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The effect of Corporate Governance Practices on the Financial Performance of Public Enterprises in Ethiopia

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF DEGREE OF MASTER OF BUSINESS ADMINISTRATION IN FINANCE

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Declaration

I, Abel Hailegiorgies, hereby declare that the work which is being presented in this thesis entitled "The effect of Corporate Governance Practices on the Financial Performance of Public Enterprises in Ethiopia" is an original work of my own and prepared under the guidance of my thesis supervisor Ato Gebremedhin Gebrehiwot. It has not been presented for any scholastic achievement and level of study (Bachelors or Masters or PhD programs) in any other Institute, College and University. All the sources of the materials used in this dissertation paper have been duly acknowledged.

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This is to certify that the above declaration made by candidate is correct to the best of my knowledge.

Gebremedhin Gebrehiwot _____

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ABSTRACT

The role of corporate governance in public enterprises differs from that of the private counterparts for the principal-agent problem in this enterprises is more complicated. In this study the effects of corporate governance practices specifically board size, board composition, board gender diversity and debt policy are investigated in the Ethiopian public enterprises context. The main objective of the study is to explore the theoretical and practical aspects of public enterprises, corporate governance, and their interrelationship in the Ethiopian context. The study employed explanatory research design with an econometric panel data of 10 Pubic enterprises that covers the period 2012 to 2017. Both correlation analysis and fixed effects regression model is adopted after conducting the necessary tests. Board size, board composition and board gender diversity are found to have insignificant relationship with financial performance whereas Debt policy has negative and significant effect on the performance of public enterprises in Ethiopia. The control variable firm size has significant and negative relationship with financial performance while liquidity has no relationship with financial performance. The findings suggest that public enterprises in Ethiopia may improve their financial performance depending on the measures being used.

Keywords: Public enterprises, Corporate Governance, Fixed effects model, Ethiopia

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LIST OF ABBREVIATIONS

ATO	Asset Turnover
BJ	Bera Jerque
BPKP	Board of Finance and Development Control
CEO	Chief Executive Officer
CEO	Chief executive officer
CG	Corporate Governance
GDP	Gross Domestic Product
GLS	Generalized least square
MOPE	Ministry of Public Enterprises
MSOEs	Ministry of State-Owned Enterprises
NPM	Net profit margin
NPV	Net present value
OECD	Organization for Economic Cooperation and Development
OLS	Ordinary least squares
OPM	Operating Profit Margin
OROA	Operating returns on assets
PEs	Public enterprise
ROA	Return on assets
ROE	Return on equity
SC	State corporations
SCs	State Corporations
SOE	State Owned Enterprise
VIF	Variance inflation factor

CHAPTER ONE

INTRODUCTION

1.1. Background of the study

The role of the state in the economy has greatly increased from ancient times where it used to almost be entirely political and geared at the maintenance of internal peace and security and protection from external aggression. The modern state has to ensure economic growth of a country and provide welfare services to its citizens. The role of the state is even greater in the current world of globalization where the different and distinct economic units all over the world operate to create a single economic community. The stiff competitive environment in the global market requires government-backed entrepreneurship (Dagnachew and Addissie, 2009).

Public sector enterprises reveal a massive economic function of the state, though the specific economic purpose and the dimension of the engagement intended in the adoption of a public enterprise may differ from state to state taking into account prevailing quasi-political and economic factors. Generally, the term public enterprise refers to enterprises established under the ownership of the state or public authorities (Tewodros, 2014). Public enterprise is a business organization wholly or partly owned by the state and controlled through a public authority. The Public Enterprises Proclamation No. 25/1992 defines public enterprises as a wholly state owned public enterprise established pursuant to the Proclamation to carry on for gain in manufacturing, distribution, service rendering or other economic and related activities. For the purpose of this research, the term Public Enterprise, State-Owned Enterprises and State Corporations are used interchangeably having the same meaning. Some public enterprises are placed under public ownership because, for social reasons, it is thought the service or product should be provided by a state monopoly. Utilities (water, electricity, etc.), broadcasting, telecommunications, and certain forms of transport are examples of this kind of public enterprise.

African governments have relied heavily on public enterprises (PE's) to achieve their development goals. But PE's performance has been poor; that PE's has yielded a very low rate of return on a largeamount of resources invested in them. Many African PE's, particularly those in infrastructure, have a long history of poor performance. From the outset, PE's financial and economic performance generally failed to meet the expectations of their creators and funders (World Bank, 2005). While PEs have come to play an important economic role, evidence from the 1970s and 1980s from a number of countries shows that, on average, SOEs have performed poorly relative to private firms, partly because multiple policy goals proved difficult to reconcile. State enterprises often juggle multiple, unclear, or conflicting financial and social

objectives, such as providing a blanket, low-cost telephone service. Political interference can prompt decisions that threaten a company's financial goals. Finding talented workers at all levels are a problem too: the best and brightest gravitate toward the more lucrative private sector, and the tenure-based promotions common at state enterprises can conceal their best internal talent. An assessment of SOE's in six countries (Brazil, Colombia, Ethiopia, Ghana, Jordan, and Peru) found that only 3 out of 115 assessed firms met the conditions for being commercially run (IMF, 2005).

On the other hand, there is a notion that suggests Public-sector companies can match the performance of their private-sector counterparts and even become world-class players. But beyond the traditional financial motives of a company, some of the public enterprises are not only profit makers but also used to strategically support the economic development. In an economic sector that requires huge investments and has a relatively low return, the private sector may not invest in the level of the demand. In such cases, it is the public enterprises that play a role of filling the gap that the private sector may not address. This is particularly true when it comes to the case of developing countries like Ethiopia.

Public enterprises are by definition intended to be operated in the public interest. This gives rise to a number of organizational and commercial issues. One problem is how to reconcile the need for close political control with the need for sufficient management autonomy. Public enterprises are usually intended to pay their way in the longer term, and yet they may be subject to political constraints in their pricing policy that could be in conflict with that objective. Conversely, they may receive hidden subsidies or enjoy additional protection not available to competitors due to social reasons. Such factors tend to distort the normal commercial operations of the corporation or the company and often lead to managerial disorientation. Partly because of these non-commercial considerations, public enterprises may appear to be highly inefficient and, in times of difficult trading conditions, may be a drain on public resources (World Bank, 2005).

The separation of ownership and control has led to the development of corporate governance rules as a means to protect the interests of stakeholders (the state). In general, corporate governance is concerned with the structures and processes for decision-making, accountability, control and behavior at the top of organizations (Spiller, 2004). It addresses the issues arising from the interrelationships between boards of directors, such as interactions with senior management and relationships with the owners and others interested in the affairs of the entity, including regulators, auditors, creditors, debt financiers and analysts (Standards Australia, 2003). The purpose of good governance is to add value to the organization, reduce financial, business, and operational risk, strengthen shareholder confidence in the entity, and assist in the prevention of fraudulent, dishonest and unethical behavior (Armstrong, 2004).

An argument has been advanced that the governance structure of any corporate entity affects the firm's ability to respond to external factors that have some bearing on its performance (Donaldson, 2003). In this regard, it has been noted that well-governed firms largely perform better and that good corporate governance is of an essence to firms. Developing countries are now increasingly embracing the concept of corporate governance knowing it leads to sustainable economic growth (Miring'u and Muoria, 2011).

According to the Ministry of Public Enterprises, the Ethiopian government is intensifying its efforts of equipping public Enterprises with modern and efficient corporate governance system thereby to make them globally competitive. The critical challenges of Enterprises which have been identified include, but not limited to, poor management style and unable to meet the emerging market demands. The appointment of top leadership, Board of the Enterprises, itself has been found one debilitating factor for most of the Public Enterprises. In light of this effort, the ministry has changed board management of public enterprises because most of the enterprises have been found to be inefficient and ill-managed on the board level. The number of ministers and state ministers running public enterprises as board chairpersons and members has been limited not to exceed 50 percent. This and other corporate governance practices are considered critical in affecting the performance of public enterprises in the country.

Agency theory by Jensen and Meckling (1976) holds that managers will not act to maximize returns to shareholders unless appropriate corporate governance structures are implemented in the large corporation to safeguard the interest of the shareholders. On the other hand, the stewardship theory by Donaldson and Kay (1976) suggests that the problem of governance may lie not in the self-interest of the executive but rather in the assumptions that distant others - notably investors and regulators - make as to their self-interested motives. The danger it highlights is that negative investor assumptions may inadvertently distort or weaken the leadership of a company.

Empirically, Miring'u & Muoria (2011) sought to examine how Corporate Governance affects the performance of commercial State Corporations in Kenya and found out there is a positive relationship between ROE, board size and board composition. Another study by Christine (2014) sought to examine how corporate governance affects the performance of state corporations in Kenya. Using a descriptive survey design, the study found that organizations that scored highly in corporate governance achieved better performance.

The concept of corporate governance has also been one portion of the Ethiopian literature. Hussien (2012) studied Ethiopia's company law with specific reference to the powers, composition, and remunerations of the board of directors. Researchers like K.S Rao et al. (2016) and Asamnew (2015) also studied the effect of corporate governance on the financial performance of commercial banks and the insurance industry in Ethiopia respectively. However, there is a lack of research to observe the effect of corporate governance

on the financial performance of public enterprises in Ethiopia. Therefore, this paper will try to analyze corporate governance practices and their effect on the financial performance of public enterprises in Ethiopia.

1.2. Statement of the problem

Strategic decisions about the allocation and utilization of corporate resources are the foundations of investments in productive capacities that can make innovation and economic development possible (Private sector initiative for corporate governance, 1999).

In developing countries, the public enterprise sector is an integral part of socio-economic activity. A public enterprise is necessitated by the need to find an effective and efficient economic organization under socially satisfying conditions (Sicherl, 1981). A public enterprise combines dual features as enterprise aiming at profit while at the same time having public nature as a public entity (Tewodros, 2014). However, the performances of these enterprises have been generally poor that they fail to meet the expectation of their creators. An assessment of SOE's in six countries including Ethiopia found that only 3 out of 115 assessed firms met the conditions for being commercially run (IMF, 2005). The poor performance of Public enterprises suggests that they have been operating under serious constraints, of which the major ones are lack of management autonomy, foreign exchange constraints, weak financial position, shortage of raw material and other inputs and outdated technology. Public-owned agencies poorly perform due to differences in the interests of bureaucrats and politicians (Cook, 1997). According to Ethiopian Ministry of Public enterprises most of the enterprises under its control have been found to be inefficient and ill managed on the board level. The recent move by the Ethiopian government to allow local and international investors to buy stakes in some of its largest state owned enterprises is not only driven by the urgent need to build supplies of foreign exchange, but also to improve the efficiency of these enterprises and reduce corruption.

Corporate governance issues have attracted attention in government policy circles, the academia, and the popular press throughout much of the world (Hussien, 2012). Although corporate governance is a highly researched area in the private sector, there is scarcity of research in the public sector, especially in Ethiopia. And governance in the public sector presents an interesting variation from that of the private counterparts. The principal-agent problem is even bigger in SOE's. The ultimate principals in SOEs are the public who benefit from good regulation and who suffer when the regulation fails short. The public will delegate their interests to the government as their agent; the government in turn will delegate the responsibility to regulatory authority where there may be multiple levels of delegation. This will create several levels of delegation between principal/agent delegations and therefore multiple levels at which governance issues may arise (Gitari, 2008). In addition, corporate governance of public enterprises has

both a context of public governance reforms and a specific area of public administration. Proponents of market economy believe that effects of property right and public-agent problems are non-existent or marginal in the private sector as against the case in the public sector (Worku, 2000). SOE's in developing countries are, in many cases characterized by the lack of formal rules and frequent political interference from the government. Too often, SOE's boards are populated with people chosen for their political allegiance rather than business expertise. According to Porta and Silanes (1999), the critical agency conflict in SOE's could emanate either of the two: managers or politicians. Managers may lack either the incentive or proper monitoring to handle SOEs. The other difference is the high political interference in these enterprises, resulting excessive employment, poor choice of product and location, and lack of investments.

Despite its importance in affecting the performance of firms, there is no consensus on the role of internal corporate governance mechanisms in mitigating agency problems and affecting financial performance. Findings of prior literature show mixed results. Jensen and meckling (1976) have proven that better governed firms might have more efficient operations, resulting in a higher expected future cash flow stream. On the other hand Gompers et al. (2003) found no significant relationship between firm's governance and operating performance. The Ethiopian literature also exhibits a mixed finding on the effect of corporate governance practices on financial performance of firms. For instance, Asamnew (2015) found a significant and negative relationship between board size and financial performance while K.S Rao et al. (2016) found insignificant relationship between the two variables.

In addition, despite the growing interest in SOE corporate governance, only a few empirical studies have looked into the relationship between corporate governance and SOE performance. Most studies analyzing the effects of corporate governance on performance have focused on publicly traded companies, owing to the limited availability of data. Moreover, in most cases, those studies did not distinguish between private companies and SOEs in their analysis. A few studies have obtained SOE-specific data from a limited number of countries, such as China (Fan, Wong, and Zhang 2007), Italy (Menozzi, Gutiérrez Urtiaga, and Vannoni 2011), Korea (Heo, 2018), Lithuania (Curi, Gedvilas, and Lozano-Vivas 2016; Jurkonis and Petrusauskaitė 2014), Kenya (Miring'u and Muoria 2011, Christine 2014).

1.3. Research Objectives

1.3.1. General objective

The main objective of this study is to explore the theoretical and practical aspects of corporate governance, financial performance of Public enterprises, and their interrelationship in Ethiopia.

1.3.2. Specific objectives

The specific objectives of the study are as follows:

- To assess the effect of board size on the financial performance of Ethiopian public enterprises.
- To assess the effect of board composition on the financial performance of Ethiopian public enterprises.
- To assess the effect of board gender diversity on the financial performance of Ethiopian public enterprises.
- Finally, this paper aims to assess the effect of debt policy on the financial performance of Ethiopian public enterprises.

1.4. Research hypothesis

Since the problem of agency becomes complex, corporate governance is needed (syafaruddin, 2009). And the board of directors is the primary direct stakeholder influencing corporate governance. Many SOE boards still primarily comprise executive directors and nonexecutive directors who are mainly government representatives. Government representatives are most often civil servants, who can be from the ownership entity or from other ministries. In some cases, ministers and other political appointees may also sit on SOE boards. Nonexecutive directors from the private sector, academia, think tanks, and other external sources may be appointed as representatives of the state (World Bank, 2014). In addition, debt policy is used as a corporate governance mechanism.

