Factors Affecting the Quality of External Audit Services: Evidence from Private Audit Firms of Ethiopia

By

Kumsa Bersisa

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Statement of Declaration

I, Kumsa Bersisa, declare that this thesis is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person, except where due acknowledgement has been made in the text. I confirm that no part of the material presented in this thesis has previously been submitted by me or any other person for a degree in this or any other institution.

Name: Kumsa Bersisa

Signature_____

Place: Addis Ababa

Date of Submission: January, 2021

This master thesis, has been submitted for examination with my approval as thesis

Advisor Name: Degefa Duresa (PhD)

Signature_____ Date_____

Addis Ababa University

School of Graduate Studies

This is to certify that the thesis entitled, “Factors Affecting the Quality of Auditing In External Auditing Services: Evidence from Private Audit Firms of Ethiopia” was carried out by Kumsa Bersisa under the supervision of Degefa Duresa (PhD) submitted in partial fulfillment of the requirements for the degree of Master of Science in Accounting and Finance complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

Approved by:

Internal examiner: _____ Signature _____Date _____

External examiner: _____Signature _____Date _____

Advisor: Degefa Duresa (PhD) Signature _____Date _____

Chair of Department or Graduate Program Coordinator

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List of Abbreviations

AABE	Accounting and Auditing Board of Ethiopia
ACCA	Association of Chartered Certified Accountants
AICPA	American Institute of Certified Public Accountants
CPA	Certified Public Accountant
FCIB	Federal Crime Investigation Bureau
FRC	Financial reporting council
IAASB	International Auditing and Assurance Standards Board
IAESB	International Accounting Education Standards Board
IASB	International Accounting Standard Board
IDR	Indonesian Rupiah
IESBA	International Ethics Standards Board for Accountants
IFAC	International Federation of Accountants
IFRS	International Financial Reporting Standards
INTOSA	International Organization of Supreme Audit Institutions
ISA	International Standards on Auditing
ISQC	International Standard on Quality Control
KPMG	Klynveld Piet Marwick Goerdeler
NGO	Non-Governmental Organizations
OFAG	Office of the Federal Auditor General
OLS	Ordinary Least Square
PTKAI	Pesan Tiket Kereta Api Indonesia
SEC	Securities and Exchange Commission

SME	Small and Medium Enterprises
SOX	Sarbanes-Oxley Act
SPSS	Statistical Package for Social Sciences

Abstract

The purpose of this study is to identify key factors that may affect the quality of Auditing in external private Audit firms of Ethiopia, focusing on the impact of competence and independence on the quality of auditing. To attain this objective, a study adopted mixed method of research approach to test a research hypothesis, and by using convenience sampling design, one hundred two close ended sample questionnaires were distributed to Audit practitioners working in private external audit firms of Ethiopia. The study used ordinal regression model of data analysis and statistical package, SPSS. The result discloses that Audit competence has statistically positive significant effect on audit quality on 5% significance level, and Audit independence has statistically positive significant effect on audit quality on 5% significance level. Therefore, this study suggests the Auditing Board of Ethiopia to give a bigger scale to independence and competence of auditors while setting a criteria to be fulfilled in the process of awarding professional licenses for new entrants.

Key words: External Auditor, Audit Quality, Audit Competence, Audit independence, Private Audit firms

Chapter One: Introduction

Chapter Introduction

This chapter presents a brief background of the study which is followed by the statement of the problem. The statement of the problem states the very question that needs to be solved in the process of this study. Succeeding the statement of the problem, the research questions, the objectives of the study are presented. And also research hypotheses, significance of the study, scope (delimitation) of the study, limitations of the study and organization of the paper are sequentially presented.

1.1 Background of the study

The history of Auditing predates the Christian era. Anthropologists have found records of auditing activity dating back to early Babylonian times (around 3000 BC). There was also auditing activity in china, Greece and Rome. The Latin meaning of the word "Auditor" was a "hearer or listener" because in Rome auditors heard tax payers, such as farmers, give their public statements regarding the results of their business and tax duty due (Hayes, Dassen, Schilder, and Walage, 2005).

