

Corporate Governance Mechanism: Impact on performance of Ethiopian commercial banks

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Declaration

I, Kibrysfaw Getahun, declare that this thesis entitled *“Corporate Governance Mechanism: Impact on performance of Ethiopian 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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Statement of Certification

This is to certify that thesis entitled, *“Corporate Governance Mechanism: Impact on performance of Ethiopian commercial banks”*, undertaken by Kibrysfaw 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.

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Abstract

Numerous studies have looked at the implications of corporate governance mechanism on company performance although the literature is not unanimous in its conclusions. The aim of this research is to analyze the effect of different corporate governance mechanisms , particularly board structure, different regulations, ownership structure and depositors influence, on the performance of nine commercial banks of Ethiopia, covering the period of 2005-2012. The study adopts quantitative method research approach by combining documentary analysis and administering simple questionnaire. The findings of the study shows that proportion of non-executive from board characteristics variable, CAR and reserve requirement from regulation proxies had negative and significant impact on the performance of Ethiopian commercial banks. On the other hand concentrated ownership, deposit ratio and availability of audit committee had a positive and significant impact on banks performance. However, the impact of the remaining variables like board size, board ownership, and liquidity on bank performance is negligible. The study suggests that the directive which regulates banks to have fully non-executive directors need to be modified. Furthermore, by reducing the type and ratio of reserve and liquidity requirement and by devising different mechanism, like establishing deposit insurance, NBE need to encourage banks to decrease their money holdings without the potential of any earning but with interest expense. In addition to this, there need to have directive which can enforce the disclosure of different relevant information like: share register, financial reports and the rating of each bank by NBE to different stakeholders and NBE need to assure the execution of these directives by different banks.

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“..... The king did that because God was kind to me” Nehemiah 2:8

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List of Abbreviation

AC	Audit committee
BJ	Bera-Jareque
BOH	Board holding
BZ	Board size
CAR	Capital adequacy ratio
CEO	Chief Executive Officer
CLRM	Classical Linear Regression Model
D-W	Durbin Waston
FDRE	Federal Democratic Republic of Ethiopia
ISHH	Influential share holders holding
LIQ	Liquidity
NBE	National bank of Ethiopia
OECD	Organization for Economic Co-operation and Development
OLS	Ordinary List Square
RES	reserve
ROA	Return on Asset
ROE	Return on Equity
TDTA	Total deposit to total asset ratio
USAID	United States Agency for International Development

Chapter One Introduction

1.1 Background of the Study

It is revealed that a long standing debate about the original need for corporate governance centers on whether it stands to protect the interest of shareholder or the interest of stakeholder, (Langtry 1994). Under the shareholder (agency) theory corporate governance is a structure created between owners and managers to ensure that management runs the company in the best interest of the owners. Many advocators of this theory define corporate governance as a mechanism through which shareholders are assured that managers will act in their own interest. To mention some, Mayer (1997) defined it as “ways of bringing the interests of investors and managers into line and ensuring that firms run for the benefits of investors”. Such interests will be harmonized by a structure created between owners and managers called board of directors whose function is to ensure that management runs the company in the best interest of the owners. Similarly, LaPorta, et al. (2000) defined corporate governance as a set of mechanisms through which outside investors protects themselves against expropriation by insiders, (i.e. the managers and controlling shareholders).

Many investors (shareholders) lack the time and expertise necessary to operate a firm and insure that it provides investment return. As a result they hire managers and delegate decision making rights to management expecting managers to act in the best interests of shareholders, (Jensen & Meckling 1976). Agency problem arises when the agents (managers) engaged in activities which maximize their interest at the expense of shareholders interest, (Jensen & Meckling 1976).

Therefore, according to agency theory, instituting good corporate governance is primarily aimed at minimizing the potential loss of shareholders; due to conflict of interest between shareholders and management. As a primary means of reducing this conflict of interest, the shareholders of corporation elect and appoint members of board of directors in order to monitor the actions of management and make strategic decisions about the corporation on behalf of the shareholders.

On the other side, definition by scholars like, Huse (2007) is wider and embraces the stakeholders' concept where by corporations are managed for the interest of many stakeholders (owners being only one stakeholder group). According to them in the same way that a business owes special and particular duties to its investors, it also has different duties to the various stakeholder groups. The firm and its managers have special obligations to ensure that the shareholders receive a fair return on their investment; but the firm also has special obligations to other stakeholders, which go above and beyond those required by law. In cases where these interests conflict, the demands and interests of some stakeholders, including shareholders, must be moderated or sacrificed in order to fulfill basic obligations to other stakeholders, (Freeman 1984). It is the doctrine that businesses should be run not for the financial benefit of their owners only, but for the benefit of all their stakeholders.

It is an essential tenet of stakeholder theory that organizations are accountable to all their stakeholders, and that the proper objective of management is to balance stakeholders' competing interests. According to advocators of stakeholder theory, corporate governance refers to the processes and structures by which the business and affairs of institutions are directed and managed, in order to improve long term shareholders' value by enhancing corporate performance and accountability, while taking into account the interest of other stakeholders, (Jenkinson & Mayer 1992)

A stakeholder in an organization is (by definition) any group or individual who can affect or is affected by the achievement of the organization's objectives. Each of these stakeholder groups has a right not to be treated as a means to some end, and therefore must participate in determining the future direction of the firm in which they have a stake, (Sumanjeet 2010).

According to Harissonetal (2010), some of the advantages of applying stakeholder theory in management of organization are: first of all, mutually beneficial stakeholder relationships can enhance the wealth-creating capacity of the corporation, while failure to do so limit capacity for future wealth generation. Secondly it helps the corporation to have greater organizational flexibility. The third advantage is that it motivates managers to draw together stakeholders in efficient manner to achieve financial objectives. Fourthly, it facilitates the formation of alliances, long-term contracts and joint ventures. The other advantage according to the author is that it serves as a source of competitive advantage as the firm is presented with a larger number of better business opportunities from which to select. And lastly it creates trust from stakeholders and this increased trust leads to fewer transactions costs by reducing the resources needed to create and enforce contracts and by eliminating the need for elaborate safeguards and contingencies that require detailed monitoring.

Similarly The Basel Committee (Basel 2006) defines bank governance as follows:

"From the point of view of the banking industry, corporate governance involves the way banking institutions' business and affairs are managed by the board of administration and the top management, which affects how the bank works out the bank's objectives, plans and policies, taking into consideration making appropriate economic returns for founders and other shareholders, day-to-day work

management, protection of the rights and interests of recognized stakeholders (shareholders and depositors), companies' commitment to sound and safe professional behaviors and practices which are in conformity with regulations and legislations”.

The bank corporate governance process is a complex framework. This governance framework encompasses bank's stockholders, depositors, managers and other employees, and board of directors. Banks further operate under a unique system of public oversight in the form of bank supervisors and a comprehensive body of banking laws and regulations. The interaction between all of these elements determines how well the performance of a bank will satisfy the desires of its stockholders, while also complying with public objectives.

According to Macey and O'Hara (2001) in banking sector, there are unusual agency problems. The conflict areas involve more than two parties simultaneously. Since most suppliers of funds in banking sector are investors who have only small portions in the bank, such as individuals and institutional depositors, it increases shareholders' incentives to maximize their utilities by exploiting other suppliers of funds. These disbursed suppliers of fund have no enough power to monitor and control the managers and owners in operating the bank. Such information is incommunicable and very costly to reveal, implying that a bank's loan portfolio is highly fungible. A further issue is that the interests of bank shareholders may oppose those of governmental regulators, who have their own agendas, which may not necessarily coincide with maximizing bank value, (Boot and Thakor, 1993). Because of the unique nature of the banking industry, it requires that a broad view of corporate governance.

Therefore, the current study included board of directors, shareholders, depositors and government regulation as a main constituent of corporate governance mechanism and tried to test their impact on the performance of commercial banks.

1.2 Statement of the problem

In the middle of 2007 world economy faced the worst financial crisis, according to leading economists, since the Great Depression of 1930. Failure of key businesses, decline in economic activity, bank solvency, decline in consumer wealth, losses on the global stock markets and bailouts are some of the effects of this credit crunch globally. Specifically, the banking sector had to confront major issues caused by the over extension to credit. According to Sundry (2008), this financial crisis can be viewed as a potential breakdown of corporate governance suggesting that board members failed to understand and respond to the financial risks appropriately.

But corporate governance is not only connected with the crisis. Looking a few years back there are a lot of corporate scandals, such as Barings Bank, Enron and WorldCom that showed governance weaknesses due to inappropriate and ineffective control mechanisms (Vadiale, 2010). In case of WorldCom, which was the second largest long-distance telephone company in United States, Ethics Institute of South Africa (2008) reported that the total losses resulting due to fraudulent behavior by its executives were around \$11 billion. As a result, the Company filed for bankruptcy and was forced to sell off most of its peripheral business units and cut 17,000 jobs. This resulted mainly from inadequate board oversight function, and failure of responsible persons within the company to fulfill their fiduciary obligations to shareholders, (Vadiale, 2010).

Since financial institutions; especially, banks are generally more exposed to information asymmetry between insiders (bank managers) and outsiders (shareholders and depositors) compared with non-financial institutions, are characterized by the considerable opacity of their assets and activities, are subject to a large set of statutes and regulations, financial structure is quite different from that of other institutions and since they face the case of liquidity commitments (short-term liabilities in the form of on-demand deposits) corresponding to non-liquid assets (long-term assets such as real-estate loans), it requires the need to dedicate special studies to them, especially to their governance, (Jonathan and Maureen 2003). According to King & Levine (1993), the following three reasons magnify the importance of corporate governance of banks in developing countries: First, Banks have an overwhelmingly dominant position in the financial system of a developing economy and are extremely important engines of economic growth. Second, as financial markets are usually underdeveloped, even non-existing in some of them, banks in developing economies are typically the most important source of finance for majority of firms and serve as a vehicle for a government to implement its monetary policy. Lastly, in addition to providing generally accepted means of payment, banks in developing countries are usually the main depository for the economy's savings.

In the study entitled "Policy Brief on Corporate Governance", OECD adds the following reasons for the difference between banking governance and corporate governance in non-financial sectors, (Alkhalidi 2008): First, the banking governance structure's weakness leads to the destabilization of the financial system and bringing in more risks for the national economy, because banks determine the end-users of financial resources (loans) and provision of payment means.

Second, Banks are often more exposed to accountability by depositors and creditors for the purpose of avoiding expected risks from bank deposits management. Third, Banks/creditors enjoy the protection measures provided by government sponsored safety nets such as insurance programs on deposits and liquidity reserves. Lastly, Banks are subject to numerous systems and prudential regulations, which are important and crucial element in securing sound and healthy banking governance. Due to all the aforementioned reasons the corporate governance of banking sector needs special focus and dedicated special studies

As a result of the aforementioned corporate scandals and failures in the world and the special importance of banks, corporate governance of banks have been a growing area of enquiry and debate, and produced relatively large body of knowledge. Babatunde and Olaniran (2009) stated that despite the fact that previous empirical studies have provided the link between corporate governance and firm performance, there is still no consensus on the impact of corporate governance on firm performance. Hence further research is needed to get better understanding of the impact of corporate governance on firm performance.

According to Fekadu (2010), since 2005, selling shares to the large number of public through initial public offering is highly expanded and thereby started creating bigger shareholding base. However, according Kelifa (2012), absence of organized stock exchange market, high government intervention and involvement in business activities, lack of corporate governance awareness, lack of competence of board members, absence of nationally implemented standards for corporate governance, absence of nationally implemented accounting as well as auditing standard & weak legal framework to protect minority shareholder rights, hampers the current practice of corporate governance mechanisms in Ethiopia. Consistent with this, USAID (2007)

recommended establishing a program on corporate governance which would provide training and education on corporate governance and protection of investors in Ethiopia.

Prior studies conducted in the area of corporate governance in Ethiopia are very few. Study conducted by Fekadu (2010), analyzed the ownership structure of corporations in the country and tried to expose the weaknesses of the Commercial Code in protecting minority shareholder rights. Habtamu (2012), studied the relationship between internal corporate governance structure and bank performance. He used only board of director characteristics as proxy for corporate governance. And study by Kelifa (2012), analyzed the impact of Corporate Governance Mechanisms on Performance of Commercial Banks in Ethiopia. On his part, he tested the relationship between some corporate governance proxies and performance of commercial banks.

Most of the studies used the agency theory as a model to their research. According to agency theory, the central need to cooperate governance is to protect the interest of shareholders only. The problem with this model is that it did not fit in to banking industry. The problem of agency becomes steeper within the banking industry. Thus, banking governance systems may rest on some fundamentals, namely: regulations, external mechanisms and internal mechanisms.

According to Macey and O'Hara (2001) in banking sector, there are unusual agency problems. The conflict areas involve more than two parties simultaneously. Most suppliers of funds in banking sector are dispersed depositors who have only small portions in the bank. This condition increases shareholders' incentives to maximize their utilities by exploiting other suppliers of funds. They have no enough power to monitor and control the managers and owners in operating the bank. Further issue is that the interests of bank shareholders may oppose those of governmental regulators,

who have their own agendas, which may not necessarily coincide with maximizing bank value, (Boot and Thakor, 1993). Shareholders may want managers to take more risk than is socially optimal, whereas regulators have a preference for managers to take substantially less risk due to their concerns about system wide financial stability. Shareholders could motivate such risk-taking using incentive-compatible Compensation schemes. However, from the regulators point of view, managers' compensation schemes should be structured so as to discourage banks from becoming too risky. In this state of nature, external market for corporate control potentially fails to discipline the managers and owners of banks.

In the market failure context, agency theory has lacked the clarity to overcome the agency problems. For these reasons the current investigation believes the corporate governance mechanism of banks should be extended to include these constituents. To the best of my knowledge, there are no such studies conducted in Ethiopia which includes board of director, regulator, shareholder and depositor as corporate governance variables and the current study tried to fill the knowledge gap by analyzing the impact of aforementioned governance mechanism on the performance of commercial banks of Ethiopia.

1.3 Objectives of the study

The general objective of the study is to examine how corporate governance mechanism of bank affects their performance. Specifically the study addresses the following objectives:

- ➔ Assessing the impact of board of director structure on the performance of banks.
- ➔ Assessing the impact of regulation on the performance of banks.

- ➔ Assessing the impact of depositor on the performance of banks.
- ➔ Assessing the impact of having dominant shareholders on the performance of banks.

