

Addis Ababa University

College of Business and Economics

Department of Accounting and Finance

The effect of Corporate Governance on Firms Financial Performance: in the Case of Selected Private Commercial Banks in Ethiopia.

A research Paper submitted to Addis Ababa University, College of Business and Economics, Department of Accounting and Finance for partial fulfillments of Masters of Science Degree in Accounting and Auditing

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Approval Sheet

We, undersigned certify that we have read and hereby recommend to the Addis Ababa university to accept the thesis submitted by **Estifanos G/Hiwot Solomon**, entitled "***The effect of Corporate Governance on Firms Financial Performance: in the Case of Selected Private Commercial Banks in Ethiopia.***" in partial fulfillment of the requirement for the Award of Master of science in Accounting and Finance.

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Declaration

I, undersigned declare that this thesis work entitled "The effect of Corporate Governance on Firms Financial Performance: in the Case of Selected Private Commercial Banks in Ethiopia." is my own original contribution with the guidance and support of the research advisor and hasn't been submitted for any degree or diploma program in this or any other higher learning institution

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This is to certify that Mr. **Estifanos G/Hiwot Solomon** has conducted a thesis on **"*The effect of Corporate Governance on Firms Financial Performance: in the Case of Selected Private Commercial Banks in Ethiopia.*"** under my supervision. This work is original in nature and it is suitable for submission in the partial fulfillment of the requirement for the Degree of Master of science in Accounting and Finance.

Degefe Duressa (PhD) _____ _____

Name of Principal adviser **Signature** **Date**

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Table of Contents

Approval Sheet ..... **Error! Bookmark not defined.**

Declaration ii

Letter of Certification iv

Acknowledgment iv

Table of Contents V

List of tables IX

List of figures X

List of Acronyms XI

Abstract XII

CHAPTER ONE: INTRODUCTION 1

1.1 Backgrounds of the Study 1

1.2 Statements of the Problem 4

1.3 Objective of Study 5

1.3.1 General Objective 5

1.3.2 Specific Objective 5

1.4 Research Hypothesis 5

1.5 Significance of the study 6

1.6 Scope of the study 7

1.7. Structure of the Paper 8

CHAPTER TWO: LITERATURE REVIEW 9

1.5 Introduction 9

2.2 Theoretical Concept corporate Governance. 9

2.2.1 Corporate Governance practices 12

2.3 Review of Theory on Corporate Governance 13

2.3.1 Agency Theory 13
2.3.2 Stakeholders theory 15
2.3.3 Stewardship Theory. 15
2.3.4 Resource dependency theory 17
2.3.5 Proprietor theory 17
2.3.6 Transaction Cost Theory 18
2.4 Measuring Bank performance 19
2.4.1 Bank overall performance and Board size. 19
2.4.2 Board Composition and overall the performance of the Bank. 21
2.4.3 Communication Strategies 22
2.4.4 Codes of Conduct 22
2.5 Empirical literature Review 24
2.5 Conceptual Framework 27
CHAPTER THREE: RESEARCH METHODOLOGY 28
3.1 Introductions 28
3.2 Research Design 29
3.3 Research Approach 29
3.4 Population and Sample size 29
3.5 Sampling Techniques 30
3.6 Data collections tools and instruments collection 30
3.7 Method of Data Analysis 31
3.8 Model Specification 31
CHAPTER FOUR: RESULTS AND DISCUSSION 33
4. Introduction 33
4.1 Descriptive analysis 33

4.2. Correlation analysis 36
4.3 Tests for classical linear regression model assumptions (CLRM) 37
4.3.1 Assumption one: The errors have zero mean ($\varepsilon = 0$) 38
4.3.2 Assumption two: Test for Normality 38
4.3.3 Assumption three: Test for multicollinearity 38
4.3.4 Assumption four: Test for Heteroskedasticity 40
4.3.5 Assumption five: Test for autocorrelation 41
4.3.6 Assumption six: Linearity Test 42
4.4 Econometric model specification tests 42
4.4.2 Hausman specification test 43
4.5 Regression analysis 43
4.6 Summary of the analysis 48
CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS 50
5.1. Introduction 50
5.2 Summary and Conclusion 50
5.3 Recommendations 51
5.4 Additional research recommendation. 52
REFERENCES 52
Appendix 60
Appendix I: descriptive statics 60
Appendix II: Correlation 61
Appendix III: Normality test 61
Appendix IV: Bresusch-pagan /cook-Weisberg test for hetroskedaticity 62
Appendix V: VIF test for multicollionarity 62
Appendix VI: Breusch-Godfrey LM test for autocorrelation 63
Appendix VII: Hausman specification test 63

Appendix VIII: Random—effects GLS regression 64

List of tables

Table 4. 1 summary of the descriptive statistics of the dependent and independent variable 34

Table 4. 2 Correlation matrix for both dependent and independent variables 37

Table 4. 3: Test for normality of residuals Skewness/Kurtosis test for Normality 38

Table 4. 4 correlation matrix of independent variables 39

Table 4. 5 variance inflation factor (VIF) of the independent variables 40

Table 4. 6 Breush-Pagan/Cook-Weisberg test for heteroskedasticity 40

Table 4. 7 Breush-Godfrey LM test for autocorrelation 41

Table 4. 8 Hausman specification test 43

Table 4. 9 Random-effects GLS regression 44

Table 4. 10 Comparison of the Test Result with the Expectation 48

List of figures

Figure 1 Conceptual framework 28
Figure 2 Linearity graph 42

List of Acronyms

BOD: Board of Directors

CEO: Chief Executive Officer

LLP: Loan Loss Provision

NBE: National Bank of Ethiopia

NSE: National stock Exchange

OECD: Organization for Economic Cooperation and Development

OLS: Ordinary Least Square

ROA: Rate on Asset

SBB: Supervision of Banking Business

Abstract

Poor corporate governance practices are generally known to influence the financial performance and stability of the banking institutions especially in the developing economies like Ethiopia. With the regulatory processes aimed at enhancing the existing governance structures, there are still concerns on the relationship of governance mechanisms in relation to the performance of privately owned commercial banks. Thus, the study was investigated how corporate governance mechanism can influence the financial performance of the private commercial banks in Ethiopia. This research employed a quantitative research method whereby panel data was used to obtain the results based on sixteen private commercial banks in the time frame of 2016-2025. The sampled banks had audited annual reports and financial statements whereby secondary data were gathered. The correlation between the variables of corporate governance such as board independence, board size, CEO duality, audit committee expertise, ownership concentration and disclosure practices and the financial performance in terms of Return on Assets (ROA) was analyzed through random-effects regression model. The findings indicate that the positive and significant impact of board independence, audit committee expertise, and disclosure practices on the financial performance are positive whereas the negative impact of CEO duality and bigger board size impact on the performance is adverse. The concentration of ownership does not have any significant impacts based on the dominance of shareholders. The research arrives at the conclusion that the existence of good corporate governance mechanisms helps to enhance the level of profitability and accountability of the bank. There is thus a recommendation that banks increase the independence of board, improve audit committee skills and performance of disclosure in order to enhance quality of financial performance and governance.

Keywords: Board Independence, Board Size, CEO Duality, Audit Committee Expertise, Ownership Concentration, And Disclosure

CHAPTER ONE: INTRODUCTION

1.1 Backgrounds of the Study

Corporate governance is a framework that helps in directing and controlling management of corporations, which entails activities among directors, shareholders, and other stakeholders. It touches on the way power is shared between directors and majority shareholders and its influence on minority shareholders, employees, creditors and other interested parties (Muriithi, 2009). Corporate governance has been of a great discussion and implementation in contemporary businesses in recent years (Mwangi, 2013).

The Organization Economic Cooperation and Development (OECD, 2015) says that the main objective of corporate governance is to create a culture of trust, transparency, and accountability. They are necessary to promote long-term investment, financial stability, and business integrity, which are factors that lead to the development of the economy as a whole and inclusive development. Historical financial scandals - such as the subprime mortgage meltdown - have revealed critical weaknesses in governance design, and some of the most notorious failures include Enron, which has demonstrated the harmful nature of weak oversight or unnoticed fraud on firms and financial systems (Lamm, 2010).

According to Australian Stock Exchange (2003) corporate governance can affect the manner in which goals are established and attained, the monitoring of risk and optimum performance. Good governance systems enhance value generation as well as make sure that control mechanisms are commensurate to the amount of risk assumed by the organization. Governance systems entail internal incentives that establish the association among the key corporate actors, as well as external factors, which include legal, policy, and market circumstances that build the organizational behavior and performance. The core of internal governance is the board of directors, the key role of which should be to ensure long-term sustainability of the firm and regulate the performance of the management. The external governance measures such as legal and regulatory systems are used to ensure fairness, accountability, and competitive integrity. These external forms are fundamental in sustaining the fact that firms are governed by homogeneous rules that safeguard the stakeholders such

as shareholders, consumers, workers, the environment, and even competitors (Iskander and Chamlou, 2000).

Banks especially are critical contributors to the growth of the economy because they direct the amount of money saved by the savings to the productive areas. In view of this pivotal position in the financial system, banking safety and soundness are of paramount importance. Corporate governance is therefore very essential in the integrity of the morale of individual institutions and the entire economy. Systemic risks may also be caused by weak governance in key banking institutions, which may cause the rest of the financial industry to experience vast disruptions (Basel Committee on Banking Supervision, 2014). Bank regulation is necessary because of the negative externalities that are usually of high magnitude in case of a bank failure. The effect of failure of a bank on depositors and the entire financial system unlike in other industries can be detrimental to the shareholders as well. In this way, the banking regulations are designed to protect the depositors and ensure the stability of the financial system (John, De Masi, and Paci, 2016). In banking terms, corporate governance refers to the manner in which the board of directors and senior management direct the operations of the bank, develop corporate objectives, hold shareholders accountable, safeguard the depositors as well as adhere to the regulations of the bank. It also means harmonizing organizational behavior and the taking of prudent risks and operational healthiness (Basel Committee on Banking Supervision, 2006).

Global bodies such as the Basel Committee and the OECD have been in the frontline to set the world principles and standards of effective corporate governance in the banking sector. The set standards are meant to assist the banks to embrace governance practices that would guarantee transparency, accountability and long term stability. The central regulatory body in Ethiopia is the National Bank of Ethiopia (NBE) which is mandated to nurture monetary and financial stability in the country to facilitate economic growth. Under the Proclamation No. 591/2008, NBE is required to ensure price stability, control the financial sector and facilitate accelerated national development. Rather than merely reacting to governance concerns, the NBE proactively took initiative to regulate the banking sector by issuing the Bank Corporate Governance Directive No. SBB/62/2015, which became effective on September 21, 2015. This directive has

since undergone two rounds of amendment to reflect evolving governance standards — first superseded by Directive No. SBB/70/2018, which came into force on September 21, 2019, and subsequently revised under Directive No. SBB/74/2020 — with the provisions of the latter currently in application. These successive directives are closely aligned with internationally recognized governance frameworks, particularly the Basel Committee on Banking Supervision's Principles for enhancing corporate governance in banks and the OECD Principles of Corporate Governance, ensuring that Ethiopian banking regulation remains anchored in global best practice. The directive will help strike a balance between risk taking and business prudence and accountability, which eventually contributes to shareholder value as well as the interests of customers and other stakeholders. It highlights the importance of corporate governance in ensuring that the financial system, and especially the banking sector, is sound and safe.

This emphasis is backed up by empirical research. Obeten, Ocheni, and John (2014) concluded that effective practices in corporate governance have positive impacts on the performance of the bank and the value of firms because it provides an opportunity to make better investment decisions and contribute to its development. In the same vein, Katrodia (2011) emphasized that cooperation between the bank management and the regulatory bodies is important whereas Dharmastuti and Wahyudi (2013) have found that good governance systems lead to higher financial performance. Some of the scholars like Kalifa (2012), Kibrysfaw (2013), Ngirande (2014), and Ndlovu (2014) have explored different mechanisms of corporate governance which include board size, remuneration, audit committee size and ownership and their effects on the financial performance of firms. Their research, done in varying settings, indicates conflicting findings on the correlation between governance practice and financial performance. Corporate governance has therefore become critical in the management of organizations in the present complicated global arena (Yenesew, 2012). Banks are critical sources of finance in developing economies and effective corporate governance is one of the factors that determine their performance. Well-capitalised and profitable banks take part in the general stability of the financial system of a country (Abdurazak, 2017).

Additionally, while there is a growing body of research on corporate governance in Ethiopia — particularly in the banking sector — much of the existing work remains limited in scope and duration (Mandefro, 2019). The research was seek to make the Ethiopian banking institutions

aware of the importance of good corporate governance and its effect on financial performance. This knowledge may assist these banks compete not only in the country but also globally. The study particularly aims to focus on the impact of corporate governance on the organizational performance of the sampled privately owned commercial banks in Ethiopia.

1.2 Statements of the Problem

Corporate governance has also been noted as an important tool in the promotion of transparency, accountability and good managerial practices that facilitate the financial performance of companies across the globe (OECD, 2015). The importance of good governance is especially crucial in the banking industry, which is a systemic matter and the level of trust that the population places in it that is quite high as stated by the Basel Committee on Banking Supervision (2014).

Despite the positive banking sector growth and regulations in Ethiopia, including the Corporate Governance Directive by the National Bank of Ethiopia (2015), there are still numerous privately owned commercial banks in the country that presently experience constant issues. These are poor governance systems, faulty oversight systems, and poor implementation of regulatory mandates (Mandefro, 2019).

The available empirical studies analysing corporate governance and bank performance in Ethiopia are still narrow in terms of scope and time. As an example, the studies by Fanta et al. (2013), Fared (2012), and Getahun (2013) were based on rather short durations of research of five to seven years, which decreases the strength and applicability of the results. Firehiwot (2016) conducted more recent research on corporate governance and financial performance on commercial banks that determined that smaller and academically qualified boards of directors are more effective in controlling the management and enhancing performance. However, the loopholes in governance practices still compromise the efficiency of operations, risk management processes, and sustainable financial performance problem that can eventually jeopardize the stability of the financial system in the country (Abdurazak, 2017).

Even though the studies conducted internationally have repeatedly shown that, in the case of good corporate governance, there is close association between good corporate governance and the performance of firms (Adams and Mehran, 2012; Dharmastuti and Wahyudi, 2013), there are

still notable gaps in the empirical data in Ethiopia. There is very little literature that has investigated the effect of governance mechanism of the privately owned commercial banks on financial performance, these mechanisms are board structure, audit committees, ownership concentration, disclosure practices and CEO duality. Such deficiency of evidence limits the knowledge of stakeholders on the manner in which governance reforms can improve the performance and competitiveness in the Ethiopian banking industry. To fill this gap, this paper explores how corporate governance mechanisms can affect the financial performance of identified privately owned commercial banks in Ethiopia within a long period of 10 years (2016-2025).

1.3 Objective of Study

1.3.1 General Objective

The main objective of this study was be to examine how corporate governance influences the performance of privately owned commercial banks in Ethiopia.

1.3.2 Specific Objective

The specific objectives of the study were:

- To assess the impact of **board independence** on bank performance.
- To examine the influence of **board size** on bank performance.
- To evaluate the effect of **CEO duality** on bank performance.
- To determine the role of the **audit committee** in enhancing bank performance.
- To analyze the effect of **ownership concentration** on bank performance.
- To investigate the influence of **disclosure practices** on bank performance using a disclosure index.

1.4 Research Hypothesis

A variety of theoretical reviews and empirical research used to test hypotheses. The hypothesis developed that help to meet study's objective was the following.

H1: Board independence has a positive and significant effect on the financial performance of privately owned commercial banks in Ethiopia. Based on agency theory, independent directors reduce managerial opportunism and improve monitoring, which is expected to enhance profitability.

H2: Board size has a negative and significant influence on the financial performance of privately owned commercial banks in Ethiopia. Agency and stewardship theories suggest that larger boards face coordination challenges and slower decision-making, which is anticipated to reduce financial performance.

H3: CEO duality has a negative and significant effect on the financial performance of privately owned commercial banks in Ethiopia. Agency theory predicts that combining the CEO and board chairperson roles weakens oversight and concentrates power, which is expected to adversely affect performance.

