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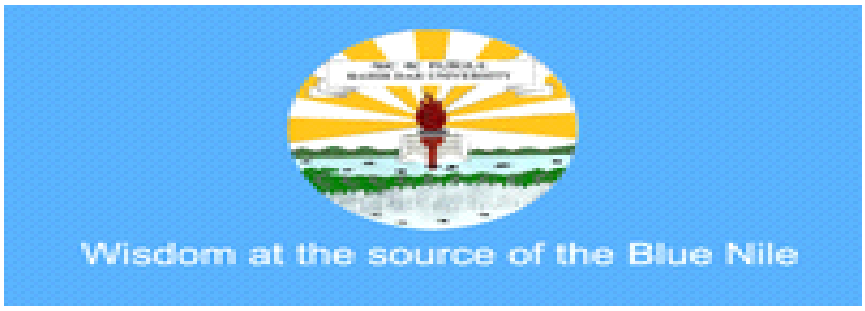

Bahir Dar University

College of Business and Economics

Department of Accounting and Finance

The Effects of Board and Firm Specific Characteristics on Earnings Management: Evidence from Private Banks in Ethiopia

By

Tilahun Simegnew

June, 2021

Bahir Dar, Ethiopia

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The Effects of Board and Firm Specific Characteristics on Earnings Management: Evidence from Private Banks in Ethiopia

By

Tilahun Simegnew

A Thesis Submitted to the Department of Accounting and Finance in Partial Fulfillment of the Requirements for the Degree of Master of Science in Accounting and Finance

Advisor:

Tilahun Aemiro (PhD)

June, 2021

Bahir Dar, Ethiopia

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Statement of Declaration

I, Tilahun Simegnew, have carried out independently a research work on "The effects of board and firm specific characteristics on earnings management: Evidence from private banks in Ethiopia" in partial fulfillment of the requirement of the MSC program in Accounting and Finance with the guidance and support of the research advisor.

This study is my own work that has not been submitted for any degree or diploma program in this or any other institution, and that all references materials contained therein have been duly acknowledged.

Name of the candidate	**Signature**	**Date**

Bahir Dar University

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Approval of Thesis for Defense

I hereby certify that I have supervised, read, and evaluated this thesis titled "The effects of board and firm specific characteristics on earnings management: Evidence from private banks in Ethiopia" by Tilahun Simegnew prepared under my guidance. I recommend the thesis be submitted for oral defense.

Advisor	Signature	Date
Co - advisor	Signature	Date
Department Head	Signature	Date

Bahir Dar University

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Department of Accounting and Finance

Approval of Thesis for Defense Result

As members of the board of examiners, we examined this thesis entitled "The effects of board and firm specific characteristics on earnings management: Evidence from private banks in Ethiopia" by *Tilahun Simegnew*. We hereby certify that the thesis is accepted for fulfilling the requirements for the award of the degree of "Master of Science in Accounting and Finance".

Board of Examiners

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Abstract

The concept of Earnings management has attracted much attention from policymakers and regulators in the last years following several so known financial scandals which provide evidence of artificial earnings management and have reduced investors' trust on information published in financial statements and on the management of the company. The purpose of this study is to identify the effects of board and firm specific characteristics on earnings management proxied by discretionary loan loss provision in private banks of Ethiopia for the period of 10 consecutive years (2010-2019). To test the research hypotheses, the study employed quantitative research design by a documentary analysis based on the audited financial statements of eight sample banks selected by using purposive sampling technique. The secondary data were analyzed using descriptive statistics, correlation matrix and multiple linear regression analysis. The results of panel least square regression analysis revealed that audit committee expertize, board gender, board independence, and profitability had statistically significant and negative effect on the possibility of firm's engagement in earnings management in Ethiopian private banks. On the other hand, firm's size and leverage had statistically significant and positive effect whereas board size had insignificant effect on earnings management of Ethiopian private banks. The study recommended that banks and regulators should promote audit committee expertize, board independence, and more female directors in board members and critically examine the financial statements prepared by large, highly levered and less profitable private banks.

Keywords: board specific characteristics, discretionary loan loss provisions, earnings management, firm specific characteristics, private banks.

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List of Acronyms

AABE - Accounting and Auditing Board of Ethiopia

AC – Audit Committee

CEO – Chief Executive Officer

CLRM – Classical Linear Regression Model

DLLP – Discretionary Loan Loss Provision

DW – Durbin Watson

EM – Earnings Management

FE – Fixed Effect

GST - Gender Socialization Theory

IFRS – International Financial Reporting Standard

IMF – International Monetary Fund

JB – Jarque - Bera

LEV - Leverage

NBE – National Bank of Ethiopia

OLS – Ordinary Least Square

RE –Random Effect

R & D – Research and Development

ROA – Return on Asset

CHAPTER ONE: INTRODUCTION

1.1. Background of the Study

Earning or profit is one of the most important figures of a firm's financial statements that receive much attention from different stakeholders of a business. A firm's earning is said to be one of the most important accounting numbers since it conveys information about the entity's performance in the short-run and potentials in the long-run (Cudia & Dela Cruz, 2018; Dang, Hoang, & Tran, 2017). The earnings of any organization are very important for the shareholders and investors because they have to invest based on the financial position of that organization. Therefore, true financial reporting is beneficial for the firm and investors (Leuz, Nanda, & Wysocki, 2003; Omoye & Eriki, 2014; Ronen & Yaari, 2008; Scott, 2015).

Financial statements are useful tools in accounting practice as they provide information on firm's financial activities, status and performance to investors for decision making purpose. Financial statements summarize the process of recording transactions occurring in the current financial year. The use of these documents is crucial in the decision-making process for internal stakeholders. Likewise, external stakeholders also rely on financial statements to assess the risk and return of their investment decisions (Arniati, Puspita, Amin, & Pirzada, 2019; Beneish, 2001; Cudia & Dela Cruz, 2018; Dang et al., 2017). However, accounting choice and judgment appeared to be a double-edged sword that affected reported earnings quality over the past decades. In the exercise of accounting choice, comes earnings management.

Earnings management involves the use of acceptable accounting rules and procedures as well as circumventing business activities to achieve desired ends. Earnings management is a form of disclosure management that affects the financial reporting process in order to obtain some private gain (Schipper, 1989). Financial statements contain accounting numbers and disclosures, which are vital information for stakeholders. As such, it can be a source of manipulations to convey a desired outcome of an entity. Prior research suggests that managers have both personal and business motivations to display impressive or at the very least satisfactory performance in their reports on a consistent basis (Greenfield, Norman, & Wier, 2008).

Earnings management practices raise important issue facing the accounting profession. This issue has grown tremendously for the past two decades and continues to be of interest to academics and standard setters. The interests in examining earnings management is grounded in the assumption that this behavior misleads financial statement users and sometimes are precursors of more serious activities such as fraudulent financial reporting (Hashim, Salleh, & Ariff, 2013). Moreover, earnings management reduces the transparency, quality and comparability of accounting numbers.

A significant number of researches are conducted in accounting to understand the causes and consequences of earnings management (Bashir, 2017; Bharath, Sunder, & Sunder, 2008; D. C. Burgstahler, Hail, & Leuz, 2006; Cudia & Dela Cruz, 2018; Dang et al., 2017; Engdahl & Malmström, 2019; Ghazali, Shafie, & Sanusi, 2015; Hashim et al., 2013; Healy & Wahlen, 1999; Lanouar, Riahi, & Omri, 2013; Nikoomaram, Banimahd, & Shokri, 2012; Paiva & Lourenço, 2016; Soliman, 2019). However, many researches often excluded the banking industry from the sample of earnings management because its characteristics are viewed different from other firms (vanOosterbosch, 2010).

However, earnings management should not be ignored to be more analyzed in the banking industry. The existing earnings management in the banking industry can emerge because of the constraint in regulation, such as related to capital adequacy ratio or high incentive on bonus scheme (Aerts & Cheng, 2011; Alareeni, 2018; Healy & Wahlen, 1999). They employ earnings management within legitimate constraint to reduce the volatility of earnings. Reduced volatility can represent lower risk. Commercial banks manipulate earnings through discretionary loan loss provisions (vanOosterbosch, 2010). The level of loan loss provisions is determined by the bank managers and thus there is potential for banks to provision more or less than necessary to manage earnings.

Loan loss provision is an expense item listed on the income statement reflecting management's current period assessment of the level of future loan losses. As managers increase loan loss provisions net income decreases, while a decrease in the recording of loan loss provisions increases net income. Loan loss provisions are intended to capture expected future losses that will occur if a borrower does not repay the bank in accordance with a loan contract. Bank

regulators view accumulated loan loss provisions, the loan loss allowance account on the balance sheet, as a type of capital that can be used to absorb losses during bad times (Cornett et al., 2009). Loan loss provision has two portions, discretionary and non-discretionary. The discretionary portions are those accruals that largely depend on the outcome of the managers' future expectation of uncertain events while non-discretionary portion is the provision that is based on fair and objective analysis of the firm's economic conditions.

In accounting literature, the focus of empirical studies on earnings management by banks is on loan loss provisions (LLPs). LLPs are a relatively large accrual for commercial banks and therefore have a significant impact on earnings and regulatory capital of banks. The purpose of these provisions is to adjust banks' loan loss reserves to reflect expected future losses on their loan portfolios. However, bank managers also have incentives to use these loan loss provisions to manage earnings and regulatory capital as well as to communicate private information about future prospects (Ahmed, et al., 1999). Since the amount of the provision is subject to managers' estimation and judgment, it may include bias, which is called discretionary loan loss provision.

The main objective of this thesis is to investigate the effects of board and firm specific characteristics on earnings management through discretionary loan loss provision in private banks of Ethiopia. It seeks to examine how firm-specific factors (profitability, firm's size and leverage) and board characteristics (board independence, board size, board gender, audit committee expertise) influence the level of earnings management in these companies. The thesis is aimed to investigate whether earning management is being employed in the Ethiopian financial institutions, specifically, the banking sector; and how the presence of firm-specific characteristics and board specific characteristics affect their level of earnings management.

1.2. Research Problem

Earnings management has attracted much attention from policymakers and regulators in the last years following several so known financial scandals (Jones, 2011). Most highly published case of the financial scandals in financial statement fraud and earnings manipulation involves, starting from Enron, HealthSouth, Tyco and WorldCom to AIG, Lehman Bros., Bernie Madoff and Satyam (Daghsni, Zouhayer, & Mbarek, 2016; Donatiello, Larcker, & Tayan, 2016; Kao & Chen, 2004). These cases in accounting scandals provide evidence of artificial earnings

management and have reduced investors‘ trust on information published in financial statements and on the management of the company (Cudia & Dela Cruz, 2018; Dechow, Hutton, Kim, & Sloan, 2012; Leuz et al., 2003; Ramachandran, Ngete, Subramanian, & Sambasivan, 2015; Ronen & Yaari, 2008; Wijaya, Pirzada, & Fanady, 2020). It has commonly been recognized that the key frustration give rise to these financial crises arisen instantly from fraudulent financial reporting and insufficient governance practices (Haniffa, Rahman, & Ali, 2006; Man & Wong, 2013; Nikoomaram et al., 2012; Omoye & Eriki, 2014).

Many countries, including Ethiopia, adopted international financial reporting standard (IFRS) to limit management in undertaking earnings management and increase the quality of disclosed information (Alemi & Pasricha, 2016; Babil, 2018; Desalegn, 2020). Comprising a set of high quality financial reporting standards, IFRS removes many allowable accounting alternatives, and is expected to limit the managements' discretion to manipulate earnings, thereby improving earnings quality (Bharath et al., 2008; Engdahl & Malmström, 2019; Nenova, 2003; Renders & Gaeremynck, 2007). However, many empirical studies have claimed that IFRS adoption does not affect or decrease the level of earnings management as expected due its greater flexibility in terms of principles, due to its involvement of the criteria of fair value accounting or valuation as well as the reduction of requirements regarding the presentation of financial statements, the gradual transition from local accounting standards to IFRS and the lack of infrastructure to enforce IFRS (Capkun, Collins, & Jeanjean, 2012; Ghazali et al., 2015; Jeanjean & Stolowy, 2008). These changes and factors have been argued to provide some openings for opportunistic behavior followed by discretionary accounting.

A significant number of researches are conducted in accounting in order to understand the causes and consequences of earnings management (Dechow et al., 2012). Questions as why managers manipulate earnings, how they do so and for what purpose, have been widely studied in the empirical literature (Bashir, 2017; Bharath et al., 2008; D. C. Burgstahler et al., 2006; Cudia & Dela Cruz, 2018; Dang et al., 2017; Engdahl & Malmström, 2019; Ghazali et al., 2015; Hashim et al., 2013; Healy & Wahlen, 1999; Lanouar et al., 2013; Nikoomaram et al., 2012; Paiva & Lourenço, 2016; Soliman, 2019). However, most of these prior studies have primarily been conducted in developed countries and some developing countries in which investors and all financial statement users are well-protected by the legal system and the level of transparency is

high. But, much less is known about the effects of key factors on earnings management in developing countries, particularly in African countries.

Ethiopian firms' current reporting practice is in alarming rate with low legal requirement on information asymmetry, higher reporting laxity and non-standard/mixed reporting experience. The reports prepared by the Ethiopian firms are not in accordance with the accounting standards. Even though the reporting practice shows alarm, earnings management is not yet considered as a problem and the earnings reported by companies are not examined from earnings management viewpoint (Yimenu & Surur, 2019). In Ethiopia, the financial reporting is regulated by undefined accounting and auditing principles and there is no formal stock exchange market more likely to induce corporate managers not to present the underlying reality of firms' financial performance and position (Belay, 2020). The earnings reported by Ethiopian banks are not examined from earnings management viewpoint (Erena & Tehulu, 2012). This situation affects the credibility of both the accounting and auditing functions in the country.

In Ethiopia, as far as the knowledge of the researcher is concerned, there are few related researches conducted in this area but most of these researches have entirely focused on non-financial sectors of the country rather than the banking sector. There is no empirical study in Ethiopia concerning the effects of both bank specific and board characteristics on the practice of earnings management; which motivates the researcher to conduct a study on this topic. Therefore, this research identified and tested the relationship between earnings management and its key determinants of board and firm specific characteristics in Ethiopian private commercial banks.

1.3. Objectives of the Study

This research examined the effects of board and firm specific characteristics on the level of earnings management practice through discretionary loan loss provision in some selected private commercial banks in Ethiopia. The research has general and specific objectives.

1.3.1. General Objective of the Research

The overall objective of this study is to examine and identify the effects of board and firm specific characteristics on earnings management through loan loss provisions in private banks of Ethiopia and to know which of the theories of earnings management are appealing to Ethiopian banking industry.