Hypothesis 1: Board size

The size of a board is seen as an important factor in influencing the monitoring and decision-making process (Haniffa&Hudaib, 2006; Larmou&Vafeas, 2010; Fauzi& Locke, 2012) thereby enhancing firm performance. Board size refers to the total number of directors on the board of directors of a firm. The importance of board size in influencing firm performance is evidenced by a number of empirical studies in recent years (Fuzi et al. 2016; Alves, 2014; Hillman & Dalziel, 2003). However, empirical findings have been mixed and inconclusive.

The relationship between board size and firm performance is supported by different corporate governance theories. Agency and resource dependency theories support board with a large number of directors

whereas stewardship theory supports smaller board size for effective management. Agency theory proposes that the firm director acts as representatives of the various shareholders and stakeholders of the company for monitoring the performance and managers activities. A larger board consists of more number of directors who work towards the interest of the stakeholders. The advantages of a larger board size include more diversity in handling problems and increasing the company's impact on society due to the relationships of board members. Firms with many directors will therefore mobilize more resources from the outside in order to improve their performance (Vo and Nguyen 2014). Larger board size is associated with greater collective information and range of expertise which is essential for board decision making and enhancing financial performance. In addition larger board size is harder for powerful CEO to dominate. Thus, agency theory believes that a larger board size enhances the firm performance by improving monitoring function. On the other hand, the stewardship theory argues that smaller boards are more effective because directors enjoy better communications and interactions between them (Yermack, 1996; Ozkan, 2007). Yermack (1996) observe that small boards of directors are more effective and that companies with small size achieve higher market value. The problems of large board size are coordination and communication problem, free-rider problem and minimized board cohesiveness. Given the large size of public enterprises in Ethiopia the following hypothesis is proposed regarding board size and its effect on performance:

H1: Board size of public enterprises in Ethiopia affects financial performance positively.

Hypothesis 2: The proportion of outsiders (board composition)

The structure of a board of directors reveals information about the quality of the firm's management and the extent of checks and balances on managerial decisions. Boards are often made up of inside and independent (outside) members. Insiders are major shareholders, founders and executives. Independent directors do not share the ties of the insiders, but they are chosen because of their experience managing or directing other large companies. Independents are considered helpful for governance because they dilute the concentration of power and help align shareholders interest with those of insiders. It is considered critical to strike a balance of internal and external directors on a board. Agency theory and stewardship theory both indicate that independent directors exert a positive effect on firm performance, but the role of the board of directors is different in each theory. Under the agency theory, the independent director's monitor and control insiders and/or the firm. Under the stewardship theory, the independent directors provide valuable outside advice and counsel to the firm. According to stewardship theorists, internal directors contribute better to the performance of a firm than outside directors do as inside directors' have access to accurate, relevant and timely information and a better understanding of the business (than

outside directors) as they live in the company they govern, which will help them make a better decision. In this context, the following hypothesis is proposed regarding the proportion of outsiders:

H2: Board composition of public enterprises in Ethiopia affects financial performance positively.

Hypothesis 3: Board gender diversity

Women are increasing in number among corporations' boards of directors, yet their representation is far from uniform across firms (Hillman & Cannella, 2007). One of the board diversity qualities measurements is the sex premise. In other words, board diversity captured by the percentage of women in each board in prior studies. There are theories backing the commitment by female executives on better usefulness for board on critical issues. A diversified board has easy access to new ideas, skills and different views steaming from gender diversity. It also means the board has different source of knowledge and experience and is open to changes. In conjunction, gender diversity in top corporate positions has got consideration in the recent decade due legislative changes, financial scandals and crisis. As a matter of fact, the presence of women on boards of directors is limited, even if the literature reveals a slow but steady rise in the female presence on corporate boards throughout the world (Dutta and Bose, 2006 cited in Romano et al, 2012). Researchers find that females are viable on their monitoring part and they are considered as a vital corporate governance device (Lakhal, Aguir, Lakhal, & Malek, 2015). Therefore the following hypothesis is forwarded regarding Board gender diversity:

H3: Board gender diversity of public enterprises in Ethiopia affects financial performance positively.

Hypothesis 4: Debt policy

Debt policy can also be used as a corporate governance mechanism to reduce agency conflict (Jensen and Meckling 1976; Faccio, Lang, and Young, 2001). The increasing debt can reduce conflict of free cash flow and show to the public that majority shareholders do not use the free cash flow for their own sake. The increasing debt will drive a firm to use the cash efficiently because the cash is used to pay debt interest periodically. Debt generates external monitoring; therefore, the majority shareholders should act to improve the firms' performance. Hence debt shifts monitoring from shareholders to creditors. This is referred to as control hypothesis (Faccio et al. 2001; Jensen 1986). Nevertheless, an excessive debt will decrease the firms' performance because the increase of debt will be followed by an increase of debt expense. Therefore the following hypothesis is forwarded regarding debt policy:

H4: Debt policy of public enterprises in Ethiopia affects financial performance positively.

1.5. Research Question

This research, in particular, seeks to assess the effect of corporate governance practices on the financial performance of public enterprises in Ethiopia. Thus the study seeks answers on the following research questions;

- What is the effect of Board size on the financial performance in Ethiopian public enterprises?
- What is the effect of Board composition on the financial performance in Ethiopian public enterprises?
- What is the effect of Board gender diversity on the financial performance in Ethiopian public enterprises?
- What is the effect of debt ratio on the financial performance in Ethiopian public enterprises?

1.6. Significance of the study

The topic of corporate governance in public enterprises is interesting to scholars and practitioners both in the context of public governance reforms and a specific area of public administration.

The study has great contribution to policy makers and managers of public enterprises in Ethiopia to consider the effect of corporate governance practices on financial performance. Public enterprises in Africa, including Ethiopia, have a long history of poor performance mainly associated with weak corporate governance system. Taking the above factor in consideration there has been massive efforts from the government to establish modern and effective corporate governance system in these public enterprises. Therefore, assessing the relationship between corporate governance variables and financial performance may help in the government's effort of improving the governance system and financial performance of these enterprises. And since public enterprises in Ethiopia are still dominant market players, the improvement in the performance of these enterprises will in turn lead to the well being of the economy and the society as a whole.

Most corporate governance literature concluded that corporate governance framework must be tailored to each organization, as there is difference in need between one and another organization. The complexity in public sector corporate governance as opposed with private sector necessitates a specific assessment tailored for public enterprises. The study intends to address the research question, what is the effect of Corporate Governance on Financial Performance of Public Enterprises in Ethiopia? And to the best understanding of the researcher, no study has been conducted in Ethiopia on the relationship between corporate governance and financial performance of public enterprises using the variables to be used in this study. In addition, there is also limited literature when it comes to corporate governance and especially public enterprises in Ethiopia and their interrelationship. Therefore, this research paper is

expected to contribute to the existing literature on corporate governance, public enterprises and their interrelationship relating to the case of Ethiopia.

Finally, this research paper can serve as a stepping stone for future researchers who want to conduct study on related topic.

1.7. Scope of the study

This research paper will restrict itself to observing the effect of corporate governance on the financial performance of public enterprises in Ethiopia for the years 2012-2017. Other issues such as the role of government and public enterprises in the economy and the effect of privatization are beyond the scope of this study. For the purpose of this study two contradicting theories of corporate governance, agency theory and stewardship theory, are chosen. Other corporate governance theories such as resource dependence theory and stakeholder's theory are not considered.

1.8. Limitation of the study

Any empirical work on Ethiopia's corporations faces the problems of data integrity. Therefore the absence of reliable information continues to be a point of distress for many researchers. Major global data streams do not include information about Ethiopian companies. There is no national data enter other than the one owned by the Ethiopian Economics Association. In addition to this level of information scarcity, most of the microeconomic statistics that are issued by government departments and the World Bank are the results of surveys. The issue of data availability and reliability is more distressing when it comes to public enterprises in developing countries like Ethiopia due to political and other reasons. Data availability is the main constraint to conducting research on SOEs. While publicly traded companies are required to disclose detailed data on corporate governance and financial performance, SOEs in most countries are not required to disclose to the public.

In addition, in recent years many state enterprises in the world have been given financial targets that take into account both social and commercial responsibilities. However, Performance evaluation is not a simple task in private enterprises and it is all the more complicated in public enterprises. When it produces a marketable product, such as coal or steel, which competes with other products, the normal commercial criterion of profit may be adopted to assess its performance. In the case of a utility enjoying monopoly power, the usual performance measures may give vague information. Economists have developed concepts like cost-benefit analysis as a performance measurement tool to address this problem.

Therefore the researcher intends to use the following measures to minimize the effect of the above-mentioned factors. Regarding the issue of data availability and reliability, more emphasis will be given to the data collection process as to ensure its integrity and reliability. However, regarding the second issue,

the researcher intends to use the accepted (usual) measures of performance despite their inaccuracy, as mentioned before.

1.9. Organization of the study

The structure of this paper is as follows: Chapter 2 provides theoretical issues and empirical evidence. Basically, this chapter focuses on the general corporate governance theories, public enterprise theories and the relationship between corporate governance and financial performance of public enterprises. It also describes other empirical works. Chapter 3 develops a methodological framework of the study. Chapter 4 devotes on analysis of the result. The last chapter presents the conclusion and recommendation part.

CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

This chapter presents the available literature that has been reviewed for the study. Specific areas covered include the main corporate governance theories, main public enterprise theories, and theoretical as well as practical aspects of the interrelationship between corporate governance and performance of public enterprises. Finally, relevant empirical studies are reviewed.

2.2. Theoretical review

According to Tewodros (2014), the need for a definition of public enterprise is not only academic for it has far-reaching practical ramifications. It applies to the pursuits of developing policy, strategy, and planning and undertaking comparative research studies. The difference in the legal form (or designation) in which a public enterprise is established is expected to have an impact on the autonomy of its management from the intervention of the government or other agencies. And he defined public enterprises as all enterprises set up by the state or public authorities to carry out business activities. Currently, public economic enterprises are established as an enterprise (Ethiopian Airlines Enterprise), a share company (Ethiopian pulp and paper Share Company) or a corporation (Ethiopian Insurance Corporation). However, there are no clear elements of demarcation that explain the selection of a specific form, and it is also difficult to identify the basic distinction between these different forms. The Public Enterprises Proclamation No. 25/1992 defines public enterprises as a wholly state owned public enterprise established pursuant to the Proclamation to carry on for gain manufacturing, distribution, service rendering or other economic and related activities.

Corporate governance is a system by which companies are strategically directed, interactively managed and holistically controlled in an entrepreneurial and ethical way and in a manner appropriate to each particular context (Hilb, 2008:9-10). Hussien (2012) defined corporate governance as all issues related to ownership and control of the corporate property, the rights of shareholders and management, powers and responsibilities of the Board of Directors, disclosure and transparency of corporate information, the protection of interests of stakeholders that are not shareholders, enforcement of rights, etc. Corporate governance systems depend upon a set of institutions such as laws, regulations, contract enforcement and norms that create self-governing firms as the central element of a competitive market economy. These institutions ensure that the internal corporate governance procedures adopted by firms are enforced and they render management responsible to owners and other stakeholders.

There are different theories on corporate governance, public enterprises, and their relationship. The following portion will discuss these theories accordingly. Agency theory and Stewardship theory will be discussed in relation to corporate governance practices.

2.2.1. Theories on corporate governance

The following theories contributed to the broad understanding of the fundamental aspects of governance and provided the logical framework for comprehending Corporate Governance phenomena: agency theory and stewardship theory

2.2.1.1. Agency theory

A comprehensive theory of the firm under agency arrangements developed by Jensen and Meckling (1976) is used to understand the relationship between agents and principals. The agent represents the principal in a particular business transaction and is expected to represent the best interests of the principal without regard for self-interest. The different interests of principals and agents may become a source of conflict, as some agents may not perfectly act in the principal's best interests. The resulting miscommunication and disagreement may result in various problems within companies. Incompatible desires may drive a wedge between each stakeholder and cause inefficiencies and financial losses. This leads to the principal-agent problem.

The theory suggests that the principals (the shareholders) can assure themselves that the agent will make the optimal decisions only if appropriate incentives are given and only if the agent is monitored. Incentives include such things as stock options, bonuses, and prerequisites which are directly related to how well the results of management's decisions serve the interests of shareholders. Monitoring consists of bonding the agent, systematic reviews of management prerequisites, financial audits, and placing specific limits on management decisions. These involve costs, which are an inevitable result of the separation of corporate ownership and control. Such costs are not necessarily bad for shareholders, but the monitoring activity they cover needs to be efficient.

The board of directors is one of several internal governance mechanisms that are intended to ensure that the interests of shareholders and managers are closely aligned and to discipline or remove ineffective management teams. Board of directors has legal duties of reviewing the corporation's major plans and actions and are also charged with selecting, compensating, evaluating, and, when appropriate, dismissing top managers. The use of debt financing can also reduce agency problem by inducing monitoring by lenders.

The board of directors has an important function here and in particular, the relationship between the chairperson and the chief executive officer is key (Tricker, 1984). Shareholder interests will be safeguarded only where the chair of the board is not held by the CEO or where the CEO has the same

interests as the shareholders through an appropriately designed incentive compensation plan (Williamson, 1985).

An implication of agency theory is that where CEO duality is retained, shareholder interests could be protected by aligning the interests of the CEO and the shareholders by a suitable incentive scheme for the CEO, i.e. by a system of long-term compensation additional to the basic salary. Where CEOs hold the dual role of chair, the presence of long-term compensation will align their interests with shareholders and forestall the loss in shareholder benefit which otherwise will result from the dual role.

In summary, agency theory suggests that managers are opportunistic and self-serving. Therefore, the theory recommends strong director and shareholder control. It advocates that the fundamental function of the board of directors is to control managerial behavior and ensure that managers act in the interests of shareholders.