H4: Audit committee expertise has a positive and significant effect on the financial performance of privately owned commercial banks in Ethiopia. Consistent with agency theory, financially expert audit committees improve the quality of financial reporting and internal control, which is anticipated to enhance performance.

H5: Ownership concentration has a significant effect on the financial performance of privately owned commercial banks in Ethiopia. Based on the agency and proprietor theories, concentrated ownership may both reduce agency costs through tighter monitoring and create entrenchment risks, resulting in an ambiguous directional expectation.

H6: Disclosure practices have a positive and significant effect on the financial performance of privately owned commercial banks in Ethiopia. Drawing on the OECD governance principles, greater transparency reduces information asymmetry and builds investor confidence, which is expected to improve financial outcomes.

1.5 Significance of the study

The research was to be valuable in various aspects, touching on the theoretical and practical and policy-based requirements in the Ethiopian banking industry. To start with, academically, the study contributes to the scarcity of empirical research on the influence of corporate governance mechanisms on the financial performance of private commercial banks in Ethiopia. Although many studies have been made worldwide, the realities of the less-developed economy such as that of Ethiopia are not well represented due to the context-specific realities. This paper assists in addressing this gap by analyzing the factors of governance like size of board, communication strategies, code of conduct and relationship of stakeholders with respect to performance outcomes. It provides a localized insight on the interaction of these variables in a distinctive

regulatory, economic and institutional environment.

Secondly, in managerial and institutional perspective, the study results were to present real-world implications to the bank executives and board members, and corporate managers of how to enhance the governance practices to achieve better performance, transparency, and accountability. The critical decision-making, risk management and long-term value creation can be enhanced under better governance, which is an important asset in the highly sensitive and regulated banking sector.

Thirdly, to policy-makers and regulators, especially the National Bank of Ethiopia, the study brought evidence contribution to the review, revision, or enforcement of corporate governance guidance, including the NBE Corporate Governance Directives No.SBB/62/2015. Tighter regulatory systems can be used to reduce risk within the banking sector and promote stability of financial systems. More so, the research is beneficial to investors, shareholders and customers in that better governance is directly correlated with financial strength, trust and protection of the stakeholders. Clear governance processes was build trust with the investors and depositors to integrate more finances in the sector and promote the expansion of the industry.

Finally, the research served as a source of information to future scholars conducting research in the same fields particularly in emerging economies. It offers both the methodological and the empirical basis of the analysis of additional relations between corporate governance and firm performance in other areas or industries.

1.6 Scope of the study

This paper is aimed at analyzing how the corporate governance systems affect the financial performances of privately owned commercial banks in Ethiopia. The scope is given considering the geographical, temporal, conceptual, and methodological limits.

In geography, the research is restricted to the privately owned commercial banks in the banking sector of Ethiopia. In the short term, the timeframe of the study is a decade, between 2016 and 2025, which was enable examining the long-term trends and alterations in the practices of governance and financial performance. In theory, the research focuses on the major corporate governance variables, which are independent directors, board size, CEO duality, audit committee performance, ownership concentration, and disclosure. Return on Assets (ROA) is used to measure financial performance. The methodology of the study is based purely on secondary data that was retrieved through audited financial statements and annual reports of the sampled banks.

The random-effects regression model, which is a panel data analysis method, is used to establish the relationship between the governance mechanisms and financial performance. This scope has a well-identified scope of the study that keeps it focused, easy to handle and capable of yielding considerable information on the role of corporate governance in improving the performance of the Ethiopian privately owned commercial banks.

1.7. Structure of the Paper

This paper has been divided into 5 chapters. Chapter One is the introduction which contains the background, problem statement, research objectives, research hypotheses, scope of the study, and the significance of the study. In Chapter Two, the conceptual framework is described and the background of the relevant theoretical and empirical literature reviewed. Chapter Three explains the research methodology, such as, the research design, population and sample, data collection methods, variables, and model specification. The data analysis, results and interpretation have been given in Chapter Four. Lastly, Chapter Five gives the summary of findings, conclusions, and policy, practice and future research recommendations.

CHAPTER TWO: LITERATURE REVIEW

1.5 Introduction

In this chapter, the author gives a summary of the available theoretical and empirical literature applicable in the study. It also does a discussion on important theories that describe the connection between corporate governance and the macroeconomic performance of the organizations listed on NSE. These theories have principles of business operation, management practice, and stakeholder participation. Evidence of this is seen in the effective corporate governance has a strong positive effect on the performance of a company as seen in empirical evidence of various countries. Neumann (2006) defines a theory as a conceptual model that is used to facilitate and combine knowledge concerning the phenomena in the world.

2.2 Theoretical Concept corporate Governance.

In the world today, banking is a critical aspect of the global economic life with much of the trade and industrial growth dependent on the bank (Somashekar, 2009). Banking is highly regulated because it is a sensitive area, and this allows it to maintain the confidence of the people. This confidence is as a result of professional banking staff as well as the guarantee marketed through government control. The regulatory structures influence most of the operational policies and procedures, which banks have to follow and adherence to these rules should be properly documented (Dilley, 2008).

Corporate governance can be defined as a system of practices applied to steer and manage the strategic direction of an organization and provide accountability to the stakeholders. It is concerned with the process of coordinating strategic decision-making and the interests of different stakeholders in case of the possible conflict between the interests of owners and top executives (Hitt, Ireland & Hoskisson, 2007). The governance systems are aimed at enhancing transparency, reducing fraud, and conflict of interest. The shareholders in most corporations are not in charge of the business. Instead, they choose a board of directors whose duty is to formulate policies, manage and to safeguard the interest of shareholders. The daily routine decisions are passed to executives like the CEO who executes the strategies of the board (Berk and Demarzo, 2014).

Corporations are legal entities that enable various contributors e.g. investors, professionals and

workers to pool resources and share it in common benefit. Investors make profits without engaging in day to day running of activities, and the management runs business without investing in it. In spite of the limited liability, shareholders have a say in the company in the election of directors and in trusting the directors to represent their best interests (Monks and Minow, 2011). Separation of ownership and management results in agency relationship where the principals (owner) appoint agents (managers) to represent them. Such an arrangement creates the agency costs that comprise of incentives, monitoring, enforcement as well as possible losses whereby the agents do not act in accordance with the expectations of the owners. These expenses become more complicated in diversified companies, where the process of monitoring becomes more difficult. Weak governance can also enable managers to have too much freedom and a strong control like an efficient board can make them align decisions with those of the shareholders (Hitt et al., 2007). Essentially, corporate governance is concerned with how the stakeholders can intervene or manage a system of ownership and control that is not directly tied. Good governance is based on the election of a board by shareholders who appoint top executives in the board. Effective monitoring of the management is greatly determined by the independence , size, and composition of the board (John and Lemma, 1998).

According to Mohan and Marimuthu (2015), corporate governance is a system of established norms and customs, legality, practices, and regulation that govern the way business is conducted and run. Corporate governance has recently become a popular issue in terms of the number of people discussing it because it affects the financial well-being of various organizations, as well as society as a whole. When it comes to the banking industry in particular, good governance would require responsible management of funds and assets, ethical and professional behavioral standards, and belief in corporate goals that will favor customer satisfaction, higher employee morale, and stability in the market and the general resilience of financial institutions (Okoi, Ocheni, and John, 2014).

Corporate governance has been a burning issue of business leaders worldwide. Enhancement of governance practices is no longer considered a secondary measure in attaining sustainable financial performance of both firms and economies (Hifza Inam and Aqeel Mukhtar, 2014). This importance has been emphasized more as recent financial crises and business failures in some of the most significant markets in the world made the importance of corporate governance in ensuring that the economy functions normally (Imam & Malik, 2007). In this regard, governance

is now perceived as part of handling intricate internal associations, and to be accountable of institutions.

The meaning of corporate governance as given by Habbash (2010) is relative to decision and organizational control mostly on the board of directors and its processes. The contemporary business model whereby ownership is usually divided and control is usually divided leads to so-called agency problem in which the managers (agents) might not represent the interests of the owners (shareholders). These poor governance practices of conflict of interest between shareholders, boards and management are the causes of the increasing focus on governance.

Imam and Malik (2007) also continue by stating that these conflicts usually develop on two major factors: the stakeholders do not share common goals and preferences, and there is also no total information one party has concerning the other; their actions, intentions and capability. Nanka-Bruce (2009) further notes that corporate governance is important in reducing these conflicts and making sure that the people in control are checked. In the absence of such mechanisms an organization can fall into misaligned interests and lack of coordination resulting in deterioration of organizational value.

The code of corporate governance focuses on all dimensions of an organization structure, as far as sourcing of capital to accountability. Corporate governance is critical to the knowledge of the people who are directing, investing, regulating, and controlling companies since it has a strong effect on the national development (Okoi, Ocheni & John, 2014).

Banking policies and regulations are based on institutional set up and economic system of a country. In command economies, there was government regulation of financial variables and banking where the involvement of the private sector was minimal. Indeed, there were a few government banks in Ethiopia (NBE, 2018). With the new banking legislation, since economic reforms in the 1990s, the rapid growth of the number of the private banks and financial institutions has happened (Okoi, Ocheni & John, 2014). This shift provided a market-based model in which the government depends more on the work of the private sectors in which National Bank provides the guidelines to the management of the financial institutions. Corporate governance has a crucial role in ensuring that banks are safe and stable (Abdulrazak, 2017).

Corporate governance in a nutshell implies that it is a powerful transparent accountable mechanism to oversee the affairs of organizations without compromising the interests of

shareholders, lenders, etc.

2.2.1 Corporate Governance practices

Best practice codes in the banking sector have also been changing in the past few years and the majority of organizations have devised standard codes of corporate governance. A case in point is the Basel Code of Corporate Governance of Banks and Financial Institutions that has come out with the clear-cut responsibilities and roles of the key players such as the board of directors, individual directors, the board chairperson, senior management, board committees, auditors, shareholders and regulatory authorities. This framework equally gives a high emphasis on conflict of interest among shareholders and making sure that the information is properly disclosed.

There has been growing acceptance of corporate governance as a critical instrument to address the issue of ownership. However, as the world practices are available enabling a clear understanding of the real owner, the regulators may not solely use the ownership limit to avoid undue influence or disguised control by the related parties. As a result, an increased dependence on effective corporate governance to reduce the risks of concentrated ownership is seen. In the absence of good governance, concentrated, clandestine, or complicated ownership framework may compromise the control systems of firms. In banking especially, most nations have regulatory ownership restrictions to ensure no individual or interconnected groups of individuals own the majority of an institution which would lead to the stability and self-sufficiency of the institution (Abdurazak, 2017). Also, many jurisdictions have indirect rules (e.g. on related party transactions and stringent fit-and-proper tests in bank directors and senior executives). Regulators feel these measures would improve on corporate governance through the increase in stronger risk management practices in the banks hence a more resilient financial system (Mulili & Wong, 2010).

Banking and financial industry is unlike other industries because of the critical role that it plays in the national monetary system. Banks are the banks which are highly dependent on customer deposits which are deposits made by the customers and the reason is that unlike the usual firms which mostly depend on capital markets, banks do not require capital markets. It is this special consideration that puts additional fiduciary obligations on banks and their management to

safeguard the finances of depositors. Banks are also the financial intermediaries, who circulate money in the form of loans and investments, and transfer payments both on a local and global scale by the means of bank accounts, transfers of funds, and credit cards (Abdurrazak, 2017). Bank operations should have a fine balance of power and confidence of the populace. Passing through the experience of various countries in the past, people lack confidence over banks, and the failure of the system can be rapid, which is why it is necessary to have good corporate governance to maintain the stability.

In Ethiopia, banks are governed by the National Bank of Ethiopia (NBE) which is the regulator of the financial sector of the country. The NBE oversees and controls the banking activities to ascertain adherence to the monetary policies and banking legislations. Based on the Banking Business Proclamation No. 592/2008, the NBE establishes the qualification criteria of the board of directors, minimum size of the board, the duties and responsibilities of the board of directors, corporate governance, and the tenure limitation of the directors. To implement them, the NBE has published the Bank Corporate Governance Directive No.SBB/70/2018 that has come into force on September 21, 2019 (NBE, 2018).

On the whole, modern codes of best practice in corporate governance define essential principles and values that should be maintained by organizations in terms of their leadership and management. Good corporate governance has been considered as one of the basic tools of mitigating risks in financial institutions irrespective of the nature of their business practice thus institutional prudence and confidence of stakeholders have been achieved.

2.3 Review of Theory on Corporate Governance.

There are different theoretical frameworks that support corporate governance by expressing the relationships, roles and responsibilities of the stakeholders in a corporation. The theories are the most notable:

2.3.1 Agency Theory

The traditional firms are characterized by the fact that they are there to fulfill the interests of their owners whose main goal is the maximization of their wealth. Here, the decision-makers are supposed to be the managers who will make decisions on behalf of the owners. Nonetheless, the agency theory puts in question the supposition that the managers were automatically; prioritizing the interests of owners. It recognizes that people tend to act in their self-interest more as a result

of which conflicts may occur. This theory suggests contractual relationship between the principal (owner) and the agent (manager) with an aim of producing the best results to the principal with incentive congruence and control (Crowther & Seifi, 2011). The emergence of modern companies has brought about structural disconnection between ownership and control. Although it would be the choice of the owners to directly manage their firms in order to enjoy the benefits fully, the financial requirements of the large-scale firms make it unrealistic. Consequently, owners give up power to the executives who take managerial positions in exchange of chances to pursue their selfish interests. This delegation gives owners the status of principals and managers the status of agents. The principals, who have put in their capital, seek to put in place governance mechanisms that can work to bring the managerial action in line with the shareholder interests (Berle and Means, 1932).

According to Alchian and Demsetz (1972), the outcome in case all shareholders participated in the corporate decision-making would be too much bureaucracy and inefficiencies. In addition, numerous shareholders may not want to be fully informed, hoping other people will take in the impact of ineffective decisions. To avert these, corporations delegate decision-making authority to a few-managerial team entrusted with the role of coordinating operations. Shareholders still have the certain powers like appointing or dismissing the management, as well as, endorsing major structural modifications. The rationality of this model is that shareholders should be the right group in setting corporate objectives. Not only do they have the right incentives to attain profit-maximizing goals but also are in the best position to ascertain their implementation. This hints at the fact that in case managerial discretion is not constrained, inefficiencies can occur because of differences in goals. Hence, it is crucial to have proper constraints on managerial behavior that will enhance the corporate behavior in accordance to shareholder interests and eventually increasing firm value (Dignam & Galanis, 2009). According to Jensen and Meckling (1976), agency relationship can be described as a relationship that exists whereby a principal delegates the power of making decisions to an agent in their place. Considering that both parties are supposed to work in order to maximize their respective utility, then there may be a conflict of interest when the agent fails to fulfill the objectives of the principal. Principals can minimize these crashes by designing incentive systems and investment in monitoring systems. The sum of these efforts, the costs of monitoring, the costs of bonding taken by the agent, and any other inefficiencies which remain, is called an agency cost.

Regarding the general theory of the firm, Jensen and Meckling consider the relationship between shareholders and corporate executives to be one of an archetypal agency relationship, which is complicated by a separation between ownership and control. The key question then arises on how to get the agents to be driven to behave in a manner that serves the interests of the principals. Fama and Jensen (1983) build upon it by indicating that agency issues might be addressed by providing a clear distinction between the functions of decision making and control. The decision initiators and implementers should not be the same as the ratifiers and overseers of these decisions. In the absence of such regulations, the managers can make decisions that are not consistent with the interests of the shareholders. The last control point in this structure usually involves boards of directors that can provide a balance to decision-making power and control in the organization.

This is strengthened by Fama (1980), who explains this through the boards that are the products of market forces that came to act as an internal monitor. Their primary task is to check on the top level executives and to ensure that they do activities that promote the contractual and strategic goals of the firm. Marnet (2008) observes that one of the main issues surrounding the agency theory is finding a balance between the interests of manager and shareholders. This involves reducing time divergence and trade-off between monitoring expenses and the payoff on the separation of ownership and managerial control.

2.3.2 Stakeholders theory

Wheeler et al (2002) described the concept of stakeholder theory as having its background in the sociological and organizational aspect. The stakeholders can be referred to as any individual or entity that can be affected or affects the fulfilment of the objectives of a company.