1.3.2. Specific Objectives

The specific objectives answered at the end of the study were:-

1. To identify the effect of board independence on earnings management
2. To identify the effect of board size on earnings management
3. To identify the effect of board gender on earnings management
4. To identify the effect of audit committee expertise on earnings management
5. To identify the effect of firm's size on earnings management
6. To identify the effect of profitability on earnings management
7. To identify the effect of leverage on earnings management

1.4. Significance of the Study

This thesis aimed to empirically examine and identify the effects of board and firm specific characteristics on earnings management practice in Ethiopian private commercial banks. As such the research will have the following significances.

- The results of this study are expected to provide a better understanding about the effects of board and firm specific characteristics on earnings management in private banks of Ethiopia to practitioners, financial analysts, financial statement preparers, auditors, and financial statement users.
- The findings of the study are expected to provide useful and timely information to policymakers and regulators such as Accounting and Auditing Board of Ethiopia (AABE) and National Bank of Ethiopia (NBE). The study results are expected to be significant to policy makers and NBE in devising policies that can be effectively applied to promote better financial reporting. The result will be also valuable to other policy

making institutions and accounting regulators like AABE to develop more rules to improve the quality of financial statements of banks.

- The research findings will provide valuable information to understand the basic factor behind manipulations, misrepresentation and misspecification. In this case, the research will have a great contribution to shareholders and other investors who are interested in investing their capital in different private banks of Ethiopia.
- This study will enable us to know and understand the practice and extent of earning management in the banking sector of Ethiopia.
- This study will have knowledge contribution, provides an important introduction to the areas of earnings management in Ethiopia and will add valuable contributions to the existing body of literature and assist the future researchers in obtaining new ideas and perspectives for their study.

1.5. Hypothesis of the study

The study hypothesizes that board and firm specific characteristics affect earnings management in private banks of Ethiopia. Both theoretical and empirical earnings management studies have generated many results that attempt to explain the effects of firm specific factors and board characteristics on earning management. In this study, the researcher concentrated only on seven key variables because of the time constraints. These explanatory variables are: board independence, board size, board gender, audit committee expertise, firm's size, profitability and leverage. The major variables that were expected to have an influence on the possibility of firms' engagement on earnings management in private banks of Ethiopia are presented below.

Hypothesis 1: Audit committee expertise has significant effect on earnings management.

Hypothesis 2: Board gender has significant influence on earnings management.

Hypothesis 3: Board independence has significant effect on earnings management.

Hypothesis 4: Board size has significant effect on earnings management.

Hypothesis 5: Firm's size has significant effect on earnings management.

Hypothesis 6: Firm leverage has significant effect on earnings management.

Hypothesis 7: Profitability has significant effect on earnings management.

1.6. Scope of the Study

This paper tried to encompass the vital and most interesting branch of finance, earnings management. This study focused on the effects of board and firm specific characteristics on earning management and investigates their relevance in Ethiopian context from 2010-2019. The study was limited to the Federal Democratic Republic of Ethiopia and to those firms engaged in the private commercial banking industry sector. Only eight private banks were covered by the study from the total of 16 private banks of Ethiopia. The study was limited to board and firm specific determinants of earnings management.

1.7. Organization of the Study

This study is organized into five chapters. Chapter one presents research introduction, statement of the problem, objectives of the study, significance of the study, hypothesis and scope of the study. Chapter two presents review of theoretical and empirical literatures on the effects of board and firm specific characteristics on earnings management. Chapter three presents the research methodology. The fourth chapter presents and discusses results and analysis of the study and finally, chapter five presents conclusions and possible recommendations.

CHAPTER TWO: LITRATURE REVIEW

2.1. Theoretical Literature Review

2.1.1. Earnings Management

The main objective of financial reporting is to deliver company's financial information to both external and internal stakeholders in a reliable and timely manner. A major element of the report is accounting earnings, which are used to assist the users in developing corporate policies. Major decisions like capital raising, debt covenants, executive remuneration are shaped based on the available information reported in financial reports. For external investors, they basically can make more informed investment decisions based on the information acquired in the reports. However, the validity of this objective is being questioned by many users of corporate financial reports because of the probable effects of earnings management (Alareeni, 2018; Beneish, 1999; Chi, Hung, Cheng, & Lieu, 2015; Dang et al., 2017; Dechow et al., 2012; Ramachandran et al., 2015; Renders & Gaeremynck, 2007; Roychowdhury, 2006).

Earnings management was recognized by national and international regulators as one of their major challenges of financial reporting. In the literatures, earnings management can still be found under the name of creative accounting, income smoothing, earnings smoothing, cosmetic accounting or accounting cosmetics, or accounting crafts (DeFond & Park, 1997; Francis & Schipper, 2011; Myers, Myers, & Skinner, 2007; Nikoomaram et al., 2012; Ronen & Yaari, 2008; Roychowdhury, 2006; Stolowy & Breton, 2004; Xie, Davidson III, & DaDalt, 2003).

According to literatures, earnings management can be defined from opportunistic and an informational perspective. The opportunistic perspective considers earnings management as an opportunistic tool used by managers to avoid certain situations that may affect the company and then mislead investors about the situation of the company. In this way, through the increase or decrease of income, managers transmit to investors that outcomes were being met and they will be compensated by a maximizing of personal profit. The informational perspective considers earnings management as a tool to signal private information related to the company's future performance to the capital market (Erickson & Wang, 1999).

Earnings management is recognized as attempts by management to influence or manipulate reported earnings by using specific accounting methods or accelerating expense or revenue transactions, or using other methods designed to influence short-term earnings (Soon & Wee, 2011). Earnings management involves those techniques which are openly displayed (window dressing) as well as those which are sophisticated ones, off-balance sheet financing, (Lin, Li, & Yang, 2006). Thus, the economic entity is presenting to the investors or to the prospective investors financial statement passed through the filter of some techniques capable of generating a more favorable image on the market but also the illusion of some more attractive results. A firm can intentionally alter reported financial results in some desired amount.

Earnings management is a purposeful intervention in the external financial reporting process, with the intention of obtaining some private gains (Schipper, 1989). It is the strategic exercise of managerial discretion in influencing the earning figure reported to external audiences (Degeorge, Patel, & Zeckhauser, 1999). Earnings management is the process of taking deliberate steps within the constraints of generally accepted accounting principles to bring about a desired level of reported earnings(Dechow et al., 2012). Earnings management occurs when the managers use judgment in financial reporting, and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company, or to influence contractual outcomes that depend on reported accounting numbers (Healy & Wahlen, 1999). It is the action of managers to reveal to investors their private expectations about the firm's future cash flows and managers seek to mislead the investors (Beneish, 2001; Degeorge et al., 1999; Engdahl & Malmström, 2019; Healy & Wahlen, 1999).

From the above definitions, we can understand that earnings management occurs through manipulations of accounting practices that follow the accounting standards and rules, in essence it can deviate from the spirit of these rules. The definitions highlight some important incentives for managers to engage in earnings management, either accrual-based or real earnings management, such as an incentive to obtain private gains, to mislead stakeholders, and to influence contractual outcomes. The above definitions also highlight two earnings management approaches, including accrual-based earnings management and earnings management through real operational activities.

Earnings management has similar traits both in non-financial and financial firms; the only difference is a technique in which managers practice it. In case of financial firms particularly in banks, earnings management arises through estimation of loan loss provisions (Erena & Tehulu, 2012). Bank managers determine the level of provision for loan loss to capture the expected loss on loan portfolios. Since the amount of the provision is subject to managers' estimation and judgment, it may include bias, which is called discretionary loan loss provision Earnings management is divided into accruals-based management and real earnings management activities.

2.1.2. Types of Earnings Management

2.1.2.1. Accrual-based earnings management

An effective way to affect earnings is the manipulation of accounting policies related to discretionary accruals, such as provisions, warranty costs and inventory values (Scott, 2015). Accruals are components of accounting earnings that do not have immediate cash flow consequences in a particular reporting period. Managers usually have a lot of discretion over accounting judgments in regard to accruals, such as discretions in estimating the expected lives and salvage values of long-term assets, deferred taxes, and losses from bad debts, and in selecting inventory valuation and depreciation methods (Healy & Wahlen, 1999). The use of accruals to temporarily boost or drag down earnings is a well-documented mechanism for earnings management through which firms achieve certain market and contractual incentives (Dechow, Sloan, & Sweeney, 1995).

Accrual-based earnings management is the situation whereby total accruals are being manipulated by managers of a firm. Hereby accruals can be distinguished by two types of accruals namely, discretionary and non-discretionary accruals. Discretionary accruals are at the discretion of management while non-discretionary accruals will have an effect (increase or decrease) on a firm's operation and external factors (Cohen, Dey, & Lys, 2004). Previous empirical studies investigated earnings management by banks have focused on loan loss provisions (LLPs) as a tool for earnings management. LLPs are a relatively large accrual for banks and therefore have a significant impact on earnings (vanOosterbosch, 2010).

A loan loss provision is an income statement expense set aside as an allowance for uncollected loans and loan payments. This provision is used to cover different kinds of loan losses such as non-performing loans, customer bankruptcy, and renegotiated loans that incur lower-than-previously-estimated payments. Loan loss provisions are then added to the loan loss reserves, a balance sheet item that represents the total amount of loan losses subtracted a company's loans. In the event of a loss, instead of taking a loss in its cash flows, the bank can use loan loss reserves to cover the loss. Since the bank does not expect all loans to become impaired, there is usually enough in the loan loss reserves to cover the full loss for any one or small number of loans when needed. An increase in the balance of reserves is called loan loss provision. The level of loan loss provisions is determined based on the level expected to protect the safety and soundness of the bank(Cornett, McNutt, & Tehranian, 2009).

2.1.2.2. Real earnings management

In addition to manipulating accounting choices and estimates, firms can also influence reported earnings through manipulating real business activities. Real-based earnings management can be described as accelerating or delaying real recognition of economic activities. Real activity manipulation is defined as departures from normal operational practices, motivated by managers' desire to mislead at least some stakeholders into believing certain financial reporting goals have been met in the normal course of operations (Roychowdhury, 2006). According to Roychowdhury (2006), real activities manipulation earnings management is achieved mainly by three means. They are sales, production and discretionary expenditure manipulation.

Various literatures have examined various forms of real earnings management through different operating activities, including controlling production, sales and inventory, selling of fixed assets, and managing discretionary expenditures such as R&D, and selling, general and administrative expenses (Xu et al., 2007). Furthermore, some studies examine real earnings management via investing and financing activities and find that firms smooth quarterly or annual earnings through share repurchases, stock option issues, and financial instruments.

Most of the literature on earnings management research has associated the use of discretionary accruals towards an opportunistic behavior wherein managers would exercise their discretion towards reported earnings due to tied benefits or associated incentives that lead to maximizing

their own utility to the point of deceiving financial statement users (Farshadfar & Monem, 2011). This was observed when managers use discretionary accruals to avoid reporting losses (D. C. Burgstahler & Eames, 2003).

On a different perspective, earnings management is observed to be an efficient means of communicating private information, instead of being opportunistic alone. This is where discretion is exercised to improve the ability of earnings to reflect fundamental value (Engdahl & Malmström, 2019; Farshadfar & Monem, 2011). In this regard, earnings management is deemed to be efficient as it is used to send positive signals about the firm's future profitability. Specifically, evidence was observed where managers use discretionary accruals to send positive signals about their beliefs to the market (i.e., their optimism about future firm performance), which now highlighted the role of discretionary accruals as a signaling device contrary to an opportunistic motive (Louis & Robinson, 2005). In addition, the use of discretionary accruals permits the communication of more value-relevant information which is not captured under the non-discretionary accruals (Gambier, 2014).

2.1.3. Motives of earnings management

Managers engage in earnings management for various reasons. The review of the academic literature revealed three main motivations which encourage managers to follow such behavior. These are incentives related to executives, incentives associated with the company and incentives linked to investor.

2.1.3.1. Motives Related to Company Executives

One of the motive for managers to manipulate earnings is in situations where managers can achieve a bonus that is based on a compensation plan. This may stimulate managers to behave in an opportunistic manner, they could be motivated to apply policies that increase the firms income so that their amount of compensation will eventually be higher (Cheng & Warfield, 2005). Indeed, the companies can experience hardships when it is weak in its performance. Having planned and announced incomes different from those anticipated, managers can choose to manage their results upward to save their reputations, their jobs and may even receive a premium and increase their chances in the job market (Sun, Wang, Wang, & Zhang, 2013). They

can also participate in the company's capital if there is a compensation system based on the results achieved (Hashim et al., 2013).

2.1.3.2. Motives Related to the Company

Earnings management may be influenced by endogenous variables related to the company itself. Hashim et al. (2013) provided evidence on the motives for directors to manage earnings. They examined three different motives (i.e. altruistic, speculative, and pressure from affiliated parties) for directors to manage earnings. They concluded that the primary motive for directors to be involved in earnings management activity is derived from altruistic motivation, which refers to the motive that involves concern about the benefits of company. Directors work hard to meet market expectations and are more concerned about their company's reputation rather than their own personal benefits.

Earnings management is used to avoid losses: managers performing a negative result or a result close to zero, seek to avoid these losses by using earnings management. It is also used to avoid declines of the result: the desire to present a boost result is an incentive to executives to manage the result. This behavior is explained by the premium assigned by the market for companies with regularly growing results (Myers et al., 2007). Earnings management is used to achieve earnings forecasts: this goal is an incentive for executives to manage earnings to correct forecasting errors (Kasznik, 1999).

2.1.3.3. Motives Related to investors

In some situations, executives apply earnings management not to disappointing investors. This behavior is justified by the desire to save and maintain the company's good reputation by trying to realize their commitments to stakeholders. Thus, executives are compelled to engage in certain earnings management to meet investors' expectations for future growth. By using earnings manipulation tool, managers hide the real value of their company in order not only to encourage investors to invest in the firm as a shareholder or as a creditor but also to influence investors about the current and future prospects of the company (Leuz et al., 2003; Nikoomaram et al., 2012).

Another motivations for the use of earnings management is to attract external funding with the least cost (Dechow et al., 2012). Violation of debt covenants can provide a negative signal of corporate performance as well as a negative impact on the managers' reputation. As a result, to avoid these unwanted effects managers may be motivated to manage their accounting numbers (M.-C. Chen & Tsai, 2010).