2.2.1.2. Stewardship Theory

Although agency theory is the dominant perspective in corporate governance studies, it has been criticized in recent years because of its limited ability to explain sociological and psychological mechanisms inherent of the principal-agent interactions (Davis et al., 1997). Stewardship theory has its roots from psychology and sociology and is defined by Davis, Schoorman, and Donaldson (1997) as a person who protects and maximizes shareholders wealth through firm performance because by doing so, the steward's utility functions are maximized. In this perspective, stewards are company executives and managers working for the shareholders, protects and make profits for the shareholders. Unlike agency theory, stewardship theory stresses not on the perspective of individualism (Donaldson and Davis, 1991) but rather on the role of top management being as stewards, integrating their goals as part of the organization.

Here organizational role-holders are conceived as being motivated by a need to achieve, to gain intrinsic satisfaction through successfully performing inherently challenging work, to exercise responsibility and authority, and thereby to gain recognition from peers and bosses (McClelland 1961; Herzberg et al., 1959). Thus, there are non-financial motivators.

Moreover, identification by managers with the corporation, especially likely if they have served there with long tenure and have shaped its form and directions, promotes a merging of individual ego and the corporation, thus melding individual self-esteem with corporate prestige. Again, even where a manager may calculate that a course of action is unrewarding personally they may nevertheless carry it out from a sense of duty, that is, normatively induced compliance (Etzioni, 1975).

Further, while agency theorists posit a clear separation of interests between managers and owners at the objective level (Jensen and Meckling, 1976), this may be debatable, and organizational sociologists would point out that what motivates individual calculative action by managers is their personal perception

(Silverman, 1970). To the degree that an executive feels their future fortunes are bound to their current corporate employers through an expectation of future employment or pension rights, then the individual executive may perceive their interest as aligned with that of the corporation and its owners, even in the absence of any shareholding by that executive.

The executive manager, under this theory, far from being an opportunistic shirker, essentially wants to do a good job, to be a good "steward" of the corporate assets. Thus, stewardship theory holds that there is no inherent, general problem of executive motivation. Given the absence of an inner motivational problem among executives, there is the question of how far executives can achieve good corporate performance to which they aspire. Thus, stewardship theory holds that performance variations arise from whether the structural situation in which the executive is located facilitates effective action by the executive. The issue becomes whether or not the organization structure helps the executive to formulate and implement plans for high corporate performance (Donaldson, 1985). Structures will be facilitative of this goal to the extent that they provide clear, consistent role expectations and authorize and empower senior management.

Thus, Stewardship theory highlights that negative investor assumption may inadvertently distort or weaken the leadership of a company and argues that the board should have a significant proportion of inside directors to ensure more effective and efficient decision making and other control mechanisms are not necessary for disciplining management.

2.2.2. Theories on Public Enterprises

There is no general theory of public enterprise, and the miscellany of separate theorizations on the subject has created a conceptual dilemma. Shirley and Walsh (2001:4) have provided sufficient literature survey of the current conditions of debates related to public ownership and summarized it in three approaches that researchers deal with:

(1) Market competition, not property rights, is the determinant of enterprise performance. Scholars who studied in this direction argue that market competition creates incentives for better resource allocation and the lack of the former will lead to inefficient allocation and bad performance, regardless of ownership. Applying this argument to SOEs, Schleifer and Vishny (1994) hold that even in a fully competitive environment, SOEs will be inefficient due to the distorting interference of politicians primarily pursuing their political goals. However, Kay and Thompson (1986), debate that a blend of competition and such viable threats as takeover or bankruptcy will promote the productive efficiency of SOEs.

(2) State uses SOEs for purposes other than social welfare. Another stream of research on SOEs deals with the various objectives of state and government. Typically, two qualities of government behavior and SOEs were mentioned: social-welfare-maximizing governments and self-interested governments. The former quality assumes that public ownership is the

best solution for market failures and that the social benefits can offset economic costs. Nonetheless, it is hard to judge and quantify the costs and benefits of social goals (Hart, 1997 and Shirley and Walsh, Introductory section 2001:16). Hart (1997) and Schleifer and Vishny (1994) argue that decision on public services is similar to a firm's decision to produce in-house or to buy on the market – similar to the notion, introduced by Coase (1937). In terms of inefficient political market, bureaucrats behave like rational actors who maximize their own screen performance and therefore SOEs will be used to produce political benefits at the cost of SOEs operations. Schleifer and Vishny (1994) have itemized SOE inefficiencies, listing them as emerging from "politicization" of SOEs and the self-interested behavior of politicians.

(3) Regardless of government goals, private firms will be more successful than SOEs in addressing Corporate Governance issues. In this area of research, scholars have focused on efficiency problems based on studies of separation and control. The differences in Corporate Governance of private and public enterprises could be examined in the context of:

- monitoring by owners (Alchian, 1965)
- legal constraints (Schleifer and Vishny, 1997:739ff);
- takeovers (Coffee, 1986); and
- Bankruptcy (Schleifer and Vishny, 1997:752-754 and Kornati, 1980).

It is crucial to examine the reason why states establish public economic enterprises irrespective of variation in political ideology and economic realities. For some scholars, public enterprises continue to be an enduring phenomenon in a society for two reasons: that the economic activity of a government is a function of its greatly increased responsibilities for the life and welfare of their citizens, and that the complexities of the industrial and commercial activities undertaken by the government demand some permanent legal and administrative structure (Tewodros, 2014).

There are other reasons that may justify the decision to establish public enterprises. One of the reasons can be the need to correct market failure such as an inadequate private supply of goods and services and improving competition. According to Talis (2015) The use of Public enterprises should be limited to circumstances in which a market failure exists, less invasive forms of intervention such as regulation/taxes/subsidies and private-sector contracting are ineffective or not possible, and the welfare loss of the market failure exceeds the costs, distortions, and inefficiencies of Public Enterprises.

The second reason is altering the structure of payoffs of the economy by redistributing the benefits received by particular individuals or groups. Pro-poor growth increases opportunities for poor sections of the citizen and decreases socioeconomic ills and investments in social sectors and in basic infrastructure

are essential in the process of sustainable and inclusive growth (Muleta, 2015).The other reason is facilitating long-term economic planning by which enterprises will have a developmental role. Despite some drawbacks raised on them many of the public enterprises have undeniably contributed to the economy by earning foreign currency, employment as well as revenue to the economy. Some of the public enterprises are not only profit makers but also used to strategically support the economic development. In an economic sector that requires huge investments and has a relatively low return, the private sector may not invest in the level of the demand. In such cases, it is the public enterprises that play a role of filling the gap that the private sector may not address.

The other reason that justifies the existence of Public Enterprises is to encourage the private sector to play its role in the economy. Mostly the government intervenes in the market, especially through Public Enterprises, to fill the void that the private sector could not because of several reasons such as the shortage of capital, lack of sufficient expertise or that the specific venture is simply not attractive for the private investors to engage in. the government can focus on the strategy in selected areas of investment, i.e. expanding health centers or building roads. All these infrastructures help investors enhance their performance (Muleta, 2015). For example, if electric power is expanded in the rural area and everywhere, and if telecoms expand everywhere, the private sector can easily manage and easily use that to promote their companies. Private companies can join the economic development in numerous industries, such as textile, agro-processing, mining, and manufacturing, among others.

On the other hand, there are some scholars that suggest the government's primary role should be making sure that its policies are implemented properly and setting the way straight for the private sector since the government cannot have the expertise and time to simultaneously invest in and carry out regulatory tasks. And the private sector can do the tasks for its own sake, to stand competitively in the market and float in the business for a long time.

Through out the course of their operations, public enterprises endured rising corruption, management inefficiencies, overstaffing, inflation and rising current account deficits that indicated the downsides of public enterprises as key players in economic development. Consequently, large-scale privatization of public enterprises was undertaken in the 1980s and 1990s, with the vital support of multilateral financial institutions (Tewodros 2014).

2.3. Corporate Governance and Public Enterprises

Governance in the public sector presents an interesting variation from that of the private counterparts. Corporate governance of public enterprises has both a context of public governance reforms and a specific area of public administration. The ultimate principals in SOEs are the public who benefit from good regulation and who suffer when the regulation fails short. The public will delegate their interests to the government as their agent; the government in turn will delegate the responsibility to regulatory authority where there may be multiple levels of delegation. This will create several levels of delegation between principal/agent delegations and therefore multiple levels at which governance issues may arise (Gitari, 2008). In addition, Proponents of market economy believe that effects of property right and public-agent problems are non-existent or marginal in the private sector as against the case in the public sector (Worku, 2000).

From the viewpoint of agency theory, the essential contrast in Corporate Governance of SOEs (State Owned Enterprises) derives from its characteristics of having the state as the owner. Therefore, the poor performance of many SOEs can be ascribed to the specific challenges they face in governance, as opposed to private firms.

According to Porta and Silanes (1999), the critical agency conflict in SOE's could emanate either of the two: managers or politicians. Managers may lack either the incentive or proper monitoring to handle SOEs. The other cause could be high political interference in the firm, resulting excessive employment, poor choice of product and location, and lack of investments. Whereas the government, as the shareholder of SOEs, has a legitimate right to influence SOEs the scope and extent of influence in practice has been excessive and calls for some limitations.

The topic of SOEs management is quite specific due to its duality: on the one hand, it is an area of public governance with an intensive intervention of the government, on the other – SOEs are the autonomous enterprises, having dual – social (e.g., creation of work places, implementation of state-level projects, etc.) and economic (e.g., profitability, return on investment, etc.) goals (Jurkonis and Petrusauskaitė, 2014).

Although similar in their structure and functioning, boards of directors in State-owned enterprises (SOEs) often do not engage in the same activities they undertake in private companies. At best, SOE*s*' boards may act as a kind of parliament that represents the interests of employees, various ministries, and in some cases, non-state shareholders.

In SOEs, state ownership and government control are governance challenges that might contribute to poor performance. However, efforts to improve corporate governance in SOEs have been weaker than in the private sector, where changes have been extensive over the last two decades. Actually, a SOE has very

diffused owners, the citizens, but it generally has a higher body or bodies that oversee it: one or more ministries, an ownership entity specifically created to oversee SOEs, the Parliament or some combination of them. At worst, these various authorities may use SOEs to achieve short-term political goals. SOEs also have the related problem of "common agency": given that each relevant part of the government may have different objectives, each could attempt to influence the SOE accordingly (Menozzi, Gutierrez and Vannoni, 2011). Managing multiple and potentially conflicting objectives is one of the central challenges in the governance of SOEs, as recognized by both the World Bank and the OECD.

In spite of these governance challenges, the experience of some developed countries (Sweden, Australia, New Zealand, Denmark, and others) shows that the state has managed to become an effective owner, which provides a high level of Corporate Governance. In this regard, some economists believe that productivity and the efficiency of large enterprises depend not so much on a form of property, but the form, level, and nature of management; management depends not on who is the owner of the enterprise, but rather on control rules, rational decisions, and ways and means of evaluating the effectiveness of the management system and its leaders. Establishing the responsibilities of owners and managers is equally important to the promotion of initiative.

According to the Ethiopian ministry of public enterprises, the critical challenges of Public Enterprises in Ethiopia which have been identified include, but not limited to, poor management style and unable to meet the emerging market demands. A set of managerial/institutional Impediments to good PE performance is also important. This set includes the factors of overstaffing, political interference in day-to-day management decisions, unclear objectives, a weak human resource base, inadequate incentives for good managers, and the incompatibility of civil service procedures with commercial operations. At the level of the firm poor information and reporting systems and, in particular, extremely weak accounting methods hinder the operations of a large number of PEs - and government supervisors. Weak or non-professional Boards of Directors, combined with rigid and stultifying government oversight mechanisms complete the picture.

2.4. Determinants of firm performance

2.4.1. Board Size

It is widely recognized that the board size is a crucial internal mechanism of corporate governance and plays a major role in a firm's management. For this reason, board size and its impact on firm financial performance is one of the most argued issues in corporate governance (Ozcan and Ali, 2016). While agency theory suggests that the board size positively affects performance, stewardship theory favors smaller board size and argues that a larger board size negatively impacts the firm performance. The advantage of a larger board size is the greater collective information and range of expertise that the board

subsequently possesses and hence larger boards will lead to higher performance (Dalton et al., 1999, 2005). A larger board consists of more number of directors who work towards the interest of the stakeholders. The advantages of a larger board size include increasing the company's impact on society due to the relationships of board members. In addition, larger boards mean more diversity in handling problems and are harder for powerful CEO to dominate. However, there are eventually disadvantages of large boards in the form of coordination costs and free rider problems. Firstly, coordination and communication problems arise because it is more difficult to arrange board meetings, reach consensus, leading to slower and less-efficient decision-making (Jensen 1993). Secondly, board cohesiveness is undermined because board members will be less likely to share a common purpose, communicate with each other clearly, and reach a consensus that builds on the directors' different points of view (Lipton and Lorsch, 1992). Thirdly, director free-riding increases because the cost to any individual director of not exercising diligence falls in proportion to board size (Lipton and Lorsch, 1992). Jensen(1993) and Lipton and Lorsch (1992) suggest that as board size increases beyond a certain point, these inefficiencies outweigh the initial advantages from having more directors to draw on, leading to a lower level of corporate performance. Lipton and Lorsch (1992) argue that a board size of eight or nine directors is optimal, whilst Jensen (1993) argues that the optimum board size should be around seven or eight directors.

2.4.2. Board composition

Preference for outsider-dominated boards is mainly grounded in agency theory. From an agency theory perspective, as outside directors are assumed independent from the company's managers, they are in a better position to monitor management. According to agency theory, advocators outside directors are more likely to show objectivity in their deliberations and are willing to consider diverse groups in making their decisions. It seems because unlike insiders, outside directors' careers are less likely to be affected by the outcomes of their decisions and thus can arrive at more objective solutions.

However, from stewardship theory perspective internal directors should be more helpful to the board of directors. Because of their professional knowledge, abilities, and familiarity with the CEO's decision-making quality make them better at evaluating the CEO. In general, according to stewardship theorists internal directors contribute better to the performance of a firm than outside directors do as inside directors' have access to accurate, relevant and timely information and better understanding of the business (than outside directors) as they live in the company they govern, which will help them make better decision.