Advocates of the stakeholder theory maintain that the corporate executives need to build and maintain a wide web of relationship, comprising of employees, suppliers and other business partners, as these stakeholders are especially important in the operations of the organization. Sundaram and Inkpen (2004) however opposed this argument by arguing that the stakeholder theory should be used to manage the stakeholder relationships that are most valuable in creating value and success to a company.

2.3.3 Stewardship Theory

The stewardship theory considers managers as people who serve the best interests of the owners of the organization, and not on their own interests (Davis, Schoorman and Donaldson, 1997). The managers are regarded as care takers rather than focusing on the self interest, since their main aim is the overall organizational goals. The stewards would tend to cooperate and carry out the mission of the organization even in cases where their own interests do not necessarily coincide with that of the principals, ultimately benefiting the needs of the principal. The theory focuses on a strong association between the performance of the organization and satisfaction among its owners. A manager that helps develop the organization is likely to be beneficial to all the stakeholders since most of them will have a personal interest in the success of the firm. Stewards understand the relevance of having their own desires in line with the overall organizational goals and that through the promotion of the success of the collective, their own needs would also be achieved.

In its most basic form, the stewardship theory presumes that the executives are inseparably tied with the goals of the owners. Instead of strict control, it encourages empowering and supporting systems to managers. A collaborative relationship, which is aimed at maximization of organizational performance, is achieved when a stewardship approach is taken by both parties.

Central to this theory is the imperative of balancing stakeholder benefits — ensuring that shareholders receive adequate returns, employees are treated fairly and motivated, and the broader public is protected from the negative externalities of corporate activity. This balancing act naturally extends to Corporate Social Responsibility (CSR), under which firms are expected to contribute positively to society beyond their immediate financial obligations. For banks specifically, CSR encompasses ethical lending practices, financial inclusion efforts, environmental consideration in credit decisions, and community investment — all of which are governance concerns that affect long-term reputation and financial sustainability (Freeman, 1984).

A critical dimension of stewardship theory is the emphasis on the independence of managers: steward-managers are expected to exercise professional judgment freely and autonomously, because their motivations are intrinsically aligned with organizational success rather than personal gain. This stands in sharp contrast to agency theory, which assumes managers must be tightly controlled. Under stewardship theory, governance structures should empower managers with greater discretion and independence rather than subjecting them to rigid surveillance, as

excessive monitoring may undermine the intrinsic motivation and professional commitment that steward-managers bring to their roles (Davis, Schoorman and Donaldson, 1997).

2.3.4 Resource dependency theory

Resource dependence theory underscores the critical role of corporate boards in connecting the organization and key external resources. It implies that boards are strategic in finding the assets and support required by an organization through the use of their outer relationships.

According to Wang (2009), this theory identifies the role of the board to help the management; it involves filling the gaps existing between the company and the environment it is in. In this model, directors are used as a point of contact with the outside world with the help of which the organizational activity is adjusted to the needs of the environment and allows meeting all the corporate goals. Of particular importance in this context is the contribution of external or independent directors — including those with foreign or international experience. Such directors bring access to broader resource networks, established relationships with regulatory bodies, international financial institutions, foreign investors, and strategic partners that would otherwise be inaccessible to the organization. By leveraging these external connections, they enhance the bank's capacity to secure funding, forge business alliances, and acquire market intelligence. In the Ethiopian banking context, boards that incorporate directors with diverse external networks are therefore better positioned to mobilize resources, attract foreign investment, and navigate an increasingly competitive financial environment (Wang, 2009).

2.3.5 Proprietor theory

Proprietor theory revolves around the association between the owners of an enterprise, which is usually the shareholders, and the appointed officials to run the venture, namely the executives and the directors. According to this theory, shareholders, who are the major stakeholders delegate executing powers to managers who play the role of their agents (Clark, 2004). It is expected that the managers acted in the best interests of the shareholders. But in reality, agents are able to strive to achieve their own selfish goals, which are not necessarily the interests of the owners (Padilla, 2000).

This mismatch may bring conflict as managers may be self serving or opportunistic. Such differences are usually based on the disparities in ownership and control systems within the

organization (Bhimani, 2008). In this regard, the shareholders develop strict rules and guidelines that make sure that the actions of the managers are geared towards the realization of shareholder value (Clarke, 2004). The theory, thus, brings a more individual and self-centered perspective of the managerial behavior, in which motivation is highly motivated by incentives and discouraging factors. Generally, the relationship between ownership structures and control in firms is examined in the corporate theory. In circumstances where there is no control with ownership, then the theory acts as a means of harmonizing the interests of managers with those of shareholders. It defines agents as rational people who will act out of their self interest unless they are properly incentivized or controlled (Jensen and Meckling, 1976).

2.3.6 Transaction Cost Theory

Transaction Cost Economics (TCE) helps to understand the corporate governance, as it provides an organized method of studying the contractual problems, especially between the control of a company and its shareholders. The presence of this theory is based on the transaction as the primary unit of analysis. In this context, managers have been perceived as selfish players who influence transaction in their interests (Wasiamson, 1996, as cited in Abdullah and Valentine, 2009). The equity-based governance model, which is a part of TCE, identifies three key features. To start with, shareholders become residual claimants. Second, the equity deal spans throughout the life of the company. Third, to protect the interests of the shareholders, a board of directors is set up to offer oversight. This board is also important in overseeing and reviewing managerial decisions, mainly on the strategies of investments (Wasiamson, 1988, as cited in Saravia and Chen, 2008).

One of the central assumptions of the theory is that of the limited rationality, that is, given the lack of cognitive ability, one cannot write fully complete contracts. Among the most important ideas that Wasiamson provides is the creation of governance mechanisms- like boards of directors- as insurance mechanisms that would help in reducing the risks related to incomplete contracts and opportunistic behaviour. The mechanisms ensure the perceived risk of contractual breaches decreases, which decreases the cost of external equity and facilitates long-term growth. Wasiamson defines opportunism as self-interest behavior, which entails cheating, manipulating, and deceiving actions. Without good governance mechanisms, managers might be opportunistic and will not perform actions that can maximise shareholder value. Therefore, one of the primary concerns of the theory is control of such behavior (Wasiamson, 1996, as cited in Saravia &

Chen, 2008). A central practical implication of Transaction Cost Economics for corporate governance is cost reduction in management. By establishing robust governance mechanisms — such as effective boards, audit committees, and disclosure requirements — organizations reduce the transaction costs that arise from managerial opportunism, information asymmetry, and the need for excessive external monitoring. Effective governance therefore serves as a cost-reduction instrument: it makes managerial contracting more efficient and predictable, lowers the cost of capital by signaling to investors that agency risks are controlled, and reduces the resources spent on enforcing and renegotiating incomplete contracts (Williamson, 1996).

2.4 Measuring Bank performance

Different researchers (Shah et al., 2011; Matolcsy and Wright, 2011; Yasser et al., 2011) have evaluated the performance of banks based on a variety of evaluation criteria. In one example, Matolcsy and Wright (2011) considered the performance of firms by using such indicators as Return on Assets (ROA), the net income divided by total assets at book value, Return on Equity (ROE), the net income divided by equity at book value, and the adjusted market prices of equity, which calculates the value of dividends and risk. Similarly, the performance measures used by Yasser et al. (2011) were ROE and profit margin. Shah et al. (2011) measured using market-oriented measures, including market value of equity to book value ratio, Q (the ratio of market value of equity plus market value of the book value of debt to the total value of the book value of assets) of Tobin and performance indicators based on financial reporting of the companies, including ROE and net income plus interest over equity and over a total debt.

Furthermore, Bhagat and Black (1999) measured the performance of firms using a set of measures such as the following; the Q of the Tobin, ROA (operating income/assets), asset turnover (revenue/assets), operating profit margin (operating income/ sales), the size of the workforce and the increase in assets, revenues, operating profits, employees and cash flows. Their research has identified some of the most important indicators of the performance of firms with a particular concern to profitability ratios such as ROA, ROE, and dividend yield as far as its significance in the strategic measurement of the general economic performance is concerned.

2.4.1 Bank overall performance and Board size.

Board size is the number of board directors in total. Excessive directors might create

inefficiencies, including ineffective communication and tendency of some members to exploit others without putting in enough effort just to be called as a free-rider problem (Alam & Akhter, 2017). Even though the addition of directors may improve the monitoring power of the board, it may be compensated by the fact that large groups may produce more communication and decision-making challenges (John & Lemma, 1998). Liang, Xu, and Jiraporn (2013) argue that large corporate boards are less effective due to the inability to coordinate, control, and flexibilities, which in most cases lead to excessive concentration of power on the hands of CEOs. Board size has either positive or negative effect on the performance of a company. On the one hand, larger boards may lead to a more difficult coordination and communication process that contributes to the formation of agency issues and a detrimental impact on performance. On the other hand, the resource dependence theory assumes that the large boards combine a greater pool of experts in different sets of fields, which may increase the quality of decisions (Eisenberg et al., 1998; Kiel and Nicholson, 2003, cited in Salim et al., 2016).

According to Uwuigbe and Fakile (2012), Lipton and Lorsch (1992) would cite that smaller boards are more effective because they present fewer coordination problems and suggest a maximum number of ten members and preferably eight or nine. They also pointed out that larger board may have an advantage in terms of enhanced monitoring capacity, however the disadvantages, which include reduced rate in decision making, reduced candid discussion with regards to performance of the management, and unwillingness to take risks usually overshadows these advantages.

In line with the above results, Mak and Yuanto (2003) found that the valuation of Singaporean and Malaysian firms is highest when there are five board members. In an analysis of Danish small and medium-sized closely held firms (Bennedsen, Kongsted, and Nielsen 2004), board size did not play a significant role in performance, where there were less than six members on the board. Nonetheless, they found out that there was a significant negative correlation when the board size was seven or more members. Bhagat and black (2002) did not conduct any conclusive evidence on the relationship between board size and company performance. When studying the effects of board size and average performance in Japanese and Australian companies, Bonn, Yokishawa, and Phan (2004) found out that board size and performance (in terms of market-to-book ratio and return on assets) are negatively correlated in Japanese firms. However, when it came to Australian companies, there was no such relationship. The percentage of outside

directors and women directors on the board was however of great influence on the performance in the Australian sample, unlike the Japanese sample (Bonn, 2004).

However, unlike these findings, Mak and Li (2001) and Adams and Mehran (2005) found a positive impact of greater board size on the performance of firms. In particular, Mak and Li (2001), who examine the data on 147 Singaporean companies in 1995, indicated that the size of the boards is endogenously chosen. Their results using ordinary least squares (OLS) suggested that board size, ownership structure, and firm size have a significant impact on the performance of a firm but their two-stage least squares (2SLS) regressions did not prove the same. Adams and Mehran (2005) established a positive correlation between the size of the board and performance (measured by the Tobin Q) in the banking industry in the United States of America. Their results suggest that the beneficial effect of big boards on performance might be industry-dependent, and it is effective in some kind of firms depending on the organization structure.

2.4.2 Board Composition and overall the performance of the Bank.

The boards mostly consist of executive directors and non-executive directors. The company has executive directors who are engaged in the management process but non-executive directors (also referred to as independent directors) are not involved in the daily running of the business (Shah et al., 2011). To ensure effective functioning of boards, it is recommended that one-third of the board members be board independence who provide the much needed supervision. Nonetheless, board independence can abuse sensitive company information in their own interest, prejudice to other shareholders, despite having access to information that other directors do not, due to the insider information (Beasley, 1996).

An independent board consists of people who do not work in the company, do not hold the company stock, or are the family members of the company by blood or marital union (Gallo, 2005). Since such directors do not have any direct links to the firm, there is less risk of conflict of interest in that they do not have any significant financial interest in the firm.

Dalton, Daily, Ellstrand, and Johnson (1998) cited Jacobs (1985) in order to emphasize the importance of incorporation of directors who are outside of the firm. The internal or dependent directors may not be equipped with access to the external resources and information that the

board independence like the CEOs of other organizations, former government officers, investment bankers, social activists or key suppliers have access to.

2.4.3 Communication Strategies

Communication is a vital part of the strategic model of an organization because it is not only a systems but also a process of transferring information but also an establishment of an understanding between parties. The communication within organizations is usually consistent with their short, medium, and long-term business plans to make sure that the communication is coherent with the corporate strategy. It has been found that top management and internal partners, such as department heads will evaluate the success of communication on individual occurrences. Nevertheless, not all organizations have an in-depth knowledge of the role of communication in terms of its contribution to the general success of the organization. The communications parties involved tend to gauge their effectiveness by media attention, social media response or metrics of operation but seldom quantify the impact of communication practices on how corporate strategies evolve or change. Therefore, the strategic contribution of communication and operational contribution of communication need to be distinguished to prevent viewing it as a support activity (Sophia Charlotte et al., 2017).

The communication department should be directed by the strategic management team of an organization to deal with external and internal communication effectively and efficiently. The leaders in this field ought to look at unconventional ways of promoting sustainable growth of the company. To be able to lead their teams and communicate with the outside parties communication professionals should learn main management principles and display the ability to be a leader (Bronn, 2001; Moss et al., 2005).

The chief communication officers (CCOs) reveal the risk of communication, community interests, and issues of concern in their strategic role and advise the top management. It is essential that the communication advisors establish mutual trust and understanding the values, mission, vision, and scope of the company to provide useful advice. In order to be successful, CCOs need to give truthful, considerate, and even blunt decisions to the chief executives, which contributes to the preservation of positive relationships with stakeholders (Zerfass and Franke, 2013).

2.4.4 Codes of Conduct

Corporate codes of conduct and corporate business ethics are developed by many organizations

at the corporate level to facilitate their operations. These codes serve as useful mechanisms to promote good corporate governance as they effectively articulate the roles that the management plays to the stakeholders and makes the leaders exercise their power in accordance to laid down rules on internal affairs as well as external ones. According to Arrigo (2006), these codes of conduct in businesses cover a broad scope of disciplines and involve all the stakeholders who deal in the business environment. Moreover, those codes tend to be tied to the organizational culture of the company since the rules and actions are based on the organizational culture.

Although the two terms corporate code of conduct and code of ethics are often used interchangeably, they differ. Corporate codes of conduct are structured lines of rules that are aimed at providing some guidelines and corrective measures in specific situations and establishing a foundation of corporate strategies structuring. On the other hand, codes of ethics are value based and include the nature of values, morals and ethics of the organization (Palfrey and Peacock, 1991). Success of company has been widely researched by both scholars and practitioners and it has been related to the extent to which both tangible and intangible resources are put into use. Most importantly, intangible assets have been considered crucial towards long-term sustainability and success. Different management research papers have investigated the factors that contribute to high organizational performance with a number of these papers relying on empirical research to determine the effect of different strategies on the outcome like customer engagement. It is universally recognized that the organizational performance is a principal source of the competitive advantage and the success of the business in general (Douglas and Judge, 2001; Dubey, 2015).

In the present international economic system, investors consider the performance of a firm and then invest in it since globalization enables to conduct business and investments across borders. The world connectivity improves the growth opportunities and assists businesses to overcome difficulties. In addition, the fast-paced technological growth and the desire of entrepreneurs all over the globe make investors find the organizations that have good records of performance. Thus, organizational performance will continue to play a vital role in attracting investment and business leaders have a duty to steadily improve performance by establishing fresh plans and conducting frequent operational reviews during the existence of the business (Ebrahim et al., 2014). Most companies nowadays measure their success based on reputation, which is the

summation of various stakeholders perceptions and attitudes, of customers, workers, investors among others who gain out of the company performance. The external stakeholders greatly determine the organizational reputation, as they see and expect the future conduct of the company. The good reputation has a great contribution to the financial stability and affects the purchasing choice of customers. Reputation as conveyed via the media channels of the people is termed as organizational media reputation. The presence in the media is regarded by many stakeholders as one of the factors contributing to the formation of the image of the company and its expectations (Sophia Charlotte et al., 2017).

The level of commitment of the employees depends on the perception that the workers have towards the employer. Highly committed employees have a strong attachment to the goals, vision, mission, values and norms of the organizations. The high level of commitment correlates with high job satisfaction, loyalty and motivation, effective internal operations of the company and low employee turnover (Sophia Charlotte et al., 2017).