2.1.4. Theoretical Approaches of Earnings Management

Earnings management is increasingly used by managers in their companies. Affecting both the richness of the executives and that of other market participants, earnings management is no longer a simple tool but also a strategic element that influence the investment decision and the resource allocation of different stakeholders (Sellami & Adjaoud, 2010). Several theoretical approaches have tried to explain the use of this strategic tool. Indeed, a review of the literature has allowed us to identify five theories explaining motivations for earnings management: the positive accounting theory, the signal theory, the threshold management theory, the agency theory and the entrenchment theory.

2.1.4.1. The Agency Theory

The agency theory was developed by Jensen and Meckling (1976). The agency theory is based on the relationship between the principal (owners) and the agent (managers). The separation of ownership from management in modern corporations provides the context for the function of agency theory. Modern organizations have widely dispersed ownership, in the form of shareholders, who are not normally involved in the management of their companies. The distinction between ownership and control creates the potential for conflicts of interest between agents and principals, which result in costs associated with resolving these conflicts (Abbas, 2018; Fama, 1980; Fama & Jensen, 1983). The agency relationship leads to information asymmetry problem which allows the pursuit of self-interest, where, management alter the company's reported earnings in order to meet or beat earnings targets (Ronen & Yaari, 2008).

Managers seek to maximize their personal utility to the detriment of other stakeholders. Indeed, the divergence of interests between shareholders and managers encourages the creation of compensation contracts based on the income of the company. Thus to increase their remuneration and benefit from these contracts executives tend to manage their results upward

and maximize their well-being by presenting to shareholders the results they were expecting. In addition, in order to limit expenditure and unnecessary spending of managers, shareholders proceed to allocate charges. This distribution causes pressure on the managers and stimulates them measures to reduce their costs. Hence, leaders can use earnings management to defer some of these charges and show their good management (Jensen & Meckling, 1976).

2.1.4.2. The Signal Theory

The signal theory considers that the same information is not shared by all economic agents. Indeed in the reality of market economies, there is a lot imperfect information between various stakeholders within the company (Beneish, 2001). Thus, managers are considered as the most informed party on the future prospects of the company because they have some privileged information that allows them to emit a signal to different investors and market participants. Therefore, through these accounting practices, managers may report and share private information of the future performance of the company. This leads to the alignment of market expectations with those of the managers (Sun et al., 2013). According to Xue (2003), only companies that have growing opportunities can manage their result to send signals to the market and investors. Similarly, the use of earnings management is explained by the fact that the managers want to give relevant information about the future performance of the company (DeFond & Park, 1997).

2.1.4.3. The Positive Accounting Theory

The positive accounting theory aims to explain and predict the practice of accounting by describing why an accounting practice is conducted, which more specifically reveals the influence of economic variables on managerial motivation in choosing an accounting method (Watts & Zimmerman, 1986). There are three main hypotheses that form the basis for developing hypothesis testing to detect earnings management: the first one is bonus plan hypothesis, managers in companies with bonus plans tend to choose accounting procedures that can move earnings reports into future periods, the second is debt covenant hypothesis, corporate managers with large leverage ratios tend to choose accounting procedures with reported earnings changes from future periods to current periods, as it will give the company a small leverage ratio, and the third one is political cost hypothesis, the greater the cost of corporate politics, managers tend to

choose accounting procedures that postpone the earnings report from the current period to the future period (Ibid).

2.1.4.4. The Threshold Management Theory

The thresholds theory states that the company's managers use earnings management to reach a level of expected result called threshold (D. Burgstahler & Dichev, 1997). D. Burgstahler and Dichev (1997) were the first researchers who examined the irregularities in the distributions of accounting results. They note the existence of two types of thresholds: the threshold of zero result (to avoid losses) and the threshold of variation nil of the result (avoiding the decrease in income), yet the study by Degeorge et al. (1999) has allowed to add a new threshold: the threshold of analysts' expectations.

Analysts in the financial market use these thresholds as a tool to evaluate the performance of companies. Thus, the presence of irregularities around its threshold was interpreted as a manipulation of the accounting result. Companies manage their results to reach or even exceed these thresholds (Vidal, 2010). Apart from maximizing their compensation, managers have interest to give a good image of their managements which encourage them to manage earnings in order to realize or exceed objectives (thresholds), and thus maintain their good reputation and increase their demand on the job market (Aerts, Cheng, & Tarca, 2013).

Degeorge et al. (1999), attempted to rank the three thresholds mentioned in the literature by treating the psychological effect of negative numbers on investors. These authors considered a preference firstly for a weakly positive result then a result in growth and finally the respect for predictions. Considering from the psychological principle that the human mind experiences a natural aversion to negative numbers, it is more pleasant to executives to announce positive results than negative, null or declining results. This behaviour was explained by the cognitive theory that claims human mind makes a big difference between positive numbers and negative ones. This prevents managers from publishing negative results and encourages them to find their accounting tools to prevent such result.

2.1.4.5. The Entrenchment Theory

Entrenchment is to strengthen the presence of leaders within the company by making their replacement expensive and difficult. Through their managements, managers will try to increase their discretionary position to maximize their welfare and obtain significant compensation. Thus through entrenchment strategies the presence of the executives is indispensable. Earnings management is based on the theory of entrenchment. Indeed, by holding some shares in the company, the manager's interest converges with that of shareholders, so we expect a correct management of the result. However, according to the entrenchment theory, the shareholder-manager may act on his/her own interests by trying to increase his/her share in capital through earnings management (Mard & Marsat, 2009).

2.1.5. Earnings Management and Fraud

There are various definitions of fraud in the audit literature. However, they all have common facts about fraud. For instance, Wells (2009) mentioned that four elements must exist in any fraud case: A material false statement, intent to deceive, reliance on the false statement by the victim, and damages as a result. Lord added that different countries define fraud by using a common set of three elements: 'Material false statement with the intent to deceive, a proof that the victim depended on the false statement, and damages occurred as a result of victim's reliance on those false statements' (2010). In fact, in each country, the definition of fraud will be slightly different; but all definitions will involve that fraud is breaking the law or violating the regulatory framework (Jones, 2011). Fraud can generally be defined as an intentional and illegal act carried out by the perpetrator to steal or misuse the victim organization's resources or assets and the perpetrator can hide his theft by concealing the true nature of the business transaction.

Fraud as an intentional act that results in a material misstatement in financial statements that are the subject of an audit (Auditing Standards Board, 2002). Fraud encompasses an array of irregularities and illegal acts characterized by intentional deception and can be perpetrated for the benefit of the organization and by persons outside as well as inside the organization. It is the use of one's occupation for personal enrichment through the deliberate misuse or application of the employing organization's resources or assets (Wells, 2005). Fraud is the intentional distortion of financial statements or other records by persons internal or external to the authority, carried

out to conceal the misappropriation of assets or otherwise for gain (Jones, 2011; Perols & Lougee, 2011).

Fraud differs from earnings management. Fraud is outside the limits of accounting standards and occurs when somebody commits an illegal act. However, earnings management is within accounting standards and is one form of accounts manipulation. Accounts manipulation is use of management's discretion to make accounting choices or to design transactions so as to affect the within the constraints possibilities of wealth transfer between the company and society fund providers or managers (Stolowy & Breton, 2004). Earnings management is the process of taking deliberate actions of accounting standards so as to achieve a desired level of reported earnings (Guan, He, & Yang, 2006; Koumanakos, Siriopoulos, & Georgopoulos, 2005). Earnings management as Jones (2011) mentioned, involves using the flexibility within accounting to manage the accounts in order to deliver a predetermined profit or achieve a specific objective.

Some literatures advocates that manipulation is not fraud, it is a matter of interpretation (Diana & Madalina, 2007). Unlike fraud, earnings management encompasses the selection of accounting and estimates that conforms to the accounting principles and procedures. This implies that companies that practice earnings management would manage their earnings within the limits of accepted accounting procedures (Abdul Rahman & Haneem Mohamed Ali, 2006).

However, others believe that earnings management is just another form of fraud and has to be stopped. Healy and Wahlen (1999) mentioned that earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers. Illegal earnings management may involve intentionally recognizing or measuring transactions and other events and circumstances in the wrong accounting period or recording fictitious transactions which both constitute fraud. Even if earnings management did not violate accounting standards, it may still lead to inaccurate information about the company, which will in turn mislead investors in judging the performance of the company (Ali, 2006 & Jones, 2011).

2.1.6. Board Characteristics and Earnings Management

In the literature, the occurrence of opportunistic earnings management can be prevented or mitigated by the presence of board characteristics in place. Previous studies have employed different characteristics of the boards to test their specific impact on earnings management. This research includes board independence, board size, board gender, and audit committee expertize.

2.1.6.1. Board independence

The role of independent non-executive directors is to bring independent judgment to the board; therefore, the board composition is associated with confidence in the firm's financial reporting system. Executive directors have more information about the organization compared to outside directors. Domination by insiders may lead to transfer of wealth to managers at the expense of the stockholders (Daghsni et al., 2016; Gulzar, 2011; Haniffa et al., 2006). Therefore, outside directors are appointed on the board mainly to obtain independent monitoring mechanism over the board process thereby reducing agency conflicts and improve performance. The presence of independent board of directors can be seen as a constraint to earnings management. Outside directors are positively related to stock return and performance and negatively related to fraudulent reporting (Monsif Azzoz & Khamees, 2016). Similarly, there is a negative relation between outside directors and earnings management (Klein, 2002).

According to Peasnell, Pope, and Young (2000), as the number of independent directors increases, the probability of managers to engage in income increasing discretionary accruals decreases. This is further supported by the findings of Klein (2002) where a negative relationship between abnormal accruals and the number of independent board of directors was observed. Independent directors provide additional check and balance. Thus, it is expected that the number of independent directors is negatively related to a firm's level of discretionary accruals used for an opportunistic perspective. However, a contrasting result was noted by Haniffa et al. (2006), Siregar and Utama (2008) and Banderlipe and Mc Reynald (2009) where board independence does not significantly influence earnings management. This can be explained by the dominance of the entity's management in its board of directors, which outweighs the relatively smaller proportion of independent directors.

2.1.6.2. Board Size

Board of directors performs an oversight role in a corporation. In the literature, there were mixed evidence obtained as to the effectiveness of board sizes. For instance, having a large board size can create more disparity between members of the board that can affect their effectiveness in performing their oversight role (Jenssen, 1993). However, according to Dalton, Daily, Johnson, and Ellstrand (1999), the presence of more board of directors in a corporation brings in more expertise in the table that can help improve firm performance. In relation to earnings management, it is then expected that board size negatively affects a firm's tendency to engage in earnings management.

However, mixed evidence was obtained regarding the effect of board size on earnings management. For instance, board size as measured by the number of board of directors in a firm was deemed to be an insignificant predictor of an entity's tendency to engage in earnings management (Banderlipe & Mc Reynald, 2009). A similar case was also observed by Jamaludin, Sanusi, and Kamaluddin (2015) where board size does not significantly influence managers' tendency to engage in earnings management using the case of Malaysian firms. This is in contrast with the results of Ramachandran, Ramachandran et al. (2015) the core objective of this study is to test whether the roles of board of directors and other key committees influence Earnings Management (EM where board size was observed to be positively related with a firm's level of discretionary accruals).

2.1.6.3. Board Gender Diversity

Gender diversity is part of the broader concept of board diversity. Boards are concerned with having right composition to provide diverse perspectives. The review of the literature suggests that there exists a wide range of theoretical and empirical opinions explaining the role of gender diversity in restraining manipulative practices related to earnings. Theoretically, gender socialization theory (GST) justified the notion that the role of gender and related social and ethical values are inculcated during the childhood. Therefore, men and women have different leadership and decisions making styles based on their underlying social and ethical values. Under the GST framework, females are risk averse decision makers and most likely adhere the established ethical standards (Fan, Jiang, Zhang, & Zhou, 2019; Kouaib & Almulhim, 2019).

Women are less likely to expropriate the available resources of the firm since women are more ethical than men (Kouaib & Almulhim, 2019).

Furthermore, the previous literature also supported the notion that women issue less debt and least likely engage in mergers and acquisitions due to their conservative risk taking behavior (Harris, Karl, & Lawrence, 2019). Under the agency theory framework, the gender diversity is considered as alternative monitoring mechanism to restrain the management's opportunistic behavior. Gender diversity in governance structure is more beneficial for firms that are operating in less competitive and weakly regulated markets (Jurkus, Park, & Woodard, 2011). Greater female representation on boards provides some additional skills and perspectives that may not be possible with all-male boards (Boyle and Jane, 2011). Board diversity promotes more effective monitoring and problem-solving. He suggests that female board members will bring diverse viewpoints to the boardroom and will provoke lively boardroom discussions. The management may be less able to manipulate a more heterogeneous board to achieve their personal interests.

2.1.6.4. Audit Committee Expertize

Audit committee expertize concerns the profound knowledge of the committee members in financial accounting and other related accounting skills to enable them carryout their work effectively. Accounting or financial expertise are attributes/qualifications or experience acquired by a person before becoming a board member of a company. Previous studies support the existence of relationships between accounting expertise and the quality financial reporting. Carcello, Hollingsworth, Klein, and Neal (2006) document that a reduction in the use of discretionary accruals and income-increasing accruals occurs when an accounting expert is on the audit committee (Belay, 2020) and when firms have at least one general financial expert on their audit committee. Audit committee members need the financial sophistication necessary for curtailing the tendency of managers to engage in earnings management practices (Xie et al., 2003). Hence, a greater number of members with financial expertise on the audit committee reduces the level of fraudulent practices and strengthens internal control processes.

An audit committee with members who are knowledgeable in financial and management accounting would improve the quality of financial reporting and make it difficult for management to engage in earnings management. Audit committee with financial expertise is

more effective at determining earnings management. Financial expertise is unarguably beneficial to understand fundamental financial statements and to evaluate or analyze financial information (Badolato, Donelson, & Ege, 2014). Expertise in auditing, finance/accounting and internal control form an important factor of audit committee effectiveness. Audit committee members must be knowledgeable and well experienced to fulfill their responsibilities effectively. It is expected that audit committees that have financially-literate members, achieve their responsibilities efficiently and optimize corporate financial performance.

2.1.7. Firm Specific Characteristics and Earnings Management

2.1.7.1. Firm size

Firm size is related to the number of resources owned by the company; the size of a firm can be presented by total assets, number of sales, average sale and average total assets. Assets size is considered to be the most appropriate as a proxy for firm size (Wuryani, 2013). It is often argued the larger the firm the less likely they may want to engage in creative accounting practices and the more likely they will be concerned with improving the quality of financial reporting. Managers of large firms have fewer opportunities to manage earnings because larger firms are more likely to be closely monitored by security analysts (Swai, 2016). Large firms also have high-quality internal control and are usually audited by the Big 4 auditors, hence less likely to be able to hide abnormal accruals (Siregar & Utama, 2008).

