THE EFFECT OF CORPORATE GOVERNANCE ON FINANCIAL PERFORMANCE OF ETHIOPIAN PRIVATE COMMERCIAL BANKS

A RESEARCH PROJECT SUBMITTED TO THE COLLEGE OF BUSINESS AND ECONOMICS OF ADDIS ABABA UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF EXECUTIVE MASTERS OF BUSINESS ADMINISTRATION

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STATEMENT OF DECLARATION

I, hereby, declare that this research work entitled "**The Effect of corporate governance on financial performance of Ethiopian private Commercial banks"** is submitted in partial fulfillment of the requirement for Degree of Executives Masters of Business Administration with the guidance and support of the research advisor. This study is my original work and it has not been presented for any degree or diploma program in this or any other university/institution, and that all source of materials used have been dully acknowledged.

Declared by: Yehwalashet Zewdu Goshu

Signature _____

STATEMENT OF CERTIFICATION

This is to certify that the research prepared by Yehwalashet Zewdu, entitled "The Effect of Corporate Governance on Financial Performance of Ethiopian Private Commercial Banks" and submitted in partial fulfillment for the Degree of Executives Masters of Business Administration complies with the regulations of the university and meets the accepted standards with respect to originality and quality.

Approved by the Examining Committee

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LIST OF ACRONYMS

NBE	National Bank of Ethiopia
ROA	Return on Asset
OECD	Organization for Economic Co-operation and Development
CEO	Chief Executive officer
PAT	Profit after Tax
TA	Total Asset
OLS	Ordinary List Square
BJ	Bersa-Jareque
CLRM	Classical Linear Regression Model

ABSTRACT

Corporate governance has become one of the important issues of businesses around the world and it is attracting attention now a days. The issue of corporate governance, however, has long been ignored in developing economies like Ethiopia. To fill the gap, this study examines the impact of corporate governance mechanisms on the performance of Ethiopian private commercial using a structured review of documents and financial data of the sampled private commercial banks for the period covering from the year 2009 to 2018. The study assessed the relationship between selected internal corporate governance mechanisms and bank performance as measured by return on asset (ROA). Both descriptive and regression analyses were conducted on the selected samples of 10 private commercial banks out of 16 private banks operating in the Ethiopia. Results from the regression analysis estimated by fixed effect regression model showed that availability of various board subcommittees, gender diversity in the board, and frequency of board meeting, had a significant effect on the financial performance in Ethiopian banking sector. There is negative and statistically insignificant association between board size and return on asset (ROA). This shows that small boards are more effective in monitoring and controlling private commercial banks management and it helps to reduce agency costs. Bank size (the control Variable) shows a negative and significant impact in its relationship with the banks' financial performance. This implies that bank size was able to explain the rising bank profit but had a negative sign. Estimation result suggests that larger banks in terms of total asset tend to have lower ROA. This finding is consistent with theories emphasizing the importance of scale effects for financial performance. In general, the findings suggest that banks with effective corporate governance mechanisms improve financial performance depending on the financial performance measure being used.

Keywords: Corporate Governance, bank performance, private commercial banks

CHAPTER ONE

INTRODUCTION

1.1. Back Ground of the study

Corporate Governance is defined as a set of relationships between a company's management, its board, its shareholders and other stakeholders which provides the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance. It helps define the way authority is allocated and how corporate decisions are made.

Corporate Governance in simple words means the extent to which companies are run in an open and honest manner. The essence of the corporate world lies in promoting transparency and accountability and in fulfilling the fair expectations of all the stakeholders. Corporate governance is one such tool to achieve this goal and to safeguard the interests of various stakeholder groups. It involves promoting the compliance of law in letter and spirit, and demonstrating ethical conduct. The framework of corporate governance encourages efficient use of resources and also requires accountability for the stewardship of those resources. The three key constituents of corporate governance are - Shareholders, Board of Directors and Management.(Aggarwal, 2013)

For Tricker (2009) corporate governance is all about building credibility, ensuring transparency and accountability as well as maintaining an effective channel of information disclosure that will foster great corporate governance. Corporate governance can therefore be said to refer to the process and structures by which the business and affairs of institutions are directed and managed in order to improve long terms shareholders' value by enhancing corporate performance and accountability while taking into account the interest of other stakeholders.

In recent years, the subject of corporate governance is attracting attention in both of developed and developing economies. It has become one of the important issues around the world of business. As a result of global financial crisis in 2008, many financial institutions collapsed around the world. The associating conditions of such a crisis led to reduce confidence in the financial system. This is due to the inability of regulatory and monitory bodies to predict and

prevent failure of the financial institutions. On another hand, rating agencies are more concerned with better corporate governance.

As Stijn Claessens and BurcinYurtglu(2012) pointed out the recent financial crisis has been a particularly severe wake-up call. Weaknesses in corporate governance structures within companies and banks were cited as reasons for excessive risk taking, skewed incentive compensation for senior managers, and the predominance of a board culture that values short-term gains over sustained, long-term performance.

From a banking industry perspective, corporate governance involves the manner in which the business and affairs of banks are governed by their boards of directors and senior management, which affects how they: Set corporate objectives; Operate the bank's business on a day-to-day basis; Meet the obligation of accountability to their shareholders and take into account the interests of other stakeholders; Align corporate activities and behavior with the expectation that banks will operate in a safe and sound manner, and in compliance with applicable laws and regulations; and Protect the interests of depositors. (Awotundun, Kehinde, and Somoye, 2011).

According to IlduaraBusta(2008) banks have a central role in any economy. They mobilize funds, allocate capital and play a decisive role in the corporate governance of other firms. All this means that, when banks are efficient, they stimulate productivity growth and the prosperity of the whole economy. On the other hand, banking crises are able to destabilize the economic and political situation of nations. These strong externalities on the economy make the corporate governance of banks a fundamental issue. And as a result of its relevance, in the case of banks, corporate governance is not merely a private, but also a public affair manifest through the existence of bank regulation and supervision.

Effective corporate governance, as stated on the publication of Basel Committee on Banking Supervision (2015), is critical to the proper functioning of the banking sector and the economy as a whole. Banks serve a crucial role in the economy by intermediating funds from savers and depositors to activities that support enterprise and help drive economic growth. Banks' safety and soundness are keys to financial stability, and the manner in which they conduct their business, therefore, is central to economic health. Governance weaknesses at banks that play a significant role in the financial system can result in the transmission of problems across the banking sector and the economy as a whole.

According to K.S Rao &Kidane (2016) commercial banks perform very important functions to the growth of capital formation and investment in Ethiopia. The proper functioning of commercial banks and their good performance is therefore, quite important for Ethiopia. Taking into account their roles, national bank of Ethiopia regulate them by issuing directives. However, regulations may not enough to ensure good corporate governance in banks. Hence, banks themselves put into practice some corporate governance mechanisms to ensure the shareholder and other stakeholders' interests.

The purpose of this research is therefore, to study the effect of corporate governance practices on operational performance of private commercial banks in Ethiopia.

1.2. Statement of the problem

A number of researches have been conducted to investigate the effect of corporate governance practices on financial performance of banks and we could find numerous studies that provide us with both theory and empirical evidence to link corporate governance practices with firms' performance. As most of the prior studies have been undertaken on large firms operating within well-organized corporate governance mechanisms in developed economic system, it is difficult to generalize the same result from the findings of those studies for relatively small size Ethiopian Banks that are at infancy stage (see for example Kyereboah Coleman, 2007; Bauer, et al; 2009; Al- Manaser et al; 2012; Bahereni, 2013).

A large portion of the developing country's business is in the banking sector in particular and the financial institutions in general. Accordingly, almost all business entities maintain direct relationships with banks and the other financial institutions (Shleifer and Vishny, 1997). The impact on economic growth depends on the efficiency of banks. Therefore, efforts to enhance the operational capabilities and capacities within banks have to be a primary agenda for over-emphasizing or under-estimating the finest position that is applicable to the banks may result in a series of difficulties to the banks operation in particular and to the economic development in general. The corporate governance philosophy has to be introduced in the banking industry as one, and of course be the primary, of these efforts to enhance the banks operations.

The corporate governance of banks in developing economies is important for several reasons.

First, banks have an overwhelmingly dominant position in developing-economy financial systems, and are extremely important engines of economic growth. Second, as financial markets are usually underdeveloped, banks in developing economies are typically the most important source of finance for the majority of firms. Third, as well as providing a generally accepted means of payment, banks in developing countries are usually the main depository for the economy's savings. Fourth, many developing economies have recently liberalized their banking systems through privatization/disinvestments and reducing the role of economic regulation. (Cited byT.G Arun and J.D Turner)

Admassu &Asayehgn (2014) discussed that banking industry in Ethiopia is in a rudimentary and fragile state. It is small, relatively undeveloped, closed and characterized by a large share of state ownership. The banking industry unlike other sectors is tightly controlled one and corporate governance framework is highly dictated by the National Bank of Ethiopia (NBE). In addition, absence of organized stock exchange; high government intervention; lack of corporate governance awareness, absence of national standards of corporate governance, as well as accounting and auditing; and weak legal framework to protect minority shareholder rights are the major factors with adverse impact on corporate governance and bank performance in Ethiopia.

Numerous studies on firms operating in developed economic system and countries where there are capital markets have been conducted to examine the relationship between variety of governance mechanisms and firm performance. Studies made in financial institutions in Ethiopia, however, are found few and come with a varied result. Some studies have shown no significant relationship between governance practices and operational performance (See for example K.S Rao &KidaneKerebihDesta, (2016). They concluded that disclosure practice, board size, board gender diversity and ownership type have no significant impact on the financial performance of Ethiopian commercial banks.

Beyene.A, Srmolo.K, and Kassa.Y**,** (2013)in their research entitled corporate governance and impact on bank performance tried to assess the relationship between selected internal and external corporate governance mechanisms, and bank performance as measured by ROE and ROA. The result of their study reveals that board size and existence of audit committee in the board had statistically significant negative effect on bank performance; whereas bank size had statistically significant positive effect on bank performance. Similarly, capital adequacy ratio, as measure of

external corporate governance mechanism, had statistically significant positive effect on bank performance.

The result of the study made by Yenesew Ferede(2012) on the other hand indicates that large size board and audit committee negatively influences financial performance; whereas board members educational qualification positively associated with financial performance. While industry specific experience of director positively related with return on asset but it has a negative effect on net interest margin. Finally, the percentage of female directors and board members business management experience does not have a significant effect. In general, the findings of his study suggest that banks with effective corporate governance mechanisms improve financial performance depending on the measure used although not all corporate governance mechanisms are significant.

The studies undertaken by Fanta ,Kemal ,Waka,(2013)and Yenesew,(2012),Getahun (2013) used only five to seven years data and small sampling size therefore, this study intends to increase the number of observations through the use of relatively large sample size and number of observations.

The various studies made previously to assess impact of corporate governance mechanisms on financial performance of Ethiopian banks as indicated above have used a varied combination of governance mechanisms as independent variables and the methodology used to gather and analyze data by some of the studies were limited to secondary data. Moreover, results of the studies show varied effects of the corporate governance proxies in terms of significance level and direction of relationship to bank performance. Hence, the subject remains a topic of further investigation.

Therefore, this study contributes to existing knowledge and bridge the gap by providing empirical evidence particularly on the effect of internal corporate governance mechanisms on financial performance of privately owned commercial banks in Ethiopia.

Moreover, the study tries to provide sufficient answers to the following basic research questions.

1. To what extent does board size affect banks financial performance?
2. Is there any relationship between frequencies of board meetings and banks financial performance?

3. Is there any relationship between existence of various board subcommittees and firms operational performance?
4. To what extent bank size affect banks financial performance?
5. Is there any relationship between board gender diversity and banks financial performance?

1.3. Objectives of the study

1.3.1. General objective

The general objective of the study is to examine the effect of corporate governance mechanisms on financial performance of selected privately owned commercial banks in Ethiopia using ten years secondary data from the year 2008 to 2017.

1.3.2. Specific objectives

This study has the following specific objectives:

i Identifying the effect of banks' board size (members of board of director) on the financial performance

ii Identifying the effect of board subcommittee size on the financial performance of banks

iii Identifying the effect of frequency of board meetings on the financial performance of banks

iv Examining how bank performance is related to bank size of selected privately owned commercial banks in Ethiopia.

v Examining the association between board gender diversity and financial performance of selected commercial banks in Ethiopia.

1.4. Research Hypotheses

Agency theory, among the various corporate governance theories that will be discussed later on is the most popular theory and has received the most attention from academics and practitioners. This study will draw on agency theory to test whether hypothesized relationships exist between corporate governance mechanisms and financial Performance as it has the ability to explain corporate governance mechanisms and its association with financial performance.

The following research hypotheses were formulated to guide the researcher in finding answers to the research questions;

(**Ha:** stands for alternative hypothesis)

Ha_1: There is a significant and negative relationship between board size and financial performance of banks.

Ha_2: Availability of various board subcommittees has positive and significant relationship with bank financial performance.

Ha_3: Meeting frequency of board has significant and negative relationship on the financial performance of banks.

Ha_4: There is a strong and positive relationship between bank size and banks financial performance.

Ha_5: There is a strong &positive relationship between board gender diversity and bank's operational performance.

1.5. Significance of the study

The result of this study will contribute to the financial institutions in general and banks in particular by identifying corporate governance variables that significantly affect performance of banks in Ethiopia and consequently helps them to take the right decisions so that performance will be improved.