2.5 Empirical literature Review

This section was provides a summary of the empirical studies, with a detailed review.

In this section, a summary of the empirical studies was made, and it was reviewed in detail.

Manini and Abdillahi (2015), Assefa and Megbaru (2014), Ashenafi et al. (2013), Orazalin et al. (2016), Liang et al. (2013), and Firehiwot (2015) also found that the board size has a strong negative expression on the performance of the bank. Conversely, some studies conducted by Rao and Kidane (2016), Olani and Berhanu (2015), James and Joseph (2015), Kibrysfaw (2013) and Yenesew (2012) indicated a negative yet not significantly significant influence of board size on the returns on assets (RoA). In contrast, the studies by Abdulazeez, Ndibe, and Mercy (2016); Andres and Vallelado (2008); Malik et al. (2014); Al-Amarneh (2014); and Salim, Arjomandi, and Seufert (2016) found that the relationships between the board size and performance are positive and significant. In the meantime, Bussoli, Gigante, and Tritto (2015) and Elbannan and Elbannan (2014) discovered that the board size influenced the bank performance in a positive non-significant way. On the other hand, Ben, Patrick, and Caleb (2015) also found that the size of any board does not have any considerable impact on the performance of banks.

Ashenafi, Kelifa, and Yodit (2013) examined the impacts of corporate governance mechanisms internal and external on the performance of the commercial banks that do not have a structured stock exchange. They analyzed seven years of data of seven privately owned and two state owned Ethiopian banks using a random effects multivariate regression model. They were dependent on return on assets (ROA) and return on equity (ROE), and the independent variables were board size, existence of an audit committee, capital adequacy ratio, loan loss provision, capital ratio, loan to deposits ratio and the square of capital adequacy ratio. The findings showed a positive statistically significant effect of capital adequacy ratio on ROA at 5 percent. The size of the board, however, had a negative influence on ROA, as well as presence of an audit committee, which were significant at 5% level without doubt. The bank performance was not strongly impacted by loan loss provision and loan-to-deposit ratio. Also, the squared capital adequacy ratio experienced a significant negative impact on ROA at 1% level of significance.

Abdulazeez, Ndibe and Mercy (2016) examined the role of corporate governance in the performance of Nigerian banks by investigating 15 banks during the period of seven years. They applied panel data regression analysis to investigate the independent variables, that is, board size, board composition (number of non-executive directors),CEO duality, and audit committee, and ROA was the dependent variable. They found that the composition of boards was negatively, but non significantly related to bank performance. The performance had a positive yet the insignificant association with the audit committee. Conversely, board size affected the performance of the banks positively and significantly at the 5 percent level implying that increasing the size of the board enhances performance.

Manini and Abdillahi (2015) examined how corporate governance mechanisms affect profitability of 42 Kenyan banks in a period of one year. They used multiple regression analysis to determine the association between audit committee size, board gender diversity, board size, and ROA. The researchers did not find statistically significant connection between board gender diversity or the size of audit committee and the bank profitability. Nonetheless, the board size had a strong negative association with the performance of the bank and the correlation between the board gender diversity and the financial performance was negative but not significant.

Bussoli, Gigante and Tritto (2015) investigated the impact of corporate governance on the performance of the banks, and the quality of loans granted by the banks in 48 Italian banks over a period of three years by applying multivariate OLS regression. Dependent variables were the ROA, ROE and non-performing loan ratio; independent variables comprised of the board size, women directors on the board and the number of board committees. Their findings showed that there was an insignificant negative association between the number of committees and bank performance and insignificant positive association between the board size performance. The positive but insignificant effect on performance was also caused by female directors. The control variable of the size of a bank had a negative and significant relationship with ROA.

Olani and Berhanu (2015) evaluated the factors that affected financial performance of the Ethiopian commercial banks using a corporate governance lens. They gathered 6 years of data of 10 banks (eight privately owned and two government owned). Independent variables were the size of the board, the frequency of board meeting, the proportion of women directors, the proportion of directors with qualifications in businesses, proportion of directors with prior experience in a bank, the compensation of the CEO, the shareholders, the presence of an audit committee, the presence of a risk management committee and the dispersion of the ownership. ROA and ROE were dependent variables, leverage and ownership type were used as controls. Their multiple linear regression analysis showed that the variables of ROA and frequency of board meetings, previous banking experience of directors, presence of risk management committees, and leverage were positively and significantly associated. The qualification of directors and ownership dispersion exhibited high positive and negative correlations with the financial performance, respectively. Board size, number of female directors in the board and presence of an audit committee did not significantly influence performance, with respective negative, positive and no effects. Ben, Patrick and Caleb (2015) analyzed the effect of corporate governance on deposit money banks in Nigeria based on eight years of information. The research employed the multiple regression (OLS) to examine capital adequacy ratio, loan-to-deposit ratio, non-performing loan ratio, liquidity ratio, lending rates, cash reserve ratio, the board size and audit committee as independent variables where ROA was the dependent variable. Their findings showed that capital adequacy ratio and lending rates were significant and showed positive effects on the bank performance. Lender to deposits ratio and cash reserve ratio were not significant

towards performance. The size of the board was not significantly related whereas the audit committee presence had a positive influence on bank performance. Profitability was positively but non significantly influenced by Liquidity ratio.

Ferrede (2012) investigated the effects of corporate governance on financial performance on the basis of eight Ethiopian commercial banks that operated in the period between 2007 and 2011. This paper measured performance based on the return on investment, the return on equity, and profit margins with the variables of governance including the board size, gender diversity, the academic qualification of the board members, and the oversight of the business. Results showed that academic qualification positively influenced performance and longer tenures in an audit committee had negative effect. The industry-specific experience of the board members enhanced the returns to investment but decreased the profit margins. The effect of female board representation was not significant. The information was obtained through audited financial reports and questionnaires. The study stressed that the effect of factors of governance is different when the financial performance is the parameter.

In a related study, Getahun (2013) reported mixed effects of non-executive directors' involvement on the performance of Ethiopian Industrial Bank, with factors like ownership concentration, deposit ratio, and audit committee presence positively affecting efficiency, while board size and liquidity had negligible influence. Firehiwot (2016) suggested that the Ethiopian Commercial Bank could improve performance by maintaining a smaller board composed of well-qualified members, increasing gender diversity, and reducing the tenure of audit committees. Collectively, these studies demonstrate that the relationship between corporate governance and firm performance varies depending on the specific governance practices and organizational context examined. In General, The literature review demonstrates that corporate governance elements, such as board size, board composition, CEO duality, and financial indicators like return on Asset, play a significant role in enhancing the financial performance of NSE-listed companies. Although evidence confirms the relationship between these governance attributes and economic results, the influence of other factors not included in the study remains unexplored.

2.5 Conceptual Framework

The conceptual framework of this study is developed based on the literature reviewed above and illustrates the relationship between corporate governance mechanisms and the financial performance of privately owned commercial banks. In this research, Return on Assets (ROA) is taken as the dependent variable in the study whereas the independent directors, board size, CEO duality, audit committee expertise, ownership concentration, and disclosure practices are taken as independent variables. These governance mechanisms are likely to affect the bank performance in terms of better monitoring, transparency, accountability, and effectiveness in decision making. The framework thus presupposes that changes in the corporate governance practices may have a tremendous impact on financial performance of banks.

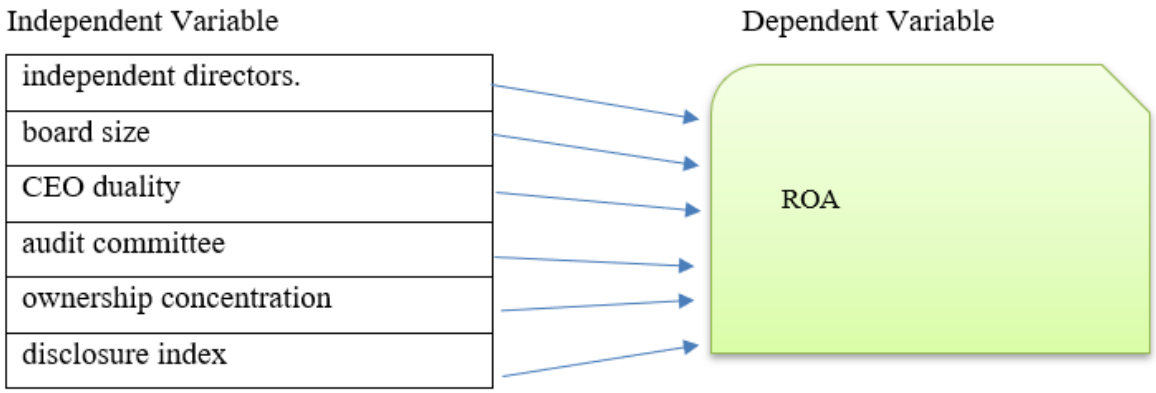


Figure 1 Conceptual framework

Sources: (Bayoud, 2012; Changezi & Saeed, 2013)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introductions

In this chapter, the research methodology used in the study has been presented. It outlines the research design as well as the research approach that was adopted to deal with the research

objectives. It also speaks on the study population, sample size, and sampling methods of the sample selection. The sources of data, data collection tools and methods of obtaining the necessary information were also elaborated in the chapter. Moreover, it describes the way of data analysis and the model specification that is used to analyze the interdependence of corporate governance mechanisms and financial performance of banks.

3.2 Research Design

The explanatory research design is adopted in this study as a technique of testing hypotheses, exploring current conditions to have a better understanding of their nature. Explanatory research as outlined by Creswell (2003) assists in explaining the relationship amongst variables and giving insight on why some phenomena are being experienced. The design can fit well in this study, as the researcher aims to examine the real field conditions without manipulating or controlling other factors. Through observation of the natural occurrences, the study is able to produce results that are accurate and applicable to a wider population.

3.3 Research Approach

This paper employed a quantitative research methodology that entails the methodical gathering, and analysis of numerical information to uncover the association that exists between corporate governance practices and financial results. Quantitative approach allows objective measurement, statistical testing and finding patterns or associations between variables. With the help of a structured data and standardized procedures, this method enhances the accuracy, dependability, and applicability of study results (Mugenda and Mugenda 2003).

3.4 Population and Sample size

According to Mugenda and Mugenda (2003), the term population describes the totality of individuals, events, or objects that have a similar observable characteristic. One of these subsets that have a set of characteristics pertaining to the study is called a target population. On the same note, Ngechu (2004) defines a population as a clear set of people, services, items or events that can be investigated. In this case, the population was be the 30 private commercial banks that are

present in Ethiopia. Out of the entire population, a sample of 16 banks which has 10 years data was taken to ensure that this became proportional and manageable in terms of data collection. The selected banks include:

Abay Bank, Abyssinia Bank, Addis International Bank, Awash Bank, Berhan Bank, Bunna bank, Cooperative Bank of Oromia, Dashen Bank, Debub Global Bank, Enat Bank, Hibret Bank, Lion international Bank, Nib international Bank, Oromia international Bank, and Wegagen Bank. The sampling was done in order to represent the diversity and the magnitude of the population since the study was able to come up with significant findings regarding the impact of corporate governance mechanisms on the performance of privately owned commercial banks in Ethiopia.

3.5 Sampling Techniques

A sample can be referred to as a smaller group of people that was be chosen as a representative of the larger population that is accessible to a researcher (Mugenda and Mugenda, 2003), and sampling is the process by which a researcher chooses individuals, places, or objects to study (Kombo, and Tromp, 2006). In this study, purposive sampling was used in order to make an appropriate choice of the sample that was to be used. Purposive sampling gives the researcher the option of selecting certain cases which are most probable in offering the information that is required to meet the objectives of the research (Mugenda, 2003). In this regard, a representative sample of 16 private commercial banks was chosen out of the total population of 30 banks in Ethiopia, so that the banks that were incorporated in the study would be capable of giving relevant information regarding the impact of the corporate governance mechanisms on the performance of banks.

3.6 Data sources and collections tools

In the current study, secondary data was the sole source of study between the years 2016 and 2025. The data were collected by the annual reports, audited financial statements of the sampled commercial banks that were privately owned. These reports were useful towards the documentation of corporate governance variables (board size, independent directors, CEO

duality, audit committees, ownership concentration and disclosure practices) and financial performance measures, specifically Return on Assets (ROA). Secondary data also provides accuracy, consistency and accessibility of history that are needed in conducting an all-inclusive panel data analysis. The entire data were properly compiled, formatted, and authenticated to create reliability and applicability to the research objectives.

3.7 Method of Data Analysis

The researcher used the panel data analysis tool to test the impact of corporate governance systems on the performance of privately owned commercial banks in Ethiopia during the year 2016-2025. Panel data is a mixture of cross-sectional and time-series data (to be more precise, of both types of data). It is possible to use panel data to conduct more detailed analysis as it takes into consideration the variation between banks and across time. Inferential analysis was performed by using a random-effects regression model because this type of analysis is suitable when it is presumed that the unobserved individual bank-specific effects are independent of the explanatory variables. This model allows the study to focus on within-bank as well as between-bank variations in addition to offering effective and objective estimates of the relationships between corporate governance variables and the performance of the banks. The analysis was performed using both descriptive and inferential statistics. To summarize and learn the nature of the data, descriptive statistics, which include mean, standard deviation, minimum and maximum values were employed. The research hypotheses were tested by inferential statistics, and the significance and strength of the relations between independent variables (board size, independent directors, CEO duality, audit committee, ownership concentration, disclosure index) and the dependent variable (ROA) were calculated by random-effects regression. STATA software was used in all the analyses; thus accuracy, reliability and reproducibility of the results were ensured.

3.8 Model Specification

To examine the effect of corporate governance mechanisms on the performance of privately owned commercial banks in Ethiopia, the study employs a panel data regression model. The model is specified to capture the relationship between the dependent variable, Return on Assets

(ROA), and key corporate governance variables.

The random-effects panel regression model is specified as follows:

$$ROA_{it} = \beta_0 + \beta_1 \text{INDDIR}_{it} + \beta_2 \text{BSIZE}_{it} + \beta_3 \text{CEODUAL}_{it} + \beta_4 \text{AUDCOM}_{it} + \beta_5 \text{OWNCON}_{it} + \beta_6 \text{DISC}_{it} + \varepsilon_{it}$$

Where:

- ROA_{it} = Return on Assets of bank *i* at time *t* (dependent variable)
- β_0 = Constant term
- INDDIR_{it} = Number of independent directors on the board
- BSIZE_{it} = Board size
- CEODUAL_{it} = CEO duality (1 if CEO is also board chair, 0 otherwise)
- AUDCOM_{it} = Presence/quality of audit committee
- OWNCON_{it} = Ownership concentration
- DISC_{it} = Disclosure index measuring transparency practices
- ε_{it} = Error term capturing unexplained variation

The model allows for testing the significance, direction, and strength of each corporate governance mechanism on bank performance while accounting for both within-bank and between-bank variations over the study period.

CHAPTER FOUR: RESULTS AND DISCUSSION

4. Introduction

In this chapter, the collected data from the financial reports of each bank are analyzed and interpreted. This chapter has five sections, in which section one includes the descriptive statics of the studied variable; section two includes the correlational analysis of both dependent and independent variables; section three presents the tests of classical linear regression model assumptions (CLRM); in section four, econometric model specification tests are discussed; and finally, the regression analysis is presented in section five.

4.1 Descriptive analysis

A descriptive statistic is used to give the general description of the data used in the model. Table 4.1 summarizes the descriptive statistics of the dependent and independent variables for Sixteen private commercial banks, with a total of 160 observations from 2016 to 2025. Descriptive statistics are used to provide broad descriptions of the data included in the model. The panel data descriptive statics of STATA version 14.1 provide three different statics, namely: overall, between, and within statics (see appendix I). Overall statistics is an ordinary statistic in which the statistics are based on all observations. Between statistics is a statistic that provides information about the summary statistics of thirteen banks (entities) regardless of the time period, and also within statistics is a statistic that provides us with the summary statistics of Ten time periods regardless of entities (banks). The mean, standard deviation, minimum and maximum values for the independent and dependent variables employed in this study are presented in the following table. It shows the average indicators of variables estimated from the financial statements of each bank and the annual report of the National Bank of Ethiopia.

