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**The Effect of Corporate Governance on the Performance of Private
Commercial Banks in Ethiopia**

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Declaration

I, Tadele Getahun, declare that this thesis entitled “The Effect of Corporate Governance on Ethiopian Private Commercial Banks” is outcome of my own effort and study and that all sources of materials used for the study have been duly acknowledged. I have produced it independently except for the guidance and suggestion of the thesis Advisor.

To the best of my knowledge, this study has not been submitted for any degree in this University or any other University. It is offered for the partial fulfillment of the degree of Masters of business administration in Finance.

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This is to certify that the thesis prepared by Tadele Getahun, entitled “The Effect of Corporate Governance on Financial Performance of the Ethiopian Private Commercial Banks” and submitted in partial fulfillment for Masters of Business Administration in Finance complies with the regulations of the university and meets the accepted standards with respect to originality and quality.

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Abstract

The paper looked at the effects of corporate governance on the financial performance of private commercial banks in Ethiopia. This explanatory study sought to analyze the effect of different corporate governance mechanisms, particularly board size, variety number of internal board sub-committee and meeting frequency on the financial performance of 7 privately owned commercial banks of Ethiopia. The financial performance measure was Return on Asset (ROA). In order to achieve this objective, the study used quantitative research approach that is by adopting quantitative method research approach by documentary analysis of secondary data which was collected from the National Bank of Ethiopia (NBE). And capturing and administrating primary data using unstructured questionnaire which were completed by board secretary and delegated staffs as he/she is in a better position to comment on corporate governance affairs. Panel data covering 13year period from 2004-2016 was analyzed and regression result with recommendation are displayed for the selected 7 private commercial banks. The cross section fixed effect technique has been applied to find out the most significant variables from considered corporate governance variables. The findings indicated that Board size and variety, number of internal board sub-committee had statistically significant negative effect on private commercial bank financial performance and board meeting frequency is negatively insignificant on banks performance. When number of board members and variety number of internal board sub-committee increase, ROA will decrease and there should be optimal number of both. Meeting frequency of board members is insignificant to ROA. Future researchers need to focus on these significant variables and additional corporate governance mechanisms.

Keywords: Banking Sector, Private Commercial Bank, Financial Performance, Corporate Governance.

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Statement of Certification

This is to certify that thesis entitled, “The Effect of Corporate Governance on Financial Performance of the Ethiopian Private Commercial Banks”, undertaken by Tadele Getahun for the partial fulfillment of degree of Master of business administration in Finance at Addis Ababa University, to the best of my knowledge, is an original work and not submitted earlier for any degree either at this University or any other University.

Thesis Advisor

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Tadele Getahun

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List of Abbreviation and Acronyms

| | |
|------|--|
| AC | Audit committee |
| BJ | Bera-Jareque |
| BZ | Bank Size |
| CAR | Capital adequacy ratio |
| CLRM | Classical Linear Regression Model |
| NBE | National bank of Ethiopia |
| OECD | Organization for Economic Co-operation and Development |
| OLS | Ordinary List Square |
| ROA | Return on Asset |
| ROE | Return on Equity |
| TDTA | Total deposit to total asset ratio |

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Stakeholders and those who have interest on a bank wants to see the bank profitable, sustainable, and minimum risk and get better dividend from their investment. Investors also wanted to see how companies manage themselves and their relationships with shareholders and stakeholders and they wanted to evaluate the risk of investing in a bank and thus help to build their confidence on the sustainability of the bank. Moreover, banks are working with community; as a depositor and as a borrower and working with the government to ensure in achieving and maintaining public trust and confidence on the banks system. Nowadays, even when a financial crisis happens in a bank, working on corporate governance is being taken by the board and management of banks (Amba, 2013).

Corporate governance answers the question how the business of the bank is governed and helps to see relationships between the bank's management, its board, its shareholders, and other stakeholders. It helps to set corporate objectives and a bank's risk profile, aligning corporate activities and behaviors with the expectation that management will operate the bank in a safe and sound manner, and running day-to-day operations within an established risk profile and in compliance with applicable laws and regulations, while protecting the interests of depositors and other stakeholders (Lupu and Nichitean, 2011).

It is therefore, important to note the importance of taking agency roles on managing companies as it is not likely to manage everything of their investment by stockholders themselves. Agency theory states the assignment of a representative to act on behalf of the stockholder who has the role to protect the interest of shareholders. This theory states that the managers (agents) are hired to work and make decision on behalf of the owners (principals) to maximize return to the shareholders and make sure the interest of shareholders is maintained and given priority and thus requires proper representation of the agents to act on behalf of the principal. To keep the relationship between the agent and the principal healthy and use the assignment for smooth running of the banks operations, much attention should be given for the corporate governance. However,

there might be a situation when the agent fails to do so and give priorities for their self-interest and result in agency problems. Thus, per the agency theory, institutionalizing good corporate governance has advantage of bringing in minimizing the potential conflict of interest between shareholders and management and ultimately reduce compromising shareholders' interest. To make this practical, by monitoring the actions of the management and make strategic decisions, shareholders appoint members of board of directors. The stockholders and investors are the main sources of funds in a bank and similar financial institutions.

Banks corporate governance is a sum of involvement of different groups and with different roles. Board, management, stockholders, depositors, and employees are the key elements in the banks' corporate governance. To be more specific, board size, financial expertise of directors, number of board meetings, committees of the board (audit committee, remuneration committee, nomination committee) are the key players in banks corporate governance. The size of board is believed to have a significant impact on firm's performance and directors should be financially literate, so that they can better understand the implications of decisions taken by management and thus, lead to better & effective controlling. Moreover, board members should meet sufficient number of times as very few meetings show lack of interest on the part of board, while too frequent meetings indicate some trouble in the organization. Additionally, board committees (audit committee, remuneration committee, nomination committee and others) add to effectiveness of board by exercising better control over management decisions (Aggarwal, 2013)

Banks play a critical role in supporting the economy and the communities where they do business. As banks play role, an intermediary between depositors and borrowers, banks protect customer deposits and extend credit to corporate and retail borrowers. This collaborative process allows our economy to run smoothly and efficiently and provides opportunities for the acquisition of property, the pursuit of gainful employment through investments in businesses, the financing of higher learning and the consumption of numerous goods and services. In addition to its logistical function, banks provide tangible economic benefits through their own business activities and operations and employ a large workforce and purchase intermediate inputs and supplies needed for their operations, such as consultants and computer equipment and soft wares. These all maximizes the countries' economy (Thornberg, 2012).

The Ethiopian banking sector consists of sixteen private and one development banks. In order to get the best out of it, banks need strategic frame work and regulations to operate in a given country and the government can use such restrictions to protect the interest of public and all involved in the sector (Ayele, 2013). Mulugeta (2010) has also noted that Ethiopia has established strategic framework for the financial sector and accentuate the importance of further strengthening corporate governance and making the financial institutions accountable. Better corporate governance of corporations, financial institutions and markets is increasingly recognized as a pre-condition for the countries development and it is directed and monitored by NBE and as NBE monitors and controls the banking business and functions as regulatory organ of the country's money supply.

This research aimed to look the effect of corporate governance mechanisms on the financial performance of Ethiopian private commercial banks.

1.2. Statement of the problem

Commercial banks have a dominant role in developing economic financial systems and are basic machines to ignite the economic growth of a country. Thus, banking failure would affect the whole financial system and economy of a country. The development, translation and proper implementation of corporate governance in banks is mandatory to ensure the improvement of the company performance, economic efficiency and growth, and to make sure investors' are confident on the banks they invest (Levine, 1997).

Bahreini and Zain (2013) on their study conducted in bank industry concluded that the cause for investors lack of confidence and the financial crisis happened in organizations and the remedies for these is corporate governance; either it is poorly designed board structures; there is no proper board meetings, no adequate number of board members, no adequate number of board committee or composition of boards compromised or there is lack of proper laws and regulations governing corporate governance structures. This would result in lack of adequate disclosures for financial reports presentations, no fair presentations and lack of transparency in their recording and reporting. Thus, this would result in lack of protection of investment which is due to the result of poor corporate governance. When countries work on the ways to improve their corporate

governance mechanisms and work on board of directors and make them responsible for the accuracy of financial reports and statement and accountability of the company, there comes a good progress in their economy.

As corporate governance helps to ensure accountability and transparency which are very important considerations in banks performance, corporate governance is considered to have influence on bank performance (Akingunola, 2013).

Though literatures don't ignore the influence of corporate governance on performance, there are inconsistent findings as some are saying part of the corporate governance variables have positive effect on performance and some others are saying negative effect on banks performance.

Board size, audit committee size, and audit committee meeting have positive relationship with performance of bank and percentage of independent nonexecutive board of director and percentage of independent nonexecutive audit committee members have negative correlation with performance of bank (Bahreini et al, 2013).

There are other researchers who emphasizes corporate governance variables having negative effect on corporate performance. Shungu (2014) on the study entitled impact of corporate governance on the performance of commercial banks in Zimbabwe identified that there appears a negative relationship between board size, board committees and bank performance though there is a positive relationship between board composition and board diversity. Stepanova and Ivantsova (2012) on their study entitled role corporate governance on the banking sector supports the idea that board size has negative relationship where as independent directors and gender diversity of the board (more women, better performance) have positive relationship with performance. Beyene.A, Srmolo.K, and Kassa.Y, (2013) also described board size and existence of audit committee in the board has negative effect on bank performance.

Considering all these above literatures, there are no consistent way of saying these variables of corporate governance have positive or negative relationship with banks performance in Ethiopia. Thus, this research addressed which of these variables have positive and which variables have negative effect on banks performance in Ethiopia and increase the body of knowledge of researchers and other users in Ethiopia by analyzing the hypothesis developed under this research.

Studies conducted by Marte (2010), James (2016) and Kyereboah Coleman (2007) have been undertaken on large firms operating within well organized corporate governance mechanisms in

developed economic system and in countries where there are capital markets. However, in developing countries like Ethiopia few studies on corporate governance have been conducted previously yet not covered adequately by those studies. Ashenafi et al., (2013) on their study entitled ‘corporate governance and impact on bank performance’ considered few internal corporate governance variables only which is board size and existence of audit committee. Board gender composition and effects of meeting frequency and other board structures were not addressed.

Moreover, Getnet.A (2013) focused on two of the board structure variables (in terms of size, composition) and these two governance mechanisms were emphasized in view of their relatively higher impact on the exercise of shareholders controlling rights. And hence, other board structure variables were not considered.

These mentioned studies number of observations was limited in terms of the variables and number of years of observations as they used 7-10years data. To mention some of the observations' limitations: Using narrow period or number of years and small sampling size. Methodology of data gathering and analyzing focused by some of the studies were limited only on secondary data. In addition, this study focused on private commercial banks since majority of banks in Ethiopia are private and commercial in nature and only one governmental owned bank has not been considered. As indicated by Getnet.A (2013) commercial bank is government owned and the parameter is different and this research focused on private commercial banks. This also could help to see their linkage with the corporate governance mechanisms. Therefore, it is difficult to generalize the same result from the findings of the studies that were done in developed countries on the effect of corporate governance mechanisms on banks performance. Ethiopian banking sector's corporate governance is characterized by the absence of an organized share market and the country has different rules, regulations, practices, and economic features which needs to conduct a separate study using various perspectives, meaning they were concentrated on agency theory which is the central need to cooperate governance are to protect the interest of shareholders only have not been conducted within a well-organized corporate governance mechanism. This study has been conducted to provide empirical evidence particularly on the effect of corporate governance mechanisms on commercial bank's financial performance.

To come up with a better insight; this study has been covered by assessing and including selected corporate governance mechanisms major areas of board of directors' characteristics; board size,

number of board sub-committee and meeting frequency of board. Hence this paper addressed the effect of selected corporate governance mechanisms, which have been sufficiently uncovered variables in the previous studies to be further explained and financial performance of the commercial banks with in the given period which is measured by the return on asset (ROA).

1.3. The Objectives of the Study

The general objective of the study is to identify the effect of corporate governance factors on banks performance.

Specifically, the study addressed 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 banks' board subcommittees on the financial performance of banks
- iii. Identifying the effect of banks' frequency of board meetings on the financial performance

1.4 Research Questions

The study has been conducted to find answers to the following specific questions:

- i. What effect does the board size have on banks performance?
- ii. What effect does the board internal committee have on banks performance?
- iii. What effect does the meeting frequency of boards have on banks performance?

1.5. Scope and Limitation of the Study

There are several corporate factors that influence the performance of banks. But the current study focused on board of directors' structures to see their impact on performance. As Bonn (2004) studied boards of directors play an important role in the governance structure of large organizations. While corporate governance refers to the integrated set of internal and external controls and incentive arrangements that are used to harmonize the interests of the principals (owners or shareholders) with the interests of the designated agents, the managers, the board of

directors' acts as the formal link between the shareholders of the firm and the managers entrusted with running the organization. Hence, boards can be described as the apex of the firm's decision control system, which plays a key role in monitoring and controlling managers.

Hence board structure has impact on corporate performance since it might affect the directors' motivation and their ability to effectively monitor and advise managers (Ayele, 2013). The board structure variables which are considered as the focus of this research include; board size, variety number of board sub-committee and meeting frequency of board.

The study covered private banks having 13 and more years of experience ranging from 2004 to 2016 hence the NBE's directive on a term of a boards is for six years and has the chance to be elected again for the second term, to see the changes on it, the researcher considered to see after their two terms.

One of the limitation for this research is because of lack of secondary market to use market based returns, this study relied on accounting based return, return on asset (ROA), to measure bank financial performance and its scope is also limited to see the effect of the NBE directives hence the directive has been declared after 2015.

The results of study should be interpreted considering these limitations and the future researchers should attempt to overcome them while doing further research in this area.

1.6. Significance of the Study

Developing banking standards is an important process for a country's financial and economic wellbeing. After the collapse of different companies during the different times including the great depression of the 1930s', many countries promote corporate governance and set rules to their banking industry. Therefore, the study is expected to give an important input for policy makers to identify the effect of corporate governance mechanism on private commercial bank performance. And it also provides clue about the corporate governance variables used for investors and help them to develop confidence. Good practice of corporate governance helps for shareholder recognition, maintaining stakeholder interests, help to endorse and outline board responsibilities, help to maximize ethical behavior, promote business transparency and ultimately helps to mitigate

risk. The effect of board structure is taken as an input to sound corporate governance. Furthermore, this study will contribute to practitioners by providing proper responses to the questions on; how the performance of banks can be affected by board structures?. Finally, the results of this study will motivate potential researchers and lay foundation for further study on the field of business and related disciplines and use academicians as a reference in their study .

1.7 Structure of the paper

This paper is organized in to five chapters. Chapter one presents introductions 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: LITRATURE REVIEW

This chapter focused on the theoretical review which is relevant to the title and previous studies on corporate governance variables are also reviewed as the views are different due to the different corporate governance theories. According to (Fernando, 2009) corporate governance concept has gone further as a subject of matter, an objective, or a regime followed for the good of shareholders, employees, customers, bankers and indeed for the reputation and standing of a nation and its economy. OECD, (1999) extent the concept of corporate governance as the system by which business corporations directed and controlled for the better of stakeholders and shareholders.