1.4 Scope and Limitation of the Study

There are a number of corporate stakeholders that probably influence the performance of banks. But the current study focused on some prominent stakeholders of banks to see their impact on performance. This includes: board structure, regulation, depositor and shareholder by controlling size and income diversification of the banks. In addition, the study covered only the commercial banking industry which consists of government and private banks. The study period is for 8 years, ranging from 2005 to 2012.

One of the limitations was that this study relied on accounting based return, return on asset (ROA), to measure bank financial performance because of lack of secondary market to use market based returns. Adusie (2011) highlighted some of the problems associated with financial accounting reports. These reports suffered from the following defects such as subjection to manipulation, systematically undervaluation of assets, and create distortions due to the nature of depreciation policies adopted, inventory valuation, treatment of certain revenue and expenditure items. In addition to that, the samples are not selected by employing random sampling technique. Simply they are selected based on availability of data from 2005-2012.

1.5 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 as a result of scandals and failure and because of the importance of banks for the financial health of the

country, 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 so as to identify the impact of corporate governance mechanism on bank performance. The impact of board structure, different regulations set by regulators, depositor, and dominant shareholders on bank performance are some of these valuable inputs to sound corporate governance. Furthermore, this study will contribute to practitioners by providing proper responses to the questions such as: to what extent the regulation set by government can enhance financial institutions' performance?, how the performance of banks can be affected by depositors and shareholders reaction?. Finally, the results of this study will motivate potential researchers and lay foundation for further study on the field of business, economics and law.

1.6 Structure of the paper

This paper is organized into six chapters. Chapter one presents introductions of the study. Chapter two presents the literature review part. Chapter three presents the research methodology part. Chapter four presents the results from descriptive statistics, correlation and regression analysis. Chapter five presents the analysis and discussion of the study and finally, chapter six presents the conclusions and recommendations.

Chapter Two Literature Review

2.1.1 Theories of Corporate Governance

Before looking at the relationship between corporate governance and firm performance, it is useful to have a framework with which to understand how corporate governance can affect firm behavior and economic performance. One of the problems with the current debate on corporate governance is that there are many, different and often conflicting views on the nature and purpose of the firm. These different views of corporate governance are emanated from using different corporate governance theories.

The literature reveals a very wide range of theories, but the four most frequently used theories in different studies are agency theory, stakeholder theory, stewardship theory, and resource dependency 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. But as to resource dependency theory corporate governance is a mechanism to interact the business organization with different resources in the environment. In contrary, stewardship theory advocates corporate governance mechanism as a means to support and advise the managers of the organization. Therefore, in order to make sense of this study, it is useful to consider the different analytical backgrounds or approaches that are often employed. Under this topic, the four dominant approaches to corporate governance are discussed.

2.1.1 Agency theory

With its roots in financial economics, agency theory was developed to address the conflicting relationship between owners and managers in large corporations. The underlying problem of corporate governance in this model stems from the principal-agent relationship arising from the separation of beneficial ownership and executive decision making. It is this separation that causes the firm's behavior to diverge from the profit maximizing goal.

This happens because the interests and objectives of the principal (the investors) and the agent (the managers) differ when there is a separation of ownership and control. Since the managers are not the owners of the firm they do not bear the full costs, or secure the full benefits, of their actions. Therefore, although investors are interested in maximizing shareholder value, managers may have other objectives such as maximizing their salaries, growth in market share, or an attachment to particular investment projects, (Jensen and Meckling, 1976).

The agency problem, therefore, is also an asymmetric information problem i.e. managers are better informed regarding what are the best alternative uses for the investors' funds. As a result, the manager ends up with substantial residual control rights and discretion to allocate funds as he or she chooses. There may be limits on this discretion specified in the contract, but the fact is that managers do have most of the residual control rights which can lead to problems of management entrenchment and rent extraction by managers, (Fama and Jensen, 1983).

According to agency theory, much of corporate governance deals with the limits on managers' discretion and accountability. Agency theorists typically take the maximization of shareholder wealth as the primary standard for evaluating corporate

performance and ask how the board can serve to further corporate performance. Abdullah and Valentine (2009) defined agency theory as “the relationship between the principals (shareholders) and agents (the company executives)”. The key determinant in agency theory is agency relationship. Jensen and Meckling (1976) defined agency relationship as “a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent". This is simply where one party (the principal) delegates work to another party (the agent).

According to this theory, the central need for corporate governance is to align the interest of agent and principal and then maximize the interest of shareholders. The main purpose of corporate governance should be protecting the interest of shareholders and the interest of other stakeholder can be protected by the invisible hand (market).

The agency theory model rejects external interventions and additional obligations imposed on corporations by government and central authorities because it may distort free market operations, (Hart 1995). It sees a firm’s existing governance arrangements as the outcome of a bargaining process, which has been freely entered into by corporate insiders and outsiders, (Keasey et al. 1997). More specifically, as a rational economic model, it assumes that factor markets (e.g., capital, managerial labor and corporate control) are efficient and subsequently self-regulation backed by additional voluntary mechanisms such as a voluntary corporate governance code are more effective in reducing divergent activities of managers, (Letza et al. 2004).

The rejection of external interventions by central regulatory authorities, but heavy reliance on free market regulation, is also based on a core premise that 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. In such a market, capital is assumed to freely move to investments that offer the highest risk-adjusted returns, (Friedman 1970). If there is efficient capital market, the shareholders can easily either transfer their capital from a poorly-governed company to a better-governed one or a poorly-governed company may be acquired by a better-governed firm. Similarly, and at least in theory, poorly performing managers can easily be fired and replaced with an efficient team, hence, providing the most effective restraints on managerial discretion,(Friedman, 1970).

2.1.2 Stakeholder theory

The stakeholder theorists argue that rather than running the firm to primarily maximize the wealth of shareholders, the firm should equally serve the interests of a wider stakeholder group. These may include employees, creditors, suppliers, customers and local communities that have long-term relationships with the firm and thus affect its long-term success, (Freeman and Reed 1983, Hummels, 1998). As a result, it has been contested that the agency theory model's exclusive emphasis on the powers and rights of shareholders results in the negligence of the interests of other legitimate stakeholders, (Blair 1995).

Unlike the shareholding model that encourages firms to exclusively advance the interests of shareholders, stakeholder suggests that companies should inclusively pursue the interests of a group of identifiable stakeholders who may either directly or indirectly be affected by or can affect the success of the firm. Like the shareholding model, however, it subscribes to the idea that the separation of ownership and control

in modern public corporations creates a governance problem, (Keasey et al. 1997). The theory also agrees with the shareholding model's assumption that the resulting agency conflicts may be reduced by the firm through a nexus of contracts between the various stakeholders of the firm, and that the firm should be run rationally in economic terms to broadly maximize its wealth, (Hill and Jones, 1992). By contrast, the theory rejects the assumption that shareholders and managers are the only important participants in such a relationship, (Blair, 1995).

Further, while it shares the assumption that markets can be efficient (Fama, 1970), it also recognizes the existence of short to medium-run market inefficiencies. This implies that there may be a need for occasional external interventions, including statutory legislations to establish equilibrium in order to maximize the broader societal wealth, (Hill and Jones, 1992).

2.1.3 Steward ship theory

According to Huse (2007), the core concept of stewardship theory is trust. Unlike agency and stakeholder theory, stewardship theory considers managers as good stewards who will act in the best interest of the owners. The steward's behavior is pro-organizational and collectivists, and has higher utility than individualistic self-serving behavior and the steward's behavior will not depart from the interest of the organization because the steward seeks to attain the objectives of the organization, (Davis et al. 1997).

According to stewardship corporate governance model, Managers are viewed as loyal to the company and interested in achieving high performance. The dominant motive, which directs managers to accomplish their job, is their desire to perform excellently. Specifically, managers are conceived as being motivated by a need to achieve, to gain

intrinsic satisfaction through successfully performing inherently challenging work, to exercise responsibility and authority, and thereby to gain recognition from peers and bosses than any financial motive. The stewardship theory holds that managers inherently seek to do a good job, maximize company profits and bring good returns to stockholders. They do not necessarily do this for their own financial interest, but because they have a strong affiliation to the firm.

The need for board of director according to stewardship theory is that to advise and support management rather than to discipline and monitor, a view which is entirely opposed to the agency theory. According to Smallman (2004), where shareholder wealth is maximized, the steward's utilities are maximized too, because organizational success will serve most requirements and the steward's will have a clear mission. Steward, who improves performance successfully, satisfies most stakeholder groups in an organization, when these groups have interests that are well served by increasing organizational wealth, (Davis et al.1997). In doing so, managers need the advisee and support of board. Therefore, according to this theory board of director play an advisory and supportive role instead of controlling the managerial opportunism.

Thus the focus of stewardship theory is on structures that facilitate and empower rather than monitor and control, (Davis et al.1997). Therefore, stewardship theory takes a more relaxed view of the separation of the role of chairman and chief executive officer (CEO), and supports appointment of a single person for the position of chairman and CEO and a majority of specialist executive directors rather than non-executive directors, (Clarke 2004).

2.1.4 Resource dependency theory

The basic proposition of resource dependence theory is the need for environmental linkages between the firm and outside resources. In this perspective, directors serve to connect the firm with external factors by inviting the resources needed to survive. Resource dependency theory describes organizational success as the ability to maximize power by accessing scarce and essential resources, (Pfeffer 1972). According to the same author, corporate boards can assist organizations in gaining access to important resources that might otherwise be beyond their reach.

This means that boards of directors are an important mechanism for absorbing critical elements of environmental uncertainty into the firm. Environmental linkages could reduce transaction costs associated with environmental interdependency and then increase the performance of the company. The justification by resource dependency theory for the creation of linkages between the firm and its external environment through boards is; firms that create linkages could improve their survival and performance. Boards are considered important boundary-spanners that secure necessary resources, such as knowledge, capital, and venture partnering arrangements, (Ruigork et al.2007). Diversity of corporate board members has been found to be an important element in this theory since it can lead to broader corporate networks and improve financial performance, (Waddock and Graves 1997).

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, (Andersson & Maher1999). But, in 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 particular 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).

The other bank character which is in conflict with agency theory assumption is that they are subject to tight regulation. According to Hart (1995), the agency theory model rejects external interventions and additional obligations imposed on corporations by government and central authorities because it may distort free market operations. But 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, (Rajan 2001). 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 regulation 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. Agency theory assumes efficient capital market. According to agency model by using the market, the stockholders can govern or put a restriction on the behavior of the manager as well as on the board. But in case of Ethiopia there is no such efficient capital market.

2.2 Empirical review and Hypothesis development

Corporate governance can take the form of mechanisms both internal and external to the company, (Gillan 2006). Management and its board of directors are internal corporate governance instruments. Management acts as an agent for shareholders by investing the firm's resources and by deciding how to finance additional investments. Boards of directors, in turn, are elected by shareholders to hire, monitor, and advise management in the interests of shareholders. In the conventional literature of corporate governance, the market is the only external governance force with the power to discipline the agent. The existence of regulation means there is an additional external force with the power to discipline the agent. This force is quite different than the market. This implies that the power of regulation has different

effects to those produced by markets. This study examined the relationship between both external and internal governance mechanism and bank performance.

2.2.1 Board characteristics and Bank performance

The board of directors is charged with oversight of management on behalf of shareholders. They are responsible for setting the strategic direction and overseeing the risk management policies of the bank. The members are appointed by the shareholders in order to control the activities of managers in the company. The board of directors, as internal mechanism of governance, has its key role in controlling managers. Their main responsibility is to endorse the organization's strategy, develop directional policy, appoint, supervise and remunerate senior executives and to ensure accountability of the organization to its shareholders, authorities and other stakeholders.

The relative effectiveness of corporate governance has a profound effect on how well a business performs. The issue of structure of the board of directors as a corporate governance mechanism has received considerable attention in recent years from academics, market participants, and regulators. It continues to receive attention because theory provides conflicting views as to the impact of board structure on the control and performance of firms, while at the same time the empirical evidence is inconclusive. Previous studies used board size (Lipton and Lorsch, 1992; Almanser, 2012; Hideaki and Noki, 2011), board composition (Ezzamel and Watson, 1993; Adams and Mehran, 2003; Baysinger and Butler, 1985 and Abu-Tabajeh, 2006), frequency of board meeting (Conger et al, 1998 and Andres and Vallelado, 2008) and availability of audit committee (Keyerebah-Coleman, 2007; Chin and Li, 2008 and Sunday, 2008) as board structure proxies and have examined the

effects of such factors on strategic decisions and organization performance. The current study used board size, board composition, board ownership and availability of audit committee as a proxy for board of director structure.

2.2.1.1 Board size and performance

According to Marte (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, Go odstein et al. (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 et al (2001), Jackling and Johl (2009), Dalton et al.(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 et al, 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

2.2.1.2 Composition of board and performance

Board composition refers to the number of independent non-executive directors on the board relative to the total size of directors. An independent non-executive director is

independent director who has no affiliation with the firm except for their directorship, (Clifford and Evans 1997). Theoretically, from an agency perspective as well as stakeholder side, it is claimed that a greater proportion of outside directors on board act to monitor independently in situation where conflict of interest between the shareholders and managers occurs, (Fama and Jensen 1983). According to Fama and Jensen (1983) non-executive directors can play an important role in decision making and controlling the activity of managers' thereby increasing financial performance.

However, the empirical studies have a mixed result. Companies with more independent directors tend to be more profitable than those with fewer independent directors, (You et al. 1986). In addition, firms that substantially increase the proportion of independent directors have above-average stock price returns, (Dennis and Sarin 1997). Ezzamel and Watson (1993), found that outside directors were positively associated with profitability among a sample of U.K. firms. Similarly, in examination of 266 U.S. corporations, Baysinger and Butler (1985) found that firms with more outside board members realized higher return on equity.

Conclusion has also been made by Adams and Mehran (2003) that increasing the level of the proportion of independent directors should simultaneously increase firm performance as they are more effective monitors of managers. Furthermore, Bouaziz & Mohamed (2012) identify significant and positive influence of independent directors on ROE of the firms. Another research by Almanseer (2012), reveals a positive relationship between a number of outside board members and Jordanian banks' performance. In the same way, Liang and Li (1999), identified a direct relationship between independent board members and return on investment. Cornett et al. (2008), Ravina and Sapienza (2009) also identifies a positive relationship between

number of outsiders on the board seat and performance. Abu-Tabajeh (2006), Sahinetal (2011), Pearce and Zahra (1992) and Rosenstein and Wyatt (1990) are other studies who asserted the positive impact of independent director on performance.