The result of this study also contributes to the existing literature by providing evidence on the relationship between corporate governance mechanism and Bank's financial performance.

Moreover, market participants and policy makers may get worthwhile benefits from the study and it may serve as a reference material and lay foundation for other researchers who need to make a research on this area.

1.6. Scope of the study

As majority of banks in Ethiopia are private and commercial in nature and these private banks are almost at the same size, level of category and significantly differ on some aspects from the government owned commercial bank, this study is delimited to examining the impacts of corporate governance mechanisms on firms' operational performance by taking evidence from privately owned commercial banks in Ethiopia that are in operation from the year 2009 to 2018.

Return on Asset (ROA) is taken as dependent variable to measure performance as financial performance of commercial banks in Ethiopia is only measured by using accounting based measures and the variable is considered as a better proxy for bank performance whereas board size, board gender diversity, existence of various subcommittees, and frequency of board meetings are taken as explanatory or independent variables. The explanatory (independent) variables are selected considering the fact that these variables are used to explain corporate governance of financial institutions and a review of literature also pointed to these variables being selected as proxies of corporate governance. Bank size is taken as a control variable for the study.

1.7. Limitation of the study

Absence of active secondary data forced the researcher to consider dependent variables as well as the proxies of the independent variables in terms of book values rather than market values. As accounting based measurements could not reflect the current market performance of firms and this may limit the study. The secondary data used were collected for the periods from the year 2009 to 2018, i.e. ten years.

To make the study manageable the research is limited on examining impact of corporate governance mechanisms on operational performance of privately owned commercial banks only. It would have been better if state owned banks and other financial institutions i.e. insurances, and micro-finance institutions are covered with this study.

1.8. Structure of the study

This paper is organized into five chapters. Chapter on present introduction of the study that includes the back ground of the study, statement of the problem, objectives, significance, and limitation of the study. Chapter two presents the literature review and chapter three presents the research methodology. Chapter four presents the results from descriptive statistics, correlation and regression analysis and discussion of the study. The last chapter presents conclusions and recommendations.

CHAPTER TWO

LITERATURE REVIEW

This chapter presents a review of the literature on the topic of corporate Governance. The chapter is organized in seven sections. The first section of the chapter discusses on various theories of corporate governance. Section two, three and four discuss on corporate governance in Ethiopia, the special nature of bank corporate governance, and overview of banking industry as well. Empirical review of the previous studies conducted in relation to corporate governance mechanism and firm financial performance, a summary of the literatures with findings and conceptual framework of the study are presented in the remaining sections.

2.1.Theories of Corporate Governance

2.1.1. The stewardship theory

Davis, Schoorman& Donaldson (1997) define stewardship theory as situations in which managers are not motivated by individual goal, but rather are stewards whose motives are aligned with the objectives of their principals. Because stewardship theory is relatively new, its theoretic contribution has not been adequately established. They also define a steward as one who protects and maximizes shareholders wealth through firm performance, because by so doing, the steward's utility functions are maximized.

In the theory, the model of man is based on a steward whose behavior is ordered such that pro-organizational, collectivistic behaviors have higher utility than individualistic, self-serving behaviors. Where the interests of the steward and the principal are not aligned, the steward places higher value on cooperation and seek to attain the objectives of the organization. This behavior in turn will benefit principals. Stewardship theorists assume a strong relationship between the success of the organization and the principal's satisfaction. A steward who successfully improves the performance of the organization generally satisfies most groups, because most stakeholder groups have interests that are well served by increasing organizational wealth. The steward realizes the trade-off between personal needs and organizational objectives and believes that by working towards organizational, collective ends, personal needs are met.

2.1.2. The Agency theory

Agency theory is defined as "the relationship between the principals, such as shareholders and agents such as the company executives and managers. In this theory, shareholders who are the owners or principals of the company, hires the agents to perform work. Principals delegate the running of business to the directors or managers, who are the shareholder's agents (Clarke, 2004). Daily et al (2003) argued that two factors can influence the prominence of agency theory. First, the theory is conceptually and simple theory that reduces the corporation to two participants of managers and shareholders. Second, agency theory suggests that employees or managers in organizations can be self-interested.

Agency theory is concerned with resolving two problems that can occur in agency relation-ships. The first is the agency problem that arises when (a) the desires or goals of the principal and agent conflict and (b) it is difficult or expensive for the principal to verify what the agent is actually doing. The problem here is that the principal cannot verify that the agent has behaved appropriately. The second is the problem of risk sharing that arises when the principal and agent have different attitudes toward risk. The problem here is that the principal and the agent may prefer different actions because of the different risk preferences (Kathleen, 1989).

Agency theorists, according to Jensen & Meckling (1976), in no sense specify total control of the agent. If control were total, then the agent would have no discretion and the firm would be owner-managed. The crux of agency theory is that principals delegate authority to agents to act on their behalf. It is this delegation that allows agents to opportunistically build their own utility at the expense of the principals' utility (wealth). Thus, agency theorists specify an intermediate condition of control, that is, first delegation and then controls to minimize the potential abuse of the delegation.

2.1.3. Resource Dependency theory

Resource dependence theory is the study of how the external resources of organizations affect the behavior of the organization. Resource dependence theory has implications regarding the optimal divisional structure of organizations, recruitment of board members and employees, production strategies, contract structure, external organizational links, and many other aspects of organizational strategy Pfeffer and Salancik (1978).

The theory's fundamental assumption is that organizations are not self-sufficient, but depend on resources provided by their environments to achieve organizational goals (Hillman, Withers, and Collins (2009)). Provision of resources to the firm, according to scholars in resource dependency theory, is considered to be one of the important board functions.The theory states that directors play an important role in providing or securing essential resources to an organization through their linkages with the external environment.

According to Hillman, Withers, and Collins (2009), the provision of resources enhances organizational functioning, firm's performance and its survival. The directors bring resources to the firm, such as information, skills, access to key constituents such as suppliers, buyers, public policy makers, social groups as well as legitimacy. Directors can be classified into four categories of insiders, business experts, support specialists and influential community members. First, the insiders are current and former executives of the firm and they provide expertise in specific areas such as finance and law on the firm itself as well as general strategy and direction. Second, the business experts are current, former senior executives and directors of other large for-profit firms and they provide expertise on business strategy, decision making and problem solving. Third, the support specialists are the lawyers, bankers, insurance company representatives and public relations experts and these specialists provide support in their individual specialized field. Finally, the community influentials are the political leaders, university faculty, members of clergy, and leaders of social or community organizations.

2.1.4. The stakeholder's theory

Stakeholder theory can be defined as any group or individual who can affect or is affected by the achievement of the organization's objectives. Unlike agency theory in which the managers are working and serving for the stakeholders, stakeholder theorists suggest that managers in organizations have a network of relationships to serve – this include the suppliers, employees and business partners. And it was argued that this group of network is important other than owner-manager-employee relationship as in agency theory (Freeman, 1999).

The stakeholder theory focuses on variety of different group or individual whose interests are directly affected by the activities of a firm. These groups or individuals are referred to as stakeholders in the organization. Some of the stakeholders are the share holderswho provide the risk capital of the firm and their goal is to maximize their wealth; trade creditors supplied goods

or services to the firm and have the objective of being paid the full amount for the goods and services supplied. The financial institutions provided both the short term and long term credit facilities and have the objective of receiving payment of the principal as well as interest. Employees, provided their skills in form of labor to the firm and expect a reward inform of salaries and other benefits; the government provides the enable environment for business to operate but expect reward inform of taxation; the customers interest is to get quality products of the firm at avoidable price and must be available at the right time and place; the communities are also interested in the positive contribution of the firm to the environment in which it is located.
The important of the stakeholder theory is that managers in a corporation have network of relationship which is critical other than owners, managers and employees' relationship as in the case of agency theory (Freeman, 1999).

In essence the stakeholders deserved and required management attention since all groups or individuals participate in a business to obtain benefits (Donaldson and Preston 1995).

2.2.Corporate Governance in Ethiopia

The emergence of publicly held share companies in Ethiopia, as stated by Fikadu Petros (2012) gives rise to a multitude of issues on corporate governance. The Commercial Code of Ethiopia, according to Fikadu (2008) has basic rules on the governance of companies. However, the rules are not adequate to safeguard minority shareholders from undue exploitation. He discussed how deficient the commercial code is in protecting the rights of minority shareholders in the context of publicly held companies.

Minga Negash (2008) also observed that the status of corporate governance in Ethiopia is disappointing and notes that "the Commercial Code of 1960 does not provide adequate legislative response to complex governance issues of the day.

According to Hussein Ahimed Tura (2012) the Commercial Code of Ethiopia incorporates provisions pertinent to the governance of share companies. However, such provisions are inadequate to address specific issues in corporate governance related to board of directors such as separation of roles of nonexecutive directors and CEOs, composition and independence of the board as well as director's remuneration. Moreover, proclamations and directives governing financial share companies in Ethiopia do not sufficiently address the aforementioned issues.

There are a number of companies that are being formed by sale of shares to the wider public unlike most share companies in the past which were formed among founders. The emergence of publicly held share companies in Ethiopia gives rise to a multitude of issues on corporate governance. Typically, ownership separates from the control of dispersed shareholders and goes into the hands of few managers, which in turn creates the principal-agent relationship. In such situations, agents (managers) may misappropriate the principals' (shareholders') investments as they have more information and knowledge than the shareholders. Where there exist few block holders in share companies, minority shareholders could be exploited in the hands of such block holders (Hussein Ahimed Tura, 2012).

Hussein Ahimed Tura (2012) further states that the agency problems that could occur between dispersed shareholders and managers and/or block holders of share companies in Ethiopia necessitate good corporate governance laws and institutions.

2.3.The special nature of Bank Corporate Governance

From a banking industry perspective, corporate governance involves the manner in which the business and affairs of banks are governed by their boards of directors and senior management, which affects how they: Set corporate objectives; Operate the bank's business on a day-to-day basis; Meet the obligation of accountability to their shareholders and take into account the interests of other stakeholders; Align corporate activities and behavior with the expectation that banks will operate in a safe and sound manner, and in compliance with applicable laws and regulations; and Protect the interests of depositors (*Awotundun D. A. Kehinde J. S. and Somoye R.O.C. 2011*).

For Ross Levine (2004) there are two traits that motivate a separate analysis of bank corporate governance. Specifically, banks are more opaque than other non-financial firms and governments heavily intervene in the banking industry more frequently. He concluded that opaqueness of banks has implication for corporate governance as it makes harder for debt holders to control banks from risk taking, and managers of opaque banks by controlling significant pools of resources can move asset prices that trigger payments to themselves under incentive contracts, can often design compensation packages that allow them to benefit at the expense of the long-run health of the bank. Opaqueness also makes it easier for insiders to exploit outside investors and the government. In many countries, the domination of large sectors of the economy by relatively

few families makes insider abuses more likely, most often at the expense of outside equity investors, depositors, and ultimately taxpayers.

Ilduara Busta (2008) citing Llewellyn (2001) explained the major roles played by banks and underlined the devastating consequences of a bank crisis for an economy. Not only the nature of their activities and the high debt ratios make banks very fragile institutions; on top of this, because of the interconnectedness of banks, the failure of one institution can immediately affect other banks and firms they do business with. This is known as *contagion effect* and makes bank runs a very serious issue to deal with since they could potentially spread throughout the economy - in what is called a banking panic-, justifying the systemic interest to avoid bank failures and the associated high social cost.

According to Freixas and Rochet (1997) cited in Ilduara Busta (2008) , the specificity of banks lies in the fact that their creditors are also their customers, and this entails a much more serious free rider problem related to the monitoring of widely held banks. Their reasoning goes as follows. While in non-financial firms "professional investors", such as, banks, venture capitalists or "informed" private investors, hold the majority of the debt; in the case of banks the debt is mostly held by uninformed, dispersed small agents (mostly households) that could poorly monitor the banks' activities. To make things worse, these securities can be used as a means of payment (which moderates the free rider problem involved in monitoring), and the capital structure of banks is characterized by a substantially higher proportion of debt than in non-financial firms.

Ilduara Busta,(2008) referring past studies further stated that boards of directors and takeovers, both friendly and hostile, play a weaker disciplinary role in banks; even though boards are larger, more independent, have a superior number of committees and meet more often. Top executives' compensation is higher in banking, but pay-performance sensitivity is lower. Finally, while banks present more dispersed ownership structures, high government participation is common all over the world.

Effective corporate governance practices, according to Awotundun *D. A. Kehinde J. S. and Somoye R.O.C. (2011)* are essential to achieve and maintain public trust and confidence in the banking system, which are critical to the proper functioning of the banking sector and economy as a whole particularly, at a time when banks are now global in term of size of shareholders funds, foreign investment inflow and lending activities. Poor corporate governance may contribute to

bank failures and lose of confidence in the ability of a bank to properly manage its assets and liabilities, including deposits, which could in turn trigger a bank run or liquidity crisis.

Bank corporate governance, according to Asnakech G, (2013) is characterized by a complex framework as it encompasses a wide range of stakeholders including not only shareholders but also depositors, creditors, suppliers, employees, and regulatory bodies. The unique features of banks necessitate strict government regulation through bank supervisors and a range of banking laws and regulations. The interface between these elements determines how well the performance of a bank conforms to the best interest of shareholders, while complying with regulatory standards. Hence, for shareholders and regulators the bank corporate governance framework is critical for the bank's success and its daily operations.

