



The Impact of Corporate Governance on the Financial
Performance on selected State Owned Enterprise (SOEs) in
Ethiopia

By

Sisay Demelash Haile

Advisor: Habtamu Berihanu (Dr.)

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Department of Accounting and Finance

College of Business and Economics

Addis Ababa University

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ABSTRACT

The main objective of this study is to examine the impact of corporate governance on the financial performance of selected SOEs of Ethiopia. To achieve this objective, the data were collected from a sample of eight SOEs for the financial year covering 2010 to 2018. Variables such as board size, board educational qualification, firm size, board gender diversity, board frequency of meeting and size of audit committee were considered as predictors of the firm financial performance that was measured employing the return on asset (ROA). Secondary data were collected using documentary information from company annual financial statements and the data were analyzed using fixed effect regression analysis by using STATA 14.2. The regression result shows that board size is negatively related and has significant effect on ROA. The frequency of meeting and board educational level are related with ROA negatively and has insignificant effect. Firm size is negatively related and has significant effect on ROA. Firm age also positively and significantly related with ROA. Whereas Board gender diversity & audit committee size are positively but insignificant effect on ROA; Board educational qualification is insignificant and negatively related with ROA. The finding of the study indicates that small board size is related to better performance. The overall contribution of this research is to recommend PEHAA to nominate small board members with high skill & industry specific experience without considering the political intuition.

Keywords: Corporate governance, financial performance, board size, board frequency of meeting, board gender diversity, board educational qualification, firm size, Return on asset (ROA), State owned Enterprises (SOE)

DECLARATION

I, Sisay Demelash, declare that this research work is outcome of my own effort and study, except were otherwise indicated and acknowledged. It is submitted for the partial fulfillment of the degree of Masters in Accounting and Finance at Addis Ababa University. 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 or diploma to any other university. I further declare that all resources cited or quoted are indicated and acknowledged by means of a comprehensive list of references.

By: Sisay Demelash

Signature_____

Date_____

Dedication

This thesis is dedicated to my beloved mother Fantu Haile, my beautiful wife Gelila Belay for their encouragement, pray and unconditional support.

Statement of Certification

Addis Ababa University
College of Business and Economics
Department of Accounting and Finance

This is to certify that the thesis prepared by Sisay Demelash, entitled: The Impact of Corporate Governance on the financial performance of Selected SOEs in Ethiopia and submitted in partial fulfillment of the requirements for the of Degree of Master of sciences in Accounting and finance complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

Signed by the Examining Committee:

Examiner _____ Signature _____ Date _____

Examiner _____ Signature _____ Date _____

Examiner _____ Signature _____ Date _____

Advisor Dr. Habtamu Berihanu Signature _____ Date _____

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List of Abbreviations

BOD- Board of Directors

ROA- Return on Asset

CEO- Chief Executive Officer

PEHAA- Public Enterprises Holding and Administration Agency

SOE- State Owned enterprises

OECD- Organization for Economic Co-operation and Development

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Corporate governance involves a set of relationships between a company's management, its board, its shareholders and other stakeholders. It also provides the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined (OECD, 2015). Corporate governance can be defined as the relationship among shareholders, board of directors, top management, employees, regulators, any other stakeholders and the community in determining the direction and performance of the corporation. Shleifer & Vishny (1997) also defines corporate governance as it is the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment.

In the wake of Enron and other similar cases, countries around the world have reacted quickly by pre-empting similar events domestically. As a speedy response to these corporate failures, the USA issued the Sarbanes–Oxley Act in July 2002, whereas in January 2003 the Higgs Report and the Smith Report were published in the UK, again in response to recent corporate governance failures (Solomon, J. 2004).

Good corporate governance can be an advantage to avert corporate scandals, deception, and impending civil and unlawful obligation of companies. The revelation of corporate fraud generally occurs at the beginning of economic downturns that may independently drive households' decisions to reduce their equity holdings (Povel, Singh, and Winton, 2007; Wang, Winton and Yu, 2010). Good corporate governance enhances the image and reputation of a company and makes it more alluring to investors, suppliers, customers and other stakeholders of the company. There is evidence from many types of research that good corporate governance engenders direct economic benefit to the company, making it more remunerative lucrative and competitive (Solomon, J. 2004).

The degree to which corporations observe basic principles of good corporate governance is an increasingly important factor for investment decisions. Of particular relevance is the relation between corporate governance practices and the increasingly international character of investment. International flows of capital enable companies to access financing from a much larger pool of investors. If countries are to reap the full benefits of the global capital market, and if they are to attract long-term “patient” capital, corporate governance arrangements must be credible, well understood across borders and adhere to internationally accepted principles (OECD, 2015).

Even if corporations do not rely primarily on foreign sources of capital, adherence to good corporate governance practices will help improve the confidence of domestic investors, reduce the cost of capital, underpin the good functioning of financial markets, and ultimately induce more stable sources of financing (OECD, 2015).

State-owned enterprises (SOEs) are an important element of most economies, including many more advanced economies. SOEs are most prevalent in strategic sectors such as energy, minerals, infrastructure, and other utilities and, in some countries, in financial services. The presence of SOEs in the global economy has grown strongly in recent years. Today they account for over a fifth of the world's largest enterprises as opposed to ten years ago where only one or two SOEs could be found at the top of the league table. This means that high standards of corporate governance of SOEs are critical to ensure financial stability and sustain global growth (OECD, 2018).

State Owned Companies are generally not created to maximize profits or incur losses; rather their existence is primarily for the purposes of driving development agenda on behalf of the government. SOE's are divided as commercial and non-commercial. Commercial SOE are those which are created for making profit whereas non-commercial SOE's are created to enhance service delivery and create employment on behalf of the government (Jurkonis & Petrusauskaite, 2014) cited in Ramantsi, 2017).

The performance of SOE's has improved by greater competition, exposure to capital market discipline and better governance practices. However many SOE's still not

performing well due to high economic, financial and opportunity cost. Inefficient provision of critical inputs and services can increase costs for local businesses and divert scarce public sector resources and taxpayers' money away from social sectors that directly benefit the poor. Assets that could be used more productively elsewhere in the economy may be tied up. And poorly performing SOEs cannot access financing through the capital markets, which is critical to infrastructure and financial sector development (OECD, 2005).

The poor performance of SOE's is caused by mainly by the fundamental problems that arise in their governance rather than by exogenous or specific problems. The problem in the governance may include contradictory mandates, the absence of clearly identified owners, politicized boards and management, lack of autonomy in day to day operational decision making, weak financial reporting and disclosure practices, and insufficient performance monitoring and accountability systems where these shortcomings are more common, SOEs may also be a source of corruption (OECD, 2005).

For investors, one of the most paramount aspects when making an investment decision is on the level of implementation of corporate governance principles (public report of reference, a buttress of lender rights and approach treatment of shareholders) and profitability, which ascertains return on their investment.

Like most Africa countries Ethiopia does not have any adequate corporate governance standards yet. Bradley (2004) cited in Fekadu (2015) describes firms which has better corporate governance mechanisms could attain organizational goals and objectives than those firms which do not have. Adams and Mehran (2003) cited in Fekadu (2015), indicate that well designed systems have been considered as the significant factor in improving the performance of the organization. Corporate Governance is aimed at ensuring proper governance of business as well as complying with all the governance norms prescribed by regulatory body for the benefit of all interested parties including society.

The board of directors has an important role in alleviating the agency costs that arise from the separation of ownership and decision control in corporations (Cheung and Chan, 2004 cited in Fekadu (2015). The need for an independent board is evident in mitigating this principal-agent relationship. The creation of a board of directors as part of corporate governance attributes is to monitor the firm's performance, thus, protecting the interest of shareholders (OT San et al, 2015).

SOE's are often associated with mismanagement and poor financial performance and this is generally attributed to various aspects such as operational inefficiencies, resource inadequacies (Ambe & BadenhorstWeiss, 2012 cited in Ramantsi, 2017), misappropriation of funds and the lack of shareholder accountability (McGregor, 2014 cited in Ramantsi, 2017).

1.2 Statement of the problem

Corporate governance has become a popular discussion topic in developed and developing countries. The widely held view that corporate governance determines firm performance and protects the interests of shareholders has led to increasing global attention. However, the way in which corporate governance is organized differs between countries, depending on the economic, political and social contexts. Firms in developed countries have dispersed shareholders and operate within stable political and financial systems, well developed regulatory frameworks and effective corporate governance practices and the reverse is true for developing countries (Kumudini, 2011 cited in Gebregeorgis, 2017).

In Africa and especially in Ethiopia there are few studies on the relationship between corporate governance and financial performance. Gebregeorgis (2017) studied board structure and financial performance in case of state-owned service enterprises, Getahun (2013) examine impact of corporate governance mechanisms: on performance of Ethiopian Commercial bank; Mitiku (2015) studied the impact of corporate governance on the financial performance of selected insurers in Ethiopia; Melkamu (2016) investigated the effect of corporate governance on the financial performance of Micro-Finance institution in Ethiopia; Engdawork (2015) examined the corporate governance practice in private banks of Ethiopia and Getahun, T. (2017), conduct a research on the effect of corporate governance on the performance of private commercial banks of Ethiopia. Most of the studies are on financial sectors.

Beside the little research on the issue of the impact of corporate governance on the financial performance SOE in Africa & Ethiopia, the result is mixed. These varied findings therefore imply that the relationship between corporate governance and financial performance may not be consistent across firm specific context or for all

types of corporate governance structures. Therefore the findings of prior studies are fraught with limitations which make it impossible to generalize the results to all SOE. So the need for further research could lead to new contribution to the scant body knowledge of corporate governance.

Gebregeorgs (2017) conducted a research on Board structure and financial performance of six state owned service enterprise in Ethiopia by using a pane data for a period of 2000 to 2014. From the research he conclude that corporate governance variables board structure, board composition, board committee and leadership structure are positively correlated with ROA and board size negative correlation with ROA. On the other hand board composition, board committee, and board leadership shows positive relationship with ROE. The study overlooked some corporate governance variables like board frequency of meeting, audit committee size and board gender diversity.

In general, lack of sufficient research on the impact corporate governance mechanism on financial performance SOEs in the context of Ethiopia and the existence of knowledge gap in the area are also the reason to undertake this study.

In many countries, SOE provide the basic infrastructure for economic and social developments. When they fail to meet their mission they become a financial and a political burden. Prior researches on the performance of SOEs show that weak corporate governance is linked with poor performance (OECD, 2015).

- ✓ Though public enterprises exist for the purpose of serving a sensitive public interest side-by- side with the aim of profit-making at the end, they must be capable of resisting the stiff competition exerted by private enterprises. This implies that they need to have suitable organizational set-up and efficient management systems so as to remain competent in the market.
- ✓ Many projects run by SOEs are commenced without detailed analysis and planning. This results in losses and delays. This is due to poor planning, mismanagement or lack of finance. As a result projects become cost overrun.
- ✓ The profitability of state owned enterprise is quite low due to several inefficiencies in the way in which they are managed. Many enterprises incur heavy losses and the government regularly infuses capital to run them.

- ✓ Many of these SOE s function according to the dictates of politicians. There are many instances of corruption and undue favors being extended to select group of people who enjoy political patronage.
- ✓ The output of state owned enterprises, whether it is a product or a service, is not of high quality. This is due to lack of investment in technology, low employee morale, inferior quality of raw materials, poor work culture and lack of quality focus. Therefore they are not able to compete with the superior quality products and services offered by the private sector.

Based on the above facts, addressing governance issues of SOE should be given due importance.

1.3 The Objectives of the Research

General Objectives of the study

The general objective of the study is to examine the impact of corporate governance mechanisms on the financial performance of selected SOEs performance.

Specific objectives

Specifically, the study addressed the following objectives:

- 1) To evaluate the effect of Board Size on Return on Assets.
- 2) To determine how frequency of Board Meetings affect Return on Asset
- 3) To determine the relationship between audit committee size and ROA
- 4) To assess how board educational background affect the ROA
- 5) To determine the effect of board gender diversity on ROA

1.4 Research Questions

The study has been conducted to answer the following specific questions:

1. What effect does the board size have on financial performance selected SOEs performance?
2. What effect does the meeting frequency of boards have on financial performance selected SOEs performance?
3. What is the effect of audit committee size on the financial performance of selected SOEs performance?

4. What is the effect of existence of female board member on the financial performance selected SOEs performance?
5. What is the effect of board members educational background on the financial performance selected SOEs performance?

1.5 Hypotheses of the Study

The following hypotheses were developed for the study.

Board size

Board size and its impact on firms is one of the most debated issues in corporate governance. Yermack (1996) cited in Wang (2013) concludes for his research that the relation between board size and firm performance is negative. He provides strong empirical evidence for the notion that smaller boards are better boards.

On the one hand, larger board size may suffer from impaired coordination and communication problems and thus influence board effectiveness (Lipton and Lorsch, 1992; Guest, 2008, 2009 cited in Wang, 2013). Further, larger board size also may reduce the board's ability to oppose the control of top managers due to less candid discussion of managerial performance (Jensen, 1993; Eisenberg et al., 1998 cited in Wang, 2013). In the other hand, larger boards may benefit firms by offering better advice, which comes from directors' knowledge, expertise, experience, or their external links (Booth and Deli, 1999; Agrawal and Knoeber, 2001; Carpenter and Westphal, 2001; Güner et al., 2008 cited in Wang, 2013).

Therefore, the prior studies actually yield inconclusive arguments about the impact of board size on firm performance.

Given the above contradicting facts the following hypothesis is developed.

H1: Board size has significant & negative relationship with the financial performance of SOEs performance.

Gender Diversity of a Board

The presence of women as directors in firms has received considerable debate concerning board diversity and its association firm's performance Jamaludin et al (2018). In prior literature, several studies attempted to examine the effect of women on board on companies' performance.

Kang et al. 2008 cited in Moser & Shabanaj (2019) declare that gender balance on BODs can enhance the boards' ability to discharge their control and strategic roles and lead to improved corporate performance. Women director are seen as more risk-averse than men in strategic and financial decisions (Jianakoplos & Bernasek, 1998 cited in Moser & Shabanaj (2019)). This implies that a balanced appointment of male and female directors on boards would result in better strategic decisions and corporate performance.

Campbell & Minguez-Vera (2008) cited in Moser & Shabanaj (2019)) also examined if gender diversity in the boardroom affects the financial performance of Spanish corporations. They found that a gender balanced board has a significant effect on firm value, while only the presence of women is not affecting the firm value.

However, Kang et al. (2008 cited in Moser & Shabanaj (2019)) claim that gender diversity could cause disadvantages, such as time-consuming discussions and higher risk of conflicts. Hence could also negatively affect the corporate performance.

Therefore, considering the recent activities of the government in gender diversity at leadership position and also the view of stakeholder theory which supports a negative association between board diversity and firm performance the following hypothesis is proposed.

H2: Gender diversity of the board has positive & significant relation with the financial performance of SOEs performance.