There were other views which are totally different from the above. Some researchers found that although the proportion of independent directors on the board is high, the level of board independence and professionalism is not necessarily good, (Chen et al. 2004). Baysinger and Hoskisson (1990) have suggested that the superiority of the amount and quality of inside directors' information may lead to more effective control of top managers. A research by Beveney (2009) finds significant negative impact of outside directors on corporate performance. Similarly By using Tobin's Q as a measure of performance Agrawal & Knober (1996), concludes the negative impact of greater representation of independent executives on performance. According to Klein (1998) and Yermack (1996) the relationship between the proportion of independent director and firm performance was found to be negative. In line with stakeholder and agency theory, for the current study the predicted hypothesis is stated as follows:

H2: Higher proportion of independent non-executive directors is positively and significantly related to bank performance

2.2.1.3 Audit committee and firm performance

Audit committee is another attributes of corporate governance structure so that it assists the board in fulfilling its oversight responsibilities by reviewing the financial information and internal control system, (Wawaru et al. 2008). According Keyereboah-coleman (2007), the availability of audit committee on the board has a positive impact on return on asset. Similarly Chin and li (2008) found significant and positive relationship between the existence of audit committee in the board and firm

performance. Furthermore, Klein (2002) found a negative relationship between earning manipulation and existence of audit committee in the board of directors. On the other hand, Sunday (2008) did not find significant relationship between availability of audit committee and bank performance. The current study proposed the following hypothesis regarding relationship of audit committee and bank performance:

H3: There is significant and positive relationship between existence of audit committee in the board and bank performance

2.2.1.4 Board Ownership and Bank performance.

Board Ownership is also an important characteristic of board structure. It reduces manager–shareholder conflicts in stock ownership by board members (both executive and non-executive). To the extent that executive board members own part of the firm, they develop shareholder-like interests and are less likely to engage in behavior that is detrimental to shareholder, (Uadiale 2010). Therefore, Board ownership is inversely related to agency conflicts between managers and shareholders. In contrast Demsetz and Lehn (1985) found no significant relationship between board ownership and firm performance and assert that there is little support for the divergence of interests between managers and shareholders. According to agency and stakeholder theory, as board ownership increases, the boards’ incentive to monitor the opportunistic and risk taking behavior of manager will be high and this enhances the performance of banks. Hence, the present study stated the following hypothesis:

H4: There is positive and significant relationship between board ownership and 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, legal reserve 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 domestic-owned-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.

H5: There is positive and significant relationship between CAR and bank Performances.

2.2.2.2 Legal reserve and bank performance

Other important external government policy to control excessive risk taking behavior of managers is the reserve ratio. Tandelilin et al. (2007), Kwee and Rasiah (2010) used this variable as corporate governance proxy. The cash reserve ratio is the minimum reserve that the central bank requires each bank to hold from the total deposit liabilities held by the banks. This serves two purposes. First, to be able to meet sudden and unexpected cash withdrawal demands of depositors, but more importantly, a rise in this ratio may be used to restrict the amount of loans that the banks can make. Second, the purpose of regulation is not only maximizing profit making but also protecting the whole public by minimizing the risk taking behavior of managers for example; Banks have to keep funds in their accounts at the Federal Reserve that pays no interest. A high cash reserve ratio (CRR) reduces the cash for

lending and a low CRR increases the funds for lending. A reduction in money supply affects the ability of banks to create new money through giving loans to their customers. Since extending loan is the main source of income for commercial banks and CRR do not earn any income for the banks, it drains on the profitability of bank. Accordingly, the hypothesis for the study regarding reserve ratio is stated as follows:

H6: There is significant and negative relationship between bank profitability and legal reserve.

2.2.2.3 Liquidity and bank performance.

Another regulation used by NBE to protect bank stakeholders is liquidity ratio. Through the financial inter-mediation role, the commercial banks reactivate the idle funds borrowed from the lenders by investing such funds in different classes of portfolios. Such business activity of the bank is not without problems since the deposits from these fund savers which have been invested by the banks for profit maximization, can be recalled or demanded when the later is not in position to meet their financial obligations. There are two conflicting views as to the impact of liquidity on bank performance. The first view is that liquidity has a positive impact on bank performance. According to this view, when a bank has adequate liquidity, it can obtain sufficient funds, either by increasing liabilities or by converting assets promptly, at a reasonable cost, thereby affecting profitability positively.

The second view is that since investment in liquid asset has relatively lower income than investment in illiquid assets, keeping more liquid asset affects the profitability negatively. Referring to previous empirical findings, the results concerning liquidity are mixed. Molyneux & Thornton (1992) and Guru et al. (2002) find a negative relationship between liquidity and bank profitability. In contrast, Pasiouras &

Kosmidou (2007) found a significant positive relationship between liquidity and bank Profit. And further more Olokoyo (2011) finds no significant relationship between bank liquidity and bank performance. The hypothesis for the study regarding liquidity is stated as follows:

H:7 There is significant and negative relationship between liquidity and bank performance.

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:

H8: There is Positive and significant relationship between deposit to asset ratio and bank performance.

2.2.4 Shareholder dominance and bank performance

Shareholders dominance refers to the proportion of a firm's shares owned by a given number of the largest shareholders. A high concentration of shares tends to create more pressure on managers to behave in ways that are value-maximizing. According to Jensen and Meckling (1976), the more ownership structure is dispersed, the more the agency costs are higher. This would mean that the presence of important shareholders is beneficial, because they tend to actively involve themselves in more tighter monitoring activities, which would result in a more efficient governance structure leading to an important value for shareholders.

In support of this argument, Shleifer and Vishny (1997), and Morck et al. (1988), found that an increase in concentration will be associated with an increase in firm value, but that is beyond a certain level of concentration, the relationship might be negative. Other studies such as Renneboog (2000) reported results not totally in agreement with the hypothesis of a positive relationship. The author reported no evidence to support the hypothesis of a positive relationship between firm performance and ownership concentration. Holderness and Sheehan (1988) found

little evidence that high ownership concentration directly affects performance. For the current study the hypothesis is stated as:

H9: Concentration in ownership has positive and significant impact on bank performance

2.3 Review of previous studies on Ethiopia

In the context of Ethiopia, to the best of my knowledge, there appears to be very limited number of research work on the assessment of the impact of corporate governance mechanism on bank profitability. These researches include studies by Fikadu (2010), Habtamu (2012) and Kelifa (2012). These studies examined emerging separation of ownership and control in Ethiopian share companies and its legal and policy implication, the relationship between corporate governance structure and financial performance of Ethiopian commercial banks and corporate governance mechanisms and their impact on performance of commercial banks in Ethiopia respectively. Thus, this particular section presents detailed review of these three related studies conducted in the context of Ethiopia.

Fikadu (2010), by referring different corporate governance theories; tried to identify the deficiency of commercial code of Ethiopia. According to him, the separation between ownership and control is growing in Ethiopia and submitted some empirical evidence in support of this claim. From the research he concluded that even if there is tight regulatory environment under Proclamation 592/2008 within which financial companies, especially banks operate, brings their managers and block holders under a strict control of the National Bank, that does not seem to be enough in protecting minority rights. Financial regulation, which is the objective of the National Bank, is

just one aspect of the governance and does not give sufficient solution to the problems minority investors face in these companies.

Study by Habtamu (2012), examined the impact of corporate governance on the performance of banks. The study applied panel data of ten Ethiopian commercial banks that covered for the period of 2004/05 to 2009/10. The paper used independent sample t-test and pooled OLS panel data regression models to investigate the impact of some internal corporate governance variables on major profitability indicator i.e., ROA and ROE. The estimation results showed that, board size, gender diversity in boardroom and CEO experience are found to have negative effect on the financial performance of banks measured using ROA and ROE. Audit committee and board meeting frequency are found to positively affect ROE, with no effect on ROA. Finally board composition is found to have no effect on both financial performance measures.

On the other hand, Kelifa (2012) examined the relationship between selected internal and external corporate governance mechanisms and bank performance as measured by ROE and ROA. The study used mixed methods approach, particularly structured review of documents and in depth interviews. By using a panel data of 9 banks for 7 year (from 2005 up to 2011) and OLS as analyzing technique, the result revealed that board size and existence of audit committee in the board had statistically significant negative effect on bank performance in terms of both ROE and ROA; whereas bank size had statistically significant positive effect on bank performance in terms of both ROE and ROA. Similarly, capital adequacy ratio, as a measure of external corporate governance mechanism; had statistically significant positive effect on bank performance. The remaining variables such as loan loss provision, loan to deposit

ratio, and ownership type did not have statistically significant effect on 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 impact 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 a highest coverage in Ghana, Nigeria and Egypt. 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 impact 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 impact 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 bard proxies and bank performance. The study

clearly failed to fill the knowledge gap that exists in the area as far as it considers only internal variables and ignores all the external variables of corporate governance. And moreover 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 like ownership structure, legal reserve, board ownership, board composition and liquidity. 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 impact of internal as well as external corporate governance mechanism 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 examine the impact of corporate governance mechanism on Ethiopian commercial banks and to fill the knowledge gap that exists in the area by considering board characteristics, regulation, ownership structure and depositors influence as governance proxy.

Chapter three Methodology

3.1 Population and Sample for the Study

According to official website of the NBE, Currently there are 20 commercial banks and one development bank operating in Ethiopia. However most of the banks, particularly private ones, are young. As a result; for the purpose of the study, the researcher selected nine banks which are both state and private banks. The selection is primarily based on purposive sampling technique in which it is based on the availability of data for the period 2005 to 2012. In addition, the use of banks in this study is primarily important because financial institutions play a key role in economic system as they greatly facilitate the efficient allocation of scarce capital resources.

3.2 Type of Data

This quantitative study was analyzed based on panel data, which is a combination of time-series and cross-sectional data. Gujarati (2004,; pp 637-38) highlighted some of the merits of panel data over cross-sectional or time-series data as follows:

“it explicitly accounts for unobservable and constant heterogeneity across individual units, that is, specific to each bank (management style, business strategy, etc.); it helps capture cross-sectional specific attributes and time-series properties of units; unlike time-series, panel data gives more informative data, more variability, more degrees of freedom, less collinearity among variables, and more efficiency; and it minimizes the bias caused from aggregation in pure time-series data”.

Consequently, this study will use panel data of 9 commercial banks for 8 years or 70 firm year data.

3.3 Data Source

The data was collected from both primary and secondary sources. Data for Board of director characteristics variables are obtained through administration of a simple questionnaire and the target groups for the questionnaire was bank's CEOs/Presidents or board secretaries. Ownership concentration proxy is collected through reviewing a register of share kept by each banks' share administration department. The annual reports of each sample bank for the period 2005 to 2011 is examined to compute performance, regulation and control variables.

3.4 Data analysis method

To test the relationships between the governance structure variables and performance of selected commercial banks the multiple linear regressions model is used, and thus OLS is conducted using EVIEWS 6 econometric software package. The descriptive statistics is used to analyze the means and standard deviations of regression variables and to check the governance practice trends. In addition, for the purpose of this study, diagnostic tests like: Test for Heteroscedasticity, Test for Autocorrelation, Test for normality and Test for Multicollinearity is performed to ensure whether the assumptions of the CLRM are violated or not in the model. This study used panel data framework for analyzing the data. Accordingly, the researcher employs the following panel data model;

$$ROA_{it} = \alpha + \beta_1 BZ_{it} + \beta_2 BC_{it} + \beta_3 AC_{it} + \beta_4 CAR_{it} + \beta_5 RES_{it} + \beta_6 TDTA_{it} + \beta_7 ISHH_{it} + \beta_8 BOH_{it} + \beta_9 LIQ_{it} + \beta_{10} BSZ_{it} + \beta_{11} ID + \epsilon$$

Where;

- ROA_{it} is measures of financial performance for bank i in time t
- α is the intercept of the models.
- BZ_{it} represents the sizes of board of directors for bank i in time t.
- BC_{it} represents the compositions of the board for bank i in time t.
- AC_{it} represents the presence of audit committee in a bank i in time t.
- CAR_{it} represents capital adequacy ratio of bank i in time t
- RES_{it} represents total reserve ratio kept by bank I in time t
- LTD_{it} represents loan to deposit ratio of bank I in time
- $ISHH_{it}$ represents the total holdings of influential shareholders in bank I time t
- BOH_{it} represents the total holdings of board members in bank I time T
- BSZ_{it} represents the size of bank.
- LI_{Qit} represents the ratios of liquid asset to total asset for bank i in time t.
- ID_{it} represents income diversification measured by the ratio of non-interest income to non- interest expense.
- β_i represents coefficient of corporate governance and control variables.
- ε is the error term

3.5 Variable definition and measurement

Corporate governance variables

- 1. The board of directors** The board of directors is the supreme governing body of bank. The board is responsible for setting the strategic direction of the bank and overseeing the risk management policies of the bank. The board of directors is appointed by the shareholders of the company. The board has the ultimate responsibility for the manner in which the operations/business of a bank is conducted. A board must be strong, independent and actively involved in the activities of a bank. For this study purpose the researcher used four proxies to measure board characteristics. These are:
 - A. Board size.** This is measured by the number of board members in each bank.
 - B. Board composition.** Board composition refers to the percentage of independent non-executive directors on the board relative to the total number of directors. An independent non-executive director is defined as an independent director who has no affiliation with the firm except for their directorship and is measured by the ratio of independent non-executive director from the total board members
 - C. Availability of audit committee.** Is one attribute of corporate governance and takes the value 1 when there is audit committee on the board, 0 otherwise
 - D. Board ownership.** Is measured in terms of the total percentage holding by board members.

2. Regulations. Bank regulation represents the existence of interests different from the private interests of the firm. As a governance force, regulation aims to serve the public interests, particularly the interests of the customers of the banking services. The regulator does not have a contractual relationship either with the firm's principal or with the banking organizations because of differing interests from those of the principals (Ciancanelli and Gonzales, 2000). The role of bank regulators and supervisors in the corporate governance process is mainly seen through the laws and legislations that are promulgated. Such laws pertain to capital adequacy requirements, reserve requirements and others. National Bank of Ethiopia (NBE) is the Major institution which regulates the corporate governance and operation of commercial banks in Ethiopia. It is stated in Proclamation no. 592/2008 of FDRE (2008) that, NBE is given the authority to regulate and supervise other banks in Ethiopia by issuing the necessary directives. One means of NBE's bank regulation is through the use of various financial ratios of individual banks. For this research purpose the researcher used three variables as a proxy for regulation. These are:

A. **Capital adequacy ratio.** Capital adequacy ratio (CAR) is capital divided by risk-weighted average assets. 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. Konishiand & 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:

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

B. **Legal reserve.** Another central bank regulation proxy which is used by this research is the total Reserve ratio. This ratio is calculated by dividing total reserve kept by each bank to their respective total asset.