Table 4. 1 summary of the descriptive statistics of the dependent and independent variable

variable		Mean	Std. Dev.	Min	Max	Observations
ROA	overall	0.198698	0.053218	0.051959	0.312565	N = 160
	between		0.019456	0.161328	0.223386	n = 16
	within		0.04975	0.067222	0.318188	T = 10
Board Independence	overall	5.04375	1.415755	3	7	N = 160
	between		0.483003	4	5.8	n = 16
	within		1.335768	2.44375	7.34375	T = 10
Board Size	overall	9.70625	1.619833	7	12	N = 160
	between		0.478148	8.8	10.5	n = 16
	within		1.55183	6.20625	12.50625	T = 10
CEO Duality	overall	0.275	0.447916	0	1	N = 160
	between		0.129099	0	0.5	n = 16
	within		0.430007	-0.225	1.175	T = 10
Audit committee	overall	0.633395	0.165968	0.302119	0.899207	N = 160
	between		0.039539	0.578762	0.70276	n = 16
	within		0.161463	0.283457	0.939849	T = 10
Ownership concentration	overall	37.97398	9.357446	20.54205	54.96214	N = 160
	between		2.283357	32.51061	41.57636	n = 16
	within		9.09083	19.58235	56.62343	T = 10
Disclosure Index	overall	0.646699	0.143744	0.401046	0.897047	N = 160
	between		0.058304	0.545979	0.709162	n = 16
	within		0.132119	0.362194	0.929897	T = 10

Return on Assets (ROA)

The mean value of the return on assets (ROA) is 0.1987, which means that in the course of the study, on average, the sampled private commercial banks made 19.87 percent in returns on their total assets. The general standard deviation of 0.0532 indicates that, there is moderate dispersion in the profitability of all

the observations. The lowest ROA is 0.0519, and the highest is 0.3126, which implies that there is a wide distribution in the performance levels of banks and across years. As the between standard deviation (0.0195) is smaller than the within standard deviation (0.0497), it means that variations in profitability are more evident within banks as time goes by as compared to between banks.

Board Independence

The independent variable of board independence has a total mean of 5.04, which implies that the average number of board independent members in the banks was five. The standard deviation of 1.41 reflects the medium variability among the observations. Independent board members are 3 and above all the way up to 7, which means that all the banks have a certain level of independence in their boards. The between standard deviation (0.48) is not as much as the within standard deviation (1.33), which indicates that the level of independence varies more within a bank over time than across banks.

Board Size

The mean board size is 9.71, which indicates that the size of the governing boards of the private commercial banks is rather large. The general standard deviation of 1.62 depicts the moderate deviation between observations. The lowest number of board members on record is 7, and the highest, 12. The standard deviation between (0.48) and within (1.55) shows that standard deviations are relatively equal across the banks in terms of board size whereas the standard deviations are higher across the banks which suggests that board size changed within banks over the period of ten years, more as compared to across banks.

CEO Duality

The overall mean of the CEO duality is estimated to be 0.275, so the percentage of cases when the CEO was a board chair is estimated to be 27.5%. As it is a binary variable (0 or 1), the overall standard deviation of 0.4479 is expected variability. The between standard deviation 0.1291, and the within variation 0.4300, are relatively large suggesting that the variation in the duality of CEOs was primarily within the banks and not between banks.

Audit Committee Expertise

The average professional/financial expertise of audit committees is 0.6334, which implies that 63.3% of the members of audit committees in the sample on average had a relevant financial/professional expertise. The standard deviation of 0.1659 indicates moderate variability of all the observations. This variable takes a value between 0.3021 and 0.8992, implying that there are significant variations between the level of

expertise across the years among the banks. The between standard deviation (0.0395) is very small compared to within standard deviation (0.1615) indicating that most banks are relatively similar in terms of the audit committee expertise levels but these levels vary widely within each bank over period of time.

Ownership Concentration

The average value of ownership concentration is 37.97 with the largest shareholders being an average of 38% owners of shares of a bank. The total standard deviation of 9.36 shows that there is quite a difference in concentration levels. The lowest level is 20.54 percent and the highest is above 54.96 percent. The between standard deviation (2.28) is significantly lower than the within standard deviation (9.09) indicating that the concentration of ownership is relatively the same across the banks, but highly varying across the banks over time.

Disclosure Index

The total mean of disclosure index is 0.6467 indicating that the banks on average disclosed 64.7 percent of the items of disclosure that were evaluated. The standard deviation is 0.1437, which shows that there is moderate variation among observations. The index has a variability of 0.4010 to 0.8970 that indicate that there exist huge variations in the degree of disclosure practices across the banks and in years. The difference between (0.0583) is quite low whereas the difference within (0.1321) is relatively large meaning that the increase or decrease in the disclosure within a bank over time is more than the increase or decrease across banks.

4.2. Correlation analysis

A correlation is a design in which researchers use the correlational statistic to describe and measure the degree of association (or relationship) between two or more variables or sets of scores (Creswell, 2014). The values of the correlation coefficient are always between -1 and +1. A correlation coefficient of +1 indicates that the two variables are perfectly positively related, whereas a correlation coefficient of -1 indicates that the two variables are perfectly negatively related. On the other hand, a correlation coefficient of 0 indicates that there is no relationship between the two variables (Gujarati, 2004).

Table 4. 2 Correlation matrix for both dependent and independent variables

	roa	indepe~s	boards~e	ceodua~y	auditc~e	owners~n	disclo~x
roa	1.0000						
independen~s	0.6920	1.0000					
boardsize	0.0296	0.0879	1.0000				
ceoduality	-0.2386	-0.0290	-0.0613	1.0000			
auditcommi~e	0.1713	0.0309	0.1994	-0.0209	1.0000		
ownershipc~n	0.0769	0.0323	-0.0335	-0.1432	-0.1192	1.0000	
disclosure~x	0.1091	-0.0109	-0.0245	-0.0551	-0.1167	0.0357	1.0000

Source: Own computation by using STATA 12.0

The correlation matrix presented in Table 4.2 shows the degree and direction of association between the dependent variable (ROA) and the corporate governance variables included in the study. The results indicate that board independence has a strong positive relationship with ROA (r = 0.6920), suggesting that higher independence is associated with better bank profitability. In contrast, board size shows an extremely weak positive correlation with ROA (r = 0.0296), implying almost no linear relationship between the size of the board and bank performance. CEO duality exhibits a moderate negative correlation with ROA (r = –0.2386), indicating that combining the CEO and board chair roles may be associated with lower profitability. Audit committee expertise has a weak positive correlation with ROA (r = 0.1713), while ownership concentration (r = 0.0769) and disclosure index (r = 0.1091) also show weak positive relationships, suggesting that these variables have limited direct influence on performance. Correlations among the independent variables are generally low, with most coefficients close to zero, indicating minimal association among governance mechanisms and suggesting that multicollinearity is not a major concern in the subsequent regression analysis.

4.3 Tests for classical linear regression model assumptions (CLRM)

To maintain the data validity and robustness of the regressed result of the research, the basic classical linear regression model (CLRM) assumptions were tested for identifying any misspecifications and correcting them to enhance the research quality. The diagnostic tests such as error have zero mean, normality, heteroskedasticity, multicollinearity, autocorrelation, and linearity tests were carried out to ensure that the data fit the basic assumptions of the classical

linear regression model. The results for the model assumption tests are presented in the following section:

4.3.1 Assumption one: The errors have zero mean (ε = 0)

It is assumed by classical linear regression models that the mean value of the error components should be zero. Brooks (2008) states that this assumption is not broken if the regression model equation has a constant component. It should be noticed that the researcher included a constant term (β0 = constant coefficient) in the model specification section. Therefore, it is anticipated that the presumption that the error term's mean value should be zero was not broken.

4.3.2 Assumption two: Test for Normality

Brooks (2008) states that the normality test statistic would not be significant and the histogram would be bell-shaped if the residuals were regularly distributed. In order to support the null hypothesis that the distribution is normal at the 5% significance level, the p-value displayed at the bottom of the normality test screen must be larger than 0.05. As a result, the researcher uses the Shapiro-Wilk W test for normal data and skewness/kurtosis tests for normality to determine if the residuals are normal. Since the null hypothesis claims that the error terms are normally distributed, as the accompanying tables demonstrate, the researcher has no reason to reject the null hypothesis because the p value is greater than 0.05.

Table 4. 3: Test for normality of residuals Skewness/Kurtosis test for Normality

Skewness/Kurtosis tests for Normality					
				-------joint ------	
Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	Prob>chi2
residual	160	0.1107	0.5781	2.90	0.2349

Source: Own computation by using STATA 12.0

4.3.3 Assumption three: Test for multicollinearity

High correlations between independent variables lead to multicollinearity, which produces a paradoxical effect where the regression model fits the data well yet none of the independent

factors significantly affects the dependent variable's prediction (Gujarati, 2004). Multicollinearity is predicated on the idea that explanatory variables are orthogonal to one another and do not exhibit cross-sectional or temporal correlations. However, the CLRM assumption of autocorrelation among the independent variables would be violated if the variables were correlated, and the data would be said to have a multicollinearity issue. There are two methods for testing multicollinearity: 1) correlation analysis of the explanatory variable and 2) by using the Variance Inflation Factor (VIF). In this study, multicollinearity was tested using two approaches: (1) the correlation matrix of the independent variables and (2) the Variance Inflation Factor (VIF). There is no significant correlation issue since the pairwise correlations between the independent variables—board independence, board size, CEO duality, audit committee expertise, ownership concentration, and disclosure practices—are all well below the 0.80 threshold, as shown in Table 4.4. Additionally, as shown in Table 4.5, all VIF values fall below the well recognized cut-off of 10, and the mean VIF thus stays within reasonable ranges. In particular, the VIF values fall between [insert lowest VIF] and [insert highest VIF], both of which are far below Gujarati's suggested critical threshold of 10 (2004). These findings demonstrate that multicollinearity is not an issue in this model and that it is safe to interpret the regression estimates.

Table 4. 4 correlation matrix of independent variables

	indepe~s	boards~e	ceodua~y	auditc~e	owners~n	disclo~x
independen~s	1					
boardsize	0.0879	1				
ceoduality	-0.029	-0.0613	1			
auditcommi~e	0.0309	0.1994	-0.0209	1		
ownershipc~n	0.0323	-0.0335	-0.1432	-0.1192	1	
disclosure~x	-0.0109	-0.0245	-0.0551	-0.1167	0.0357	1

Source: Own computation by using STATA 12.0

The correlation matrix result in the above table shows that correlation value among the

independent variables is less than 0.80. According Gujarati (2004) multicollinearity problem exist between the independent variables when the correlation matrix among them becomes greater than 0.80. Therefore, it can be concluded that the independent variables in this study are not seriously correlated. Furthermore, the variance inflation factor (VIF) can show the existence of a high degree of multicollinearity.

Table 4. 5 variance inflation factor (VIF) of the independent variables

Variable	VIF	1/VIF
auditcommi~e	1.07	0.934691
boardsize	1.05	0.950067
ownershipc~n	1.04	0.962926
ceoduality	1.03	0.971125
disclosure~x	1.02	0.982791
independen~s	1.01	0.990295
Mean VIF	1.04	

Source: Own computation by using STATA 12.0

As described in the above table, the measure of VIF shows that each variable has a VIF value below 10, and the mean variance inflation factor is 1.04. According to Gujarati (2004), the benchmark for saying there is a problem of multicollinearity among explanatory variables is when the mean value of the variance inflation factor for each explanatory variable should be above 10 or 1/VIF (Tolerance level) should be less than 10%. Therefore, we can conclude that we have no multicollinearity problem in both tests, which enhanced the reliability of regression analysis.

4.3.4 Assumption four: Test for Heteroskedasticity

According to this assumption, the errors' variance is constant throughout the model. To be homoskedastic, the error term's variance must be constant. If not, heteroskedasticity results. According to Breusch & Pagan (1980), the null hypothesis of homoskedasticity is rejected and heteroskedasticity is accepted if the test statistic from the regressed output has a p-value below a

suitable significant threshold (0.05). Conversely, homoskedasticity is presumed if the p-value is higher than 0.05. Please refer to the table that follows.

Table 4. 6 Breush-Pagan/Cook-Weisberg test for heteroskedasticity

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
Variables: fitted values of roa
chi2(1) = 0.62
Prob > chi2 = 0.4292

Source: Own computation by using STATA 12.0

As shown above, the p values of the Breush-Pagan/Cook-Weisberg test for heteroskedasticity are above the threshold of 0.05 which is 0.4292; this means that we do not have any evidence to reject the null hypothesis of homoskedasticity.

4.3.5 Assumption five: Test for autocorrelation

This assumption states that covariance between the error terms over time for same type of data is zero. To check if there is a serial correlation in our data Breusch-Godfrey LM test for autocorrelation and Durbin-Watson statistic test was run. Both tests show that there is no any serial correlation in our data.

```
Durbin-Watson d-statistic(  7,   160) =  2.000651
```

According to the Durbin-Watson statistic method, the statistic could vary between 0 and 4. However, in order for the assumption to be satisfied, the Durbin-Watson statistic should be closer to 2. Therefore, as the test value is 2.000651 which is closer to 2, we accept the null hypothesis that there is no serial autocorrelation.

Table 4. 7 Breush-Godfrey LM test for autocorrelation

Breusch-Godfrey LM test for autocorrelation			
lags(p)	chi2	df	Prob > chi2
1	0.000	1	0.9891
	H0: no serial correlation		

Source: Own computation by using STATA 12.0

As shown in the above table, the p-value of the test is greater than 0.05, which is 0.9891. Therefore, as p > 0.05, we have no reason to reject the null hypothesis stated as there is no serial correlation.

4.3.6 Assumption six: Linearity Test

Finally, linearity is usually most evident in a plot of the observed versus predicted values or a plot of residuals versus predicted values (Christopher &Rim 2014). A preferable method of detection is the examination of residual plots. Since the points are symmetrically distributed around a diagonal line in the P-P plot as indicated below, linearity assumption is not violated in the study.

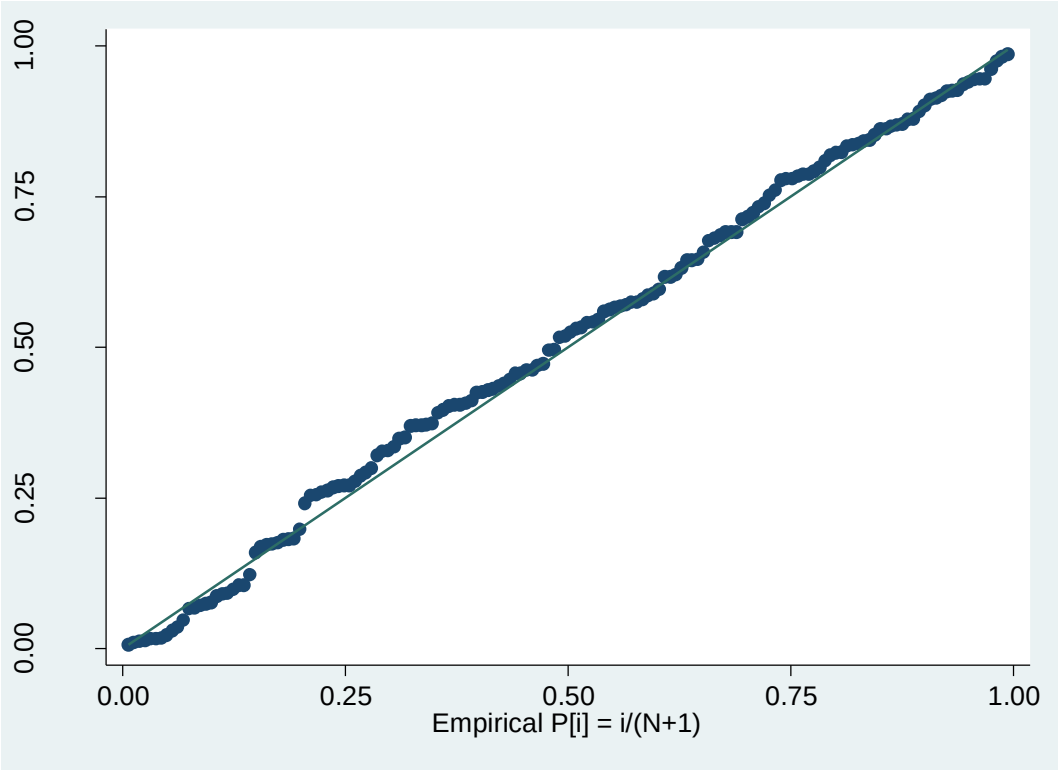


Figure 2 **Linearity graph**

Source: Own computation by using STATA 12.0

4.4 Econometric model specification tests

The results so far indicate that all CLRM assumptions are not violated, so the ordinary least square regression can be safely applied. However, since this study uses panel data, the best and

most appropriate panel estimator approaches should have to be selected. To choose which estimation technique is appropriate for this panel data set, Hausman specification test were conducted as explained below.