Currently, researchers worldwide has faced some challenges on try to analyses the effect of corporate governance on corporate performance. A challenge was discovered to be the ideal measure of corporate governance, as there is no universally accepted measure of corporate governance (Calabrese, Costa, Menichini, Rosati, & Sanfelice, 2013). Yakasai (2001) argued that board structure could be an ideal measure of corporate governance. However, (Chiorazzo , 2008) has used corporate ownership and control as the measure of corporate governance for big and non-financial corporations. According to Ramano (2012), corporate governance should use any variable, which has a direct impact on corporation performance. After measuring this concept using board structure Boone, Casares Field Karpoffa and Raheja (2007) confront that good corporate governance practices seem to enhance bank performance since it effect the reputation on the bank in the overall market.

2.1. Theoretical and Conceptual Review

Due to the different theories of corporate governance and banks performance, the views on the effect of corporate governance on performance is different among different researchers and authors and practitioners.

Literature reveal different theories, but this research emphasizes agency theory and stakeholder theory. According to Agency and stakeholder theories, corporate governance is associated with the principal-agent or agency problem. Both theories dictate that corporate governance is a mechanism designed to minimize agency conflict in the business environment.

Although corporate governance as a term has only been around for about 15 years, the theories that underlie its development have been around for much longer. It is argued by the academics that several theories have influenced the development of corporate governance. These are:

2.1.1 The Agency Theory

The agency theory articulated by Michael Jensen and William Meckling in 1979 requires separation of ownership and control. How do owners prevent managers from acting in their own self-interest and act in the best interest of shareholders instead? Thus, agency theory is the study of the agency relationship and the issues that arise from this, particularly the dilemma that the principal and agent, while nominally working toward the same goal, may not always share the same interests. It is thus the relationship between shareholders and managers as an agency relationship whereby the owners/shareholders are the principal and the managers, the agent (Jensen and Meckling,1979). Coyle (2009) suggests that the owners must delegate decision making authority to management. Governance is about managing the conflict of interest between owners and managers of companies.

2.1.2 The Stakeholders Theory

Under this theory, the main purpose of corporate governance is the satisfaction of the interests of all stakeholders other than just shareholders.

A stakeholder focuses on the effect of corporate activity on all identifiable stakeholders of the corporation. This theory posits that corporate managers (officers and directors) should take into consideration the interests of each stakeholders in its governance process. This includes taking efforts to reduce or mitigate the conflicts between stakeholders' interest. It looks further than the traditional members of the corporation (officers, directors, and shareholders) also focuses on the interests of any third party that has some level of dependence upon the corporation.

Companies should act as good corporate citizens, acting in ways that benefit society. The board in making decisions should give priority to those stakeholders who are the most important to the company, for example, employees, investors, customers, suppliers, creditors, and the public. This

means that a company's Board has to balance many objectives, as their stakeholders will have different interests, not just maximizing shareholder value. Stakeholder theory formed the basis for the stakeholder approach to corporate governance adopted by the Organization for Economic Cooperation and Development (OECD) in their principle of Corporate Governance by Jensen and Meckling.

2.1.3 Stewardship theory

The basic concept of this theory is trust. Trust is to the managers to act on the best interest of the owners, Huse (2007). According to Davis (1997), the best stewards are the managers and these managers are collectivists who prioritizes organization interest over self and individual interests under this theory and it is this point that makes this theory different from agency and stakeholder theories. Thus, the managers are always there to attain organizational objectives.

Under this theory corporate governance model, managers are believed to be loyal to the company and interested in achieving best performance. Managers have the desire to perform best and it is this motive that directs them to accomplish their plans and set objectives.

They need to achieve to get their inherent satisfaction through their desire to manage challenging work, to assume and exercise higher responsibility, and authority within the organization and get recognition from various parts of the organization; employees, owners and bosses and financial incentives or motivational schemes. As these managers are seeking a good job, strong affiliation to the organization, and doing their level best and exerting their maximum effort, the company will generate maximum profits and bring good returns to stockholders.

According to this theory, the importance of board of directors is not to monitor and supervise rather it is to advise and support management rather which is opposite to the agency theory. The steward's utilities are supposed to be maximized when shareholder wealth is maximized. That means the basic mission of managers is organizational success and better achievements in different angles which is assumed positive, (Smallman, 2004). According to Davis et al. (1997), most stakeholders are satisfied when there is a successful accomplishment by the stewards, who improves performance successfully, satisfies most stakeholder groups in an organization and this would also result in increasing organizational wealth. Thus, managers need advises and support of boards for achieving such betterments. Therefore, according to this theory, the role of board of directors is

advisory and supportive role instead of controlling the managerial opportunism. As to this theory dictates to work on structures that empower stewards instead of monitoring and control.

2.1.4 Resource dependency theory

This theory promotes firms' environmental linkages with outside resources. Thus, directors and those who represent need to serve the firm to connect with the external factors by promoting and inviting the resources needed to survive. According to Pfeffer (1972), firms' success is defined based on the ability to maximize power through accessing scarce and essential resources and it of the assistance of boards to get reach in such resources.

The outside environment is the sources of major resources like human capital, external governance structure, technology, raw materials, services, equipment and other supplies. It is the importance of boards of directors for absorbing critical elements of environmental uncertainty into the firm about accessing such resources. The linkage with the outside environment about resources could reduce transaction costs associated with environmental interdependency and performance. As to Ruigork (2007), boards are considered important boundary-spanners that secure necessary resources, such as knowledge, capital, and venture partnering arrangements. Since boards can lead to broader corporate networks and improve performance, board diversity has been found to be an important element in this theory, (Waddock and Graves 1997).

According to, Andersson & Maher (1999), in the economics concerning the impact of corporate governance on performance, the debate is narrowed to two different models of the corporation, the shareholder (agency) model and the stakeholder model. For this study, to construct the regression model of corporate governance, the stakeholder approach of corporate governance was used because of the following reasons. Firstly, banks are distinguished for having characteristics that agency theory failed to address. The main assumption used by agency theory is that markets are efficient and there is no information asymmetry. But Banks are generally more exposed to information asymmetry between insiders (bank managers) and outsiders (shareholders and depositors) in comparison with non-financial institutions, because managers are more able to hide information, making it difficult for shareholders and creditors to monitor bank managers, (Rose 2003).

Banks subject to high regulation is the other bank character which conflicts with agency theory. The external interventions and additional obligations imposed on corporations by government and central authorities are rejected by agency theory model because it may distort free market operations (Hart, 1995). But as to Rajan (2001), banks are characterized by the considerable opacity of their assets and activities and due to their economic importance; they are subject to a large set of statutes and regulations. The regulations to which banks are subject may lead to weakening the monitoring role undertaken by the market towards banks, (Pablo & Eleuterio 2008). The other distinguished characteristics of bank are the multiplicity of stakeholders. In case of bank there is a dual agency conflict. Since substantial fund of bank is raised through depositors, the success of these institutes depends on how these depositors are protected. So like shareholders the interest of the owner of higher amount of fund which is used by banks (depositors) must be protected, which is out of the lens of agency theory.

The main theme of agency theory, perfect competition, or the invisible hand is almost none existed in banking industry. Banks are subject to numerous systems and prudential regulations, which are an important and crucial element in securing sound and healthy banking governance. To protect the healthiness of banking industry, competition is restricted by these different regulations drafted by central banks. According to Friedman (1970), the major source of finance to corporations is equity rather than debt. That is, equity capital is expected to be raised mainly from efficiently operated capital markets. But this is not true in case of banks. The bank's structure is quite different from that of other companies because of the high credit rate since they largely rely on receiving deposits to mobilize funds. Banks receive 90% of their funds from credits, (Shelash 2011).

Secondly, the assumption used by agency theory is not consistent with the financial system of Ethiopia as Agency theory assumes efficient capital market where by the stockholders can govern or put a restriction on the behavior of the manager as well as on the board and yet there is no such efficient capital market in case of Ethiopia.

2.2. Corporate Governance and the Nature of Banking Sector

Banks play a key role for industrial expansion, the corporate governance of firms, and capital allocation. When there is a proper functioning of the private commercial banks, it has implications for the operations of firms and the prosperity of countries. If sound corporate governance

mechanisms is designed and implemented, the bank can allocate capital efficiently and improve its financial performance. And also effective corporate governance protects the interests of shareholders as well as other stakeholders (Levine, 2003).

On the other way it is less likely to allocate capital efficiently, if the banks face poor corporate governance mechanisms. In this case the bank manager will mainly enjoy acting in his/her own interest rather than in the interests of shareholders or other stakeholders. This leads to banking failures and crises that promote the massive consequences and can pose significant public costs of poor governance of banks (Levine, 2004). Therefore, effective corporate governance practices are essential to achieving and maintaining public trust and confidence in the banking system, which are critical to the proper functioning of the banking sector and economy as a whole.

According to Levine (2003), banks have two characteristics that are related to the corporate governance of banks. First, even though information asymmetries exist in all sectors it is larger in banking industry than non-financial firms due to the opaqueness of their assets and activities. Loan quality can be hidden easily for long periods in banking industry. In addition to this, banks can modify the risk composition of their assets more immediately than most of the non-financial industries, and bank managers can hide problems by extending loans to clients that cannot service previous debt obligations. The greater information asymmetry between insiders and outsiders and relatively severe difficulties in acquiring information about bank activities and monitor continuing bank activities intensifies the agency problem. Second, governments impose heavy regulation on banks which are usually regulated very seriously since banks are important for the economy of countries.

According to Basel Committee on Banking Supervision (2006), banking sector corporate governance has a greater importance to the international financial system and has advantages for the stakeholders and countries due to the financial intermediation role of banks in an economy, and high degree of sensitivity of the sector to potential difficulties arising from ineffective corporate governance and the need to safeguard depositors' funds. The other special nature of banking requires not only a broader view of corporate governance i.e. the methods by which suppliers of finance to control managers in order to ensure that they earn appropriate return on their investment, but also government intervention in order to control the opportunistic behavior of bank management (Arun & Turner, 2004). Since the uniqueness nature of the banking firms,

sound corporate governance can be beneficial for both shareholders and depositors if it is being adopted and implemented properly for the banks.

2.3. Corporate Governance Tools and Firm Financial Performance

Corporate governance mechanisms are essential tools needed in managing any corporation including banks. There are different mechanisms that reduce agency cost whereby corporate governance can be measured in an organization. Management and its board of directors are internal corporate governance instruments. The existence of regulation is one of the external governance forces, in addition to the market, with the power to discipline the agent. In the corporate governance literature board size, diversity of board sub-committees, board gender diversity and experience and audit committee size were used as corporate governance mechanisms. And some of the characteristics improved firms financial performance.

International organizations such as Organization for Economic Cooperation and Development (OECD) have developed corporate governance principles which stressed on the role of boards. So that it is important to adopt sound corporate governance mechanism in order to reduce information asymmetry problem and to improve controlling of management.

A strong board can play an important role in improving firm financial performance and can help the firm to achieve better performance by effectively undertaking their monitoring duties (Bathula, 2008).

Boards of directors are the agent of the shareholders and perform their task of monitoring and controlling the activities of firms top management on behalf of shareholders to reduce agency problem (Jensen and Meckling, 1976). According to agency theory, boards have played critical role in solving the agency problems. When the board is effective it is expected to drive the company towards better financial achievement (Andres and Vallelado, 2008).

The board of directors is highly significant for shareholders as an internal control mechanism and its financial performance can be affected by board composition and quality, size of board, board diversity, and board committee effectiveness such as audit committee and information asymmetries (Uadiale, 2010). However, the effectiveness of the board of directors can only be efficient if bounded with appropriate size, composition and sub-committee (Lawal, 2012).

Audit committee is one of the sub-committee of the board of directors and its primary role is to monitor and review financial statements (Yammeesriand Herath, 2010). It also ensures the

interests of shareholders are properly protected in relation to financial reporting and internal control (Habbash, 2010). Monitoring is performed by external audit and audit committees. The existence of an audit committee improves the monitoring of corporate financial reporting and internal control, it uses as a decision control system and it helps to promote good corporate governance in turn this improves firms' financial performance by reducing agency cost (Al – Saeed and Al-Mahamid, 2011). This study examined the relationship between both external and internal corporate governance mechanism and private commercial bank financial performance.

2.3.1. Board size and its effect on bank performance

The size of board is believed to have a significant impact on firm's performance; which is usually observed to be positive (Aggarwal, 2013). However, Stepanova and Ivanstova(2012) states unless there is a strong mechanism of managing additional human capital provided by boards, the relationship between bank performance and board size is negative.

According to Uadiale (2010), the size of board is considered to be crucial characteristics of board structure. The review of the empirical evidence on the impact of board size on performance shows mixed results. Some studies concluded that board size is positively related to performance by reasoning large boards could provide the diversity that would help companies get critical resources and increase monitoring capacity of the board, (Haniffa and Hudaib, 2006, p1038). Vanden Berghe and Levrau (2004) argue that expanding the number of directors provides an increased pool of expertise and thus larger boards are likely to have more knowledge and skills at their disposal than smaller boards.

Furthermore, Goodstein (1994), suggests that larger boards may reduce the domination of the CEO. Nicholson & Geoffrey (2003), by using 348 samples of Australian largest publicly listed companies, supports the positive correlation between board size and firm performance. According to studies like Kiel & Nicholson (2003) and Godard and Schatt (2004), in uncertain environment large board size can improve performance and effective control. Similarly Sunday (2008), found positive relationship between board size and bank performance. Findings of Dehaene (2001), Jackling and Johl (2009), Dalton (1998), Pearce & Zahra (1992) witnessed the positive impact of board size on corporate performance. All the above findings of positive relationship support resource dependency theory of corporate governance.

In contrast Lipton and Lorsch (1992), asserted that large boards are associated with greater free riding, slower decision making, and problems of coordination, control and flexibility in decision

making. Furthermore, Jensen (1993) argues that as the board size increases, boards' ability to monitor managements decrease due to a greater tendency to avoid an increase in decision making time. According to Jensen (1993), the decision-making power of the board becomes slower with the involvement of more people. Almanseer (2012), in his study on Jordanian banks, found a negative and statically significant relationship between bank performance and board size. Similarly, Gill and Mathur (2011), found a negative relationship between the performance of 75 Canadian service firms and board size. Another research by Olubukunola (2011), concluded that bank with large board size record a profit lower than those with smaller board size. In Similar way Sakwa & Wataabel (2011) found that banking firm with large boards under perform their peer in terms of Tobin's Q. Several researchers have also noted a negative relationship between board size and corporate performance, (Bennedsen 2004; Sanda, Mukaila & Garba, 2003; Van den Berghe and Levrau, 2004; and Yermack 1996). These above findings of negative relationship between board size and bank performance are consistent with agency as well as stakeholder's theory. Accordingly, the current study predicted the negative relationship between board size and bank performance. Therefore, the hypothesis is stated as:

H1: Board size is significantly and negatively related to Bank performance

2.3.2. Availability of Variety Number of Board Sub-committee

Board committees are internal regulatory and supervision board which oversees the effective operation and acts of the board of directors. They are calculated as the total number of internal sub-committees serving on the board the private commercial bank has at the end of the period. The total minimum required number of internal board committees means the central/national bank and international corporate governance codes requirements established for a bank that is at least three committees: audits and risk sub-committee, remuneration sub-committee and main board management sub-committee.