2.4.Overview of Banking Industry in Ethiopia

The banking industry differs fundamentally from other industries in any country. An apparent area of variation is in the products and services it provides. Banks mainly deal with the liquid and largely risky assets of business, cash and cash equivalents. Two key differences distinguish the governance of banks from that of non-financial firms. The first is that banks have many more stakeholders than non-financial firms. The second is that the business of banks is opaque and complex and can shift rather quickly (Hamid Mehran Alan Morrison June 2011).

Banks lie at the heart of the world's financial system. They represent the source we often visit to find a loan to purchase a home or automobile, start a new business, or finance a college education etc. (Peter and Sylvia, 2008).

For the fact that the banks have differences in the scale, diversity, complexity and geographical coverage, each bank is adopting different management structures. Of particular significance is the functioning of the internal audit unit in the various banks. Each bank is subject to different degrees and types of risks. The internal audit function is therefore tailored in such a way as to manage the risk exposure of the banks (Mahama, 2009).

As discussed by (Admassu Bezabeh and Asayehgn Desta 2014) banking history in Ethiopia like any share companies has passed through several stages of state systems. Banking institutions have been springing up in all corners of the country during the past few years of Ethiopia's economic history private commercial banks being introduced into the country.

The banking sector in Ethiopia has been dominated by the state-owned Commercial Bank of Ethiopia (CBE). The level of financial intermediation in Ethiopia was low in part due to the public's lack of confidence in the banking sector. This in turn is due to a very weak supervisory framework, dominant state ownership, and its widespread lending directed by the National Bank of Ethiopia (NBE) (Admasu Bezabeh&AsayegnDesta, 2014).

At present, the boom of the new private banks has been set back due to the raise of capital requirements from Birr 75 million to 500million (NBE Directive SBB/50/2011). However, the contribution of the existing 16 private banks is still substantial for the economy, which was under the central command for more than 17 years and where dependence on private banking as financial intermediation was unknown.

2.5.Corporate Governance Mechanisms and firm financial performance

Corporate governance mechanisms relates to the tools, techniques and instruments via which accountability is ensured; it is the various medium through which stakeholders monitor and shape behavior to align with set goals and objectives. Adekoya, (2012) defined corporate governance mechanism as "the processes and systems by which a country's company law and corporate governance codes are enforced".

2.6. Review of Related Empirical Studies

The numbers of researches conducted to examine the impact of corporate governance mechanisms on financial performance of Ethiopian commercial banks are found very limited and scanty. However, the researcher has found it worthy to mention the results of the reviews made on the very few studies made on the topic as follows.

Ashenafiet al.(2013) examined the impact of corporate governance mechanisms and their impacts on performance of commercial banks in the absence of organized stock exchange. They assessed the relationship between selected internal and external corporate governance mechanisms, and bank performance as measured by ROE and ROA. They used structured review of documents, and commercial banks financial data were collected covering a period 2005 to 2011. Their finding indicated that board size and existence of audit committee in the board had statistically significant negative effect on bank performance; whereas bank size had statistically significant positive effect on bank performance. Similarly, capital adequacy ratio, as a measure of external corporate

governance mechanism, had statistically significant positive effect on bank performance. In addition, absence of organized stock exchange; high government intervention; lack of corporate governance awareness, absence of national standards of corporate governance, as well as accounting and auditing; and weak legal framework to protect minority shareholder rights were found as the major factors with adverse impact on corporate governance and bank performance in Ethiopia.

The objective of the study made by Rao and Kidane (2016) was to determine the effect of corporate governance on financial performance of Ethiopian commercial banks. Annual reports of sampled commercial banks were used as source of data. They used Return on Equity (ROE) and Return on Asset (ROA) as a proxy for measuring financial performance. Content analysis was applied to determine the level of disclosure using un-weighted checklist. Correlation and regression analysis were made to determine the relation between corporate governance and financial performance. The results of their study show that disclosure practice, board size, board gender diversity and ownership type have no significant impact on the financial performance of Ethiopian commercial banks. However, asset size and capital structure have significant effect on both on return on equity and return on asset.

Similar studies made by Yenesew (2012), Migibaru (2013),Kibrysfaw(2013), and Frehiwot (2016) aiming to examine impact of corporate governance mechanisms on financial performance of private commercial banks in Ethiopia bring varied results. Though, the topic and objective of their researches were similar, the majority of corporate governance variables used for their study was not the same.

Yenesew (2012) used five years data (*from the year 2007 to 2011*) with a sample of eight Ethiopian commercial banks for his study; three financial performance indicators such as return on asset, return on equity and net interest margin were used.

Corporate governance variables used for his study include board size, board gender diversity, board members educational qualification, board members business management and industry specific experience, and audit committee size.

The findings of his study indicated that large size board and audit committee negatively influences financial performance; whereas board members educational qualification, industry specific experience and board composition positively associated with financial performance.

Based on his findings he suggested that banks with effective corporate governance mechanisms improve financial performance depending on the measure used even if not all corporate governance mechanisms are significant.

Similarly, Migbaru (2013) tried to examine the effect of corporate governance on firms' financial performance of selected banks in Ethiopia. Dependent variables he used to show financial performance of selected banks were return on asset, return on equity, and operating profit margin. Board size, board independence, meeting frequency of boards, CEO duality, audit committee, and board ownership were the independent corporate variables used for his study. Furthermore, two variables i.e. firm size and leverage were considered as a control variable.

The findings of his study show that except board ownership all the other variables were found having significant effect on return on asset. Board ownership was found insignificantly associated with return on asset. Board size, board independence, audit committee and board ownership were also found to have significant correlation with operating profit margin.

The findings of the study made by Kibrysfaw (2013) to analyze the effect of different corporate governance mechanisms , particularly board structure, different regulations, ownership structure and depositors influence, on the performance of nine commercial banks of Ethiopia, covering the period of 2005-2012 shows that proportion of nonexecutive from board characteristics variable, CAR and reserve requirement from regulation proxies had negative and significant impact on the performance of Ethiopian commercial banks. On the other hand concentrated ownership, deposit ratio and availability of audit committee had a positive and significant impact on banks performance. His study also shows that the effect of the remaining variables like board size, board ownership, and liquidity on bank performance is negligible. The study suggests that the directive which regulates banks to have fully non-executive directors need to be modified.

The study made by Frehiwot (2016) also tried to assess the relationship between selected corporate governance variables and bank performance as measured by return on asset.

Corporate governance variables considered in her study include board size, board gender diversity, board members educational qualification, industry specific experience, audit committee size and frequency of board meeting. Size and age of the banks were used as control variable.

The findings of the regression results of her study indicated that large size board and audit committee negatively influences financial performance; whereas board members educational qualification, industry specific experience and board composition positively associated with financial performance.

2.6.1. Board Size

Board size is the number of members on the board. Identifying appropriate board size that affects its ability to function effectively has been a matter of continuing debate (Jensen 1993; Yermack, 1996; Dalton, Daily, Johnson & Ellstrand, 1999; Hermalin &Weisbach, 2003). Some scholars have been in favour of smaller board size (e.g., Lipton &Lorsch, 1992; Jensen 1993; Yermack, 1996 as cited by Somoye R.O.C., 2011).

According to Aggrawal, 2013, the size of board is believed to have a significant impact on firm's performance; which is usually observed to be positive.

The largely shared wisdom regarding the optimal board size is that the higher the number of directors sitting on the board the less is performance. This leans on the idea that communication, coordination of tasks, and decision making effectiveness among a large group of people is harder and costlier than it is in smaller groups. The costs overwhelm the advantages gained from having more people to draw on.

Jensen (1993) states that "Keeping boards small can help improve their performance. When boards get beyond seven or eight people they are less likely to function effectively and are easier for the CEO to control.40 Since the possibility for animosity and retribution from the CEO is too great, it is almost impossible for those who report directly to the CEO to participate openly and critically in effective evaluation and monitoring of the CEO."

Lipton and Lorsch (1992) as cited by Belkhir (1993) also call for adoption of small boards, and recommend that board size be limited to seven or eight members. They further suggest that, larger groups face problems of social loafing and free riding. As board increase in size, free riding increases and reduces the efficiency of the board.

On the other hand, large boards were supported on the ground that they would provide greater monitoring and advice. (Pfeffer, 1972; Klein, 1998; Adam &Mehran, 2003; Anderson et al., 2004; Coles, et al., 2008). Singh and Harianto (1989) also found that large boards improve board

performance by reducing CEO domination within board, thereby making it difficult to adopt golden free-fall contracts that might not be in the shareholder's interest.

According to Renée B. Adams & Hamid Mehran(2011), however, larger boards do not necessarily increase value becausethey help deal with complexity. However, they may increase value when they contain alarger number of directors who also sit on subsidiary boards.

As per the corporate governance directives of Ethiopia (SBB/62/2015) the board of a bank shall comprise at least nine directors who as a group provide a mixture of gender and core competencies such as banking, finance, accounting, legal, business administration, auditing, information technology, and investment management.

2.6.2. Board Gender Diversity

This is calculated as the total number of women in the board over the board size in a given period. Studies trying to link board diversity to firm financial performance have focused primarily on board gender diversity.

Some gender diversity studies, as quoted by Larker &Tayan, 2011, find a positive relationship between women directors and firm performance (Carter, Simkins& Simpson, 2003; Erhardt, Werbel&Shrader, 2003), while others find no significant relationships (Rose, 2007; Shrader, Blackburn & Iles, 1997) or even a negative relationship.

Women are significantly under-represented on boards of directors relative to the general population. Greater female representation on boards might improve board performance. For example, female board representation can enhance independence by reducing social similarities that lead to premature consensus. Women might also exhibit higher levels of trustworthiness and cooperation than men, thus leading to better boardroom dynamics. In addition, they might evaluate information and consider risk and reward differently than men, thereby leading to enhanced decision making. Finally, obvious social benefits exist for increasing gender equality on the board to the general population. However, risks also exist with higher female board representation. The primary risk occurs when companies, in an effort to appear more gender-balanced, recruit under qualified directors. This is referred to as **tokenism** and is similar to the risk of appointing outside directors with the sole purpose of satisfying perceived external demand for diversity (Larker &Tayan, 2011).

With reference to the relationship between gender diversity and firm performance, empirical studies show contrasting results. Considering the ASEAN Banking context Yen, et al, (2015) find a positive and significant relationship between gender diversity and firm performance. Wachudi (2010) reported that board gender diversity has no significant effect on the performance of banks. This is shown by a statistically insignificant relationship between board gender diversity and bank performance.

For Zakzouk et al.(2018),contrary to the findings of many studies from developed countries, there is no statistically significant relation between the percentages of women on boards and top and medium-level executive managements of Jordanian banks and these banks' financial performance.

Dutta and Bose, (2006) reported a statistically significant positive relationships between both the presence and the percentage of women on the board of directors and market value added (MVA) and firm value. Conversely, Shrader*et al.* (1997) shows a negative relationship between the percentage of female board members and firm performance.

A research made by Mitiku(2015) shows insignificant positive association between percentage of women directors and financial performance of Insurance companies in Ethiopia. For Haileab Getachew, however, board gender diversity has a positive effect on financial performance of Insurers in Ethiopia.

2.6.3. Existence of Board committees

Board committees are also an important mechanism of the board structure providing independent professional oversight of corporate activities to protect shareholders interests (Harrison 1987). The agency theory principle of separating the monitoring and execution function is established to monitor the execution functions of audit, remuneration and nomination (Roche 2005).
Corporate failures in the past focused criticism on the inadequacy of governance structures to take corrective actions by the boards of failed firms. (Adesanmi, 2018)

To increase efficiency and allow deeper focus in specific areas, a board may establish certain specialized board committees, unless it can demonstrate to the supervisor that it can still effectively accomplish the goals described below without such committees. The committees

should be created and mandated by the full board. The number and nature of committees depends on many factors, including the size of the bank and its board, the nature of the business areas of the bank, and its risk profile. (Basel Committee on Banking Supervision, 2015). Board committees add to effectiveness of board by exercising better control over management decisions. These include:–

a) **Audit Sub-committee:**-High-profile corporate scams have heightened the need for an effective audit committee. Frequent meetings and independence of audit committee can ensure credibility of corporate reports.

   Audit committees are considered as bastion of governance establishing a link between the external auditor and the board, reducing the risk of illegal activity and preventing fraudulent financial reporting. However the effectiveness of corporate auditing is open to question (Clarke and Dean 2007).

   According to Walage, et al. (2005), over time and over various corporate failure eras, audit committees have been assigned increasing responsibilities for monitoring management, corporate reporting, and relations with the independent auditor. The audit committee acts on the behavior of stockholders in this regard.

   They further added that the committees are currently charged with conducting meetings with the internal and external auditors, reviewing financial statements before they are issued to the public, and, in certain circumstances, taking action to control management. Audit committees are typically the primary locus for suggestions for improvement of the process and also focus of recent failures. These committees should focus on high quality financial reporting and risk management (including identification and control). Furthermore, audit committees should maintain a charter, and regularly assess the performance against this charter.