Recently the concept of audit quality is of a great importance and unquestionable for its requirement as almost all financial statements need to pass through the process of auditing to be examined whether or not the financial statements present fairly in all material respects the financial position and results of the companies in question (DeZoort, Holt, and Taylor, 2012). According to Thibodeau and Freier (2009) due to lack of the quality of auditing huge businesses were subject to failure out which (Enron, World com and Qwest) were a few to name in 2001 and early 2002. From the bankruptcy filing of Enron on December 2, 2001 for the next 12 months, an unprecedented string of large bankruptcies and corporate scandals emerged. Six of the ten largest corporate bankruptcies occurred in this 12-month period. Of these six, all received unmodified Corporate opinions and four of the six (WorldCom, Enron, Global Crossing, and UAL Corp) were clients of Arthur Andersen (Mansouri, Pirayesh, and Salehi, 2009). As a response to these failures, Al-khaddash, Al Nawas, and Ramadan (2003) stated that regulators and the accounting profession have taken a number of policy measures to improve audit quality

which include the SEC's proposed prohibition on audit firms undertaking non-audit services in 2000 and the rapid adoption of SOX following collapse of Enron.

There is a vast body of literature relating to audit quality and its measurement. Despite the extent of that literature, no single generally accepted definition of generally accepted definition or generally accepted measure of audit quality has emerged (Al-khaddash et al., 2003). Audit quality is defined in different terms by different Authors even though it encompasses common ideas. Audit quality is the level of assurances the probability financial statements contain no material omissions or misstatements (Palmrose, 1988). However more than others' definition of Audit Quality, it is perceived that the definition given by De Angelo is a paramount. Audit quality is the joint probability that an auditor will both discover and report a breach in the client's accounting system (De Angelo, 1981). An audit will be successful in changing expectations and hence reducing the opportunistic behavior costs (agency costs) borne by the manager only if it is expected that the auditor will report some discovered breaches of contract (Watts and Zimmerman, 1983).

In Ethiopia substantial efforts have been made to increase the quality of auditing, of which the office of the federal auditor general (OFAG) and the Accounting and Auditing board of Ethiopia (AABE) are the ones to be noted. In Ethiopia, due to the absence of an organized strong national professional association there is no comprehensive set of ethical standards to govern the behaviors of professional accountants (OFAG, 2009). OFAG has established by proclamation No. 669/2010 to strengthen the audit system required for a reliable information necessary for the proper management and administration of the plans and budget of the federal government (OFAG, 2009). Later OFAG was replaced by Accounting and auditing board of Ethiopia (AABE) by proclamation No. 847/2014. AABE adopted full IFRS and IFRS for small and medium enterprises (SME) for the preparation of financial statements in December, 2014. It is the first public body on accounting and auditing and is empowered to register and license auditors, to conduct investigation and take measures on public auditors and entities having public interest, to issue standards of financial reporting, to give accreditation for accounting entities, to receive and register financial statements of reporting entities, to conduct quality assurance reviews of public auditors and other audit firms, as well as to advise government on matters of financial reporting (AABE, 2015).

In In addition to the above efforts, some studies have been conducted in Ethiopia to improve the quality of Auditing. Among the recent studies those conducted by Chemeda, Kitata and Nebiye are some to be noted.

If one tries to summarize the definition by De Angelo, audit quality can be the resultant effect of two components. The first is discovering a breach which implies Auditor's or Audit firm's ability or it's Competence to discover a breach in the course of his/her auditing, and the second is reporting the discovered breach, that implies the preparedness of an Auditor or an audit firm to report that breach and this can be best described by independence. On the process of reviewing related literatures, it appears that past studies merely tried to focus exclusively only on these two variables- Competence and independence. The studies just assumed these factors as one of the determinant factors of Audit quality in the sense of considering other determinants. This is to give a direction that the position of this study wishes to search the determinant factors of audit quality from the point of view of the definition of Audit quality. In the context of the above discussions, this study is aimed to assess the impact of competence and independence of an auditor on the quality of auditing in private external audit firms of Ethiopia.