C. **Liquidity ratio.** Other tool used as governance mechanism by NBE is liquidity ratio. And for this research purpose liquidity is calculated as follows:

$$\text{Liquidity ratio} = \frac{\text{liquid asset}}{\text{Total asset}}$$

3. **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.

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

4. **Ownership structures.** Ownership structure is another proxy for corporate governance structure. Shareholding structure may be diffused or concentrated.

Shareholding is said to be diffused if each person's shareholding is so small. One corporate governance mechanism for preventing managers from deviating too far from the interests of owners is concentrated ownership. For this research purpose this variable is measured by total percentage holding of influential shareholders. According to NBE Proclamation No.592/2008 "influential shareholder" means a person who holds directly or indirectly two percent or more of the total subscribed capital of a bank.

5. **Control variables.** In this study, bank size (measured by logarithm of total asset) and income diversification (measured by ratio of total non-interest income to total assets) are used in the model as a control variable.

Bank performance variables

Mostly financial performance measures 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.

Table 3.1 Summary of variable description measurement and expected sign

Variables	Description	Measures	Expected sign
AC	Availability of audit committee on the board.	1 if there is audit committee and 0 if not	+
BZ	The size of board	The number of board in each year	-
BC	Board composition	The number of non executive directors divided by board size.	+
BOH	Board members holding	% holding of board members	+
CAR	Capital adequacy ratio	Total capital/ risk weighted asset	+
RES	Reserve ratio	Total reserve/ total asset	-
LIQ	Liquidity ratio	Liquid assets / total asset	-
ISHH	Ownership concentration	Total % holdings of influential shareholders.	+

TDTA	Depositors impact	Total deposit to total asset	+
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Chapter Four

Results

4.1 Classical linear regression model assumptions and diagnostic tests

To assure that the estimation technique, ordinary least squares (OLS), had a number of 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

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; that is, they all 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 White's test. Eviews 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 Table4.1, 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.

Table 4.1 Heteroskedasticity Test: White

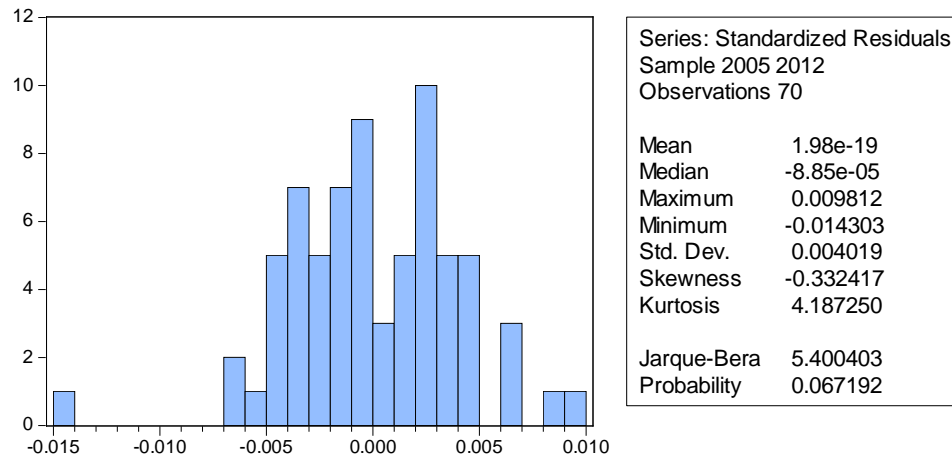
F-statistic	1.424200	Prob. F(64,5)	0.3761
Obs*R-squared	66.35981	Prob. Chi-Square(64)	0.3956
Scaled explained SS	40.46877	Prob. Chi-Square(64)	0.9906

Source: financial reports, data collected through questionnaire and own computation

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 p- value of BJ test is more than 0.05 as a result we fail to reject the null hypothesis for residual normality.

Table 4.2 Test for normality



Source: financial reports, data collected through questionnaire and own computation

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 ‘autocorrelated’. The simplest and the formal statistical test to check the existence of auto correlation is Durbin and Watson (D-W) test. In this study 70 observations are used and furthermore there were 11 regressors in the model. Accordingly, the critical value for the test are $dL = 1.206$ and $dU = 2.066$ at 5% significance level. Accordingly $4-dU = 4-2.066 = 1.934$; $4-dL = 4-1.206 = 2.794$, (Gujarati, 2004). The Durbin and Watson test statistics of this research on table 4.3 is 1.964681 which is clearly between 1.934 and 2.794. And, Therefore, the null hypothesis of no autocorrelation is within the non-rejection region and thus there is no evidence for the presence of autocorrelation.

Table 4.3 Autocorrelation Test: Durbin Watson

Variables	DW static result
All main and control variables	1.964681

Source: financial reports, data collected through questionnaire and own computation

Multicollinearity test

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 among independent variables

	AC	BC	BOH	BSZ	BZ	CAR	ID	ISHH	LIQ	RES	TDTA
AC	1.0000										
BC	0.2012	1.0000									
BOH	0.0203	0.4204	1.0000								
BSZ	0.1951	-0.2594	-0.3483	1.000000							
BZ	0.5603	0.3973	0.3999	-0.071605	1.000000						
CAR	0.1258	0.1462	0.118	-0.366631	0.137544	1.000000					
ID	-0.1700	0.1202	-0.128	0.065554	-0.233566	-0.061531	1.000000				
ISHH	-0.1981	-0.6522	-0.5568	0.487288	-0.627098	-0.108843	0.180993	1.000000			
LIQ	0.3297	0.2297	0.0368	-0.246981	0.191424	0.570346	0.033804	-0.246232	1.000000		
RES	0.2065	0.1035	0.0513	-0.243714	0.053943	0.752542	-0.090849	-0.049041	0.714896	1.000000	
TDTA	-0.0943	-0.0153	0.0224	0.491536	-0.086729	-0.733125	-0.098669	0.074210	-0.437407	-0.480825	1.000000

Source: financial reports, data collected through questionnaire and own computation

4.2 Descriptive statistics results

Table 4.5 Descriptive statistics results

Variables	DESCRIPTIVE statistics			
	Mean	Sta.dev	Max	Min
ROA	0.023942	0.015421	0.0403	-0.06111
AC	0.614286	0.490278	1	0
BZ	9.300000	2.009759	12	5
BC	0.887735	0.128608	1	0.6
CAR	0.435990	1.612903	13.659	0.05694
TDTA	0.7158	0.105095	0.828362	0.116279
RES	0.178748	0.116904	0.891473	0.038366
BOH	0.059342	0.055250	0.1758	0
ISHH	0.438660	0.373865	1	0
LIQ	0.410402	0.121095	0.9379	0.15806
Control variables				
ID	0.046191	0.111585	0.9612	0.00015
BSZ	22.17727	1.369732	25.791	18.6753

Source: financial reports, data collected through questionnaire and own computation

From Table 4.5 descriptive statistics results, ROA indicates that on average the Ethiopian banks managed a positive after tax profit over the last eight years (i.e 2.4%). Which means on average Ethiopian banks earned 2.3 cent for each one birr invested in the assets. Among the sampled banks the most profitable bank achieved a profit of 6 cent per birr invested in the assets. On other side, the least profitable bank incurred a loss of 6 cent per one birr investment. The standard deviation figure also

shows that there is no that much significant difference among sample banks in terms of their performance.

Figure 4.1 Trend of ROA during the sample period.

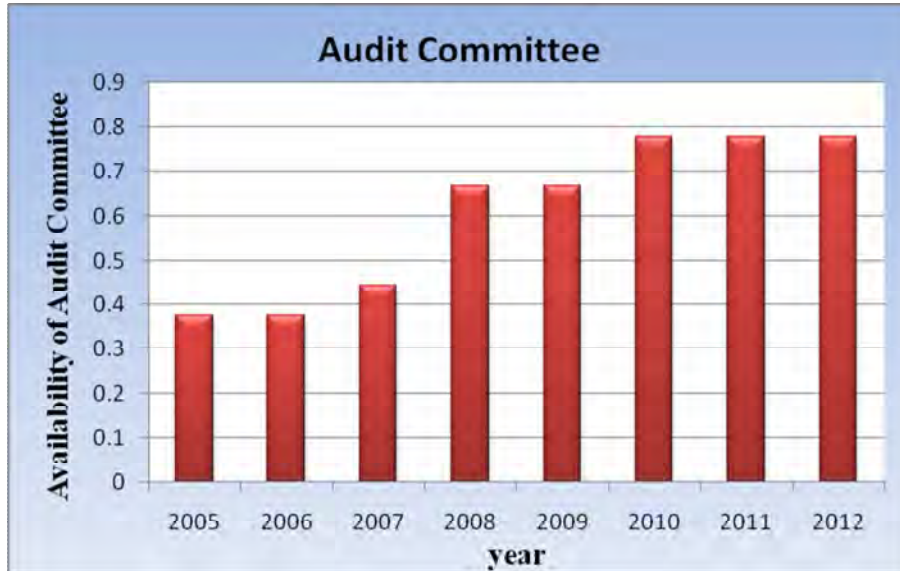


Source: financial reports of each banks and own computation

When we look into the trend of Ethiopian commercial banks performance from figure 4.1, we can understand that on average, it is increasing from time to time. Especially for the last three years their performance in terms of ROA had increased consistently. Within the sample period (8 year) their ROA is increased by more than three folds. In terms of availability of audit committee, on average the sample banks have audit committee (AUDC) 50% of the time. A maximum of 1 shows that there are banks with audit committee and a minimum of 0 shows that there are banks without audit committee. Availability of audit committee is one of the manifestations of having good corporate governance mechanism. In case of Ethiopian banks, even if the practice of having audit committee on the board is improving from time to time, there are banks which are still without this subcommittee. Figure 4.2 show that the practice of having audit committee is improving from time to time which shows improvement

in corporate governance practice of banks. But still around 20% of the sample bank does not have audit committee in their board.

Figure 4.2 Trend of audit committee practice during sample period



Source: data collected through questionnaire

In case of board size, the maximum and minimum numbers of board in the sample period were 12 and 5 respectively. The mean size of the board members of bank in the sample period was 9.3. If we see the trend from the graph there is no consistency as to the number of board of sample banks i.e, one year increases and then the next year decreases. So we can not infer that whether governance practice in this aspect is improving or not.

Figure 4.3 trends of board size during the sample period.



Source: data collected through questionnaire

Regarding to the composition of board of directors, on average 89% of the board members were non- executive with a maximum of 100% and minimum of 60%. In the last two years, all banks are enforced to have only non-executive board members in their board room. Figure 4.4, shows that the proportions of non - executive members have increased slightly from year to year up to 2011. But because of the directive enacted in 2011 the proportion of non-executive board members increased dramatically in these two years. This shows that, in this aspect, the corporate governance practice of Ethiopian commercial banks improved a lot. Since increasing non-executive member of board increases the independency as well as controlling ability of board, it enhances the quality of corporate governance.

Figure 4.4 Trends of proportion of non executive directors in the board room

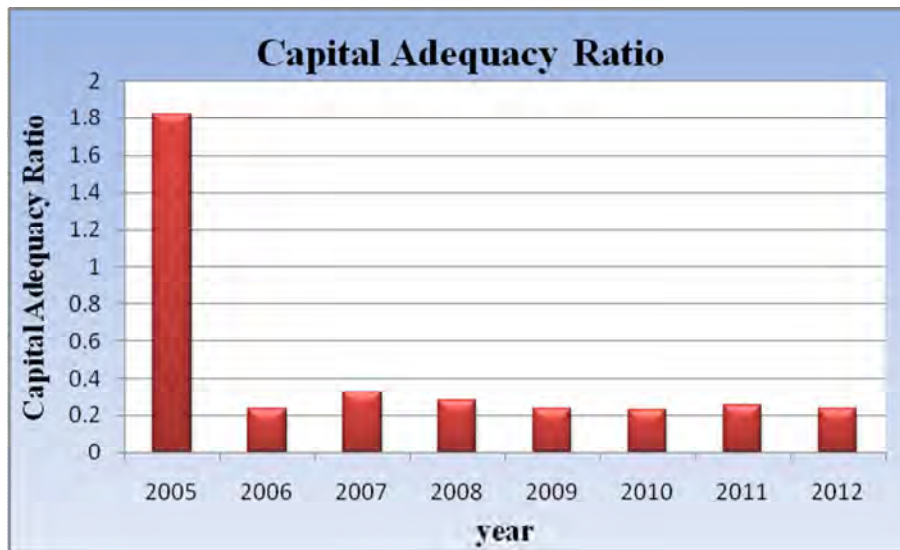


Source: data collected through questionnaire

On the other hand the mean CAR of sample banks was 44% which is by far higher than the minimum amount of CAR required by NBE and Basel accord. Even if maintaining higher ratio of CAR in banks represents higher banks' sensitivity toward public, Banks with a surplus capital relative to target exhibit a strongly negative relationship between capital and profitability. Both Basel accord and NBE regulation enforces banks to have capital adequacy ratio of 8%. But during the past eight years, on average, Ethiopian banks maintained 44% capital adequacy ratio. This huge margin may harm the profitability of bank.

Figure 4.5 shows that banks maintain higher amount of CAR during 2005 and it reduced by tremendous amount during 2006. From 2007 onward the CAR amount declined slightly but still on average the sample banks maintain above 20% on each sample years. The trend shows that Ethiopian banks are highly sensitive toward public interest but it also shows that they maintain excessive amount of CAR which hamper their profitability.

Figure 4.5 Trend of CAR during the sample period.



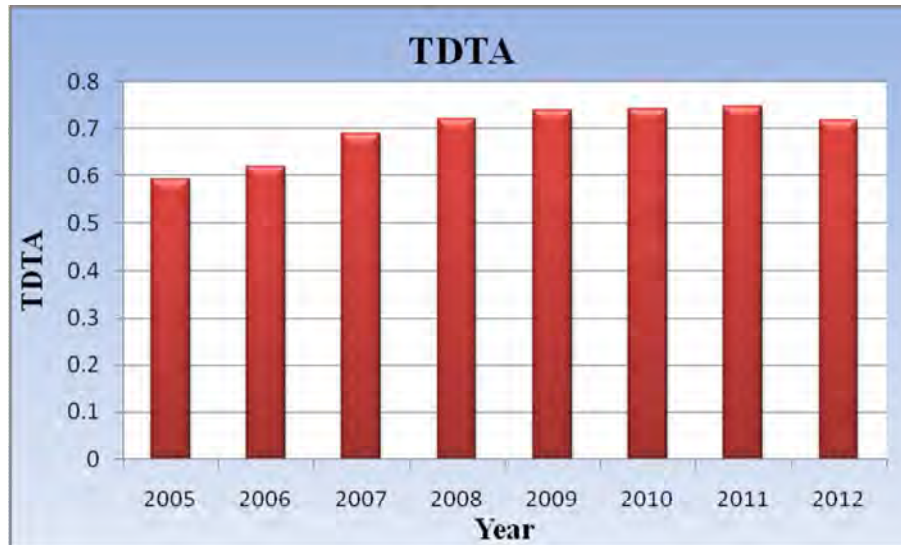
Source: financial reports of each bank and own computation.