On the other hand, the positive accounting theory suggested that managers of larger firms are more likely to engage in earnings management to reduce political costs (Watts & Zimmerman, 1986). Firm size is positively related to discretionary accruals such that larger firms are more likely to engage in using discretionary accruals as opposed to smaller firms (Lanouar et al., 2013). On the contrary, the results of Bassiouny (2016) provided a different insight wherein firm size was determined to be an insignificant determinant of a firm's level of earnings management. The same case was observed in Albania where earnings management across varying firm sizes, whether large or small, does not vary significantly (Llukani, 2013).

2.1.7.2. Profitability

Firms' profitability has been argued to have an influence on the level of earnings management. In Companies with higher level of profitability, the tendency to engage in earnings management practices may be reduced since the pressure to perform will tend to be reducing than companies with lower level of profitability (C. J. Chen, Chen, & Su, 2001). The economic performance of a firm affects management's decisions either engage or not to engage in earnings management accounting practices. When companies are not performing well, economic demands and the anticipated benefits will determine the nature of the firm's information environment (Kapoor & Goel, 2017).

Empirical evidence shows that accruals are opportunistically manipulated by managers to conceal poor performance, to avoid reporting losses or to postpone of a portion of the unusual good year to the future years (Alareeni, 2018; D. Burgstahler & Dichev, 1997; DeAngelo, 1981; Skinner & Myers, 1999). That is why earnings management is arisen for keeping good reputation in the eyes of stakeholder. Earnings management existed from increasing the stock prices (M.-C. Chen & Tsai, 2010). Khodadadi and Janjani (2011) concluded that poor financial performance of an entity is, the more earnings management exists. In contrast, in the studies of Haniffa et al. (2006) in Malaysia context, (Alves, 2012) in Portuguese context, no relationship between profitability and earnings management exists.

2.1.7.3. Leverage

A firm's degree of financial leverage measures its level of indebtedness. One motivation of firms to engage in earnings management is to influence contractual outcomes, specifically in the case of debt covenants. Debt covenant provisions require firms to maintain or achieve a certain level of earnings as a part of the borrowing arrangement. This then introduces pressure on firms to engage in earnings management to influence such contractual outcomes in its favor. Managers use voluntary accounting changes in order to increase earnings and eventually avoid violations of debt covenants or contractual arrangements (Fields, Lys, & Vincent, 2001). Thus, it is expected that highly-leveraged firms are more likely to engage in opportunistic earnings management to avoid debt covenant or other contractual violations and to avoid projecting an image of financial distress.

Earnings management is used by managers to avoid violations on debt agreements that might impose higher costs on their end. As such, it is expected that highly leveraged firms will have a higher engagement in opportunistic earnings management. This is further supported by Bassiouny (2016) wherein a firm's degree of financial leverage positively influences the level of earnings management. A similar finding was observed by Fung and Goodwin (2013) where a positive association between short-term debt and discretionary accruals was observed for low-credit worthy firms. This further implies that highly indebted firms tend to resort in opportunistic earnings management because they are subjected to monitoring and would face consequences because of debt covenant violations (Lanouar et al., 2013).

2.1.8. Empirical Literature Review

This study would not be completed without taking a critical look at some past empirical studies in terms of the purpose of the studies, the methodology that was adopted and the findings of the studies as are related to this current study. This is necessary in order to enable the researcher to see the gaps that might have been left or to get a brief view of some recommendations for further studies that might have been reported in these previous studies.

In recent decades, many studies have been done in the context of earnings management. Most of the studies are focused on identifying the motives, means and factors affecting earnings management. Several explanations from different perspectives on earnings management have been offered. But, there are few literatures available in Ethiopian private commercial banking sector about this context. However, other developed countries have conducted a lot of research related to this context.

Dung, Hassan & Houston (2018) compared earnings management between public and private banks by using discretionary loan-loss provisions (DLLPs) as proxies. They concluded that public banks are more likely to manage their financial reporting than private banks. The study found that large and profitable banks are more likely to engage in LLPs management. Additionally, high-growth banks tend to engage more in LLP management, and favorable economic conditions allow a decrease in DLLPs. Bereskin, Kieschnick, and Rotenberg (2015) also conducted a study to examine the factors that affect earnings management in US firms for a period of 1990-2012 by using regression model. The study revealed that the practice of earnings

management is affected by operating environment, change in tax rate, regulation and economic conditions. It also concluded that to executive compensation was significant in affecting earnings management.

Anandarajan, Hasan, and McCarthy (2005) examined whether Australian banks engage in earnings, capital management and signaling, and, if so, the extent to which loan loss provisions (LLPs) are used for this purpose. The result indicated that banks in Australia use loan loss provisions to manage earnings. Further, the result concluded that listed commercial banks engage more aggressively in earnings management using LLPs than other banks. But, the result indicated Australian banks do not appear to use LLPs for signaling future intentions of higher earnings to investors. Luo (2019) examined the associations between board characteristics and the level of earnings management in the UK listed companies and concluded that CEO duality and board size had negative and positive effect while, board meetings, independent directors and board gender had insignificant effect with the level of earnings management.

Cornett et al. (2009) examined whether corporate governance mechanisms affect earnings and earnings management at the largest publicly traded bank holding companies in the United States. The study found that CEO pay-for-performance sensitivity (PPS), board independence, and capital are positively related to earnings and that earnings, board independence, and capital are negatively related to earnings management. They also found that PPS is positively related to earnings management. La Utu and Takdir (2016) examined the factors that affect earnings management at Banks Listed in Indonesia Stock exchange by using partial least square. This study found that company Size and investment activities has a positive and significant effect while corporate governance and leverage has a negative and significant effect on earnings management.

Daghsni et al. (2016) carried out a study to test the effect of the board characteristics on the earnings management in French listed companies for the period 2008 to 2012. The CEO duality and boar meeting is found to have a positive relationship with the earnings management. Board size has a negative relation with the earnings management and board independence has insignificant influence on earnings management. Dang et al. (2017) conducted a research to investigate factors affecting earnings management of listed firms on Vietnam Stock Exchange

for the period 2012 to 2016 by using Ordinary least squares. Consolidated financial statements, chair of management board cum a director, financial performance, firm size, and stock issuance have positive effect whereas auditor size and financial leverage have negative effect on earnings management.

Cudia and Dela Cruz (2018) have conducted a study on the factors that influence the practice of earnings management among publicly listed industrial firms in the Philippines for the period 2014. The study examined the effect of firm-specific characteristics and corporate governance variables on a firm's tendency to engage in earnings management using discretionary accruals. Results revealed that leverage and cash flow from operations are both significantly and positively related to a firm's level of discretionary accruals, while profitability was found to be negatively related. But, board size, board independence, CEO duality, and audit quality were all insignificant predictors of a firm's earnings management activities.

Ghazali et al. (2015) have conducted a study to analyze the relationship between opportunistic behaviors (free cash flow, liquidity and profitability), monitoring mechanism (leverage) and pressure behaviors (financial distress) toward earnings management in Malaysian public listed companies from year 2010 to 2012 by using multiple regression model. This empirical research shows that managers of the companies would engage in earnings management when the company is financially healthy, when the profit of the company is high and when the company is more liquid. Saleh, Iskandar, and Rahmat (2005) investigated the relationship between earnings management and board characteristics in Malaysian listed firms. The result revealed that discretionary accruals as a proxy for earnings management is negatively related to management ownership, independent non-executive directors, and size of the board but positively related to the existence of CEO-Chairman duality, after controlling for size, leverage and performance.

Haider (2020) conducted a study to analyze the motivational factors behind the manipulation of the earnings in the banking sector of Pakistan by using regression and correlation analysis. Firm size, profitability, financial leverage and effective tax rate are taken as the motivational factors behind earning manipulation. The study found profitability and leverage had significant and positive effect whereas firm size and tax rate found to be negative but insignificant in explaining the earning management. Moradi, Salehi, Bighi, and Najari (2012) examined the factors affecting

earning management in Iran listed companies for the year 2006 to 2010 by using correlation and regression analysis. The result indicates that there exist negative and significant relationship between debt to equity ratio whereas firm size has a positive and significant relationship with earning management. Effective Tax rate and bonus for the motivation found insignificant in this study.

Swai (2016) investigated the impacts of corporate governance and firm specific characteristics on the practice of earnings management in East African security markets for ten (10) years from 2004-2013 by using correlation and multiple regression and panel data. According to this study, board independence, board size, type of auditors, and leverage have positive and significant influence whereas concentration of ownership, institutional ownership, firm size, performance and cash flow have a negative and significant influence on earnings management. Moreover, managers in East Africa also substitute accruals-based earnings management for real earnings management.

Omoye and Eriki (2014) have done a study to analyze the determinants of earnings management in companies quoted in Nigerian the stock exchange for the period of 2005 to 2010 by conducting descriptive statistics, correlation matrix, diagnostic test and binary regressions analyses of the data. The study revealed that board independence, firm size, type of auditor, industry class had a positive and significant influence while audit committee independence and board gender had a negative and significant influence earnings management, Board size and CEO shareholding were found to be statistically not significant in influencing the likelihood of earnings management levels. Soliman (2019) has conducted a study to identify the factors that affect earnings management in Banks listed in Egyptian stock market by using multiple regression model. According to the study, systematic risk, insolvency risk, and loan loss provision have a positive and significant influence whereas bank size and operational risk have insignificant influence on earnings management.

In Ethiopia, there are few studies conducted on the study area. Yimenu and Surur (2019) examined earning management in Ethiopian large manufacturing companies from agency and signaling theory perspectives for the period of 2009 to 2017. From agency theory proxies, leverage and audit quality had significant positive and negative impact respectively on earning

management. The finding for signaling theory proxies showed that, size of the firm had a positive significant relationship with earning management. Belay (2020) examined the level of earnings management and its determinant factors in Ethiopian non-financial corporate companies by using random-effects panel regression model. The result revealed that firm assets size, sales size, and profitability have positive and significant influence whereas firm age has negative and significant influence on earnings management practices of sampled firms. However, contrary to numerous findings, liquidity position and leverage status is not significantly influences.

Erena and Tehulu (2012) examined the impact of corporate governance mechanisms on earnings management through discretionary loan loss provision, using panel data of 10 banks for the period 2006 to 2010. Based on discretionary loan loss provision model and random effect GLS regression, the study found that education, experience and objectivity of internal auditor, audit committee meeting frequency, and active general board of directors are negatively and significantly associated with earnings management.

2.1.9. Conceptual Framework

Most previous researches tried to examine some variables as major determinants of the practice of earnings management level. This research focused on studying the major board and firm specific characteristics that critically influence the practice of earnings management in Ethiopian private banking Sector. From the literature reviewed above, the following schematic representation of the conceptual framework for this study is developed. It depicts the relationship between the dependent variable and independent variables. Earnings management, which is the dependent variable, is measured by discretionary loan loss provisions (DLLPs) as a proxy for earnings management, while the independent variables are board independence, board size, board gender, audit committee expertise, firm’s size, bank's profitability and leverage.

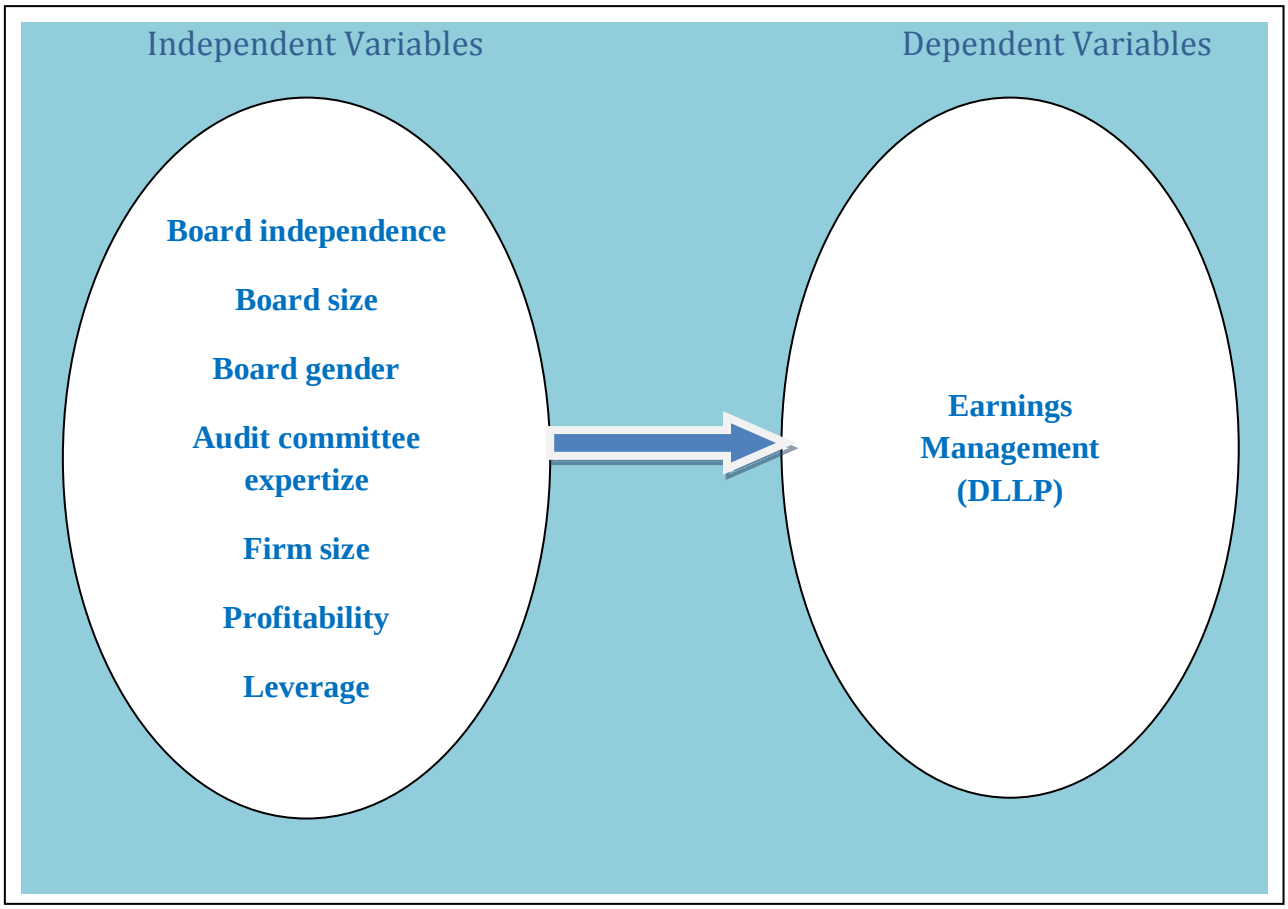


Figure 2.1. Conceptual framework

Source: Combined from Literatures

2.1.10. Conclusion and Research Gap

According to the literatures reviewed, a number of empirical studies are conducted on the factors that affect the level of earnings management in various countries. These studies examined various determinant factors of earnings management by using different research methodologies depending on the type of data, frequency and coverage. From these empirical studies, it is can be concluded that the determinants of the level of earnings management vary across countries and regions. However, there are no universally accepted research findings/results on the determinants of earnings management. Some of those studies argued that the main factors that affect the practice of earnings management are firm specific factors; whereas others claim that corporate governance mechanisms/board characteristics factors are the most important factors that explain

the level of earnings management. Even within firm specific and board characteristics, there is no consensus among scholars whether these factors affect earnings management positively, negatively or significantly. Some literatures simply examined the level of earnings management without deeply assessing the determinant factors. Therefore, there is a continuous debate on the key determinants of earnings management in different countries.