Romano (2012) argued that board sub-committees are critical that help to monitor corporate activities and protection of shareholder value. Most of the countries requires all banks to have an internal control, risk and compliance committee, remuneration committee, and nomination committee; among other committees (Bank of Italy, 2008). Audit committee and risk and compliance sub-committees mainly focus on the examination of the financial conditions, on the assessment of internal controls and on the monitoring of bank performance and also review the findings of the internal auditors will be reported to the board with some recommended. The sub-

committees should be independent and transparent from the board and clearly communicate to all employees the risk strategy and risk tolerance of the company (Enobakhare, 2010). Nomination committee is one of the most important committee, which appoint in new committed directors and fire uncommitted (Sierra et al., 2006). Remuneration and nomination sub-committee should be comprised only with non-executive directors, of whom the majority should be independent, and chaired by the board chairperson. This committee is a relevant tool to align managers and shareholders' interests, mitigating agency costs and providing a link between managerial actions and performance (Romano, 2012). Asset and liability management committee (ALCO) is required to better perform its role, as it requires more discussions and assures more skills, backgrounds and competences (Alkdaiand, 2012). ALCO is the most appropriate strategy in terms of the mix of assets and liabilities given its expectations of the future and the potential consequences of interest rate movements, liquidity constraints and foreign exchange exposure and capital adequacy (Romano and Guerrini, 2012).

In the Ethiopian directives on bank corporate governance there are at least three committees that are allowed to establish but not limited to: audit sub-committee, risk and compliance subcommittee and human resource affairs sub-committee. Those are the total minimum required number of internal board committees that are established by NBE codes of requirements.

According to Bussoli (2013), the board sub-committees are the measurements for better functioning of private commercial banks, as the number of board committees is statistically significant to banks financial performance. Hlanganipai and Godfrey (2014) positive relationship between board composition, board diversity and commercial bank performance, although a negative relationship appears between board sizes, board committees. Rajendran (2012) positive relationship for separate leadership, board composition, board committees. Most of the previous studies concluded that availability of variety number of board committee is positively related to the financial performance by reasoning different variety board committee could provide the diversity that would help companies get critical resources and increase monitoring and controlling capacity of the board.

H2: Availability of Variety Board Sub-committee is significantly and positively related to Bank performance

2.3.3. Meeting Frequency of Board

For board to effectively perform its function and monitor management performance, the board must hold a regular meeting. Meeting frequency of board refers to how much time the board meets on a year. There are two theoretical views on this issue: those who are in favor of higher frequency of board meetings and those who are not (e.g. Lipton and Lorsch, 1992; Jensen, 1993).

A higher frequency of board meetings will result in a higher quality of managerial monitoring. This will imply that there is a positive relationship between frequency of board meetings and financial performance. Regular meetings allow directors more time to confer set strategy and to appraise managerial performance (Vafeas 1999, p.118). It can help directors to remain well informed about important developments within the firm. This will place the directors in a better position to timely address critical problems. In fact, there was a suggestion that frequent meetings intermingled with informal sideline interactions can create and strengthen cohesive bonds among directors (Lipton and Lorsch 1992, p.69).

An opposing theoretical view is that board meetings are not necessarily beneficial to shareholders. Firstly, Vafeas (1999, p.114) argues that normally the limited time directors spend together is not used for the meaningful exchange of ideas among themselves. Instead, routine tasks, such as presentation of management reports and various formalities absorb much of the meetings. This reduces the amount of time that outside directors would have to effectively monitor management (Lipton and Lorsch 1992 p.64). Secondly, board meetings are costly in the form of managerial time, travel expenses, refreshments and directors' meeting fees (Vafeas 1999, p.118).

Empirical findings on the effect of frequent board meetings and corporate performance show mixed results. Some studies concluded more meeting frequency has a negative effect on the performance of banks. Akpan (2015) found that board meetings negatively and significantly related with company financial performance. And also the higher the number of meetings has a significant negative effect on ROA and an increasing in meeting frequency will reduce the ROA (Danoshana and Ravivathani, 2013). Vafeas (1999) reported a statistical significance and negative association between frequency of board meetings and corporate performance.

But Karamano (2005) found a positive association between frequency of board meeting and management earnings forecasts, using a sample of 157 firms in Zimbabwe from the year 2001-2003; report a positive relationship between board meeting frequency and corporate performance. Similarly, in a study of the sample of 169 listed corporations from 2002-2007 in South African, a statistical significant and positive association between the frequency of board meeting and corporate performance exist (Ntiman, 2011). Belete (2015) also found that meeting frequency of board has a significant effect on the financial performance of Microfinance Institutions. This implies that the board of directors in South Africa that meet more frequently tend to generate higher financial performance.

In fact, Jensen (1976, p.866) contends that boards in well-functioning companies should be relatively inactive and exhibit little conflicts. He suggests that rather than necessarily organizing frequent board meetings, it will be more profitable for corporate boards to establish a system that is responsive to their specific challenges. For example, directors can increase the frequency of meetings during crisis or when shareholders' interests are visibly in danger, such as when replacing the CEO or fighting hostile takeovers. Consistent with Jensen's (1993) suggestions, Vafeas (1999, p.118) argues that companies that are efficient in setting the right frequency of board meetings, depending on its operating context, will enjoy economies of scale in agency costs.

H3: Meeting Frequency of Board is significantly and negatively related to Bank performance

2.2.2 Regulation and Bank performance

Regulatory oversight into financial sector practices and procedures are primarily designed to meet their accountability, transparency and monitoring roles that they play for the economy-wide stakeholders. A failure of such a governance mechanism becomes clear and prevalent in cases of widespread frauds, misconducts, moral hazards and crashes that occur primarily out of negative investor psychology, Like in the cases of Asian financial crisis, and the US financial crisis, i.e., the world recession. Even the U.S financial crisis has been proved to have occurred due to regulatory governance failures, (Anwar 2009). Little is known about which laws and regulations enhance the governance of banks although many argue that banks are extraordinarily complex and opaque, (Capiro and Levine 2007). From this perspective, investor protection laws alone may not provide a sufficiently powerful corporate governance mechanism to small shareholders. Put

differently, even with strong investor protection laws, small stakeholders may lack the means to monitor and govern complex banks.

Official bank regulations may arise in part to stop bank insiders from expropriating or misallocating bank resources as argued in Caprio and Levine (2007). Thus, effective regulation towards more institutional shareholding might augment investor confidence and boost market valuations. It is from this ground that the central bank and other regulators frameworks and standards for the financial system of a political economy so that the constituents and participants of the system generates more transparency, accountability, and oversight. In common practices, depositors rely on the government role in protecting their bank deposits from expropriating management. It might encourage economic agents to deposit their funds into banks because a substantial part of the moral hazard cost is guaranteed by the government. This moral hazard problem can be restored through the use of economic regulations such as asset restrictions, interest rate ceilings, reserve requirements, and separation of commercial banking from insurance and investment banking. The effects of these regulations limit the ability of bank managers to over-issue liabilities or divert assets into high-risk ventures. Thus, the special nature of banking requires government intervention through regulation and supervision in order to restrain the expropriating management behavior in banking sector. In this view, managers and owners are subject to the regulation. Government use different regulation to restrain the activity of the managers and protect the stakeholders of the bank. This study used Capital adequacy ratio and liquidity ratio as a proxy for government regulation.

2.2.2.1 Capital adequacy ratio and bank performance

Capital adequacy focuses on the total position of bank capital and protects the depositors from the potential shocks of losses that a bank might incur. It helps absorbing major financial risks like credit risk, market risk, foreign exchange risk, interest rate risk and risk involved in off-balance sheet operations (Javed & Tanzila 2009). Umoh (1991) noted that adequate capitalization is an important variable in business and it is more so in the business of using other people's monies such as banking. It is further stated that insured banks must have enough capital to provide

a cushion for absorbing possible losses or provide, funds for its internal needs and for expansion, as well as ensure security for depositors and the depositor insurance system.

Regulators and bankers have also not reached agreement as to what level of capitalization is adequate; for instance while regulators concern themselves primarily with the safety of banks, the viability of invested funds, and stability of financial markets, bankers generally prefer to operate with less capital, as the smaller its equity base the greater the financial leverage. Rose (1999), states that even a bank with a low return on assets can achieve a relatively high return on equity through heavy use of debt (leverage) and minimal use of owner's capital. Kidwell et al (2000), on the issue of capital adequacy observed banks and regulators differ because they have different objectives. The primary goal of bank management is long term profit maximization achievable through high leverage while bank regulators are more interested in the risk of bank failures in general. Hence, bank regulators desire higher capital standards that promote banks' safety.

Many studies used capital adequacy ratio (CAR) as the main proxy for corporate governance. Researchers like Tandelilin et al. (2007), Kwee and Rasiah (2010) and Ibraheem (2011) used CAR as a proxy for corporate governance. They argued that the central bank alleviates the deterioration of financial performance in banks by using CAR to classify the healthy level of financial institutions, and put it in different categories, either in poor categories or good categories. In addition, CAR represents the degree of bank's obedient function toward the rules, which serves and protects the public interest. The larger CAR number in banks represents the higher banks' sensitivity toward public. By contrast, if the CAR number in banks is small, it will show a lower banks' Sensitivity toward public interest, (Tandelilin et al. 2007). The empirical result shows mixed result. Ibraheem (2011) concluded that CAR has no statistically significant effect on Tobin's Q. According to Tandelilin et al (2007) CAR has negative effect on ROE for foreign-owned banks, joint-venture owned banks, and state-owned banks. However, CAR has positive effect on ROE for private domesticowned-banks. Kwee and Rasiah (2010) evidenced the positive impact of CAR on the performance of bank. Similarly, AL-Omar & AL-Mutairi (2008), Yisau (2012) evidenced the positive impact of CAR on the performance of banks arguing; when the capital and asset ratios of banks have fulfilled the stipulations, it will turn the status of bank into healthy banks category. This effort will attract public and customers to deposit their funds into the banks and this trust reduce the coast of fund and increase the profitability of the banks. Similarly

Oluyemi (1996), Nanon (1999) and Mathuva (2009), found that Increase in capital ceteris paribus is expected to enhance earnings by reducing the expected cost of financial distress including bankruptcy. Therefore, based literatures above, the current study stated the following hypothesis regarding CAR and bank performance.

H4: There is positive and significant relationship between CAR and bank Performances.

2.2.3 Depositor influence and bank performance

To measure depositors' influence, similar with Tandelilin et al. (2007), the deposit to asset ratio is used. A lower value of this ratio indicates reduced depositor support for investment probably because of perceived higher risk. The ability of private agents like depositors to control bank risk-taking is another mechanism of corporate governance. Depositors and creditors may withdraw deposits from, or require high deposit interests from risky banks. If banks recognize that deposit withdrawal or high funding costs endanger their survival, they will avoid excessive risk-taking and engage in prudential management, (Hosono 2007). This ratio shows the proportion of public contribution as a source of capital to finance the banks' asset. Smaller deposit to asset a ratio (TDTA) number indicates that public provides smaller proportion to support the banks' activity. Hence, the ratio represents a good proxy for external corporate governance mechanism, (Tandelilin et al. 2007).

According to risk return tradeoff theory, as corporation use more debt to finance their asset their return will be magnified. There are many empirical results which supports this hypothesis. Modigliani and Miller (1963) in existence of corporate taxes suggested that firms should use as much debt capital as possible in order to maximize their value by maximizing the interest tax shield. Similarly, Ebiad (2009), indicates that higher levels of debt in the firm's capital structure is directly, associated with higher performance levels. Therefore, according to risk return trade off theory, the higher a bank's deposit to total asset ratio, the more money it can earn in terms of lending revenue. For this reason, the researcher expects positive relationship between loan to deposit ratio and bank performance. Hence, the hypothesis is stated as:

H5: There is Positive and significant relationship between deposit to asset ratio and bank performance.

2.4 Conclusions and knowledge gap

The above review of the literature exposes the existence of many gaps of knowledge in relation to the effect of corporate governance particularly in the context of Ethiopia. As per the review of the literature most of the empirical studies that have been conducted with the purpose of examining the relationship between corporate governance mechanism and bank profitability belong to European companies and some emerging markets such as India, Malaysia, China, Indonesia and Tunisia. From Africa such topic got coverage in Ghana, Nigeria, Egypt, Zimbabwe. Even if the topic is boldly researched in the above countries, the above literature review revealed the existence of controversial conclusions that results from different studies made so far. Moreover, so far as the review of the literature disclosed, very small work has been done with the aim of examining the effect of corporate governance mechanism in sub-Saharan countries in general and Ethiopia in particular.

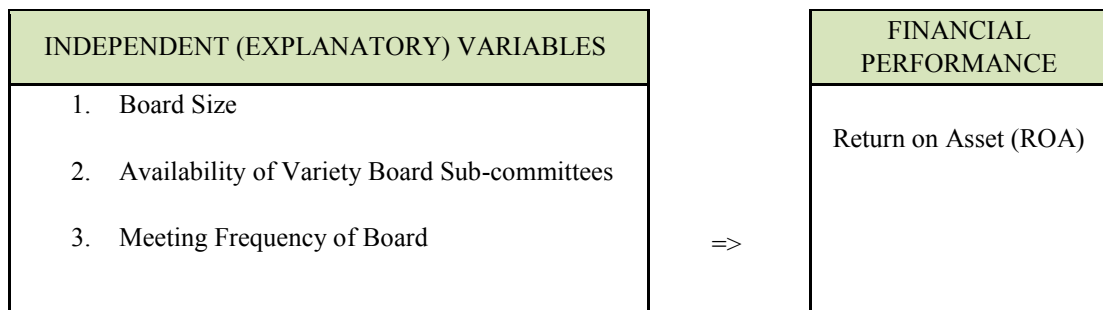
In case of Ethiopia, the study conducted by Fikadu (2010) tried to expose the weakness of commercial code of Ethiopia in protecting minority shareholders by taking different cooperate governance theories as a benchmark. Even if the study tried to evaluate the major document which dictates the corporate governance mechanism of Ethiopian corporation, it fails to disclose the effect of such mechanism on the corporate profitability. Another study by Habtamu (2012), tests the relationship between some internal corporate governance mechanism and bank performance. The research used only board characteristics as corporate governance proxies and established relationship between board proxies and bank performance. The agency theory was used by the study as a model which is less relevant when there is regulation or government intervention and imperfect market which is an environment on which banks operates. Even if a research conducted by Kelifa (2012) tried to address the issue in a better way as compared to the previous work of Habtamu (2012), he overlooked some important corporate governance variables. Furthermore, the contradictory conclusions that results from the two previous researches call for a detailed

investigation to be conducted in the area. In general, the lack of sufficient research on the effect of board structure on bank performance in the context of Ethiopia and the existence of knowledge gap in the area are the root causes for undertaking this study. Therefore, the objective of this study is to identify the effect of corporate governance mechanisms on Ethiopian private commercial banks performance and to fill the knowledge gap that exists in the area by considering board characteristics as a governance proxy.

2.5. Conceptual Framework of the Study

The following diagrammatic framework is developed.

Figure 2.1: Conceptual Framework



Self-constructed

CHAPTER THREE: RESEARCH METHODOLOGY

This section presents the methods used to carry out the study. In particular, this study is employed in order to examine the effect of corporate governance on financial performance of banking sector by taking evidence from selected private commercial banks in Ethiopia. It presents the research design, procedures of data collection, the sampling procedure and method of data analysis and the variable measurements.

3.1. Research Design

The type of research which is appropriate to be employed for this study is explanatory survey design in nature. Quantitative method has been applied and the explanatory type of research design helps to identify and evaluate the causal relationships between the different variables.

3.2 Population, Sample and Sampling Technique for the Study

There are 16 commercial banks in Ethiopia and one of which is a government bank and most of the banks are private banks though they are young in operation (<http://www.nbe.gov>).