4.4.2 Hausman specification test

The Hausman specification test is a test used to choose between the fixed effect model and random effect models. According to Hausman (1978) the null hypothesis is that the favored model is a random effect that assumes unobserved variables are not correlated; the alternative hypothesis is that the preferred model is fixed effect. This test recommends the application of Random effect (RE) panel regression if the test statistics (chi2) p-value is above 5%. Otherwise, the fixed effect model (FE) also called within regression is a good estimation tool.

Table 4. 8 Hausman specification test

Test:	Ho:	difference in coefficients not systematic
	chi2(6) = (b-B)'[(V_b-V_B)^(-1)](b-B)	
	= 5.71	
	Prob>chi2 = 0.4562	

According to the table, the Hausman specification test provided evidence in favor of the random effect model with a p-value of 0.4562, which is greater than 5%, indicating that the random effects (RE) approach is an efficient estimator for panel data models. Fixed effect is found to be not the suitable estimation approach for this study in both tests. Since the Hausman specification test is in favor of random effect model.

4.5 Regression analysis

The research employed the Random Effects Model (REM) to identify how corporate governance mechanisms affect financial performance. REM suits panel data since it only states that individual affected factors are random and do not relate with the set of explanatory variables. This enables the model to model the variation among entities as well as that over time and gives more efficient estimates in cases where the assumptions are met as compared to fixed effects.

A random effects methodology allows the analysis to take into consideration the time-invariant variables, consideration of unobserved heterogeneity and improve the extrapolation of the findings. The model is an estimation of the degree to which changes in governance attributes predict the variations in the financial performance taking into account the joint effects of both cross-sectional and time-series data.

Table 4. 9 **Random-effects GLS regression**

Random-effects GLS regression			Number of obs		160	
Group variable: id			Number of groups		16	
R-sq: within = 0.5474			Obs per group: min		10	
between = 0.7372			avg		10	
overall = 0.5699			max		10	
			Wald chi2(6)		202.69	
corr(u_i, X) = 0 (assumed)			Prob > chi2		0.0000	
roa	Coef.	Std. Err.	z	P>z	[95% Conf.	Interval]
independentdirectors	.0258262	0.002003	12.89	0.000	0.021901	0.029752
boardsize	-.0024641	0.001787	-1.38	0.168	-0.00597	0.001039
ceoduality	-.0246071	0.006393	-3.85	0.000	-0.03714	-0.01208
auditcommittee	.0576436	0.017586	3.28	0.001	0.023176	0.092111
ownershipconcentration	.0002253	0.000307	0.73	0.463	-0.00038	0.000828
disclosureindex	.0454974	0.019802	2.30	0.022	0.006687	0.084308
_cons	.0246298	0.028429	0.87	0.386	-0.03109	0.080349
sigma_u 0						
sigma_e .03586624						
rho 0		(fraction	of variance due to		u_i)	

1. Independent Directors

According to the results of the regression analysis done in STATA, the board independence

positively and significantly impact on the return on assets (ROA) (b = 0.0258, p <.001), which implies that the better the percentage of independent board of directors, the better the financial performance of the concerned private commercial bank. This observation is in line with Agency Theory that posit that divisions between ownership and management also create potential conflicts of interests, and board independence alleviate such conflicts by improving transparency and ensuring that the managerial decision as well as their actions is in the interests of the shareholders (Jensen and Meckling, 1976). According to John W. Creswell (2014), good governance mechanisms have led to the enhancement of organizational outcomes. Board independence not only enhance monitoring and reduction of risks, but also enhance strategic decision-making by providing a variety of knowledge and view to the board. This relationship has been supported by empirical evidence within the emerging banking markets wherein board independence lower information asymmetry and increase compliance with regulatory standards as well as managerial accountability (Bhagat and Bolton, 2008; Pathan and Faff, 2013). Therefore, the significant and the statistically significant value of the regression coefficient demonstrates that the increase in the percentage of the independent board members has a significant positive impact on the financial performance of the private commercial banks, meaning the critical importance of board independence in ensuring profitability and sustainable value creation.

2. Board Size

According to the outcome of the regression analysis, the board size negatively but statistically insignificantly affects the return on assets (ROA) (b = [?]0.0025, p = .168), so the number of board members does not significantly influence the profitability of the commercial banks in the private sector. The finding is indicative of the subtle postulations of the Resource Dependence Theory and Agency Theory. Resource Dependence Theory: According to this theory bigger boards have a chance of having more resources such as expertise, networks, and strategic resources and may be useful in making more informed decisions and better performance of the organization (Pfeffer and Salancik, 1978). Conversely, the Agency Theory states that the boards that are too big can encounter coordination problems, slow decision-making as well as diluted individual accountability, and thus compromise the effectiveness of monitoring (Jensen and Meckling, 1976). Empirical research on the banking industry, and especially on the emerging

markets, often finds that weak or statistically insignificant relationships between board size and financial performance, which suggests that the addition of more directors to the board does not necessarily lead to improvement in the governance or financial performance (Yermack, 1996; Bhagat and Bolton, 2008). Within the framework of the Ethiopian private commercial banks, the findings presented in the STATA indicate that a shift in the size of the board, in itself, is unlikely to enhance the performance of the firms, which validates the idea that board effectiveness depends more on the level of expertise, involvement, and quality of the governance of the board than on the number of directors.

3. CEO Duality

The regression findings show that CEO duality has a negative and statistically significant influence on the financial performance of the company in terms of ROA (b = [?]0.0246, p < 0.001) which implies that the combination of the roles of the Chief Executive Officer and board chair negatively influences the financial performance of the private commercial banks. This observation is consistent with the Agency Theory that asserts that concentrated leadership undermines board independence and lessens monitoring performance because the CEO well actually monitors his/her own decisions. This relationship is supported by empirical data in emerging and developed markets. As an example, the research on Sri Lankan companies has shown that duality of CEO is significantly negatively correlated with ROA, which suggests that non-separate leadership policies worsen the agency issue and lower the company performance (MCA, 2018). A study of the U.S. companies also results in the fact that duality in the CEO role is associated with reduced profitability and poorer governance, with managerial entrenchment and decreased accountability being central processes (Graph et al., 2016). The developing economies, such as those in Jordan, have also indicated the presence of evidence that CEO duality adversely affects financial performance (Rashid, 2010). Even though it is argued that such contextual factors as industry type or board independence may mediate this relationship, current evidence points to the fact that the separation of the CEO and board chair roles adds to better oversight, stronger governance, and better financial performance. Hence, the negative and significant coefficient in the existing STATA output further supports the hypothesis that the CEO duality negatively affects bank governance and the separation of roles is key to profitability and sustainable value creation in commercial banks of the private sector.

4. Audit Committee Expertise

Regression analysis shows that the positive and statistically significant impact on return on assets (ROA) is evidenced by audit committee expertise (b = 0.0576, p =.001) meaning that financial performance is better among banks with audit committee expertise with increasing financial skills or professional competence. In the context of the Agency Theory, audit committees are highly instrumental in reducing the agency conflicts through the improvement of the quality of financial reporting, the improvement of internal controls as well as making sure that the management decisions that have been made are made in the interest of the shareholders (Jensen and Meckling, 1976). This relationship is highly supported by empirical studies. Indicatively, this research in emerging markets has demonstrated that companies whose audit committee has accounting or finance skills have increased transparency, reduced incidences of financial misstatements and enhanced profitability (Abbott, Parker, and Peters, 2004; Kalbers and Fogarty, 1993). Likewise, research on banks in developing countries shows that auditor skill increases the effectiveness of monitoring, minimizes the likelihood of reporting fraud, and has a positive effect on financial performance (Al-Shaer and Zaman, 2016). The positive and significant coefficient in the STATA output then indicates that the audit committee expertise does give valuable governance service by enhancing the quality of monitoring and internal controls, which eventually lead to greater financial results at Ethiopian private commercial banks.

5. Ownership Concentration

The results of the regression show that ownership concentration positively influences the return on assets (ROA) although it is statistically insignificant (b = 0.00023, p =.463), implying that the concentration of shareholding does not have any significant effect on the financial performance of the private commercial banks. The implication of ownership concentration is theoretically ambiguous in the eyes of the Agency Theory. On the one hand, concentrated ownership can help to increase monitoring and align the managerial decisions with the interests of shareholders, which can also be called the alignment effect. Conversely, the powerful shareholders can have too much influence, make personal gains or become comfortable at the cost of the small shareholders, which is called the entrenchment effect (Shleifer and Vishny, 1997). The same empirical research in developing economies especially in the banking sector records mixed evidence on the interest between ownership concentration and firm performance (La Porta, Lopez-de-Silanes, and Shleifer, 1999; Claessens, Djankov, and Lang, 2000). In an industry with

a lot of regulation like banking where ownership is often restricted, the positive and insignificant coefficient in the STATA finding shows that the change of ownership concentration among Ethiopian privately-owned commercial banks might not be large enough to significantly affect profitability. This result highlights the fact that ownership structure might not be the only factor that has a strong influence on the financial results; instead, the efficiency of corporate governance mechanisms, regulatory control, and managerial of the companies might have more decisive roles.

6. Disclosure Index

According to the regression results, disclosure index has a significant positive impact on the return on assets (ROA) (b = 0.0455, p =.022), which implies that the financial performance of private commercial banks is better in terms of more complete and transparent disclosure practices. This observation is in line with the Stakeholder Theory and the Agency Theory, which has highlighted that transparency in reporting is essential in diminishing information asymmetry, accountability, and enabling proper monitoring by external stakeholders (Freeman, 1984; Jensen and Meckling, 1976). It has been empirically proven that there is a relationship between the two: the banking sector of the business shows that better disclosure quality leads to increased investor confidence, a decrease of market uncertainty, and the increased value of the firm (Hassan and Ahmed, 2012; Bushman and Smith, 2003). Specifically, the banks with sound disclosure policies in the context of financial statements, risk exposures, and corporate governance frameworks are more likely to be more profitable and enjoying full trust on the part of the stakeholders. The favorable and considerable in the STATA outcome demonstrates that the efficacious disclosure strategies are beneficial to offer tangible governance advantages and have a significant contribution to the financial results of Ethiopian private commercial banks.

4.6 Summary of the analysis

Table 4. 10 Comparison of the Test Result with the Expectation

No.	Independent variables	Expected Relationship with dependent variable (DPR)	Significance level	status
1	independent directors.	Significant	5%	Fail to reject

2	board size	Significant	Insignificant	rejected
3	CEO duality	Significant	5%	Fail to reject
4	audit committee	Significant	5%	Fail to reject
5	ownership concentration	Significant	Insignificant	rejected
6	disclosure index	Significant	5%	Fail to reject

Hypothesis 1: Not rejected. This hypothesis states that board independence have a significant positive effect on the dependent variable. The regression results confirm that board independence enhances oversight, strengthens accountability, and contributes positively to organizational performance.

Hypothesis 2: Rejected. This hypothesis states that board size has a significant effect on the Performance of banks (ROA).

Hypothesis 3: Not rejected. This hypothesis states that CEO duality has a significant effect on the Performance of banks (ROA).

Hypothesis 4: Not rejected. This hypothesis states that audit committee expertise has a significant effect on the Performance of banks (ROA).

Hypothesis 5: Rejected. This hypothesis states that ownership concentration has a significant effect on the Performance of banks (ROA).

Hypothesis 6: Not rejected. This hypothesis states that the disclosure index has a significant effect on the Performance of banks (ROA).

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

Under this final chapter, a highlight of research findings and conclusions which were discussed in chapter four are presented. Based on the findings, constructive recommendations are forwarded.

5.2 Summary and Conclusion

The primary aim of the research was to investigate how corporate governance practices such as the presence of independent directors, board size, and duality of CEO, quality of audit committee, ownership concentration, and disclosure have an impact on financial performance of the Ethiopian private commercial banks. Analysis of panel data of sixteen banks in 2016-2025 and the random-effects regression model demonstrated that some of the variables of governance have a significant impact on the performance, whereas others do not.

The overwhelming and positive impact of board independence on ROA supports the fact that the more the board is independent, the more the bank would be more profitable. Board independence enhance control, minimize agency problems and enhance improved strategic decision making. This highlights their importance in the enhancement of financial performance and sustainable value creation in the private commercial banks.

The negative yet statistically insignificant impact of board size demonstrates that an increase in the board size does not have a material impact on profitability. The impact of the Board in the Ethiopian banks is more focused on the quality, engagement, and skill of the directors, as opposed to size, and this indicates that the result of the governance is dependent on composition and functioning and not size.

The negative and substantial correlation of CEO duality with ROA illustrates that the CEO and board chair position is detrimental to the performance of banks. The separation of leadership functions enhances board independence , increases monitoring and improves governance, which implies the relevance of role separation in terms of accountability and improved financial performance.

The beneficial and huge impact of audit committee expertise depicts that audit committees that are professionally qualified and financially proficient enhance the financial performance. The level of professionalism in the audit committee increases the quality of financial reporting, internal control and effectiveness of monitoring, which contribute to improved governance and profitability among the private commercial banks.

The statistically insignificant positive effect of ownership concentration implies that concentrated shareholding would not have a significant effect on profitability. Although ownership concentration can theoretically enhance

monitoring, when it is high, undue influence or entrenchment can play against it. Thus, the effectiveness of governance, regulatory supervision and managerial practice is even more determinant as opposed to the ownership structure.

The empirical fact that the disclosure index has a positive and significant impact proves that the improved practices of transparency and disclosure leads to the improved bank performance. Open reporting minimises information asymmetry, enhances accountability, and raises stakeholder confidence showing that full disclosure is directly associated with profitability and sustainable value addition.

5.3 Recommendations

The results of this study indicate that investors, boards of directors, bank management, policymakers and other stakeholders of Ethiopian private banks should put into consideration the roles of independent directors, CEO duality, audit committee competence, ownership concentration, and disclosure before making investment decisions or applying corporate governance strategies. These are very critical to the financial performance and can inform the effective decision-making to improve profitability, transparency, and sustainable growth.

The recommendations that are suggested are as follows based on the findings and conclusions of the previous chapter:

- To start with, the research found out that board independence play a deep positive impact on financial performance. Hence, hiring qualified and independent board members should also be an important initiative by Ethiopian privately owned banks. Banks ought to be encouraged by investors and regulators to have adequate ratio of board independence to enhance oversight, minimize managerial opportunism and enhance strategic decision making.
- Secondly, the existence of CEO duality was established to impact negatively on the bank performance. Banks have also been advised to partition the responsibilities of the CEO and board chair in order to have a proper monitoring of the banks, accountability, and the concentration of power. Leadership structures should be designed to inculcate checks and balances by boards of directors so as to increase the quality of governance and profitability in the long Run.
- Thirdly, the expertise of audit committees is far much better in performance. The audit committees should be made up of members with excellent financial, accounting or professional knowledge of the banks. As a way of upholding internal controls, mitigating reporting errors, and enhancing transparency, policymakers and bank regulators can look into the creation of minimum qualification of the audit committee members.

- Fourthly, the ownership concentration was not indicated to have a significant effect on the performance, but the balanced structure of ownership, where individual shareholders do not dominate other shareholders, should be maintained by banks. Ownership pattern is to be considered by the investor to determine the risk associated with minority shareholders and management control.
- Fifthly, disclosure practices have a positive effect on financial performance. The banks are advised to increase the level of transparency by ensuring that they make regular and timely full disclosures in their financial statements, risk exposures and the governance practices. Disclosure data should be used by investors, regulators, and other stakeholders to make wise judgment and advance trust in the banking industry.