2.4.3. Board gender diversity

A great number of arguments have been presented that advocate that gender diversity has a positive effect on firm value and performance. It was argued by some researchers that companies ought to increase female presence on their boards, since this had a positive effect on business performance (Reguera-Alvarado et al., 2017). The better economic performance would be the result of new ideas, skills and different views that stem from greater board diversity (Reguera-Alvarado et al., 2017). Similarly, boards with low level of diversity might not be able to take advantage of different knowledge and experience when some people are excluded from the participation in the decision-making (Westphal & Milton, 2008). Additionally a well diversified board is open to changes. Both Gordini and Rancati (2017) and Campbell and Mínguez-Vera (2008) found that gender diversity on boards did have a positive and significant effect on firm financial performance.

2.4.4. Debt policy

Agency theory states that there is a separation between ownership and control in modern firms. Agency conflict also appears in the existence of free cash flow in a firm, referred to as the free cash flow hypothesis (Jensen, 1986).The free cash flow hypothesis states that managers endowed with free cash flow will invest it in negative net present value (NPV) projects rather than pay it out to shareholders. Jensen defines free cash flow as cash flow left after the firm has invested in all available positive NPV projects. An over-investment problem will be created, and consequently increasing the costs incurred by shareholders. These costs are called “over-investment costs”. The over-investment behavior is motivated by managers’ enticement to drive their firms to grow away from the optimal size, which increases the funds under their control, and consequently increases their power.

In their pioneering analysis of the agency problems between professional managers and dispersed corporate shareholders, Jensen and Meckling (1976) argued that debt constrains managerial misappropriation by imposing fixed obligations on corporate cash flow. This argument was further developed by Jensen (1986) in the context of leveraged buyouts that forced managers to disgorge their corporations’ free cash flow, replacing equity with debt.

The increasing debt can reduce conflict of free cash flow and show to the public that majority shareholders do not use the free cash flow for their own sake. The increasing debt will drive a firm to use the cash efficiently because the cash is used to pay debt interest periodically. Debt generates external monitoring; therefore, the majority shareholders should act to improve the firms’ performance. Hence debt shifts monitoring from shareholders to creditors. This is referred to as the control hypothesis (Faccio et al. 2001; Jensen 1986). Nevertheless, an excessive debt will decrease the firms’ performance because the increase in debt will be followed by an increasein debt expense.

2.4.5. Firm size

Economic theory prescribes that increasing firm size allows for incremental advantages because the size of the firm enables it to raise the barriers of entry to potential entrants as well as gain leverage on the economies of scale to attain higher profitability. The size of a firm affects performance in many ways. Key features of a large firm are its diverse capabilities, the abilities to exploit economies of scale and scope and the formalization of procedures. These characteristics, by making the implementation of operations more effective, allow larger firms to generate superior performance relative to smaller firms (Amato and Wilder, 1990).

On the other hand, Penrose (1959) maintains that firms can create economic value not due to mere possession of resources, but due to effective and innovative management of resources. This indicates that firm commanding massive resources is not necessarily more profitable than firm commanding little resources. Creative resource deployments spur differences in productive opportunities and financial performance.

2.4.6. Liquidity position

In theory, liquidity and profitability goals are generally assumed to be contradictory to each other. The goal of liquidity management should be to enable a firm to maximize profits of its operations while meeting both short term and upcoming operational expenses, i.e. to preserve liquidity (Panigrahi, 2014). To achieve this goal, the firms should eliminate the risk of inability to meet its short term obligations on the one hand, while avoiding excessive investments in current assets on the other hand (Eljelly, 2004). Excessive investment in liquidity may lead managers to make investments towards maximizing their own utility, thus to the other detriment of profitability (Fama and Jensen, 1983). In such circumstances, another pitfall is the manager'stendency to invest projects with negative net present values (Adams, 1996). From this point of view, the trade-off between liquidity and profitability has been an important field of study in corporate finance.

2.5. Empirical review

There are very little and inconclusive studies and findings on the effect of corporate governance mechanism on the financial performance of public enterprise in developing countries and, to the best understanding of the researcher, there is no research undertaken in the Ethiopian case to see the relationship between financial performance and corporate governance practices in Ethiopian public enterprises. The following are some of the empirical studies conducted regarding corporate governance and/or public enterprises that are more or less related.

Heo (2018) assessed the relationship between corporate governance and performance of state owned enterprises using data set from 320 enterprises in Korea. In order to capture various objectives of SOEs the study used four performance indicators and assessed their relationship with corporate governance. These performance indicators are financial performance captured by the proxy ROA, Debt ratio, performance evaluation and customer satisfaction scores. Performance evaluations are conducted annually by the Ministry of Strategy and Finance in Korea for all firms categorized as either Public Corporations or Quasi Governmental Institutions. The evaluation assesses the firm's annual performance against preset performance indicators on leadership, management system, and core business performance. This evaluation examines whether the complex objectives of SOEs, such as financial performance and social objectives, have been met fully in that year. An annual SOE customer satisfaction survey, also conducted by the Ministry of Strategy and Finance, assesses the level of customer satisfaction with SOE services via phone interview, face-to-face interview, or online survey of direct customers. And the findings of the study suggest that CEO duality has a negative and insignificant effect on performance evaluation score and debt ratio while maintaining significant negative effect on ROA. CEO duality has a positive but insignificant effect on customer satisfaction. The variable board size has a significant positive effect on performance evaluation score and significant negative effect on debt ratio. Board size doesn't have a significant relationship with customer satisfaction and ROA. Board independence (Board composition) has a significant negative relationship with customer satisfaction and insignificant relationship with performance evaluation score, debt ratio and ROA. Disclosure in these enterprises was measured using the disclosure inspection score and the findings suggest significant positive relationship of disclosure with performance evaluation score and ROA. But disclosure doesn't have a significant relationship with customer satisfaction and debt ratio. And the study concluded that, although various aspects of corporate governance work differently depending on how performance is measured, several important aspects of corporate governance do have a significant association with the performance of SOEs.

C.Curi et al. (2016) analyzed whether, and to what extent, corporate governance mechanisms affect the efficiency of SOEs operating in transition economies and whether the link between corporate governance and efficiency varies with the degree of state ownership (wholly SOEs vs. majority SOEs). The final sample consisted of 190 firm-year observations for the years 2012 and 2013. Rather than market-based or accounting-based performance measures this study used technical efficiency as measure of SOEs performance. The efficiency measure reflects the SOEs ability to generate financial returns from minimum consumption of capital, labour and operational costs incurred. Corporate governance score, conducted by GCC (sole provider of corporate governance measures of SOEs in Lithuania), was given after assessing the implementation of good governance practices following OECDs recommendation. The score measures three corporate governance mechanisms: quality of transparency, quality of boards and quality of strategic planning, implementation and controls. The analysis revealed that there exist inequality between the efficiency of wholly SOEs and majority SOEs. Wholly SOEs are more efficient than Majority SOEs while corporate governance mechanisms are more effective for majority SOEs. The study found that higher quality of corporate governance in SOEs enables an increase of relative efficiency. Specifically, the study found positive and insignificant effect by transparency score on technical efficiency score while board quality index and strategic planning index have significant positive effect on technical efficiency. Overall, the findings confirm that restructuring SOEs via corporate governance reform plays a crucial role in enhancing efficiencies.

Jurkonis and Petrusauskaitė (2014) investigated Lithuanian SOEs with a main purpose of evaluating the influence of features reflecting best governance on these enterprises managerial efficiency. The researchers prepared an index for corporate governance of 135 Lithuanian SOEs in 2013. The index was compiled based on the results of self-assessment by the researchers, executives in the SOEs and ministry of economy of the republic of Lithuania (charged with controlling and managing SOEs in the country). The index was composed with scores of transparency, composition of the board, quality of planning and internal control system. Composition of the board is measured through board independence, availability of key competencies in the board, employees' participation in the board and structure of the committees in the board. ROE and earnings before interest, taxes, depreciation and amortization (EBITDA) were used as a measure of management efficiency. The correlation analysis revealed that transparency, strategic planning and internal control have a positive correlation with managerial efficiency while board composition scores have a negative correlation with managerial efficiency. Specifically board independence (the inclusion of politically unrelated members) exhibited a positive correlation with managerial efficiency. The regression analysis revealed that board independence and Implementation of operational audits have a significant and positive effect on ROE while Quality of management reporting, Quality of strategy management and monitoring have insignificant positive effect on ROE of these SOEs.

The study thus concluded that improved corporate governance practices, particularly board independence, led to better financial performance and the positive return to Lithuanian SOEs is ensured by a strict observance of the selected strategy and set goals and by the internal control system.

Warganegara et al. (2012) investigated the impact of corporate governance practices on operating performance of Indonesian SOEs. The objectives of this study were to investigate the extent of corporate governance implementation by Indonesia's publicly listed state-owned enterprises (SOEs) and to examine the relationship between corporate governance strength and operating performance. Two ROA elements: operating profit margin (OPM) and assets turnover (ATO) were used to measure the operating performance of SOEs. To uncover evidence on the extent of corporate governance implementation, this study utilized the Corporate Governance (CG) Questionnaire developed jointly by the Indonesian Ministry of State-Owned Enterprises (MSOEs) and the Board of Finance and Development Control (BPKP), a state agency under the Indonesian Ministry of Finance, which has five (5) categories: Shareholders' Rights, CG Policy, CG Practices, Disclosure & Transparency, and Commitment. The final samples selected for this study were non-financial SOEs between the years 2004 and 2007. The study finds an improvement in the implementation of good corporate governance in Indonesian state-owned enterprises. The regression analysis revealed an evidence of a positive relationship between Corporate Governance Strength and Operating Performance only when the performance is represented by ROA and OPM but no evidence when operating performance is measured using the proxy ATO.

Menozzi, Gutiérrez Urtiaga, and Vannoni (2011) examined the effects of board size and board composition on the behaviour and performance of 114 Italian state owned enterprises with a dataset 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.

Fan, Wong, and Zhang (2007) Examined the role of government intervention in Chinas newly partially privatized firms. CEO's political connection-defined as serving as a current or former government bureaucrat—that is, a current or former officer of the central or local governments or the military—was used as a proxy for government intervention in the firm. The study employed stock and accounting based measures to evaluate the performance of these Chinese companies. The data was collected from shanghai and Shenzhen stock exchange from 1993 to 2001. The finding of the study suggests that firms with politically connected CEOs underperform than those without politically connected CEOs. Thus the study

concluded that there is a negative relationship between CEOs political connection and performance of these partially privatized firms.

When we come to Africa, the Kenyan literature has covered corporate governance practice and its effect on the performance of public sector organizations (State corporations) extensively. Maina (2017) sought to investigate the relationship between corporate governance and financial performance of SOEs in Kenya. Both primary and secondary data sources were used in the study for a sample of 43 SOEs out of 187 populations. Four corporate governance attributes (board size, board independence, board composition and ownership structure) were chosen by the study and ROA was used as a proxy for financial performance. Board independence refers to number of independent (non-executive) directors while board composition refers to the number of directors with expertise in the sector. Correlation analysis revealed the existence of positive relationship between financial performance (ROA) and corporate governance attributes (board size, board composition, board independence and ownership structure). The regression analysis also revealed that board size, board composition, board independence and ownership structure have a significant positive relationship with financial performance (ROA). The study thus concluded that improved corporate governance would lead to improved financial performance and if SOEs in Kenya are to improve their performance they should direct their efforts towards these corporate governance attributes.

Kyondu (2014) sought to examine the relationship between Corporate Governance and performance of State Corporations in Kenya. The study used a descriptive survey design. The target population for this study was 178 SCs in Kenya. A sample of 60 state corporations out of 178 was found ideal in the study. Primary data was collected using questioners aimed at attaining a corporate governance score. The corporate governance practices assessed in this study were board size, board composition, CEO duality and independence of audit committee. The findings suggest that financial performance exhibited a positive relationship with board composition, CEO duality and independence of audit committee and a negative relationship with board size in Kenyan state corporations. Therefore organizations that scored highly in corporate governance were also ranked highly in yearly ranking of State Corporation's performance. The study thus concluded the relevance of corporate governance cannot be over emphasized.

Miniga (2013) assessed the relationship between corporate governance practices and financial performance of regulatory state corporations in Kenya. A sample of 12 out of 18 corporations was analyzed using a data set comprising both primary and secondary data. Structured questionnaires was used to collect data on compliance with the best practice governance mechanisms and average increase in surplus for the previous 5 years was used as the measure of financial performance. The corporate governance practices observed by the study are board size, independence of board committees, board

independence, CEO duality, frequency of board meetings, board diversity and internal audit function. The findings of the study indicated a strong relationship between corporate governance practices and financial performance in regulatory state corporations of Kenya. The regression analysis, however, shows that only one variable (CEO duality) is found to have a significant relationship with financial performance. The other variables are insignificant in affecting financial performance of regulatory state corporations in Kenya. The study recommended that the government ought to enforce the measures it has laid down on corporate governance.

Miring'u and Muoria (2011) examined the role of corporate governance and its effect on the performance of commercial State Corporations in Kenya. The objective of the study was to identify the relationship between financial performance, board composition, and size. The study used a descriptive survey design. The target population for this study was 41 commercial State corporations in Kenya. Respondents were 30 human resource officers. Data were analyzed through descriptive statistics and multilinear regression technique. A board size mean was found to be ten while a minimum of three outside directors is required on the board. The findings demonstrated that larger board size and a higher ratio of nonexecutive directors on the board had positive impacts on financial performance. The study thus concluded that financial performance (ROE) has a positive relationship with board size and board composition in Kenyan commercial state corporations.

Gitari (2008), while carrying out a case study, sought to determine and assess the corporate governance practices in New Kenya Cooperative Creameries (a state corporation operating in the diary processing business) and the role board plays in the financial performance of this corporation as a means of corporate governance mechanism. The study covered the period from January 2003 - December 2005. The researcher used scorecard methodology to assess the degree of fulfilment of different governance principle on a scale of 1-5. The findings of the study indicated that the Board of Directors of New Kenya Cooperative Creameries has adopted good corporate governance practices that have yielded improved financial performance over time and governance structures positively influence financial performance. Thus the study concluded that the key to improved financial performance lies within the development and implementation of the governance structures that are specific, monitoring and review of the structures regularly.