Educational qualification of the board

Cheng, Chan and Leung (2010) cited in Li-He et al (2016) used Mainland Chinese firms to study the influence of educational levels on firms' financial performance. Their findings revealed that members with higher educational levels led to enhanced firm financial performance. The study also found that board members who held university degrees were significantly positively associated with firm financial performance. Almatari, Alswidi and Fadzil (2013) cited in Li-He et al (2016) studied the relationship between board education and firm financial performance, as measured by ROA. They reported that having a qualified and educated member on the board improved firm financial performance. According to Fairchild and Li (2005) cited in Li-He et al (2016), the board member must be skill full with management fully

knowledge to manage & monitor the company, and ultimately improve the performance of the organization.

Similarly, Darmadi (2013) cited in Li-He et al (2016) examined the relationship between the educational backgrounds of board members on firm financial performance, and employed a sample consisting of 160 firms listed on the Indonesia Stock Exchange for the financial year 2007. The results indicated that postgraduate degrees and degrees from 'prestigious' high-ranked universities had significant positive effects on ROA.

On the other hand, some previous studies show that there is no relationship between board members' education and firm financial performance. Gottesman and Morey (2006) cited in Li-He et al (2016) studied the correlation between education and firm financial performance (measured by ROE, Tobin's Q, ROA and adjusted ROA) on New York Stock Exchange listed firms during the period 1997 to 2003. They found that companies managed by members who had Master of Business Administration or law degrees performed no better than companies managed by members who did not have graduate degrees. Thus, there was no association between education and the financial performance of listed firms in the US.

Vo and Phan's (2013) cited in Li-He et al (2016) conduct a study on 77 listed firms trading 43 over the period 2006 to 2011 in Vietnam to examine relationship between board education and the performance and found that no relationship.

Some prior research also revealed the negative relationship between board members' education and firm financial performance. For instance, Darmadi (2013) cited in Li-He et al (2016) also found a significant and negative relationship between postgraduate degrees held by board members and Tobin's Q. He also found that board members holding developed-country degrees were negatively related to ROA. Further, academic degrees held by board members in finance-related disciplines negatively influenced firm financial performance, while firms led by directors with qualifications from 'prestigious' universities showed significantly higher profitability than others (Darmadi 2013 in Li-He et al (2016)). Given the above illustration the following hypothesis is developed.

H3: the number of board members with post graduate degree is positively associated with the financial performance of SOEs performance.

Size of Audit Committee

Audit committee size is defined as the number of audit committee members (Amer, Ragab & Shehata 2014; Nuryanah & Islam 2011 cited on cited in Khalifa H (2018)). Companies which have audit committee perform better than companies which do not have audit committee (Wild 1996: 2011 cited on Khalifa, H. (2018)). One of the most important characteristics of audit committee is audit committee size (Khalifa H, (2018). Pearce li and Zahra (1992) cited in Khalifa H (2018) stated that an audit committee with an appropriate number of members enables them to use their experience and expertise for the benefit of stakeholders. On the other hand Vafeas & Theodorou 1998 cited on cited in Khalifa H (2018) reported that audit committee size do not have impact on the performance of the firm.

Kyereboah-Coleman (2008) cited in Khalifa H (2018) studied data from 103 listed firms drawn from Ghana, South Africa, Nigeria and Kenya, covering the five-year period from 1997 to 2001. They found that audit committee size positively affected the financial performance.

Another study by Ibrahim, Raman and Saidin (2009) cited in Khalifa H (2018) conduct a research on a sample of 261 listed companies in the Bursa Malaysia in 2004, and found that audit committee size had a significant positive effect on firm financial performance, which they believed was due to improvements in the quality of financial reporting.

Amer, Ragab and Shehata (2014) cited in Khalifa H (2018) used audit committee size as a variable in their research to oversee the effect of audit committee characteristics on companies' performance in Egyptian companies listed on the stock exchange, via measuring ROE, ROA and Tobin's Q. Their study did not find a significant relationship, which suggests that audit committee size did not influence firms' financial performance. Azim (2012) determined the consequences of CG characteristics on the performance of companies, where audit committee size was one of the characteristics. The sample size comprised 1,500 companies selected from the 500 top companies listed on the Australian Securities Exchange (ASX) for

2004 to 2006. Their study found that audit committee size had a negative effect on firm financial performance.

Based on the above stated facts the following hypothesis is proposed.

H4: Size of audit committee in a board has a significant positive relationship with the financial performance of SOEs performance.

Frequency of meeting

Board activity and board meeting are the most important indicators of the effectiveness of the board. (Vafeas, 1999; Congeret al., 1998; Lipton & Lorsch, 1992 cited on Al-Daoud ,2016). Lipton and Lorsch (1992) cited on Al-Daoud (2016) reported that stating the frequency and duration of meetings helps the board to oversight the activities of the firm. El Mehdi (2007) cited on Al-Daoud, 2016 found that board activities do not have a necessarily positive relation to firm performance. Given the above conflicting results the majority of prior research work goes to in favor of the idea that board meetings has positive impact on performance of the company (Al-Daoud, 2016).

Therefore based on the above facts the following hypothesis is proposed.

H5: Frequency of board meeting has a significant positive relationship with the financial performance of SOEs performance.

1.6 Scope and Limitation of the Study

1.6.1 Scope of the Study

This study is delimited to exploring the impact of internal corporate governance mechanism on firm financial performance by taking evidence from selected eight SOEs of Ethiopia for the period of nine years, from 2010-2018 that are under Public Enterprise Holding and Administration Agency (PEHAA). As indicated above, the study focuses only on SOEs in Ethiopia because corporate governance problems and transparency issues are crucial in state owned enterprises (OECD, 2005). Besides, to make the study more manageable and to investigate the problem thoroughly the study is limited to incorporate only internal corporate governance mechanisms and focusing only on SOEs in Ethiopia.

1.6.2 Limitation of the Study

This study is limited to internal corporate governance mechanism variable (board size, Frequency of board meetings, Existence of female directors in the board, director's educational qualification & size of audit committee) against firm performance as measured by return on assets (ROA). External corporate governance mechanisms are controlled by those outside the organization which includes financial markets, regulation, governments & trade union. Internal corporate governance mechanisms is chosen because as Bonn (2004) cited Getahun (2017) stated boards can be described as an important element of the firm's decision control system, which plays a key role in monitoring and controlling managers. Hence board structure has impact on corporate performance since it might affect the directors' motivation and their ability to effectively monitor and advise managers (Ayele, 2013 cited Getahun (2017)).

One of the limitations is that this study relied on accounting based return, return on asset (ROA), to measure SOE financial performance because of lack of capital & stock market to use market based returns.

1.7 Significance of the research

The findings of this study would contribute by identifying relevant corporate governance mechanisms and how these governance mechanisms affect financial performance. The result of this study contributes to the existing literature by providing evidence on the relation between corporate governance mechanisms and SOEs financial performance. The study may serve as a reference material for other researchers who need to make a research on this area at larger scale. And also, this study may contribute to practitioners by providing proper responses to the corporate governance and its effect on financial performance to formulate policy.

1.8 Structure of the Study

The structure of the thesis report is divided into five chapters. Chapter one is the introduction part which contains background of the study, statement of the problem, research question, hypothesis, objective of the study, scope of the study, limitation of the study and significance of the study & structure of the research thesis.

Chapter two presents a discussion on literature review. Chapter three outlined the research methodology followed in the study. Chapter four reports the results and a discussion thereon. In the final chapter, conclusions, summary recommendations and suggestions for further research and improvements were forwarded.

CHAPTER TWO

LITERATURE REVIEW

2.1 Concepts and Models of Corporate Governance

Corporate governance is dynamic and central aspect of business. The study of corporate is principally the study of the mechanisms of capitalist system. Even if there is many variation of capitalism, most corporate governance research has tended to focus predominantly on Anglo American (Anglo Saxon) system of corporate governance. Anglo Saxon (Anglo American) is a system where companies are listed on stock exchange and shareholders can trade freely in the shares (Solomon, J. (2004)).

Corporate ownership has been considered as having strongest influence on system of corporate governance and other factors that affect corporate governance includes legal system, cultural and religious traditions, political environment and economic events (Solomon, J. (2004)).

There are many more forms of corporate governance based on different structures of ownership and influenced by vast variations on cultural and religious background, legal framework and political climate. Typically, Russia and China experienced state control due to their political climates. East Asian countries have been influenced by cultural and legal factors. For instance Confucian ethics has had a significant and last impact on the development of business in South Korea. European Union characterized by founding family ownership structure and Japan and Germany are characterized by “Pyramidal ownership” structure which is traditionally bank relationship (Solomon, J. (2004)).

Corporate governance weakness, which perhaps passed unnoticed in earlier times, has led to massive corporate collapse, affecting countries around the world (Solomon, J. (2004)).

There is no single accepted definition for corporate governance. Corporate Governance is the system of check and balances, both external and internal to companies, which ensures that companies discharge their accountability to all their stakeholders and act socially responsible ways in all areas of their business activity. Structure of corporate governance determines distribution of rights and responsibilities between various actors in company, such as boards, managers,

shareholders and other stakeholders, and lays rules and procedures for making corporate decisions. This way, it provides the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined (OECD, 2015).

2.1.1 The Models of Corporate Governance

Due to historic, cultural and financial differences between nations, there are some different corporate governance systems in the financial markets. In the legal literature, three kinds of well-known corporate governance systems, Anglo American Model, German Model and Japanese Model, take the leading position. (Sonmez & Yildirim, 2015)

2.1.1.1 Anglo American Model

In this model ownership and control is separated and the main objective of this model is to maximize the interest of shareholders. So shareholders have very important right in the company. In this model it is believed that shareholders may not have enough ability to run the company in a professional manner and they need an external agent for the management of the company; on the other hand they continue to control them in order to ensure whether external agent works for the benefit of the company. These relations between shareholders and external agents accepted as the most important problem of Anglo American model (Principal Agent problem). (Sonmez & Yildirim, 2015)

The market control or Anglo-Saxon system is characterized by the following features:

- (1) ownership is diffuse except for institutional investors;
- (2) control is vested in the board of directors, with external directors playing an important role;
- (3) capital markets are very liquid and there is a developed market for corporate control and takeover market; and
- (4) there is more defense of the ownership rights of shareholders over the rights of debtholders than in the continental European model; that is, legal protection acts as a substitute for ownership structure (La Porta et al., 1997)

2.1.1.2 The German Model

This model is also known as Continental European approach because the German model is implemented by many European states such as Germany, Holland, and France (Fernando, 2006). The German Model has two tier board structures in corporate governance. Two tier board refers to two kinds of board structure in the company: upper board (supervisory board) and executive board (management board). In this model shareholders accepted as owner of the company but they cannot completely select supervisory board. Half of the members of supervisory board are selected by shareholders and others half are selected by stakeholders. In this model managers of the company focus on the interest of both shareholders & stakeholders. (Sonmez & Yildirim, 2015)

The large-shareholder control or Continental European system is characterized by the following features: (Baums, 1993; Kester, 1997)

- (1) ownership is concentrated; banks, companies, and families are large shareholders;
- (2) control is assumed to be exercised by large shareholders;
- (3) the board of directors is controlled by internal directors or external directors linked to large shareholders;
- (4) capital markets are relatively illiquid and have limited control ability;
- (5) there exist implicit contracting and close personal trust relationships among managers;
- (6) long-term lender or borrower relationships and bank ownership of equity are main-trained;
- (7) there is no active market for control; that is, management does not face hostile takeover bids; and
- (8) banks play a major role in corporate governance, through equity stakes, proxies given to them by small investors and bankers' position on the boards of firms

2.1.1.3 The Japanese Model

The Japanese Model focuses on the long term interest of the company instead of the short term shareholders interest. In this model the boards are generally accepted as a huge & exceptionally executives. In the Japanese model members of the board

generally consists from the majority of shareholders and also from the main bank. The main bank plays an important role in corporate governance system as an outsider manager of the company by providing loan and monitor and elect a director to the supervisory board. (Sonmez & Yildirim, 2015)

2.1.2 Fundamental corporate governance theories

2.1.2.1 Agency theory

Agency theory is defined as the relationship between the principals such as shareholders and agents such as the company executives and managers, shareholders who are the owners or principal of the company, hires the agents to perform the work. The problem arises as a result of this system of corporate ownership is that the agents do not necessarily make decision in the best interest of the principal (Solomon, J. (2004))

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 ideal. 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 reap the full benefits, of their actions (Solomon, J. (2004)).

2.1.2.2 Shareholders theory

According to the shareholder model the objective of the firm is to maximize shareholder wealth through allocative, productive and dynamic efficiency i.e. the objective of the firm is to maximize profits. The criteria by which performance is judged in this model can simply be taken as the market value (i.e. shareholder value) of the firm. Therefore, managers and directors have an implicit obligation to ensure that firms are run in the interests of shareholders.

2.1.2.3 Stewardship theory

Stewardship theory has its root from psychology and sociology and is defined by Davis, Schoorman & Donaldson (1997) cited in Tshipa (2017) stated as "steward

protects and maximizes shareholders wealth through firms performance by so doing, the steward's utility functions are maximized". Stewards are company executives and managers working for the shareholders, protect and make profits for the shareholders.

Contrary to the concepts of agency theory, Donaldson (1990) and Davis (1991) (cited in Maina, 2017) derived the stewardship theory which focuses on maximizing shareholders wealth through firm performance. Abdullah and Valentine (2009) (cited in Maina, 2017) also described stewardship theory in the perspectives borrowed from psychology and sociology. It is usually applied in the business in case relating to family business interest in what scholars refer to as 'family firm' in which the firm has both family shareholders as well as family.

Contrary to agency theory that concentrate on the monitoring role of the outside director over management and executive directors (in their capacity as managers) , stewardship theory holds that there is no conflict between inside/ executive directors and outside directors. Both categories of directors have an alignment of objective of motivation in terms of working together to grow and sustain a company's wellbeing. To this end, given common and aligned motivations and within an environment of trust, both the outside and executive director input may also be considered a 'resource' to the company (Nicholson and Kiel, 2004 cited in Maina 2017).

2.1.2.4 Stakeholders

Stakeholders theory can be defined as any group or individual who can affect or is affected by the achievements of the organization's objectives. Stakeholder's theory owes its development to Freeman's (1984) cited in Maina (2017). Freeman's study defined both concept of stakeholders and provides explanation for corporate responsibilities to its stakeholders. The essence of stakeholders theory is the assumption that the firm is a system composed of stakeholders who operate within a large system where various stakeholders and the society at large provide needed legal and market infrastructure that enable the companies activities as well as the companies' ability to generate wealth and value for its shareholders (Clarkson, 1994 cited in Maina 2017).

Stakeholder's theory involves three aspects which essence explain and guides the structure of the corporation. One of the aspects is the descriptive aspects which describes the specific uniqueness and behavior of the corporation. The second is the instrumental aspect which identifies the linkage between management, stakeholders and organizational achievements of goals. The third is the normative aspect which focuses on the definition of the corporation like moral guidelines for the corporation's operation and management (Donaldson & Preston, 1995 cited in Maina, 2017).