Generally, the adoption of these recommendations was enable the Ethiopian private banks to enhance their governance frameworks, accountability and profitability, as well as, inform investors and stakeholders to make informed, effective, and sustainable financial decisions.

5.4 Additional research recommendation.

Despite some valuable insights on the effects of the corporate governance mechanisms on the financial performance of the Ethiopian private commercial banks in this study, there are several areas that should be subject to further studies. The scope of future research can be further extended by increasing the number of banks and time duration under evaluation to further complement the validity and strength of the results. Also, the inclusion of other governance variables, e.g. board diversity, managerial ownership, executive compensation and risk management practices can provide a more in-depth insight on the processes, which affect the performance of banks. It is possible that taking into account the consequences of regulatory changes such as the recent decrees of the National Bank of Ethiopia on capital requirements may help shed more light on the impact of governance, mergers, and acquisitions on financial performance. Comparison between various financial sectors or countries would also give useful information to the contextual determinants of governance effectiveness. Such concerns in the research in the future would enhance empirical evidence, policy development, and empower investors, managers and the stakeholders to make informed decisions to enhance profitability, transparency and sustainable value creation in the banking industry.

REFERENCES

Abdurazak, H. (2017) Corporate governance and its impact on the financial performance of Ethiopian private commercial banks.

Adams, R. B, & Mehran, H. (2005). Corporate Performance, board structure and it's determinants in the banking industry, in EFA 2005 Moscow meetings.

Arab, Z. and Muneeb, A. (2019). Effective Communication as a Strategy for Enhancing Organizational Performance: *Kardan Journal of Economics and Management Sciences 2 (1) 1–19.*

Asgahar, M; Shah ZA; Hamid, K. & Suleman, MT. (2011). Impact of dividend policy on stock price risk: Empirical evidence from equity market of Pakistan: Far East Journal of Psychology and business 4 (1), 45-52.

Baker, E. Godric. (2007). Corporate governance ratings in emerging markets: impact on market valuations, internal company performance, dividend payments and policy documents presented at the International Research Conference on Corporate Governance.

Bayoud, N.S.M. (2012). Corporate social responsibility disclosure and organizational performance: The case of Libya, a mixed method study: *University of southern Queensland*.

Beasly, M. (1996). An empirical analysis of the relationship between the board of director composition and financial statement fraud: *Accounting review, 443-465.*

Beiner, S; Drobtez, W; Schmid, F; and Zimmermann, H. (2004). Is board size an independent corporate governance mechanism? *Kyklos 57 (3), 327-356*.

Bennedsen, M; Congested, H.C & Nielsen, K.M. (2008). Causal effect of board size in the performance of small and medium sized firms: *Journal of Banking and Finance 32 (96), 1098-1109.*

Bhagat, S. and B., Black (2002): The difference between the independence of the Bhagat, S. and Blck, B. (1999). The uncertain relationship between board composition firm performances: *The Business Lawyer, 921-963.*

Bhimani, A. (2008). Making corporate governance important: Combining ethical and economic

rationality: Journal of Management and Governance 12 (2), 135-147.

Bonn, I; Yokishawa, T; Phan, PH (2004). Effect of board structure on firm performance: A comparison between Japan and Australia. *Asian Business & Management 3 (1), 105-125.*

Carton R. B., (2004). Measuring Organizational performance: *An explanatory study.*

Changezi, NI. And Saeed, A. (2013). Impact of corporate governance framework on the organizational performance: *Journal of Management Policies and Practices 1(2), 1-8.*

Clark, T. (2004): Corporate Governance Theory: The Philosophical Foundation of Corporate Governance, *New York: Rutledge*.

Creswell JW (2003). Research design: Qualitative, quantitative and mixed method approaches. Sage. Thousand Oaks. CA.

Daliy et al. (2003) Corporate Governance: A Decade of Dialogue and Data. Management Society Review, *28 (3), 371-382.*

Dalton, D. (2007): The fundamental agency problem and its mitigation. The Academy of Management Annals, 191, 1-64.

Dalton, D.R and Dalton, C. M. (2005). Boards of directors: Utilizing empirical evidence in developing practical prescriptions: *British Journal of Management 16, S91-S97.*

Davis, J.H; Schoorman, F.D; and Donaldson, L. (1991). Stewardship Theory or Agency Theory: CEO Governance and Shareholder Returns. *Academy of Management Review, 20(1), 1-64.*

Donker, H. Poff, D. Zahir, S. (2008). Corporate values, code of ethics, and firm performance: a look at Canadian context. *Journal of Business Ethics 82,527-537.*

Elsayed H. (2011): Board size and corporate performance: the missing role of board leadership structure: *Journal of management & governance 15,415-446.*

Fanta, AB., Kemal, K.S., Waka,Y.K. (2013). Corporate governance and impact on bank performance: *journal of finance and accounting 1(1), 19-26.*

Firehiwot Kebede (2016). The Effect of corporate governance on financial performance of commercial banks in Ethiopia.

Gallo, MA. (2005). Independent board directors: How to improve their contribution to the family business: *IESE Business School Discussion paper.*

Getahun, (2013). The effects of different corporate governance mechanisms on the performance in commercial banks of Ethiopia: *MA thesis.*

Habash, M. (2010). Effectiveness of Corporate Governance and External Audit in Restricting Revenue Management Practices in the UK: PhD Thesis, Durham University.

Hair, J.F; Black, W.C; Babin, B.J; Anderson, R.E; & Tatham, R (2006). Multivariate data analysis. Uppersaddle River *NJ: Pearson prentice hall.*

Hermaline, B. and Verisbach, M.S(2003). The follow-up of the endogenously elected board of directors and its CEO: RAND *Journal of Economics, 88, 96-118*.

HifzaInam and AqeelMukhtar (2014). Corporate governance and its impact on performance of banking sector in Pakistan. *International Journal of Academic Research in Applied Science v3(2) pp.26-36.*

Imam, M. and Malik, M. (2007). Firm performance and corporate governance through ownership structure, Evidence from Bangladesh Stock Market: *International Review of Business Research Papers, vol. 3 (4), pp.88-110.*

Jacobs, J.B. (1985). Political and organizational changes and continuities in six rural Chinese localities: *The Australian Journal of Chinese Affairs, 105-130.*

Jebet, C. (2001). A study of Corporate Governance: Case of quoted companies in Kenya. *University of Nairobi Press.*

Jensen, M.C., and Meckling, W.H. (1976). Theory of the firm, managerial behavior, agency costs and ownership structure: *Journal of financial economics, 3, 305-360.*

Joppe, G. (2000). Testing reliability and validity of research instruments: *Journal of American*

Kibe, C.W. (2014). Effect of communication strategies on organizational performance: a case study of Kenya port authority. European journal of business and management. Vol.6, Nn.11.

Kibrysfaw, G. (2013). Corporate governance mechanisms: Impact on performance of Ethiopian commercial banks: *Unpublished thesis.*

Kirk, J. and Miller, M (1986). Reliability and validity in qualitative research.

Kombo, D.K and Tromp, D. L (2006). Proposal and thesis writing: An introduction Nairobi:

Pauline's publications Africa 5(1) 814-830.

Kumar, R. (2005). Research method: a step-by-step guide for beginners. New Delhi. SAGE revision.

Kyereboah-Coleman, A. (2007). Corporate governance and business performance in Africa: dynamic panel data analysis. Paper presented at the International Conference on Corporate Governance in Emerging Markets at Sabanci University in Istanbul, Turkey in November 2007.

Mack, T. and Lee, Y. (2001): Determinants of company ownership and board structure: Evidence from Singapore.

Mak, Y. T, and Yvanto, K. (2003). Size really matters: Further evidence on the negative relationship between board size and firm value.

Mang'unyi, E. (2011). Ownership structure and Corporate Governance and its effects on performance: A case of selected Banks in Kenya. *International Journal of Business Administration.*

Manyuru, P.J. (2005). Corporate governance and organizational performance: The case of companies quoted at the Nairobi Stock Exchange: *University of Nairobi*.

Matengo, M. (2008). The relationship between Corporate Governance practices and performance: The case of banking firms in Kenya, *University of*

Nairobi.

Matolcsy, Z and Wright, A (2011). CEO compensation structure and firm performance:

Accounting and Finance 51 (3), 745-763.

Miring'u, A. and Muoria, E. (2011). An analysis of the effect of Corporate Governance on performance of Commercial State Corporations in Kenya: *International Journal of Business and Public Management.*

Mohan and Marimuta (2015). Research on the impact of corporate governance on financial results: ICTACT *Journal of Management Research, Volume 01, pp. 30-33.*

Mugenda, O. M., &, A. G. (2003). Research Methods: Quantitative and Qualitative Approaches.

Mulili, M. and Wong, P. (2010). Corporate Governance in Developing Countries: The Case of Kenya, *International Journal of Business Administration, 2 (1).*

Muriithi, D. K. (2005). An evaluation of the risk and returns of equity mutual funds in Kenya:

University of Nairobi.

Muriithi, P. (2009). Corporate Governance; KASNEB Newsline, January to March 2009.

Mwangi, J.N. (2019). Effect of corporate governance on the dividend payout of manufacturing firms listed in the Nairobi Security Exchange.

Nanka-Bruce, D. (2009). Corporate Governance and Versatility: Doctoral Program in European Entrepreneurship and Small Business Management, Spain.

National Bank of Ethiopia. (2018). Corporate Governance Directive 74/2018: Addis Ababa.

Neuman, W. L. (2006). Social Research Methods: Qualitative and Quantitative Approaches, (6th Ed.), Boston.

Ngechu, M. (2004). Understanding the research process and methods: An introduction to Research Methods.

Okoi, Ocheni and John, (2014). The Effects of Corporate Governance on the Performance of Commercial Banks in Nigeria: *International Journal of Public Administration and Management Research Vol. 2(2), pp.:219-234.*

Ongore, V. and K'Obonyo, P. (2011). Effects of selected Corporate Governance Characteristics on Firm Performance: Empirical Evidence from Kenya. *International Journal of Economics and Financial.*

Organization for Economic Cooperation and Development (2009). The Corporate Governance lessons from the financial crisis: *Financial market trends.*

Padilla, A. (2000): Can Agency Theory Justify the Regulation of Insider Trading: *The Quarterly Journal of Austrian Economics.*

Shungu, P., Ngirande, H.,Ndlovu, G. (2014). Impact of corporate governance on the performance of commercial banks in Zimbabwe: *Mediterranean journal of social sciences 5 (15), 93- 93.*

Sundaram, A.K. and Inkpen, A. C. (2004). The Corporate Objective Revisited: Organization Science.

Uma, S. (2003). Research Methods for Business Students: A skill building approach, (4th Ed.) John Wiley & Sons.

Vafeas, N. (2000). Board meeting frequency and firm performance: *Journal of financial economics.*

Vianny, D. and Victoria, R. (2017). Impact of corporate governance on organizational performance: *International Journal of Engineering Research and General Science.*

Wang, Y. (2009). Board Independence and Firm Performance: Evidence from ASX- Listed Companies. A Thesis Submitted for the Degree of Doctor of Philosophy.

Wheeler, D; Fabig, H; and Boele, R. (2002). Paradoxes and dilemmas for stakeholder responsive firms in the extractive sectors: Lessons from the case of shell and the Ogoni. *Journal of Business Ethics 39 (3), 297-318.*

Yasser, Q.R; Entebang, H.A; and Mansor, S.A. (2011). Corporate governance and firm performance in Pakistan: The case of Karachi Stock Exchange: *Journal of Economics and international finance 3(8), 482-491*.

Yenesew Ferede (2012). The Impact of Corporate Governance Mechanisms on Firm's Financial Performance: Evidence from Commercial Banks in Ethiopia: *International Journal of Global Economic light.*

Appendix

Appendix I: descriptive statics

Variable		Mean	Std. Dev.	Min	Max	Observations	
roa	overall	.1986978	.0532181	.0519588	.3125654	N =	160
	between		.0194563	.1613283	.2233859	n =	16
	within		.0497498	.0672224	.3181881	T =	10
indepe~s	overall	5.04375	1.415755	3	7	N =	160
	between		.4830028	4	5.8	n =	16
	within		1.335768	2.44375	7.34375	T =	10
boards~e	overall	9.70625	1.619833	7	12	N =	160
	between		.4781475	8.8	10.5	n =	16
	within		1.55183	6.20625	12.50625	T =	10
ceodua~y	overall	.275	.4479162	0	1	N =	160
	between		.1290994	0	.5	n =	16
	within		.4300066	-.225	1.175	T =	10
auditc~e	overall	.6333946	.1659675	.3021193	.8992074	N =	160
	between		.0395394	.5787624	.7027598	n =	16
	within		.1614631	.2834568	.9398492	T =	10
owners~n	overall	37.97398	9.357446	20.54205	54.96214	N =	160
	between		2.283357	32.51061	41.57636	n =	16
	within		9.09083	19.58235	56.62343	T =	10
disclo~x	overall	.6466991	.1437444	.4010459	.8970467	N =	160
	between		.0583038	.5459794	.7091621	n =	16
	within		.1321194	.3621944	.9298966	T =	10

Appendix II: Correlation

	roa	indepe~s	boards~e	ceodua~y	auditc~e	owners~n	disclo~x
roa	1.0000						
independen~s	0.6920	1.0000					
boardsize	0.0296	0.0879	1.0000				
ceoduality	-0.2386	-0.0290	-0.0613	1.0000			
auditcommi~e	0.1713	0.0309	0.1994	-0.0209	1.0000		
ownershipc~n	0.0769	0.0323	-0.0335	-0.1432	-0.1192	1.0000	
disclosure~x	0.1091	-0.0109	-0.0245	-0.0551	-0.1167	0.0357	1.0000

Appendix III: Normality test

```
. sktest residual
```

Skewness/Kurtosis tests for Normality

				joint	
Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	Prob>chi2
residual	160	0.1107	0.5781	2.90	0.2349

Appendix IV: Bresusch-pagan /cook-Weisberg test for hetroskedaticity

```
. hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: fitted values of roa

         chi2(1)      =     0.62
         Prob > chi2  =   0.4292
```

Appendix V: VIF test for multicollionarity

```
. vif
```

Variable	VIF	1/VIF
auditcommi~e	1.07	0.934691
boardsize	1.05	0.950067
ownershipc~n	1.04	0.962926
ceoduality	1.03	0.971125
disclosure~x	1.02	0.982791
independen~s	1.01	0.990295
Mean VIF	1.04	

Appendix VI: Breusch-Godfrey LM test for autocorrelation

```
. estat bgodfrey

Breusch-Godfrey LM test for autocorrelation
```

lags(*p*)	chi2	df	Prob > chi2
1	0.000	1	0.9891

H0: no serial correlation

Appendix VII: Hausman specification test

```
. hausman fixed random
```

	Coefficients (b) fixed	(B) random	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
independen~s	.0251962	.0258262	-.00063	.0007604
boardsize	-.0030755	-.0024641	-.0006114	.0006349
ceoduality	-.0266368	-.0246071	-.0020297	.0020502
auditcommi~e	.0588053	.0576436	.0011617	.0055051
ownershipc~n	.000117	.0002253	-.0001083	.0000876
disclosure~x	.0369935	.0454974	-.0085039	.0089904

b = consistent under Ho and Ha; obtained from xtreg
B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(6) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= 5.71
Prob>chi2 = 0.4562

Appendix VIII: Random—effects GLS regression

```
Random-effects GLS regression                   Number of obs      =       160
Group variable: id                              Number of groups   =        16

R-sq:  within  = 0.5474                         Obs per group: min =        10
       between = 0.7372                                        avg =      10.0
       overall = 0.5699                                        max =        10

                                                Wald chi2(6)       =    202.69
corr(u_i, X)   = 0 (assumed)                    Prob > chi2        =    0.0000
```

roa	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
independentdirectors	.0258262	.0020029	12.89	0.000	.0219006	.0297517
boardsize	-.0024641	.0017872	-1.38	0.168	-.0059669	.0010388
ceoduality	-.0246071	.0063927	-3.85	0.000	-.0371366	-.0120775
auditcommittee	.0576436	.0175859	3.28	0.001	.0231758	.0921113
ownershipconcentration	.0002253	.0003073	0.73	0.463	-.000377	.0008276
disclosureindex	.0454974	.0198016	2.30	0.022	.006687	.0843078
_cons	.0246298	.0284288	0.87	0.386	-.0310897	.0803492
sigma_u	0					
sigma_e	.03586624					
rho	0	(fraction of variance due to u_i)				