When we look at the case of Ethiopia, the empirical literature is entirely based on the effect of corporate governance practices on the financial performance of private sector enterprises (in some cases it doesn't differentiate between private and public sector enterprises). Asamnew (2015) studied the effect of corporate governance mechanisms and firm performance in the Ethiopian insurance industry using panel data and Pooled OLS and a data set of 8 insurance companies over the period 2008-2012. The effects of board characteristics (specifically proportion of outsiders in the board, board size, CEO-Chairman duality,

and board meeting frequency), debt policy, and dividend policy were investigated in the Ethiopian context using two theories of corporate governance, which are agency theory and stewardship theory. The results show that the proportion of outside directors, board size, debt ratio, and ownership have a significant negative effect on the performance of insurance companies. However, boards meeting frequency, firm size and firm age, are identified to have a significant positive impact on firm performance. Dividend policy has no effect on firm performance while the effect of CEO-Chairman Duality remains untested since it is not practiced in any one of the insurance companies.

Ashenafi et al., (2013) examined the corporate governance mechanisms and their impact on performance of commercial banks in the absence of organized stock exchange. The study assessed the relationship between selected internal and external corporate governance mechanisms, and bank performance as measured by ROE and ROA. The study used structured review of documents, and commercial banks financial data were collected covering a period 2005 to 2011. Their findings indicated that board size and existence of audit committee in the board had statistically significant negative effect on bank performance; whereas bank size had statistically significant positive effect on bank performance. Similarly, capital adequacy ratio, as a measure of external corporate governance mechanism, had statistically significant positive effect on bank performance. In addition, absence of organized stock exchange; high government intervention; lack of corporate governance awareness, absence of national standards of corporate governance, as well as accounting and auditing; and weak legal framework to protect minority shareholder rights are the major factors with adverse impact on corporate governance and bank performance in Ethiopia.

In another study, Assefa and Megbaru (2013) conducted a study on the effect of corporate governance mechanisms on the financial performance of commercial banks in Ethiopia between 2004 and 2010. The study used both primary and secondary data. Furthermore, primary data were collected through conducting focus group discussion with selected staff of banks of commercial banks in Ethiopia. Collected data were analyzed using correlation analysis and pooled panel time series data with cross-sectional nature. The result of the study shows that the size of the board was significantly and negatively associated to bank's performance measures (ROA; ROE and NPM). The study recommended that regulatory authorities in Ethiopia should ensure that mechanisms of corporate governance are well implemented by all banks since it is capable of influencing financial performance of commercial banks in Ethiopia.

Mehmet (2011) examines the relationship between board size and financial performance of the Turkish firms. The study employed panel data techniques to measure the relation between board size and firm performance for a sample of 122 Turkish firms for the period of 2004-2009. Unlike the findings of

various studies made on the topic this study found that there is no relation between the board size and the firm performance for Turkey.

Mikaela and Ida (2017) tried to investigate whether or not companies with female directors on their boards perform better than companies without female directors on their boards. The target group of the study was Swedish listed companies with a statutory residence in Sweden. For the purpose of their research, data for a period of three years (2013-2015) were collected from a sample of 94 Swedish listed companies. Their results show that there is a significant positive correlation between female representation in the boardroom and the ratio EBIT margin. However, the correlation strength is so weak that it is not fair to draw the conclusion that female representation has a positive effect on the financial performance of the companies. Also, the regression analysis shows no relationship between the two variables.

Anthony (2012) tried to examine the effect of debt financing on the financial performance of companies listed at the Nairobi Securities Exchange. The objective of the study was to establish the effect of debt financing on firm performance in companies listed at the Nairobi Securities Exchange. The research design used was a quantitative research design. Three regression models were utilized, with return on asset as the dependent variable and total debt, long-term debt and short-term debt as the independent variables so as to assess the effects of debt on firm performance. According to the study, debt has no significant influence on profitability either in a linear way, or in a non-linear way but he recommended that firms should use more of long-term debt since there is less negative impact on financial performance as long as the cost of debt does not exceed the required rate of return of the firm.

A study by olawale et al., (2016) investigates the effect of firm size on the performance of firms in Nigeria. They used a panel data set of 12 non-financial firms operating in Nigeria in the period 2005-2013. The results of the study reveal that firm size in terms of total assets has a negative effect on performance, while in terms of total sales; firm size has a positive effect on the performance of Nigerian non-financial companies.

Sarah et al., (2014) analysed the effect of liquidity on profitability of commercial banks in Kenya. The study employed a descriptive research design incorporating panel data. All the 43 Commercial banks in Kenya formed the population and a census was done over a period of 5 years from 2009 to 2013.The study used secondary data obtained from the annual published financial statements. The finding of the study shows that Liquidity has statistically significant and positive relationship with banks' profitability.

Khidmat and Rehman (2014) analyzed the relationship between the liquidity, solvency and performance which plays a vital role in the Return on Assets Pakistan. The analysis explained the relationship between liquidity and solvency with ROA and is conducted on the data of 10 chemical companies for the nine

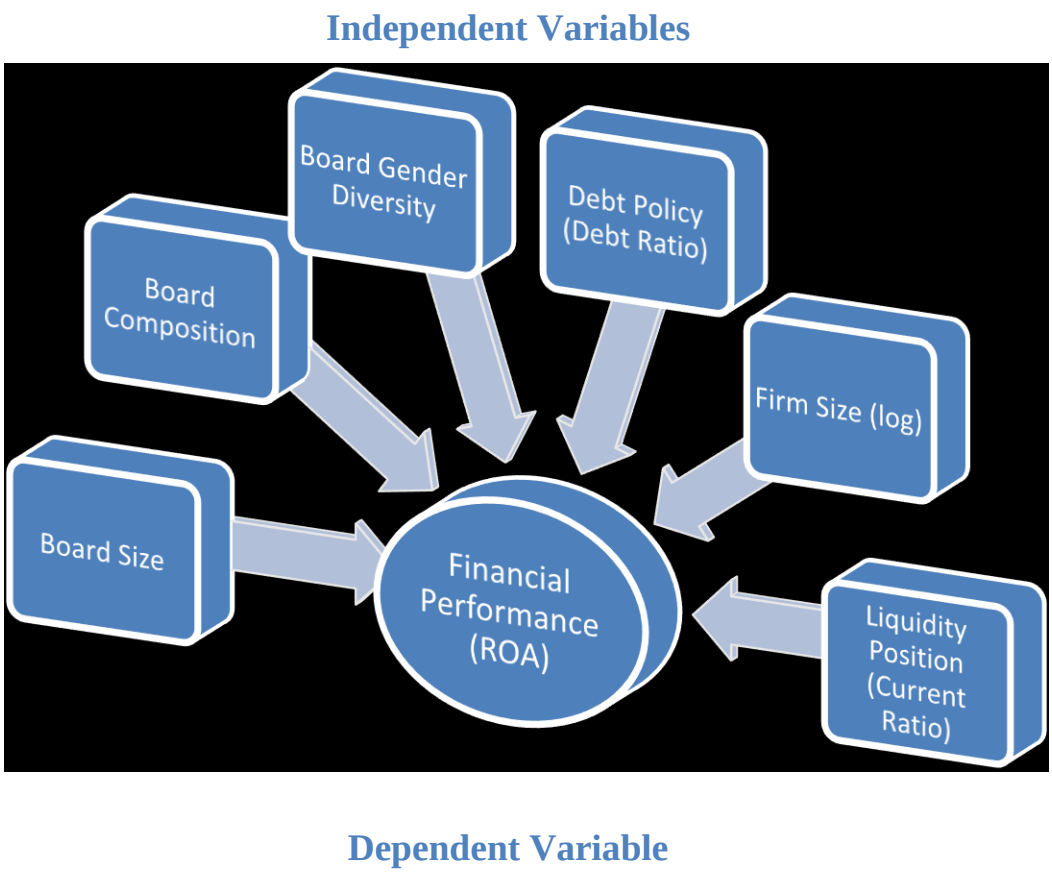
years (2000-2009) in the chemical production sector of Pakistan. Conclusions drawn were that liquidity ratio affects ROA positively while it impacts negatively on solvency.

2.6. Conceptual framework

The Conceptual framework of these variables is a guide to this research and shows how the independent variables affect the financial performance (dependent variable) of public enterprises in Ethiopia. Six variables are selected while assuming other variables remain constant during the research.

The financial ratio of ROA will be used as a proxy for the dependent variable financial performance. The included explanatory variables are corporate governance variables and control variables (Figure 2.1). The corporate governance variables will be measured as follows: Board size will be measured through the average number of board of directors sitting in the board for that year, whereas board composition will be measured by the ratio of outside directors in the board to the total number of directors. Board gender diversity will be measured through the proportion of number of female directors in the board to the board size. Debt ratio will be the proxy for debt policy. The control variable Firm size will be measured by taking the natural logarithm of total assets while current ratio will be used as a proxy for liquidity.

Figure 2.1: Conceptual Framework of the study



2.7. Research gap

There are a lot of empirical studies conducted in Ethiopia to observe the effect (relationship) of corporate governance on/and financial performance. However these studies generally (to the best understanding of the researcher, entirely) based their assessments on the private sector enterprises (in some cases they doesn't differentiate between private and public sector enterprises). However, principal-agent problem and corporate governance practices in the public sector have different features than their private counterparts, as stated in the statement of the problem. And there is no one size fits all model of corporate governance that leads to higher firm performance. In addition, although public enterprises in Ethiopia are still the dominant players in the Ethiopian economy 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 METHODOLOGY

3.1. Introduction

The main objective of this paper is to assess the effect of Corporate Governance practices on the Financial Performance of public enterprises in Ethiopia. This chapter examines the research approach, research design, population of interest, sampling method, data collection and data analysis methods of the study.

3.2. Research Approach

This study adopted a quantitative approach in order to realize the objective of the study and test the hypothesis developed using panel data. Quantitative research approach tends to assume that there is a cause and effect relationship between known variables of interest. In line with this, quantitative research tests the theoretically established relationship between variables using sample data with the intention of statistically generalizing for the population under investigation and it uses statistical methods in describing patterns of behavior (Creswell, 2003). Therefore using the quantitative research approach this research intends to study the effect of corporate governance practices on the financial performance of public enterprises in Ethiopia.

3.3. Research Design

Research design is a master plan that specifies the methods and procedures for collecting and analyzing the needed information. It's a structure for investigating so conceived as to obtain answers to research questions and for testing hypothesis (Kothari, 2004). Explanatory research design was used in this study to investigate the relationships between board size, board composition, board gender diversity, debt policy, firm size and liquidity position as explanatory variables and firm financial performance (ROA) as the dependent variable. Zikmund (2009) asserts explanatory studies look for explanations of the nature of certain relationships and helps to test hypothesis in order to provide an understanding of the relationship that exist between variables and draw inferences about the association among variables.

3.4. Target Population

According to Saunders et al. (2003) 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 all public enterprises as defined in the public Enterprises Proclamation No. 25/1992. The proclamation defines public enterprises as an enterprise owned wholly by the state and is engaged for gain in manufacturing, distribution, service rendering or other economic and related activities. And the government have selected twenty two enterprises as an enterprise fulfilling the above definition and put them under the supervision of Ministry of Public Enterprises (MOPE). MOPE is the government organ with the task of managing and controlling public enterprises in Ethiopia. Currently there are 22 public enterprises under its supervision. These enterprises are engaged in different areas of business such as agriculture, trade, service, manufacturing, transportation, financial services and construction sectors (see Appendix **II**). Therefore, for the purpose of this study, the sampling frame consists of the 22 public enterprises that are under the supervision of ministry of public enterprises.

3.5. Sample

In determining how to sample the SOEs for the study, the following factors were taken into consideration: a) there was no inherent need to have a pre-determined number of units in the sample for this particular study; and b) Only certain types of organizations were relevant.

The main objective of this research is to study the effect of corporate governance practices on the financial performance of public enterprises and these enterprises have certain shared characteristics that define their (institutional) organizational arrangements. The first common characteristic is that these enterprises operate under heavy intervention from the government. However the Ethiopian Airline Group has distinct features that separate it from the other public enterprises. The enterprise is exempt from income tax and is authorised to transfer its net profits to paid-up capital in accordance with a decision by the council of ministers. These features differentiate the enterprise from other public enterprises in a sense that it has more institutional autonomy. And taking this enterprise with the other public enterprises may give vague information. Therefore the Ethiopian Airline Group has been purposively excluded from the sample of the study. In addition, the Ethiopian financial sector and its corporate governance system are governed by a different set of rules drafted by the national bank of Ethiopia. For instance, according to Directive No SBB/67/2018 and Directive No SBB/49/2011, the financial institutions in Ethiopia cannot have inside directors serving as members in the board. Inside directors according to the directive "means a chief executive officer, a senior executive officer or any other person who is appointed or hired by a bank to carry out its day to day operational activities". However other public enterprises are not forced to

be guided by these rules instead they are governed by the public Enterprises Proclamation No. 25/1992 and internal procedures developed by Ministry of public enterprises. Therefore financial public enterprises found in the population of the study (Commercial bank of Ethiopia, Development bank of Ethiopia and Ethiopian Insurance Corporation) are purposively excluded from the sample. These types of sampling characteristics have been associated with the purposive sampling techniques (Patton, 2002; Etikal et al., 2016).

Furthermore, Sample enterprises covered by the study are selected based on availability of all data included in this study. This study intends to cover the time span 2012-2017. Therefore enterprises that are established after 2012 (Ethiopian agricultural business corporation, 2015; Ethiopian construction design and supervision workshop corporation, 2015; Ethiopian construction works corporation, 2015; Ethiopian trading business corporation, 2015; Ethiopian mineral petroleum and bio fuel corporation, 2016) are excluded from the sample. In addition, due to unavailability of data on Ethiopian Sugar Corporation, Metals and Engineering Corporation and Chemicals Industry Corporation, these enterprises have been excluded from the sample. This type of sampling technique is associated with convenience sampling method.

Thus, the study making up this research work is based on public enterprises selected using both purposive and convenience sampling method. Therefore samples of 10 public enterprises (see Appendix **II**) were found to be relevant for the years 2012-2017.

3.6. Data Collection

Survey method was used to collect data. Survey approach is the group of methods which emphasizes quantitative analysis, where data are collected, from many organizations through methods such as questionnaire, interview, or from published statistics, and these data are analyzed though statistical techniques. Survey approach, by studying a representative sample of organizations, aims at discovering relationships that are common across organizations, and hence to provide generalizable statements about the object of study (Gable, 1994).