1.2 Statement of the problem

According to Thibodeau et al. (2009) due to lack of the quality of auditing huge businesses were subject to failure out of which (Enron, World com and Qwest) were a few to name in 2001 and early 2002. From the bankruptcy filing of Enron on December 2, 2001 for the next 12 months, an unprecedented string of large bankruptcies and corporate scandals emerged, Six of the ten largest corporate bankruptcies occurred in this 12-month period and of these six, all received unmodified opinions and four of the six (WorldCom, Enron, Global Crossing, and UAL Corp) were clients of Arthur Andersen (Mansouri et al., 2009). 9 billion US Dollars fraud was perpetrated at WorldCom. At the time the fraud was disclosed, US president George W.Bush said "I'm deeply concerned, there is a need for renewed corporate responsibility in America." Wolffe (2002) cited in Hayes et al. (2005). Similar cases also occurred in PT KAI in 2005 a state-owned company recorded a profit of IDR 6.9 billion, then after the financial report of PT KAI further investigated, it should have been PT KAI suffered the loss of IDR 63 billion (Hardiningsih, Januarti, Oktaviani, and Srimindarti, 2019). In Ethiopia, due to the absence of an organized strong national professional association there is no comprehensive set of ethical standards to govern the behaviors of professional accountants (OFAG, 2009). The federal crime

Investigation bureau (FCIB) (2019) cited in Yalew (2021) reported that due to fraud, Ethiopian Commercial Banks have lost about 326,343,280 Birr in 2018 and 2019.

As a response to these failures, Al-khaddash et al. (2003) stated that regulators and the accounting profession have taken a number of policy measures to improve audit quality which include the SEC's proposed prohibition on audit firms undertaking non-audit services in 2000 and the rapid adoption of SOX following collapse of Enron. The law of SOX requires auditors to issue an opinion attesting to the effectiveness of the internal control system at their publicly traded clients (Thibodeau et al., 2009).

However, these policy decisions have been made despite the fact that the empirical evidence regarding factors that can enhance or impair audit quality is inconclusive and uncertain (Al-khaddash et al., 2003).This study is intended to close this gap by examining the impact of Auditor's competence and Auditor's independence on the quality of Auditing.

1.3 Research Questions

This study is aimed at addressing the following questions:

(a) What is the impact of Auditor's competence on Audit Quality?
(b) What is the impact of Auditor's independence on Audit Quality?

1.4 Objectives of the study

1.4.1 General Objectives

The purpose of this study is to highlight key factors that may affect external audit quality and state remedial directions for concerned parties to enhance the quality of audit.

1.4.2 Specific Objectives

(a) To examine the impact of Auditor's competence on Audit Quality?
(b) To examine the impact of Auditor's independence on Audit Quality?

1.5 Research Hypothesis of the study

In order to answer the above questions, based on the theories and empirical studies on the effect of Auditor's competence and Auditor's independence on the quality of Auditing, the study formulates the following hypotheses:

H1: Auditor's competence has a positive and statistically significant impact on the quality of auditing.

H2: Auditor's independence has a positive and statistically significant impact on the quality of auditing.

1.6 Significance of the study

An auditor will be successful in changing expectations and hence reducing the opportunistic behavior costs (agency costs) borne by the manager only if it is expected that the auditor will report a discovered breaches of contract (Watts et al., 1983). Therefore this study is important in identifying the variables which potentially affect the quality of auditing and contributing valuable input for concerned parties. For instance academicians may design their curriculum giving special attention on the education that encompasses practical learning scheme for students meant to increase their competency in addition to theory and also education of ethics regarding auditing. Regulatory bodies on their part may give special considerations to these variables while setting standards and rules. In addition to these, the findings of this study may serve as an input for future researchers.

1.7 Scope of the study

This study is delimited to assessing factors affecting the quality of auditing of Ethiopian private external audit firms, on two factors Competence and independence and the study do not cover other factors which may affect the quality of auditing. In addition, the study is delineated to the use of a mixed research methodology and ordinal logistic regression model of data analysis.

1.8 Limitation of the study

The quality of auditing might be affected by other factors other than those factors included in this study. For instance off-Balance sheet transactions if there are any exercised by management can affect the figures of financial statements by hiding some transactions from the book of clients' accounting system and hence the impact of such transactions on the quality of auditing are not included in this study due to time constraints. Furthermore, the analysis of the study is done by data which is collected from respondents' perception, which may not be free from individuals' bias.

1.9 Organization of the Study this study

This research proposal encompasses six chapters, the 1st chapter presents the introduction part which comprises Background of the study, statement of the problem, objective of the study, the research hypothesis, significance of the study and delimitation and limitation of the study. The 2nd chapter presents theoretical and empirical literatures reviews and followed by justification of the research and conceptual frame work. The 3rd chapter deals with research methodology. The fourth chapter presents data presentation, analysis and the discussion. Finally, chapter five presents the conclusion and recommendation of the researcher forwarded.