2.1.2.5 Resource dependency theory

Resource dependency theory concentrates on the role of board directors in providing access to resource needed by the firm. The resource dependency theorists advocated that whereas the agency theorists posited a very narrow view that the board of directors served as a monitor, the role of the board is more inclusive (Aldrich & Pfeffer, 1976 cited in Ashe 2012). Pennings (1980) cited in Ashe 2012 found that the survival of organization depends on the skills and competence among the board of directors. Boyd (1990) cited in Ashe 2012 advocated that the resource dependency theory contribution to corporate governance is grounded on the linkages between the board's role and the business strategies of the organization.

Pfeffer and Salancik (1978) cited in Ashe 2012 found that the management team of successful organizations learns how to manage the other parties which influence the resources needed to assist managers to perform. The authors argued that the survival of organization depends on the management team ability to respond to the "demands of the external environment".

2.1.2.6 Transaction cost theory

Transaction cost theory is an interdisciplinary alliance of law, economics and organizations. The theory attempts to view the firm as an organization comparing people with different views and objectives.

Transaction cost economics as explained by the work of Williamson (1975, 1984) (as cited in Areba, 2009) is often viewed as closely related to agency theory. Transaction cost economics views the firm as a governance structure whereas the agency theory views the firm as a nexus of contracts. Essentially, the latter means that there is a

connected group or series of contracts amongst the various players, arising because it is seemingly impossible to have a contract that perfectly aligns the interests of principal and agents in a corporate control situation.

As firms grow in size, whether caused by the desire to achieve economies of scale, or by technological advances, or by the fact that natural monopolies have evolved, they have increasingly required more capital which has needed to be raised from the capital markets and wider shareholder base has been established. The problem of the separation of ownership and control and the resultant corporate governance issues have thus arisen. Coase (1937) (as cited in Areba, 2009) examines the rationale for the firm's existence in the context of a framework of the effectiveness of internal as opposed to external contracting. He states "the operation of a market costs something and by forming an organization and allowing some authority (an entrepreneur) to direct the resources, certain marketing costs are saved".

The entrepreneur has to carry out his function at less cost; taking into account the fact that he may get factors of production at a lower price than the market transactions which he supersedes (Cadbury, 2002). Hart (1995) (as cited in Areba, 2009) states there are a number of costs to writing a contract between principal and agent, which include the cost of thinking about and providing for all the different eventualities that may occur during the course of the contract, the cost of negotiating with others, and the costs of writing the contract in an appropriate way so that it is, for example, legally enforceable.

These contracts tend to mean that contracts are apt to be incomplete in some way and so contracts will tend to be revisited as and when any omissions or required changes come to light. Hart indicates that in a world of incomplete contracts (where agency, problems are also present), governance structure can be seen as a mechanism for making decisions that have not been specified in the initial contract (Carver, 2000) (as cited in Areba, 2009).

2.1.2.7 Political Theory

Political theory brings the approach of developing voting support from shareholders, rather by purchasing voting power. Hence having a political influence in corporate governance may direct corporate governance within the organization. Public interest

is much reserved as the government participates in corporate decision making, taking into consideration cultural challenges (Pound, 1993 cited in Abdullah, 2009).

The political model highlights the allocation of corporate power, profits and privileges are determined via the governments' favor. The political model of corporate governance can have an immense influence on governance developments. Over the last decades, the government of a country has been seen to have a strong political influence on firms. As a result, there is an entrance of politics into the governance structure or firms' mechanism (Hawley and Williams, 1996 cited in Abdullah 2009).

2.1.3 Principles of corporate Governance

The OECD principles of corporate governance provide specific guidance for policymakers, regulators and market participant in improving the legal, institutional and regulatory framework that underpins corporate governance, with a focus on publicly traded companies. They also provide practical suggestions for stock exchanges, investors, corporations and other parties that have a role in the process of developing good corporate governance. They have been endorsed as one of the Financial Stability Forum's key standards essential for financial stability.

There is no single model of good corporate governance. However, some common elements underlie good corporate governance. The Principles build on these common elements and are formulated to embrace the different models that exist. (OECD, 2015)

The main principles of OECD are as follow:

1. Ensuring the basis for an effective corporate governance framework: the corporate governance framework should promote transparent and efficient market, be consistent with the rule of law and clearly articulate the division of responsibility among different supervisory, regulatory and enforcement authorities.
2. The right of shareholders and key ownership functions: The corporate governance framework should protect and facilitate the exercise of shareholders' right.
3. The equitable governance framework should ensure the equitable treatment of all shareholders, including minority and foreign shareholders. All

shareholders should have the opportunity to obtain effective redress for violation of their right.

4. The role of stakeholders in corporate governance: The corporate governance framework should recognize the right of stakeholders established by law or through mutual agreements and encourage active cooperation between corporations and stakeholders in creating wealth, jobs, and the sustainability of financially sound enterprises.
5. Disclosure and transparency: The corporate governance framework should ensure that timely and accurate disclosure is made on all material matters regarding the corporation, including the financial situation, performance and governance of the company.
6. The responsibility of board: the corporate governance framework should ensure the strategic guidance of the company, the effective monitoring of management by the board, and the board's accountability to the company and the shareholders.

2.1.4 Corporate Governance mechanisms

The corporate governance mechanisms that have been most extensively studied in the US can be broadly characterized as being either internal or external to the firm. The internal mechanisms of primary interest are the board of directors and the equity ownership structure of the firm. The primary external mechanisms are the external market for corporate control (the takeover market) and the legal/regulatory system. The system of corporate governance encompasses are mechanisms design to control managers and reduce conflict of interest. Corporate governance mechanism can be characterized as internal and external.

2.1.4.1 Internal corporate governance mechanism

Internal corporate governance mechanisms are the internal means in the firm that can encourage managers to maximize the company values. These means includes in particular board of directors, committees, auditors, ownership structure & mutual monitoring & supervisory board (Azutoru et al, 2017).

A. Board of directors

The term board of directors refers to the governing body of an incorporated organization such as an SOE. The exact role of the board differs

by jurisdiction and may also be different for state-owned enterprises from that of private sector companies. In a one-tier system, a single board of directors provides strategy and oversight of the company. Its board may be composed either entirely of nonexecutive members (that is, members who are not part of the senior management), of a combination of executive and nonexecutive members, or, in rare cases, of executive members only. In jurisdictions with a two-tier system, the SOE has both a supervisory board and a management board. The supervisory board, usually composed entirely of nonexecutive directors, oversees the management board, which consists of the enterprise's senior management team (OECD, 2005).

The board of SOE's often constitutes representative from the government, political body and stakeholders who have limited business or financial knowledge or experience and therefore they are not capable unsuited to exercising the kind of responsibility increasingly required of SOE boards (OECD, 2005).

Boards of SOE may comprise ministers and other politically connected persons, party leaders, elected officials, and civil servants who may excel at ensuring that the SOE is attentive to political or policy goals; but they may pursue those goals to the detriment of the economic and financial health of the SOE (OECD, 2005).

Moreover, without the required technical and business experience, directors may be unprepared to exercise the full range of responsibilities of a professional board member. For example, their knowledge of risk management or internal control and audit may be insufficient to effectively monitor management or provide strategic guidance (OECD, 2005).

The boards of director's constituent an important internal corporate governance mechanism, as they represent shareholders are responsible for monitoring the daily management of the corporation (Sana, 2013). The boards of directors control the affairs of the company in order to achieve financial reliability and compliance with laws and regulations.

Board characteristics

1. Board size

Board size refers the total number of directors on the board of any corporate organizations. Establishing the ideal board size for an organization is very important because the number and quality of directors in the firm determines and influence the board functioning and hence corporate performance.

2. Board independence

A board comprising a reasonable proportion of non-executive directors is more likely to be independent of management than the one dominated by executive directors and therefore more likely to protect the interest of other stakeholders.

3. Directors remunerations

Director remuneration is the payment made for services or employment of directors on the board of company or corporation.

4. Ownership structure

Directors with direct or indirect ownership in a firm under their watch will perform their monitoring and strategic responsibilities are effective.

B. Board committees

Committees are subsidiary to the board of directors. They perform particular function on the ones that are delegated by the board. Committees most commonly includes the audit committee, the remuneration committee, & risk management committees.

C. Auditors

The auditors represent a mechanism for the management to control and way to reduce discretionary latitude. The objective of the auditors is to provide shareholders with more developed and more relevant information.

D. Ownership Structure

It is a means of controlling relationship between shareholders and manager. The ownership structure is an effective means of control of management executive, as it brings together.

2.1.4.2 External corporate governance mechanisms

Beside the internal control mechanisms, there is another control that contributes to the regulation of potential conflicts that may arise between shareholders and

managers. This control is exercised through financial market, market goods and services, and the labor market for managers. (Sana, 2013)

2.1.5 Overview of corporate Governance in Ethiopia

The corporate governance practice in Ethiopia relies on the existing legal framework, which includes laws and bylaws, sets of decisions, directives, codes and rules. Tura, H.A (2012) noted that “The Ethiopian company law does not have adequate legislative provisions on governance issues related to the separation of supervision and management responsibilities, and on the composition, independence and remuneration of board of directors in share companies”. The commercial code of Ethiopia includes some provision relevant to share companies (Tura, H.A 2012), whereas the proclamation No. 25/1992 of SOE include articles pertinent to SOEs in Ethiopia. We will examine the proclamation No. 25/1992.

SOE is a business organization wholly or partly owned by the state and controlled through a public authority with the aim of serving a sensitive social interest & profit making at the ultimate goal. SOE must resist the competition with the private in order to remain in the market. In Ethiopia there were many SOEs but failed to realize their goals due to state intervention & improper involvement of the state in the internal operation of the enterprise. (Dagnachew et al, 2009)

SOEs are inherently weak to run commercial business activities due to the existence of rigid procedures, red-tape & delay in functioning. Therefore it is important to create an organizational structure whereby SOE can enjoy management autonomy and that enable them to be efficient, productive and profitable by competing with private enterprises. (Dagnachew et al, 2009)

The SOE proclamation No. 25/1992 contains provisions that set out the organizational pattern which gives relative autonomy upon SOE. Article 10 of the proclamation puts forth what the organization of a SOE should look like and says each enterprise shall have Supervising Authority, Management Board, General Manager (and Deputy General Manager as may be necessary), Management Committee and the Necessary Staff (employees). (Dagnachew et al, 2009)

The Management Board (Articles 12-15)

Boards may be established with different natures in different systems. There could be advisory boards – that propose decisions and not make them; functional boards – that make routine decisions of the day-to-day affairs of the enterprise; or policy boards – that have wide powers and make long-term decisions. The management board of a SOE in Ethiopia is best categorized under policy boards. According to the proclamation, the management board is not expected to exhibit high functionality; it is simply to formulate broad directions and policies.

Detailed managerial matters are formulated and executed by another internal managerial organ, but of course within the ambit of the general policy laid down by the board.

Formation and Composition

The members of the management board are all physical persons (individuals), as juridical persons are not fit for assuming such offices as boards. The number of the members is to be between three (minimum) and twelve (maximum); the exact number, within the given range for a particular SOE is to be determined by supervising authority (Art 11(1)).

Modes of assuming office in the board are election and appointment. Election is carried out by the general assembly of workers, and not more than one-third of the members are to assume office by this method. The rest of the members are appointed by the supervising authority, and chairman of the board is appointed from among these. The term of office of members is fixed to be minimum three years and maximum five years with reappointment or reelection possible upon expiry. An individual can have a membership in two non-competing enterprises.

The supervising authority being an executive organ of the state, it seems to be the case that the government is having its own personnel, who could be outsiders to the enterprise, in the internal decision-making process of the enterprise. (Dagnachew et al, 2009)

Powers and Duties of the Board

The management board of the SOE acts upon its power and discharges its duties in a properly convened meeting. The power & duties of the board is of a policy making nature.

The board made collective decision. The role of the chairman of the board is to facilitate & call the meeting to respond to the demanding cases timely in case of urgency. (Dagnachew et al, 2009)

According to Article 14 (1) and 11 (3), the powers and duties of the supervising authority and those of the management board seem to be non-overlapping, and of course, in principle, they are not. It seems that all residuary powers of policy-making that are not assigned to the supervisory authority belong to the board (just like the power division between the federal government and the states in the Ethiopian Federal Constitution). (Dagnachew et al, 2009)

The policy issues are formulated by the board, but would be submitted to the supervisory authority for approval.

The matters subject to such role of the Management Board are the following:

- The employment, assignment and dismissal of officers accountable to the general manager, including their salary and allowance. These are usually department heads directly reporting to the general manager (officials having no direct connection with the general manager and other ordinary workers are excluded).
- Adoption of internal regulations, work program and budget
- Long-term loans and credits.
- Sale of fixed assets that do not affect the existence of the enterprise

Failure to carry out duties by the board entails liability wholly and partially for the damage caused. So, due care and diligence is required of Board members.

The General Manager

Organizationally, the office of the General Manager is one of the few pillars of effective management in the decision-making hierarchy of a SOE. The GM is an appointee of the Management Board and is accountable to the Board (Arts 14(2) & 16(2)). His office usually carries out execution functions. He puts into practice policy

matters decided by the Board, and he administers the daily affairs of the enterprise (Art 16(1) (i)).

General Manager is the one who discharges the tasks of organizing, directing, administering and controlling the enterprise as one economic unit. In short, he is a chief executive officer of the enterprise who runs the enterprise and sustains its life on a daily basis. (Dagnachew et al, 2009)

The general manager acts as an agent of the enterprise whose agency authorization arises from the law (Art 18), and an enterprise carries out its legal activities, acquires rights and incurs liabilities primarily through the representation of the General Manager. He is specifically empowered to represent the enterprise in all dealings with third parties and in legal proceedings brought by or against it (Art 16(1) (b)).

The Management Committee

The Management Committee is an organ established by and accountable to the General Manager. It renders an essentially advisory function. It advises on the operations of the SOE. (Dagnachew et al, 2009)

The Necessary Staff

Apart from stating in generic terms that every enterprise's organization contains the necessary staff (Art 10(4)), the SOEs Proclamation does not have detailed provisions on the composition and kind of staff. (Dagnachew et al, 2009)

2.2 Financial Performance

Performance measurement refers to the measuring the action's efficiency and effectiveness (Neely, Gregory & Platts, 1995 cited on Al-Matari et al (2014)). Performance of a firm is significantly impacted by corporate governance and if the functions are appropriately established for the corporate governance system, it attracts investment and in maximizing the company's funds, reinforce the company's pillars and this will result in the increase in firm performance.

Performance measurement can be classified in two categories: Accounting based and Market based measurement. (Al-Matari et al 2014).

2.2.1 Accounting based measurement

Accounting based measurement is generally consider as an effective indicator of the company's profitability and the business when compared to benchmark rate of return

equal to the risk adjusted weight average cost of capital. The most common accounting base measurement are ROA (Return on Asset), ROE (Return on equity), ROS (return on sales), ROI (return on investment), EPS (earning per share), ROCE (return on capital employed), etc. (Al-Matari et al 2014).