This study required the collection of both primary and secondary data. In carrying out this study, the researcher collected primary data using the interview method. Thus, primary data is collected through interview conducted with each respective public enterprises board secretary as he/she is in a better position to know information and access documents about board attributes chosen in this study.

The secondary data constituting the sample has predominantly been obtained from the audited annual financial statements of each public enterprise. The calculation of performance measures (ROA) and Debt and Current Ratio has been conducted from the collected financial statement of these entities. This is for a 6-year period spanning from 2012– 2017. Thus, the study is based on a panel data of ten public enterprises over a 6-year period, yielding sixty observations.

3.7. Data Analysis

The study uses statistical tools such as correlation and multiple linear regressions to analyze the data which would be collected from both primary and secondary sources. The study would primarily run correlation analysis to see if there is a relationship between the dependent and independent variables. The study would further make a multiple linear regression analysis so as to show the magnitude effect of the independent variable over the dependent variable.

Descriptive statistics is used to show the average and standard deviation of the different variables of interest in the study. The primary data collected through interview and analysis of financial statements were analyzed using descriptive statistics including mean and standard deviations using stata 12. Tables are used to present the data to enable ease of understanding and analysis.

Fixed-effects regression analysis is used to test the hypotheses developed above. The researcher undertakes three tests to select Pooled OLS model from fixed effects and random effects model. The result of Chow test of poolability suggests the F-test rejects the null of zero company heterogeneity. Hence, between the pooled regression and FE model, we select the latter. The Breusch and Pagan Lagrangian multiplier test used to choose between random effect and simple OLS indicates that there is panel effect or unobserved time-invariant variations between the public enterprises in Ethiopia that may have an impact on their performance (so Random-effects GLS regression is appropriate). The result of Hausman Specification Test shows that the unobserved time-invariant firm level heterogeneities are correlated with the independent variables employed in the study (i.e. fixed effect is appropriate than random effects model). Thus, Fixed-effects regression analysis is used in STATA (Windows 12.0 version) to test the hypotheses.

This essay employs panel data modelling to examine the effect of corporate governance practices on public enterprise financial performance. Panel data is constituted from a sample of entities over time period. The use of panel data methods is due to the fact that the data involves two dimensions these being; individual cross-sectional units in the study, being the public enterprises and the time dimension. A major strength of panel data has to do with its ability to isolate the effects of characteristics specific to individual entities.

The panel model is therefore generally expressed as

$$Y = X + \qquad i = 1 \quad n \text{ and } t = 1 \quad T$$

For model construction purposes the cross section units (the public enterprises) are denoted by the subscript *i*, and the time series dimension is denoted by subscript *t*, in the context of *n*, being the number of observations.

3.7.1. **Data Analysis Model**

The methodological approach used in most previous work examining the impact of corporate governance on firm performance variables utilizes a multiple regression. Thus, the study employs a modified version which is given as follows:

$$ROA_{it} = \alpha_0 + \beta_1 BS_{it} + \beta_2 BC_{it} + \beta_3 BGD_{it} + \beta_4 DR_{it} + \beta_5 LFS_{it} + \beta_6 LCR_{it} + \varepsilon_{it}$$

Where,

ROA it: ROA of individual enterprise i at time t.

BSit: Board size of individual enterprise i at time t.

BCit: Board composition of individual enterprise i at time t.

BGDit: Board gender diversity of individual enterprise i at time t.

DRit: Debt ratio of individual enterprise i at time t.

LFSit: log of Firm size of individual enterprise i at time t.

LCRit: log of Current ratio of individual enterprise i at time t.

ε it: Error term

i: individual banks

t: time periods

3.7.2. Variables and explanation

The variables for the study were chosen based on data availability and computational purposes.

A. Firm performance variables

ROA = Defined as return on assets and is computed by dividing profits before interest and tax payments by total assets. Although there are other profit measures available, it is preferred to use return on asset (ROA) as this is the most common measure of profitability used in finance.

B. Governance variables

BS = Board size is captured by the number of member directors serving on a firm's board. Board size and its impact on financial performance is one of the most argued issues in corporate governance (Ozcan and Ali, 2016). The argument here is that, larger board size is associated with greater collective information and range of expertise. In addition large board size is harder for powerful CEO to dominate and more diverse in handling problems. However, there are eventually disadvantages of large boards in the form of coordination costs and free rider problems. The sign of this variable is expected to be positive.

BC = Board composition is the ratio of outside directors to the total number of directors (i.e. number of outside directors divided by total number of directors). Outside directors are those who do not have any prior tie with the organization in any form such as participation in management or being and employee of the organization. They are chosen because of their experience managing or directing other large companies. Board composition reflects the independence of the board in that organization. Both agency and stewardship theory indicate that independent directors exert a positive effect on firm performance. Therefore the expected sign of this variable is positive.

BGD = The ratio of women directors to the total number of directors (i.e. number of women directors divided by total number of directors) in a board is used to capture Board Gender Diversity. It was argued by some researchers that companies ought to increase female presence on their boards, since this had a positive effect on business performance (Reguera-Alvarado et al., 2017). Both Gordini and Rancati (2017) and Campbell and Mínguez-Vera (2008) found that gender diversity on boards did have a positive and significant effect on firm financial performance. The sign of this variable is expected to be positive.

DR = Debt ratio captures the debt policy in an organization and is computed by dividing total debt by total assets. Debt policy has been used as a corporate governance mechanism to reduce agency conflict (Jensen and Meckilng, 1976). The argument here is that, the increasing debt will constrain managerial misappropriation by imposing fixed obligation on the cash flows. In addition it will generate external monitoring by the lenders. The expected sign of this variable is positive.

C. Control Variables

LFS = Log of firm size is the size of the firm measured by the value of its asset base. For the regression analysis, the log of the assets is taken because the values are large and widely spread. Firm size is one of the most widely used control variable in the literature of financial performance.

CR = Current ratio captures the liquidity position of the enterprise. It is measured by dividing current assets of the enterprise to current liabilities.

The essence of the control variables is to give recognition to the fact that the performance of a firm and for that matter listed firms may be influenced by several other factors. Both parametric and non-parametric methodology is employed. The regression is run in a panel manner; various options of panel data regression were tested Polled OLS, fixed effects model and random effects model. The most robust of all was the fixed effects panel regression model.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1. Descriptive statistics

The study analyzes ten public enterprises for the last six years from 2012-2017 in order to capture the effect of four corporate governance practices on the financial performance of these enterprises. The descriptive statistics are summarized under table 4.1. The descriptive statistics summary shows mean, standard deviation, minimum and maximum value for each of the dependent and explanatory variable. The total observation for each variable is 60.

The dependent variable, Return on Asset, is computed by dividing earnings before interest and tax payments by total assets. The average ROA of public enterprises included in the sample is 0.194 (19.4%), and standard deviation of 15.6%. In the time period under observation the minimum and maximum ROA is -3.96% and 50.37% respectively. The minimum -3.96% has occurred in Ethiopian pulp and paper Share Company while the maximum ROA of 50.37% occurred in Berhanenaselam printing enterprise.

The average board size is about 8.15 with a minimum of 6, a maximum of 9 directors and with a standard deviation of 0.66. The average board size is in agreement with the 1960 commercial code of the country and Public Enterprises Proclamation No. 25/1992, in which the board size is required to be between 3 and 12.Public enterprises in Ethiopia have relatively similar board sizes. On average they have the same size suggested by Jensen (1983). He suggested that a board should have a maximum of seven or eight members to function effectively. However, Kyereboah-Coleman and Biekpe (2006) suggested a maximum board size of twelve and a minimum of four. According to their suggestion public enterprises in Ethiopia have relatively moderate board sizes.

Looking at the use of outside directors, the mean proportion of the outside directors sitting on the board (which ranges from 66.6% to 100%) is about 82.67% of the total board size. the Ethiopian pulp and paper Share Company has a board composed only of outside directors. The standard deviation of board composition is 0.111, suggesting little variation among public enterprises in Ethiopia in the proportion of outside directors.

According to Public Enterprises Proclamation No. 25/1992 “Not more than one-third of the members of the board shall be elected by the general assembly of the workers. The rest of the members of the board shall be appointed by the supervising authority.” The minimum number of outside directors in the board is 66.6% with a maximum of 100%. Therefore the proportion of insiders in the board of public enterprises in Ethiopia is in agreement with the proclamation.

The average proportion of female directors in the board for the years under observation are 0.063 (6.3%) with standard deviation of 0.126. The minimum and maximum proportion of female directors is 0% to 44.5 % consequently. This figure shows that public enterprises in Ethiopia have low proportion of female directors sitting in the board. This may suggest gender inequality in boards of public enterprises in Ethiopia.

The average Total Debt to Total Assets (Debt ratio) is 16.18% ranging from a minimum of 0% to a maximum of 71.58%. This indicates that about 16.2% of public enterprise asset is financed by debt. 0% debt ratio means that there are enterprises (such as Shebelle transport Share company and Ethiopian post office enterprise) operating without incurring any debt throughout the sample period while a maximum of 71.58% of public enterprise’s assets is financed by using debt.

The control variable, firm size which is measured by taking the natural logarithm of total assets showed an average of 20.02 and standard deviation 2.13. The minimum and maximum is 17.08 and 24.87 respectively. The figure shows that there exists high variation among sampled enterprises in their asset value as measured in log form.

The average of liquidity ratio which is measured by dividing current asset to current liability is 165.03% with standard deviation 1.71. The minimum and the maximum liquidity ratio is 40.89% to 1022.11%.This shows as there is a huge difference among Ethiopian public enterprises in their liquidity position, as measured by the current ratio. The higher the liquidity ratio the higher the ability of the enterprise to absorb liquidity risks that might occur in the daily operation. On the other hand a high liquidity ratio may indicate idle cash left unused in the firm.

Table 4.1: Summary of descriptive statistics for dependent and explanatory variables

Variable	Obs	Mean	Std. Dev.	Min	Max
ROA	60	0.1939925	0.1558346	-0.0396328	0.5036649
Board Size	60	8.15	0.6593525	6	9
Board Composition	60	0.8267196	0.1112855	0.666667	1
Board gender diversity	60	0.0625661	0.1260059	0	0.445
Debt Ratio	60	0.1618872	0.2031861	0	0.7158005
Log Firm Size	60	20.01465	2.132138	17.08394	24.86823
Current Ratio	60	1.650301	1.705534	0.4089201	10.22108

Source: Structured review of financial statements and own computations

4.2. Correlation analysis

The degree of relationship between the variables under consideration is measured through the correlation analysis. The correlation analysis enables us to have an idea about the degree & direction of the relationship between two variables under study. This analysis can be seen as the initial step in statistical modelling to determine the relationship between the dependent and independent variables. Correlation quantifies the extent to which two quantitative variables go together. When high values of one variable are associated with high values of another variable, a positive correlation exists. When high values of one variable are associated with low values of another variable, a negative correlation exists. It involves no units and varies from -1 (indicating perfect negative correlation) to + 1 (indicating perfect positive correlation). In case the coefficient of correlation is zero, it indicates zero correlation between two sets of measures (Sing 2006).

Table 4.2 below shows how the explanatory variable is related to the dependent variables ROA. Hair et al., 2010 suggested that the correlation should be interpreted as perfect relationship when the correlation values assume a value between o (no relationship) and 1. Also, the relationship is considered small when r = ±0.1 to ±0.29, while the relationship is considered medium when r = ±0.30 to ±0.49, and when r is ±0.50 and above, the relationship can be considered strong. Accordingly, the study result shows that there is a small positive correlation between ROA and board size whereas the correlation between ROA and board composition is medium negative. Board gender diversity exhibits medium positive correlation with ROA while debt ratio has small negative correlation with ROA. Firm size and current ratio have a small negative and medium negative correlation with ROA. Therefore the correlation analysis reveals that financial performance (ROA) have a positive correlation with board size and board gender diversity while its negatively correlated with the other variables.

Table 4.2: Correlation matrix

	ROA	BS	BC	BGD	DR	FS	CR
ROA	1						
BS	0.2578	1					
BC	-0.4875	-0.2924	1				
BGD	0.3059	0.4907	-0.2554	1			
DR	-0.2733	-0.3165	0.6451	-0.2028	1		
FS	-0.1520	-0.3651	0.5150	-0.2093	0.5968	1	
CR	-0.4825	-0.1675	0.5633	-0.1562	0.1548	0.1648	1

Note: *ROA refers to return on assets, BS Board size, BC board composition, BGD board gender diversity, DR debt ratio, FS firm size and CR current ratio.*

Source: Structured review of financial statements and own computations

4.3. Test of OLS Assumptions and Estimation Results

4.3.1. Test of OLS Assumptions

Before conducting the main analyses, the assumptions for multiple regression analysis are checked. Among the several important assumptions of classical linear regression model this study tests misspecification (functional form), heteroskedasticity, normality of residuals, and multi-collinearity. Autocorrelation is not tested since according to (Baltagi, 2005) serial correlation is not a major problem for micro panels (few years and large number of cases).

4.3.1.1. Functional form test

An implicit assumption of the classical linear regression model is that the appropriate 'functional form' is linear. This means that the appropriate model is assumed to be linear in the parameters and that in the bivariate case, the relationship between *y* and *x* can be represented by a straight line (Brooks, 2014). To test the functional form of the conditional mean, the Ramsey RESET test is utilized. Results for the test shows that the null hypothesis that there is no omitted variable cannot be rejected in the Model, since the p-value is greater than 0.05 (see table 4.3 below). Hence we can conclude that there is no problem of misspecification (the appropriate functional form is adopted).

Table 4.3: Ramsey RESET test

Ho: model has no omitted variables		
Ramsey test	**F value**	**Prob> F**
using powers of the fitted values of ROA	0.83	0.4862

Source: Own computation using STATA 12.0

4.3.1.2. Hetroscedasticity test

It has been assumed that the variance of the errors is constant; this is known as the assumption of homoscedasticity. If the errors do not have a constant variance, they are said to be heteroscedastic. Breusch Pagan / Cook-Weisberg test used to detect the existence of heteroskedasticity indicates that there is no problem of heteroskedasticity in the model, since the null hypothesis of constant variance cannot be rejected (p-value>0.05) (see table 4.4 below).