As to reserve ratio, during the sample period, on average, Ethiopian banks kept their 17.89% asset as a reserve in NBE. The maximum amount of 0.8914 shows that there was a bank which maintains its 89% asset as a reserve in central bank.

On average, during the given period, sample banks of Ethiopia finances 72% percent of their asset through deposits. And the trend also shows that the deposit mobilization of the banks was continuously increasing except in year 2012. This trend implies two things. First, since deposit mobilization is a hub of bank operation; increasing deposit raising capacity is a signal to improved corporate governance. In addition, financing most of their asset using deposits gave depositors a chance to govern the behavior of bank managers by withdrawing their deposits from riskier bank and depositing their money in less risky banks. Second, using more deposit to finance their assets by banks may create riskier environment to the depositor since if the banks face sudden crashes, the chance of losing their many will be high. But since the regulation provides

different backups like CAR, liquidity ratio, reserve on NBE, if banks face sudden shock, the disaster level to be faced by depositor will be minimal.

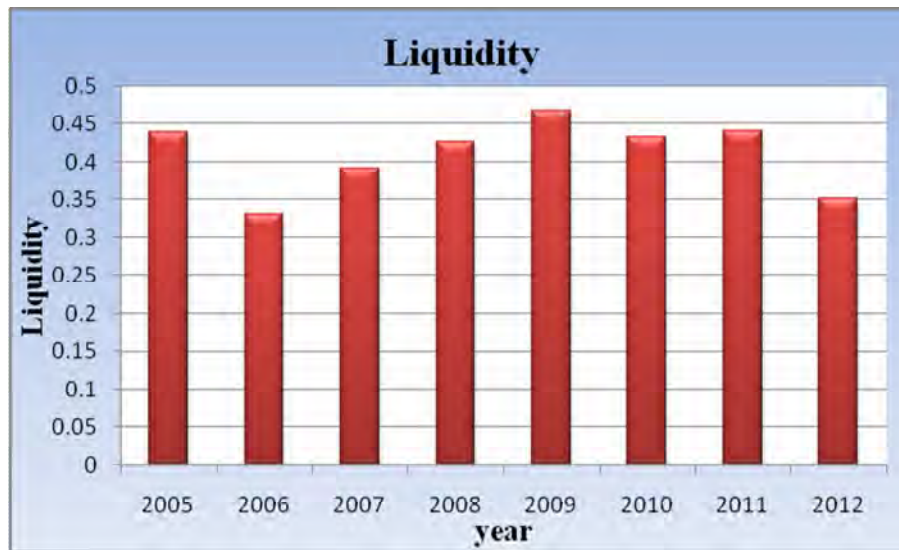
Figure 4.6 trend of total deposit to total asset ratio during sample period.



Source: financial reports of banks and own computation

Regarding liquidity, on average, Ethiopian banks invest 41% of their money on liquid assets which is by far higher than the statutory requirement of 20%. Of the total 41% liquidity ratio around 18% is kept at NBE as deposit reserve, payment and settlement account. The remaining amount (around 23%) is invested on other liquid assets. If we see the trend from figure 4.7, in all sample years, on average Ethiopian banks invested more than 30% of their money on liquid assets. This shows two things. First, in all sample years on average Ethiopian bank maintain liquid asset more than statutory requirement of 20%, which is a good signal to corporate governance strength. But on other hand the average reserve ratio maintained by sample banks was by far more than reserve ratio required by the regulation. In the later case given liquid assets' low returns relative to other assets maintain higher amount of liquid may reduce the profitability of commercial banks.

Figure 4.7 Trends of liquidity ratio during sample period.



Source: Financial report of each bank and own computation

As to the influential share holding percentage, on average influential share holders own 27% of banks subscribed capital in case of privately owned commercial banks. Figure 4.8 Shows that the holding of influential shareholder is declining consistently from 2005 -2012. This is due to the enacted regulation which enforces influential shareholder to have a maximum of 5% capital from total subscribed capital of the bank. This trend has two implications as to corporate governance improvement. First, decreasing the holding of influential shareholders protects minority shareholder from expropriation of these major shareholders, since decreasing their holding means decreasing their influential power. But on the second case it reduces the incentive and power of influential shareholders to monitor opportunistic behavior of managers. So this trends shows that improvement in corporate governance mechanism in protecting minorities but it may create some excuse regarding controlling of managers by these major shareholders.

Figure 4.8 Trend of influential share holders holding during sample period.



Source: data collected from questioner.

4.3 Correlation analysis results among governance variables and ROA

As could be seen from table 4.6 below, the sign of correlation coefficient of board composition (BC) is negative. This means percentage of non-executive members in the board and the ROA of banks move in opposite direction. In the same manner when the percentage holding of board member (BOH) increases, the ROA of banks move in the opposite direction. Similarly the size of board is negatively correlated with after tax return on asset of banks. CAR was the most negatively correlated variable with ROA. This correlation clearly infers that as capital adequacy ratio increases, the average return on each birr invested in total asset moves in opposite direction.

In contrary to the above variables, the correlation coefficient of percentage of influential shareholder holding is positive. This shows that, as the percentage holding of influential shareholders increases, the ROA moves in the same direction. On the other hand, the correlation coefficient of -0.543 of Liquidity (LIQ) variable shows that

as banks hold more money in most liquid assets, their return on asset diminishes significantly. From the correlation coefficient of reserve variable we can conclude that there was negative relationship between reserve balance ratio and bank profitability. This means as the bank put more money in reserve fund, the profitability of bank will move in opposite direction. In contrast deposit to asset ratio of banks was directly correlated with ROA. This means as the total debt to total asset (TDTA) of banks increases, the return generated from total asset changes in the same direction.

Table 4.6 correlation matrix among governance variables and ROA

	ROA	AC	BC	BOH	BSZ	BZ	CAR	ID	ISHH	LIQ	RES	TDTA
ROA	1.0000											
AC	-0.2183	1.0000										
BC	-0.0652	0.2012	1.0000									
BOH	-0.0726	0.0203	0.4204	1.0000								
BSZ	0.5782	0.1951	-0.2594	-0.3482	1.0000							
BZ	-0.2463	0.5604	0.3972	0.3998	-0.0716	1.0000						
CAR	-0.7137	0.1259	0.1461	0.1179	-0.3666	0.1375	1.0000					
ID	0.0481	-0.1701	0.1202	-0.1278	0.0655	-0.2336	-0.0615	1.0000				
ISHH	0.1428	-0.1982	-0.6522	-0.5567	0.4872	-0.6271	-0.1088	0.1809	1.0000			
LIQ	-0.5429	0.3297	0.2296	0.0368	-0.2469	0.1914	0.5703	0.0338	-0.2462	1.0000		
RES	-0.5927	0.2065	0.1034	0.0513	-0.2437	0.0539	0.7525	-0.0908	-0.0490	0.7148	1.0000	
TDTA	0.7163	-0.0943	-0.0152	0.0223	0.4915	-0.0867	-0.7331	-0.0986	0.0742	-0.4374	-0.4808	1.0000

Source: financial reports, data collected through questionnaire and own computation

Chapter Five Discussion and Analysis of Regression Results

5.1 Results of regression analysis

The multiple regression results of the econometric model used in the study are presented in table; 5.1. To run the regression the 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. But in this research the coefficient of the variables (11) is greater than the cross section of the model (9). 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 5.1 was run by taking ROA as a dependent variable and other governance and control variables as an independent variable. From the table R-squared statistics and the adjusted-R squared statistics of the model were 92.8% and 90% respectively. This shows that 90% variability of the dependent variable is explained by the movement of explanatory variables included in the model. In other word 90% variability of ROA of sample banks were attributed to the change in explanatory variables.

Table 5.1 Regression result of the model.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.251320	0.036455	-6.894006	0.0000
AC	0.005298	0.002771	1.912256	0.0616*
BC	-0.024311	0.009713	-2.502906	0.0156**
BOH	-0.030849	0.020116	-1.533546	0.1314
BZ	-0.001194	0.001033	-1.156147	0.2531
CAR	-0.001429	0.000849	-1.683825	0.0984*
LIQ	-0.005622	0.009546	-0.588947	0.5585
RES	-0.017919	0.010657	-1.681395	0.0989*
ISHH	0.080834	0.016924	4.776266	0.0000***
TDTA	0.035784	0.012898	2.774313	0.0078***
ID	-0.007357	0.006781	-1.084928	0.2832
BSZ	0.011359	0.001577	7.201787	0.0000***

Effects Specification			
Cross-section fixed (dummy variables)			
R-squared	0.928734		
Adjusted R-squared	0.901653		
S.E. of regression	0.004836		
F-statistic	34.29453	Durbin-Watson stat	1.964681
Prob(F-statistic)	0.000000		

***, **, * shows they are significant at 1%, 5% and 10% significance level respectively.

Source: financial reports, data collected through questionnaire and own computation

The remaining 10% of changes was explained by other factors which are not included in the model. Similarly, The F- statistic of 34.29 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 5.1, governance variables like, availability of audit committee on the board, board composition, capital adequacy ratio, influential shareholders holding, reserve ratio and total deposit to total asset ratio had statistically significant impact on performance of banks. Whereas, the impact of other governance

variables like board size, board holding and liquidity, on ROA are insignificant. Among control variables used in the study, bank size had significant impact on bank performance where as the impact of income diversification is insignificant. Among the significant governance variables, AC, CAR and RES were significant at 10% significant level, since the p- values of these variables are 0.0616, 0.0984 and 0.0989 respectively. Board composition was significant at 5% significant level with P-value of 0.0156 whereas, ISHH and TDTA were significant at 1% significant level. In addition, the coefficients of board composition, holding of board members, board size, capital adequacy ratio, reserve ratio and liquidity were negative. This implies that the increase of the aforementioned six variables will lead to decrease in performance of banks. In contrast, governance variables like availability of audit committee, holding of influential shareholders, and deposit to total asset ratio had a positive relationship with bank performance, ROA, as indicated by their respective coefficient of 0.005298, 0.0800834 and 0.035784 respectively. This shows that an increase on the aforementioned three variables will bring an increase in bank performance. From two variables included in this study as control variables, bank size affects the performance of banks positively. Whereas, income diversification had a negative relationship with banks ROA. This result implies that as bank size increases, the performance of bank increases too. Finally, income diversification does not have significant impact on banks performance.

5.2 Analysis and Discussions

In this section the impact 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 nine variables. These are board size, board composition, availability of audit committee on the board,

board members ownership, the holding of influential shareholders, capital adequacy ratio, liquidity, reserve ratio and deposit to total asset 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 nine 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.

Availability of audit committee

Availability of audit committee on the board had positive impact on banks performance (ROA) and it is statistically significant at 10% significant level. The parameter coefficient of 0.005298 shows that banks with independent audit committee on the board significantly out performs these banks without audit committee on their board. This result is in line with both agency theory and stakeholder theory. According to these two theories the existence of independent audit 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. Furthermore, according to Klein (2002) the availability of audit committee in the board decreases earnings manipulation in the company thereby increasing performance. The positive sign of the coefficient is as expected. This is similar with the findings of Keyerebah-colenan (2007) and Chin and Li (2008). Accordingly, hypothesis three is failed to reject.

Board composition

In contrary to expectation, the coefficient parameter of board composition showed negative relationship between percentage of non-executive board members and bank performance. -0.024311 value shows that as one percent non-executive board member included in to board, the performance of bank will reduce by 2.4% and it is significant at 5% level. This is contrary to the relationship proposed by agency and stakeholder theory. According to both agency and stakeholder theory, non-executive directors can play an important role in decision making and controlling the activity of manager's thereby increasing financial performance. But the result here is consistent with stewardship theory of corporate governance. Based on this theory, since insider directors have good knowledge and information advantage about the operation of the company, better financial performance is likely to be associated with greater number of executive directors.

The empirical result here in Ethiopian banks shows negative and significant relationship between outside directors and bank performance. This may be resulted due to the availability of superior internal information to executive board members than non-executive boards which lead to better control of top managers or lack of expertise independent boards in the country. In case of Ethiopian banks the percentage of non- executive members in board is increasing from time to time and it becomes 100% in the previous two years because of the directive issued by NBE. This may create large number of experienced individuals in banking industry in long run. In other word, as non-executive members of the board stay more in the bank environment, their exposure to internal information and their experience on bank business will increases. As a result, in long run the percentage of independent members on board may have a positive impact. But the result from the current data

shows negative association between non-executive board members and bank performance. This result is consistent with the findings of Agrawal & Knober (1996) and Yermack (1996). So the hypothesis which expects positive relationship between independent board members and bank performance is rejected or data didn't support it.

Board size and board holding

The impact of the remaining board characteristics variables, board size and board holding, on bank performance was insignificant. The regression outputs of both variables are inconsistent 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. Even if the result is inconsistent with the above theories, it is supported by the findings of Dalton et al. (1999), Ibraheem (2011) and chaghadari (2011). This result may be attributed to the reason that, the cost incurred to additional board member (administrative costs of bank with directors' fee and commission) may be compensated by the additional member contribution, like resource linkage to the environment, idea contribution, and injection of additional experience to the board. Accordingly, the insignificant impact of board composition rejects the second hypothesis or data didn't support it.

Regarding to board holding, the result has revealed that there is negative relationship between percentage of directors' ownership and ROA though it is insignificant. In other words, it has implied that the percentage of directors' ownership doesn't have

any impact on bank financial performance. This insignificant and negative impact of board holding is inconsistent with the assumption of agency theory. As to this theory, when the board of directors owns part of the firm's share, their interests align the interests of other shareholders and they are less likely to engage in opportunistic behavior and they do get incentive to control managers. But the finding of this study doesn't support this assumption. This result may be attributed to the reason that, on average, the ownership percentage of board members in Ethiopian banks is very small and this may reduce their incentive to control the opportunistic behavior of banks managers. The result of negative and insignificant relationship in this research is supported by the findings of Marte (2010). So the hypothesis that expects positive relationship between board ownership and bank performance is rejected or data didn't support it.

Capital adequacy ratio.