2.2.2 Market based measurement

Market base measurement is characterized by its forward looking aspect and they are long term. The most common measurement are Tobin`s Q, MVA (Market value add), MTBV (market to book value), RET (abnormal return; annual stock return), & DY (dividend yield). (Al-Matari et al 2014).

2.3 Empirical survey

Evidence from previous empirical studies from academic literature confirmed that the effect of corporate governance on a firm's performance is mixed.

Vo and Nguyen 2014 cited in Heo (2018) stated that large board size have advantage since it gives more diversity in handling problems and increasing the company's impact on society due to the relationships of board members. In addition to this large boards can mobilize more resources from outside in order to improve their performance.

On other hand, large board size imposes greater transaction cost in decision making process. It will lead to communication and coordination issues and taking more effort to reach consensus. Large board size delays decisions that require a prompt response, possibly leading to lower profits and effectiveness for the firm (Cheng 2008; Guest 2009 cited in Heo (2018)). Miring'u and Muoria (2011) cited in Hoe (2018) examined SOEs in Kenya and demonstrated that larger board size and a higher ratio of nonexecutive directors on the board had positive impacts on financial performance.

Charkham, 1995 and Kihara, 2006 cited in Guzeh (2012) found that good corporate governance results in better financial performance of an organization and some researchers like Jarrell et al. (1998) found out that financial performance of organization is negatively influenced by corporate governance. On the hand,

researchers like Lamport et al. (2010) found out that there is no difference on the financial performance between firms with poor and good corporate governance.

Masibo (2005) found that corporate governance is positively affects the financial performance of state owned corporations through board effectiveness.

Bebchuk, Cohen and Ferrell (2004) cited in Mania (2017) have examined the nexus between corporate governance relative to firm performance and found that firms with good governance structure perform better than those with weaker governance structure. Agrawal and Millistien (2012) cited in Maina (2017) investigated whether there is a relationship between corporate governance & financial performance and found mixed results without clear cut relationship.

Menozzi, Gutiérrez Urtiaga, and Vannoni (2011) examined the effects of board size and board composition on the behavior and performance of 114 Italian state owned enterprises and the data covering eleven years period from 1994-2004. They defined board composition as proportion of directors with or without political connection but do not have any tie with the company they are serving as directors. The results demonstrated that board size affects profitability negatively while increasing employment significantly. The effect of politically connected directors on profitability is also negative while increasing employment.

Fondo (2016) examined the Effect of Corporate Governance on Financial Performance of State Owned Corporations in the Service Industry in Kenya. The Financial performance of the state owned corporations was measured return on assets while the corporate governance attributes used included board composition, board size, independence of committees and duality. The descriptive research design was used in this study. A Sample of 50 corporations was studied and descriptive statistics and multiple regression analysis was used. Data was collected for the month between September 2016 and November 2016. From the study it was concluded that there is a positive relationship between corporate governance and the ROA of the state owned corporations. Board size negatively impacts ROA while board composition, independent committees and firm size all have a positive influence on the ROA.

Duc et al (2013) on their research on Corporate Governance and Firm Performance: Empirical Evidence from Vietnam found that elements of corporate governance such as the presence of female board members, the duality of the CEO, the working experience of board members, and the compensation of board members have positive effects on the performance of firms, as measured by the return on asset (ROA). However, board size has a negative effect on the performance of firms. The study also presented ownership of board members has a nonlinear relationship with a firm's performance.

Gebregeorgs (2017) studied the Board Structure and Financial Performance in state-owned service enterprises in Ethiopia. A sample of 6 firms was selected and a panel data was collected for the period of 2000-2014 (90 observations). Corporate governance variables like board structure of board size, board composition, board committee and board leadership structure and the accounting based performance measures of ROA and ROE selected. Statistical technique of correlation and regression analysis has been employed to find the relationship between dependent & independent variables. The findings showed that separate leadership, percentage of non-executive directors and board size has significant relationship with both ROA and ROE performance variables. On the other hand, board committee has significant relationship with ROE but not with ROA. Therefore, this study concludes that there is a positive relationship between corporate governance variable of board structure and financial performance but the relationship between the financial performance and corporate governance indicators mentioned above remains mixed.

Amadi (2014) conduct a research on The Relationship between Corporate Governance and Financial Performance of State Owned Commercial Enterprises in Kenya. The study was conducted using data from 127 state owned enterprises. The questionnaires were used to collect data. The corporate governance elements employed in the study were the size of BODs, their gender, their educational level, their working experience, their independence, the audit committee's competence and the duality of the CEOs, which were all found to be directly related to the financial performance of the state owned commercial enterprises. Regression model was employed in the analysis of data to estimate the quantitative effect of corporate governance on the financial performance of the state owned commercial enterprises

in Kenya. From the study it was concluded that there exists a positive relationship between corporate governance and financial performance of the state owned commercial enterprises in Kenya. The study concluded that there exists a positive relationship between the corporate governance (board size, board's gender composition, BODs educational level, BODs working experience, BODs independence, Audit committee competence and Duality of CEOs) and the financial performance (ROA) of the state owned commercial enterprises in Kenya.

Yemane et al (2015) examined the impact of corporate governance mechanisms on the performance of Ethiopian insurance Companies using a panel data model for the period covering from 2009 to 2013. The study was conducted on the selected samples of 10 insurance companies &. Descriptive and regression analyses were used. The findings indicated that board meeting and board compensation had statistically significant positive impact on return on equity (ROE). But the results failed to show any significant impact of board size, audit committee, and gender diversity on the proxy of companies' performance. Moreover, the Size of the companies had a significant positive impact on ROE.

Bozec & Dia (2017) cited in Moser & Shabanaj (2019) studied the relationship between the structure of BODs in Canadian SOEs and their technical efficiency. They used three characteristics of the board, namely board size, board independence and leadership structure. The result of their study shows that a positive relationship between board size, board independence and corporate performance, when SOEs are exposed to market discipline. This indicates that larger and more independent boards are more effective at governing within a complex and uncertain environment, than SOEs with smaller, less independent boards.

Mohamed et.al (2016) conducted a study on the impact of corporate governance on Chinese firms' performance with a board structure perspective. A data was collected from Shanghai stock exchange and Shenzhen stock exchange for a period of 2008 to 2011 and 6981 observations. The variables used in this research was return on equity, return on invested capital and Tobin's Q while corporate governance variables were board size and board independence. The result indicates that the board size has significant negative effects on firm performance. On the other

hand, the board independence has overall significant positive effects on firm performance.

Kemboi (2013) cited in Fondo (2016) examine the effect of corporate governance on revenue collection in Kenya revenue authority, a state owned enterprise (SOE). The study found out that board size negatively affects revenue collection while board effectiveness, board roles, policy and decision making positively affects revenue collection. This study concluded that corporate governance positively affects revenue collection.

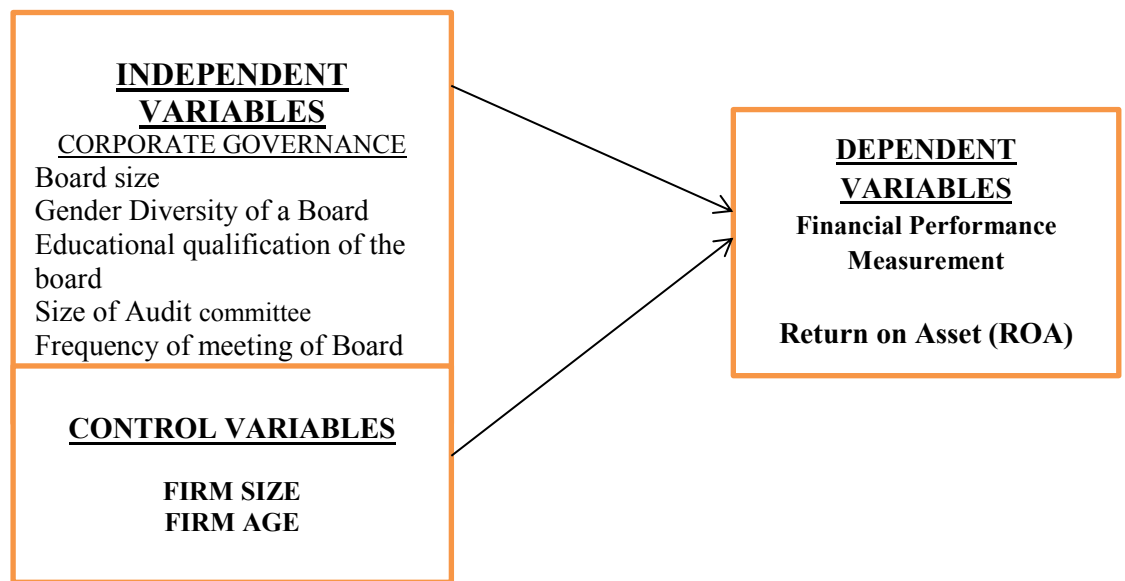
Moya & Akodo (2012) examined the relationship between political interference, corporate governance and corporate performance in four public universities in Uganda. The study was prompted by institutional turbulences as a result of political interference in public universities. A cross-sectional and correlational study was conducted in four public universities in Uganda namely; Makerere, Kyambogo, Gulu and Mbarara. Multiple regression model was fitted using SPSS to determine the strength of the relationship and prediction of corporate performance. The result showed that political interference in these universities decision-making negatively affects their corporate performance. Political interference had a significant negative effect on corporate performance. The findings further revealed that corporate governance variables were significant in this study, specifically, board size, had a negative effect on corporate performance while policy and decision making had a significant positive relationship with corporate performance.

2.4 Conceptual framework of the research

The framework for this study considered internal corporate governance as a dependent variable a key component influencing the firm performance of SOEs is adopted from the work of Makhlouf et al (2014). They propose conceptual framework to investigate the relationship among board characteristics & firm performance among industries listed Amman stock exchange. The model put forward a model with five independent variables as predictors to board effectiveness which consequently affects the SOEs performance. The aim was to see how related are the board characteristics to firm performance. The independent variables under study were Board of directors' independence, board of directors' size, family

members at board of directors, board of directors meetings, CEO duality, and existence of nominations and compensation committee and firms' performance. The conceptual framework for this study is illustrated in Figure 1.

Figure 1: Conceptual Frame works



Source: Adopted from Makhlouf et al (2014)

According to this framework, the internal corporate governance of SOE is the independent variable whereas organizational performance is the dependent variable. Elements of corporate governance include board size, board gender diversity, and board educational qualification, board frequency of meeting & size of audit committee. On the other hand, organizational performance was assessed in relation to Return on asset (ROA).

2.5 Research Gap

In general, literature indicates that corporate governance has a significant contribution to the performance of the SOEs. However researches show that there are no consistent results found. Concerning the Corporate Governance practice in

Ethiopia and its effect on firm performance, there are some empirical studies which were published banking & insurance sector. For instance, previous studies done in banks & insurance companies are Mitiku (2015), Melkamu (2016), Million (2017), & Getahun (2013)).

As far as the researcher's knowledge concerned, there is no sufficient and robust research that has been conducted to provide empirical evidence particularly on the effect of corporate governance mechanisms on firm's financial performance of SOEs in Ethiopia. Furthermore, most previous studies were made in countries where there are capital markets and stock exchange market. So the findings may not apply to country like Ethiopia where there is no capital or stock market and the practice of corporate governance is at infant stage. Moreover corporate governance practice in Ethiopia is at early stage of development and can be described as weak legal framework & poor corporate responsibility.

Gebregeorgs (2017) examine the Board Structure and Financial Performance in state owned enterprises focusing only on service sectors. However the findings may not be applied to SOEs that are engage in manufacturing & other sectors due to difference in the nature of business. Besides the research used few board characteristics and neglected to use other important board characteristics like board frequency of meeting, educational level and board industry specific experiences. In addition to this, the data was collect for short period from 2000-2005.

In addition, although state owned enterprises in Ethiopia are still the dominant players in the Ethiopian economy and the government has been investing a huge amount of money, the literature have generally neglected the assessment of corporate governance in these enterprises. Therefore this study is intended to fill this gap in the Ethiopian literature.

CHAPTER THREE

RESEARCH DESIGN & METHODOLOGY

3.1 Introduction

This chapter consists of research design, data collection procedure, data analysis techniques & description of variables and model specification.

3.2 Research Design

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

The most appropriate way to examine the relationship between corporate governance variables and companies' financial performance was to use a quantitative correlational research design. The focus of quantitative correlational design is examining possible relationships among variables (Stanley, 2011).

A quantitative correlational design was best for the proposed study because the purpose for the study was investigating the relationship among known variables (Stanley, 2011).

The experimental design and quasi-experimental designs were not appropriate for this study. The experimental design is suitable for researchers examining cause-and-effect relationships. The quasi-experimental design is appropriate when the researcher wants assess the casual effect of an intervention on a target population of a study through control groups (Hamoudi & Dowd, 2013 cited Darweesh (2015)).

Accordingly, explanatory research design is best serves the investigation of the relationship between corporate governance variables and financial performance.

The independent variables in the regression model are corporate governance mechanisms of board size, board gender diversity, board educational qualification, size of audit committee and board frequency of meeting. The dependent variables in the study were corporate financial performance. ROA will be used to measure the

corporate financial performance. ROA is one of the most popular value-based measures of performance (Habbash et al., 2014; Taiwo Adewale & Adeniran Rahmon, 2014 cited in Darweesh (2015)). ROA determines a firm's growth over the study period.

3.3 Population and Sample Selection

3.3.1 Target Population

According to Saunders et al. (2003) cited in Hailegiorgies (2019) stated that population is the full set of cases from which a sample is taken. Population can therefore be defined as the total collection of elements about which we wish to make some references. The population of this study is comprised of SOE which reporting to Public Enterprise Holding and Administration Agency (PEHAA). According to proclamation of PEHAA there are 23 SOE under its supervision. These enterprises are engaged in different areas of business such as agriculture, trade, service, manufacturing, transportation, financial services and construction sectors Therefore, for the purpose of this study, the sampling frame consists of the 23 SOE that are under the supervision PEHAA (see Appendix II).

3.3.2 Sample

From the population SOE's which are financial sector are excluded from the sample because they have their own distinct corporate governance system. Furthermore, Sample enterprises covered by the study are selected based on availability of all data. Due to availability of data the following SOE's are excluded from the study: Ethiopian agricultural business corporation; Ethiopian construction design and supervision workshop corporation; Ethiopian construction works corporation; Ethiopian trading business corporation; Ethiopian mineral petroleum and bio fuel corporation are Metals and Engineering Corporation, Ethio-telecom, Ethiopian pulp & paper S.C. Thus, the study making up this research work is based on public enterprises selected using both purposive and convenience sampling method. Therefore, eight major SOEs with financial report from 2010 - 2018 are considered as a representative sample of the study.