As these commercial banks are small in number, for the study, the researcher considers all the private banks but with certain qualifications as to their experience and data availability. The selection is primarily based the way that valuable and complete data is to be obtained. To get valuable data about board of directors, as hence NBE licensing and supervision of banking business bank corporate governance directive No.SBB/62/2015 requires the term of a board is six years and even, 1/3 of the member can also have a chance of serving for the second time, and hence to see the changes in boards, this research considers those banks whose experience is 13 and more years which is for the period 2004 to 2016 so that it would help the research to see changes after two terms of boards services. The private commercial banks are corporations that have a dominant position in developing economic financial systems, and they are important engines of economic growth of a country (Levine, 1997). Banking failure would affect the entire financial system and economy of a country. Therefore, in order to ensure the improvement of the company performance, economic efficiency and growth, and to enhance investors' confidence; strong, effective and good corporate governance has to be developed and implemented. The study used

purposive sampling technique. In purposive sampling the researchers believed that data can be obtained by a representative sample by using a sound judgment. The judgment in this case is obtaining data from board chairman/board secretary. Moreover, the sample is made in limited numbers of people who can serve as primary data sources due to the nature of research design and aim and objectives.

3.3 Type of Data

The panel data which is a combination of time-series and cross-sectional data has been used to analyze this quantitative study. Gujarati (2004) 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 collinearity among variables, and more efficiency; and it minimizes the bias caused from aggregation in pure time series data”.

Consequently, this study used panel data of 7 private commercial banks for 13 years or 91 firm year data/observations.

3.4. Data Analysis Technique and Variables Measurement

The data collected through the tools mentioned above was analyzed using the method known as descriptive statistics, correlation and multiple panel linear regression methods. The descriptive statistics was used to quantitatively describe the important features of the variables using mean, maximum, minimum and standard deviations. Pearson correlation analysis has been used to identify the relationship among the variables. But it does not allow the researcher to make causal inferences regarding the relationship between variables (Marczyk et al., 2005) and a multiple panel linear regression analysis has been used to test the hypotheses and explain the relationship between corporate governance variables and financial performance measures. The least square has been conducted using Eviews9 econometric software package for analysis and the results is presented in tables and figures.

The variables are selected based on alternative theories of agency, stakeholder, stewardship and resources dependency theories and previous empirical studies related to corporate governance and firm performance. Accordingly, the theory and empirical studies, the independent and dependent variable of the study were identified to examine the effect of corporate governance mechanisms on private commercial banks' financial performance.

1. Dependent Variables:

Bank performance variables

Mostly financial performance is measured by either with accounting-based return, market based return or both. Even though market-based returns are widely acceptable for performance measure by most researchers, they are excluded from this study. This is because of the unavailability of data. For example, to use Tobin's Q we need current market price of stock. Such data is not available in Ethiopia as the country has no stock market. In absence of market based data most researches used ROA and ROE as a proxy to performance. In this study the researcher chooses ROA over ROE as a proxy to bank performance because of the following reasons. Because ROE weighs net income only against owners' equity, it doesn't say much about how well a company uses its financing from borrowing and bonds. Such company may deliver an impressive ROE without actually being more effective at using the shareholders' equity to grow the company. ROA, because its denominator includes both debt and equity, can help us to see how well a company uses both these forms of financing.

Since banking industry financial structure is more of debt than equity and the research applies stakeholder theory of corporate governance, using ROA (return on both equity and debt) is judicious base to measure performance. In this study accounting-based measure, ROA is used ROA is measured by the ratio of after tax net income to total assets of the sample banks. The following table summarizes each variables description, measures and expected sign

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

$$\text{Return on Asset (ROA)} = \frac{\text{Profit after Tax (PAT)}}{\text{Average Total Asset (TA)}}$$

2. **Independent Variables:**

- A. **Board Size:** It is the number of boards elected at the time of board election. This include the number of female board members who has a site on the board. Marte (2010), indicated that the size of board is considered to be crucial characteristics of board structure. Some researchers showed us that board size is positively related to performance by reasoning large boards could provide the diversity that would help companies get critical resources and increase monitoring capacity of the board (Haniffa and Hudaib, 2006, p1038).
- B. **Availability Variety Number of Board Sub-committees:** It is the number of subcommittees under the board of directors in private commercial banks. It has been calculated as the total number of internal board sub-committees of the private commercial bank has at the end of the period. The researcher expects that there is a significant positive association between number of internal board sub-committees and commercial bank financial performance.
- C. **Meeting Frequency of Board:** Refers the number of meetings that board meets on a year during the period under review. The researcher expects the number of board meeting has a negative effect on Ethiopian commercial banks financial performance.

3. **Control Variables**

- D. **Bank Size:** In this study, bank size (measured by logarithm of total asset) was used in the model as a control variable.
- E. **Depositors' impact.** Among various disciplining devices, the ability of private agents to control bank risk-taking, i.e., market discipline, is attracting more and more attention by both policy-makers and economists, (Tandelilin et al. 2007). Depositors (and creditors) may withdraw deposits, or require high deposit interests from risky banks. If banks recognize that deposit withdrawal or high funding costs endanger their survival, they will avoid excessive risk taking and engage in prudential management, (Hosono, 2007). Similar to Tandelilin et al. (2007), deposit to asset ratio, is used to measure this variable.

$$\text{TDTA} = \frac{\text{Total deposit}}{\text{Total asset}}$$

- F. **Capital adequacy ratio.** Capital adequacy ratio (CAR) is capital divided by risk-weighted average assets and measured by logarithm of its ratio. Capital included in the CAR comprises main capital and secondary capital. Both NBE in its Directive No. SBB/24/99

and Basel accord dictates that each bank should reserve minimum level of CAR of 8%. The CAR number represents the degree of bank's obedient function toward the rules, which serves and protects the public interest. Larger CAR number represents higher banks' sensitivity toward public interest. Konishi and Yasuda (2004) find that the implementation of the capital adequacy requirement reduces risk taking of commercial banks. Thus, this ratio represents a good proxy for implementing good corporate governance mechanism and it is computed as:

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

Table 3.1: Summary for Terms of Measurement

| Variables | Description | Measures | Expected Sign |
|-----------|--------------------------------------|--|---------------|
| ROA | Return on Asset | Amount of profit after tax as a percentage of total asset | |
| BSZ | Board Size | Number of board member in a bank | - |
| BSC | Availability of board Sub-committees | Number of sub-committees serving on the board | + |
| MFB | Meeting Frequency of Board | Number of meeting or how much time board meets on a year during the period | - |
| CAR | Capital Adequacy Ratio | Total Capital/risk weighted asset | + |
| BZ | Bank Size | LnBZ | + |

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.

$$Y_{it} = \alpha + \sum \beta KX_{it} + \epsilon_{it} \text{-----} (1)$$

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

$$ROA_{it} = \alpha + \beta_1 BSZ_{it} + \beta_2 BSC_{it} + \beta_3 MFB_{it} + \beta_4 CAR_{it} + \beta_5 TDTA_{it} + \beta_6 BZ_{it} + \varepsilon_{it} \quad (2)$$

Where:

- Y_{it} represents the dependent variable (ROA) of the sample bank i for time period t
- α is the intercept of the model
- β_K represents the coefficients of the X_{it} variables
- X_{it} represents the independent or explanatory and control variables (BSZ, BSC and MFB) of the commercial bank i for time t
- ε_{it} is the error term
- ROA_{it} is measures of financial performance for the sample bank i in time t
- BSZ_{it} represents female directors on the board for the sample bank i in time t
- BSC_{it} represents the size of internal board sub-committee in a sample bank i in time t
- MFB_{it} represents the meeting frequency of the board in a sample bank i in time
- CAR_{it} represents capital adequacy ratio of bank i in time t
- $TDTA_{it}$ represents loan to deposit ratio of bank I in time
- BZ_{it} represents the size of bank
- β_i represents coefficient of corporate governance and control variables.
- ε is the error term

The Model adequacy test has been conducted using R^2 and adjusted R^2 that is the research has used Ordinary Least Squares (OLS) regression to evaluate model fit

CHAPTER FOUR: RESULTS AND DISCUSSION

4.1 Classical linear regression model assumptions and diagnostic tests

To assure that the estimation technique, ordinary least squares (OLS), had several desirable properties, and so that the hypothesis tests regarding the coefficient estimates could validly be conducted. Five assumptions were made relating to the classical linear regression model (CLRM), (Brooks 2008). In this research, diagnostic tests were carried out to ensure that the data fits the basic assumptions of the model; which are presented as follows:

Test for Heteroscedasticity

Heteroskedasticity is the circumstance in which the variability of a variable is unequal across the range of values of a second variable that predicts it. This test is conducted to check one of the assumptions of the CLRM, that the error terms appearing in the population regression function are homoscedastic; if all random variables in the sequence have the same finite variance; that is, all random variables have the same variance. If the errors do not have a constant variance, they are said to be heteroscedastic. To test for heteroscedasticity, the researcher used Breusch-Pagan-Godfrey test.

Both the F-statistic and Chi-Square versions of the test statistic gave the same conclusion that there is no evidence for the presence of heteroscedasticity on ROA and since the p-values were in excess of 0.05

Eviews9 presents three different types of tests for heteroscedasticity. According to Brooks (2008), If F, X^2 and normalized version of the explained sum of squares from the auxiliary regression ('Scaled explained SS') statistic have a p-value of more than 0.05, the test statistic give conclusion that there is no evidence for the presence of heteroscedasticity. Accordingly, in this study as shown in Table 4.1, both the F statistic, Chi-Square versions of the test and 'Scaled explained SS' Statistic gave the same conclusion that there is no evidence for the presence of heteroscedasticity as a result, the null hypothesis of there is no heteroskedasticity is failed to reject.

Table 4.1 Heteroskedasticity Test:

| Heteroskedasticity Test: Breusch-Pagan-Godfrey | | | |
|--|----------|---------------------|--------|
| F-statistic | 1.917238 | Prob. F(6,83) | 0.0875 |
| Obs*R-squared | 10.95525 | Prob. Chi-Square(6) | 0.0898 |
| Scaled explained SS | 12.69213 | Prob. Chi-Square(6) | 0.0682 |

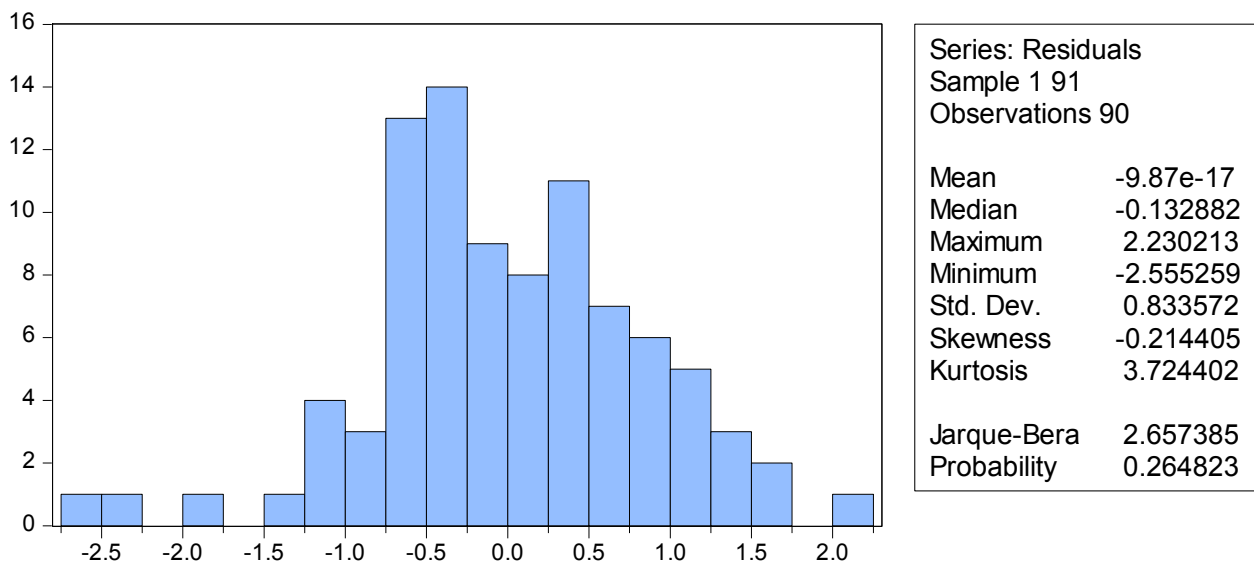
Source: Eviews 9 result

Test for normality

This test is performed to confirm the assumption of CLRM which states that the disturbances terms are normally distributed. One of the most commonly applied tests for normality is the Bera-Jarque (BJ) test. BJ uses the property of a normally distributed random variable that the entire distribution is characterized by the first two moments, the mean and the variance, (Brooks 2008). According to the same author if the residuals are normally distributed, the histogram should be bell-shaped and the Bera-Jarque statistic would not be significant. This means if the p-value is bigger than 0.05 the null hypothesis of normality should not be rejected at 5% level.

In case of this study, as shown in Table 4.2, the skewness is close to zero and Kurtosis is also close to zero and the p-value of BJ test is more than 0.05 thus we fail to reject the null hypothesis for residual normality or the null hypothesis of the sample data are not significantly different than a normal population is failed to reject.

Table 4.2 Test for normality



Source: Eviews 9 test result summary

Test for Autocorrelation

The CLRM assumes that the disturbance term relating to any observation is not influenced by the disturbance term relating to any other observation. In other words, it is assumed that the errors are uncorrelated with one another. If the errors are not uncorrelated with one another, it would be stated that they are 'auto-correlated'.

For Testing for autocorrelation the research used for Breusch–Godfrey LM Test and the result from Eviews looked as here under.

Table 4.3 Test for Autocorrelation

Breusch-Godfrey Serial Correlation LM Test:

| | | | |
|---------------|----------|----------------------|--------|
| F-statistic | 1.216035 | Prob. F(25,58) | 0.2655 |
| Obs*R-squared | 30.95081 | Prob. Chi-Square(25) | 0.1907 |

Source: Eviews 9 test result summary

Therefore, the null hypothesis of no autocorrelation is failed to reject as there is no evidence for the presence of autocorrelation hence the P-value is greater than 0.05

Test for Multicollinearity

Multicollinearity test is a test of phenomenon in which two or more predictor variables in a multiple regression model are highly correlated, meaning that one can be linearly predicted from the others with a substantial degree of accuracy.

The other Assumption of the CLRM is that there is no multicollinearity among the regressors included in the regression model. When the explanatory variables are highly correlated with each other there is a problem known as multicollinearity. In this study to check the existence of multicollinearity the following Correlation matrix between independent variables is calculated by using Eviews. Hair et al. (2006) stated that multicollinearity problem exists when the correlation coefficient among the variables are greater than 0.9 but in this study there is no correlation coefficient that exceeds or even close to 0.90. Accordingly, in this study there is no problem of multicollinearity.