Chapter Two: Literature Review

Chapter Introduction

This section is divided in to four parts namely the theoretical review and empirical studies on the determinants of external audit quality, justification of the research project and conceptual framework. Under theoretical review, factors affecting external audit quality, theories of external audit quality and external auditors' liabilities shall be presented. Empirical studies on the factors affecting the quality of external audit will be presented in section 2.2. Subsequently justification of the research project will be assessed. Finally the conceptual framework will be presented in section 2.4.

2.1 Theoretical review

There is a conflict of interest between the owners of the company or shareholders and the management who are administering the operations of companies being remunerated by the owners for their administration services they render. The essence of the agency problem is the separation of management and finance, or – in more standard terminology – of ownership and control (Shleifer and Vishny, 1997). This leads us to search for the way of resolving the agency problem in our context the lack of rendering a high quality auditing service. Quality of Auditing is measured by whether the issued audit opinion witnesses that the financial statements of the company audited present fairly in all material respects the financial position and the financial results of the company or not (DeZoort et al., 2012).

Past researchers of this field came up with different views on their search of identifying the factors that they perceive affect the quality of auditing. Al-khaddash et al. (2013) identified six theoretical concepts to measure audit quality: the reputation of audit firm, auditors' fees, industry specialization, Audit firm size, auditor's fee and auditor's independence. Sawan and Alsaqqa (2013) associate audit firm size and audit quality, debating that large audit firms have more resources which they can direct to the recruitment and training process, thereby providing them with the human capability to detect and correct errors in financial statements. Besides De Angelo (1981) associates Quality of auditing with Audit firm size. But in contrast to this position, Arnett and Danos (1979) cited in Nwanyanwu and Loveday (2017) stated the following regarding audit firm size as follows:

> That so far as professional standards and qualifications are maintained, it is not fair to arbitrarily distinguish between the largest eight and all other Certified Public Accountants (CPA) Firms. To halt this discrimination on size of audit firms, eighteen small to medium sized audit firms initiated a suit in 1978 to prevent the division of American Institute of Certified Public Accountants.

(AICPA) into two sections; one for audit firms whose clients are to file reports with the securities and Exchange Commission and the other, for audit firms whose clients should not. The Derieux Committee De Angelo (1981) set up by the AICPA to examine the issue recommended that the selection of a CPA firm should be based not on size, but on the ability to provide service (Nwanyanwu et al., 2017). Contrary to this view, the current paper argues that size alone alters auditors' incentives such that, ceteris paribus, larger audit firms supply a higher level of audit quality. When audit technology is characterized by significant start-up costs, incumbent auditors earn client-specific quasi-rents (De Angelo, 1981).

The auditing standards and professional behavior are the most impact factors on the independence of the auditor and that the integrity, honesty and truthfulness of the qualities that must be provided by the independent auditor (Albeksh and Mohamed, 2017). Nwanyanwu et al. (2017) on their part used auditor’s independence, engagement performance, technical training and proficiency as measures of Audit quality. The measures of audit quality are unending and difficult to quantify. The concept is intangible as goodwill and to a large extent depends on the imagination of investors, scholars, analysts and financial market regulators (Nwanyanuwu et al., 2017).

In the process of `searching for the factors that are deemed to affect audit quality, it is apparent that if the auditors had maintained the mind of independence in its general terms, other attributes except auditor competence would be assumed to have no impact on audit quality. Yet it is realistic that always perfection is not expected from human behavior including external auditors, that controlling mechanisms must be there at least to mitigate the likely hood effect of unethical behavior by maintaining standards, criteria or audit procedures, rules and regulations in which an audit process should pass through. Conceptual frame works in essence are similar to basic notion

of this study that assumes as-audit quality is determined by auditor independence and auditor competence. Put in other way that the contents of conceptual frame works focus mainly on these two determinant factors of audit quality. In carrying out the assignment, the auditor should be guided by professional standards and professional code of ethics. Auditors should always uphold the value of ethics and moral rules (Hardiningsih et al., 2019).

If anyone asks the question "why conceptual frame works both IAASB or UK financial reporting frame works and other pronouncements as IESBA while setting auditing standards set their foundation basically on terms as auditor ethics, Culture in audit firms, skill and personal quality of audit partners and other related attributes like integrity and objectivity rather than mechanical measures as audit firm size etc."? This question paves the way for researchers to thinking critically and scientifically in the process of pointing out the determinant factors of audit quality basically. This perspective is also in line with attribution theory of Heider (1979) cited in Kertarajasa, Mariwa, and Wahyudi (2019) tried to demonstrate that the behavior of individuals will be shaped by internal and external factors.