SOEs that are investigated under this research are the following:

1. Ethiopian Airlines
2. Ethiopian Sugar Corporation
3. National Chemical Industry Corporation
4. Gihon Hotels Enterprises
5. Ethiopian Postal Service Enterprises
6. SPA Service Enterprises
7. National Liquor and Alcohol Factory
8. Birhan ena Selam Printing Enterprise

3.4 Data Collection Methods

The data used for this research was collected from consolidated annual financial statement for each SOEs for the period of 9 years from 2010-2018. This period is select because corporate data was available for most of the companies. The data on board characteristics comes from SOE board of director's office through structured questioner.

3.5 Data Analysis Techniques

In this study, the multiple regression analysis methods is used to investigate the relationships between corporate governance & financial performance and analyzed by using STATA 14.2 and the results will be presented through tables.

A panel data analysis is used for this research because, according to Himmelberg (1999), it facilitates removal of the unobservable heterogeneity that may exist in the different firms. Yasser (2011) stated that, the first advantage of the panel data regression is this it combines the time series and cross section observation panel data and provides better informative data. In addition to this it is less co-linearity among the variable and more efficiency. And secondly, panel data minimizes the biasness that may be caused if separate firm level data are divided into broad aggregates. And finally, panel data can measure the effects that are not possible to observe in pure cross section or pure time series data.

Descriptive statistics like mean, maximum and minimum is used to summarize the data regarding corporate governance variables and performance measurement of the enterprise. Pearson's Correlation Coefficients was used to test the relationship between corporate governance and performance

3.6 Description of Variable & Model Specification

To estimate the impact of corporate governance mechanisms on the financial performance of Selected SOEs, the following general empirical research model is adopted from previous researches:

Financial Performance = $\beta_0 - \beta_1$ Board size + β_2 Board Educational background + β_3 Board Gender diversity + β_4 Audit committee size + β_5 Board frequency of meeting
finaperfor = f(bsize, beduc, bgdiver, auditcs, bfreqmet, fsize, fage)

$ROA_{it} = \beta_0 - \beta_{1it}$ bsize + β_{2it} beduc + β_{3it} bgdiver + β_{4it} auditcs + β_{5it} bfreqmet + fsize + fage + ϵ_{it}

Where:

ROA – Return on asset

bsize – number of board members

beduc - board education

bgdiver - board gender diversity

auditcs - audit committee size

bfreqmet - board frequency of meeting

fsize- firm size

fage- firm age

3.6.1 Dependent Variable

The dependent variable considered in this study is variable that is used to measure the financial performance of Selected SOEs and are defined as follows:

Return on Asset (ROA) - measures the overall efficiency of management. It gives an idea how efficient management is at using its assets to generate earnings.

$$ROA = \frac{\text{Profit after Tax}}{\text{Total Asset}}$$

prior research considered corporate performance as dependent variable and measured on the basis of accounting measures such as ROA (return on asset), ROE (return on equity), NPM (net profit margin), EPS (earning margin) etc., for the short term analysis of operating performance; and market measures such as Tobin's Q and market to book value ratio the most widely used long-term proxy for firm valuation of performance. In Ethiopia there is no organized stock market indicating the market information of firms hence the market measures are not considered as a proxy to measure share companies' long term performance. In this study the accounting performance measures of profitability of short term performance are the appropriate and the most common measure that is used to gauge financial performance is return on asset (ROA), although it may be biased due to off-balance-sheet activities (Wondem BA, et al, 2019).

According to Hagel, Brown and Davison (2010) cited in Onyali et al (2018) ROA explicitly takes into account the assets used to support business activities. It determines whether the company is able to generate an adequate return on these assets rather than simply showing robust return on sales. Asset-heavy companies need a higher level of net income to support the business relative to asset light companies where even thin margins can generate a very healthy return on assets. Using ROA as a key performance metric quickly focuses management attention on the assets required to run the business. Therefore ROA is used as measurement of financial performance for this study.

3.6.2 Independent variables

The independent variables (explanatory variables) which are used for this study are board size, board's gender diversity, board members' educational qualification, board frequency of meeting and, of audit committee size.

a) Board size

Board size can be defined as the number of board members sitting in the board room. Most previous studies showed that large boards have positive impact on firm performance (Klein, 1998; cited in cited in Li-He et al (2016)). For this study also board size is expected to influence performance negatively.

b) Board gender diversity

Gender diversity of the board is measured as the ratio of women directors to the total number of directors (i.e. number of women directors divided by total number of directors). The gender variable is measured in the proportion female directors on boards of and is expressed likewise the studies of Allini et al. (2016), Campbell et al. (2008) and Nielese & Huse (2010) (cited in Moser & Shabanaj (2019)) by dividing the number of female directors with the total number of directors.

c) board educational qualification

Board educational qualification is measured by the proportion of board members having post graduate degree. Educational qualification is an important determinant of board effectiveness. Moser & Shabanaj (2019) uses the proportion of directors with a bachelor, master, or PhD in economics. This measurement is also adopted for this research. This requirement implies that the quality of each board member will contribute to management decisions which is then translated into the firm's performance (Nicholson and Kiel, 2004; Fairchild and Li, 2005; Adams and Ferreira, 2007 cited Duc et al (2013)).

d) Size of audit committee

Geiger et al (2008) measured audit committee size, as a percentage of audit committee members on the board. Therefore the size of an audit committee refers to the proportion of audit committee members from the board size.

e) Board frequency of meeting

Board frequency of meeting refers to the number of board meeting conducted in the year.

3.6.3 Control variables

a) Firm size

Firm size is measured by natural logarithm of total asset (Skinner & Sloan, 2002). Toh (2013) also used the same measurement for firm size.

b) Firm age

Firm age is measured as natural logarithms of the number of years since the establishment of the firm (Chechet et al (2013) and Vijayakumaran (2019)).

Table 3-1: Description of variables

	Variables	Description	Measurements
1	Bsize	Board size	Number of board of directors
2	Beduc	Board members educational qualification	BOD with post graduate degree divided by board size
3	bgdiversity	Board gender diversity	The ratio of women directors to the total number of directors
4	Bfreqmet	Board frequency of meeting	Number of BOD meeting per year
5	Auditcs	Size of audit committee	percentage of audit committee members on the board
6	ROA	Return on Asset	Profit after tax divided by total asset
7	Fsize	Firm size	Natural logarithm of total asset
8	Fage	Firm age	Natural logarithm of age (years from the date of incorporation)

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION

The chapter is organized in three sections. Section 4.1 presents test for five Classical Linear Regression Model Assumptions. Section 4.2 presents the results of STATA. In Section 4.3 the results obtained under this method is analyzed a discussed.

4.1. Hausman Test: Fixed Effects versus Random Effects

The Hausman specification test compares the fixed versus random effects under the null hypothesis that the individual effects are uncorrelated with the other regressors in the model (Hausman 1978 cited in Getachew (2104). If correlated (HO is rejected), a random effect model produces biased estimators, violating one of the Gauss-Markov assumptions; so a fixed effect model is preferred. The Hausman specification test provided the p-value of 0.0021 that is less than 0.05. Therefore fixed effects data regression model is used, because the behavior of each individual influences the explanatory variables.

4.2. Classical Linear Regression Model Assumptions and Diagnostic tests

To ascertain the validity of the regression model and to check the goodness fit, diagnostic statistics tests like normality, autocorrelation, heteroscedasticity and multicollinearity is performed. To achieve representative diagnostic results, the researcher transformed some of the variables using a natural logarithm as a means of attaining the model fit. All the natural logarithm transformed variables are identified with the “Ln” prefix such Lnbsize and Infreqmet.

4.2.1. Normality

The classical *normal linear regression model assumes that each u_i is distributed normally with Mean= 0 and Variance= σ^2* That is, $u_i \sim N(0, \sigma^2)$ (Brooks, 2008 cited in Getahun, 2013). The normal distribution is symmetric, and has a bell-shape with a

peaked and tail-thickness leading to a kurtosis of 3 (Lee C. Adkins et al).

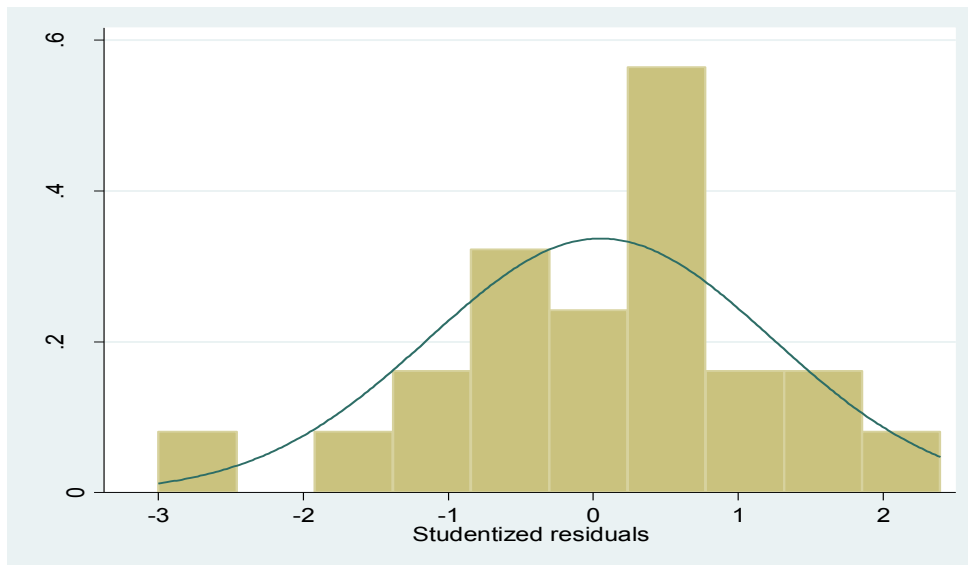


Figure 2: Histogram

The normality distribution of the residual was tested using the Shapiro-Wilk test, which is commonly used to detect any deviation from normality. The normality of error distribution proposition assumes that the sample distribution to be normal if the p value is greater than 0.05 (Baty et al. 2015).

HO: Data are normally distributed

HI: Data are not normally distributed

The Shapiro- Wilk test of the study provided the p-value of 0.70883 that is greater than the p-value of 0.05. Hence, HO is not rejected that means the data are normally distributed.

4.2.2. Test for Autocorrelation

Autocorrelation, also known as serial correlation, refers to the correlation of error components across time periods. This condition violates the classical assumption of regression analysis but it is a reasonable characteristic of error term in time series analysis (Wooldridge, 2003 cited in Tshipa, 2017). The Durbin-Watson (DW) statistic indicates independence between the residuals when DW statistic encompasses values between 1.5 and 2.5 (Diebold, 2016 & Green, 2002 cited in Tshipa, 2017).

From the findings, the Durbin- Watson value was found 1.333245 and this show there no serial correlation.

Table 4-1: Autocorrelation Test: Durbin Watson

Variables	DW static result
All main and control variables	1.333245

4.2.3. Multi-collinearity

Gujarati (2004), stated that multi- collinearity is the presence of a "perfect," or exact, linear relationship among some or all explanatory variables of a regression model. The researcher used the VIF and tolerance to check whether there is the problem of multi collinearity or not among the explanatory variables in the model.

Table 4-2 : Test for Multi collinearity

Variable	VIF	1/VIF
Fsize	6.29	0.158943
Auditcs	2.72	0.367043
beduc	2.67	0.374770
bfreqmet	3.31	0.302222
bsize	2.32	0.431074
bgdiver	1.09	0.920502
Lnage	2.24	0.445872
Mean VIF	2.95	

The above table shows a tolerance value (is an indicator of how much of the variability of a specified independent variable is not explained by the other independent variable) less than 0.1 and if the value of Variance Inflation Factor (VIF) is above 10, indicate there is multi collinearity among the independent variables (Morgan et al.,2004 cited in Getachew (2014)). The result in the above table is obtained from the computation by STATA 14.2 and indicates that there are no tolerance values below 0.1 and the values of VIF greater than 10, suggesting the model is free from multi collinearity problem.

4.2.4. Test for Heteroscedasticity

Heteroscedasticity refers to non-constant variance related to the error term in the model. The study uses the Breusch Pagan test. If the P- value < 0.05, then there is heteroscedasticity. If the P- value > 0.05, there is no heteroscedasticity (Gujarati,

2004 cited in Tshipia, 2017). The Breusch Pagan test result shows that p value of 0.2787 which is greater than 0.05 and this indicates that there is no heteroscedasticity.

4.2.5. Unit root test

Unit root means a parameter of a series that is equal to 1 and when there is a unit root in a series, it means there is evidence of a random walk in the series and therefore it is not stationary. Regression result based on such series may be spurious or non-senescent. There are different methods for testing stationarity and most of them assume balanced panel data: Levin, Lin and Chu (2002), Im, Pesaran and Shin (2003), Harris and Tzavalis (1999), Choi (2001) and Hadri (2000). However the Im–Pesaran–Shin and Fisher-type tests (i.e. Choi 2001) allow for unbalanced panels. (Tshipa, 2017) For this study augmented Dickey-Fuller tests is used to check the stationarity.

4.3. Descriptive statistics results

This research study used the mean, median, maximum, minimum and standard deviation to identify the statistical characteristics of the study’s dependent variable (ROA) and independent variables (gender diversity of the board, board frequency of meeting, board level of education, board size, and audit committee) variables. Table 4-3 below presents the descriptive statistics of these variables.

Table 4-3 : Descriptive statistics results

Variable	Obs	Mean	Std. Dev.	Min	Max
ROA	68	0.1882974	0.2185256	-0.0307674	0.69
Bsize	68	8.294118	1.107085	7	11
bfreqmet	68	11.75	2.221839	5	18
Beduc	68	0.6723962	0.2645117	0	1.111111
Auditcs	68	0.3311423	0.1246869	0	0.4444444
Bgdiver	68	0.0930497	0.0760268	0	0.2857143
Fsize	68	20.85277	2.825447	16.66788	25.80627
Fage	68	3.560126	1.391578	0	4.70048

Source: STATA 14.2 test result summary

Table 4-3 shows the descriptive statistics of the dependent and independent variables for the selected SOE in Ethiopia for the period of 2010-2018 with a total of 68 observations. The Table 4-3 includes the mean, median, standard deviation, number of observations, minimum and maximum for the independent and dependent variables of the model.

The average return on asset for the polled sample is 18.82 % (mean = 0.1882974) with a maximum and minimum value of 3.07% (0.0307674) and 69% (0.69) respectively. At the same time, the standard deviation is 21.85 percent from the average value. This result indicates that most performing SOE among the sampled earned 0.19 cents of profit after tax for a single birr invested in the assets of the firm. On the other hand, less efficient enterprise during study period from the sampled enterprise loss 0.031 cents for each birr invested in the assets of the firm. With regard to independent variables there are some imperative statistics.

The size of the board has average value of 8.29 and the maximum 11 and the minimum 7. Moreover, there is some variation in the frequency of meeting of the board during the period of the study. On average the board conducts 11.75 meeting per year. The standard deviation of the frequency of meeting is 2.22 with a minimum value of 5 and maximum of 18. This implies that some boards of SOEs of Ethiopia conduct at maximum of 18 meeting and at minimum 4 times per year.