Appendix IX: Raw Data

Bank	ID	Year	ROA	Independent Directors	Board Size	CEO Duality	Audit Committee	Ownership Concentration	Disclosure Index
Abay Bank	1	2016	0.154319	3	10	0	0.451066	38.33582	0.784479
Abay Bank	1	2017	0.240978	7	10	1	0.622248	51.42135	0.873534
Abay Bank	1	2018	0.19519	7	9	1	0.447793	33.4845	0.54
Abay Bank	1	2019	0.226174	3	9	0	0.765219	40.50657	0.817694
Abay Bank	1	2020	0.22776	7	9	1	0.704616	42.56777	0.589161
Abay Bank	1	2021	0.15892	6	10	0	0.316857	35.47747	0.897047
Abay Bank	1	2022	0.186591	4	11	1	0.511022	29.27837	0.463694
Abay Bank	1	2023	0.262331	6	9	0	0.498349	52.21157	0.873791
Abay Bank	1	2024	0.312565	7	9	0	0.876651	22.94069	0.504677
Abay Bank	1	2025	0.188917	3	12	0	0.871271	41.12219	0.665922
Abyssinia Bank	2	2016	0.189409	6	9	0	0.819519	54.42326	0.439683
Abyssinia Bank	2	2017	0.158079	3	7	0	0.355996	30.39013	0.863792
Abyssinia Bank	2	2018	0.198653	5	8	0	0.752116	45.96518	0.42429
Abyssinia Bank	2	2019	0.146589	6	7	1	0.471922	30.72644	0.732631
Abyssinia Bank	2	2020	0.226842	4	8	0	0.832714	44.37089	0.620164
Abyssinia Bank	2	2021	0.191436	4	10	0	0.788906	31.79732	0.863788
Abyssinia Bank	2	2022	0.160196	5	11	0	0.750986	22.77021	0.829695
Abyssinia Bank	2	2023	0.158639	3	11	0	0.786987	36.37957	0.803969
Abyssinia Bank	2	2024	0.196778	6	11	1	0.649305	27.21335	0.758879
Abyssinia Bank	2	2025	0.206885	6	9	0	0.704196	33.70178	0.751052
Addis International Bank	3	2016	0.184042	3	7	0	0.50346	48.73391	0.629411
Addis International Bank	3	2017	0.254214	6	9	0	0.511366	48.07265	0.599069

Addis International Bank	3	2018	0.091387	3	11	1	0.568933	31.90962	0.4967
Addis International Bank	3	2019	0.160105	3	8	0	0.825971	22.78937	0.621447
Addis International Bank	3	2020	0.133167	4	9	1	0.508592	51.49716	0.663446
Addis International Bank	3	2021	0.215532	6	9	0	0.594594	51.75425	0.479714
Addis International Bank	3	2022	0.107277	3	11	0	0.866296	20.54205	0.538857
Addis International Bank	3	2023	0.131376	4	9	0	0.531204	43.36917	0.566906
Addis International Bank	3	2024	0.167056	6	10	1	0.352081	36.21752	0.429193
Addis International Bank	3	2025	0.169128	6	10	1	0.744829	34.45112	0.435051
Awash Bank	4	2016	0.166615	5	12	0	0.630789	45.18141	0.611553
Awash Bank	4	2017	0.21336	4	7	0	0.335807	33.93155	0.768998
Awash Bank	4	2018	0.211536	5	10	0	0.727398	34.97522	0.54889
Awash Bank	4	2019	0.175539	7	11	0	0.692833	33.08305	0.517256
Awash Bank	4	2020	0.129864	3	11	1	0.766203	20.97937	0.486953
Awash Bank	4	2021	0.232346	7	11	0	0.674372	24.04664	0.558643
Awash Bank	4	2022	0.186843	6	11	1	0.365357	37.34221	0.516418
Awash Bank	4	2023	0.105447	5	11	1	0.469622	35.16964	0.404879
Awash Bank	4	2024	0.185509	4	10	0	0.821622	29.37313	0.628374
Awash Bank	4	2025	0.132844	3	10	0	0.405224	31.02383	0.845555
Berhan Bank	5	2016	0.169693	4	9	0	0.497001	32.88186	0.801922
Berhan Bank	5	2017	0.268514	6	7	1	0.345722	36.83949	0.633425
Berhan Bank	5	2018	0.248178	7	11	1	0.843017	35.52587	0.44858
Berhan Bank	5	2019	0.269065	6	11	0	0.570882	46.05149	0.712307
Berhan Bank	5	2020	0.213671	7	8	1	0.616244	40.78433	0.682347
Berhan Bank	5	2021	0.147998	6	12	0	0.776267	24.72911	0.585289
Berhan Bank	5	2022	0.183872	5	8	0	0.426999	53.00471	0.830284

Berhan Bank	5	2023	0.180262	3	7	0	0.630572	48.46598	0.829971
Berhan Bank	5	2024	0.297188	7	10	0	0.726045	30.30809	0.885682
Berhan Bank	5	2025	0.175512	4	9	0	0.446796	31.85038	0.681814
Bunna Bank	6	2016	0.178119	3	10	0	0.637136	40.88808	0.487122
Bunna Bank	6	2017	0.214535	6	10	0	0.888671	46.27616	0.669989
Bunna Bank	6	2018	0.279192	7	12	1	0.632757	39.34163	0.589902
Bunna Bank	6	2019	0.175618	4	10	0	0.631759	44.16589	0.538793
Bunna Bank	6	2020	0.252929	6	8	0	0.511975	32.70191	0.479433
Bunna Bank	6	2021	0.189625	5	11	1	0.56254	46.33166	0.631768
Bunna Bank	6	2022	0.234412	6	11	0	0.853412	54.95355	0.700358
Bunna Bank	6	2023	0.205319	5	11	0	0.693331	46.76325	0.805157
Bunna Bank	6	2024	0.306546	7	7	1	0.436681	40.62954	0.693808
Bunna Bank	6	2025	0.194815	6	12	0	0.758795	23.71193	0.401046
Cooperative Bank of Oromia	7	2016	0.273936	7	7	0	0.590235	36.72424	0.433872
Cooperative Bank of Oromia	7	2017	0.156184	6	9	0	0.579501	47.67734	0.802433
Cooperative Bank of Oromia	7	2018	0.147528	4	8	0	0.51709	50.21737	0.654701
Cooperative Bank of Oromia	7	2019	0.235661	6	8	0	0.883259	54.55729	0.60433
Cooperative Bank of Oromia	7	2020	0.111753	4	12	0	0.739937	24.75478	0.683541
Cooperative Bank of Oromia	7	2021	0.242352	6	12	0	0.86326	40.59135	0.449357

Cooperative Bank of Oromia	7	2022	0.253546	6	12	0	0.754043	24.86876	0.586237
Cooperative Bank of Oromia	7	2023	0.154046	3	8	0	0.337605	42.9853	0.47956
Cooperative Bank of Oromia	7	2024	0.227834	5	12	0	0.525065	39.00011	0.829458
Cooperative Bank of Oromia	7	2025	0.220435	7	8	0	0.399336	41.44388	0.519392
Dashen Bank	8	2016	0.188875	6	11	0	0.612526	25.6035	0.859528
Dashen Bank	8	2017	0.148214	3	12	0	0.468476	46.73428	0.454271
Dashen Bank	8	2018	0.132885	3	8	1	0.431026	32.70864	0.827486
Dashen Bank	8	2019	0.287062	6	11	0	0.722975	54.83755	0.577957
Dashen Bank	8	2020	0.306381	7	11	0	0.825031	30.24057	0.781384
Dashen Bank	8	2021	0.134987	3	12	0	0.444149	50.96818	0.630119
Dashen Bank	8	2022	0.18882	7	11	0	0.790757	39.58206	0.738963
Dashen Bank	8	2023	0.1799	4	7	0	0.612696	40.32212	0.554599
Dashen Bank	8	2024	0.194321	5	12	0	0.509545	38.93829	0.624527
Dashen Bank	8	2025	0.238823	6	10	0	0.784181	33.80295	0.765537
Debub Global Bank	9	2016	0.176111	6	10	0	0.473334	42.39972	0.649968
Debub Global Bank	9	2017	0.276318	7	8	0	0.362923	42.749	0.571849
Debub Global Bank	9	2018	0.234427	5	8	0	0.344266	29.72388	0.587993
Debub Global Bank	9	2019	0.241403	7	11	1	0.670658	33.91976	0.62368
Debub Global Bank	9	2020	0.22097	6	12	1	0.809373	48.99216	0.596944
Debub Global Bank	9	2021	0.20644	5	12	0	0.555206	53.10747	0.760443
Debub Global Bank	9	2022	0.158294	6	9	0	0.618498	43.7155	0.553626

Debub Global Bank	9	2023	0.182858	5	9	0	0.595533	39.11653	0.832672
Debub Global Bank	9	2024	0.14989	4	9	0	0.598529	33.89767	0.532513
Debub Global Bank	9	2025	0.278818	7	11	0	0.899207	20.8103	0.655215
Enat Bank	10	2016	0.23139	7	12	0	0.805432	41.49603	0.449164
Enat Bank	10	2017	0.211652	4	12	0	0.847134	31.0735	0.487237
Enat Bank	10	2018	0.139783	3	9	1	0.73126	23.54137	0.658083
Enat Bank	10	2019	0.179736	3	8	0	0.557198	45.64686	0.731318
Enat Bank	10	2020	0.22849	7	8	0	0.410284	22.85542	0.4406
Enat Bank	10	2021	0.078993	5	12	1	0.433962	29.38436	0.497249
Enat Bank	10	2022	0.269778	5	10	1	0.859253	43.38005	0.829363
Enat Bank	10	2023	0.250151	6	8	0	0.836927	46.36215	0.660145
Enat Bank	10	2024	0.17723	4	11	0	0.75028	50.40735	0.616971
Enat Bank	10	2025	0.151328	3	9	1	0.526873	33.37382	0.425563
Hibret Bank	11	2016	0.15607	3	11	1	0.889459	25.88409	0.637297
Hibret Bank	11	2017	0.298525	7	12	0	0.802849	42.80749	0.876948
Hibret Bank	11	2018	0.140424	4	10	1	0.882628	50.5089	0.755081
Hibret Bank	11	2019	0.25783	5	10	0	0.898788	42.32128	0.434076
Hibret Bank	11	2020	0.213043	5	10	0	0.623671	22.81515	0.683173
Hibret Bank	11	2021	0.233682	5	9	0	0.729154	41.98985	0.883756
Hibret Bank	11	2022	0.197156	5	11	0	0.346511	51.22264	0.417273
Hibret Bank	11	2023	0.228599	7	9	0	0.302119	36.83112	0.863727
Hibret Bank	11	2024	0.199392	3	12	0	0.544067	33.03388	0.828577
Hibret Bank	11	2025	0.07447	3	8	1	0.501326	32.23482	0.594937
Lion International Bank	12	2016	0.228855	7	10	0	0.617428	35.83781	0.822461
Lion International Bank	12	2017	0.065681	3	12	0	0.716193	44.14834	0.617155

Lion International Bank	12	2018	0.258216	7	9	1	0.559368	40.09701	0.583939
Lion International Bank	12	2019	0.246518	5	9	0	0.692048	32.50916	0.622764
Lion International Bank	12	2020	0.189849	3	8	1	0.87618	20.76226	0.886203
Lion International Bank	12	2021	0.231089	6	10	0	0.719048	39.77119	0.710488
Lion International Bank	12	2022	0.221684	4	9	0	0.535779	50.9508	0.87349
Lion International Bank	12	2023	0.051959	3	7	1	0.569163	46.05481	0.517912
Lion International Bank	12	2024	0.10616	3	9	1	0.616474	40.87414	0.602528
Lion International Bank	12	2025	0.234331	6	11	1	0.793032	21.57639	0.736349
Nib International Bank	13	2016	0.274289	6	10	0	0.445332	52.81839	0.854006
Nib International Bank	13	2017	0.18356	5	11	0	0.551124	34.55638	0.785654
Nib International Bank	13	2018	0.23952	5	12	0	0.601138	49.24829	0.75994
Nib International Bank	13	2019	0.204973	5	9	0	0.648031	22.53486	0.739718
Nib International Bank	13	2020	0.286291	7	12	0	0.602978	22.89518	0.690303
Nib International Bank	13	2021	0.311627	7	8	0	0.888328	24.2484	0.455775
Nib International Bank	13	2022	0.245435	7	11	0	0.552323	50.41177	0.777861
Nib International Bank	13	2023	0.139408	5	9	1	0.713025	27.15064	0.635344
Nib International Bank	13	2024	0.102486	3	7	0	0.677082	35.03109	0.464551
Nib International Bank	13	2025	0.246272	6	7	0	0.724098	31.19341	0.890251
Oromia International Bank	14	2016	0.194847	6	12	0	0.466454	54.96214	0.420308
Oromia International Bank	14	2017	0.146144	3	9	0	0.739561	43.73334	0.42595
Oromia International Bank	14	2018	0.106571	3	8	1	0.378669	41.42628	0.894107
Oromia International Bank	14	2019	0.165774	4	8	0	0.469308	33.6167	0.68468
Oromia International Bank	14	2020	0.28939	6	8	0	0.836319	37.37778	0.613048
Oromia International Bank	14	2021	0.125739	3	9	1	0.853429	30.61833	0.569905
Oromia International Bank	14	2022	0.162546	3	10	0	0.746833	24.94182	0.679413

Oromia International Bank	14	2023	0.191408	5	12	0	0.388634	29.94767	0.789623
Oromia International Bank	14	2024	0.17043	3	8	0	0.889574	41.56023	0.42947
Oromia International Bank	14	2025	0.146145	4	12	1	0.702676	28.66296	0.662433
Wegagen Bank	15	2016	0.189012	4	12	0	0.692019	54.86302	0.784699
Wegagen Bank	15	2017	0.247581	6	12	0	0.77538	38.15508	0.612934
Wegagen Bank	15	2018	0.220901	5	8	1	0.66177	42.93246	0.77383
Wegagen Bank	15	2019	0.240507	5	11	1	0.851038	23.19537	0.631826
Wegagen Bank	15	2020	0.301358	7	12	0	0.44295	48.27269	0.847489
Wegagen Bank	15	2021	0.217338	6	7	0	0.303327	36.97183	0.894164
Wegagen Bank	15	2022	0.175919	4	12	0	0.577145	53.70516	0.570915
Wegagen Bank	15	2023	0.192627	5	7	0	0.729361	34.36819	0.495503
Wegagen Bank	15	2024	0.179259	5	7	1	0.315145	29.3417	0.651036
Wegagen Bank	15	2025	0.185045	4	10	0	0.439488	30.52135	0.717221
Zemen Bank	16	2016	0.181707	6	8	1	0.873752	36.73251	0.860163
Zemen Bank	16	2017	0.226696	6	9	0	0.484587	49.85288	0.599011
Zemen Bank	16	2018	0.219477	7	8	0	0.620446	33.50102	0.524312
Zemen Bank	16	2019	0.275821	7	9	0	0.825463	38.22514	0.417517
Zemen Bank	16	2020	0.16948	3	10	0	0.565128	31.14522	0.542275
Zemen Bank	16	2021	0.152349	5	7	1	0.81147	53.47092	0.748971
Zemen Bank	16	2022	0.238927	4	9	0	0.730412	45.05126	0.420454
Zemen Bank	16	2023	0.199022	5	8	0	0.560991	34.09755	0.46092
Zemen Bank	16	2024	0.216538	5	11	1	0.692076	36.91589	0.620188
Zemen Bank	16	2025	0.202598	5	9	0	0.863273	47.10776	0.575848