Numerous prior studies have been conducted to examine the extent of earnings management, and the determinant factors have focused on developed countries (Abdul Rahman & Haneem Mohamed Ali, 2006; Cudia & Dela Cruz, 2018; Dang et al., 2017; Donatiello et al., 2016; Francis & Schipper, 2011; Haniffa et al., 2006; Healy & Wahlen, 1999; Johari, Saleh, Jaffar, & Hassan, 2009; Sun et al., 2013; Xiong, 2016)). In developing countries, especially countries with no formal stock exchange market, such studies are uncommon and scarcely pursued. Furthermore, the effect of board and firm specific characteristics on the level of earnings management is contextual. Their effects vary across countries and industry. This is because of countries and industries differences in terms of economic, social, cultural, legal and political aspects. Policies, programs and strategies of any country or industry are unique and contextual to that country or industry. However, the previous researches encourage further research and the need for a more comprehensive study on the issue of factors influencing the practice of earnings management in the banking sector.

In Ethiopia, as far as the knowledge of the researcher is concerned, there are few related researches conducted in this area but most of these researches have entirely focused on non-financial sectors of the country rather than the banking sector. There is no empirical study in Ethiopia concerning the effects of both bank specific factors and board characteristics on the practice of earnings management. Hence, this study intends to address both the practical and theoretical gap of the effects of board and firm specific characteristics on earrings management of private commercial banks in Ethiopia.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter outlines the methodology that provides a detailed direction about the methods that the researcher used to conduct the research. Kothari (2004) defines research methodology as a way to systematically solve the research problem. A research methodology provides a framework or a blueprint for conducting a research (Dawson, 2002). Various techniques and methods used in analyzing the effects of board and firm specific characteristics on earnings management of private banks in Ethiopia. The aim of this chapter is therefore to provide arguments for the approaches that the researcher adopt in gathering and in the treatment of the data in order to test the research hypothesis. This chapter also describes the types and sources of data and the methods and techniques used in the estimation of the models.

3.1. Research Design

Research designs are plans and the procedures for research that span the decisions from broad assumptions to detailed methods of data collection and analysis (Creswell, 2009). Therefore, in order to achieve the objective stated in the preceding section, considering the nature of the problem and the research perspective, this study used quantitative research design. This is because the study tried to identify the relationship between board and firm specific characteristics and earnings management. The nature of the problem and objective of any study usually determine the type of research design adopted by researcher. If the problem is to identify factors that influence an outcome, the utility of an intervention or understanding the best predictors in outcomes, a quantitative research design is the best approach. Quantitative research design is a means for testing objectives and theories by examining the relationship among variables (Ibid). These variables, in turn, can be measured, typically on instruments, so that numbered data can be analyzed using statistical procedures. Therefore, based on the nature of the study the researcher adopted a quantitative research approach to understand and analyze the possible effects of board and firm specific characteristics on earnings management of private banks in Ethiopia.

3.2. Data Type and Data Collection Instruments

The study used secondary data sources. Secondary sources were obtained basically from the audited financial statements of Ethiopian private banks. Panel data techniques were employed on secondary data collected from the annual financial reports. The study used survey method of collecting data. The purpose of survey research is to generalize or makes claim from the sample to the population so that inferences can be made about some characteristic, attitude or behavior of the population (Creswell, 2009). Survey research involves acquiring information about one or more group of people perhaps about their characteristics, opinions, attitudes, or previous experiences.

The researcher selected survey design because surveys are relatively inexpensive and it enables to gather enough information, which may not available from other sources. Accordingly, the survey was carried out by means of a document review. The data related to a documentary analysis which is necessary to undertake this study were gathered from the audited financial statements of eight private banks for ten consecutive years (2010-2019), and the data were the audited financial statements particularly balance sheet and income statement, which mainly extracted from National Bank of Ethiopia.

3.3 Sampling Techniques and Sample Size Determination

The target populations for this research were the total number of Ethiopian private banks registered by National Bank of Ethiopia (NBE). As per NBE 2018/19 annual report, there are 16 private banks in the country. The study employed purposive sampling technique to select the required sample of banks. Purposive sampling is a non-probability sampling that conforms to certain criteria. Accordingly, the researcher employed judgmental sampling technique which is one of the purposive sampling techniques. Judgmental sampling offers the researcher to deliberately select items for the sample concerning the choice of items as supreme based on the selection criteria set by the researcher. The selection criteria set by the researcher was first the required banks have to be private banks operating in Ethiopia. Second, those private banks should have audited financial statements and annual reports for at least ten consecutive years (2010 to 2019) to allow the researcher to obtain sufficient data for calculating the representative data from each bank. Out of the total population, the researcher selected sample banks that were

in existence over the selected sample periods and whose published annual reports and audited financial statements were available and accessible over the time frame of the study.

Therefore, out of the sixteen private banks, the researcher judgmentally selected eight private banks. These are Awash International Bank, Bank of Abyssinia, Dashen Bank, Nib International Bank, United Bank, Oromia Cooperative Bank, Lion International Bank and Wegagen Bank. This is due to the fact that since the primary aim of this study is to examine the effect of board and firm specific characteristics on the level of earnings management in private banks of Ethiopia, it is better to make generalization for the banking sector of the country based on data drawn from sample banks which were much more experienced in the industry. Secondary data were collected from their 10 years (2010-2019) audited financial statements.

3.4. Data Analysis and Presentation Techniques

To reduce the illegibility, incompleteness, and inaccuracy of data, the raw data was filtered to make it useful for final use in the analysis. To solve the problems, the data collected was edited, coded and tabulated and summarized depending on the nature of the data. After the collection of data, the researcher implemented a number of statistical techniques and procedures that help to test the research hypotheses.

To establish a clear picture of the characteristics of the sample units, the study employed descriptive statistics for analysis. To determine the relationship among the variables and to test the hypothesis, correlation and multiple regression analysis were also used by meeting the Ordinary Least Square (OLS) assumptions of the linear regression model. This analysis helps to identify and analyze the effects of board and firm specific characteristics on earning management in Ethiopian private banks. The financial statements of sampled private banks for the period of 2010-2019 were analyzed using panel data model. Panel data embody information across both time and space. Importantly, a panel keeps the same individuals or objects and measures some quantity about them over time. The quantitative data analysis was undertaken by using EVeiws 9 statistical package and it included the descriptive statistics, correlation matrix analysis and panel data regression.

3.5. Model Specification

The goal of this analysis is to know the level to which earning management, which is measured by discretionary loan loss provisions (DLLPs), is affected by board independence, board size, board gender, audit committee expertise, firm size, bank's profitability, and leverage as explanatory variables by considering the ordinary least square (OLS) value, beta coefficient for the significant of the relation. Therefore, the following model is formulated for this research in order to test the research hypotheses developed.

The econometric specification is thus;

$$\boldsymbol{DLLP}\text{t} = \boldsymbol{\beta 0} + \boldsymbol{\beta 1 BINDPt} + \boldsymbol{\beta 2 BSZEt} + \boldsymbol{\beta 3 BGDRt} + \boldsymbol{\beta 4}\text{AUCOMEX}\boldsymbol{t} + \boldsymbol{\beta 5}\text{FSZE}\boldsymbol{t} + \boldsymbol{\beta 6 PROFt} + \boldsymbol{\beta 7 LEVt} + \boldsymbol{\varepsilon t}$$

Where:

DLLP = discretionary loan loss provision

BINDP =board Independence

BGDR = board gender

BSZE = board Size

FSZE= firm size

AUCOMEX = audit committee expertise

PROF = profitability

LEV = leverage

$\varepsilon t = error\ term$

$\beta o = The\ constant\ term$

$\beta 1, \beta 2, \beta 3, \beta 4, \beta 5, \beta 6$ and $\beta 7$ are the coefficient of the independent variables of the study

3.6. Definition and Measurement of Variables

In this study, the researcher used one dependent variable, earnings management, and seven independent variables namely; board independence, board size, board gender, audit committee expertise, firm's size, bank's profitability and leverage from most prominent and recent empirical studies. The selection measures for dependent variable (discretionary loan loss provision) and independent variables (board and firm-specific characteristics) are detailed as follows.

3.6.1. Dependent Variable

This study used earnings management as a dependent variable. It is measured by discretionary loan loss provisions (DLLPs). DLLPs are the residuals (the error term) from the loan loss provision estimations model. Loan loss provision estimations are based on judgments of bank managers and reflect the expected losses of originating and holding loans during the period; thus, LLPs are vulnerable to manipulation. However, not all LLPs are subject to manipulation since some parts of LLPs are appropriately adjusted on a regular basis. This part of LLPs is called non-discretionary loan loss provision (NLLPs).

Various models have been advanced by researchers in identifying and estimating the accruals that is discretionary in the banking sector. Most of these models largely emanate from Beatty, Ke, and Petroni (2002) and Nichols et al. (2008) who used estimated residuals of LLPs regression model as a measure of discretionary loan loss provision. The discretionary loan loss provision is the error term which is the difference between loan loss provision and NLLPs. The regression equation, therefore is as follows:

$$\frac{\mathbf{LLPi,t}}{\mathbf{TLi,t-1}} = \boldsymbol{\alpha 0} + \boldsymbol{\alpha 1}\left(\frac{\mathbf{\Delta LOANi,t}}{\mathbf{TLi,t-1}}\right) + \mathbf{a2}\left(\frac{\mathbf{LLAi,t-1}}{\mathbf{TLi,t-1}}\right) + \boldsymbol{\alpha 3}\left(\frac{\mathbf{GROWTHi,t}}{\mathbf{TLi,t-1}}\right) + \boldsymbol{\alpha 4}\ \mathbf{LNTAi,t} + \boldsymbol{\alpha 5}\ \mathbf{INFLi,t} + \boldsymbol{\alpha 6}\left(\frac{\boldsymbol{OUTLOANi,t}}{\boldsymbol{TLi,t-1}}\right) + \boldsymbol{\varepsilon i} \quad (1)$$

Where: LLPi,t = Loan Loss Provision for firm i at time t.

i = bank index

t = year index

TLi, t-1 = total loan

ΔLOANi,t = change in total loans

LLAi,t-1 = total allowance for loan losses

GROWTHi, t = change in total revenue

LnTAi,t = natural logarithm of total assets

INFLi, t = general inflation rate

OUTLOANi, t = outstanding loans

(εi) = the error term

(αo)= the intercept.

To estimate the parameters of the variables (αo, α1, α2, α3, α4, α5, α6) in equation (1), multiple regression analysis was used. Then nondiscretionary loan provision is estimated using these estimated parameters. Earnings management is the residual of the regression from equation (1).

$$\frac{\mathbf{NLLPi,t}}{\mathbf{TLi,t-1}} = \boldsymbol{\alpha 0} + \boldsymbol{\alpha 1}\left(\frac{\mathbf{\Delta LOANi,t}}{\mathbf{TLi,t-1}}\right) + \mathbf{a2}\left(\frac{\mathbf{LLAi,t-1}}{\mathbf{TLi,t-1}}\right) + \boldsymbol{\alpha 3}\left(\frac{\mathbf{GROWTHi,t}}{\mathbf{TLi,t-1}}\right) + \boldsymbol{\alpha 4}\ \mathbf{LNTAi,t} + \boldsymbol{\alpha 5}\ \mathbf{INFLi,t} + \boldsymbol{\alpha 6}\left(\frac{\boldsymbol{OUTLOANi,t}}{\boldsymbol{TLi,t-1}}\right) \quad (2)$$

Where:

NLLPi, t = non-discretionary loan loss provision

Discretionary loan loss provision (DLLP) can be estimated by deducting equation (2) from equation (1) as follows:

$$DLLPi,\ t = LLPi,t - NLLPi,t \quad (3)$$

Where:

DLLPi, t = Discretionary LLP

Thus, the absolute value of DLLPs is used as a measure of the degree of earnings management. The higher the value of the $|DLLPs|$, the higher the present of earnings manipulation via loan loss provision. This research focuses on absolute DLLP rather than the signed values of the accruals because the interest is on the magnitude rather than the direction of the accruals. The signed value only gives an insight into whether earnings are being managed upwards or downwards.

3.6.2. Independent Variables

This subsection describes the independent variables that are used in the econometric model to estimate the dependent variable. Following prior researches towards the effects of board and firm's specific characteristics on earnings management, the independent variables are board independence, board size, board gender, audit committee expertise, firm's size, bank's profitability and leverage.

3.7. Measurement of Variables

Variables	Symbol	Measurement	Type
Earnings management	EM	Discretionary Loan Loss Provision	Dependent
Board independence	BINDP	The proportion of outside directors on board	Independent
Board size	BEX	The total number of board members	Independent
Board gender	BGR	The proportion of female directors on the board	Independent
Firm's size	FSZE	Natural Log of total assets	Independent
Audit committee expertise	AUCOMEX	A dummy variable =1 if the is accounting and auditing professional(s) and 0 otherwise	Independent
Profitability	PROF	**Profitability ratio** $= \frac{\text{Net income}}{\text{Total assets of bank's}}$	Independent
Leverage	LEV	**Leverage ratio** $= \frac{\text{Total debt}}{\text{Total Assets of bank's}}$	Independent

Table 3.1: Summary of variables definitions.

3.8. Model Selection: Random Effect versus Fixed Effect Models

This study used panel data model where the random effect or fixed effect models could be used to estimate the coefficients of variables. The best alternative to make a choice between fixed effects and random effects model is conducting Hausman specification test. In this study, the Hausman specification test was utilized to decide which model is appropriate to fit the sample data. Hausman specification test is the classical test of whether the fixed or random effects model should be used. Running a Hausman specification test at five percent level enables the researcher

to choose between fixed effects and random effects models. Fixed effects model is appropriate if the probability of Hausman p-value is less than 0.05, otherwise random effects could be used.