The analysis also indicates that the variation of conducting a meeting among the sampled SOEs is 2.22. In general the sampled SOE conduct meeting on average 11.75 times per year. When we compare with the proclamation SOE proclamation 25/1992, the researcher found that the frequency of the board meeting is below the minimum level that is stipulated in the proclamation. According to the proclamation number 25/1992, board should conduct a meeting at least once in a month, which is 12 times per year.

The Table 4-3 also shows that the average proportion of audit committee size is 33.11%, and ranging from the minimum of zero percent to a maximum of 44.44% and the variation is 12.47%. This implies that there are some SOEs which do not

have audit committee. There is a significant variation on size of audit committee among selected SOEs.

With regard to the gender diversity of the board, average proportion of women directors in the board room is 9.3 percent with minimum of 0 percent and a maximum of 28.57 percent and standard deviation 7.06 percent. Based on the descriptive statistics the gender diversity of board in Ethiopian SOE is minimal.

Additionally the descriptive statistics of educational qualification of board of directors, measured as the proportion of directors who has post graduate degree or higher, shows a mean, minimum and maximum value of 67.24%, 0% and 111.11% respectively. The standard deviation is 26.45%. This indicates that from the sampled SOE, there is some enterprises who have highly qualified board members. On the other hand the study reveals that some board members of SOE owns bachelor degree or college diploma. This shows a significant variation on the educational qualification of the board members.

The table also shows that the average audit committee size is 0.3311423 and the minimum value is zero and the maximum of 0.44. The variation is 0.1246869. This indicates that some SOE do not have audit committee.

As per the Table 4-3 the mean value of firm size as measured by the natural logarithm of total asset is 20.85 with having a maximum value of 25.81 and a minimum value of 16.67. The standard deviation of firm size among the sample is 2.82.

4.4. Correlation analysis

Correlation analysis is considered a measure to determine the direction and strength of the linear association between pairs of variables. Table 4-3 presents the correlation values of the variables for this study period. Overall, the correlations are low between all variables, with no indication of strong correlations as per the criteria of 0.90 (Hair et al. (2006)).

Table 4-4 Correlation analysis table

	ROA	bsize	bfreqmet	beduc	bgdiver	auditcs	fsize	lnage
ROA	1.0000							
Bsize	-0.6202*	1.0000						
bfreqmet	0.3216*	-0.0971	1.0000					
beduc	-0.5801*	0.2940*	-0.1515	1.0000				
bgdiver	0.1533	0.0922	0.1773	0.0552	1.0000			
Auditcs	0.4872*	-0.1908	0.7471*	-	0.1256	1.0000		
fsize	-0.7611*	0.6256*	-0.4376*	0.7121*	-0.0677	-	0.5400*	1.0000
Lnage	0.3884*	-0.0681	0.6723*	-0.2132	0.1664	0.4759*	-	0.4752*

Note: Asterics (*) indicates at 5% significance

4.4.1. Correlation analysis of ROA and corporate governance mechanisms

Regarding the correlation between dependent and independent variables, the results shows that Pearson correlation coefficients of board size -62.02%, frequency of meeting 32.16%, size of audit committee 48.72%, board gender diversity 15.33%, board members qualification -58.01%, and firm size -76.11% firm age 38.84%. From this it can be understand that board size, firm size and educational qualification have insignificant & negative association with ROA; and frequency of meeting, audit committee size, board gender diversity and firm age have significant and positive correlation with ROA.

4.5. Regression Results and Discussion

The model is regressed by fixed effect regression method using STATA version 14.1 to find the association between the corporate governance variables and the financial performance of the selected SOE in Ethiopia and the results are presented in Table 4-5.

Table 4-5: Fixed-effects regression results

ROA	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
bsize	-0.0295818	0.0099561	-2.97	0.004	-0.0495512	-0.0096124
bfreqmet	-0.0151451	0.0081453	-1.86	0.069	-0.0314825	0.0011923
beduc	-0.0416536	0.0452836	-0.92	0.362	-0.132481	0.0491738
bgdiver	0.0439783	0.0798491	0.55	0.584	-0.1161786	0.2041353
auditcs	0.0144309	0.097217	0.15	0.883	-0.1805618	0.2094236
fsize	-0.0318348	0.0106746	-2.98	0.004	-0.0532454	-0.0104242
lnage	0.0735045	0.0238504	3.08	0.003	0.0256667	0.1213424
_cons	1.027901	0.1815366	5.66	0.000	0.6637848	1.392017

R-sq: within = 0.3811 between = 0.5768, overall = 0.5609, F (7, 53) = 4.66, Prob > chi2 = 0.0004

Source: Author's STATA Output

As it can be seen from the Table 4-5, the P value is 0.0004. As a result, the model is considered significantly better than would be expected by chance and there is linear relationship of ROA to the independent variables. These results suggest that the independent variables included in the model are jointly statistically significant in explaining the dependent variable ROA.

The regression analysis reports three different R-square values (within R-square, between R-square and overall square). FIXED effect estimator (GLS estimator) is a weighted average of between and within estimators. Therefore R-squared overall is considered for this research purpose. The analysis shows that 56.09% of the model is explained by the independent variables collectively (the dependent variable, ROA, is explained by board size, board gender diversity, firm size, board educational qualification, size of audit committee, firm age, and firm size) and the remaining is explained by other variables or factors.

4.5.1. Discussion

The regression analysis also shows that board's education, frequency of meeting, board education, gender diversity and audit committee size has insignificant relation with ROA while board size, firm size, & firm age has a significant relationship with ROA. The interpretation of each explanatory variable is presented as follows.

Table 4-6: Summary of hypothesis testing

Dependent variables	Return on Asset (ROA)			
Independent variables	Hypothesis Number	Hypothesized sign	Statically significance of the result	Conclusion
Board size	H1	-	statically significant at alpha 0.05	Accept
Board gender diversity	H2	+	not statically significant at alpha 0.05	Reject
Board frequency of meeting	H3	+	not statically significant at alpha 0.05	Reject
Size of audit committee	H4	+	not statically significant at alpha 0.05	Reject
Board educational qualification	H5	+	not statically significant at alpha 0.05	Reject

Source: Researcher's own computation

Board size

The first hypothesis of interest is board size. From the regression analysis result depicted in Table 4-5 the coefficient of board size -0.0295818 has a t– statistic equal to -2.97 and a p– value of 0.004. Therefore the hypothesis cannot be rejected at 5% confidence interval confidence interval. In other words, board size of SOE in Ethiopia had impact on financial performance as measured by ROA.

The study was hypothesized a negative & significant relationship between board size and financial performance. The finding also confirms that there is negative & significant relationship between board size and financial performance.

Therefore hypothesis that there is a negative & significant relationship between board size and financial performance is accepted.

When using size of the board as a measure of governance, estimated results shows a negative and statistically significant effect on firm performance. Holding other variables constant, an additional member in the board would decrease ROA of the firm by 2.96%, annually. This estimated result is corroborated by empirical findings in literature.

Empirical shows that negative relationship between board size and firm performance (Yermack (1996), Guest (2009), Onyali (2018) & Malik and Makhdoom (2016)). The possible explanation for this negative result can be that large board size may lead to ineffective communication & decision making. Therefore the finding of this research is in line with prior researches.

Gender diversity of the board

The study found that the coefficient board gender diversity is 0.0439783 has a t-statistic equal to 0.55 and a p – value of 0.584. This is due to the number of women in the board room is smaller compared to male board members. Consequently, this leads to the conclusion that this coefficient is not statistically significant at a 5% significance level, consequently the null hypothesis stating that the proportion of women directors in board room is negatively related with the financial performance is found to be statically insignificant & the hypothesis is rejected. In other words, board gender diversity positively but insignificant effect on financial performance of SOE.

Rao and Tilt (2015) cited in Onyali 2018, found that having females on corporate board has little impact on performance. Though, from the perspective of stakeholder`s theory, females in the boardroom could be a positive sign to stakeholders that a company is social responsible and pays more attention to the need of different stakeholders.

Shrader et al. (1997) (cited in Mira Ruuska 2017) did not find positive relationship between financial performance and higher percentages of women in top management or in the board of directors. Shrader et al, 1997, (cited in Mira Ruuska 2017) found a negative impact of gender diversity on performance signaling less importance of the participation of women on boards.

On the other hand the result is in contrary with some previous studies. Researcher`s like Setó-Pamies (2013) cited in Onyali 2018 argues that argued that, the presence of women in corporate boardrooms improves the relationship with stakeholders, increase accountability, shows greater concern for the environment and prompts more ethical behavior.

Gender diversity in board room is assumed to improve company performance since it provides new insights and perspectives (Onyali, 2018). It is also believed that

female board members bring diverse viewpoints to the boardroom which is not possible if all directors are male. However, recent studies by Ding and Charoenwong (2004) and Farrell and Hersch (2005) cited in Bathula (2008) in did not find significant relationship between women directors and shareholder returns. Instead, Farrel and Hersch (2005) in Bathula (2008) found that gender diversity occurs more in response to internal and external calls for diversity.

Educational qualification of board members

The coefficient educational qualification of the board (beduc) is -0.0416536, p-value 0.362 and t- statistic -0.92. This shows that it is statistically insignificant at 5% significant level. The result indicates that the proportion of directors who have post graduate has no relation with the financial performance.

The result is not in line with the proposed hypothesis stating that the number of board members with post graduate positively associated with the financial performance. Some prior researches also discover the negative relationship between board members' educational qualification and firm financial performance, which is similar result with this research. Darmadi (2013) cited in Li-He et al (2016) found a significant and negative relationship between postgraduate degrees held by board members and financial performance. Gottesman and Morey (2006) & Vo and Phan's (2013) (cited in Li-He et al (2016)) also found that there is no association between education and the financial performance.

Size of audit committee

The result of this study showed that the size of audit committee has coefficient of 0.0144309, t-statics 0.15 and p-value 0.883 as performance is measured by ROA and it is statically insignificant at 5%. This indicates that there is no relationship between audit committee size & performance.

Wild 1996: 2011 (cited in Khalifa, H. (2018) found that Companies which have audit committee perform better than companies which do not have audit committee. Pearce li and Zahra (1992) cited in Khalifa H (2018) confirm that audit committee with appropriate number enables to use their experience and expertise for the

benefit of stakeholders. Kyereboah-Coleman (2008) cited in Khalifa H (2018) found that audit committee size is positively affected the financial performance.

Kyereboah-Coleman (2007) reported that a significant positive relation between size of the audit committee and firm performance (ROA and Tobin's q) using the overall sample. Kyereboah-Coleman (2007) describe that size of the audit committee could be an indication of the seriousness attached to issues of transparency by the organization.

Frequency of meeting

The coefficient of frequency of meeting of boards is negative value of -0.0151451 and t-statics -1.86 & p-value 0.069. The value is insignificant at 5% confidence interval & negative impact in the financial performance.

Prior research conducted Vafeas (1999) found that board meetings are statistically and significantly associated with the performance of the firms. On the other hand, Mangena and Tauringana (2008) cited Tshipa (2017) showed positive association between activities of the board and firm performance. El Mehdi (2007) cited in Tshipa (2017) found that board activities do not have a necessarily positive relation to firm performance.

Firm size

The control variable firm size is found to be statistically significant in explaining the variations in financial performance (coefficient -0.0318348, t-statics -2.98 and p-value 0.004). Firm size is found to be significantly and negatively related to performance suggesting that larger public enterprises in Ethiopia encounter difficulty managing the vast resources at their disposal. But the firm size affects financial performance negatively which may be due to the increased misappropriation of resources in larger firms.

Firm age

The control variable firm age also found positive and statically significant at 5% confidence interval (coefficient 0.0735045, t-statics 3.08 and p-value 0.003).

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

5.1 Finding summary

Correlation analysis through Person correlation coefficients established positive correlation with ROA are board frequency of meeting (0.3216), board gender diversity (0.1533), audit committee size (0.4872) & firm age (0.3884) and a negative correlation with board size (-0.6202), educational qualification (-.5801) firm size (-0.7611).

The regression results indicate that the regression model explains 56.09% of variations in ROA using the five independent variables. These findings indicate that the independent variables (board size, board frequency of meeting, board gender diversity, audit committee size, board educational qualification). The p-value of 0.0004 suggest that the explanatory variables are jointly significant in explaining the variations in the dependent variable at 1% level of significance indicating that the regression model provided some explanatory power and the overall model is significant.

Board size and frequency of meeting are related with ROA negatively and has significant effect. Firm size is negatively related and has significant effect on ROA. Firm age also positively and significantly related with ROA. Board gender diversity & audit committee size are positive but insignificant effect on ROA. Board educational qualification is insignificant and negatively related with ROA.

5.2 Conclusion

The study examines the relationship between corporate governance variables and firm performance for the period of nine years from the year 2010 to 2018. The researcher drawn the following conclusions based on the results of the data analysis. Return on Asset (ROA) used to determine the financial performance of selected SOE in Ethiopia given by net income after tax to total assets.

Based on the descriptive statistics the financial performance of manufacturing SOE is shows 18.83 % as measured by return on asset (ROA). It is therefore the sampled

SOEs are not doing well in utilizing their asset effectively & efficiently to maximize their profit.

The result of this study shows that board size has a negative but statically significant effect on ROA. This implies boards with small size have impact on the performance of SOE's. The possible explanation for this is that large board size seems to lower board efficiency, as a consequence worsen condition for reaching consensus among a great numbers of board members. As communication is critical among board members increasing board size, also increase the number of ideas but may reduce decision quality due to more compromises. Furthermore negotiation may take longer and due to more compromise the outcome may not be acceptable. The finding of this study is line with stewardship theory which argues that smaller boards are more effective because directors enjoy better communications and interactions between them (Yermack, 1996; Ozkan, 2007 cited in Hailegiorgies (2019)).

Firm size affects financial performance of SOE's significantly but negatively. The negative relationship between the two variables may indicate the inefficiency of management in utilizing the resources at their disposal and the existence of misuse.

5.3 Recommendation

The study has empirically examined the correlation that exists between corporate governance variables and firm performance using selected SOE in Ethiopia. The study therefore recommends that:

- ▶ The findings revealed that small board size is positively related with the financial performance of SOE's. Therefore the supervisory authority should nominate and appoint those who have technically equipped and have industry specific knowledge disregarding politically intuition.
- ▶ the findings shows that firm size affects financial performance of SOE's negatively indicating management inefficiency and/or misuse of public resources in these enterprises. The study recommends that a policy measure should be taken to enhance internal control system.

5.4 Limitations and suggestion for further research

Like any other research, there are some inherent limitations with the findings of this study. There are other potentially effective corporate governance mechanisms that this study fails to consider such as ownership, managerial incentive, board independence & dividend policy in addition to external corporate governance mechanism to further examine its effects towards firm financial performance. Therefore, further researchers should incorporate and consider such important points in examining the effect of corporate governance mechanisms on firm performance. Besides, as far as corporate performance is concerned this study focused only on accounting based performance measures which is return on assets (ROA). However, to measure corporate performance in a broader sense, market based measures can be proposed for future researchers.