Table 4.4 correlation matrix between independent variables

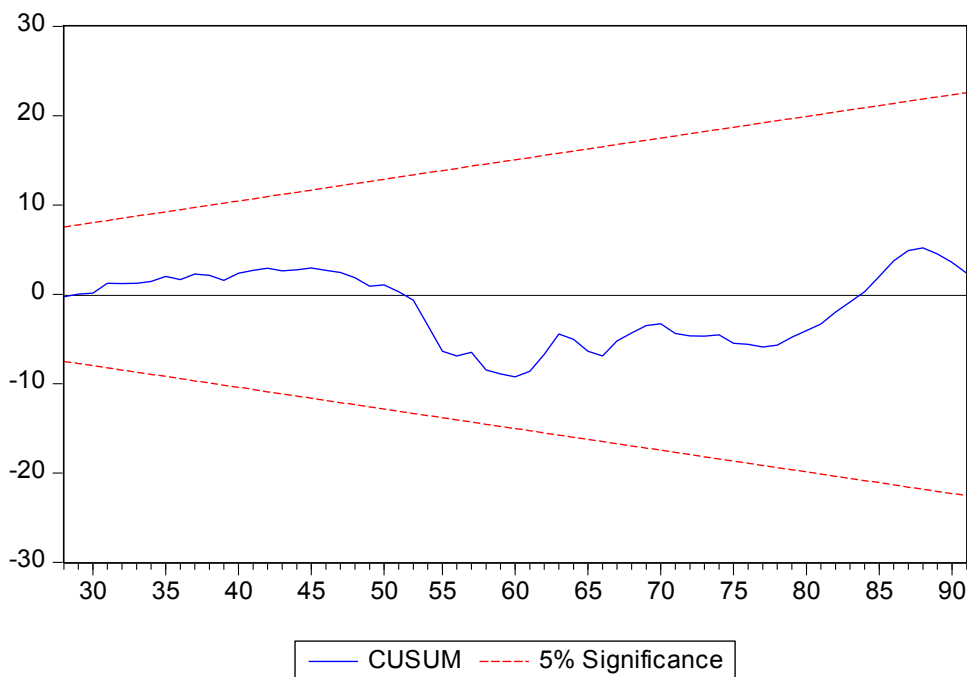
| Correlation | TDTA | MFB | LNCAR | LNBZ | BSZ | BSC |
|-------------|-----------|-----------|-----------|-----------|-----------|-----------|
| TDTA | 1.0000000 | - | - | - | - | - |
| MFB | 0.1384234 | 1.0000000 | - | - | - | - |
| LNCAR | 0.5227574 | 0.1106790 | 1.0000000 | - | - | - |
| LNBZ | 0.2538430 | 0.0108927 | 0.6199157 | 1.0000000 | - | - |
| BSZ | 0.2739874 | 0.4618047 | 0.2674579 | 0.1690820 | 1.0000000 | - |
| BSC | 0.1036100 | 0.2573541 | 0.0391452 | 0.2958297 | 0.5784565 | 1.0000000 |

Source: Eviews 9 test result summary

Stability Diagnostics Test

The CUSUM test (Brown, Durbin, and Evans, 1975) is based on the cumulative sum of the recursive residuals. This option plots the cumulative sum together with the 5% critical lines. The test finds parameter instability if the cumulative sum goes outside the area between the two critical lines. The significance of any departure from the zero line is assessed by reference to a pair of 5% significance lines.

Table 4.5 CUSUM Test



Source: Eviews 9 test result summary

4.2 Descriptive statistics results

Table 4.6 Descriptive statistics results

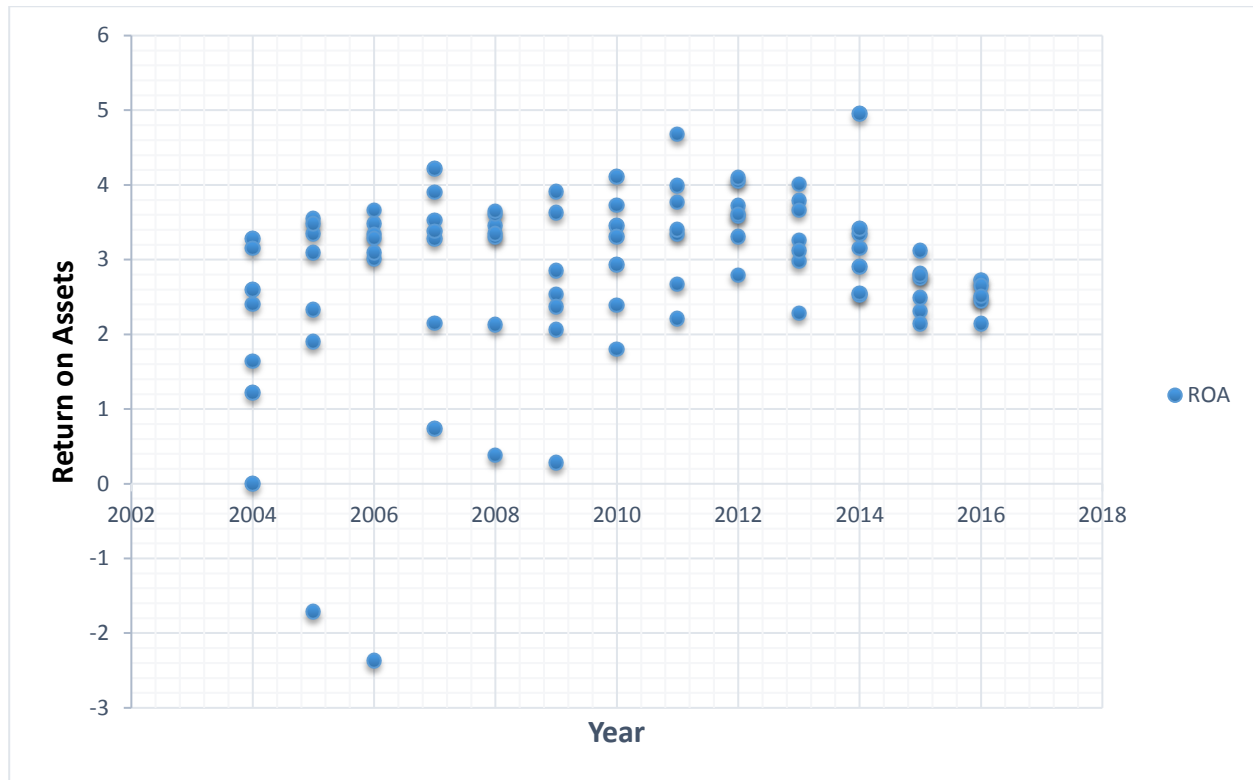
| | ROA | TDTA | MFB | LNCAR | LNBZ | BSZ | BSC |
|--------------|---------|----------|----------|---------|----------|--------|--------|
| Mean | 2.883 | 0.747 | 26.511 | -2.175 | 8.567 | 9.78 | 2.73 |
| Median | 3.120 | 0.772 | 24 | -2.178 | 8.756 | 9 | 3 |
| Maximum | 4.951 | 0.884 | 62 | -0.141 | 10.260 | 12 | 5 |
| Minimum | -2.370 | 0.116 | 0 | -3.397 | 4.860 | 7 | 0 |
| Std. Dev. | 1.111 | 0.101 | 13.77 | 0.452 | 1.069 | 1.695 | 1.475 |
| Skewness | -2.160 | -3.176 | 0.88 | 1.085 | -0.924 | 0.045 | -0.611 |
| Kurtosis | 10.271 | 18.977 | 3.12 | 8.130 | 4.003 | 1.766 | 2.977 |
| | | | | | | | |
| Jarque-Bera | 268.237 | 1108.624 | 11.70701 | 116.380 | 16.57445 | 5.744 | 5.597 |
| Probability | 0 | 0 | 0.00287 | 0 | 0.000252 | 0.057 | 0.061 |
| | | | | | | | |
| Sum | 259.50 | 67.23 | 2386 | -195.8 | 771.00 | 880 | 246 |
| Sum Sq. Dev. | 109.86 | 0.90 | 16882.49 | 18.2 | 101.70 | 255.56 | 193.6 |
| | | | | | | | |
| Observations | 90 | 90 | 90 | 90 | 90 | 90 | 90 |

Source: Eviews 9 test result summary

From Table 4.6 descriptive statistics results, ROA indicates that on average the Ethiopian private commercial banks managed a positive after tax profit over the last thirteen years (i.e 2.88%). Which means on average Ethiopian banks earned 2.88 cents for each one birr invested in the assets. As per the Basel Accord, a return on assets of 1% is good and 1.5% and above are strong. Based on this, the private commercial banks in Ethiopia are categorized as strong. This mean, the private commercial banks are attractive for investors, shareholders are getting more dividends and the investors can be confident in. The management is efficient in their utilization of assets and can generate more returns and it also attracts depositors, creditors and other stakeholders to invest in.

Among the sampled banks the most profitable bank achieved a profit of 5 cent per birr invested in the assets. On other side, the least profitable bank incurred a loss of 2 cent per one birr investment. The standard deviation of return on asset is 1.11% from the average value or from the mean value of the sample private commercial banks. And when we see its trend from year to year it shows the following trends.

Table 4. 7 Trend on ROA



As the trend shows, the maximum loss was recorded during 2006 and the maximum return was recorded during 2014. After 2006 to the time 2014 there were high return on assets and then decline and a declining trend was shown during year 2016. Thus, this decline need to be corrected timely that is their corporate governance has to come with a solution. Either there has to be proper board meetings as the relation with ROA is oppositeso that it will help them to reduce costs and make proper supervisions and monitoring and the boards subcommittee has to be reduced as their relation is opposite or boards strategic thinking on this and other solutions is mandatory. Unless it is timely corrected, investors and depositors will not be attracted and they may lack confidence on their investment on the bank.

In case of board size, the maximum and minimum numbers of board in the sample period were 15 and 7 respectively. The mean size of the board members of bank in the sample period was 10. The NBE of directive requires to have a minimum board size of nine for all banks, those banks with a minimum of seven has to work to make their board size to be nine otherwise it would be difficult

to work as a legal institute. As the data considers the board size since 2004, this result doesn't necessarily indicate there are still banks who has a board size of less than nine.

In terms of availability of boards subcommittee, on average the sample banks have 3 board subcommittee. There are also banks who has a maximum of 9 committees and there are also banks who have no sub-committee. Availability of sub-committees is one of the manifestations of having good corporate governance mechanism. In case of Ethiopian private banks, there are banks which were without subcommittee.

When meeting of board of directors is seen, the average number of meeting minutes or number of times that the board members mate was 27 times and the maximum number of times that banks had a meeting during a year was 62 and also there were banks who had not conducted a meeting. Interms of the NBE directive, it requires boards to meet 12 times in a year and the trend shows there are more than double times such number of meeting times in a year. It shows there are boards supervisions and monitoring of the banks operations so that it will help them to continue in profit.

4.3 Correlation analysis results among governance variables and ROA

As could be seen from table 4.7 below, the sign of correlation coefficient of board size (BSZ) is negative. This means the size of board members in the board and the ROA of banks move in opposite direction. In the same manner when the number of board subcommittee (BSC) increases, the ROA of banks move in the opposite direction. Similarly, the meeting frequency of board is negatively correlated with after tax return on asset of banks.

4.4. Discussion and Analysis of Regression Results

4.4.1 Results of regression analysis

The multiple regression results of the econometric model used in the study are presented in table; 4.7. To run the regression fixed cross- section effect method was used. The rational for using the fixed effect method is that, according to Brooks (2008), if one or more regressors in the model are somewhat correlated, then the random cross section effect estimators are biased, whereas those obtained from fixed cross section effect are unbiased. In this study, according to table 4.4, even if there is no series multicollinearity problem, there is to some extent co-movement of variables in the model. In this case fixed cross section effect model gives unbiased result. The second reason is that to use random cross section effect, the cross section of the variable must be greater than the

coefficient of the variables in the model. And lastly to use random effect method the sample must be selected by using random sampling technique but in this research the samples are selected based on availability of data. Because of the aforementioned reasons this research used fixed cross effect regression model.

The regression output in Table 4.7 presented on the next page was run by taking ROA as a dependent variable and other governance, regulation, and deposit variables as an independent variable. From the table R-squared statistics and the adjusted-R squared statistics of the model were 58% and 52% respectively. This shows that 52% variability of the dependent variable is explained by the movement of explanatory variables included in the model. In other word 52% variability of ROA of sample banks were attributed to the change in explanatory variables.

Table 4.7: Regression Result for the Model

Dependent Variable: ROA
 Method: Panel Least Squares
 Date: 06/02/17 Time: 11:04
 Sample: 2004 2016
 Periods included: 13
 Cross-sections included: 7
 Total panel (unbalanced) observations: 90

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| LNBZ | 0.497191 | 0.135067 | 3.681053 | 0.0004 |
| MFB | -0.007521 | 0.014630 | -0.514095 | 0.6087 |
| BSZ | -0.354064 | 0.174082 | -2.033895 | 0.0454 |
| TDTA | 4.612723 | 1.053076 | 4.380237 | 0.0000 |
| BSC | -0.211644 | 0.111083 | -1.905285 | 0.0605 |
| LNCAR | 0.186876 | 0.303894 | 0.614936 | 0.5404 |
| C | -0.175180 | 2.045803 | -0.085629 | 0.9320 |

Effects Specification

Cross-section fixed (dummy variables)

| | | | |
|--------------------|-----------|-----------------------|----------|
| R-squared | 0.583680 | Mean dependent var | 2.883331 |
| Adjusted R-squared | 0.518799 | S.D. dependent var | 1.111032 |
| S.E. of regression | 0.770708 | Akaike info criterion | 2.449870 |
| Sum squared resid | 45.73726 | Schwarz criterion | 2.810953 |
| Log likelihood | -97.24413 | Hannan-Quinn criter. | 2.595480 |
| F-statistic | 8.996158 | Durbin-Watson stat | 1.160062 |
| Prob(F-statistic) | 0.000000 | | |

Source: Eviews 9 Output

The remaining 48% of changes was explained by other factors which are not included in the model. Similarly, The F- statistic of 8.996158 is significant with P- value of zero, showing that the null hypothesis, that all the coefficients are jointly zero is rejected. This indicates that the change in dependent variable is well explained by the change in the independent variables of the model.

Based on the results shown in table 4.7, governance variables like BSC, BSZ, TDTA and BZ statistically significant effect on performance of banks hence the p- values of these variables are 0.0605, 0.0454, 0.0000 and 0.0004 respectively. BZ and TDTA are significant at 1% and BSZ and BSC are significant at 5% and 10% respectively. Meeting frequency of boards and capital adequacy ratio were insignificant for the decrease and increase of ROA. In addition, the coefficients of BSZ and BSC were negative which is -0.354064 and -0.211644 respectively. This implies that the increase of the aforementioned two variables will lead to decrease in performance of banks. A decrease in performance of banks which is ROA in this research would result in lack of confidence by investors and other stockholders like depositors and the existing shareholders

may withdraw from the bank. In contrast, CAR and BZ had a positive relationship with bank performance, ROA, as indicated by its respective coefficient of 0.186876 and 0.497191 respectively. This shows that an increase on this variable will bring an increase in bank performance. When capital adequacy ratio increases, ROA would increase and its decrease would result in a decrease in ROA because they move in the same direction. Similarly, when a bank size becomes larger, ROA will also increase as BZ may indirectly affect other independent variables.

4.4.2 Analysis and Discussions

In this section the effect of corporate governance variables on performance of banks is analyzed and discussed based on the regression output and different theories related to the variables. In this study, corporate governance is represented by five variables. These are board size, availability of board subcommittee, boards meeting frequency, Total Asset to Total Deposit Ratio and capital adequacy ratio. On the other hand, the proxy for performance is after tax return on asset. To check the relationship between the aforementioned governance variables and bank performance three hypotheses were developed. The regression results of each governance variables' effect on performance of banks are analyzed based on theoretical framework and previous empirical results as follows.