3.9. Tests for the Classical Linear Regression Model (CLRM) Assumptions

3.9.1. The Normality (Bera- Jaque) Test

The Jarque-Bera normality test was used to determine whether the regression errors are normally distributed. It is a joint asymptotic test whose statistic is calculated from the skewness and kurtosis of the residuals. A normal distribution is not skewed and is defined to have a coefficient of kurtosis nearest to 3 with a be bell-shaped histogram and the Jarque-Bera statistic would not be significant. In Bera-Jarque normality test, p-value should exceed 0.05 in order not to reject the null of normality at the 5% level (Brooks, 2008).

3.9.2. Autocorrelation Test

Testing for autocorrelation helps to identify any relationships that may exist between the current values of the regression residuals and any of its lagged values. The assumption of no serial autocorrelation implies that the errors associated with one observation are not correlated with the errors of any other observation. For this purpose, Durbin-Watson (DW) measure was used. According to Brooks (2008), DW has two critical values: an upper critical value and a lower critical value, and there is also an intermediate region where the null hypothesis of no autocorrelation can neither be rejected nor not rejected. The null hypothesis is rejected and the existence of positive autocorrelation presumed if DW is less than the lower critical value; the null hypothesis is rejected and an existence of negative autocorrelation is presumed if DW is greater than 4 minus the lower critical value; the null hypothesis is not rejected and no significant residual autocorrelation is presumed if DW is between the upper critical value and 4 minus the upper limits; the null hypothesis is neither rejected nor not rejected if DW is between the lower and the upper limits, and between 4 minus the upper and 4 minus the lower limits.

3.9.3. Heteroscedasticity Test

The test for Heteroscedasticity investigates whether the variance of the errors in the model is constant or not. Accordingly, to perform a heteroscedasticity test the popular white test was used. In this test, if the p-value is very small, less than 0.05 the null hypothesis of the variance of the residuals is homogenous must be rejected. According to Brooks (2008) this test is the most popular because it makes few assumptions about the likely form of the heteroscedasticity. Gujarati (2004) indicates that Heteroskedasticity is a systematic pattern in the errors where the variances of the errors are not constant. Similarly, Brooks (2008) noted that if the errors do not have a constant variance, they are said to be heteroscedastic.

3.9.4. Multicollinearity Test

Multicollinearity means that there is linear relationship between explanatory variables which may cause the regression model biased (Gujarati, 2004). When there is strong correlation between variables it becomes difficult to identify the impact of individual independent variables. Thus, in order to examine the possible degree of multicollinearity among the explanatory variables, correlation matrixes of the selected explanatory variables was used. Usually the multicollinearity exists if the correlation between two independent variables is more than 0.75 (Malhotra, 2007). Kennedy (2008) also suggests that any correlation coefficient above 0.7 could cause a serious Multicollinearity problem leading to inefficient estimation and less reliable results. This indicates that there is no a single agreed upon measure of Multicollinearity.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

This chapter analyzes, discusses and presents the empirical results pertaining to the effects of board and firm specific characteristics on the possibility of firms' engagement on earnings management practice in Ethiopian private commercial banks. It presents the descriptive statistics, correlation analysis, model specification test, the CLRM assumptions test and multiple panel linear regression analysis of the study variables. The descriptive statistics summarizes the main features of the study variable such as mean, maximum, minimum and standard deviation. The correlation analysis shows the degree of association between the study variables. The model selection test is necessary to determine whether the fixed effect or random effect approach is appropriate for the study. The CLRM assumptions test is performed before utilizing OLS estimation in order to validly test the hypothesis and estimate the coefficient. It presents the results of the panel data regression analysis results. In this thesis, earnings management, measured by a proxy of discretionary loan loss provisions, is dependent variable whereas, board and firm specific characteristics are independent variables.

4.1. Summary of Descriptive Statistics

The study examined the effects of board and firm specific characteristics on the level of earnings management for eight private banks over the time period from 2010-2019. The descriptive statistics of the dependent and explanatory variables for the sample banks were summarized in table 4.1. The total observation for each dependent and explanatory variable was 80 (data for eight private banks for the time period covering 2010 to 2019 years). The following summary of descriptive statistics of all dependent and independent variables gives the general distribution of the data set. It measures the mean distribution, the standard deviations, minimums and maximums of the wide range of earnings management, measured by a proxy of discretionary loan loss provisions and seven explanatory variables (audit committee expertize, board gender diversity, board independence, board size, firm size, leverage and profitability).

Table 4.1. Descriptive Statistics for Continuous Variables

	Mean	Median	Standard Deviation	Maximum	Minimum
DLLP	0.53007	0.53029	0.01820	0.56475	0.46735
AUCOMEXP	0.41250	0.00000	0.49539	1.00000	0.00000
BGR	0.12650	0.11000	0.11369	0.33000	0.00000
BINDP	0.52075	0.22000	0.42639	1.00000	0.11000
BSZE	10.26250	11.0000	1.26034	13.00000	9.00000
FSZE	20.98098	21.13109	1.54190	223.03588	12.63979
LEV	0.87147	0.87574	0.04748	0.95403	0.62000
PROF	0.02992	0.02726	0.01094	0.06075	0.01086

Source: Own computation using Eviews 9

Summary of descriptive statistics in table 4.1, above disclosed that, average earnings management of the sampled Ethiopian private banks for study period was 0.53. The mean 0.53 indicates that about 53 percent of the private banks in Ethiopia engaged in earnings management practice. Earnings management for the sample period was ranged from 47 percent to 56 percent with a standard deviation of 1.8 percent. The standard deviation of 1.8 percent indicates that earnings management variation between the selected banks during sample period was 1.8 percent.

Table 4.1, indicates the mean, median, maximum, minimum and standard deviation of audit committee expertize when it was measured as dummy variable by assigning one if there is at least one financial expert in the audit committee and zero otherwise. This independent variable had mean, maximum and minimum 0.4125, 1.0000 and 0.0000 respectively for the sampled private banks. The mean 0.4125 implies that about 41 percent of the audit committee members are financial experts in the sampled private banks. The standard deviation was 0.49539 which indicates that the variation in audit committee expertize among the sample private banks was 50 percent.

Regarding to independency of board of directors (i.e. measured by dividing total number of board members by number of independent non-executive external board members for each

company) had mean value of 0.52075 with standard deviation of 0.42639. Maximum and minimum values are 100 percent and 11 percent respectively. This indicates that, on average 52 percent of board of directors in private banks were independent non-executive external board members with a variation 43 percent among private banks in Ethiopia.

The summary statistics showed bard gender had a mean value of 0.12650 which implies that about 13 percent of the board members are female directors in private banks of Ethiopia. Minimum and maximum statistical values for this particular explanatory variable were 0.3300 and 1.000 respectively. It had a standard deviation of 11 percent, which means that, there was relatively low variation in board gender diversity during the study period. The descriptive statistics also provided that board size had a mean value of 10 which implies that private banks in Ethiopia had around 10 board members. Board size for the sample period was ranged from 9 to 13 with a standard deviation of 126 percent. This shows that board size varies by 126 percent in private banks of Ethiopia during the study time period.

Table 4.1, above, portrayed that leverage had a mean value of 0.87147 with the standard deviation of 0.04748 percent. This means that more than 87 percent of the banks in Ethiopia were financed by debts. This highlights that debt ratio was high in this study. Leverage for the sample period was ranged from 62 percent to 95 percent with a standard deviation of 5 percent. On the other hand, the mean of the firms' size, which was represented by the natural logarithm of total assets, was 20.98098 with a standard deviation of 154 percent. Natural logarithms of total assets for the sample were ranged from 12.639 to 23.036. The maximum value indicating the large private commercial bank in Ethiopia and the minimum value was some of small private commercial banks in Ethiopia.

Finally, table 4.1 provided that profitability registered a mean value of 3 percent indicating a return on assets of 3 percent, and median of 2.7 percent with a standard deviation of 1.1 percent and profitability for the sample was ranged from 1.1 percent to 6 percent. This shows the existence of great variation in profit among banks in Ethiopia.

4.2. Pearson Correlation Analysis

In this section, the association of dependent variable with independent variables were analyzed and discussed by using a correlation matrix. The correlation analysis was made aiming to see the extent of strength or weakness of relationship among variables. Correlation analysis could have three important advantages. First, it tells whether the relationship between the dependent variable is positive or negative. Second, it tells whether the relationship is strong or not. Third, it tells about whether there is multicollinearity problem or not.

According to Brooks (2008), the correlation between two variables implies that they are being treated in completely systematical way (Similar manner). This implies an existence of evidence for linear relationship between the two variables which does not mean a change in one variable causes in a change in another. Values of the correlation coefficient are always ranged between positive one and negative one. A correlation coefficient of positive one indicates that a perfect positive association between the two variables; while a correlation coefficient of negative one indicates that a perfect negative association between the two variables. A correlation coefficient of zero, on the other hand, indicates that there is no relationship between the two variables. The table below presents the correlation between the dependent and independent variables.

Table 4.2. Correlation matrix of dependent and independent variables

	DLLPS	AUCOMEXP	BGR	BINDP	BSZE	FSZE	LEV	PROF
DLLPS	1.0000	-0.6185	-0.4738	-0.1425	0.0888	0.6936	0.6727	-0.5707
AUCOMEXP	-0.6185	1.0000	0.3676	0.0788	-0.2162	-0.3652	-0.3647	0.3281
BGR	-0.4738	0.3676	1.0000	-0.0522	-0.2859	-0.3002	-0.1405	0.2508
BINDP	-0.1425	0.0788	-0.0522	1.0000	0.1452	0.0908	0.0187	-0.0306
BSZE	0.0888	-0.2162	-0.2859	0.1452	1.0000	0.0339	-0.1424	-0.0524
FSZE	0.6936	-0.3652	-0.3002	0.0908	0.0339	1.0000	0.6143	-0.4310
LEV	0.6727	-0.3647	-0.1405	0.0187	-0.1424	0.6143	1.0000	-0.3212
PROF	-0.5707	0.3281	0.2508	-0.0306	-0.0524	-0.4310	-0.3212	1.0000

Source: Regression result of Eviews 9

Table 4.2, shows the correlation between the explanatory variable and earnings management in this study. To find the association of the independent variables with the dependent variable,

Pearson product moment of correlation coefficient was used. Accordingly, earnings management was correlated at -0.6185, -0.4738, -0.1425, 0.0888, 0.6936, 0.6727 and -0.5707 with audit committee expertize, board gender, board independence, board size, firm size, leverage and profitability respectively. This indicates that almost all the independent variables correlated with earnings management. The correlation result shows that earnings management is negatively correlated with audit committee expertize, board gender, board independence, and profitability. This implies that as audit committees expertize, board gender, board independence, and profitability increase, earnings management moves to the opposite direction. Board size, firm's size and leverage had a positive correlation with earnings management. This shows that earnings management moves in the same direction with board size, firm's size and leverage.

4.3. Model Selection Test

The first step before running a regression analysis is to specify whether the random effect or fixed effect models could be used to estimate the coefficients of variables. There are two broad classes of panel estimator approaches that can be employed in financial research: fixed effects models (FEM) and random effects models (REM) (Brooks 2008). Fixed effect model allows the heterogeneity or individuality that may exist among companies by allowing each company to have its own intercept value which is time invariant.

An alternative to the fixed effects model is the random effects model. The random effects approach proposes different intercept terms for each entity and again these intercepts are constant over time, with the relationships between the explanatory and explained variables assumed to be the same both cross-section ally and temporally.

In this study, the Hausman specification test is utilized to decide which model is appropriate to fit the sample data. Hausman specification test is the classical test of whether the fixed or random effects model should be used. Running a Hausman specification test at five percent level enables the researcher to choose between fixed effects and random effects models. Fixed effects model is appropriate if the probability of Hausman p-value is less than 0.05, otherwise random effects could be used. Based on Haussmann test, the hypothesis is:

H0: Random effect model is appropriate

H1: Fixed effect model is appropriate

The null hypothesis will reject if p-value from Haussmann test is significant at 5% level and fixed effect model will appropriate estimation model for panel data in the study.

Table 4.3. Correlated Random Effects - Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	12.540274	7	0.0841

Source: Own computation using Eviews 9

Table 4.3 shows that the p-value of Hausman test was insignificant at 5% level. The probability of Hausman p-value is greater than 0.05. Hence, the researcher used random effect model.

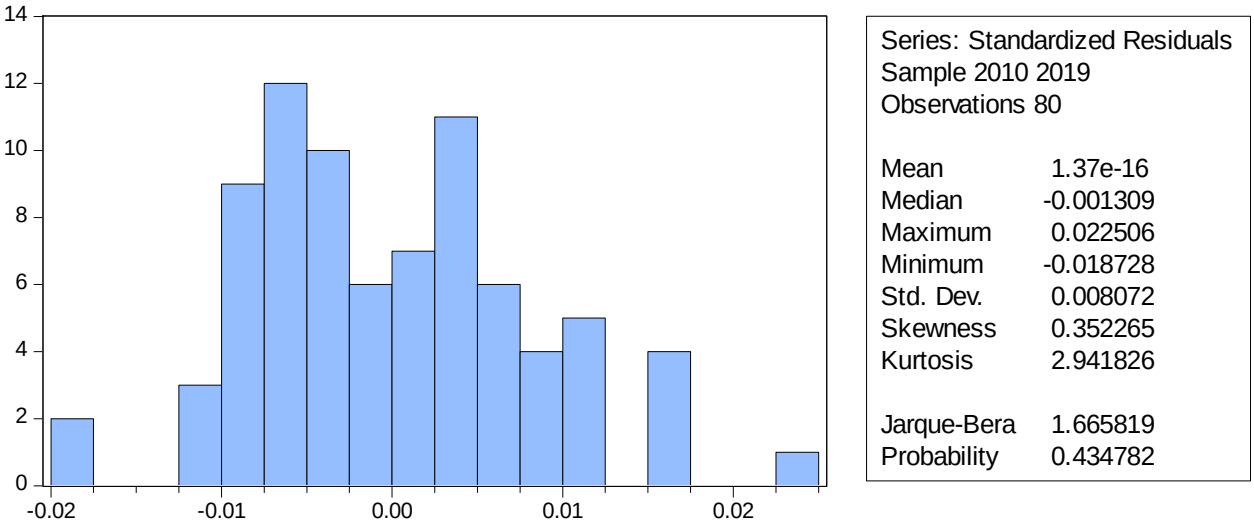
4.4. Tests for the Classical Linear Regression Model (CLRM) Assumptions

Different tests were run to make the data ready for analysis and to get reliable output from the research. These tests were made to sure that the classical linear regression model assumption is violated or not and to get reliable output from the study. In this study an attempt is made to test normality, heteroscedasticity, autocorrelation, and multicollinearity assumptions are violated or not, i.e. the OLS assumptions, are fulfilled when the explanatory variables are regressed against the dependent variables. Accordingly, the following sub-section presents tests of CLRM.