Heider (1979) cited in Kertarajasa et al. (2019) defined attribution theory as follows:

> Attribution theory refers to how someone explains the causes of the behavior of others or themselves which will be determined whether from internal such as the nature, character, attitude, etc. or external such as the pressure of certain situations or circumstances that will influence individual behavior.

In debating about the determinant factors of audit Quality from the angle of audit firm size for instance, regardless of the size of the audit firm, if competent and independent auditors are there in the firm it is reasonable that the audit firm will provide a high quality audit service. Yet due to the fact that high quality audit service delivered increases the reputation of that firm as a result of which it is expected and natural that audit firm grows to big size. This takes us to the conclusion that growing in size will be the result of a high quality audit performance not the cause for high quality audit.

If a researcher finds out that financial statements opinions audited by auditors working in large audit firms represent the financial status of the audited companies better than the financial

statements opinions audited by auditors engaged in smaller audit firms, is it fair to conclude that audit firm size is a determinant factor for audit quality or is it better to further diagnose by asking "why auditors in big size audit firms come up with a better performance"? If the researcher is able to extend the investigation to such a step, now the content items which make a difference shall be uncovered. For instance for this particular scenario it could be because competent auditors were saturated in big size audit firms, where they could be paid for their competency in giving a better quality service and their technical ability to capture errors than those auditors who are engaged in small audit firms with lower technical ability in detecting errors. If this is the case, conceptually what matters is technical ability not the size of the audit firm. If such a competent auditor is engaged in small size audit firm, what can prevent for the auditor from providing a high quality audit report? Still a given small size audit firm has an option to recruit small number of competent auditors paying them a reasonable incentive than engaging large number of junior auditors-meant to benefit from low payment and wider service with low quality. In such a circumstance it will be clearer that the case leads us rather to express in such a manner that "in big size audit firms competent auditors are likely to be saturated in order to receive incentives that fits their quality services" than " big audit firms render a high quality audit services than small size audit firms" because small size audit firms can also provide high quality audit services if they recruit competent auditors and there is a chance where big size audit firms could render low quality audit services if they recruit incompetent auditors. Small audit Firms can recruit competent auditors by limiting the number of auditors to the level they can pay them higher salaries. For instance if a given large audit firm is to recruit 10 certified auditors, another small size audit firm may recruit 4 certified auditors with similar salaries. This implies that if the kind of auditors are similar, it is apparent that the kind of audit services they render do not differ. And hence the hypothesis of this study is that audit quality has positive association with auditor competence.

Another reason for former researchers to account for audit firm size as an attribute for the quality of auditing emanates from their belief that big audit firms possess more resources to train auditors. As this study have already tried to clarify, in this case the attribute to be focused on is the auditors' competence not the availability of resources to train auditors. This is because small audit firms too can train auditors, the auditor himself can enhance competency by joining distant education moreover competence can also be in place through experience.

“If we assume that the quality of the auditing is the same regardless of the size of the firm performing it, the banker would be supplied with the same information on which to base his decision; in this way the size of the firm should not necessarily be a consideration”. Arnett et al. (1979) cited in Sawan et al. (2013). All this evidences strengthen the very perspective of this study that measurement for audit quality better establishes its basement on the concept of the definition of audit quality of De Angelo (1981) which are shortly assumed to be Auditor independence and Auditor Competence.

The size of audit firm can result from Amalgamation or by merging or through acquisition of firms. And the growth in size through these events cannot be an implication for the existence of competent and ethically independent auditors in these firms. Thus firm size is not assumed to be a measure for Audit quality. One thing to be noted is that an example of audit firm size is raised here only for the purpose of comparing and contrasting and meant to be representative of other mechanical attributes which are assumed to affect auditing quality. This study assumes audit firm’s competence and audit firm’s independence as a measure of audit quality.

2.1.1 Audit Quality

The term “audit quality” is frequently used in debates among stakeholders, in communications of regulators, standard setters, audit firms and others, and in research and policy setting. Audit quality is a complex subject and there is no definition or analysis of it that has achieved universal recognition (IAASB, 2014).