Board size

The effect of board size on bank performance was negative and significant. Meaning an increase in number of boards would result in a decrease to the return on assets. This in turn would result in lack of confidence on investors and a decrease in shareholders wealth and the sustainability and existence of the selected banks would be in question and depositors and other stakeholders will not rely on the bank as a customer.

The regression output of this variable is consistent with agency as well as stakeholder theories. According to agency and stakeholder theory, large boards are less effective in coordination and pave the way to be controlled by CEOs and this opens the chance to managers to maximize their interest at the expense of other stakeholders. On the other hand, resource dependency theory supports large board size; assuming that board consisting of a large number of directors may provide more resource links than a board with a small number of directors. This result is also supported by Ranti (2012), Mohsen (2016) and Bello and E.Ene(2016), Stepanova and Ivantsova

(2012) though it is opposite to the findings of Oladapo(2016), Shungu, et al., (2014), and Brain (2014). Therefore, there should be a trade-off for the number of boards as the increase in number of board members result in a decrease in ROA. The increase in number of boards would result in high transaction costs like meeting costs, remunerations and other benefits related to boards would result in a decrease on ROA.

Accordingly, the significant effect of board size failed to reject the first hypothesis hence data supports it.

Availability of various board subcommittee

Availability of various board subcommittee on the board had negative effect on banks performance (ROA) and it is statistically significant at 10% significant level. The parameter coefficient of -0.354064 shows that banks with high number of various subcommittee significantly performed less than banks with limited subcommittee on their board. This indicates, the number of subcommittees within the board should be limited but without violating the local laws like NBE directives. Under this directive, there are three mandatory subcommittees and this cannot be violated starting 2015. Unless the number of board subcommittee are to a certain level like the one mention on the directive, it would result in the decrease on ROA and which in turn lead lack of confidence on investors' minds hence low ROA mean the bank does not efficiently squeeze profit from their assets. This result is inconsistent 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. But this result is consistent with previous studies like Shungu, et al., (2014).

Accordingly, hypothesis that states boards subcommittee has a positive significant effect on performance is rejected.

Board Meeting Frequency

Hypothesis H3 predicts that there is a significant positive relationship between meeting frequency of board and private commercial banks financial performance. Return on Asset (ROA) with Meeting Frequency of Board (MFB), coefficient is -0.007521, test of p-value is $0.6087 > 0.05$. This result depicts that meeting frequency is insignificant negative effect on ROA and the effect of meeting frequency of board on the financial performance of Ethiopian private commercial banks is negligible to banks performance. The result is consistent with previous studies like Mohsen (2016). Therefore, the hypothesis which predicts that there is a significant positive relationship between meeting frequency of board and private commercial banks financial performance is rejected.

Deposit to asset ratio

This proxy is used to measure the mechanism through which depositors can govern the risk taking behavior of managements through manipulating their deposits. As expected the coefficient sign of deposit ratio is positive and it is significant at 1% significance level. Its p- value of 0.0000 demonstrate that deposit to total asset ratio can affect the profitability of banks significantly. This is also consistent with risk-return trade of theory. Deposit is the main source of debt financing of banks and according to this theory, as corporation finances their asset from more of debt source their income will be magnified. From the regression result of this study we can infer that; in case of Ethiopian private commercial banks, the distress cost incurred by using more debt is outweighed by the benefit generated through using more debts. This significant influence of deposit to total asset ratio on bank profitability can pave a way to the depositor to influence the behavior of managers. Even if using more of deposit by banks create more risk by side depositors, by withdrawing their deposit from banks which are relatively more risky, depositors can drain the profitability of bank and this will put restriction on bank managers how to use their fund. From this we can conclude that depositors can influence the performance of Ethiopian banks by manipulating their deposit to loan ratio through market mechanism which is consistent with the assumption of agency theory

The summary of the expected and actual relationships found between the independent and dependent variables are presented in Table 4.8

Table 4.8. Summary of expected and actual relationships.

| Independent variable | Dependent variable | Expected relationship | Actual relationship | Significance at 1%, 5% or 10% |
|-------------------------|--------------------|-----------------------|---------------------|-------------------------------|
| Board size | ROA | Negative | Negative | Significant at 5% |
| Boards subcommittee | ROA | Positive | Negative | Significant at 10% |
| Board meeting frequency | ROA | Negative | Negative | Insignificant |
| CAR | ROA | Positive | Positive | Insignificant |
| Bank Size | ROA | Positive | Positive | Significant at 1% |

Source: Computed from Eviews 9

CHAPTER FIVE: SUMMARY OF MAJOR FINDINGS, CONCLUSION AND RECOMENDATION

5.1. Summary of Finding

The intention of this study was to empirically examine the effect of corporate governance mechanisms on financial performance of Ethiopian private commercial banks. Three research hypotheses have been developed to achieve its objectives. To get information about the selected variables the researcher applied quantitative research approach. Specifically, reviewing the private commercial bank documents and unstructured questionnaire.

In doing so, all private commercial banks operating for the past 13 years (2004-2016) were included in the sample for review of documents resulting in 91 observations. Fixed Cross - section (panel) effect model was used to estimate the regression equation. The researcher used the independent variables: board size, number of board sub-committee and meeting frequency of board and capital adequacy ratio and deposit ratio as a controlled variable. The dependent variable, financial performance, is measured in terms of ROA. Regarding the unstructured questionnaire, the study has been conducted by collecting questionnaire from 4 board secretaries and 3 delegated staffs of selected private commercial banks.

5.2. Conclusion

Keeping other factors constant, deposit ratio has significant positive relationship with the private commercial bank financial performance. But, board size and availability of variety number of board sub-committees and meeting frequency of boards have negative significant relationship with the profitability of the private commercial banks.

Corporate governance has an impact on the performance of private commercial banks in Ethiopia, since it helps to encourage and keep maintain investors and depositors' confidence and help to keep back the confidence of the investors when eroded at times of commercial bank failures due to different reasons. This cannot be emphasized because commercial banks plays a crucial role of intermediary in the economy, through mobilization of deposits and extension of short-term loans.

This section highlighted the conclusions that could be drawn based on the results displayed in chapter four where corporate governance and commercial bank performance was analyzed.

5.2.1 Does Corporate Governance affect Private Commercial Banks Performance in Ethiopia?

Based on the regression results with this sufficient evidence I conclude that the corporate governance has effect on commercial banks performance in Ethiopia, although I don't have enough information to totally conclude the hypothesis. The regression results show that bank performance depend on the level of corporate governance practices. However, board committee and board sizes show that the banks must have an optimal number of committees in order to perform well. Boards meeting frequency was insignificant on the analysis part but it does not mean that it does not have any effect on performance. Though not significant, it needs care when there is an increased level of number of board meetings.

5.2.2 The Key Characteristics of Corporate Governance

The results have shown that board size and board committees are crucial for private commercial bank's performance in Ethiopia since any change of the two-impact bank profitability. The findings present sufficient evidence to conclude that board size and board committees are the key characteristics of corporate governance since they explain much of the variation in bank performance in Ethiopian private commercial banks.

5.2.3 Relationship between Corporate Governance and Bank Performance

The regression results have shown board size and boards subcommittee have a negative relationship between with private commercial bank's performance, although boards frequency of meetings is insignificant but has negative relationship with performance.

5.2.4 Improvements in Corporate Governance practices

The regression results have shown that board size and boards subcommittee has a significant negative relationship with private commercial banks performance in Ethiopia. Thus, the board of directors should find the optimal board size as well as the optimal board committees, since the

regression results shows that they have a significant negative relationship with commercial banks performance. This means that the bank should have number of directors, which make it to be profitable. As a conclusion, the commercial banks in Ethiopia must chose an optimal number of directors and board subcommittee otherwise it negatively affect ROA as it has an inverse relation.

5.3 Recommendations

- There is need commercial banks to have an optimal board size and board committee so as to increase performance so as to enhance investor's confidence with the bank due to increase by having optimal number of both these factors.
 - There is need for commercial banks to comply with corporate governance requirements and best practices so as to avoid bank closure. Bank closure would tend to reduce the number of commercial banks on the financial sector which will induce some financial volatility. Thus, NBE directives NBE Licensing and supervision of banking business bank corporate governance directives No. SBB/62/2015 and changes there in should be strictly followed so as to avoid the same
 - Government has corporate governance directives for banks which could help governance equality among commercial banks in the country. Developing a directive and policies may not be adequate to check the stability and proper functionality of banks and thus it needs proper monitoring and assessment of commercial banks corporate governance. Moreover, to get the best out of this directive and overall corporate governance of banks, the government needs to work towards stabilizing the macroeconomic situation so as to increase commercial banks performance. Thus, There is need for the national bank as to increase the bank supervision and regulation on the commercial banks so as to enhance banking safety and sustainability. This will also serve to improve the competency of the commercial banks in the financial market. When the economic fundamentals are not addressed, commercial banks can be failed, since banks will continue do unethical practices in order to survive. Stability of the macro economy will also increase corporate governance, which would induce an incentive for commercial banks to perform.

- Investors with a profit motive should target banks with good corporate governance practices. This is believed that by intuition, formulation and implementation of complimentary good corporate governance practices and performance growth policies this would lead to achievement of the oral objective of the bank, shareholder wealth maximization which is needed by investors.
- Improving the Fiduciary Duties: The directors should practice due care and diligence on their undertakings. The directors are also mandated by the company act to be responsible and accountability. The directors should disclose up all their activities to the public through audited financial statements. This would help the bank to attract and return its customers and investors if directors practice their duties in an ethical way.
- The Need to Address Issues of Board Structure: There is a need for directors to address issues of board structure in order to avoid a large chunk of directors in the commercial bank board. The board structure as shown by the regression should have more optimal number of board size and board subcommittee. This would tend to attract more potential investors since investors favor a bank with more profitable banks.

Finally, for future researchers, there is also need to research about the impact of ownership structures on the commercial banks in Ethiopia and gender compositions should also be area of further research. Moreover, corporate governance mechanisms and firm financial performance from the perspective of different stakeholders such as employees, management and depositors of private commercial banks should also be a future research area. The researchers found it important for further research to adopting a multidisciplinary approach that incorporates both the qualitative and quantitative research tools. This would help to explore further about the impact of board structure on commercial banks or non-banking institutes if the samples size chosen is big enough while tests on corporate governance continue.

References

- Aggarwal, P. (2013). Impact of Corporate Governance on Corporate Financial Performance. *IOSR Journal of Business and Management*.
- Almanaseer, FM, Mohamad, AR, Abdulrahim, AM & Isaa. (2012). 'The Impact of Corporate Governance on the Performance of Jordanian Banks', *European Journal of Scientific Research, Volume 67, no.3, pp 349-359*
- Aminu, B., Aisha, M. and Muhammad, T. (2015). The effect of board size and composition on the financial performance of banks in Nigeria, *African Journal of Business Management, Vol. 9(16), pp. 590-598*
- Andres, P, Vallelado, E. (2008). 'corporate governance in banking: The role of board of directors', *Journal of Banking and Finance, vol.32 no.12, pp.2570–2580*.
- Ayele, A.G. (2013). 'Revisiting the Ethiopian Bank Corporate Governance system; A Glimpse of the Operation of Private Banks', 2013(1) Law, Social Justice & Global Development Journal (LGD).
- Bahreini, M. and Zain, M.M. (2013). Impact of Corporate Governance on Performance of Banking Sector in Malaysia. *Research Journal of Finance and Accounting Vol.4, No.19, Faculty of Management, Multimedia University, Jalan Multimedia, Cyberjaya 6300, Malaysia,*
- Bank of Italy. (2008). Supervisory Provisions Concerning Banks" Organization and Corporate Governance. March, 2008.
- Basel Committee on Banking Supervision. (2006). Enhancing corporate governance for banking organizations: *Bank for International Settlements Press & Communications, Switzerland. ISBN 92-9197-699-7.*
- Bathula, H. (2008). Board Characteristics and Firm Performance: Evidence from New Zealand. PhD dissertation paper
- Bennedsen, M, Kongsted, H, & Nielsen, M. (2004). 'Board Size Effect in Closely Held Corporations', Retrieved from www.econ.ku.dk/camon23/02/08
- Beyene.A, Srmolo.Y and Kassa.K. (2013). 'Corporate Governance and Impact on Bank Performance', *Journal of Finance and Accounting. Vol. 1, No. 1, 2013, pp. 19-26*
- Boone, A. L., Casares Field, L., Karpoff, J. M., & Raheja, C. G. (2007). The determinants of corporate board size and composition: An empirical analysis. *Journal of Financial*

Economics, 85(1), 66-101.

- Bonn, I, Yoshikawa, T. and Phan, P. H. (2004). 'Effects of board structure on firm performance: A comparison of Japan and Australia, *Asian Business and Management*', *Lee Kong Chian School of Business*.
- Brian, P. (2014). Corporate Governance and Financial Performance of Bank in Asian Regions and Recommendations. *Asian Journal of Finance & Accounting*. Vol. 6, No. 2
- Brooks, C 2008, *Introductory Econometrics for Finance*, 2nd edn, Cambridge University Press, New York
- Calabrese, A., Costa, R., Menichini, T., Rosati, F., & Sanfelice, G. (2013). Turning Corporate Social Responsibility driven Opportunities in Competitive Advantages: a Two dimensional Model. *Knowledge and Process Management*, 20(1), 50-58
- Chiorazzo, V., Milani, C. & Salvini, F. (2008). Income Diversification and Bank Performance: *Evidence Italian Banks*. *Journal of Financial Services*, 33(4), 181-203
- Dalton, DR, Daily CM, Ellstrand, AE, & Johnson. (1998, 'Meta-analytic reviews of board composition, leadership structure and financial performance', *Strategic Management Journal*, vol. 19 pp. 269–290.
- Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward a Stewardship Theory of Management. *Academy of Management Review*, vol.22 no.1pp 20
- Dehaene, A, De Vuyst, V and Ooghe H. (2001), 'Corporate Performance and Board Structure in Belgian Companies' *Long Range Planning*, vol.34, no.3, pp. 383-398
- Emeka, E. Ene and Alem, I. E. Bello. (2016). The Effect of Corporate Governance on Bank's Financial Performance in Nigeria. *IOSR Journal of Business and Management (IOSR-JBM)*. Volume 18, Issue 11. Ver. III, PP 99-107
- Fernando, A. C. (2009). *Corporate governance: Principles, policies and practices*. Pearson Education India
- Friedman, M. (1970), 'The Social Responsibility of Business is to Increase its Profits', *New York Times Magazine*, Vol. 13, Pp.32-33
- Gill, A. & Mathur, N. (2011). 'The Impact of Board Size, CEO Duality, and Corporate Liquidity on the Profitability of Canadian Service Firms', *Journal of Applied Finance and Banking*, Vol.1, no.3, pp 2 83-95.
- Goodstein, J., Gautam K. and Boeker W. (1994). 'The effects of board size and diversity

- on strategic change', *Strategic Management Journal*, 15 VOL3, pp. 241–250
- Gujarati, D.N. (2004). 'Basic Econometrics, 4th edition, McGraw-Hill Companies'
- Habtamu, A. (2012). "The Relationship Between Corporate Governance Structure and Financial Performance: Evidence from Ethiopian Banks", Msc Thesis, Bahir Dar University.
- Haniffa R M. & Hudaib M. (2006). 'Corporate Governance Structure and Performance of Malaysian Listed Companies', *Journal of Business Finance & Accounting*, 33 VOL. 7 PP.1034–1062.
- Hart, O. (1995). 'Corporate Governance: Some Theory and Implications', *the Economic Journal*, Vol. 105, Pp.678-689.
- Hosono, K. 2003, 'Market discipline and forbearance policy to banks' *Discussion Papers in Economics*, No. 339, Nagoya City University
- Jackling, B. and Johl, S. 2009, 'Board structure and firm performance: Evidence from India's top companies Corporate Governance', *An International Review*, 17 vol.4 pp492-509.
- James Oladapo Alabede, (2016). Effect of Board Diversity on Corporate Governance Structure and Operating performance: Evidence from the UK Listed Firms. *Asian Journal of accounting and Governance*7:67-80
- Jensen and M. (1976). The Modern Industrial Revolution, Exit, and the Failure of Internal Control Systems. *Journal of Journal of Financial Economics*, vol 3 no.4 pp 305-360
- Jensen, M.C. & Meckling, W.H. (1976). "Theory of the Firm: Managerial Behavior, Agency Costs and ownership Structure", *Journal of Financial Economics*, vol 3 no.4 pp 305- 360
- Jensen, M.C. (1993). 'The Modern Industrial Revolution, Exit, and the Failure of Internal Control Systems' *Journal of Finance*, 48, vol. 3, 831-880.
- Kajananthan, R. (2012). Effect of corporate governance on firm performance in listed banks, Sri Lanka.
- Kiel, G. C. and Nicholson, G. J. (2003). 'Boards that Work: A New Guide for Directors' Sydney: McGraw Hill
- Konishi, M & Yasuda, Y. (2004). 'Factors affecting bank risk taking: Evidence from Japan', *Journal of Banking & Finance*, no. 28 pp. 215–232.