Table 4.4: Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance		
Variables:	**chi2 (1)**	**Prob> chi2**
Fitted values of ROA	0.26	0.6068

Source: Own computation using STATA 12.0

4.3.1.3. Test of normality

One of the most commonly applied tests for normality is the Bera–Jarque. As shown in figure 4.5 below, the null hypothesis for residual normality is not rejected (the *p*-value for the BJ test is greater than 0.05). Hence we can conclude that the variables are normally distributed.

Table 4.5: Bera–Jarque test of normality

Ho: Normality		
Variable:	**chi2 (1)**	**Prob> chi2**
Predicted residual	0.7117	0.7006

Source: Own computation using STATA 12.0

4.3.1.4. Test of multicollinearity

An implicit assumption that is made when using the OLS estimation method is that the explanatory variables are not correlated with one another. If there is no relationship between the explanatory variables, they would be said to be orthogonal to one another. Variance Inflation Factors (VIFs) is a method of measuring the level of collinearity between the regressors in an equation. VIFs show how much of the

variance of a coefficient estimate of a regressor has been inflated due to collinearity with the other regressors. O'Brien (2007) recommended that well-known VIF rules of thumb (e.g., VIFs greater than 5 or 10 or 30) should be treated with caution when making decisions to reduce collinearity (like eliminating one or more predictors). Therefore it can be concluded that there is no evidence of multicollinearity in the data set, since all VIFs are less than the recommended cut off point (see figure 4.6 below).

Table 4.6: VIF Test Results

Variable	BS	BC	BGD	DR	LFS	LCR	Mean VIF
VIF	1.43	3.29	1.35	2.28	3.06	1.63	2.17
1/VIF	0.697727	0.303855	0.741746	0.438865	0.327149	0.612161	

Note: *BS refers to Board size, BC board composition, BGD board gender diversity, DR debt ratio, LFS log of firm size, LCR log of current ratio.*

Source: Own computation using STATA 12.0

Before conducting the regression analysis panel data requires to choose between three models. These models are Pooled OLS, Fixed effects model and Random effects GLS model. To choose between Pooled OLS and Fixed effects model Chow test of poolablity has been utilized. The result of poolability test, as can be seen from table 4.7 below, suggests the F-test rejects the null of zero company heterogeneity. Hence, between the pooled regression and FE model, the latter (fixed effects) is selected.

Table 4.7: Chow test of Pollablity Results

Ho: All Ui=0		
Variable:	**F value**	**Prob> F**
Residual of the fixed effect model	42.57	0.0000

Source: Own computation using STATA 12.0

The Breusch and Pagan Lagrangian multiplier test used to choose between random effect and polled OLS indicates that there is panel effect or unobserved time-invariant variations between the public enterprises in Ethiopia that may have an impact on their performance (so Random-effects GLS regression is appropriate) see table 4.8. We reject the null of $\sigma 2 = 0$ therefore we cannot pool the data, but select the Random Effects model.

Table 4.8: Breusch and Pagan Lagrangian multiplier test for random effects

Ho: σμ2 = 0		
Variable:	**chi2 (1)**	**Prob> chi2**
ROA of random effects model	55.92	0.0000

Source: Own computation using STATA 12.0

The Hausman Specification Test is used to choose between fixed effects model and Random effects model. The result of Hausman Specification Test shows that the unobserved time-invariant firm level heterogeneities are correlated with the independent variables employed in the study (i.e. fixed effect is appropriate than random effects model), see table 4.9 below. Thus, fixed effects regression analysis is used in STATA to test the hypotheses developed. Hence we select the fixed Effects model. The tests imply that the company effects though present in the data set are correlated with the explanatory variable, and cannot very well be taken as random; the fixed Effect estimators will be consistent and efficient. Difference in coefficients is systematic therefore fixed effects regression model is appropriate and will be adopted in this study.

Table 4.9: Hausman Specification Test

Ho: Difference in coefficients not systematic		
Variable:	**chi2 (1)**	**Prob> chi2**
	169.04	0.0000

Source: Own computation using STATA 12.0

4.3.2. Regression Results

The result of fixed effects regression is presented in table 4.10 below. As can be seen from the table, the overall Wald chi-square static is 4.25 and the P value is 0.0018. Therefore the findings reject the null hypothesis that all slope coefficients excluding the constant are zero at 1% level of significance. 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.

Stata reports three different R-square values (within R-square, between R-square and overall R-square).The within R-square tells us how much of the variance within the panel units is accounted by the model. The between R-square tells us How much of the variance between separate panel units is accounted by the model. The overall R-square is the weighted average of these two.

According to Stata PDF manual, for goodness of fit, the R-square within is directly relevant for fixed effect models. Its reported R-square within is an ordinary R-square for fixed effects regression model. Therefore the paper will proceed with within R-square. The within R-squared value of the model is 36.71%. Therefore 36.71% of variations in the dependent variable, ROA are explained by the regressors included in the model. Different scholars have different opinions on what constitutes as good R square variance. Falk and Miller (1992) recommended that R-square values should be equal to or greater than 0.10 in order for the variance explained of a particular endogenous construct to be deemed adequate. Cohen (1988) suggested R-square values for endogenous latent variables are assessed as follows: 0.26 (substantial), 0.13 (moderate), 0.02 (weak).Chin (1998) recommended R-square values for endogenous latent variables based on: 0.67 (substantial), 0.33(moderate), 0.19 (weak).Therefore following Falk and Miller the model can be categorized as adequate while according to Cohen and Chin's suggestion the value of R-square for this specific model can be assumed to be substantial and moderate, respectively. Interestingly, another researcher (K.S Rao et al., 2016) found out 14% of variations in their study explained by the variables included in their regression model with ROA as dependent variable and corporate governance and control variables as independent variables (ratio of disclosure score, board size, board gender diversity, ownership type, capital structure and size) for commercial banks in Ethiopia.

The label rho represents the ratio of individual specific error variance to the composite (entire) error variance. A large ratio means that individual specific errors account for large proportion of the composite error variance. In this random effect model, for instance, the individual specific error can explain 96 percent of entire composite error variance. Accordingly, this ratio may be interpreted as goodness-of fit of random effect model (Hun, 2011).

Table 4.10: Random-effects GLS regression results, ROA

ROA	Coef.	Std. Err.	T	P>|t|	95% Conf.	Interval
BS	-0.0169149	0.0126593	-1.34	0.188	-0.0424279	0.0085982
BC	-0.080128	0.2002483	-0.40	0.691	-0.4837019	0.3234459
BGD	0.016427	0.1405326	0.12	0.907	-0.2667978	0.2996518
DR	-0.0748149	0.0431281	-1.73	0.090***	-0.1617338	0.0121041
LFS	-0.0807058	0.0185419	-4.35	0.000*	-0.1180746	-0.0433371
LCR	-0.0031263	0.0160183	-0.20	0.846	-0.0354091	0.0291565
_cons	2.025031	0.4827944	4.19	0.000*	1.052023	2.99804

Number of obs = 60, F(6,44) = 4.25, Prob > F= 0.0018, Within R-squared = 0.3671, Between R-squared = 0.0829, Overall R-squared = 0.0892, rho=0.9609

*Significant at 1% level

** Significant at 5%

*** Significant at 10%

Source: Own computation using STATA 12.0

$$ROA_{it} = \alpha_0 + \beta_1 BS_{it} + \beta_2 BC_{it} + \beta_3 BGD_{it} + \beta_4 DR_{it} + \beta_5 LFS_{it} + \beta_6 LCR_{it} + \varepsilon_{it}$$

$$ROA_{it} = 2.025031 - 0.0169149 BS_{it} - 0.080128 BC_{it} + 0.016427 BGD_{it} - 0.0748149 DR_{it} - 0.0807058 LFS_{it} - 0.0031263 LCR_{it}$$

4.4. Corporate Governance Mechanisms: Findings and Discussion

The previous sections of this chapter presented the overall results of the study. This section presents the discussion and detail analyses of the results for each explanatory variable and their impact on financial performance of public enterprises. Moreover, the discussion evaluates the findings of the study in relation to the previous empirical evidences and tests the hypothesis developed above.

Board Size:

The first hypothesis of interest is board size. To analyze whether the size of the board has any influence on the performance of public enterprises, regression with performance variable of ROA as dependent variables and number of board directors sitting in the board as explanatory variable were estimated.

Table 4.10 presents the results of the model. The coefficient of board size has a t– statistic equal to -1.34 and a p – value of 0.188. Therefore the null hypothesis that the slope coefficient is zero cannot be rejected with 5% confidence interval, not even with 10% confidence interval. In other words, board size of public enterprises in Ethiopia had no effect on financial performance as measured by ROA. In addition, the expected positive sign has not been found in the analysis and the relationship between board size and ROA is negative.

The study hypothesised a positive relationship between board size and financial performance. However the findings suggest that there is no relationship between board size and financial performance. Therefore the study hypothesis that there is a positive relationship between board size and financial performance is rejected. Both agency and stewardship theory assumes board size as a variable has a significant effect on financial performance. But the finding of the study fails to support both theories.

While many other researchers such as Yermack (1996) and Shakir (2008) found significant relationship between board size and financial performance Mehmet (2011) found insignificant relationship between the two variables while studying Turkish firm's board size and its effect on financial performance. He explained the insignificance due to the institutional settings in most of Turkish firms. He concludes that this insignificance was due to the fact that most Turkish firms are family owned and therefore the board is inefficient under these institutional arrangements. Other studies who found insignificant relationship between board size and financial performance include Beiner et al. (2004), Bhagat and Black (2002) and Limpaphayom and Connelly (2006).

Public enterprises provide an interesting institutional setting, because boards in these enterprises are mainly composed of government officials (especially in Africa). These government officials will most likely be an enforcer of the wishes (strategies) of the government. Moreover there exists stifling government intervention in public enterprises in Africa. This is also true to the case of Ethiopia. The government, through Ministry of Public enterprises usually intervenes in the decision making process of these enterprises and their board. Theses interventions often lead public enterprises to have multiple, unclear, or conflicting financial and social objectives and the board to have insignificant power. Therefore the insignificance of board size in explaining financial performance, ROA of public enterprises in Ethiopia may be attributed to the above mentioned factor. World Bank, 2014 have suggested "deficient board of directors" as one of the factors contributing to poor performance of public enterprises in African countries. Deficiency is not merely in their numbers but also in their powers.

Board Composition:

When we see the board composition, the proportion of outside directors in the board has been used as proxy and the findings suggest that there is statistically insignificant relationship between board composition and financial performance, ROA. The coefficients of board composition have a t – statistic equal to -0.40 and a p – value equal to 0.691, so the null hypothesis that the slope coefficient is zero cannot be rejected with 5% confidence interval, not even with 10% confidence interval. In addition, the expected positive sign has not been found in the analysis and the relationship between board composition and ROA is negative.

The study hypothesised a positive relationship between board composition and financial performance. However the findings indicate the existence of no relationship between these two variables. Therefore the study hypothesis is rejected. Here also both agency and stewardship theory assert that the board composition affects financial performance but the findings fail to support both theories. Ozcan and Ali (2016) also investigate the impact of board size and board composition on performance and found insignificant relationship between board composition and financial performance. But Miring'u and Muoria (2011) found a positive and significant relationship between the two variables while studying the effect of corporate governance on the financial performance of commercial state corporations in Kenya.

The reason behind the insignificance of board composition in explaining financial performance, ROA may be the same as the above reason for board size. Since the board size doesn't affect financial performance then it may not matter the composition of that board. In addition one possible reason for this result is that outside directors appointed to the board may lack specific knowledge regarding the enterprises and the sector in which they operate.

Board Gender Diversity:

BGD, which refers to Board Gender Diversity, measured through the proportion of women directors sitting in the board, has a t– statistic equal to 0.12 and a p – value equal to 0.907 leading to the conclusion that this coefficient is not statistically significant at a 5% significance level and the hypothesis that it is equal to zero, cannot be rejected. In other words, board gender diversity doesn't affect financial performance of public enterprises. Although the study assures that there is insignificant relationship between the two variables, the actual sign meets the expected positive association between the two variables.

The research hypothesis, that board gender diversity affects financial performance positively, is rejected since the findings suggest that there is no significant relationship between the two variables. Mikaela and Ida (2017) also found the same result on Swedish listed companies. Other study by Carter, Simkins and Simpson (2003), report that the proportion of women in top management has a positive impact on firm performance.

The result of this study regarding board gender diversity may be connected with the fact that there are smaller proportions of women directors in public enterprises. To the extent that decisions are adopted by the majority and women are in minority position in the boardroom, they are unlikely to influence significantly the board's decisions hence the firm's performance.

Debt Policy:

The findings suggest that debt ratio is marginally statistically significant in explaining the variations in the dependent variable, ROA with a t-value of -1.73 and p-value of 0.09. Debt policy of public enterprises affects financial performance negatively. The significant negative association of debt ratio with ROA (p value=0.09) implies that enterprises with higher levels of debt as a proportion of total asset may have a worse financial performance. It may also express that highly profitable firms have less need of external funds. Another way of explaining these is that when debt ratio increase by one unit ROA will decrease by 0.075 and the relationship is statistically significant at 10% level of significance.

The study hypothesis that states debt policy affects financial performance positively is rejected. This significant negative relationship between debt ratio and firm performance does not support the agency theory and the argument that debt disciplines management (by inducing monitoring by lenders) and hence improving performance. But the inverse relationship between debt ratio and firm performance is similar with the finding of Asamnew, 2015 who conducted a study on Ethiopian insurance firms using pooled OLS. The negative result may be associated with the fact that due to higher interest payments of firms to meet their obligation can cause serious cash problems and reduce significantly the firm's earnings which would have a negative impact on their performance (ROA).

Firm Size:

It has become such a routine to use Firm size as a control variable in empirical corporate finance studies. The t – statistic of -4.35 and a p – value of 0.000 indicates that we can reject the null hypothesis that the slope coefficient is zero with 1% confidence interval. And hence LFS, log of firm size is statistically significant in explaining the variations in the dependent variable, ROA at one percent level of significance. LFS (log of firm size) is found to be statistically significant in explaining the variations in the dependent variable, ROA and the relationship between the two variables is negative. Therefore, ceteris paribus 1% increase in log of firm size will lead ROA to decrease by 0.081 and their relationship is statistically significant at 1% level of significance. Olawale et al. (2016) found that firm size in terms of total assets has a negative effect on performance, while in terms of total sales; firm size has a positive effect on the performance of Nigerian non-financial companies.