   The primary objective of the Audit Sub-committee as per Bank Corporate Governance Directives (SBB/62/2015) of National Bank of Ethiopia is to provide independent oversight of the bank's financial reporting and internal control system and ensuring checks and balances within the bank.

b) **Risk& Compliance Sub- Committee**: The risk committee of the board is responsible for advising the board on the bank's overall current and future risk appetite, overseeing senior management's implementation of the risk administration services (RAS), reporting on the state of risk culture in the bank, and interacting with and overseeing the Chief Risk Officer.

The committee's work includes oversight of the strategies for capital and liquidity management, as well as for all relevant risks of the bank, such as credit, market, operational, compliance and reputational risks, to ensure they are consistent with the stated risk appetite.

The committee should receive regular reporting and communication from the Chief Risk Officer and other relevant functions about the bank's current risk profile, current state of the risk culture, utilization against the established risk appetite and limits, limit breaches and mitigation plans.

The risk committee should meet periodically with the audit and other risk-relevant committees to ensure effective exchange of information and effective coverage of all risks, including emerging risks and any needed adjustments to the risk governance framework of the bank in the light of its business plans and the external environment. (Basel Committee on Banking Supervision, 2015)

The objective of the Risk & Compliance Sub-committee as per Bank Corporate Governance Directives (SBB/62/2015) of National Bank of Ethiopia is to oversee senior management's activities in managing credit, legal and other risk and to ensure that the risk management process is in place and functioning.

c) **Human Resources Affairs Sub- committee:-** is entrusted among other things to provide recommendations to the board for new board members and members of senior management; may be involved in assessment of board and senior management effectiveness; may be involved in overseeing the bank's personnel or human resource policies. (Basel Committee on Banking Supervision, 2015)

Bank Corporate Governance Directives (SBB/62/2015) of the National Bank of Ethiopia requires board of a bank to set a Human Resources Affairs Sub-committee comprising at least three of the directors. The primary objective of the sub-committee as per the directive is to provide formal and transparent proposal on the employment and removal of senior management members if he is ineffective, errant or negligent in discharging his responsibilities and the overall compensation/benefit systems of the bank.

2.6.4. Frequency of meetings of board and sub-committees

Board members should meet sufficient number of times. Very few meetings show lack of interest on the part of Board, while too frequent meetings indicate some trouble in the organization (Aggrawal, 2013).

In the agency framework, the intensity of board activity, measured by the frequency of board meetings, may indicate an active monitoring role of corporate boards and so, influence corporate performance (Fernandes et al. 2017).

Meetings provide board members with the chance to come together, and to discuss and exchange ideas on how they wish to monitor managers and bank strategy. Hence, the more frequent the meetings, the closer the control over managers, the more relevant the advisory role, factors that lead to a positive impact on performance (proactive boards). By contrast, frequent meetings might also be a result of board reaction to poor performance (reactive boards). Therefore, any hypothesis concerning the influence of board activity on firm performance is an empirical question, possibly yielding either proactive or reactive results (Andres &Vallelado, 2008).

Jensen (1993) cited in (Salim et al.2016) takes a contrary view and claims that board meetings might not necessarily be useful because of the shortage in time for directors to exchange meaningful ideas among themselves, the board or the management. Besides, Jensen (1993) states that the CEO determines the agenda of board meetings and routine tasks do not leave much time for board members to exert sufficient control over management. Thus, Jensen perpetuates the view of the board as being reactive rather than proactive towards enhancement of governance, so increased board activity suggests poor corporate performance with unclear consequences.

Board and sub committees meeting, with the exception of the Human Resources Affairs Sub-committee that shall convene once in a quarter, according to Bank Corporate Governance Directives (SBB/62/2015) is set to be held at least once in a month on the date and at the venue

fixed in accordance with the rules for manner of conducting the board and sub-committees meetings.

2.6.5. Bank size

According to Sartawi et al. 2012, bank size is generally used to capture potential economies or diseconomies of scale in the banking sector. Scales efficiencies can improve bank efficiency as the unit cost of production falls with increased size. He further added bank size may increase net efficiency through improvements in efficiency that involves superior combinations of inputs and outputs resulting from larger size. Finally it may improve efficiency through the exercise of additional market power in setting prices. Therefore increasing size could lead to improve performance, if there are significant economies of scale. He further added

(Civelic and Al-Alami (1991) & (Smirlock (1985) as cited by Tesfaye Boru, 2014 explained bank size as measured by total deposits or assets is one of the control variables used in analyzing performance of the bank system. This is included to control for the possibility that large banks are likely to have greater product and loan diversification. The impact of bank size on profitability is uncertain a prior for the fact that on the one hand, increased diversification implies less risk and hence a lower required return, and on the other hand, bank size takes into account differences brought about by size such as economies of scale. For large firms their size permits them to bargain more effectively, administer prices and in the end realize significant higher prices for the particular product, Agu (1992).

2.7.Conclusions and knowledge gap

The topic of corporate governance and its impact on firms' operational performance is broadly researched and most of the empirical studies that have been conducted so far with the purpose of examining the relationship between corporate governance mechanism and firms' operational performance are on firms operating in developed and emerging economies where there are capital markets and the findings may not work for firms operating to countries like Ethiopia where there is no organized capital market.

In case of Ethiopia, very small work has been done and the results of the few studies made so far as indicated on the above literature review shows controversial conclusions. The variables used by the researchers are also found not similar. Some used varied internal as well as external governance mechanisms as proxies for measuring performance and the others prefer to focus on

few internal board characteristics and study their impact on bank's performance ignoring external governance mechanisms. Board characteristics used by Ashenafi (2012) for example is found limited as he used only board size and existence of audit committee as explanatory variable to determine the effect of the commercial banks financial performance.

Kibrysfaw (2013) tried to address the issue in a better way as compared to the work of Ashenafi (2012) as he covers both internal and external corporate variables. He, however, overlooked major and important corporate governance variables like gender diversity on the board, availability of different sub-committees on the board, and frequency of board meetings. He rather recommends these variables to be covered in future studies.

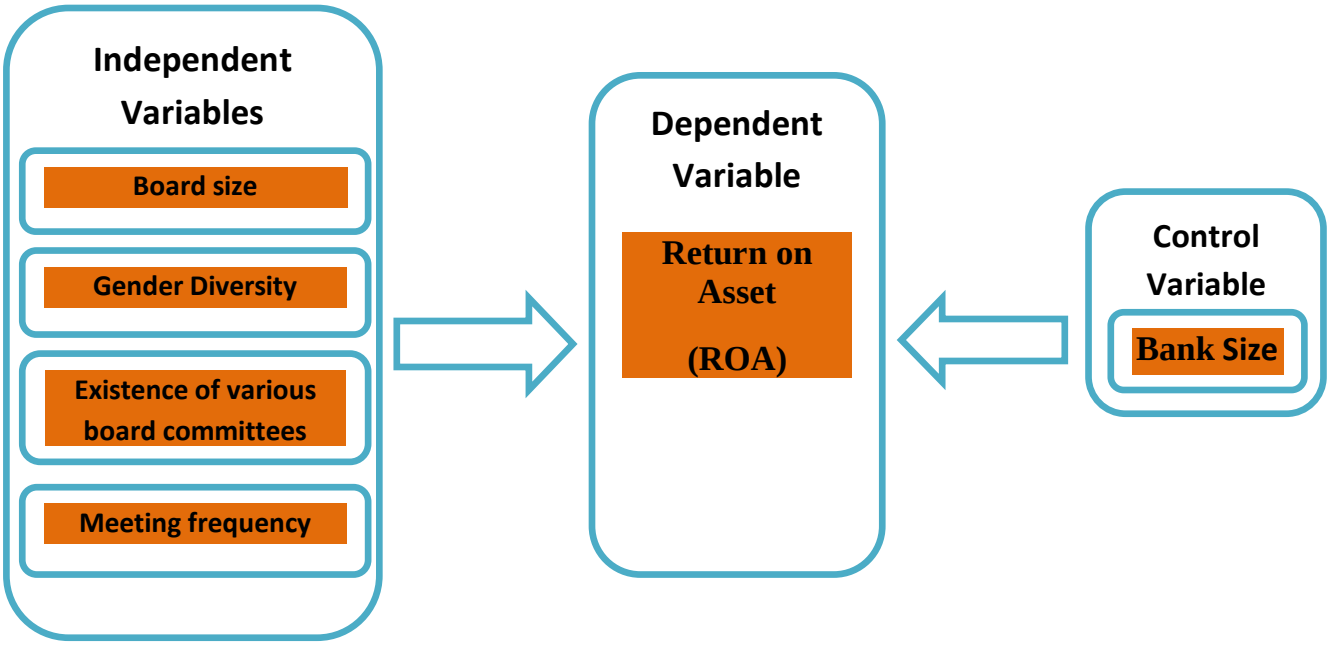
Hence, given the contradicting results of the earlier studies, and the inconsistent measures of variables used in the past researches and of course the limited number of observations and sample size , there is an objective ground to further study the impact of corporate governance mechanisms on commercial banks performance.

Therefore, the objective of this study is to examine the impact of corporate governance mechanism focusing on privately owned Ethiopian commercial banks and to fill the knowledge gap that exists in the area by considering selected internal corporate governance mechanisms as a proxy for measuring performance and by increasing the number of observations through the use of large sample size and relatively broader year data.

2.8.Conceptual framework of the study

The conceptual framework is developed after review of literature discussed above. Hence, the study is based on the presumption that corporate governance mechanisms (board size, gender diversity of board, frequency of board meetings, existence of board committees, have effect on banks' financial performance but this effect is intervened by a control variable. The variables have been selected after assessing that these proxies are frequently used as measures of corporate governance and are in line with theories.

Figure 1: Conceptual framework of the study



Source: Developed from preliminary literature review

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

This chapter describes how the study will be conducted. It focuses on the research design and the methods that will be adopted, the study area & target population, sample size and selection. The chapter also explains the type of data, data analysis technique and the variables measurement.

3.1. Research Design

The type of research which is appropriate to be employed for this study is explanatory survey design in nature. Explanatory type of research design helps to identify and evaluate the causal relationships between the different variables. Quantitative data is used to numerically measure and statistically analyze the variables.

3.2. Population, Sample and Sampling technique for the study

The population of the study is all commercial banks registered and operating in Ethiopia. Purposive sampling is used to sample commercial banks. The numbers of banks operating in the country are 18, of which 16 are private banks, and the remaining 2 are state-owned. From these 18 banks only 17 banks are Commercial Banks excluding the Development Bank of Ethiopia which focus on provision of medium and long term loans for investment projects in the Government priority areas.

The data of the study is collected for the period covering 2009 to 2018; hence, purposive sampling technique is usedthat is based on age and availability of data for the study period. Thus, this study used panel data of 10 private banks for 10 years. The sample private banks are Awash Bank, Bank of Abyssinia, Cooperative Bank of Oromia, Dashen Bank, Lion International Bank, Nib International Bank, Oromia International Bank, United Bank, Wegagen Bank, and Zemen Bank.

3.3. Type of Data

The data of the study is composed of two kinds of data. Data on board characteristics is obtained from each bank in the study and the data on the board size, board gender diversity in commercial banks are collected from the sampled banks annual reports. Audited financial statements of the sampled banks covering the period 2009-2018 are considered as a secondary data for the study. Consequently, this study used panel data which is a combination of time serious and cross-sectional data of ten commercial banks for ten years or 100observations.

Gujarati (2004,: pp 637-38) highlighted some of the merits of panel data over cross-sectional or time-series data as follows: "*it explicitly accounts for unobservable and constant heterogeneity across individual units, that is, specific to each bank (management style, business strategy, etc.); it helps capture cross-sectional specific attributes and time-series properties of units; unlike time-series, panel data gives more informative data, more variability, more degrees of freedom, less co linearity among variables, and more efficiency; and it minimizes the bias caused from aggregation in pure time series data*".

3.4. Data analysis technique and variables Measurement

To analyze the data collected, descriptive, correlation and multiple panel linear regression data analysis methods are employed. The study employs descriptive data analysis to describe the important features of the variables using mean, maximum minimum and standard deviations. The correlation analysis is used to identify the relationship between the independent, dependent and control variables using Pearson correlation analysis. Correlation analysis measures the strength of the linear relationship between variables while regression analysis provides a "best-fit" mathematical equation for the values of the variables used in determining and interpreting linear relationships of variables (Weiers, 2008). Therefore, a multiple panel linear regression model is also used to conduct inferential analysis and determine casual relation of the panel data. The method enables statistical testing of hypothesis to help estimate the dependent variable of bank performance based on the various independent variables of corporate governance. Eviews version 7, a statistical software package is used to carry out the statistical analysis.

The variables for this study are selected based on alternative theories and previous empirical studies related to corporate governance and firm performance. In accordance with the theory and empirical studies, the independent, dependent and control variables of the study are identified in

order to investigate the impact of corporate governance mechanisms on firms' financial performance.

3.4.1. Dependent Variables

In this study dependent variables are variables that are used to measure the financial performance of sampled commercial banks. As there is no secondary market in Ethiopia it is not possible to use Tobin Q and other market based measures. Thus, only accounting measures of financial performance i.e. Return on Asset (ROA) is used, which is explained below.

This measure as argued by Richard et al., 2009; Rose, 2007 is too sensitive to a company's accounting systemand their choices of asset valuation principles e.g with regard to their depreciation schedule but are most common when measuring a company's performance as they display the overall profitability of firms and its validity has been proven by empirical evidence to be related to economic returns (Alina Woschkowiak , 2018).