The coefficient of capital strength which is measured by the equity to total risk weighted asset ratio was negative and statistically significant at 10% significance level ($p\text{-value} = 0.0984$), which is contrast to the expectation. The coefficient parameter of -0.001429 shows that, other things remaining constant, a 1% increase in CAR will result in a reduction of 0.14% on ROA.

The empirical result is inconsistent with the assumption of increase in capital, holding other things constant, is expected to enhance earnings by reducing the expected cost of financial distress including bankruptcy. But it supports risk return trade off theory. Based on the risk-return tradeoff theory, a higher equity-to-asset ratio (which is the reverse of leverage) leads to a lower expected return. According to different financial theories, lowering capital to asset ratio (increasing leverage) results on higher return as business organization will only take on more risks when expected returns will

increase. In other word, according to the second proposition of Modigliani and Miller (1958), higher capital is often supposed to be costly for banks due to capital market imperfections and tax advantages of debt. This negative and significant effect of CAR on Ethiopian banks performance may be also attributed to keeping higher amount of capital in excess of CAR required by the regulation. According to Osborn (2011), banks with a surplus of capital relative to target exhibit a strongly negative relationship between capital and profitability. Based on this assumption, since Ethiopian banks maintain higher amount of capital than the percentage required by BASEL accord and NBE directive, the negative relationship is exhibited. Consequently, the hypothesis that expects positive relation between capital adequacy ratio and bank performance is rejected or data didn't support it. This result is supported by the finding of Tandelilin et al (2007).

Ownership concentration

As expected, ownership concentration which is measured by percentage holding of influential owners had a significant and positive impact on performance of Ethiopian banks. Moreover, the coefficient of the percentage of influential shareholders holding which was relatively higher as compared to other variables in the model shows that an increase in the level of concentration will result in increased performance. This is consistent with assumption that a high concentration of shares tends to create more pressure on managers to behave in ways that are value-maximizing. The result of the regression supports the idea of agency theory. According to the proponents of the theory like Jensen and Meckling (1976), the presence of important shareholders is beneficial, because they tend to actively involve themselves in more tighter monitoring activities, which would result in a more efficient governance structure leading to an important value for shareholders. In other words, if the shareholding is

diffused (each person's shareholding is so small) it becomes too costly for such shareholder to monitor the company's activities closely and opens the door for managers to maximize their interest. That means the more the ownership structure is dispersed, the more the agency costs are higher. Therefore, the study failed to reject hypothesis that expects positive relationship between ownership concentration and bank performance. This conclusion is consistent with the works of Demsetz and Lehn (1985) and Agrawal and Knoeber (1996).

Reserve

As expected, the impact of reserve ratio on bank performance is negative and significant. The coefficient parameter of -0.017919 shows that as one percent of their asset is kept in NBE as a reserve balance, the bank tends to loss 1.8% from its ROA. The empirical result is consistent with expectation in this research. The negative relationship exhibited may be due to high reserve balance reduces the cash for lending and this reduction in money supply affects the ability of banks to create new money through giving loans to their customers. Since extending loan is the main source of income for commercial banks and reserve on NBE do not earn any income for the banks, it drains on the profitability of bank. In other word banks pay interest in raising these funds but they do not earn any income from these fund. So the result supports the expectation and hence the study failed to reject the hypothesis saying there is significant negative relationship between bank profitability and legal reserve.

Liquidity

Bank liquidity which is measured in terms of liquid asset to total asset does not have any significant effect on Ethiopian sampled bank profitability. Even though the sign of the coefficient parameter is negative, a p- value of 0.5585 shows that liquidity is not a determinant of profitability of Ethiopian banks. In other word the impact of liquidity on the performance of Ethiopian banks is negligible. There are mainly two stands regarding the impact of liquidity on bank performance. The first one is since holding liquid assets imposes an opportunity cost on the bank given their low return relative to other assets; it has a negative impact on profitability. On the other hand, according to bankruptcy cost hypothesis increase in the relative liquid assets holdings of a bank decreases its probability of default and this increases trust from investors and then reduces cost of raising fund. But the empirical result of this study does not support both stands. This may be due that the opportunity cost of holding liquid asset is compensated by the marginal benefit of holding them. Thus the hypothesis that states there is a significant relationship between liquidity and profitability is rejected or data did not support the hypothesis. This result is supported by the finding of Amdemikael (2012).

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. Both the t- value of 2.7743 and p- value of 0.0078 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 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 and this supports the hypothesis which predicts positive relationship between total deposit to total asset ratio and bank performance.

The summary of the expected and actual relationships found between the independent and dependent variables are presented in Table 5.2

Table 5.2. Summary of expected and actual relationships.

Independent variable	Dependent variable	Expected relationship	Actual relationship	Significance at 1%, 5% or 10%
Availability of audit committee	ROA	Positive	Positive	Significant at 10%
Non-executive director	ROA	Positive	Negative	Significant at 5%
Board size	ROA	Negative	Negative	insignificant
Board ownership	ROA	Positive	Negative	Insignificant
CAR	ROA	Positive	Negative	Significant at 10%
Legal reserve ratio	ROA	Negative	Negative	Significant at 10%
Liquidity ratio	ROA	Negative	Negative	Insignificant
Deposit ratio	ROA	Positive	Positive	Significant at 1%
ISHH	ROA	Positive	Positive	Significant at 1%

Chapter six conclusions and recommendation

The previous chapter presented the analysis of the findings, while this chapter deals with the conclusions and recommendations provided based on the findings of the study. Accordingly this chapter is organized into two subsections. The first section presents the conclusions whereas the second section presents the recommendations.

6.1 conclusions

The aim of this study was to empirically examine the impact of corporate governance mechanism on corporate financial performance of Ethiopian commercial banks. In achieving this aim, the study obtained data on variables which were believed to have relationship with corporate financial performance and corporate governance. To get information about the selected variables the researcher applied quantitative method research approach, structured review of bank documents and simple questionnaire. In doing so, all commercial banks having operating history of 8 years, except Bank of Abyssinia, and 6 years data of LION international bank were included in the sample for structured review of documents resulting in 70 observations. To construct the regression model and select corporate governance variables, stakeholder model of corporate governance is used. In view of that board characteristics, regulations, ownership structure and depositors influence are selected as a corporate governance variables. Accordingly, board size, board composition, availability of audit committee and board ownership variables are selected as a proxy for board characteristics, and capital adequacy ratio, legal reserve ratio and liquidity ratio are used as a proxy to regulation. In addition, ownership structure is measured in terms of total percentage holding of influential

shareholders and depositors influence is measured in terms of deposit to asset ratio. Finally the dependent variable, performance, is measured in terms of ROA.

Results from the regression shows that there is negative but insignificant relationship between board ownership and bank performance. According to this result the assumption of agency and stakeholder theory of significant positive impact of board ownership on bank performance is rejected. Similarly board size has negative but insignificant impact on ROA. Even if the sign is in line with agency theory but the impact of this variable on ROA is negligible. In case of board composition, there is negative and significant impact of proportion of non-executive board on bank performance. This is not consistent with agency as well as stakeholder theories assumption but it is in line with stewardship theory of corporate governance. Availability of audit committee on board has positive and significant impact on ROA.

From regulation proxies CAR and reserve ratio has negative and significant impact on the performance of commercial banks of Ethiopia. Since higher amount of capital means lower amount of leverage, and since, according to risk return trade-off theory, lower leverage result in lower amount of income, this result is supported by risk return trade-off theory. Similarly the negative impact of reserve may attribute to that reserve amounts at NBE has no interest income and it limits the fund available to loan and this may drain the profitability of banks. The other regulation proxy liquidity has negative and insignificant impact on the performance of Banks.

The regression result also shows that positive and significant impact of concentrated ownership on the performance of banks. This supports the assumption that concentration brings motivation to control the opportunistic behavior of managers and it rejects the assumption of expropriation of minority shareholders by influential

shareholders. Lastly, the result shows positive and significant impact of deposit to total asset ratio on the performance of banks. This result does support the assumption of agency theory that depositors can influence the performance of banks by using market mechanism.

6.2 recommendations

Based on the findings of the study the following possible recommendations were forwarded

- The directive which regulates banks to have fully non-executive directors need be modified. To inject the information advantage of executive members of banks in to the board of director, the board of director should include some executive members. Or NBE should create a mechanism to develop expertise potential outside board members who are enriched with the activity and risk exposure of banks.
- Different reserve and liquidity requirements are crating restrain on the activity of banks. In other word these regulation are crating money with zero earning power and this affects the performance of banks negatively. So by reducing the type and ratio of these reserve and liquidity requirement and by devising different mechanism to protect the depositor like by establishing deposit insurance, NBE need decrees money holdings by banks without the potential of any earning but with interest expense.
- The NBE need to issue directive which should be applied consistently throughout all banks which regulate the number as well as the function of different sub-committee on the board

- NBE needs to issue directive which should enforce the disclosure of different relevant information to different stakeholders and NBE should assure the execution of these directives by different banks. Even if there is directive which regulates banks to prepare share register and avail the information to the public, most banks are not willing to disclose this information to the public.
- The banks need to create mechanisms to increase the number of influential shareholders as to increase the total holding of these dominant owners. Since the maximum amount of single owner is 5%, the bank can increase the total holding of influential shareholders only by increasing the number of shareholders who have ownership interest above 2%.
- Finally, the study sought to investigate the impact of corporate governance mechanism on the performance of banks. However, the variables used in the statistical analysis did not include all corporate governance mechanisms. Thus, future research could incorporate other variables like CEO experience, CEO and board remuneration amount, gender diversity on the board and availability of different sub-committees on the board. And furthermore this study can be expanded to different non- bank industries

Reference

- Abu-Tapanjeh, AM 2007, 'Good Corporate Governance Mechanism and Firms Operating and Financial Performance: Insight from the Perspective of Jordanian Industrial Companies', *J. King Saud Univ.*, Vol. 19, no (2), pp. 101-121.
- Adams, R, & Mehran, H 2003, 'Is Corporate Governance Different for Bank Holding Companies?', *Economic Policy Review*, vol.9,pp 123-142
- Adusie, M 2011, 'Board Structure and Bank Performance in Ghana', *Journal of Money, Investment and Banking*, Issue 19.
- Agrawal, A, & Knoeber, C 1996, 'Firm performance and mechanisms to control Agency problems between managers and shareholders', *Journal of Financial Quantitative Analysis*, vol.31, no 3, pp 377–397.
- Almanaseer, FM, Mohamad, AR, Abdulrahim, AM & Isaa, SI 2012, 'The Impact of Corporate Governance on the Performance of Jordanian Banks', *European Journal of Scientific Research*, Volume 67, no.3, pp 349-359
- AL-Mutairi, A & AL-Omar, H 2008, 'Bank-Specific Determinants of Profitability: The case of Kuwait', *Journal of Economic & Administrative Sciences*, vol.24, No.2 pp 20-34
- Amdemikael, A. 2012, "Factors Affecting Profitability: An Empirical Study on Ethiopian Banking Industry", MSc thesis, Addis Ababa university.
- 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.
- Anwar, GM 2009, 'Regulatory Governance in a Third-World Economy: Policy Perspective on Bangladesh', *International Conference on Enterprise Governance: Recent Global Financial Perspective*, 24 January, Dhaka.

- Babatunde, MA and Olaniran, O 2009, 'The Effects of Internal and External Mechanism on Governance and Performance of Corporate Firms in Nigeria: Corporate Ownership and Control', vol.7 no.2 pp.330-344
- Baysinger, BD and Butler, HH 1985, 'Corporate governance and the board of directors: Performance effects of changes in board composition', *Journal of Law, Economics, and Organization*, vol.1, pp. 101–124.
- Baysinger, BD and Hoskisson, RE 1990. 'The composition of boards of directors and strategic control', *Academy of Management Review*, vol.15,pp. 72–87.
- Bennedsen, M, Kongsted, H, & Nielsen, M 2004, 'Board Size Effect in Closely Held Corporations', Retrieved from www.econ.ku.dk/camon23/02/08
- Blair, MM 1995, 'Ownership and Control: Rethinking Corporate Governance for the Twenty-First Century', the Brookings Institution, and Washington, USA.
- Boot, AW and Thakor, AV 1993, 'Self-Interested Bank Regulation', *American Economic Review*, Vol.83, No.2, pp.206-212
- Bouaziz, Z &Triki, M 2012, 'The impact of directors on the financial performance of Tunisian companies', *Universal journal of marketing and business research*, Vol.1, no.2, pp. 56-71
- Brooks, C 2008, *Introductory Econometrics for Finance*, 2nd edn, Cambridge University Press, New York
- Caprio, G, Laeven, L and Levine, R 2007, 'Ownership and Bank Valuation', *Journal of Financial Intermediation*, vol.16, no.584-617.
- Chan, KC & Li, J 2008, 'Audit committee and firm value: evidence on outside top executives as expert-independent directors', *An International Review* Vol.16, no. 1, pp. 16–31.

- Clarke, T. 2004, 'Theories of Corporate Governance: The Philosophical Foundations of Corporate Governance', Routledge, Taylor & Francis Group, London, New York
- Clifford, P, & Evans, R 1997, 'Non- Executive Directors: A Question of independence' *Corporate Governance*, vol.5, no.4, 224-231.
- Conger, J A, Finegold, D and Lawler, E E 1998, 'Appraising Boardroom Performance', *Harvard Business Review*, vol.76 no.1 pp.136-148.
- Cornett, MM, Marcus, AJ and Tehranian, H 2008, 'Corporate governance and pay-for-performance: the impact of earnings management', *Journal of Financial Economics*, Vol. 87, PP. 357–373.
- Dalton, DR, Daily CM, Ellstrand, AE, & Johnson, J L, 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 20-47
- 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
- Ebaid, E. I.2009, 'The impact of capital-structure choice on firm performance: empirical evidence from Egypt', *The Journal of Risk Finance*, 10(5), 477-487.
- Eisenberg, T, Sundgren, S, & Martin T 1998, 'Larger Board Size and Decreasing Firm Value in Small Firms', *Journal of Financial Economics*, Vol.48, Pp. 35-54.