Reference

1. Abdullah, H. and Valentine, B. (2009), Fundamental and ethics theories of corporate governance, *Middle Eastern Finance and Economics*, 4(4), pp.88-96.
2. Al-Daoud, K.I., Saidin, S.Z. and Abidin, S. (2016). Board Meeting and Firm Performance: Evidence from the Amman Stock Exchange. *Corporate Board: Role, Duties and Composition*, 12(2), pp.6-11.
3. Alexius, S., Örnberg, J. C., & Grossi, G. (2019). Logics and Practices of Board Appointments in Hybrid Organizations: The Case of Swedish State-Owned Enterprises. In *Managing Hybrid Organizations* (pp. 157-178). Palgrave Macmillan, Cham.
4. Ali. M., (2016) Impact of Corporate Governance on Firm's Financial Performance (A Comparative Study of Developed and Non Developed Markets). *Arab J Bus Manage Rev* 6: 272. doi:10.4172/2223-5833.1000272
5. Al-Matari, E.M., Al-Swidi, A.K., & Fadzil, F.H.B. (2014). The measurement of firm performance's dimensions. *Asian Journal of Finance & Accounting*, 6(1), 24.
6. Amadi, J.A.M.E.S, (2014). The relationship between corporate governance and financial performance of state owned commercial enterprises in Kenya (Master's thesis, University of Kenya)
7. Areba, J.N., (2011)., Relationship between corporate governance practice and financial performance of commercial state corporation in Kenya (Master's thesis, University of Nairobi)
8. Ashe, P.A. (2012). Governance in Antigua and Barbuda: A qualitative case study of five state owned enterprises (doctoral dissertation, University of Phoenix)
9. Azim, M.I. (2012). Corporate governance mechanisms and their impact on company performance: A structural equation model analysis. *Australian journal of management*, 37 (3), 481-505
10. Azutoru, I.H.C., Obinne, U.G., and Chinelo, O.O. (2017) Effect of Corporate Governance Mechanisms on Financial Performance of Insurance Companies in Nigeria. *Journal of Finance and Accounting*, 5, 93-103

11. Bathula, H., (2008). Board characteristics and Firm performance: Evidence from New Zealand (doctoral dissertation Auckland University of Technology)
12. Baty, F., Ritz, C., Charles, S., Brutsche, M., Flandrois, J. P., & Delignette-Muller, M. L. (2015). A toolbox for nonlinear regression in R: the package nlstools. *Journal of Statistical Software*, 66(5), 1-21.
13. Baums, T. (1993), Take over versus institutions in corporate governance in Germany., *Contemporary Issues in Corporate Governance*, 151-183
14. Baums, Th. (1993), The German banking system and its impact on corporate finance and governance. Univesitat Osnabruk, institute fur Handels- und Wirtschaftsrect , working papers, NO. 2/93
15. Chechet, I. L., Garba, S. L., & Odudu, A. S. (2013). Determinants of capital structure in the Nigerian chemical and paints sector. *International Journal of Humanities and Social Science*, 3(15), 247-263.
16. Dagnachew Asrate & Addissie Shiferaw, (2009), *Law of Public Enterprise and Cooperative* (teaching material).
17. Darweesh, M. S. (2015). Correlations between corporate governance, financial performance, and market value (Doctoral dissertations Walden University)
18. Duc, V.H., & Thuy, P.B.G. (2013). Corporate governance and firm's performance: empirical evidence from Vietnam. *Journal of economic Development*, (JED, No. 218), 62-77.
19. Easton, G. S., & Jarrell, S. L. (1998). The effects of total quality management on corporate performance: an empirical investigation. *The Journal of Business*, 71(2), 253-307.
20. Engdawork, P.(2015), *Assessment of Corporate Governance Practice in Private Banks of Ethiopia* (Master's thesis, Addis Ababa University)
21. Fekadu, G.W. (2015). Corporate Governance on Financial performance of Insurance Industry. *Corporate ownership & control* ,841
22. Fernando, A. C. (2006) *Corporate Governance: Principles, Policies and Practices*. India: Dorling Kindersley (India) Pvt Ltd.

23. Fondo, M., (2016). the effect of corporate governance on financial performance of state owned corporations in the service industry in Kenya (Master's thesis University of Nairobi)
24. Gebregeorgis, N & Kaur, H (2017). Board Structure and financial Performance: A Study of State-owned enterprises in Ethiopia, International Journal of Research in Finance & Marketing
25. Geiger, M. A., Lennox, C. S., & North, D. S. (2008). The hiring of accounting and finance officers from audit firms: How did the market react?. Review of Accounting Studies, 13(1), 55-86.
26. Getachew , H., (2014), The Impact of Corporate Governance on Firm Performance: A study on Selected Insurance Companies in Ethiopia, (Master's thesis, Jimma University)
27. Getahun, K.,(2013), Corporate Governance Mechanism: Impact on performance of Ethiopian commercial banks (Master's thesis, Addis Ababa University)
28. Getahun, T.(2017),The Effect of Corporate Governance on the Performance of Private Commercial Banks in Ethiopia (Master's thesis, Addis Ababa University)
29. Gujarati, D., & Porter, D.C. (2004). Basic Econometrics, 2004. Editura McGraw-Hill, 858.
30. Guzeh, P. M. (2012). The relationship between corporate governance and financial performance of parastatals in Kenya.
31. Hailegiorgies, A. (2019). The effect of Corporate Governance Practices on the Financial Performance of Public Enterprises in Ethiopia, (Master's thesis Addis Ababa University)
32. Hair JF, Black, WC, Babin, BJ, Anderson, RE & Tatham, RL 2006, Multivariate data analysis, 6th edn, Pearson Education, New Jersey.
33. He, L.J., Chiang, H.T., Cheng, Y.C. (2016). The effect of the professional education background of the chairman of the board and executive management on dividend policy in Taiwanese listed companies. Investment Management and Financial Innovations, 13(1), 8.
34. Heo, K. (2018). Effects of Corporate governance on the performance of State-owned enterprises. The World Bank.

35. Himmelberg, C. P., Hubbard, R. G., & Palia, D. (1999). Understanding the determinants of managerial ownership and the link between ownership and performance. *Journal of financial economics*, 53(3), 353-384.
36. Jamaludin, M.F., Rahman, A., Fikri, A., Hamid, A., Hanisa, N., Hashim, F.,.....&, Zurina, W. (2018),. *Corporate Governance and Firm performance in Malaysia* (April 10, 2018), available at: <https://ssrn.com/abstract=3302124>
37. Keasey, K., Thompson, S., Wright, M. (Eds.). (2005). *corporate governance: accountability, enterprise and international comparisons*. John Wiley & Sons
38. Kester, C. (1997) *Governance, Contracting, and Investment Horizons: A Look at Japan and Germany*, studies in International Corporate Finance and Governance Systems. New York: Oxford University Press.
39. Khalifa H, Abdulfattah Mohamed G (2018), *The Effect of Board and Audit Committee Characteristics on the Financial Performance of United Arab Emirates Firms*, Doctoral thesis, Victoria University
40. Khalifa, H. (2018). *The Effect of Board and Audit Committee characteristic on the financial performance of United Arab Emirates Firms* (Doctoral dissertation, Victoria University)
41. La Porta, R., Lopez de Silanes, F., Shleifer, A. and Vishny, R. (1997) *Legal Determinants of External Finance*, *Journal of Finance*, 3, 1131±1150.
42. Lamport, M., Seetanah, B., & Sannasse, R. V. (2010). *Corporate Governance and Firm Performance: Evidence from the Insurance Industry of Mauritius*.
43. LaPorta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R.W. (1997), *legal determinant of external finance*. *Journal of Financial Economics*, 55(3), 1131-1150
44. Li-Jen He, Hsiang-Tsai Chiang and He-You Hong (2016). *The effect of the professional education background of the chairman of the board and executive management on dividend policy in Taiwanese listed companies*. *Investment Management and Financial Innovations*, 13(1), 8-23.
doi:10.21511/imfi.13(1).2016.01
45. Makhlouf, M.H. et al., 2014. *Board of directors characteristics and firm performance among Jordian Firms, proposing conceptual framework*. , 4(4), pp.18–23

46. Mania, K.H., (2017), The effect of corporate governance on the financial performance of state owned enterprises (SOEs) in Kenya, (Master's thesis, University of Nairobi)
47. Masibo, J. (2005). The relative power of CEO" s and Boards of Directors: Associations with Corporate performance". Strategic management journal, 12(2), 20.
48. Melkamu, E., (2016), Effects of Corporate Governance on the financial performance of Micro-Finance Institutions in Ethiopia (Master's thesis, Addis Ababa University)
49. Menozzi, A., Gutiérrez Urtiaga., Vannoni, D. (2011). Board Composition, Political Connections and Performance in State-Owned Enterprises. Industrial and Corporate Change, 21(3), 671-698
50. Million, K., (2017), Corporate Governance and Financial Performance of Commercial Banks in Ethiopia (Master's thesis, Addis Ababa University)
51. Mitiku, B., (2015), Impacts of Corporate Governance Mechanism on Financial Performance of Selected Insurers in Ethiopia (Master's thesis, Addis Ababa University)
52. Mohamed, H. A., Zhou, X., & Amin, M. (2016). The Impact of Corporate Governance on Chinese Firms Performance: A Board Structure Perspective. International Journal Of Managerial Studies And Research, 4(6), 2349-0349.
53. Moser, F., & Shabanaj, V. (2019). The Effect of Board Diversity on Corporate Performance – The Case of Swedish State-Owned Enterprises as Hybrid Organizations.
54. Moser, F., & Shabanaj, V. (2019). The Effect of Board Diversity on Corporate Performance: the Case of Swedish State-Owned Enterprises as Hybrid Organizations.
55. Moya, M., & Akodo, R. (2012). Political interference and corporate performance of public universities in Uganda. Journal of Public Administration and Policy Research, 4(6), 125.
56. OECD (2005), *OECD Guidelines on Corporate Governance of State-Owned Enterprises*, OECD Publishing, Paris
57. OECD (2015), *G20/OECD Principles of Corporate Governance*, OECD Publishing, Paris,

58. OECD (2018), OECD Public Governance Reviews OECD Integrity Review of Thailand: Toward Coherent and Effective Integrity Policies. OECD Publishing, Paris
59. Onyali, C.I., Okerekeoti, C.U. (2018). Board Heterogeneity and Corporate Performance of Firms in Nigeria, *International Journal of Academic Research in Accounting, Finance and Management Sciences* 8 (3): 103117.
<http://dx.doi.org/10.6007/IJARAFMS/v8-i3/4544> (DOI: 10.6007/IJARAFMS/v8-i3/4544)
60. Public Enterprises Proclamation, proc. No. 25/1992 (1992). *Negarit Gazeta* (51st Year No. 21). Addis Ababa: Brehan ena Selam Printing Press.
61. Ramantsi, T. (2018). Board Characteristics that influences effectiveness of the State Owned Companies (Doctoral Dissertation, University of Pretoria)
62. Ruuska, M. (2017). Women in the Boardroom and Firm Financial performance: Evidence from the Nasdaq OMX Helsinki firms , (Master's Thesis, University of VAASA)
63. San, O.T., & Heng, T.B. (2011). Capital structure and corporate performance of Malaysian construction sector. *International Journal of Humanities and social science*, 1(2), 28-36
64. Shleifer, A & Vishny, RW. (1997), 'A survey of corporate governance', *Journal of Finance*, vol. 52, no. 2, pp. 737-83.
65. Skinner, D. J., & Sloan, R. G. (2002). Earnings surprises, growth expectations, and stock returns or don't let an earnings torpedo sink your portfolio. *Review of accounting studies*, 7(2-3), 289-312.
66. Solomon, J. (2004) *corporate governance and accountability*, John Wiley & Sons.
67. Sonmez, M., & Yildirim, S., (2015). A Theoretical Aspect on Corporate Governance and Its Fundamental Problems: Is It a Cure or Another Problem in the Financial Markets, *Journal of Business Law and Ethics*, 20-30
68. Stanley, S. (2011). A correlational study examining the relationship between social responsibility and financial performance (Doctoral dissertation, Walden University).
69. Toh, M. Y. (2013). Measuring the relationship between audit committee characteristics and earnings management: evidence from New Zealand listed companies (Doctoral dissertation, Lincoln University).

70. Tshipa, J., (2017). Corporate Governance and Financial performance: a study of companies listed on Johannesburg stock exchange (Doctoral dissertation, University of Pretoria)
71. Tura, H.A, (2012). Overview of corporate governance in Ethiopia: The role, composition and remuneration of boards of directors in share companies, *Mizan Law review*, 6(1), pp 45-76
72. Vafeas, N. (1999). Board Meeting Frequency and Firm Performance. *Journal of Financial Economics*, 53(1), 113–142.
73. Veprauskaitė, E., & Adams, M. (2013). Do powerful chief executives influence the financial performance of UK firms?. *The British accounting review*,
74. Vijayakumaran, S., & Vijayakumaran, R. (2019). Corporate governance and Capital structure decisions: Evidence from Chinese Listed companies. Available at SSRN 3411462.
75. Wang, T. Y., Winton, A., & Yu, X. (2010). Corporate fraud and business conditions: Evidence from IPOs. *The Journal of Finance*, 65(6), 2255-2292.
76. Wang, Y.C., Tsai, J.J., & Lin, H.W.W. (2013). The influence of board structure on the firm performance. *Journal of Global Business Management*, 9 (2), 7.
77. Yasser, C. M. (2011). An analysis of problems in metadata records. *Journal of Library Metadata*, 11(2), 51-62.
78. Yemane, A. A., Lakshmipathi, M., & Madhusudana, M. (2015). The impact of corporate governance on firm's performance: Evidence from Ethiopian insurance companies. *Journal of Finance and Accounting*, 6(9), 225-233.