Return on Assets (ROA): a dependent variable or a proxy for the private commercial banks financial performance which measures a firm's financial performance annually. It shows how management of an entity has been able to turnover assets of the organization over-one-year. To a large extent, ROA also deals with operational sustainability of these institutions.

$$\textit{Return on Asset (ROA)} = \frac{\textit{Profit After Tax and Provision (PAT)}}{\textit{Average Total Asset (ATA)}}$$

3.4.2. Independent Variables

In this study, the independent variables are variables that are used as a determinant of corporate governance of the sample Ethiopian Commercial Banks. The independent variables of the study are board size, board gender diversity, existence of various board committees, and frequency of board meetings. The definition and measurements of the variables are as follows:-

Board Size:-

Board size is measured as the total number of directors in the boardroom and is calculated manually for each company by means of the current and historical data about the start and end dates of director positions

Board Gender Diversity:-

Board gender diversity is measured as the percentage of number of female directors divided by the total number of board members. Due to the varying size of boards, a percentage variable provides a more accurate and comparable measurement thus the percentage was taken.

Existence of Various board committees:-

It is the various numbers of sub-committees in a private commercial bank. It was calculated as the total number of internal board sub-committees the private commercial bank has at the end of the period.

Frequency of Board Meetings:-

This refers to the number of meetings held by the boardon a year during the periods under review.

3.4.3. Control Variable

Bank Size

In this study bank size as measured by the natural logarithm of total assets at year-end is taken as control variable in analyzing performance of the sampled banks.

Table 1: Summary for Terms of Measurement

variables	Acronym	Terms of measurement	Expected Relationship
Return on Assets	ROA	Amount of profit after tax as a percentage of total asset	
Board Size	BDZE	Representing the number of directors sitting in the board	Negative
Board Gender Diversity	BGD	Percentage of number of female directors to board size of sampled commercial banks	Positive
Availability of variety number of board Sub-committees	BSC	Number of sub-committees serving on the board	Positive
Meeting Frequency of Board	MFB	Number of meeting how much time board meets on a year during the period	Negative
Bank Size	BSZ	The natural logarithm of total assets at year end	Positive

Accordingly, to estimate the effect of corporate governance on private commercial bank's financial performance in Ethiopia the following general panel data regression or research model is developed.

$$y_{it} = \alpha + \sum \beta K X_{it} + \epsilon_{it} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 1$$

Where;

- y_{it} represents the dependent variable of bank(Financial performance) i for time period t
- α is the intercept
- X_{it} represents the explanatory variable (corporate governance) of the sample banks i for time t
- βk represents the vector of parameters to be estimated on the explanatory variables
- ϵ_{it} represents the error term

The above general research model is converted into the study variable to find out the effect of corporate governance mechanisms on private commercial bank's financial performance as follows:

$$ROA_{it} = \alpha_i + \beta_1 * BDZE_{it} + \beta_2 * BGD_{it} + \beta_3 * BSC_{it} + \beta_4 * MFB_{it} + \beta_5 * BSZ + \beta_6 * LOG\ ROA_{it} + \epsilon_{it} \ldots\ldots 2$$

Where:

- *i* denotes banks ranging from 1 to 10 (cross-sectional dimension).
- *t* denotes years ranging from 2009 to 2018 (time-series dimension).
- ROA*it* represents Return on Asset for *i*th bank and time period *t*
- BDZE*it represents* Board Size for *i*th bank and time period *t*
- BGD *it* Female Directors on the board for *i*th bank and time period *t*
- BSZ*it* Bank size for *i*th bank and time period *t*
- MFB*it* represents the meeting frequency of the board in a sample bank i in time
- BSC*it* represents the size of internal board sub-committee in a sample bank i in time t

3.5. Tested Model Assumption

3.5.1. Normality

To test the normal distribution of data descriptive statistics was undertaken. Based on the examination, Histogram graph used to know the property of normally distributed.

3.5.2. Multicollinearity Test

This assumption occurs when the independent variables are too highly correlated with each other. To test the independency of the independent variables in regression model the study would check a correlation matrix of independent variables. Different empirical studies show different argument towards the mulitcolinarity problem. Mashotra (2007) stated that multilicolliantory problems exist when the correlation coefficient among variables greater than 0.75. Cooper & Schindler (2009) suggested that a correlation above 0.8 between explanatory variables should be corrected for. In this study, variance inflation factor (VIF) test of balanced panel data models are applied to control for multicollinearity.

3.5.3. Homoscedasticity Test

The variance of residual is the same across the regression line. Data are homoscedasticity if the residuals plot is the same for all values of the predicted variable. In this study, to test the data of homoscedasticity the scatter plot graph was used to evaluate the problem of homoscedasticity.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1. Introduction

The preceding chapter presented the research methods adopted in the study. This chapter analysis the corporate governance mechanisms and financial performance in the case of Ethiopian private commercial banks, using the annual balanced panel data, where all the variables are observed for each cross-section and each time period. The study has a time series segment covering from the period 2009 up to 2018 and a cross section segment which considered ten Ethiopian Private Commercial Banks. This chapter is organized into four sections. Section one discusses descriptive statistics and correlation analysis. Section two presents model specification & tests for the classical linear regression model assumptions. Section three presents discussion of results and the chapter is concluded by a summary of the chapter.

4.2. Descriptive Statistics

This section presents the descriptive statistics of dependent and explanatory variables used in this study. The dependent variable used in this study was financial performance of banks measured by return on asset (response variable),board size, board gender diversity, board subcommittees and meeting frequency of board as independent variable and bank size in total asset(Control variable).

4.2.1. Summary Statistics

Table 2 shows the summary descriptive results for all the variables used in the study such as mean, maximum, minimum, standard deviation, skewness, kurtosis and number of observations.

Table 2: Summary of descriptive statistics of study variables over the period of 2009-2018

	FINANCIAL PERFORMANCE OF BANKS (ROA)	BOARD SIZE (BSZ)	BOARD GENDER DIVERSITY (BGD)	BOARD SUBCOMMITTEES (BSC)	MEETING FREQUENCY OF BOARD (MFB)	BANK SIZE IN TOTAL ASSET (BZ)
Mean	0.030	2.287	0.104	3.600	3.100	9.198
Median	0.029	2.303	0.100	3.000	3.178	9.277
Maximum	0.063	2.485	0.286	7.000	4.060	12.673
Minimum	0.003	1.946	0.000	3.000	2.079	6.962
Std. Dev.	0.009	0.158	0.088	1.178	0.527	0.946
Skewness	0.659	-0.383	0.114	1.685	0.102	0.026
Kurtosis	5.171	2.311	-1.320	4.310	1.952	4.243
Jarque-Bera	24.203	3.979	7.830	49.027	4.276	5.809
Probability	0.000	0.137	0.020	0.000	0.118	0.055
Sum	2.692	205.840	43.941	324.000	278.994	827.805
Sum Sq. Dev.	0.007	2.233	10.393	123.600	24.735	79.600
Observations	90.000	90.000	90.000	90.000	90.000	90.000

Source: Own estimation of research data (2019)

A. Dependent Variable

As indicated in the above table, the profitability measures (ROA) shows that privatecommercial banks achieved on average a positive before tax profit and provision over the last ten years. For the total sample, the mean of ROA was 3 percent with a maximum of 6.3 percent and a minimum of 0.3 percent. That means the most profitable private commercial banks among the sampled earned 6.3 cents of profit after tax and provision for a single birr invested in the assets of the bank. On the other hand, not profitable private commercial banks of the sampled gain 3 cents of profit before tax and provision for each birr invested in the assets of the bank. This clearly illustrates the disparity of rates of return earned by private commercial banks. Regarding the standard deviation, it means the value of ROA deviate from its mean to both sides by 0.9 percent which indicates there was low variation from the mean. This implies that banks incurred loss need to optimize the use of their assets to increase the return on their assets.

B. Independent Variable

Regarding explanatory variable there are some imperative statistics that have to be mentioned. The mean of board size is nearly 9.85[1] with minimum size of 7 and maximum of 12 members. In fact, the ceiling and floor of the board size are within the requirements of the Commercial Code under Art.347 (2), which state that an incorporated body should have a minimum of 3 and a maximum of 12 board members. However, in the case of Ethiopian private commercial Banks

[1] LN(X)=y implies that e^Y =x where the constant e represents 2.7182818

with the growing nature of the industry, the size of the board needs to be large enough to form different subcommittees and to take the advantage of directorial network. Gender diversity also indicates a mean of 10.4 percent ratio for the presence of female directors in the boards of private commercial banks. A further investigation of the gender diversity remarks that the maximum observation for women director percentage from total board size is 28.60 percent and there is board without female directors during the panel period. With regard to the average number of board subcommittee the number nearly is 3.6 with minimum number of subcommittees of 3 and maximum of 7.

Board meetings are part of the board process and considered as an indication of board diligence (Carcello et al., 2002). Increase in board meetings is viewed as intensity in board activity (Vafeas, 1999). Various studies examined the impact of board meetings by considering the frequency or number of meetings (Vafeas, 1999; Beasley et al., 2000; Carcello et al., 2002). For this study, the researcher uses the same approach and measure board meetings by the number of meetings held annually by the board of directors. To meet the statistical requirements of normal distribution, natural logarithm is taken after and on average the board was attended in the meeting 22 times with minimum of 8 times and maximum 60 times per year.

C. Control Variables

In order to identify the specific effect of board characteristics on firm performance, the researcher control for the effect of Bank size. Booth et al. (2002) and Peasnell et al. (2003) have suggested that internal governance structures are substitutable and the firms can choose appropriate governance options based on what is right for them. For example, as the complexity of the firm increases, board size may increase due to need for advice and environment monitoring (Pfeffer&Salancik, 1978; Zahra & Pearce, 1989).

As the firm complexity changes, the board characteristics also may vary. Boone et al. (2007) found that as firms become larger and more diversified, the size of the board increases. Firm size is, therefore, taken as a proxy for the complexity of the firm and the need for higher amount of advice to the board (Fama& Jensen, 1983; Booth & Deli, 1996). Under this research the researcher has controlled the effect of Bank size on financial performance.

4.2.2. Correlation Matrix

Correlation is a way to index the degree to which two or more variables are associated with or related to each other. The sample size is the key element to determine whether or not the correlation coefficient is different from zero/statistically significant. The values of the correlation coefficient are always between -1 and +1. A correlation coefficient of +1 indicates that the two variables are perfectly related in a positive linear sense; while a correlation coefficient of -1 indicates that two variables are perfectly related in a negative linear sense. A correlation coefficient of 0, on the other hand indicates that there is no linear relationship between two variables (Brooks, 2008). The correlation matrix in table 3 predicts the likely relationship among variables in the study.

Table 3: Correlation Matrix (With Dependent Variable)

Probability	FINANCIAL PERFORMANCE OF BANKS (ROA)	BANK SIZE IN TOTAL ASSET (BZ)	BOARD GENDER DIVERSITY (BGD)	BOARD SIZE (BSZ)	BOARD SUBCOMMITTEES (BSC)	LAG ROA	MEETING FREQUENCY OF BOARD (MFB)
FINANCIAL PERFORMANCE OF BANKS (ROA)	1						

BANK SIZE IN TOTAL ASSET (BZ)	-0.333124	1					
	0.0013	-----					
BOARD GENDER DIVERSITY (BGD)	-0.109701	-0.091342	1				
	0.3033	0.3919	-----				
BOARD SIZE (BSZ)	-0.096363	-0.135966	0.282735	1			
	0.3663	0.2013	0.0069	-----			
BOARD SUBCOMMITTEES (BSC)	0.278307	-0.059084	0.267565	0.064401	1		
	0.0079	0.5801	0.0108	0.5465	-----		
LAG ROA	0.468521	0.099247	-0.013436	-0.156359	0.154675	1	
	0	0.352	0.9	0.1411	0.1455	-----	
MEETING FREQUENCY OF BOARD (MFB)	0.051649	0.056906	0.124316	0.348888	-0.26603	0.081856	1
	0.6288	0.5942	0.243	0.0008	0.0113	0.4431	-----

Source: Own estimation of research data (2019)

Financial Performance and Board Size: In regard to financial performance and board size**,** Table 2 above indicates a strong significant negative relationship exists between financial performance and board size. Correlation coefficient for financial performance was r = -0.096; P value = 0.3663.

Financial Performance and Board Gender Diversity: In connection with financial performance and board gender diversity Table 2 above indicates a strong significant negative relationship exists between financial performance and board gender diversity with correlation coefficient was r =-0.109; P value = 0.3033.

Financial Performance and Board Subcommittees: As per Table 2 above board subcommittees and financial performance indicates a strong significant positive relationship exists between subcommittees and financial performance. Correlation coefficient for subcommittees was r = 0.278; P value = 0.008.

Financial Performance and Meeting Frequency of Board: The Correlation coefficient for meeting frequency was r = 0.052; P value = 0.6288.

Cooper and Schindler, Mashotra, and Hair and et al. (as cited in Habtamu 2012) suggested that the correlation coefficient can be 0.75 but a correlation coefficient above 0.8 between independent variables should be corrected for because it is a sign for multicollinearity problem. They also argued that correlation coefficient below 0.9 may not cause serious multicollinearity problem. In general, even though the correlation analysis shows the direction and degree of associations between variables, it does not allow the researcher to make cause and effect inferences regarding the relationship between the identified variables, is simply stated that there is evidence for a linear relationship between the two variables, and that movements in variables are on average related to an extent given by the correlation coefficient. Thus, in examining the effects of selected independent variables on financial performance proxied by ROA the econometric regression analysis which is discussed in the forthcoming section of the paper gives assurance to overcome the shortcomings of correlation analysis.