- Kyereboah-Coleman, A. (2007). 'Corporate governance and firm performance in Africa: A dynamic panel data analysis. Accessed on April 20, 2017. Retrieved from [http://www.ifc.org/ifcext/cgf.nsf/AttachmentsByTitle/PS2.3/\\$FILE/Kyerebah-Coleman-Corporate-Governance.pdf](http://www.ifc.org/ifcext/cgf.nsf/AttachmentsByTitle/PS2.3/$FILE/Kyerebah-Coleman-Corporate-Governance.pdf)
- Lawal, B. (2012). Board dynamics and corporate performance: review of literature, and empirical challenges. *International Journal of Economics and Finance*, 4(1), 22-35.
- Levine, R. (1997). Financial development and economic growth: Views and agenda. *Journal of Economic Literature*, 35(2), 688-726.
- Levine, R. (2003/4). The Corporate Governance of Banks: A Concise Discussion of Concepts and Evidence. World Bank Policy Research Working Paper 3404
- Lipton, M., & Lorsch, J. (1992). A Modest Proposal for Improved Corporate Governance. *Business Law Review*, 48, 59-77.
- Marczyk, D., Matteo, D. and Festinger, D. (2005). Essentials of research design and methodology. New Jersey: John Wiley & Sons, Inc.
- Marte, O.K. (2010). 'The impact of board structure on corporate financial performance in Nigeria', *International journal of business and management*, Volume 5, no.10, pp.155-166
- Micah, C., Geoffrey, B., Garratt, B. (2000). Corporate Governance In The Financial Sector, Commonwealth Working Group.
- Mohammed, F. (2011). Impact of Corporate Governance On Banking Sector Performance In Nigeria. Fountain University, Osogbo, Osun State, Nigeria
- Mohsen, A. (2016). The Effects of Corporate Governance on Bank Performance: Evidence from the Arabian Peninsula. Putra Business School, University Putra Malaysia
- Ms.S.Danoshana, and Ms.T.Ravivathani. (2013). The impact of the corporate governance on firm performance: A study on financial institutions in Sri Lanka. *Merit Research Journals*, pp. 118-121
- Muhammad, A. (2016). Impact of Corporate Governance on Firm's Financial Performance (A Comparative Study of Developed and Non Developed Markets), The University of the Punjab, Lahore, Pakistan
- Mulugeta, W. (2010). The Structure and Development of Ethiopia's Financial Sector.

- Andhra University. Available at <http://www.scribd.com/doc/44211421/The-Structure-and-Development-of-Ethiopia's-Financial-Sector> [Accessed 20 May 2017].
- Muni, A. (2013). Corporate governance and firms' financial performance. *Journal of Academic and Business Ethics*
- National Bank of Ethiopia. (2015). Corporate Governance Directive. SBB/62/2015 Addis Ababa
- Nicholson, J.G. & Geoffrey K.C. (2003). 'Board composition and corporate performance: how the Australian experience informs contrasting theories of corporate governance', *An International Review*, vol. 11, no. 3, pp. 185-205.
- OECD. (1999). 'OECD Principles of Corporate Governance', 1st Edition, Organization for Economic Co-operation and Development (OECD), Paris, France.
- Olayinka Marte, O.U., 'The impact of board structure on corporate financial performance in Nigeria', *International journal of business and management*, Volume 5, no.10, pp.155-166
- Olubukunola, R.U. (2011). 'Corporate governance and financial performance of banks: A study of listed banks in Nigeria', Covenant University, Ota, Ogun state
- Pfeffer, J. (1972). 'Size and Composition of Corporate Boards of Directors: The Organization and its Environment', *Administrative Science Quarterly*, Vol. 17, pp 218-229.
- Rajendran, K. (2012). effect of corporate governance on firm performance in listed banks, Sri Lanka
- Ramano, G., Ferretti, P. & Quirici, M. C. (2012). Corporate Governance and Efficiency of Italian Bank Holding Companies during the financial crisis: an empirical analysis
- Ruigrok, W., Peck, S., and Keller, H. (2006). 'Board Characteristics and Involvement in Strategic Decision Making: Evidence from Swiss Companies', *Journal of Management Studies*, Vol. 43 no.5, pp 1201-1226
- Sanda, A.U, A.S Mukaila, & T. Garba. (2003). 'Corporate Governance Mechanisms and Firm Financial Performance in Nigeria, Final Report Presented to the Biannual Research Workshop of the AERC, Nairobi, Kenya, 24-29
- Shungu, P., Ngirande, H. and Ndlovu, G. (2014). Impact of Corporate Governance on the Performance of Commercial Banks in Zimbabwe. MCSER Publishing, Rome-Italy,

- Sierra, G., Talmor, E., & Wallace, J. (2006). Examination of multiple governance forces within banking holding companies. *Journal of Financial Services, 29(2), 105-123.*
- Smallman, C. (2004). 'Exploring Theoretical Paradigm in Corporate Governance' *International Journal of Business Governance and Ethics, vol.1 no.1 pp78-94.*
- Stepanova,A. and Ivantsova,O. (2012). Role of Corporate Governance in Banking Sector: Evidence from All Over the World
- Sunday, O.K. (2008). 'Corporate Governance and Firm Performance: The Case of Nigerian Listed Firms', *European Journal of Economics, Finance and Administrative Sciences, Issue 14, pp.16-28.*
- Tandelilin, E, Kaaro, H, Mahadwartha, PA, & Supriyatna (2007). 'Corporate governance, risk management, and bank performance: Does type of ownership matter?', EDAN Working Paper, no. 34 (2007).
- Uadiale, M. (2010). The Impact of Board Structure on Corporate Financial Performance in Nigeria. *International Journal of Business and Management, 5(10), 155-166.*
- Vafeas, N. (1999). "Board meetings frequency and firm performance". *Journal of Financial Economics, 53, 113- 142.*
- Van den Berghe, L. A. A. &Levrau, A. (2004). 'Evaluating boards of directors: What constitutes a good corporate board? Corporate Governance', *An International Review, vol.12 pp 461-478.*
- Vo, D. and Phant,T. (2013). Corporate Governance and Firm Performance; Empirical Evidence from Vietnam, Economic Regulation Authority, Pert, Australia
- Waddock, S. and Graves, S. (1997). 'The Corporate Social Performance-Financial Performance Link', *Strategic Management Journal, Vol. 18 no.4, pp 303-319.*
- Walt, N.V., and Ingley, C. (2003). Board Dynamics and the Influence of Professional Background, Gender and Diversity of Directors, *Corporate Governance: An International Review, 11, 218-234*
- Yakasai, G. A. (2001). Corporate governance in third world country. With particular reference to Nigeria. *Corporate governance, 9(3), 238-253.*
- Yammeesri, J. & Herath, S. (2010). Board characteristics and corporate value: evidence from Thailand. *Emerald Group Publishing Limited, 10(3), 279-292*

Yermack D. 1996. 'Higher Market Valuation of Companies with a Small Board of Directors', *Journal of Financial Economics*, VOL. 40, PP.185-211.

Zegeye,B. (2015). The impact of corporate Governance on Microfinance Institutions Financial Performance in Ethiopia

List of Tables

Table 3.1 Summary for Terms of Measurement

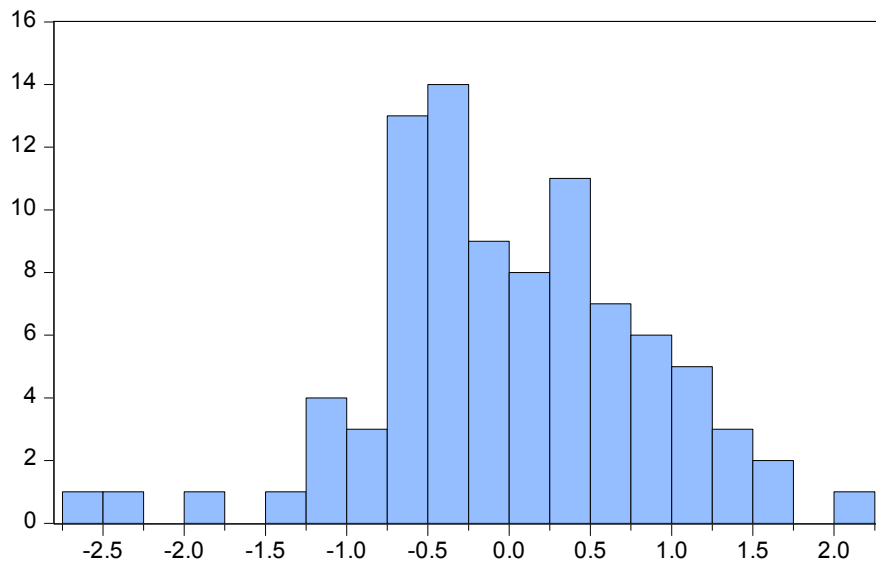
| Variables | Description | Measures | Expected Sign |
|-----------|--------------------------------------|--|---------------|
| ROA | Return on Asset | Amount of profit after tax as a percentage of total asset | |
| BSZ | Board Size | Number of board member in a bank | - |
| BSC | Availability of board Sub-committees | Number of sub-committees serving on the board | + |
| MFB | Meeting Frequency of Board | Number of meeting or how much time board meets on a year during the period | - |
| CAR | Capital Adequacy Ratio | Total Capital/risk weighted asset | + |
| BZ | Bank Size | LnTotal Asset | + |

Table 4.1 Heteroskedasticity Test

Breusch-Pagan-Godfrey

| | | | |
|---------------------|----------|---------------------|--------|
| F-statistic | 1.917238 | Prob. F(6,83) | 0.0875 |
| Obs*R-squared | 10.95525 | Prob. Chi-Square(6) | 0.0898 |
| Scaled explained SS | 12.69213 | Prob. Chi-Square(6) | 0.0682 |

Table 4.2 Test for normality



| | |
|-------------------|-----------|
| Series: Residuals | |
| Sample 1 91 | |
| Observations 90 | |
| Mean | -9.87e-17 |
| Median | -0.132882 |
| Maximum | 2.230213 |
| Minimum | -2.555259 |
| Std. Dev. | 0.833572 |
| Skewness | -0.214405 |
| Kurtosis | 3.724402 |
| Jarque-Bera | 2.657385 |
| Probability | 0.264823 |

Table 4.3 Test for Autocorrelation

Breusch-Godfrey Serial Correlation LM Test:

| | | | |
|---------------|----------|----------------------|--------|
| F-statistic | 1.216035 | Prob. F(25,58) | 0.2655 |
| Obs*R-squared | 30.95081 | Prob. Chi-Square(25) | 0.1907 |

Table 4.4 Correlation matrix among independent variables

| | TDTA | MFB | LNCAR | LNBZ | BSZ | BSC |
|-------|------------|-----------|------------|------------|-----------|-----------|
| TDTA | 1.0000000 | | | | | |
| MFB | -0.1384234 | 1.0000000 | | | | |
| LNCAR | -0.5227574 | 0.1106790 | 1.0000000 | | | |
| LNBZ | 0.2538430 | 0.0108927 | -0.6199157 | 1.0000000 | | |
| BSZ | -0.2739874 | 0.4618047 | 0.2674579 | -0.1690820 | 1.0000000 | |
| BSC | -0.1036100 | 0.2573541 | -0.0391452 | 0.2958297 | 0.5784565 | 1.0000000 |

Table 4.5 Model Stability Test

CUSUM test

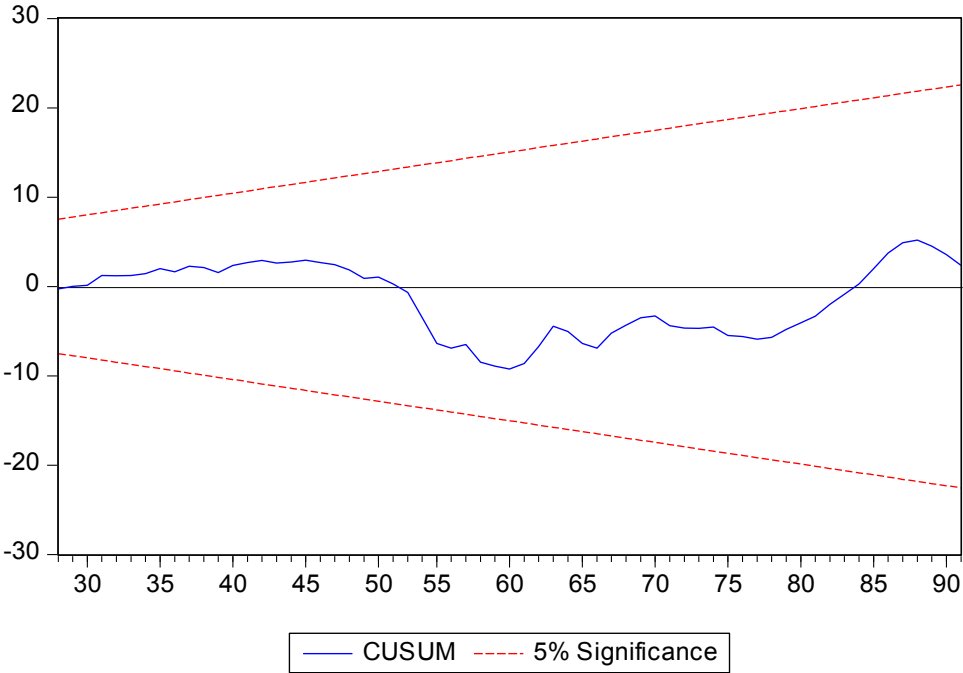


Table 4.6 Descriptive statistics results

| | ROA | TDTA | MFB | LNCAR | LNBZ | BSZ | BSC |
|--------------|---------|----------|----------|---------|----------|--------|--------|
| Mean | 2.883 | 0.747 | 26.511 | -2.175 | 8.567 | 9.78 | 2.73 |
| Median | 3.120 | 0.772 | 24 | -2.178 | 8.756 | 9 | 3 |
| Maximum | 4.951 | 0.884 | 62 | -0.141 | 10.260 | 12 | 5 |
| Minimum | -2.370 | 0.116 | 0 | -3.397 | 4.860 | 7 | 0 |
| Std. Dev. | 1.111 | 0.101 | 13.77 | 0.452 | 1.069 | 1.695 | 1.475 |
| Skewness | -2.160 | -3.176 | 0.88 | 1.085 | -0.924 | 0.045 | -0.611 |
| Kurtosis | 10.271 | 18.977 | 3.12 | 8.130 | 4.003 | 1.766 | 2.977 |
| | | | | | | | |
| Jarque-Bera | 268.237 | 1108.624 | 11.70701 | 116.380 | 16.57445 | 5.744 | 5.597 |
| Probability | 0 | 0 | 0.00287 | 0 | 0.000252 | 0.057 | 0.061 |
| | | | | | | | |
| Sum | 259.50 | 67.23 | 2386 | -195.8 | 771.00 | 880 | 246 |
| Sum Sq. Dev. | 109.86 | 0.90 | 16882.49 | 18.2 | 101.70 | 255.56 | 193.6 |
| | | | | | | | |
| Observations | 90 | 90 | 90 | 90 | 90 | 90 | 90 |