- Ethics Institute of South Africa 2008, WorldCom Case Study. Retrieved on June 16, 2012 from <http://www.ethicsa.org/index.php?page=faq#6>
- Ezzamel, M A and Watson, R 1993, 'Organizational form, ownership structure, and corporate performance: A contextual empirical analysis of UK companies', *British Journal of Management*, vol. 4 no.3, pp. 161–176.
- Fama, E. F. (1970), 'Efficient Capital Markets: A Review of Theory and Empirical Tests', *Journal of Finance*, Vol. 25, pp.382-417.
- Fama, E. F. and M. C. Jensen (1983). 'Separation of ownership and control', *Journal of Law and Economics*, 26, pp. 301–325
- Federal Democratic Republic of Ethiopia (FDRE) 2008, 'Proclamation to provide for banking business' Proclamation no. 592/2008, *Federal Negarit Gazeta*, 25 August 2008
- Fekadu, P. 2010, 'Emerging Separation of Ownership and Control in Ethiopian Share Companies: Legal and Policy Implications', *Mizan Law Review*, vol.4 no.1 pp1-30
- Freeman, R. E. 1984, 'Strategic Management: A Stakeholder Approach', Pitman Publishing Inc.: Massachusetts.
- Freeman, R.E. and Reed, D L. 1983, 'Stockholders and Stakeholders: A New Perspective on Corporate Governance', *California Management Review*, Vol. XXV, No. 3, pp.88-106.
- Friedman, M. 1970, 'The Social Responsibility of Business is to Increase its Profits', *New York Times Magazine*, Vol. 13, Pp.32-33.
- Funso, T.K, Kolade, R.A & Ojo, M.O 2012, 'credit risk and commercial banks' performance in nigeria: a panel model approach', *Australian Journal of Business and Management Research*, Vol.2, No.02 PP 31-38

- 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 & 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'
- Guru B, Staunton J & Balashanmugam B 2002, 'Determinants of commercial bank profitability in Malaysia', working paper, University of Multimedia
- Habtamu, A. 2012, "the relationship between corporate governance structure and financial performance: evidence from Ethiopian banks", MSc thesis, Bahir Dar University.
- Hair JF, Black, WC, Babin, BJ, Anderson, RE & Tatham, RL 2006, *Multivariate data analysis*, 6th edn, Pearson Education, New Jersey.
- 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.
- Harrison, J.S., Bosse, D.A. & Phillips, R.A. 2010, 'Managing for stakeholders, stakeholder utility functions & competitive advantage', *Strategic Management Journal*, 58-74.
- Hart, O. 1995, 'Corporate Governance: Some Theory and Implications', the *Economic Journal*, Vol. 105, Pp.678-689.
- Hill, C. W. L. and Jones, T. M. 1992, 'Stakeholder-Agency Theory', *Journal of Management Studies*, Vol. 29, No. 2, PP.131-154.

- Holderness, C. and D. Sheehan. 1988. 'The role of majority shareholders in publicly held corporations', *Journal of Financial Economics*, vol. 20, pp 317-346.
- Hosono, K. 2003, 'Market discipline and forbearance policy to banks' *Discussion Papers in Economics*, No. 339, Nagoya City University
- Hummels, H. 1998, 'Organising Ethics: A Stakeholder Debate', *Journal of Business Ethics*, Vol. 17, Pp.1403-1419.
- Huse. M. 2007, 'Boards, Governance and Value Creation' 1st edition, Cambridge University Press, Cambridge.
- Hussain, A.R, Raza, U.A &Umair, Y.M 2012, 'Does the loan loss provision affect the banking profitability in case of Pakistan?', *Asian Economic and Financial Review*, vol. 2 ,no.7, pp 772-783
- Ibraheem, S.S 2011, 'The Effect of Banks Governance on Banking Performance of The Jordanian Commercial Banks: Tobin's Q Model', *International Research Journal of Finance and Economics*, Issue no 71,pp 34-47
- 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.
- 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.
- Keasey, K., Thompson, S. and Wright, M. 1997, 'Corporate Governance: Economic, Management, and Financial Issues', Oxford University Press, UK.

- Kelifa, S. 2012, “corporate governance mechanisms and their impact on performance of commercial banks in Ethiopia”, MSc thesis, Addis Ababa university.
- Kiel, G. C. and Nicholson, G. J. 2003 ‘Boards that Work: A New Guide for Directors’ Sydney: McGraw Hill.
- King, R. G., & R. Levine 1993, ‘Finance, Entrepreneurship and Growth Theory and Evidence’, *Journal of Monetary Economics*, vol.32 pp 513-542.
- Klein A. 1998, ‘Firm performance and board committee structure’, *Journal of Law and Economics*, pp 275–303.
- Klein A. 2002, ‘Audit committee, board of director characteristics, and earnings management’. *Journal of Accounting and Economics* vol.33 pp. 375-400.
- Konishi, M & Yasuda, Y 2004, ‘Factors affecting bank risk taking: Evidence from Japan’, *Journal of Banking & Finance*, no. 28 pp. 215–232.
- Kwee, K.P & Rasiah, D 2010, ‘Relationship between Corporate Governance and Bank Performance in Malaysia during the Pre and Post Asian Financial Crisis’, *European Journal of Economics, Finance and Administrative Sciences*, issue no.21,PP 39-73
- Kyereboah-Coleman, A. 2007, ‘corporate governance and firm performance in Africa: A dynamic panel data analysis. Accessed on April 20, 2011. Retrieved from [http://www.ifc.org/ifcext/cgf.nsf/AttachmentsByTitle/PS2.3/\\$FILE/Kyereboah-Coleman+-+Corporate+Governance.pdf](http://www.ifc.org/ifcext/cgf.nsf/AttachmentsByTitle/PS2.3/$FILE/Kyereboah-Coleman+-+Corporate+Governance.pdf)
- Langtry, B. 1994, ‘Stakeholders and the Moral Responsibilities of Business’, *Business Ethics Quarterly*, Vol. 4, No. 4, Pp.431-443

- LaPorta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R 2000, 'Investor protection and corporate governance', *Journal of Financial Economics*, vol.58 pp 3–27
- Letza, S., Sun, X. and Kirkbride, J. 2004, 'Shareholding versus Stakeholding: A Critical Review of Corporate Governance', *An International Review*, Vol. 12, No. 2, Pp242-262.
- Liang, N. and Li, J. 1999, 'Board structure and firm performance: New evidence from China's private firms', China Centre for Economic Research. Available at: <http://www.ccer.edu.cn/workingpaper/paper/e1999008.pdf>, accessed 16 Oct 2012.
- Lipton, M.,& Lorch, J. W. 1992, 'A Modest Proposal for improved Corporate Governance', *The Business Lawyer* vol 48 no. 1 pp 59–77.
- Macey, J. R. and O'Hara, M. 2001, 'The Corporate Governance of Banks', *Federal Reserve Bank of New York Economic Policy Review*.
- 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
- Mathuva, D. M 2009, 'Capital Adequacy, Cost - Income Ratio and the Performance of Commercial Banks: The Kenyan Scenario', *The International Journal of Applied Economics and Finance*, vol.13,No. 2,pp 35 – 47
- Mayer, F 1997, *Corporate Governance, Competition, and Performance*, in *Enterprise and Community: New Directions in Corporate Governance*, Deakin,S. and Hughes,A. (Eds.),Blackwell Publishers, Oxford, UK.

- Modigliani, F., & Miller, M. 1963. 'Corporate income taxes and the cost of capital: A correction', *American Economic Review*, vol. 53, pp.443-53.
- Molyneux, P & Thornton, J 1992, 'Determinants of European bank profitability: a note', *Journal of Banking and Finance*, vol. 16, no. 11, pp. 73–1178.
- Morck, R., A. Schleifer and R.W. Vishny. 1988, 'Management ownership and market valuation: An empirical analysis'. *Journal of Financial Economics*, vol 20, pp 293–315.
- Nanon, S 1999, 'Capital Adequacy and Capital Issues in Nigeria', *CBN Journal of Finance*, Vol.3, No.2
- National Bank of Ethiopia (NBE) 1999 'Minimum Paid up Capital to be maintained by Banks, Licensing and supervision of banking business Directive No. SBB/24/1999
- National Bank of Ethiopia (NBE) 2008 'Banking Business Proclamation No. 592/2008"
- National Bank of Ethiopia (NBE) 2008, 'reserve requirement: 4th replacement', Licensing and supervision of banking business, Directive No. SBB/45/2008
- National Bank of Ethiopia (NBE) 2010 'Asset Classification and provisioning, Licensing and supervision of banking business Directive No. SBB/48/2010
- NBE (1995). Legal Reserve, Licensing and Supervision of Banking Business, Directive No. SBB/4/95
- 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.
- Olubukunola, R.U.2011, 'Corporate governance and financial performance of banks: A study of listed banks in Nigeria', Covenant University, Ota, Ogun state
- Oluyemi, S.A 1996, 'The Implications for Banks' Profitability on Implementing the Risk-Based Capital Requirements'; NDIC Quarterly, Vol. 6 No1
- Osborn, M, Furies, A & Miline, A 2011, 'Capital and profitability in banking: Evidence from US banks' Loughborough university school of business and economics.
- Pasiouras F & Kosmidou, K 2007, 'Factors influencing the profitability of domestic & foreign commercial banks in European Union', Research in International Business and Finance, vol. 21, no. 2, pp. 222-237.
- Pfeffer, J.1972, 'Size and Composition of Corporate Boards of Directors: The Organization and its Environment', Administrative Science Quarterly, Vol. 17, pp 218-229.
- Ravina, E. and Sapienza P. 2009, 'What do independent directors know? Evidence from their trading', Review of Financial Studies Vol. 23 No.3, pp. 962-1003.
- Renneboog, L. 2000, 'Ownership, managerial control and governance of companies listed on the Brussels stock exchange', Journal of Banking and Finance, vol 24, no 12, 1959–1995
- Rosenstein, S. and J. G. Wyatt 1990. 'Outside directors, board independence, and shareholder wealth', Journal of Financial Economics, 26, pp. 175–191

- 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
- Sahin, K., Sahin, B.C. & Ozasalih, A. 2011, 'The impact of board composition on corporate financial and social responsibility performance: Evidence from public-listed companies in Turkey', *African Journal of Business Management*, Volume 5, no. 7 pp. 2959-2978 retrieved from <http://www.academicjournals.org/AJBM>
- 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
- Smallman, C. 2004, 'Exploring Theoretical Paradigm in Corporate Governance' *International Journal of Business Governance and Ethics*, vol. 1 no. 1 pp 78-94.
- 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).
- Tanzila, D.S. & Javed, A.G 2009, 'Bank Governance Effectiveness towards Regulatory Compliance: Evidence from Private Commercial Banks of Bangladesh', University of Dhaka, Bangladesh.
- USAID (2007). Ethiopia Commercial Law and Institutional Reform and Trade Diagnostic. Retrieved on June 12, 2012 From www.bizclir.com/galleries/countryassessments/Ethiopia.pdf

- 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.
- Waddock, S. and Graves, S.1997, 'The Corporate Social Performance-Financial Performance Link', *Strategic Management Journal*, Vol. 18 no.4, pp 303-319.
- Watanabel, N. & Sakawa, H.2011, 'Corporate Board Structures and Performance in the Banking Industry: Evidence from Japan', Nagoya City University, Yamano-hata. Retrieved from <http://ssrn.com/abstract=1786200>
- Waweru, MN, & Kamau, RG, Uliana, E, 2008, 'Audit committees and corporate governance in a developing country', AAA 2009 Management Accounting Section (MAS) Meeting Paper
- Yermack D. 1996. 'Higher Market Valuation of Companies with a Small Board of Directors', *Journal of Financial Economics*, VOL. 40, PP.185-211.
- Yisau, A.B 2012, 'The Determinants of Bank's Profitability in Nigeria', *Journal of Money, Investment and Banking*, issue no. 24, pp. 6-16.

Appendices

Appendix –I: Tests for the Heteroskedasticity Test:

Heteroskedasticity Test: White

F-statistic	1.424200	Prob. F(64,5)	0.3761
Obs*R-squared	66.35981	Prob. Chi-Square(64)	0.3956
Scaled explained SS	40.46877	Prob. Chi-Square(64)	0.9906

Test Equation:

Dependent Variable: RESID^2

Method: Least Squares

Date: 05/27/13 Time: 01:04

Sample: 2005 2012

Included observations: 70

Collinear test regressors dropped from specification

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.053581	0.034697	1.544244	0.1832
AC	-0.003194	0.003904	-0.818122	0.4505
AC*BC	0.003545	0.002242	1.581146	0.1747
AC*BOH	-0.005885	0.002471	-2.381850	0.0630
AC*BSZ	-0.000504	0.000175	-2.882216	0.0345
AC*BZ	0.000212	0.000115	1.841205	0.1250
AC*CAR	0.002947	0.002805	1.050499	0.3416
AC*ISHH	0.000982	0.000709	1.385126	0.2246
AC*LIQ	0.000584	0.001068	0.546716	0.6081
AC*RES4	-0.004091	0.002052	-1.993462	0.1028
AC*TDTA	0.012602	0.005022	2.509367	0.0539
BC	0.004994	0.019269	0.259188	0.8058
BC^2	0.009127	0.008613	1.059706	0.3378
BC*BOH	0.000996	0.022516	0.044242	0.9664
BC*BSZ	-0.001935	0.000881	-2.195639	0.0795
BC*BZ	0.000534	0.000469	1.138681	0.3064
BC*CAR	-0.020505	0.013122	-1.562598	0.1789
BC*ISHH	0.007195	0.003788	1.899466	0.1159
BC*LIQ	0.010367	0.006788	1.527227	0.1872
BC*RES4	-0.004784	0.012752	-0.375186	0.7229
BC*TDTA	0.016928	0.010136	1.670136	0.1558
BOH	-0.072092	0.041383	-1.742043	0.1420
BOH^2	0.051598	0.022650	2.278039	0.0717
BOH*BSZ	0.002897	0.001231	2.352700	0.0653
BOH*BZ	0.001058	0.000654	1.618451	0.1665
BOH*CAR	-0.000456	0.016668	-0.027383	0.9792
BOH*ISHH	-0.000194	0.006524	-0.029671	0.9775
BOH*LIQ	0.008373	0.011516	0.727034	0.4998
BOH*RES4	-0.013045	0.021252	-0.613850	0.5662
BOH*TDTA	-0.011181	0.025546	-0.437693	0.6799
BSZ	-0.007434	0.003312	-2.244965	0.0747
BSZ^2	0.000213	8.09E-05	2.634019	0.0463
BSZ*BZ	-2.07E-05	3.68E-05	-0.562685	0.5979
BSZ*CAR	0.002646	0.000795	3.327203	0.0208
BSZ*ISHH	-0.001270	0.000476	-2.666547	0.0445
BSZ*LIQ	-0.000686	0.000581	-1.181704	0.2905
BSZ*RES4	0.000337	0.000832	0.404699	0.7024
BSZ*TDTA	0.000181	0.001219	0.148669	0.8876
BZ	0.003023	0.001315	2.298988	0.0699