4.3. Econometric Analysis

This section of the study presents the results and discussions of the regression (econometrics) analysis. So far, the study has established a framework of literature and data analysis including summary statistics and correlation analysis in order to investigate corporate governance mechanism on financial performance in Ethiopian private commercial Banks. To shed more light on corporate governance mechanism on financial performance in Private commercial Banks linear panel data (analysis of cross sectional and time series) regression models have been run. Before running the regressions, the data sets were checked for certain tests; heteroscedasticity, autocorrelation, normality, &multicollinearity, and model specification tests have been made to fit the Classical Liner Regression Model (CLRM) assumptions and to undertake reliable estimations.

4.3.1 Multicollinearity Test

The results of the test for existence of multicollinearity between independent variables are presented in the test analysis using only independent variables in Table 4.

Table 4: Correlation Matrix (Only Independent Variables)

	BANK SIZE IN TOTAL ASSET (BZ)	BOARD GENDER DIVERSITY (BGD)	BOARD SIZE (BSZ)	BOARD SUBCOMMITTEES (BSC)	LAG ROA	MEETING FREQUENCY OF BOARD (MFB)	FINANCIAL PERFORMANCE OF BANKS (ROE)
BANK SIZE IN TOTAL ASSET (BZ)	1.0000						
BOARD GENDER DIVERSITY	-0.0913	1.0000					
BOARD SIZE (BSZ)	-0.1360	0.2827	1.0000				
BOARD SUBCOMMITTEES (BSC)	-0.0591	0.2676	0.0644	1.0000			
LAG ROA	0.0992	-0.0134	-0.1564	0.1547	1.0000		
MEETING FREQUENCY OF BOARD (MFB)	0.0569	0.1243	0.3489	-0.2660	0.0819	1.0000	
FINANCIAL PERFORMANCE OF BANKS (ROE)	-0.1550	0.0723	-0.0850	0.4568	0.1018	-0.0421	1.0000

Source: Own estimation of research data (2019)

According to Lewis-Beck (1993) suggestion in order to find out the multicollinearity problem, the bivariate correlations among the independent variables should be examined and the existence of correlation of about 0.8 or larger indicates a problem of multicollinearity. Hair et al (2006) argued that correlation coefficient below 0.9 may not cause serious multicollinearity problem. Also, Cooper and Schendlar (2009) suggested that a correlation above 0.8 should be corrected for. The results in the above correlation matrix table shows that the highest correlation of 0.45 which is between board subcommittees and financial performance.

Since there is no correlation above 0.8, and 0.9 in this study according to Cooper and Schendlar (2009), Lewis-Beck (1993) and Hair et al (2006) respectively, it can be concluded in this study that there is no problem of multicollinearity, thus enhanced the reliability for regression analysis.Therefore, it can be concluded that in this study that there is no problem of multicollinearity or the results showed that the problem of multicollinearity did not exist between variables in the model. Hence all the variables were retained for use in the estimations.

4.3.2. Heteroscedasticity Test

It has been assumed that the variance of the errors is constant. This is known as the assumption of homoscedasticity. If the errors do not have a constant variance, they are said to be heteroscedasticity. The white test was used to check for the presence of heteroscedasticity in the residuals (see Table 5).

Table 5: Heteroscedasticity Test: White (Summary)

Version of Test	Value	Df	Probability
F-statistic	0.475617	Prob. F(27,62)	0.9821
Obs*R-squared	15.44261	Prob. Chi-Square(27)	0.9628
Scaled explained SS	28.78836	Prob. Chi-Square(27)	0.3712

Source: Own estimation of research data (2019)

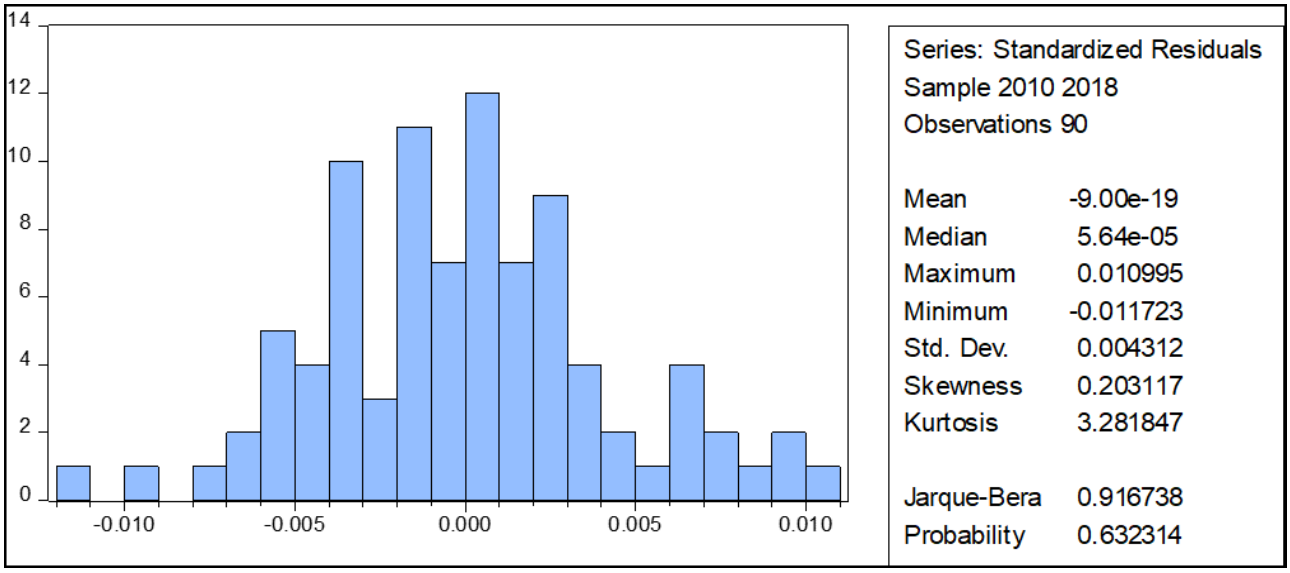
As shown in Table 4 both F-statistic and Obs*R-squared version of test give the same conclusion that there is no evidence for the presence of heteroscedasticity since the p-values in all of the cases were above 0.05. The third version of the test statistics "Scaled explained SS", which is, as the name suggests, based on a normalized version of the explained sum of squares from the auxiliary regression also give the same conclusion.

Generally, in the regression models used in this study it was proved that the test statistics is not significant and the variance of the error term is constant or homoscedastic and we had sufficient evidence to accept the null hypothesis of Homoscedasticity. The linear model is also correctly specified.

4.3.3. Normality Test

A normal distribution is not skewed and is defined to have a kurtosis coefficient of 3. Bera-Jarque formalizes this by testing the residuals for normality and testing whether the coefficient of Skeweness and kurtosis are zero and three respectively. Skewness measures the extent to which a distribution is not symmetric about its mean value and kurtosis measures how fat the tails of the distribution are. The Bera-Jarque probability statistics/P-value is also expected not to be significant even at 10% significant level (Brooks, 2008). According to (Gujarati, 2004), the BJ is a large sample test and our sample of 100 was equal to the frame was large; the study considered the BJ test also.

Figure 2: Normality Test result



Source: Own estimation of research data (2019)

As shown in the histogram in the figure1 skewness and kurtosis approaches to zero (i.e. 0.203117) and Three (i.e. 3.281847) and theJarque-Bera statistics (i.e. 0.916738) was not significant even at 10% level of significance as per the P-values shown in the histogram in the appendix was 0.632314). Hence, the null hypothesis that is the error term is normally distributed should not be rejected and it seems that the error term in all of the cases follows the normal distribution. Also, it indicates that the inferences made about the population parameters from the sample parameters tend to be valid.

4.3.4. Autocorrelation Test

Breusch-Godfrey Serial Correlation LM Test, this is one of thetests for autocorrelation in residuals. The Breush-Godfrey test is usually used because the Durbin Watson test may not reliable when lagged values are used in the model. The Breusch-Godfrey test is much more general in that it allows for both AR and MA error structures as well as the presence of lagged regress and as an explanatory variable (Gujarati, 2004). The null hypothesis is that there is no serial correlation. The summary statistic is depicted here below:

Table 6: Breusch-Godfrey Serial Correlation LM Test (Summary)

Version of Test	Value	Df	Probability
F-statistic	0.869344	Prob. F(6,77)	0.5214
Obs*R-squared	5.709906	Prob. Chi-Square(6)	0.4565

Source: Author Estimation of Research Data (2019)

Table 8 shows that the Breush-Godfrey Serial Correlation LM Test gives an F-statistic of 0.8693 with a probability of 0.5214 and Obs*R-square version gives statics of 5.7099 with probability of 0.4565. Hence, from both versions of the test we fail to reject the hypothesis of no autocorrelation in the residuals at 1% significant level

4.4. Results of Regression Analysis and its Interpretation

4.4.1. Results of Regression Analysis

This section presents the regression result of fixed effect model that examines the corporate governance mechanisms and financial performance in the case of private commercial banks.

Operational model: the operational panel regression model used to find the statistically significant corporate governance mechanisms on the financial performance in the case of private commercial Banks was:

$$ROA_{it} = \alpha_i + \beta_1 * BDZE_{it} + \beta_2 * BGD_{it} + \beta_3 * BSC_{it} + \beta_4 * MFB_{it} + \beta_5 * BSZ + \beta_6 * LOG\ ROA_{it} + \epsilon_{it} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (4.1)$$

Accordingly, Table 4.6 below presents the result of fixed effect regression model that examines the impact of explanatory variables on financial performance. Hence, ROA is dependent variable whereas board size (BDZE), board gender diversity (BGD), board subcommittee (BSC) and frequency of board meeting (MFB), bank size measured in terms of total asset (BSZ)are explanatory variables is control variable.

Table 7: Results of fixed effect regression model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BOARD SIZE (BSZ) (H1**)	-0.005858	0.005048	-1.160419	0.2492****
BOARD GENDER DIVERSITY (BGD) (H2*)	-0.004946	0.00203	-2.436031	0.017*
BOARD SUBCOMMITTEES (BSC) (H3*)	0.002211	0.000666	3.317898	0.0013*
MEETING FREQUENCY OF BOARD (MFB) (H4*)	0.003014	0.001534	1.96458	0.0528***
BANK SIZE IN TOTAL ASSET (BZ) (H5*)	-0.003676	0.000751	-4.89604	0.0000*
LAG ROA	0.271166	0.05391	5.030015	0.000*
Constant	0.054382	0.013479	4.034533	0.0001
R-squared	0.461341	Mean dependent var		0.029915
Adjusted R-squared	0.422402	S.D. dependent var		0.008642
S.E. of regression	0.006568	Akaike info criterion		-7.138676
Sum squared resid	0.00358	Schwarz criterion		-6.944246
Log likelihood	328.2404	Hannan-Quinn criter.		-7.060271
F-statistic	11.84773	Durbin-Watson stat		2.068991
Prob(F-statistic)	0.00000			

Note * Significant at 1%, ** Significant at 5%, & *** Significant at 10% and *** * insignificant at 1%, **
H* Accept Null Hypothesis and H** Rejec Null Hypothesis

Source: Own estimation of research data (2019)

Based on the regression result, the relationship between the variables included in the model can, therefore, be represented as follows;

$$ROA_{it} = 0.054 - 0.006 * BDZE - 0.005 * BGD + 0.002 * BSC + 0.003 * MFB - 0.004 * BSZ + 0.271 * LOG\ ROA + \epsilon_{it} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (4.1)$$

Where: - Dependent variable-is return on asset (ROA) and independent variables includes board size (BDZE), board gender diversity (BGD), board subcommittee (BSC) and frequency of board meeting (MFB), bank size measured in terms of total asset (BSZ)are explanatory variables is control variable.

4.4.2. Interpretation of R-squaredand F-statistic

4.4.2.1.Interpretation of R-squared

As shown in Table 4.6, an R-squared coefficient of 0. 0.4613obtained from the estimated model; revealing that 46.13 percent of variation in return on asset (ROA) is explained by the selected explanatory variables board size (BDZE), board gender diversity (BGD), board subcommittee (BSC) &frequency of board meeting (MFB),and bank size measured in terms of total asset (BSZ). The R-square result makes sense because there are other factors such as size of the bank, age of

the bank and management efficiency that were not included in the model but could help in explaining ROA in bank industry. These and other remaining factors can account for the remaining percent.

4.4.2.2.Interpretation of F-Statistics

The F-statistics tests the fitness of the model and a recommended F-statistics should be greater than 5 for it to be considered fit. The regression F-statistic takes a value of 11.84773 which is greater than 5 hence the model was fit for estimation. Furthermore, F-statistics tests for the joint impact of all explanatory variables on the dependent variables. A corresponding p-value of zero attached to the test statistic shows that the null hypothesis that all of the slope parameters are jointly zero should be rejected even at 1 percent level of significance. This implies that all selected corporate governance variables can affect the level of financial performance (ROA) jointly.