Hardiningsih et al. (2019) stated about the schools of thought on audit quality as follows:

> There are two Schools of thoughts regarding the definition of Audit quality- De Angelo’s definition of audit quality and audit quality measured by the level of conformity with standards. In carrying out the assignment, the auditor should be guided by professional standards and professional code of ethics. Auditors should always uphold the value of ethics and moral rules.

From all the different views on audit quality, the definition by De Angelo (1981) is most frequently cited (Maria, 2016). Audit quality is the joint probability that an auditor will both discover and report a breach in the client's accounting system (De Angelo, 1981). The probability that the auditor will report a discovered breach is effectively the auditing profession's definition of independence (Watts et al., 1983).

Another approach to define audit quality is a more normative way of thinking. Mautz and Sharaf (1961) stated that Auditing Theory is a guide for carrying out a normative audit. To conduct a quality audit, the auditor must comply with generally accepted standards and regulations. Audit quality is measured using auditing standards, and generally accepted regulations.

2.1.2 Factors affecting External Audit Quality

2.1.2.1 Auditor Competence

Competence can be developed through a variety of methods, including the following: Professional education, continuing professional development, including training, Work experience, coaching by more experienced staff (IAASB, 2018).

Mautz et al. (1961) has better expressed the term competence as Professional competence and had made the following remark. Professional competence has two aspects: technical competence and social competence. Technical competence includes (1) a knowledge of accounting principles, (2) an understanding of the theory of evidence, which covers the matter of auditing standards, auditing techniques and procedures, and their application in specific situations, (3) an understanding of internal control, and (4) the procedural expertise to perform the steps in an audit program, prepare adequate working papers, develop audit programs, and review the work of subordinates.

Social competence includes at least three aspects. First, the socially competent auditor must appreciate the role of auditing in the economy. He must accept his task as something more than just getting his client pass the Securities and Exchange Commission requirements. He must view his role in the broad sense as an essential step in the allocation of resources and as a factor in the financial decisions of unknown people and organizations. The auditor has an obligation of some sort to all who benefit from allocation of the nation's resources through the functioning of the investment market mechanism, an obligation to avoid any sympathies with the company's

management or its shareholders that would permit him to find unrealistic financial presentations to be fair.

He must constantly balance his responsibility to the shareholders against his responsibility to society generally. In the same way, he must recognize that a great many individuals stake their personal fortunes on investments in the company. He also has a responsibility to balance his obligation to present shareholders against his obligation to potential shareholders and to avoid any unfairness in serving either one of these at the expense of the other (Mautz et al., 1961). According to Alkhaddash et al. (2013), the level of remuneration bases on the technical capability, the level of education, the working experience and the certification type the auditor possesses. They further illustrated that for performance audit manager or a performance audit team-leader to become a performance auditor, certain distinctive qualifications have to be met. A performance auditor should be well - educated in the social sciences and in scientific Investigation /evaluation methods.

According to Zu'amah (2009) cited in Hardiningsih et al. (2019), for an Auditor to issue an audit opinion with a good quality, he/she must be equipped with the required competencies of a professional skill obtained through formal education, professional certification, training, participating in seminars, symposium and other workshops. An auditor is required to have global competence in order to face the enactment of a free competitive market. So with sufficient understanding of the auditee profile, audit procedures can be run better and can result in better quality audit reports (Hardiningsih et al., 2019). An auditor must be competent, an incompetent Auditor tends to depend on the opinions of others in completing audit tasks because of the very limited knowledge and experience they have (Kertarajasa et al., 2019). According to Knoers and Haditono (1999) cited in Kertarajasa et al. (2019), Experience is a learning process and the addition of potential development behavior both from formal and non-formal education or can also be interpreted as a process that brings someone to a higher pattern of behavior.

2.1.2.2 Auditor Independence

The importance of auditor independence was underpinned after the corporate scandals. From the bankruptcy filing of Enron on December 2, 2001 for 12 months, an unprecedented string of large bankruptcies and corporate scandals emerged. Six of the ten largest corporate bankruptcies occurred in this period (Mansouri et al., 2009). Independence is the main justification and the hallmark of existence of the auditing profession. It is recognized as a key attribute to be