4.4.1. The Normality (Jarque- Bera) Test

One of the assumptions of linear regression analysis is that the residuals are normally distributed, at mean zero and standard deviation of one. To test the normality assumption whether it is violated or not in this study, the researcher applied the Jarque-Bera (JB) test. A normal distribution is not skewed and is defined to have a coefficient of kurtosis nearest to 3 with a be bell-shaped histogram and the Jarque-Bera statistic would not be significant. In Bera-Jarque normality test, p-value should exceed 0.05 in order not to reject the null of normality at the 5% level.

Figure 4.1 Normality Test: Residual



Source: Result of Eviews 9

Figure 4.1 of the normality test for this study shows that the kurtosis is close to 3, and the Jarque-Bera statistic has a P-value of 0.434782 which was greater than 0.05 implying that the data were consistent with a normal distribution assumption.

4.4.2. Multicollinearity Test

In order to examine the possible degree of multicollinearity among the explanatory variables, correlation matrixes of the selected explanatory variables were presented in table 4.4. Usually the multicollinearity exists if the correlation between two independent variables is more than 0.75 (Malhotra, 2007). In order to examine the possible degree of multicollinearity among the explanatory variables, correlation matrixes of the variables were presented in table below. According to the result, there were no such high correlations between the explanatory variables. Thus, there is no problem of multicollinearity for this study.

Table 4.4. Correlation result between independent variables

	AUCOMEXP	BGR	BINDP	BSZE	FSZE	LEV	PROF
AUCOMEXP	1.0000						
BGR	0.3676	1.0000					
BINDP	0.0788	-0.0522	1.0000				
BSZE	-0.2162	-0.2859	0.1452	1.0000			
FSZE	-0.3652	-0.3002	0.0908	0.0339	1.0000		
LEV	-0.3647	-0.1405	0.0187	-0.1424	0.6143	1.0000	
PROF	0.3281	0.2508	-0.0306	-0.0524	-0.4310	-0.3212	1.0000

Source: Own computation using Eviews 9

4.4.3. Autocorrelation Test

As noted in Brooks (2008) this is an assumption that the covariance between the error terms over time is zero. In other words, it is assumed that the errors are uncorrelated with one another. If the errors are not uncorrelated with one another, it would be stated that they are 'auto correlated' or that they are serially correlated.

The most popular test to detect the existence of autocorrelation is Durbin-Watson (DW). According to Chris Brooks (2008), DW has two critical values: an upper critical value (dU) and a lower critical value (dL), and there is also an intermediate region where the null hypothesis of no autocorrelation can neither be rejected nor not rejected.

The hypothesis for the autocorrelation test was formulated as follow:
H0: There is no autocorrelation problem in the model.
H1: There is autocorrelation problem in the model.

The null hypothesis is rejected and the existence of positive autocorrelation presumed if DW is less than the lower critical value; the null hypothesis is rejected and the existence of negative autocorrelation presumed if DW is greater than 4 minus the lower critical value; the null hypothesis is not rejected and no significant residual autocorrelation is presumed if DW is between the upper and 4 minus the upper limits (Brooks, 2008).

To test this assumption, the DW statistics value in the main regression table should be used. The regression result in table 4.6 below indicates that, Durbin-Watson statistics value was 1.86541. With 80 number of observations and 7 explanatory variables excluding the constant term, the relevant lower and upper critical values for the test are dL=1.32, dU=1.682, 4 - dU = 4-1.683=2.317 and 4 – DL= 4- 1.312= 2.688, respectively. Thus the Durbin-Watson test statistic value 1.86541 is clearly between the upper limit (dU) and 4 minus the upper limits (dU). Therefore, there is no evidence for the existence of autocorrelation in the study. Thus, the null hypothesis is not rejected.

4.4.4. Heteroscedasticity Test

It is assumed that the variance of the errors is constant; this is known as the assumption of homoscedasticity. If the errors do not have a constant variance, they are said to be Heteroscedasticity. It is a test made to check whether error terms variance is constant (homoscedasticity) or not (heteroscedasticity). To test for the presence of heteroscedasticity, the popular White test was employed in this study. The hypothesis for the Heteroscedasticity test was formulated as follow:

H0: There is Homoscedasticity in the model.

H1: There is Heteroscedasticity problem in the model.

Decision Rule: Reject **H0** if p-value is less than 5% significance level. Otherwise, do not reject **H0**.

Table 4.5. Heteroskedasticity Test: White

F-statistic	0.760458	Prob. F(34,45)	0.7954
Obs*R-squared	29.19243	Prob. Chi-Square(34)	0.7023
Scaled explained SS	22.95808	Prob. Chi-Square(34)	0.9245

Source: Own computation using EViews 9

The result of the White test above indicates that the test statistics, both the F-statistic and Chi-Square versions of the test statistic, gave the same conclusion that there is no evidence for the presence of heteroscedasticity in this particular study, since the p-values are considerably greater

than 0.05. Therefore, the null hypothesis that the variance of the errors is constant (homoscedasticity) should not be rejected.

4.5. Regression Analysis on the Effects of Board and Firm Specific factors on Earnings Management of Private Banks in Ethiopia

Haussmann test to determine appropriate estimation model (i.e. fixed effect or random effect) assure that random effect model was suitable estimation model for this study. Therefore, final data for regression were ran using random effect panel regression model.

Regarding to how well does the model containing the explanatory variables that was proposed actually explain variations in the dependent variable; quantities known as goodness of fit statistics that, test how well the sample regression function fits the data i.e., how close the fitted regression line is to all of the data points taken together is used (Brooks, 2008).

R-squared is probably the most popular measure of goodness of fit in statistical modeling. There is a natural appeal for a measure that can be computed for a fitted model, takes values between 0 and 1, becomes larger as the model fits better, and provides a simple and clear interpretation. Therefore, final data for regression were ran using random effect panel regression model, and summary of the result of this model is presented below in table 4.6, from where analysis and discussion of the result was given.

Table 4.6. Random Effect Regression Result

Dependent Variable: DLLPs
Method: Panel Least Squares
Date: 05/22/21 Time: 15:36
Sample: 2010 2019
Periods included: 10
Cross-sections included: 8
Total panel (balanced) observations: 80

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.365973	0.024924	14.68340	0.0000

AUCOMEXP	-0.008438	0.002227	-3.788989	0.0003
BGR	-0.033237	0.009164	-3.626829	0.0005
BINDP	-0.007541	0.002210	-3.412219	0.0011
BSZE	0.000472	0.000803	0.588224	0.5582
FSZE	0.003040	0.000820	3.708239	0.0004
LEV	0.128921	0.025899	4.977872	0.0000
PROF	-0.379204	0.095344	-3.977213	0.0002

Weighted Statistics

R-squared	0.803359		
Adjusted R-squared	0.784241		
F-statistic	42.02134	Durbin-Watson stat	1.865410
Prob(F-statistic)	0.000000		

Source: Regression output of Eviews 9

Table 4.6 above shows the ordinary least squares regression result conducted using Eviews 9. From this random effect model regression output, it can be observed that the coefficient of determination of R-squared was 80 percent. This result implies that 80 percent of the outcome of the dependent variable (earnings management) is jointly explained by the selected independent variables (audit committee expertize, board gender diversity, board independence, board size, firm's size, leverage and profitability). The remaining 20 percent outcomes/changes in earnings management were caused by other factors that were not included in the model. This indicates that the model is almost more than an average fit the data from sampled companies.

Regarding the adequacy of the model, the F-test which measures the existence of linear relationship between the dependent and independent variable also indicates that a highly significant relationship exist between the variables. In addition, the observed value of DW was 1.86541 shows the absence of serial correlation in the regression results. Therefore, the model is good model and can be used to draw significant suggestions.

According to the regression result of random effect model in table 4.6, board size, leverage and firm's size had positive effect while the remaining four explanatory variables (audit committee expertize, board gender diversity, board independence, and profitability) had negative effect on the level of earnings management of private banks in Ethiopia.

4.5.1. The Effect of Audit Committee Expertize on Earnings Management

According to the panel least square regression result in table 4.6, audit committee expertize (AUCOMEXP) had 0.0003 p-value and -0.008438 coefficient which implies its significant and negative effect on the possibility of firm's engagement in earnings management practice in private banks of Ethiopia. This means an audit committee with members who are knowledgeable in financial and management accounting would improve the quality of financial reporting and make it difficult for management to indulge in earnings management practice. An audit committee consisting financially-literate members is able to read and understand fundamental financial statements and to evaluate and analyze financial information. The finding was consistent with the researcher expectation on the effect of audit committee expertize on earnings management. Therefore, the working hypothesis, which suggested that audit committee expertize has a significant effect on earnings management, is not rejected.

This study finding was also consistent with the agency theory, which advocates that audit committee expertize enhances the interest alignment of managers and shareholders of the firm. The separation of control and ownership has led to conflict of interest between managers and shareholders. This necessitates the existence of an audit committee. Furthermore, this finding is supported by existing literatures. Among the various previous studies, empirical studies conducted by Bédard and Gendron (2010), Badalato *et al.*, (2013), Salterio (2001) and Sharma and Kuang, (2014) shows that there is a significant and negative relationship between audit committee expertize and earnings management. Expertise in auditing, accounting and internal control, form an important factor of audit committee effectiveness. It helps AC members to identify and ask knowledgeable questions that challenge management and external audit to a greater extent of financial reporting quality.

4.5.2. The Effect of Board Gender Diversity on Earnings Management

Board gender diversity was considered to be one of the key factors that can affect earnings management of private banks in Ethiopia. The results of the regression analysis shown in Table 4.6 shows that board gender diversity had 0.0005 p-values and -0.033237 which indicates a statistically significant and negative relationship between board gender and the probability of firm's engagement in earnings management practices. According to the regression result, an increase in the number of female directors in the firm's board discourages high earnings management practices. The result was consistent with the agency theory which stipulates that corporate governance mechanisms reduce the problem of conflict of interest between the principals and agents. This finding was also conformed to the working hypothesis of the study, which suggests that board gender has significant effect on earnings management. Hence, there is no evidence to reject the working hypothesis.

This finding conforms to the researcher expectation that more female in firm's board discourage high earnings management practices. This finding is consistent with the work of Gallego, Garcia & Rodriguez (2010), Clikeman et al (2001), Fan et al (2019), Kouiab and Almulhim (2019), Omoye (2019), and Cudia (2019) Oscar and Daniel (2013 that show that board gender is relevant in reducing fraud and earnings management. Female board members have greater risk aversion and higher ethical standards on their decisions. Moreover, female board member improves board monitoring and hence prevents earnings management to a larger extent. This provide evidence to accept the suggested hypothesis, which suggests that firms board gender representation and earnings management levels have a significant and negative relationship.

4.5.3. The Effect of Board Independence on Earnings Management

Board independence in this study was measured as the ratio of the number of outside directors to total board members. The regression result indicates that board independence had 0.0011 p-values and -0.007541 coefficient. This implies that board independence had statistically significant and negative effect on earnings management of Ethiopian private banks. The regression result shows that the level of earnings management decreases when the bank has an independent board. Therefore, the working hypothesis of the research, board independence has significant effect on earnings management, is not rejected.

The result of this study was consistent with the agency theory and existing literatures. Empirical studies supporting the researcher's findings of a significant negative relationship between board independence and earnings management include among others Dechow, Sloan and Sweary (1996), Ball, Kothari and Robin (2000), Agrawal & Chadha (2005), Cudia et al (2018), Klien (2002), Ashbough, Collins & Lafond (2006) and Gulzar (2011).

4.5.4. The Effect of Board Size on Earnings Management

Board size was also considered as one of the key factors that can affect earnings management of private banks in Ethiopia. According to the regression analysis results of the above table 4.6, board size had a regression coefficient of 0.000472, and P-value of 0.5582 which indicates a statistically insignificant and positive relationship with the probability of firm's to adopt high earnings management strategy. The p-value shows that board size has no significant effect on the level of earnings management. The regression result was inconsistent with the agency theory and with expectation of the researcher on the effect of board size on earnings management in private banks of Ethiopia. Therefore, the working hypothesis, which suggests that firm's board size has significant effect on the level of earnings management, is rejected.

However, the insignificant relationship between board size and the probability of firms' engagement in earnings management practice was consistent existing literatures. Among others, empirical studies conducted by Abbott, Parker and Peters (2004), Banderlipe (2009), Jamaludin, Sanusi, and Kamaluddin (2015), revealed that board size deemed to be an insignificant predictor of an entity's tendency to engage in earnings management practice.

4.5.5. The Effect of Firm Size on Earnings Management

Firm size was also considered as another determinant factor of earnings management of private commercial banks in Ethiopia. It is measured as the natural logarithm of the firm's total assets. The random effect regression result indicates that bank size had 0.0004 p-value and 0.003040 coefficient which implies that firm size had statistically significant and positive effect on earnings management. This means that firm size is positively related to high earnings management. This finding supports the views that large firms are more likely to manage earnings than small firms (Bartan & Simko, 2002, and Myers & Skinner, 2000). The result was in accordance with the working hypothesis which suggests that firm's size has significant effect on

the level of earnings management. Therefore, there is no evidence to reject the working hypothesis.

4.5.6. The Effect of Leverage on Earnings Management

Financial leverage is a measure of debt financing that banks use. In this study, it is measured by the ratio of total liabilities to total assets. The regression result of random effect model as reported above shows that financial leverage had 0.0000 p-value and 0.128921 coefficient which implies statistically significant positive effect on the possibility of firm's engagement in earnings management in private banks of Ethiopia. The significant result indicates that the suggested hypothesis of the study is not rejected since the p-value is lower than 0.05. This implies that, earnings management will be influenced by the companies' debt ratio and there is no evidence to reject the hypothesis of the study that leverage has a significant effect on earnings management.

The finding is consistent with agency theory that companies with higher leverage have higher incentives to engage in earnings management. As the firm's level of debt increases, it can be confronted with varying contractual restrictions, debt covenants, and other arrangements. Thus, it is expected that managers would exercise their discretion in reporting earnings in these cases in order to avoid possible costs and conflicts due to non-compliance with debt-related agreements and arrangements.