4.4.3. Interpretation Results of the Repressors' Values

A. Board Size Vs Financial Performance (ROA) of Private Commercial Banks in Ethiopia

As shown above, table 4.6, this study found a negative and statistically insignificant association between boards size (BDZE) and return on asset even at10 percent level of significance. It implies that the number of board of directors is negatively related with private commercial banks financial performance proxied by ROA. In other words, the higher the number of board members of commercial banks, the lower their financial performance achievement is and vice versa. The result indicates that small boards are more effective in monitoring and controlling private commercial Banks management and it help to reduce agency costs. The finding supports the argument of Jensen (1993) that an increase in board size leads to less effective monitoring due to coordination and process problems inherent in large board size. The result is also consistent with prior studies which argue that coordination, communication and decision-making problems increasingly impede company performance when the number of directors increases (Sanda et al., 2005; Adusei, 2011; Yermack, 1996; Al-anaseer et al., 2012).

As per the regressions result a one-percent increase in the board size seats results in a 0.5-percent decrease in the ROA of private commercial banks in Ethiopia but it is statistically insignificant (P value greater than 5 percent), the best justification given is that, if the number of board members is large, it creates conflict of interest between the board members, which erodes the wealth of the

private commercial banks. Private commercial banks need to have reasonable numbers of directors in order to perform the board task effectively. The outcome of the analysis data indicates that there is a negative relationship between board size and financial performance of sample private commercial banks in Ethiopia. The result also indicates as the proposed national bank of Ethiopia corporate governance guideline for bank sectors which say a bank shall have at least nine directors was not empirically supported.

B. Gender Diversity in Board Vs Financial Performance (ROA) of Private Commercial Banks in Ethiopia

The relationship between female presence in board and financial performance measures by ROA are significant since the premise of null hypothesis under this study which says there is no statically positive /negative relationship between the proportions of female directors and private commercial bank performance were not rejected. Therefore, this study supports the view that gender diversity leads to superior banks financial performance. A one- increase in female director in the board results in a 0.005-unit increase in financial performance of private commercial banks in Ethiopia proxied by ROA.This is against with the findings of other studies that examined the role of women on boards (e.g., Carter et al., 2003; Bonn, 2004; Smith et al., 2006). Various studies point out that woman board members contribute to quality of decision making by questioning the conventional wisdom and provoking lively board discussion (Fondas & Sassalos, 2000; Letendre, 2004; Huse& Solberg, 2006).

This finding provides evidence to stakeholder perspective and also to resource dependency perspective that diversity is beneficial to firms. Perhaps women directors can bring their view points more effectively in a smaller board, thereby making effective contribution, rather than in a larger board. It appears that in larger boards, women are constrained or made ineffective by members of other gender. They may not be even having proportional representation as found by Kang, Cheng &Gray (2007) of Australian boards. The findings imply that women members should not be treated as tokens of representation to gender diversity but as a source of invaluable input to the boards, and should be represented in proportion to board size.

The result is not surprising because other studies that examined the association between proportion of women on boards and firm performance also found insignificant result (for example see Rose, 2007; Habbash, 2010). But the result simply indicates the presence of female directors

will not improve banks operation and performance unless they are qualified and competent. Whether gender diversity help improve bank operation and performance it depends on factors such as experience, education and assertiveness of female directors.

C. Frequency of Board Meeting Vs. Financial Performance (ROA) of Private Commercial Banks in Ethiopia

The frequency of board meeting is significantly related to firm performance measured by ROA (p-value 0.0528). This implies that the amount of time and effort directors devote to board meetings is taken as an indicator of board effectiveness. Board meetings have positive significant relationship with private commercial bank performance. This means that increase in the frequency of meetings increase shareholder's earnings as company incurred more financial expenses in terms of sitting allowance, travelling expenses, hotel accommodation and entertainment during meetings but it has positive impact on the financial performance of Banks

A one-unit increase in frequency of board meeting results in a 0.003-unit increase in financial performance (ROA) of private commercial bank in Ethiopia, since shareholders are only allowed to be a board member, high board meeting frequency may indicate significant support of shareholders on the management decision. High owner support on management decision in turn can increase firm performance as it may be support for the management to pass a decision that benefits the private commercial Banks at the expense of the owners closely watching him. So, it is amazing to get a result that board meeting frequency has positive and significant effect on firm's financial performance.

D. Availability of various Board subcommittees Vs. Financial Performance (ROA) of private commercial banks in Ethiopia

The result indicates that number of board committees has a positive and statistically significant effect on bank performance. A one-unit increase in number of board subcommittee results in a 0.002-unit increase in financial performance (ROA) of private commercial bank in Ethiopia (p-value 0.0013).This result is consistent with both agency theory and stakeholder theory. According to these two theories the existence of various board committee increases the effectiveness of board of directors in the governance of the firm by assisting in fulfilling its oversight responsibilities through reviewing the financial information and internal control system.

Private commercial banks board sub-committees are established by the banks with the responsibility of supplying the assurance on financial and compliance issues. Their role, among others, include choice and monitoring of accounting principles and policies, overseeing appointment, dismissal of external auditors, monitoring internal control process, discussing risk management policies and practices with management and overseeing the performance of the senior management, internal audit and risk management functions.

E. Bank Size and Vs. Financial Performance (ROA) of Private Commercial Banks in Ethiopia

In respect to the model specifications, the bank size (control variable) was proxied by the natural logarithm of total assets. Bank size shows a negative and significant (at 1 percent significant level) impact in its relationship with the banks' financial performance. This implies that bank size was able to explain the rising bank profit but had a negative sign. Estimation result suggests that larger banks in terms of total asset tend to have lower ROA. This finding is consistent with theories emphasizing the importance of scale effects for financial performance.

(Liebeg &Schwaiger, 2006 and Maudos & Guevara, 2004) suggest a positive relationship between the size of a bank and ROA; however, the literature presents contrasting results (Fungacova &Poghosyan, 2009) argue that due to increased economies to scale, banks that maintain sufficient asset should benefit from their size and have lower ROA.

The statistically significant impact of asset size on ROA is in line with hypothesis. In the private commercial banks, the bank size has an estimated coefficient of -0.003676 in the ROA regression, which means that a 100% change (increase) in asset size generate 0.003676 change (decrease) in ROA.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

The study established corporate governance mechanisms and financial performance in the case of Ethiopian private commercial Banks during the period from 2009-2018. Findings indicated that Banks financial performance are influenced by board size, female directors in the board, frequency of board meeting, subcommittees in the board and bank size. This chapter outlines the summary and conclusions of the study in accordance with the study results. It also gives an insight on the policy recommendations as well as suggestions for future studies.

5.2. Summary of the Study

Corporate governance helps to protect stakeholders' interest by aligning their interest with that of managers. To this end, this study aimed at examining corporate governance mechanism that could influence the performance of private commercial banks in Ethiopia. In order to achieve this objective, four hypotheses have been developed. To address research hypotheses and achieve the broad research objective, a quantitative research approach and explanatory research design were adopted in carrying out this research.

The variables were chosen based on findings from both empirical and theoretical literature. Secondary data were collected from selected ten banks that are registered by NBE and have operated at least for ten years out of sixteen private commercial banks using purposive sampling technique. The study employed panel data estimation techniques and the researcher has adopted fixed effects regression technique instead of random effect models, in the case of cross section - fixed effects, the p-value is insignificant and only period fixed effects is allowed to analyze the impact of corporate governance mechanisms on the profitability. The panel data were used for the sample of ten private commercial banks from 2009 to 2018 with a total of 100 observations.

Data were presented by using descriptive statistics; balanced correlation and regression analysis for profitability were conducted. Before performing OLS regression the researcher uses model specification test to select the appropriate model for regression analysis. Based on the result of model specification test, the researcher had used the period fixed effect model. Furthermore, the

models were tested for the classical linear regression model assumptions and the results showed that all the tests are satisfactory in all regressions.

Results from the regression analysis estimated by fixed effect regression model showed that board subcommittee, female directors in the board, and frequency of board meeting, had a significant effect on the financial performance in Ethiopian banking sector. Generally, three findings out of four were in line with literature which postulates that corporate governance mechanisms have an impact on financial performance. Specific conclusion on each factor is depicted in the following section.

5.3. Summary of the findings and conclusions

Based on the results of the descriptive statistics, correlation and regression analysis the researcher made the following conclusions.

- **Board Size**: - board size has a negative and statistically insignificant association with return on asset even at 10 percent level of significance. It implies that the numbers of board of directors are negatively related with banks financial performance proxied by ROA. In other words, the higher the number of board members of banks, the lower their financial performance achievement is and vice versa. The result indicates that small boards are more effective in monitoring and controlling bank's management and it help to reduce agency costs. The researcher concludes that, if the number of board members is large, it creates conflict of interest between the board members, which erodes the wealth of the private commercial banks.
- **Gender Diversity:** -The relationship between female presence in board and financial performance measures by ROA are negative and statistically significant. The findings imply that women members should be treated as tokens of representation to gender diversity instead of source of invaluable input to the boards, and be represented in proportion to board size. The researcher concluded that, gender diversity affects negatively to Ethiopian banking industry financial performance this could be because most private banks invite female board members for participation only.

- **Frequency of board meeting**: -Frequency of board meeting is positive and significantly related to firm performance measured by ROA. This means that the frequency of meetings increases shareholder's earnings as even though banks incurred more financial expenses in terms of sitting allowance, travelling expenses, hotel accommodation and entertainment

during meetings. Therefore, the researcher concludes that, boards that meet frequently are more likely to perform their duties properly in accordance with shareholders' interest.

- **Number of board subcommittee**: number of board subcommittee has a positive and significantassociation with return on asset at 5 percent level of significance which implies that the more subcommittee, the higher the financial performance of private commercial banks in Ethiopia. Therefore, the researcher concluded that the optimal number of board subcommittee required advising and monitoring directors under their supervision.

In general, the findings suggest that banks with effective corporate governance mechanisms improve financial performance depending on the financial performance measure being used. Although not all corporate governance variables support the stated hypotheses, the study has achieved its objective by identifying the attributes that help to test the research hypothesis. This study, therefore, finds that agency theory offers a generally good explanation of the associations between corporate governance mechanisms with financial performance.

5.4. Recommendation

This study examined the impact of corporate governance mechanisms on banks financial performance by taking evidence from selected private commercial banks in Ethiopia. On the basis of the findings and conclusions reached, the following recommendations were forwarded to private commercial banks and regulatory body (NBE).

5.4.1. Recommendation to private commercial banks

- Since the size of the board has insignificant impact on the financial performance, the board size should be in line with corporate size and activities. Setting arbitrary benchmark for board size may not be productive especially in relatively small banks i.e. private banks need to have minimum board size is recommended, so long as that minimum size enables the board to perform its supervision activities properly and in order to perform the board task effectively and NBE shall rethink on revising the directive that requires banks to have at least nine directors was not empirically supported.

- This study revealed that the boards of private commercial banks in Ethiopia are dominated by male and board gender diversity is very limited in Ethiopian banking sector. Thus, there is much to be done to improve the gender balance of boards in Ethiopian banks with a great care

about their qualification and competency. Besides their number, attention should be given for better educational qualification since small board size with better educational qualification is more effective in monitoring managers and help to improve performance.

5.4.2. Recommendation to Regulatory Body(NBE)

- The number of board meetings has significant and positive impact on bank's performance. This deserves attention not only by the private commercial banks, but also by the regulatory body of these banks. Of course, in such a large and volatile industry, board of directors needs to have a regular meeting to get in line with the industry status. However, some of the increase in the board meeting may be due to the deliberation of all corporate matters by the full board. Hence, the board needs to delegate some of the tasks to a special committee which is to be composed of directors with specific educational, training or experience for the duties and responsibility to be assigned. However, this doesn't mean boards need to be experts, but at least they need to have trainings. Together with this, the supervisory body needs to monitor and follow-up the relevance of the board's agenda and shall enforce board meetings to be held regularly.

- The National Bank of Ethiopia should encourage private banks to implement good corporate governance practices through enacting rules and regulations and the government, and financial institutions as well as the business community should work towards the establishment of a formal capital market institutions especially stock exchange which enhances corporate governance, and competition among businesses in the country.

- Finally, it is recommended that with the participation of all stakeholders in the industry a comprehensive framework of corporate governance system should be designed which enables the banks to mitigate from the potential hazards as well as to realize a fair return on investment.