Penrose (1959) maintains that firms can create economic value not due to mere possession of resources, but due to effective and innovative management of resources. This indicates that a firm commanding massive resources is not necessarily more profitable than firm commanding little resources. 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. This may indicate the inefficiency of management in utilizing the resources at their disposal. It may also be because corporate governance appears to be weaker in larger firms. Another reason for the negative relationship between the two variables may be that misuse of resources in firms whose size is big tends to be higher than firms with small size leading to decrease in financial performance.

Current Ratio:

The other control variable, CR (current ratio) is used to measure liquidity position of the enterprise at time t. Current ratio variable is found to be statistically insignificant in explaining the variations in the dependent variable, ROA. The t– statistic of -0.2 and a p – value of 0.846 indicates that the null hypothesis that the slope coefficient is zero cannot be rejected with 5% confidence interval. Therefore the results suggest that liquidity has no effect on the financial performance of public enterprises in Ethiopia.

Although the findings reveal an insignificant negative relationship between the two variables the result may be interpreted as, ceteris paribus, 1% increase in log of current ratio will lead ROA to decrease by 0.0031.

The result of this study is inconsistent with previous researches. In his study, Eljelly (2004) found that there was a significant negative relationship between a firm's profitability and its liquidity level. When firms have more assets than liabilities, this might be a sign that they are losing investment opportunities that could return in profits for the company. However another study by Khidmat and Rehman (2014) found that liquidity ratio affects ROA positively while it impacts negatively on solvency.

Hypothesis	Relationship	Result	Decision
HI	Board size and ROA	Negative Insignificant	Rejected
H2	Board composition and ROA	Negative Insignificant	Rejected
H3	Board gender diversity and ROA	Positive Insignificant	Rejected
H4	Debt policy and ROA	Negative Significant	Rejected

Table 4.11 Summary of the hypothesis result

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATION

5.1. Introduction

The main objective of this chapter is to provide a summary, draw conclusion and make necessary recommendations' based on the analysis presented in chapter four. In part 5.2, summary of findings are presented. Part 5.3 presents conclusions made from the study findings while 5.4 presents recommendations made after considering the study findings. Part 5.5 presents suggestions for any further studies that may be done in relation to study the relationship between corporate governance and financial performance.

5.2. Summary of Findings

Correlation analysis through Person correlation coefficients established small positive correlation between ROA and board size (0.208) and a moderate negative correlation between board composition and ROA (-0.3167). The study results also indicate that gender diversity (0.3335) is also positively correlated to ROA. The other variables debt ratio (-0.0659), firm size (-0.1319) and current ratio (-0.5126) affect ROA negatively.

The regression results indicate that the regression model explains 36.71% of variations in ROA using the six independent variables. These findings indicate that the independent variables (board size, board composition, board gender diversity, debt ratio, log of firm size and log of current ratio) therefore can explain 36.71% of the change in ROA of the selected public enterprises in Ethiopia. The overall Wald chi2 of 4.25 and a p-value of 0.0018 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. This indicates that board size, board composition, board gender diversity, debt ratio, log of firm size and log of current ratio can be used to predict ROA of public enterprises in Ethiopia.

Four variables (board size, board composition, board gender diversity, and current ratio) included in the model are statistically insignificant in explaining the variations in the dependent variable, ROA. The rest two explanatory variables (debt ratio and log of firm size) are found to be statistically significant in explaining the variations in the dependent variable, ROA. The two variables affect financial performance (ROA) negatively and they are statistically significant at 10% and 1% level of significance respectively.

Board size is insignificant in explaining the variation in the financial performance of public enterprises. Therefore the research hypothesis is rejected based on the findings. This result is consistent with the findings of mehmet (2011). The insignificance in the relationship between the two variables may be due

to the fact that board directors are government officials and are enforcers of government strategies. In addition public enterprises are characterized by high level of intervention from the government which may lead to the distortion of board functionality and its insignificance in explaining financial performance.

The other variable board composition also doesn't affect financial performance. Consistent with the findings of Ozcan and Ali (2016) the result may be due to the fact that outside directors appointed to the board may lack specific knowledge regarding the enterprises and the sector in which they operate. This is hardly surprising, since board size is insignificant in explaining variations in financial performance, to begin with. The research hypothesis is rejected based on these findings.

Board gender diversity also doesn't affect the financial performance of public enterprises in Ethiopia. This may be attributed to the fact that women directors are small in proportion in Ethiopian public enterprises. Therefore the study hypothesis of positive association between board gender diversity and financial performance is rejected.

Debt policy (debt ratio) is statistically significant in affecting financial performance in public enterprises in Ethiopia. The study found negative association between the two variables which can be due to the fact that debt repayment exerts higher interest payments to meet their obligation which can cause serious cash problems and reduce significantly the firm's earnings which would have a negative impact on their performance (ROA).Therefore the study hypothesis of positive relationship of debt ratio and financial performance is rejected.

However the use of debt policy as a means of corporate governance in these enterprises is ambiguous. The use of debt policy, according to agency theory is supposed to control managers self motive to use the idle cash for activities that benefits their cause and in turn enhance financial performance. But debt ratio here affects financial performance negatively. Hence, we cannot be sure as to the use of debt policy as corporate governance mechanism.

The control variable log of firm size is found to be statistically significant in explaining the variations in financial performance. But the log of firm size affects financial performance negatively which may be due to the increased misuse of resources in larger firms. The other control variable liquidity is found to be statistically insignificant in explaining financial performance of public enterprises in Ethiopia.

5.3. Conclusions

The main objective of the study was to assess the effect of corporate governance practices on the financial performance of Ethiopian public enterprises for the period of six years from the year 2012 to 2017. To achieve the intended objectives the study used quantitative approaches and a panel data analysis methodology. The researcher draws the following conclusions based on the findings of the study.

The findings of the study suggests that out of the four corporate governance practices included in the model only one variable (debt ratio) is significantly related with financial performance in public enterprises in Ethiopia. The other three variables (board size, board composition and board gender diversity) are statistically insignificant in explaining the variations in the dependent variable, financial performance (ROA).

The board attribute variables (board size, board composition and board gender diversity) are insignificant in affecting the financial performance of public enterprises. The reason for the insignificance of these variables may be the huge government intervention in the operation of the board and the enterprises. The other corporate governance variable debt policy (debt ratio) is marginally significant and negatively related with financial performance (ROA). The negative effect of debt ratio on financial performance of public enterprise may be associated with higher debt expenses affecting the profitability of the firms.

Firm size affects financial performance of Ethiopian public enterprises significantly and 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 of public resources at Ethiopian public enterprises. Liquidity (current ratio) doesn't have significant relationship with financial performance. The relationship between the two variables is negative. Although, the negative relationship between the two variables is consistent with the findings of previous researchers such as Eljelly (2004), the insignificance of liquidity in affecting the financial performance of Ethiopian public enterprises is inconsistent with previous findings. Hence the relationship between the two variables on Ethiopian public enterprises needs further research.

Finally, the findings suggest that public enterprises may improve their financial performance depending on the measures being used. Although not all corporate governance variables support the stated hypotheses, the study has achieved its objective of, assessing the effect of corporate governance practices on the financial performance of Ethiopian public enterprises, by identifying the attributes that help to test the research hypotheses.

5.4. Recommendations

The empirical findings of the research have prompted the researcher to suggest the following policy recommendations:

- Board attribute variables such as board size, board composition and board gender diversity are found to be insignificant in explaining the variations in the dependent variable. This means that these board attribute variables don't affect the financial performance of Ethiopian public enterprises. Therefore the government needs to identify gaps in the existing corporate governance system (especially relating to the functioning of the board).
- The findings revealed that debt ratio affects financial performance of public enterprises negatively which might be the result of interest expense incurred. Therefore the study recommends that Ethiopian public enterprises should exhaust all other fund sources before using debt financing in their capital structure.
- Finally, the findings revealed that firm size affects financial performance of Ethiopian public enterprises negatively indicating management inefficiency and/or misuse of public resources in these enterprises. The study, thus recommends a policy measure to install (update existing) check and balance system in Ethiopian public enterprises.

5.5. Limitations and Suggestion for Further Studies

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 board meeting frequency, managerial compensation, institutions, and large block holders. Therefore, further researchers should incorporate and consider such important points in examining the effect of corporate governance mechanisms on firm performance.

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APPENDICES

Appendix I: Diagnostic tests results for GLS Assumptions

1. Ramsey Reset test

Ramsey RESET test using powers of the fitted values of ROA

Ho: model has no omitted variables

F(3, 46) = 0.83

Prob > F = 0.4862

Source: Own computation using STATA 12.0

2. Brush-Pagan heteroskedasticity test

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance

Variables: fitted values of ROA

chi2(1) = 0.26

Prob > chi2 = 0.6068

Source: Own computation using STATA 12.0

3. Jarque-Bera normality test

Jarque-Bera normality test: 0.7117

Chi(2) 0.7006

Jarque-Bera test for Ho: normality:

Source: Own computation using STATA 12.0

4. Variance Inflation Factors (VIFs) test of multicollinearity

```
. vif
```

Variable	VIF	1/VIF
BC	3.29	0.303855
LFS	3.06	0.327149
DR	2.28	0.438865
LCR	1.63	0.612161
BS	1.43	0.697727
BGD	1.35	0.741746
Mean VIF	2.17	

Source: Own computation using STATA 12.0

5. Chow test of Poolablity

F test that all u_i=0: F (9, 44) = 42.57 Prob > F = 0.0000

Source: Own computation using STATA 12.0

6. Breusch and Pagan Lagrangian multiplier test for random effects

Breusch and Pagan Lagrangian multiplier test for random effects

ROA[cid,t] = Xb + u[cid] + e[cid,t]

Estimated results:

	Var	sd = sqrt(Var)
ROA	.0242844	.1558346
e	.0017913	.0423242
u	.0141878	.1191127

Test: Var(u) = 0

chibar2(01) = 55.92

Prob > chibar2 = 0.0000

Source: Own computation using STATA 12.0

7. Hausman specification test

	Coefficients (b) fe	Coefficients (B) .	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
BS	-.0169149	-.0107493	-.0061656	.
BC	-.080128	.0396236	-.1197517	.0565552
BGD	.016427	.0828298	-.0664028	.
DR	-.0748149	-.0788688	.0040539	.
LFS	-.0807058	-.0471063	-.0335995	.0119232
LCR	-.0031263	-.0087178	.0055915	.

b = consistent under Ho and Ha; obtained from xtreg

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

Test: Ho: difference in coefficients not systematic

chi2(6) = (b-B)'[(V_b-V_B)^(-1)](b-B)

= 169.04

Prob>chi2 = 0.0000

(V_b-V_B is not positive definite)

Source: Own computation using STATA 12.0

8. Fixed effects regression result

```
Fixed-effects (within) regression               Number of obs      =        60
Group variable: cid                             Number of groups   =        10

R-sq:  within  = 0.3671                         Obs per group: min =         6
       between = 0.0829                                        avg =       6.0
       overall = 0.0892                                        max =         6

                                                F(6,44)            =      4.25
corr(u_i, Xb)  = -0.6959                        Prob > F           =    0.0018
```

ROA	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
BS	-.0169149	.0126593	-1.34	0.188	-.0424279	.0085982
BC	-.080128	.2002483	-0.40	0.691	-.4837019	.3234459
BGD	.016427	.1405326	0.12	0.907	-.2667978	.2996518
DR	-.0748149	.0431281	-1.73	0.090	-.1617338	.0121041
LFS	-.0807058	.0185419	-4.35	0.000	-.1180746	-.0433371
LCR	-.0031263	.0160183	-0.20	0.846	-.0354091	.0291565
_cons	2.025031	.4827944	4.19	0.000	1.052023	2.99804
sigma_u	.20984301					
sigma_e	.04232417					
rho	.96090958	(fraction of variance due to u_i)				

```
F test that all u_i=0:     F(9, 44) =    42.57              Prob > F = 0.0000
```

Source: Own computation using STATA 12.0

Appendix II: List of Population and Sample Public Enterprises

List of Public enterprises in Ethiopia (Population of the study)

No.	Public Enterprises under the supervision of MOPE	Sectors engaged in
1.	National alcohol and liquor factory enterprise	Manufacturing
2.	Berhanena selam printing enterprise	Manufacturing
3.	Ethiopian pulp and paper s.c	Manufacturing
4.	Spa services enterprise	Service
5.	Ghion hotels enterprise	Service
6.	Ethiopian tourist Trading enterprise	Service
7.	Ethiopian agricultural business corporation	Agricultural
8.	Shebele transport share company	Transportation
9.	Ethiopian construction design and supervision workshop corporation	Construction
10.	Ethiopian mineral petroleum and bio fuel corporation	Service
11.	Ethiopian insurance corporation	Service
12.	Chemical industry corporation	Manufacturing
13.	Commercial bank of Ethiopia	Financial service
14.	Ethio-Telecom	Service
15.	Development bank of Ethiopia	Financial service
16.	Ethiopian shipping and logistics service enterprise	Transportation
17.	Metals and engineering corporation	Construction
18.	Ethiopian postal service enterprise	Service
19.	Sugar Corporation	Manufacturing and Service
20.	Ethiopian construction works corporation	Construction
21.	Ethiopian airline group	Transportation

22.	Ethiopian trading business corporation	Trade

Source: Ministry of Public Enterprises

Public Enterprises included in the sample

No.	Public Enterprises under the supervision of MOPE	Sectors engaged in
1.	National alcohol and liquor factory enterprise	Manufacturing
2.	Berhanena selam printing enterprise	Manufacturing
3.	Ethiopian pulp and paper s.c	Manufacturing
4.	Spa services enterprise	Service
5.	Ghion hotels enterprise	Service
6.	Ethiopian tourist Trading enterprise	Service
7.	Shebele transport share company	Transportation
8.	Ethio-Telecom	Service
9.	Ethiopian postal service enterprise	Service
10.	Ethiopian shipping and logistics service enterprise	Transportation

Source: Ministry of Public Enterprises