This regression result is also consistent with some existing findings in the literature. A study by Bassiouny (2016), Cudia et al (2016), Fields et al (2001), and Fung and Good win (2013) have revealed that leverage has statistically significant and positive effect on the possibility of firms' engagement in the practice of earnings management.

4.5.7. The Effect of profitability on Earnings Management

The regression result above shows that profitability had 0.0002 p-value and -0.379204 coefficient, which implies a statistically significant and negative effect on the possibility of firm's engagement in the practice of earnings management at 5% significance level. This implies that less profitable firms are more likely to engage in earnings management than more profitable firms. This is consistent with a risk-seeking behavior since it gives them clearer incentives to

manipulate reported earnings. In this case, the incentive comes in improving the firm's image to its stakeholders.

The finding conforms to the expectation of the researcher and consistent with the signaling theory and consistent with the existing findings in the literature. Prior studies conducted by Chen et al (2001), Kapoor and Goes (2017), Alaneeri (2018), and Khodadadi and Janjani (2011) have the same finding on the effect of profitability on the possibility of firm's engagement in earnings management. Therefore, the research hypothesis, which suggested that profitability has significant effect on earnings management, is not rejected.

To sum up, this chapter presented, analyzed, interpreted and discussed the results of the documentary analysis using the appropriate tools and techniques of data analysis and presentation. Accordingly, the chapter discussed the descriptive analysis, correlations between the variables, tested the different assumptions of the Classical Linear Regression Model and regressions analysis. The chapter demonstrated how the independent variables influence the dependent variable. The regression result indicated that audit committee expertize, board gender , board independence, leverage and profitability were statistically significant factors that affect the probability of firms' engagement in earnings management practice in private banks of Ethiopia. However, the result indicated that board size was not a significant factor that affects the level of earnings management of private banks in Ethiopia.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

In the preceding chapters, different theoretical perspectives and empirical analysis were analyzed in order to have a better understanding on the research problem, to know what was done on it in previous, and which part needs further investigation. Based on documentary analysis, the results of the regression analysis were interpreted and discussed. Based on the main findings of the study, this chapter deals with the conclusion and possible recommendations.

5.1. Conclusion

Earnings management has attracted much attention from policymakers and regulators in the last years following several financial scandals occurred due to artificial earnings management. Questions as why managers manipulate earnings, how they do so and for what purpose, have been widely studied in the previous empirical literatures. However, most of these studies have been conducted in developed countries. There is no consensus among the prior empirical studies on their findings on the effects of board and firm specific factors on earnings management. The factors and extent of the level of earnings management vary across countries and regions.

The main objective of this study was to identify and measure the effects of board and firm specific characteristics on the possibility of firms' engagement on earnings management in private banks of Ethiopia by using quantitative research method and multiple regression analysis. In doing so, previous studies on earnings management have been reviewed and it is summarized that both board and firm specific factors are important factors that affect the level of earnings management practice. The major board specific factors assumed in this research are audit committee expertize, board gender diversity, board independence and board size whereas firm specific factors include firm's size, leverage and profitability.

According to the regression result of random effect model, board size, leverage and firm's size had positive effect while the remaining four explanatory variables (audit committee expertize, board gender diversity, board independence, and profitability) had negative effect on the possibility of firm's engagement in the practice of earnings management in private banks of Ethiopia.

Audit committee expertize was found to be statistically significant at 5% levels and was negatively related with the probability of firm's choice of earnings management practices, which was consistent with the suggested hypothesis. This means that Ethiopian private banks with more audit committee expertise are less likely to engage in earnings management. Board gender was also found to have statistically significant and negative effect on earnings management. The result was consistent with prior expectation of the researcher, which suggested board gender has significant effect on the possibility of firm's engagement in earnings management. Similarly, board independence had a negative and statistically significant effect on the level of earnings management practice, which was also in line with the expected hypothesis. The result suggests that banks with more independent board engaged in less earnings management practice.

According to the regression result, board size had a statistically insignificant and positive relationship with the probability of firm's to engage in earnings management. The regression result was inconsistent with the expectation of the researcher on the effect of board size on earnings management in private banks of Ethiopia. On the other hand, firm's size had statistically significant and positive effect on earnings management. This finding supports the views that large firms are more likely to manage earnings than small firms. Similarly, financial leverage had statistically significant positive effect on the possibility of firm's engagement in earnings management private banks of Ethiopia. The significant result indicates that the suggested hypothesis of the study is not rejected since the p-value is lower than 0.05.

The regression result above shows that profitability had a statistically significant negative effect on the possibility of firm's engagement in the practice of earnings management at 5% significance level. This implies that less profitable firms are more likely to engage in earnings management than more profitable firms. The result is consistent with the research hypothesis, which suggested that profitability has significant effect on earnings management is not rejected.

In conclusion, the finding of the study shows that audit committee expertize, board gender, board independence, firm's size, leverage and profitability affects the possibility of firm's engagement in the practice of earnings management in Ethiopian private banks. However, board size had no significant effect on earnings management practice in private banks of Ethiopia. The results also confirm that agency theory is pertinent theory in Ethiopian banking industry.

5.2. Recommendations

The findings of this study indicated that audit committee expertize, board gender, board independence, firm's size, leverage and profitability highly affects the possibility of firm's engagement in the practice of earnings management in Ethiopian private banks. Therefore, banks should pay greater attention to these significant variables in determining their level of earnings management. Based on the research findings, the following recommendations are given.

The research found that audit committee expertise, board gender diversity, and board independence reduces the possibility of banks' engagement in earnings manipulation. Therefore, it is recommended to banks to have more financial and accounting professionals on their audit committee, more females and more outside non-executive directors on their board. It is also recommended to the NBE and other regulatory bodies to have a business law that forces banks to have audit committee with accounting and auditing professionals, more females and independent directors on their board members. This shows that banks themselves and NBE should encourage and promote corporate governance mechanisms in the banking sector in order to prevent and reduce the manipulation of accounting figures by managers.

The research also found that highly levered banks may engage in higher earnings management practice than less levered banks. As the firm's level of debt increases, it can be confronted with varying contractual restrictions, debt covenants, and other arrangements. Thus, it is expected that managers would exercise their discretion in reporting earnings in these cases in order to avoid possible costs and conflicts due to non-compliance with debt-related agreements and arrangements. Therefore, it is recommended that debtors, auditors, analysts and regulators should critically investigate the financial information conveyed by these banks.

The research finding indicated that highly profitable banks may have lower earnings management than less profitable banks. Less profitable banks may engage in earnings management practice to improve the firm's image to its stakeholders, to preserve managers from removal position and to obtain bonus. Therefore, it is recommended that auditors, analysts and regulators should consider intensive investigation on the financial information conveyed by low performing private banks. NBE should also set defined accounting standards in the Commercial Code in order to prevent manipulation of accounting figures by managers.

Finally, the research found that large private commercial banks faced the problem of earning management. To avoid such opportunistic management behavior, the researcher recommends large private banks to hire audit firms with higher number of certified professional auditors to conduct intensive audit. In addition to this, these banks should establish sound internal control system. Auditors and regulators, like NBE and AABE, should critically examine the financial statements of large private banks.

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Appendices

Appendix 1: Correlated Random Effects - Hausman Test

Equation: EQ01

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	12.540274	7	0.0841

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
AUCOMEXP	-0.007297	-0.008438	0.000001	0.2866
BGR	-0.038119	-0.033237	0.000025	0.3262
BINDP	-0.007848	-0.007541	0.000000	0.5880
BSZE	0.000081	0.000472	0.000001	0.6978
FSZE	0.002550	0.003040	0.000000	0.4069
LEV	0.116581	0.128921	0.000319	0.4896
PROF	-0.470361	-0.379204	0.002854	0.0880

Cross-section random effects test equation:

Dependent Variable: DLLPs

Method: Panel Least Squares

Date: 05/22/21 Time: 15:51

Sample: 2010 2019

Periods included: 10

Cross-sections included: 8

Total panel (balanced) observations: 80

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.395026	0.029598	13.34647	0.0000

AUCOMEXP	-0.007297	0.002472	-2.952221	0.0044
BGR	-0.038119	0.010426	-3.656019	0.0005
BINDP	-0.007848	0.002281	-3.439933	0.0010
BSZE	8.13E-05	0.001287	0.063170	0.9498
FSZE	0.002550	0.001010	2.524017	0.0141
LEV	0.116581	0.031461	3.705590	0.0004
PROF	-0.470361	0.109293	-4.303675	0.0001

Effects Specification
Cross-section fixed (dummy variables)

R-squared	0.835161	Mean dependent var	0.530067
Adjusted R-squared	0.799657	S.D. dependent var	0.018202
S.E. of regression	0.008147	Akaike info criterion	-6.614913
Sum squared resid	0.004315	Schwarz criterion	-6.168283
Log likelihood	279.5965	Hannan-Quinn criter.	-6.435846
F-statistic	23.52314	Durbin-Watson stat	2.241218
Prob(F-statistic)	0.000000		

Appendix 2: Regression Result

Dependent Variable: DLLPs

Method: Panel Least Squares

Date: 05/22/21 Time: 15:36

Sample: 2010 2019

Periods included: 10

Cross-sections included: 8

Total panel (balanced) observations: 80

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.365973	0.024924	14.68340	0.0000

AUCOMEXP	-0.008438	0.002227	-3.788989	0.0003
BGR	-0.033237	0.009164	-3.626829	0.0005
BINDP	-0.007541	0.002210	-3.412219	0.0011
BSZE	0.000472	0.000803	0.588224	0.5582
FSZE	0.003040	0.000820	3.708239	0.0004
LEV	0.128921	0.025899	4.977872	0.0000
PROF	-0.379204	0.095344	-3.977213	0.0002

Effects Specification		
	S.D.	Rho
Cross-section random	3.06E-08	0.0000
Idiosyncratic random	0.008147	1.0000

Weighted Statistics			
R-squared	0.803359	Mean dependent var	0.530067
Adjusted R-squared	0.784241	S.D. dependent var	0.018202
S.E. of regression	0.008455	Sum squared resid	0.005147
F-statistic	42.02134	Durbin-Watson stat	1.865410
Prob(F-statistic)	0.000000		

Unweighted Statistics			
R-squared	0.803359	Mean dependent var	0.530067
Sum squared resid	0.005147	Durbin-Watson stat	1.865410

Appendix 3: Heteroskedasticity Test: White

F-statistic	0.760458	Prob. F(34,45)	0.7954
Obs*R-squared	29.19243	Prob. Chi-Square(34)	0.7023
Scaled explained SS	22.95808	Prob. Chi-Square(34)	0.9245

Dependent Variable: RESID^2

Method: Least Squares

Date: 05/23/21 Time: 03:41

Sample: 1 80

Included observations: 80

Collinear test repressors dropped from specification

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.012786	0.011263	1.135181	0.2623
AUCOMEXP^2	-0.001172	0.001744	-0.672147	0.5049
AUCOMEXP*BGR	0.000338	0.000401	0.843383	0.4035
AUCOMEXP*BINDP	-2.37E-06	8.33E-05	-0.028427	0.9774
AUCOMEXP*BSZE	9.73E-06	3.33E-05	0.292299	0.7714
AUCOMEXP*FSZE	-8.71E-06	4.18E-05	-0.208085	0.8361
AUCOMEXP*LEV	0.001356	0.001478	0.917849	0.3636
AUCOMEXP*PROF	0.002460	0.004188	0.587320	0.5599
BGR^2	2.21E-05	0.001617	0.013659	0.9892
BGR*BINDP	-1.96E-05	0.000369	-0.052988	0.9580
BGR*BSZE	1.86E-05	0.000172	0.107685	0.9147
BGR*FSZE	0.000180	0.000180	1.000113	0.3226
BGR*LEV	0.005756	0.005175	1.112313	0.2719
BGR*PROF	0.018623	0.018728	0.994386	0.3254
BGR	-0.010090	0.006209	-1.625044	0.1111
BINDP^2	6.44E-05	0.000738	0.087318	0.9308
BINDP*BSZE	2.35E-05	3.20E-05	0.734953	0.4662
BINDP*FSZE	4.41E-06	3.30E-05	0.133729	0.8942
BINDP*LEV	0.000222	0.001087	0.203818	0.8394
BINDP*PROF	-0.003059	0.003859	-0.792485	0.4322
BINDP	-0.000500	0.001383	-0.361803	0.7192
BSZE^2	3.43E-07	1.44E-05	0.023782	0.9811
BSZE*FSZE	-5.49E-06	1.42E-05	-0.385141	0.7019

BSZE*LEV	8.34E-05	0.000545	0.152862	0.8792
BSZE*PROF	0.000351	0.001707	0.205634	0.8380
BSZE	2.58E-05	0.000626	0.041188	0.9673
FSZE^2	-3.44E-06	1.15E-05	-0.299946	0.7656
FSZE*LEV	0.000251	0.000400	0.627800	0.5333
FSZE*PROF	0.000437	0.001235	0.353473	0.7254
FSZE	-1.90E-05	0.000576	-0.033003	0.9738
LEV^2	0.008015	0.012181	0.657983	0.5139
LEV*PROF	0.069005	0.056460	1.222188	0.2280
LEV	-0.024274	0.023854	-1.017600	0.3143
PROF^2	0.078130	0.169370	0.461299	0.6468
PROF	-0.082027	0.066374	-1.235827	0.2229

R-squared	0.364905	Mean dependent var	6.43E-05
Adjusted R-squared	-0.114944	S.D. dependent var	9.02E-05
S.E. of regression	9.53E-05	Akaike info criterion	-15.38024
Sum squared resid	4.08E-07	Schwarz criterion	-14.33810
Log likelihood	650.2094	Hannan-Quinn criter.	-14.96241
F-statistic	0.760458	Durbin-Watson stat	1.941444
Prob(F-statistic)	0.795357		

Appendix 4: Multicollinearity Test

	AUCOMEXP	BGR	BINDP	BSZE	FSZE	LEV	PROF
AUCOMEXP	1.00000	0.36759	0.07882	-0.21617	-0.36523	-0.36473	0.32815
BGR	0.36759	1.00000	-0.05222	-0.28593	-0.30017	-0.14045	0.25075
BINDP	0.07882	-0.05222	1.00000	0.14519	0.09081	0.01871	-0.03064
BSZE	-0.21617	-0.28593	0.14519	1.00000	0.03387	-0.14236	-0.05242
FSZE	-0.36523	-0.30016	0.09081	0.03387	1.00000	0.61434	-0.43101
LEV	-0.36473	-0.14046	0.01871	-0.14236	0.61434	1.00000	-0.32123
PROF	0.32815	0.25075	-0.03064	-0.05242	-0.43101	-0.32123	1.00000