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Appendices

Heteroskedasticity Test: White				
F-statistic	0.475617	Prob. F(27,62)		0.9821
Obs*R-squared	15.44261	Prob. Chi-Square(27)		0.9628
Scaled explaine	28.78836	Prob. Chi-Square(27)		0.3712
Test Equation:				
Dependent Variable: RESID^2				
Method: Least Squares				
Date: 05/25/19 Time: 12:20				
Sample: 2 100				
Included observations: 90				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.004028	0.006121	-0.658184	0.5129
BANK_SIZE_IN_1	2.12E-07	1.10E-05	0.019248	0.9847
BANK_SIZE_IN_1	-2.17E-05	5.44E-05	-0.398406	0.6917
BANK_SIZE_IN_1	-7.87E-06	0.000187	-0.042097	0.9666
BANK_SIZE_IN_1	7.45E-07	2.52E-05	0.029548	0.9765
BANK_SIZE_IN_1	3.46E-05	3.78E-05	0.914392	0.3641
BANK_SIZE_IN_1	-0.000176	0.001702	-0.103244	0.9181
BANK_SIZE_IN_1	-0.000105	0.000624	-0.168255	0.8669
BOARD_GENDEF	-4.42E-06	0.000137	-0.032217	0.9744
BOARD_GENDEF	0.000239	0.000265	0.902022	0.3705
BOARD_GENDEF	-2.03E-05	5.07E-05	-0.40012	0.6904
BOARD_GENDEF	2.78E-05	9.08E-05	0.306188	0.7605
BOARD_GENDEF	-0.003366	0.004654	-0.723242	0.4723
BOARD_GENDEF	-0.000237	0.000752	-0.314306	0.7543
BOARD_SIZE__B	-0.000912	0.000598	-1.524688	0.1324
BOARD_SIZE__B	5.02E-05	0.000389	0.12914	0.8977
BOARD_SIZE__B	-0.000185	0.000224	-0.824394	0.4129
BOARD_SIZE__B	-0.002419	0.011739	-0.206087	0.8374
BOARD_SIZE__B	0.004478	0.003475	1.288612	0.2023
BOARD_SUBCOM	-7.28E-06	1.81E-05	-0.401267	0.6896
BOARD_SUBCOM	-2.64E-05	0.000114	-0.231726	0.8175
BOARD_SUBCOM	0.000423	0.001366	0.309792	0.7578
BOARD_SUBCOM	3.36E-05	0.000536	0.06277	0.9502
MEETING_FREQ	5.97E-05	7.20E-05	0.829002	0.4103
MEETING_FREQ	0.00324	0.003403	0.952249	0.3447
MEETING_FREQ	-0.000252	0.000716	-0.351469	0.7264
LAG_ROA^2	-0.038888	0.068669	-0.566312	0.5732
LAG_ROA	-0.000713	0.038243	-0.018642	0.9852
R-squared	0.171585	Mean dependent var		3.98E-05
Adjusted R-squa	-0.189177	S.D. dependent var		8.38E-05
S.E. of regressio	9.13E-05	Akaike info criterion		-15.51443
Sum squared re	5.17E-07	Schwarz criterion		-14.73671
Log likelihood	726.1495	Hannan-Quinn criter.		-15.20081
F-statistic	0.475617	Durbin-Watson stat		2.232811
Prob(F-statistic)	0.982117			

Heteroskedasticity Test: White				
F-statistic	0.475617	Prob. F(27,62)		0.9821
Obs*R-squared	15.44261	Prob. Chi-Square(27)		0.9628
Scaled explaine	28.78836	Prob. Chi-Square(27)		0.3712
Test Equation:				
Dependent Variable: RESID^2				
Method: Least Squares				
Date: 05/25/19 Time: 12:20				
Sample: 2 100				
Included observations: 90				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.004028	0.006121	-0.658184	0.5129
BANK_SIZE_IN_1	2.12E-07	1.10E-05	0.019248	0.9847
BANK_SIZE_IN_1	-2.17E-05	5.44E-05	-0.398406	0.6917
BANK_SIZE_IN_1	-7.87E-06	0.000187	-0.042097	0.9666
BANK_SIZE_IN_1	7.45E-07	2.52E-05	0.029548	0.9765
BANK_SIZE_IN_1	3.46E-05	3.78E-05	0.914392	0.3641
BANK_SIZE_IN_1	-0.000176	0.001702	-0.103244	0.9181
BANK_SIZE_IN_1	-0.000105	0.000624	-0.168255	0.8669
BOARD_GENDEF	-4.42E-06	0.000137	-0.032217	0.9744
BOARD_GENDEF	0.000239	0.000265	0.902022	0.3705
BOARD_GENDEF	-2.03E-05	5.07E-05	-0.40012	0.6904
BOARD_GENDEF	2.78E-05	9.08E-05	0.306188	0.7605
BOARD_GENDEF	-0.003366	0.004654	-0.723242	0.4723
BOARD_GENDEF	-0.000237	0.000752	-0.314306	0.7543
BOARD_SIZE__B	-0.000912	0.000598	-1.524688	0.1324
BOARD_SIZE__B	5.02E-05	0.000389	0.12914	0.8977
BOARD_SIZE__B	-0.000185	0.000224	-0.824394	0.4129
BOARD_SIZE__B	-0.002419	0.011739	-0.206087	0.8374
BOARD_SIZE__B	0.004478	0.003475	1.288612	0.2023
BOARD_SUBCOI	-7.28E-06	1.81E-05	-0.401267	0.6896
BOARD_SUBCOI	-2.64E-05	0.000114	-0.231726	0.8175
BOARD_SUBCOI	0.000423	0.001366	0.309792	0.7578
BOARD_SUBCOI	3.36E-05	0.000536	0.06277	0.9502
MEETING_FREQ	5.97E-05	7.20E-05	0.829002	0.4103
MEETING_FREQ	0.00324	0.003403	0.952249	0.3447
MEETING_FREQ	-0.000252	0.000716	-0.351469	0.7264
LAG_ROA^2	-0.038888	0.068669	-0.566312	0.5732
LAG_ROA	-0.000713	0.038243	-0.018642	0.9852
R-squared	0.171585	Mean dependent var		3.98E-05
Adjusted R-squa	-0.189177	S.D. dependent var		8.38E-05
S.E. of regressio	9.13E-05	Akaike info criterion		-15.51443
Sum squared re	5.17E-07	Schwarz criterion		-14.73671
Log likelihood	726.1495	Hannan-Quinn criter.		-15.20081
F-statistic	0.475617	Durbin-Watson stat		2.232811
Prob(F-statistic)	0.982117			

Breusch-Godfrey Serial Correlation LM Test:				
F-statistic	0.869344	Prob. F(6,77)		0.5214
Obs*R-squared	5.709906	Prob. Chi-Square(6)		0.4565
Test Equation:				
Dependent Variable: RESID				
Method: Least Squares				
Date: 05/25/19 Time: 12:23				
Sample: 2 100				
Included observations: 90				
Presample and interior missing value lagged residuals set to zero.				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
BANK_SIZE_IN_TC	-0.000191	0.000799	-0.238452	0.8122
BOARD_GENDER_	-0.001553	0.002126	-0.730306	0.4674
BOARD_SIZE__BSZ	0.000849	0.005131	0.165559	0.8689
BOARD_SUBCOMI	0.000436	0.000711	0.613597	0.5413
LAG_ROA	0.04096	0.064708	0.633002	0.5286
MEETING_FREQUE	0.000135	0.001566	0.0864	0.9314
C	-0.002347	0.013872	-0.169224	0.8661
RESID(-1)	-0.039206	0.149599	-0.262071	0.794
RESID(-2)	-0.340903	0.129332	-2.635874	0.0101
RESID(-3)	-0.004101	0.139725	-0.029353	0.9767
RESID(-4)	-0.365671	0.133963	-2.729644	7.90E-03
RESID(-5)	0.216667	0.136958	1.581997	0.1177
RESID(-6)	-0.064353	0.145048	-0.443667	0.6585
R-squared	0.063443	Mean dependent var		1.15E-17
Adjusted R-squar	-0.082513	S.D. dependent var		0.006343
S.E. of regression	0.006599	Akaike info criterion		-7.070888
Sum squared resi	0.003353	Schwarz criterion		-6.709804
Log likelihood	331.19	Hannan-Quinn criter.		-6.925278
F-statistic	0.434672	Durbin-Watson stat		2.189765
Prob(F-statistic)	0.944535			

YEAR	BANK	Financial_Performance_of_Banks_(ROA)	Board_Size_(BSZ)	Meeting_Frequency_of_Board_(MFB)	Board_Gender_Diversity_(BGD)	Board_Subcommittees_(BSC)	Bank_Size_In_Total_Asset_(BZ)
2009	1	2.0615	10	24	1	3	8.6082
2010	1	2.3916	10	24	1	3	8.7451
2011	1	2.6690	10	24	1	3	8.8926
2012	1	2.7880	9	24	1	3	9.0167
2013	1	2.3552	9	24	1	3	9.2232
2014	1	4.1804	9	24	1	3	9.3305
2015	1	2.3392	9	24	0	3	9.5228
2016	1	2.3647	9	24	0	3	9.7308
2017	1	1.9028	9	24	0	3	12.6729
2018	1	1.9677	9	24	0	3	10.1395
2009	2	2.5433	12	43	0	5	8.7676
2010	2	3.4461	12	40	0	5	8.9803
2011	2	3.9936	12	41	1	5	9.2219
2012	2	3.5771	12	32	2	5	9.3874
2013	2	3.7884	12	32	2	5	9.6063
2014	2	3.5428	12	27	2	5	9.9049
2015	2	2.9401	12	24	2	5	10.0804
2016	2	2.7815	12	24	2	6	10.2959
2017	2	2.6929	12	24	1	6	10.9199
2018	2	3.1313	12	24	0	6	10.5973
2009	3	2.8458	7	24	0	3	9.1832
2010	3	2.9344	7	24	0	3	9.4217
2011	3	3.3366	7	24	0	3	9.5929
2012	3	4.0523	7	24	0	3	9.7711
2013	3	3.2564	7	24	0	3	9.8908
2014	3	3.4164	7	24	0	3	9.9971
2015	3	3.1209	9	24	0	3	10.1171
2016	3	2.7261	9	24	0	3	10.2603
2017	3	2.6003	9	24	0	3	10.7238
2018	3	2.2817	9	24	0	3	10.4913
2009	4	3.6341	12	62	1	3	8.4777
2010	4	3.7281	12	46	2	3	8.6946
2011	4	3.7675	12	50	2	3	8.8695
2012	4	3.7204	12	49	1	3	9.0211
2013	4	3.4370	12	54	1	3	9.1209
2014	4	2.9899	12	58	2	3	9.2824
2015	4	2.8086	11	46	2	3	9.4922
2016	4	2.6802	11	48	2	3	9.6697
2017	4	2.0957	11	48	2	3	9.9532
2018	4	2.1542	12	48	1	3	10.1924
2009	5	2.3688	9	18	0	3	8.4450
2010	5	3.3078	9	15	0	3	8.6821
2011	5	3.4038	8	12	0	3	8.9523
2012	5	3.6077	8	16	1	3	9.0810
2013	5	2.2781	8	15	1	3	9.2081
2014	5	1.8145	8	12	2	3	9.3823
2015	5	2.1444	8	13	2	3	9.5723
2016	5	2.1436	8	14	2	4	9.7567
2017	5	1.9753	9	14	2	4	9.9991
2018	5	2.2928	9	14	2	4	10.2410
2009	6	3.9084	9	8	0	2	8.5406
2010	6	4.1130	9	17	0	3	8.6556
2011	6	4.6842	9	19	0	3	8.9948
2012	6	4.0985	9	20	0	3	9.0297
2013	6	3.6638	9	8	0	3	9.2490
2014	6	2.8184	9	25	0	3	9.3275
2015	6	2.8248	9	8	0	3	9.5260
2016	6	2.5229	9	12	0	3	9.6921
2017	6	2.0645	9	12	0	3	9.9474
2018	6	2.3859	11	12	3	3	10.2179
2009	7	0.2770	11	62	2	3	6.9304
2010	7	1.7984	11	46	2	3	7.4778
2011	7	2.2148	11	50	2	3	7.8243
2012	7	3.3062	11	49	2	3	8.2081
2013	7	4.0055	11	54	2	3	8.7855
2014	7	4.9412	9	58	2	3	8.9026
2015	7	3.3215	7	46	2	3	9.3468
2016	7	0.3167	11	48	2	3	9.2711
2017	7	2.3910	11	24	2	3	9.7850
2018	7	2.1967	10	24	2	3	10.3052
2009	8	0.3436	11	30	0	3	6.8591
2010	8	3.4507	11	30	1	3	7.2179
2011	8	2.7587	11	30	1	3	7.5000
2012	8	3.5310	10	30	1	3	7.8091
2013	8	4.1221	10	30	1	3	7.9870
2014	8	2.9464	11	30	1	3	8.1924
2015	8	3.1791	11	30	1	3	8.6758
2016	8	2.8065	11	30	1	3	9.0020
2017	8	2.4365	11	30	2	3	9.3023
2018	8	2.9592	11	30	2	3	9.5693
2009	9	(1.9315)	12	12	0	3	5.7714
2010	9	2.6709	12	12	0	3	7.0198
2011	9	2.8868	12	12	0	3	7.5817
2012	9	2.0852	12	12	1	3	7.9329
2013	9	1.9982	10	12	1	3	8.2716
2014	9	3.0582	11	12	2	3	8.7245
2015	9	2.7485	11	12	2	3	9.1627
2016	9	2.1300	12	12	2	3	9.3309
2017	9	1.8727	10	12	2	3	9.6949
2018	9	2.6229	12	12	1	3	10.0773
2009	10	(3.9529)	7	12	0	6	6.1368
2010	10	6.7172	9	12	1	6	6.9619
2011	10	6.3477	9	12	1	6	7.3861
2012	10	4.3104	9	12	1	6	7.7808
2013	10	3.3370	9	12	2	6	8.0859
2014	10	5.1269	9	12	2	6	8.2751
2015	10	3.4839	9	12	2	6	8.4917
2016	10	3.3109	9	12	2	7	8.9057
2017	10	3.0922	9	12	2	7	9.1856
2018	10	2.4357	9	12	2	7	9.4285