Table 4.7 Regression Result

Dependent Variable: ROA
 Method: Panel Least Squares
 Date: 06/02/17 Time: 11:04
 Sample: 2004 2016
 Periods included: 13
 Cross-sections included: 7
 Total panel (unbalanced) observations: 90

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| LNBZ | 0.497191 | 0.135067 | 3.681053 | 0.0004 |
| MFB | -0.007521 | 0.014630 | -0.514095 | 0.6087 |
| BSZ | -0.354064 | 0.174082 | -2.033895 | 0.0454 |
| TDTA | 4.612723 | 1.053076 | 4.380237 | 0.0000 |
| BSC | -0.211644 | 0.111083 | -1.905285 | 0.0605 |
| LNCAR | 0.186876 | 0.303894 | 0.614936 | 0.5404 |
| C | -0.175180 | 2.045803 | -0.085629 | 0.9320 |

Effects Specification

Cross-section fixed (dummy variables)

| | | | |
|--------------------|-----------|-----------------------|----------|
| R-squared | 0.583680 | Mean dependent var | 2.883331 |
| Adjusted R-squared | 0.518799 | S.D. dependent var | 1.111032 |
| S.E. of regression | 0.770708 | Akaike info criterion | 2.449870 |
| Sum squared resid | 45.73726 | Schwarz criterion | 2.810953 |
| Log likelihood | -97.24413 | Hannan-Quinn criter. | 2.595480 |
| F-statistic | 8.996158 | Durbin-Watson stat | 1.160062 |
| Prob(F-statistic) | 0.000000 | | |

Table 4.8. Summary of expected and actual relationships.

| Independent variable | Dependent variable | Expected relationship | Actual relationship | Significance at 1%, 5% or 10% |
|-------------------------|--------------------|-----------------------|---------------------|-------------------------------|
| Board size | ROA | Negative | Negative | Significant at 5% |
| Boards subcommittee | ROA | Positive | Negative | Significant at 10% |
| Board meeting frequency | ROA | Negative | Negative | Insignificant |
| CAR | ROA | Positive | Positive | Insignificant |
| Deposit Ratio | ROA | Positive | Positive | Significant at 1% |

Appendices

Unstructured questionnaire

Dear Respondent!

My name is Tadele Getahun. I am attending MBA in Finance at Addis Ababa University. I am conducting a research on the title “The Effect of *Corporate Governance on Performance on the Ethiopian Commercial Banks*” as a partial fulfillment of the requirements for the Masters of Business Administration, Addis Ababa University, College of Business and Economics.

This questionnaire is designed to collect data on Corporate Governance and its effect on Financial Performance of Ethiopian Commercial Banks. The data to be collected through the questionnaire is highly valuable to meet the objectives of this study. Therefore, you are kindly requested to fill in and return the questionnaire. The information you supply would be used for academic purpose only and will be kept confidential.

Thank you in advance for your cooperation!

Fill the number only for each period.

| No | Items | Fiscal Year in Gregorian Calendar | | | | | | | | | | | | |
|----|--|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| 1 | Total number of directors sitting on the board | | | | | | | | | | | | | |
| 2 | Total number of internal board committees | | | | | | | | | | | | | |
| 3 | How many times did the board had meetings? | | | | | | | | | | | | | |

Corporate Governance Variables (data Used for the research)

| YEAR | BANK | ROA | BSZ | BSC | MFB | BZ | CAR | TDTA |
|------|------|------|-----|-----|-----|-----------|------|------|
| 2004 | 1 | 2.6 | 9 | 3 | 0 | 1585 | 0.12 | 0.80 |
| 2005 | 1 | 3.35 | 9 | 3 | 35 | 2057 | 0.12 | 0.79 |
| 2006 | 1 | 3.48 | 9 | 3 | 42 | 2834 | 0.14 | 0.77 |
| 2007 | 1 | 2.15 | 9 | 3 | 49 | 3396 | 0.12 | 0.80 |
| 2008 | 1 | 0.38 | 9 | 3 | 47 | 4,269.94 | 0.10 | 0.81 |
| 2009 | 1 | 2.06 | 9 | 3 | 43 | 5,476.62 | 0.09 | 0.82 |
| 2010 | 1 | 2.39 | 9 | 3 | 40 | 6,279.54 | 0.09 | 0.82 |
| 2011 | 1 | 2.67 | 9 | 3 | 41 | 7,277.96 | 0.09 | 0.83 |
| 2012 | 1 | 2.79 | 9 | 3 | 32 | 8,239.51 | 0.11 | 0.82 |
| 2013 | 1 | 2.98 | 9 | 3 | 32 | 10,129.37 | 0.11 | 0.84 |
| 2014 | 1 | 2.53 | 9 | 3 | 27 | 11,276.39 | 0.06 | 0.82 |
| 2015 | 1 | 2.31 | 9 | 3 | 24 | 13,667.56 | 0.07 | 0.72 |
| 2016 | 1 | 2.49 | 9 | 3 | 22 | 16,828.07 | 0.07 | 0.65 |
| 2004 | 2 | 1.64 | 12 | 5 | 24 | 1770 | 0.09 | 0.84 |
| 2005 | 2 | 1.9 | 12 | 5 | 24 | 2226 | 0.10 | 0.87 |
| 2006 | 2 | 3.01 | 12 | 5 | 24 | 2954 | 0.10 | 0.87 |
| 2007 | 2 | 4.22 | 12 | 5 | 24 | 3830 | 0.11 | 0.81 |
| 2008 | 2 | 3.30 | 12 | 5 | 24 | 4,820.22 | 0.12 | 0.80 |
| 2009 | 2 | 2.54 | 12 | 5 | 24 | 6,422.55 | 0.12 | 0.77 |
| 2010 | 2 | 3.45 | 12 | 5 | 24 | 7,944.78 | 0.12 | 0.77 |
| 2011 | 2 | 3.99 | 12 | 5 | 24 | 10,115.78 | 0.13 | 0.77 |
| 2012 | 2 | 3.58 | 12 | 5 | 24 | 11,936.68 | 0.13 | 0.77 |
| 2013 | 2 | 3.79 | 12 | 5 | 24 | 14,858.82 | 0.14 | 0.84 |
| 2014 | 2 | 3.35 | 12 | 5 | 24 | 22,106.35 | 0.06 | 0.64 |
| 2015 | 2 | 2.75 | 12 | 5 | 24 | 24,763.89 | 0.07 | 0.64 |
| 2016 | 2 | 2.73 | 12 | 5 | 24 | 28,576.43 | 0.07 | 0.61 |
| 2004 | 3 | 2.4 | 7 | 0 | 24 | 2677 | 0.06 | 0.81 |
| 2005 | 3 | 2.33 | 7 | 0 | 24 | 3420 | 0.07 | 0.83 |
| 2006 | 3 | 3.34 | 7 | 0 | 24 | 4546 | 0.08 | 0.81 |
| 2007 | 3 | 3.53 | 7 | 0 | 24 | 6041 | 0.09 | 0.80 |
| 2008 | 3 | 3.45 | 7 | 3 | 24 | 7828.59 | 0.09 | 0.79 |
| 2009 | 3 | 2.85 | 7 | 3 | 24 | 9732.58 | 0.09 | 0.81 |
| 2010 | 3 | 2.93 | 7 | 3 | 24 | 12353.38 | 0.09 | 0.82 |
| 2011 | 3 | 3.34 | 7 | 3 | 24 | 14659.79 | 0.10 | 0.81 |
| 2012 | 3 | 4.05 | 7 | 3 | 24 | 17520.04 | 0.10 | 0.80 |
| 2013 | 3 | 3.26 | 7 | 3 | 24 | 19747.17 | 0.10 | 0.80 |
| 2014 | 3 | 3.42 | 9 | 3 | 24 | 21962.20 | 0.06 | 0.80 |
| 2015 | 3 | 3.12 | 9 | 3 | 24 | 24763.89 | 0.07 | 0.78 |

| | | | | | | | | |
|------|---|-------|----|---|----|----------|------|------|
| 2016 | 3 | 2.73 | 9 | 3 | 24 | 28576.43 | 0.07 | 0.73 |
| 2004 | 4 | 3.28 | 12 | 3 | 52 | 1247 | 0.14 | 0.67 |
| 2005 | 4 | 3.09 | 12 | 3 | 50 | 1732 | 0.13 | 0.71 |
| 2006 | 4 | 3.09 | 12 | 3 | 59 | 2027 | 0.14 | 0.72 |
| 2007 | 4 | 3.28 | 12 | 3 | 50 | 2607 | 0.16 | 0.72 |
| 2008 | 4 | 3.61 | 12 | 3 | 60 | 3650.11 | 0.16 | 0.68 |
| 2009 | 4 | 3.63 | 12 | 3 | 62 | 4806.50 | 0.15 | 0.69 |
| 2010 | 4 | 3.73 | 12 | 3 | 46 | 5970.51 | 0.15 | 0.69 |
| 2011 | 4 | 3.77 | 12 | 3 | 50 | 7111.52 | 0.16 | 0.73 |
| 2012 | 4 | 3.72 | 12 | 3 | 49 | 8275.70 | 0.18 | 0.71 |
| 2013 | 4 | 3.12 | 12 | 3 | 54 | 9144.54 | 0.18 | 0.73 |
| 2014 | 4 | 3.15 | 12 | 3 | 58 | 10747.28 | 0.11 | 0.68 |
| 2015 | 4 | 2.81 | 11 | 3 | 46 | 13256.12 | 0.12 | 0.60 |
| 2016 | 4 | 2.45 | 11 | 3 | 48 | 15830.32 | 0.11 | 0.55 |
| 2004 | 5 | 0 | 11 | 3 | 24 | 0 | 0.00 | 0.00 |
| 2005 | 5 | -1.71 | 11 | 3 | 24 | 129 | 0.87 | 0.12 |
| 2006 | 5 | -2.37 | 11 | 3 | 24 | 224 | 0.54 | 0.44 |
| 2007 | 5 | 0.74 | 11 | 3 | 24 | 424 | 0.31 | 0.65 |
| 2008 | 5 | 2.13 | 11 | 3 | 24 | 678.20 | 0.22 | 0.72 |
| 2009 | 5 | 0.28 | 11 | 3 | 24 | 1022.88 | 0.15 | 0.77 |
| 2010 | 5 | 1.80 | 11 | 3 | 24 | 1768.32 | 0.11 | 0.78 |
| 2011 | 5 | 2.21 | 11 | 3 | 24 | 2500.59 | 0.10 | 0.79 |
| 2012 | 5 | 3.31 | 11 | 3 | 24 | 3670.73 | 0.11 | 0.76 |
| 2013 | 5 | 4.01 | 9 | 3 | 24 | 6538.72 | 0.11 | 0.68 |
| 2014 | 5 | 4.95 | 9 | 3 | 24 | 7350.37 | 0.03 | 0.83 |
| 2015 | 5 | 2.49 | 11 | 3 | 24 | 11462.07 | 0.04 | 0.68 |
| 2016 | 5 | 2.65 | 11 | 3 | 24 | 10687.35 | 0.07 | 0.88 |
| 2004 | 6 | 1.22 | 9 | 0 | 13 | 674 | 0.14 | 0.79 |
| 2005 | 6 | 3.55 | 8 | 0 | 12 | 1073 | 0.12 | 0.81 |
| 2006 | 6 | 3.29 | 9 | 0 | 14 | 1599 | 0.12 | 0.76 |
| 2007 | 6 | 3.38 | 9 | 0 | 18 | 2182.5 | 0.16 | 0.71 |
| 2008 | 6 | 3.35 | 9 | 0 | 17 | 3249.96 | 0.14 | 0.75 |
| 2009 | 6 | 2.37 | 9 | 0 | 18 | 4651.70 | 0.11 | 0.78 |
| 2010 | 6 | 3.31 | 9 | 0 | 15 | 5896.23 | 0.11 | 0.80 |
| 2011 | 6 | 3.40 | 8 | 0 | 12 | 7725.62 | 0.12 | 0.79 |
| 2012 | 6 | 3.61 | 8 | 0 | 16 | 8786.86 | 0.13 | 0.77 |
| 2013 | 6 | 2.28 | 9 | 3 | 15 | 9977.67 | 0.12 | 0.81 |
| 2014 | 6 | 2.55 | 8 | 3 | 12 | 11876.37 | 0.08 | 0.74 |
| 2015 | 6 | 2.14 | 8 | 3 | 13 | 14360.87 | 0.08 | 0.66 |
| 2016 | 6 | 2.14 | 8 | 4 | 14 | 17269.87 | 0.07 | 0.59 |
| 2004 | 7 | 3.15 | 9 | 0 | 8 | 1140 | 0.11 | 0.77 |

| | | | | | | | | |
|------|---|------|---|---|----|----------|------|------|
| 2005 | 7 | 3.48 | 9 | 0 | 12 | 1616 | 0.11 | 0.80 |
| 2006 | 7 | 3.66 | 9 | 0 | 9 | 2259 | 0.11 | 0.79 |
| 2007 | 7 | 3.9 | 9 | 2 | 8 | 3480 | 0.12 | 0.78 |
| 2008 | 7 | 3.65 | 9 | 2 | 13 | 4124.89 | 0.15 | 0.72 |
| 2009 | 7 | 3.91 | 9 | 2 | 8 | 5118.31 | 0.16 | 0.73 |
| 2010 | 7 | 4.11 | 9 | 3 | 17 | 5741.93 | 0.18 | 0.68 |
| 2011 | 7 | 4.68 | 9 | 3 | 19 | 8061.05 | 0.17 | 0.74 |
| 2012 | 7 | 4.10 | 9 | 3 | 20 | 8347.15 | 0.19 | 0.69 |
| 2013 | 7 | 3.66 | 9 | 3 | 8 | 10393.80 | 0.18 | 0.73 |
| 2014 | 7 | 2.91 | 9 | 3 | 25 | 11528.77 | 0.12 | 0.80 |
| 2015 | 7 | 2.79 | 9 | 3 | 8 | 13711.37 | 0.12 | 0.80 |
| 2016 | 7 | 2.51 | 9 | 3 | 12 | 16189.76 | 0.11 | 0.78 |

List of Private Commercial Banks

Awash International Bank

Bank of Abyssinia

Dashen Bank SC.

Cooperative Bank of Oromia

NIB International Bank

United Bank

Wogagen Bank