BZ^2	-6.51E-05	3.37E-05	-1.932001	0.1112
BZ*CAR	0.000358	0.000295	1.211590	0.2798
BZ*ISHH	0.000544	0.000190	2.861638	0.0353
BZ*LIQ	-0.000282	0.000404	-0.697573	0.5165
BZ*RES4	0.000854	0.000633	1.349769	0.2350
BZ*TDTA	-0.003143	0.001464	-2.147112	0.0846
CAR	-0.023165	0.008884	-2.607413	0.0478
CAR^2	-0.001293	0.000862	-1.500541	0.1938
CAR*ISHH	-0.011866	0.004975	-2.385205	0.0628
CAR*LIQ	-0.012011	0.007575	-1.585519	0.1737
CAR*RES4	0.026701	0.013500	1.977771	0.1049
CAR*TDTA	-0.027619	0.011773	-2.345972	0.0659
ISHH	0.018662	0.007433	2.510580	0.0538
ISHH^2	0.001160	0.001277	0.908367	0.4053
ISHH*LIQ	0.003881	0.004152	0.934917	0.3927
ISHH*RES4	0.003048	0.003245	0.939072	0.3908
ISHH*TDTA	-0.003764	0.002839	-1.325665	0.2423
LIQ	0.018974	0.013037	1.455324	0.2053
LIQ^2	0.005286	0.003742	1.412705	0.2169
LIQ*RES4	-0.005102	0.007346	-0.694542	0.5183
LIQ*TDTA	-0.017281	0.011805	-1.463961	0.2031
RES4	-0.035779	0.022569	-1.585337	0.1737
RES4^2	0.003210	0.010685	0.300419	0.7759
RES4*TDTA	0.028252	0.019288	1.464750	0.2029
TDTA	0.043054	0.028240	1.524558	0.1879
TDTA^2	-0.022788	0.015077	-1.511452	0.1911
<hr/>				
R-squared	0.947997	Mean dependent var	4.89E-05	
Adjusted R-squared	0.282363	S.D. dependent var	6.45E-05	
S.E. of regression	5.47E-05	Akaike info criterion	-17.57312	
Sum squared resid	1.49E-08	Schwarz criterion	-15.48523	
Log likelihood	680.0592	Hannan-Quinn criter.	-16.74378	
F-statistic	1.424200	Durbin-Watson stat	2.684862	
Prob(F-statistic)	0.376138			

Appendix –II: Regression results

Dependent Variable: ROA
 Method: Panel Least Squares
 Date: 05/28/13 Time: 18:00
 Sample: 2005 2012
 Periods included: 8
 Cross-sections included: 9
 Total panel (unbalanced) observations: 70

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.251320	0.036455	-6.894006	0.0000
AC	0.005298	0.002771	1.912256	0.0616
BC	-0.024311	0.009713	-2.502906	0.0156
BOH	-0.030849	0.020116	-1.533546	0.1314
BZ	-0.001194	0.001033	-1.156147	0.2531
CAR	-0.001429	0.000849	-1.683825	0.0984
LIQ	-0.005622	0.009546	-0.588947	0.5585
RES	-0.017919	0.010657	-1.681395	0.0989
ISHH	0.080834	0.016924	4.776266	0.0000
TDTA	0.035784	0.012898	2.774313	0.0078
ID	-0.007357	0.006781	-1.084928	0.2832
BSZ	0.011359	0.001577	7.201787	0.0000

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.928734	Mean dependent var	0.023942
Adjusted R-squared	0.901653	S.D. dependent var	0.015421
S.E. of regression	0.004836	Akaike info criterion	-7.590407
Sum squared resid	0.001169	Schwarz criterion	-6.947979
Log likelihood	285.6642	Hannan-Quinn criter.	-7.335227
F-statistic	34.29453	Durbin-Watson stat	1.964681
Prob(F-statistic)	0.000000		

Appendix 3 Ratio data

NAME	YEAR	ROA	BZ	BC	AC	CAR	BSZ	ID	LIQ	ISHH	BOH	RES	TDTA
DB	2005	0.02076	7	0.714286	0	0.097076	21.95291	0.021053	0.2985	0.79	0.028526	0.114035	0.828362
DB	2006	0.029256	7	0.714286	0	0.110084	22.23751	0.027497	0.2527	0.83	0.024679	0.106027	0.812143
DB	2007	0.030955	6	0.666667	0	0.120946	22.52184	0.027313	0.277	0.84	0.017872	0.142526	0.804668
DB	2008	0.030528	7	0.857143	1	0.143595	22.7811	0.031933	0.372	0.83	0.017762	0.226444	0.785776
DB	2009	0.025686	7	0.857143	1	0.174484	22.99879	0.032981	0.483	0.83	0.017693	0.353621	0.814297
DB	2010	0.026228	7	0.857143	1	0.147686	23.23716	0.039019	0.425	0.82	0.175785	0.180216	0.821196
DB	2011	0.030764	6	1	1	0.156302	23.40839	0.046317	0.425	0.81	0.012545	0.201482	0.807736
DB	2012	0.037215	7	1	1	0.19446	23.58661	0.047239	0.33	0.78	0.010762	0.12823	0.802829
CBE	2005	0.017245	10	0.7	1	0.090133	24.22488	0.02231	0.53	1	0	0.3408	0.76478
CBE	2006	0.022372	10	0.7	1	0.100936	24.30258	0.027086	0.59	1	0	0.185668	0.789032
CBE	2007	0.019882	10	0.7	1	0.232851	24.49501	0.028005	0.59	1	0	0.2118	0.756466
CBE	2008	0.026995	10	0.7	1	0.1388	24.64357	0.028384	0.34	1	0	0.175984	0.746454
CBE	2009	0.032334	10	0.7	1	0.114346	24.80775	0.02508	0.45	1	0	0.130406	0.732003
CBE	2010	0.026528	10	0.7	1	0.093764	25.02985	0.023603	0.335	1	0	0.125023	0.736602
CBE	2011	0.025056	11	0.909091	1	0.0881	25.46179	0.025493	0.265	1	0	0.122153	0.739508
CBE	2012	0.034219	11	0.909091	1	0.056944	25.79094	0.030669	0.158059	1	0	0.082416	0.734139
CBB	2005	0.009279	5	0.6	0	0.082658	21.32867	0.034389	0.338	1	0	0.131004	0.576419
CBB	2006	0.031163	5	0.6	0	0.118634	21.30938	0.037841	0.312	1	0	0.050083	0.541458
CBB	2007	0.029645	5	0.6	0	0.151993	21.35931	0.05135	0.307	1	0	0.049762	0.601376
CBB	2008	0.026967	6	0.666667	0	0.172603	21.5954	0.034699	0.39	1	0	0.245909	0.622597
CBB	2009	0.035117	6	0.666667	0	0.160362	21.6757	0.035494	0.365	1	0	0.268889	0.707522
CBB	2010	0.029096	6	0.666667	0	0.163132	21.87447	0.033207	0.2356	1	0	0.261048	0.744667
CBB	2011	0.024536	6	1	0	0.170743	21.97746	0.036805	0.397	1	0	0.124115	0.715335
CBB	2012	0.019507	6	1	0	0.135958	22.50615	0.961264	0.46238	1	0	0.121078	0.591461

AIB	2005	0.014949	12	0.833333	1	0.135698	21.52347	0.022759	0.389	0.1702	0.1502	0.093439	0.740141
AIB	2006	0.025839	12	0.833333	1	0.124564	21.80643	0.028798	0.214	0.1624	0.1403	0.068547	0.738868
AIB	2007	0.026478	12	0.833333	1	0.166701	22.06613	0.03131	0.295	0.1532	0.1393	0.114082	0.714855
AIB	2008	0.02967	10	0.8	1	0.193718	22.29604	0.035685	0.383	0.116	0.0796	0.09634	0.802769
AIB	2009	0.022264	10	0.8	1	0.219062	22.58315	0.031294	0.496	0.0999	0.0872	0.248308	0.695739
AIB	2010	0.027436	9	0.888889	1	0.220575	22.79581	0.042489	0.49	0.0878	0.0737	0.184073	0.676709
AIB	2011	0.03252	9	1	1	0.205167	23.03738	0.048049	0.4	0.085	0.0059	0.204823	0.698302
AIB	2012	0.030051	12	1	1	0.177692	23.2978	0.033679	0.43	0.0926	0.0164	0.086632	0.701273
WB	2005	0.029703	9	1	0	0.165624	21.20322	0.043317	0.384	0.36	0.118	0.038366	0.79703
WB	2006	0.03143	9	1	0	0.15308	21.53819	0.044267	0.293	0.34	0.118	0.077468	0.787073
WB	2007	0.032184	9	1	0	0.173318	21.9703	0.038793	0.39	0.34	0.126	0.093965	0.782615
WB	2008	0.033697	9	1	0	0.245167	22.14033	0.046545	0.437	0.28	0.108	0.204816	0.719129
WB	2009	0.035365	9	1	0	0.356887	22.35603	0.046698	0.569	0.28	0.108	0.369793	0.72844
WB	2010	0.038837	9	1	1	0.349159	22.47107	0.05538	0.529	0.21	0.126	0.152428	0.683184
WB	2011	0.040069	9	1	1	0.381128	22.8103	0.062027	0.514	0.18	0.126	0.238266	0.739056
WB	2012	0.040209	9	1	1	0.383195	22.84519	0.043492	0.334	0.18	0.086	0.10702	0.689838
UB	2005	0.028891	8	1	0	0.192308	20.79372	0.041938	0.363	0.32	0.0132	0.125815	0.806151
UB	2006	0.027517	9	1	0	0.181249	21.19264	0.034396	0.371	0.28	0.132	0.178862	0.762977
UB	2007	0.029317	9	1	0	0.236112	21.50397	0.032066	0.347	0.25	0.12	0.064605	0.706071
UB	2008	0.028	9	0.888889	0	0.234707	21.90192	0.033538	0.426	0.2	0.12	0.173974	0.751808
UB	2009	0.020206	9	0.888889	0	0.221739	22.26056	0.02902	0.534	0.18	0.12	0.286183	0.777297
UB	2010	0.029512	9	0.888889	0	0.222568	22.49754	0.044098	0.445	0.16	0.02	0.296399	0.801334
UB	2011	0.030032	9	0.888889	0	0.235607	22.76773	0.037799	0.461	0.11	0.02	0.178367	0.785175
UB	2012	0.033898	8	1	0	0.240458	22.89652	0.035614	0.325	0.11	0.02	0.096738	0.769048
NIB	2005	0.026559	12	0.833333	0	0.170784	21.27254	0.030023	0.268	0.25	0.13	0.056582	0.70612
NIB	2006	0.028614	11	0.909091	0	0.173971	21.42982	0.02664	0.215	0.25	0.12	0.045881	0.716329
NIB	2007	0.029152	10	0.9	0	0.216285	21.68147	0.023399	0.267	0.18	0.1	0.107019	0.720751

NIB	2008	0.030959	11	0.909091	1	0.252192	22.01799	0.029315	0.365	0.17	0.04	0.197278	0.676673
NIB	2009	0.032037	12	0.916667	1	0.285548	22.29334	0.035781	0.486	0.15	0.1	0.188549	0.685818
NIB	2010	0.033663	12	0.916667	1	0.295148	22.51018	0.048568	0.414	0.19	0.09	0.156144	0.691262
NIB	2011	0.034589	10	1	1	0.357152	22.68505	0.045557	0.513	0.16	0.08	0.236967	0.725189
NIB	2012	0.034587	12	1.000000	1	0.350539	22.83659	0.039366	0.36	0.12	0.03	0.10089	0.705454
LION	2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LION	2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LION	2007	-0.0188	11	0.9091	1	1.108374	19.39901	0.004511	0.6316	0	0.0093	0.109022	0.458647
LION	2008	-0.00174	11	0.9091	1	0.742188	20.16814	0.015679	0.6353	0	0.0093	0.248109	0.653551
LION	2009	0.003151	11	0.9091	1	0.356612	20.67408	0.016807	0.4648	0	0.0093	0.167142	0.738716
LION	2010	0.029326	11	1	1	0.356827	21.03369	0.040323	0.5431	0.1618	0.0151	0.171377	0.74624
LION	2011	0.024195	10	1	1	0.465137	21.31552	0.036088	0.504788	0.1632	0.0176	0.271706	0.717552
LION	2012	0.030615	10	1	1	0.384865	21.62466	0.042184	0.421872	0.1762	0.0219	0.120214	0.705089
CBO	2005	-0.06111	11	1	1	13.65854	18.67532	0.000155	0.937984	0.27	0.11	0.891473	0.116279
CBO	2006	-0.01854	11	1	1	0.901034	19.22716	0.000938	0.397321	0.24	0.09	0.28125	0.4375
CBO	2007	0.004624	11	1	1	0.522088	19.86524	0.012736	0.412736	0.23	0.09	0.224056	0.653302
CBO	2008	0.014406	11	1	1	0.416635	20.33466	0.016861	0.484718	0.21	0.14	0.306557	0.722353
CBO	2009	0.001692	11	1	1	0.238484	20.74503	0.011149	0.35366	0.15	0.14	0.198926	0.771043
CBO	2010	0.011884	11	1	1	0.211427	21.29311	0.030299	0.481541	0.13	0.122	0.244474	0.775773
CBO	2011	0.018906	11	1	1	0.221523	21.6397	0.038938	0.48677	0.14	0.11	0.195821	0.792054
CBO	2012	0.027792	11	1	1	0.201852	22.02366	0.035943	0.336735	0.0879	0.1	0.134864	0.762123

Appendix 4 questionnaire

Dear Respondent!

My name is Kibrysfw Getahun , a post graduate student pursuing a Master degree in the faculty of Business and Economics at Addis Ababa University. Currently, I am conducting a master's thesis for the partial fulfillment of the master's degree in business administration in Finance. The purpose of the study is examining the impact of corporate governance mechanism in the performance of Ethiopian commercial banks. To achieve this objective, your genuine and timely responses on the next questionnaire will have a tremendous impact. The questionnaire will take only 30-45 minutes to complete as I recognize that your time is valuable. All information provided will be aggregated for academic purpose only and will be treated in the strict confidentiality. I kindly request your cooperation to return the questionnaire within SEVEN days. I am grateful for your cooperation in providing the following information for the study regarding the bank.

No	Questions	2005	2006	2007	2008	2009	2010	2011	2012
1	Total number of directors in the board each year								
2	Number of non-executive directors in the board each year *								
3	Does Audit committee exist in the bank? (yes or no)								
4	Combined holders of directors in %								
5	The total holdings of owner who have holding of 2% and above on the bank								

2. * Non-executive directors are those directors who are outside of the management and/ or employees of a bank sitting on the board.