Appendix-I

1. Choosing fixed effect regression vs random effect regression

```
. xtreg ROA bsize bfreqmet beduc bgdiver auditcs fsize lnage , fe

Fixed-effects (within) regression      Number of obs   =      68
Group variable: company1              Number of groups =      8

R-sq:                                  Obs per group:
    within = 0.3811                    min =          5
    between = 0.5768                   avg =         8.5
    overall = 0.5609                   max =          9

                                F(7,53)          =      4.66
corr(u_i, Xb) = 0.0014              Prob > F        =      0.0004
```

ROA	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
bsize	-.0295818	.0099561	-2.97	0.004	-.0495512	-.0096124
bfreqmet	-.0151451	.0081453	-1.86	0.069	-.0314825	.0011923
beduc	-.0416536	.0452836	-0.92	0.362	-.132481	.0491738
bgdiver	.0439783	.0798491	0.55	0.584	-.1161786	.2041353
auditcs	.0144309	.097217	0.15	0.883	-.1805618	.2094236
fsize	-.0318348	.0106746	-2.98	0.004	-.0532454	-.0104242
lnage	.0735045	.0238504	3.08	0.003	.0256667	.1213424
_cons	1.027901	.1815366	5.66	0.000	.6637848	1.392017
sigma_u	.14685914					
sigma_e	.04074837					
rho	.92851615	(fraction of variance due to u_i)				

F test that all u_i=0: F(7, 53) = 73.81 Prob > F = 0.0000

```
. xtreg ROA bsize bfreqmet beduc bgdiver auditcs fsize lnage, re

Random-effects GLS regression      Number of obs   =      68
Group variable: company1          Number of groups =      8

R-sq:                                  Obs per group:
    within = 0.2019                    min =          5
    between = 0.7823                   avg =         8.5
    overall = 0.7044                   max =          9

                                Wald chi2(7)      =     142.95
corr(u_i, X) = 0 (assumed)          Prob > chi2      =      0.0000
```

ROA	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
bsize	-.0884321	.0211033	-4.19	0.000	-.1297938	-.0470704
bfreqmet	-.0206992	.0125583	-1.65	0.099	-.045313	.0039147
beduc	-.2521068	.0947283	-2.66	0.008	-.4377708	-.0664428
bgdiver	.4820833	.2102945	2.29	0.022	.0699137	.894253
auditcs	.5373125	.2030616	2.65	0.008	.1393191	.9353059
fsize	-.0054862	.0136175	-0.40	0.687	-.0321761	.0212036
lnage	.0385654	.0178726	2.16	0.031	.0035359	.073595
_cons	1.086191	.2202415	4.93	0.000	.6545258	1.517857
sigma_u	0					
sigma_e	.04074837					
rho	0	(fraction of variance due to u_i)				

The Impact of Corporate Governance on the financial performance of Selected SOEs in Ethiopia

. hausman fe re

	Coefficients		(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
	(b) fe	(B) re		
bsize	-.0295818	-.0884321	.0588503	.
bfreqmet	-.0151451	-.0206992	.0055541	.
beduc	-.0416536	-.2521068	.2104532	.
bgdiver	.0439783	.4820833	-.438105	.
auditcs	.0144309	.5373125	-.5228816	.
fsize	-.0318348	-.0054862	-.0263486	.
lnage	.0735045	.0385654	.0349391	.0157928

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

Test: Ho: difference in coefficients not systematic

chi2(7) = (b-B)'[(V_b-V_B)^(-1)](b-B)
 = 22.42
 Prob>chi2 = 0.0021
 (V_b-V_B is not positive definite)

Prob>chi2 = 0.0021 which is less than 0.05 and therefore fixed effect is selected

. pwcorr ROA bsize bfreqmet beduc bgdiver fsize lnage, sig

	ROA	bsize	bfreqmet	beduc	bgdiver	fsize	lnage
ROA	1.0000						
bsize	-0.6202 0.0000	1.0000					
bfreqmet	0.3216 0.0075	-0.0971 0.4309	1.0000				
beduc	-0.5801 0.0000	0.2940 0.0150	-0.1515 0.2174	1.0000			
bgdiver	0.1533 0.2120	0.0922 0.4546	0.1773 0.1481	0.0552 0.6548	1.0000		
fsize	-0.7611 0.0000	0.6256 0.0000	-0.4376 0.0002	0.7121 0.0000	-0.0677 0.5831	1.0000	
lnage	0.3884 0.0011	-0.0681 0.5808	0.6723 0.0000	-0.2132 0.0809	0.1664 0.1751	-0.4752 0.0000	1.0000

2.

. vif

Variable	VIF	1/VIF
fsize	6.29	0.158943
bfreqmet	3.31	0.302222
auditcs	2.72	0.367043
beduc	2.67	0.374770
bsize	2.32	0.431074
lnage	2.24	0.445872
bgdiver	1.09	0.920502
Mean VIF	2.95	

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3.

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

chi2(1)      =      1.17
Prob > chi2  =      0.2787
```

4.

```
. xtunitroot fisher year, dfuller lags(0)

Fisher-type unit-root test for year
Based on augmented Dickey-Fuller tests
-----
Ho: All panels contain unit roots      Number of panels      =      8
Ha: At least one panel is stationary   Avg. number of periods =      8.50

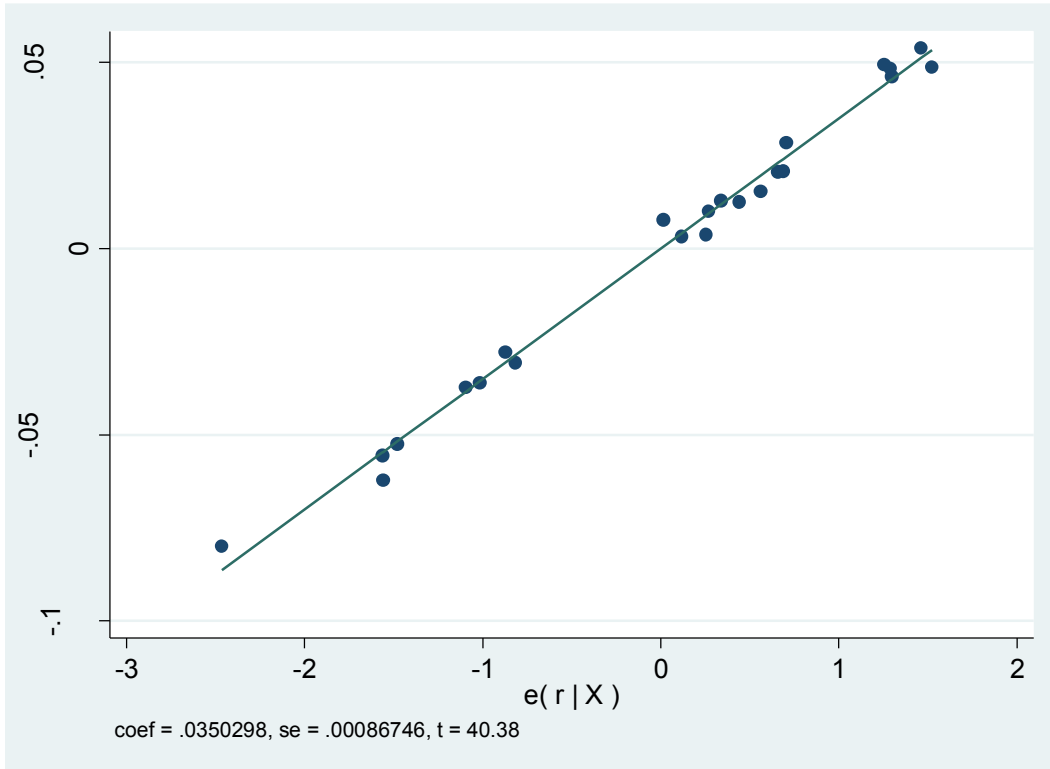
AR parameter: Panel-specific           Asymptotics: T -> Infinity
Panel means:   Included
Time trend:    Not included
Drift term:    Not included             ADF regressions: 0 lags
-----
                Statistic      p-value
-----
Inverse chi-squared(16)  P      0.0000      1.0000
Inverse normal           Z              .              .
Inverse logit t(4)      L*              .              .
Modified inv. chi-squared Pm      -2.8284      0.9977
-----
P statistic requires number of panels to be finite.
Other statistics are suitable for finite or infinite number of panels.
-----
```

```
. ovtest

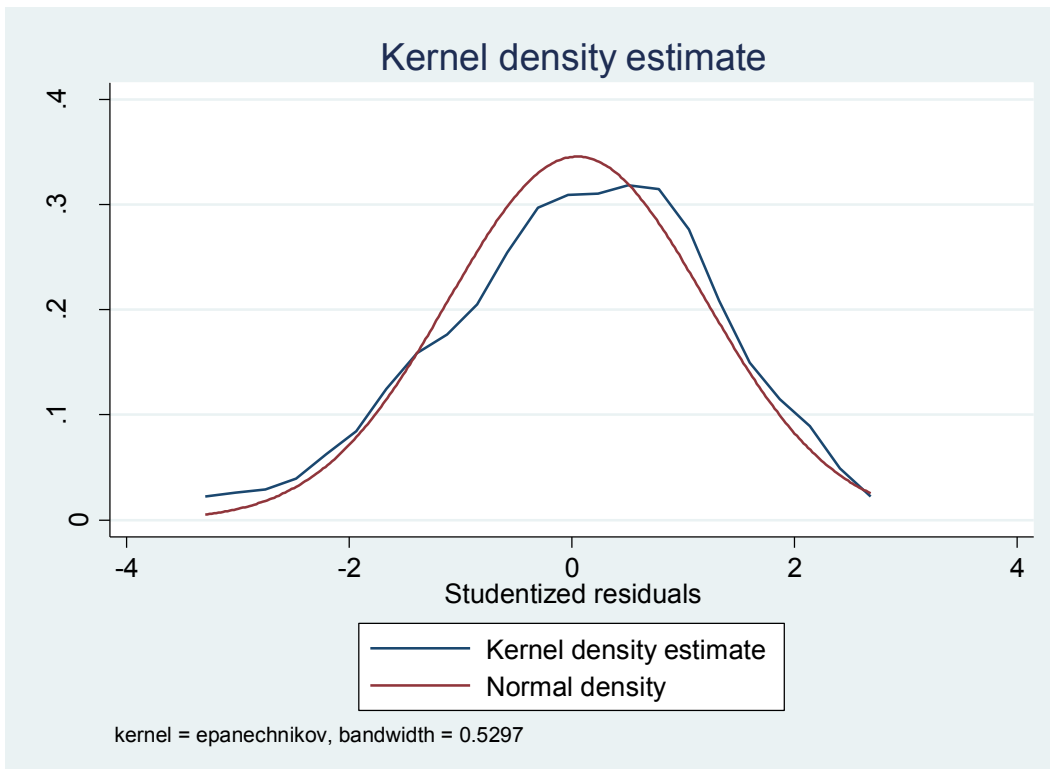
Ramsey RESET test using powers of the fitted values of ROA
Ho: model has no omitted variables
      F(3, 13) =      11.84
      Prob > F =      0.0005
```

A vif > 10 or a 1/vif < 0.10 indicates trouble.

```
. avplot r
```



. kdensity r , normal



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```
. estat hettest, iid
```

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

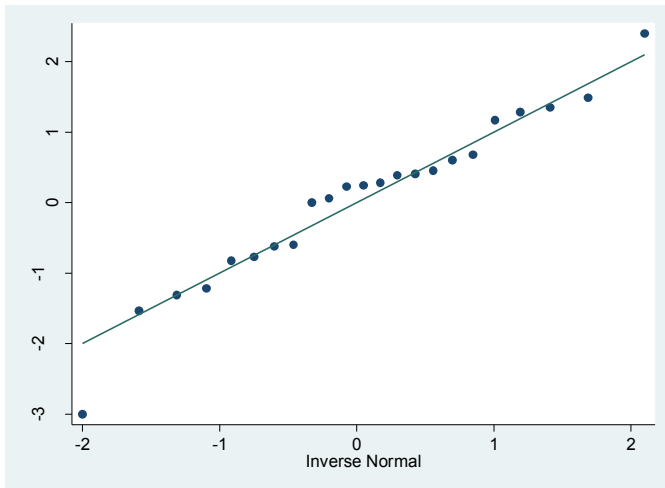
Ho: Constant variance

Variables: fitted values of ehat2

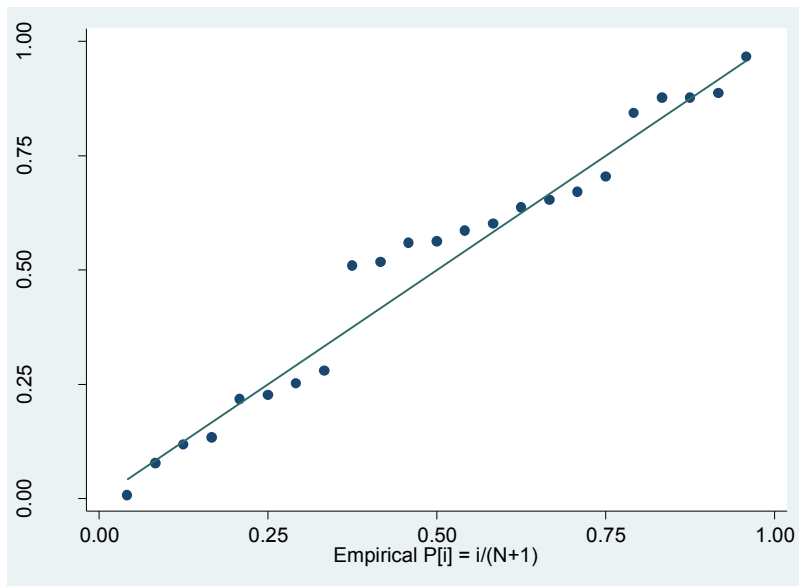
chi2(1) = 1.19

Prob > chi2 = 0.2744

```
-qnorm r
```



```
. pnorm r
```



Appendix-II

Enterprise supervised by PEHAA	
1	Ethiopian Air Lines.
2	Ethio- Telecom.
3	Ethiopian Sugar Corporation.
4	Ethiopian Shipping and Logistics Services Enterprise.
5	Commercial Bank of Ethiopia
6	Development Bank of Ethiopia
7	Ethiopian Insurance Corporation
8	Metal and Engineering Corporation.
9	Ethiopian Construction Works Corporation.
10	Ethiopian Agricultural Business Corporation.
11	Chemical Industries Corporation.
12	Ethiopian Construction Design and Supervision Works Corporation.
13	Ethiopian Mineral ,Petroleum and Bio-fuel Corporation
14	Ethiopian Trading Business Corporation
15	Birhanena Selam Printing Enterprise
16	Ethiopian Postal service Enterprise.
17	Ethiopian Pulp and Paper S.C.
18	National Alcohol & Liquor Factory
19	Ghion Hotels Enterprise.
20	SPA Service Enterprise.
21	Ethiopian Tourist Trading Enterprise
22	Adola Mine Enterprise.
23	Hotels Development S.C (A.A Hilton).

Appendix-III

Dear Respondent!

My name is **Sisay Demelash**, a post graduate student pursuing a **Master degree in the College 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 Accounting & Finance. The purpose of the study is examining **the impact of Corporate Governance on the financial performance of selected State Owned Enterprises**. To achieve this objective, your genuine and timely responses on the next questionnaire will have a tremendous impact. The questionnaire will take only 15-20 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 **five** days.

	2010	2011	2012	2013	2014	2015	2016	2017	2018			
Profit after tax												
Total Asset												
No				2010	2011	2012	2013	2014	2015	2016	2017	2018
1	Total number of board members each year											
2	Frequency of board meeting in each year											
3	Total numbers of Audit committee members each year											
4	Total number of female board member each year											
5	Educational Qualification of male board members each year											
	• Above Master's degree											
	• Master's degree											
	• Bachelor degree											
6	Educational Qualification of female board members each year											
	• Above Master's degree											
	• Master's degree											
	• Bachelor degree											

Thank you for your time & cooperation