maintained by the auditors in all circumstances (Albeksh et al., 2016). The International Ethics Standards Board for Accountants (IESBA) is a global independent standard-setting board including international independence standards in which its structure, process and operation is supported by the International Federation of Accountants (IESBA, 2018). IESBA in its final pronouncement of (2018) issued about independence in section 120.12 part A1 as follows: Professional accountants in public practice are required by internal independence standards to be independent when performing audits, reviews, or other assurance engagements. Independence is linked to the fundamental principles of objectivity and integrity. It comprises Independence in mind- the state of mind that permits the expression of conclusion without being affected by influences that comprise professional judgment, thereby allowing an individual to act with integrity, and exercise objectivity and professional skepticism. Independence in appearance- the avoidance of facts and circumstances that are so significant that a reasonable and informed third party would be likely to conclude that a firm's or an audit or assurance team member's integrity, objectivity or professional skepticism has been compromised. As mentioned in section 120.13 part A1 of the pronouncement, professional skepticism encompasses integrity and objectivity. In other words, when an auditor exercises integrity and objectivity, he/she supports professional skepticism.

Not only must an auditor be independent, however, but he or she must be perceived as independent as well. The external auditor's professional opinion would be of little value to statement users if they believe the auditor is not wholly independent of management (Mansouri et al., 2009). Independence is having a position to take an unbiased viewpoint in the performance of audit tests, analysis of results, and attestation in the audit report (Hayes et al., 2004). Auditor independence refers to the auditor's ability to maintain an objective and impartial mental attitude throughout the audit (Soltani, 2007). The common belief that independence is able to solve all the problems faced external auditors, while it is a part of the justice system in the audit profession. When the independence of the external auditor was discussed, researchers recommended that there is a necessity of vocational rehabilitation of the external Auditor (Albeksh et al., 2017).

Firth (1980) once stated about independence as follows:

> Independence is traditionally regarded as being one of the fundamental principles underlying the auditor's work. It is held that if an auditor is not truly independent then his opinion on a company's financial statements will be of no value. This, in turn, will mean that users will have less confidence in financial statements and that there will be greater uncertainty in the capital markets.

2.1.3 Foundational theories of external audit quality

2.1.3.1 Agency theory

Watts et al. (1983) documented that the appearance of independent audits are more recent and initiated by government like the registered company act of 1862 of England. The requirements of the act were stated as follows:

> The financial statements of joint stock companies be audited by a person independent of management, and thereby greatly enhanced the status of professional auditors as well as the growth of that profession. This opinion, that independent audits arose they were specifically required by government regulation, is recent congressional staff report that claims that the U.S. securities created a need for independent audits.

An audit by someone independent of the manager reduces the incentive problems that arise when the firm manager does not own all the residual claims on the firm (Watts et al., 1983). It was for this reason that the audit of the early corporations were conducted by directors or shareholders and not by recruited managers who does not own capital in that corporation. Board of directors keep potentially self-serving managers in check by performing audits and performance evaluations (Davis, Schoorman, and Donaldson, 1997).

The very reason for auditing corporations is due to the fact that managers (agents) who run the business in stewardship of shareholders (principals) have their own interest. For instance overstating profits in order to obtain bonuses, because bonuses are given to managers being accounted as a reward for managers' performance. Managers may also rent offices for themselves which may not add value to the business and according to Watts et al. (1983), these

costs are said to be Agency costs. An audit will be successful in changing expectations and hence reducing the opportunistic behavior costs (agency costs) borne by the manager only if it is expected that the auditor will report some discovered breaches of contract (Watts et al., 1983). The task of reporting discovered breaches as documented by De Angelo (1981) gives rise to the definition of independence. This implies that the audit process is able to fulfil its task of witnessing about the fairness of financial statements prepared by management in representing the financial status of the shareholders' company, if it is of a high quality which is expressed in auditor's independence.

2.1.3.2 Stakeholder theory

The term stakeholder theory is the expansion of shareholders theory which focuses on maintaining the interest of shareholders (principals) that managers should strive for fulfilling the interests of the owners of the business than the interest of themselves. Descriptive stakeholder theory describe how organizations interact with stakeholders, normative stakeholder theory describe how organizations ought to treat their stakeholders and instrumental stakeholders theory describe about how to pay attentions to key stakeholders if management wants to maximize shareholder value (Freeman, 1999). Instrumental theory like any good narrative depends on criteria such as usefulness, simplicity, and clarity in distinguishing "good" from "bad" theory (Freeman, 1999).

The association of stakeholder theory with Audit quality is that the task of audit in reducing agency costs by witnessing that the financial statements which are prepared by management can represent the company's financial status. In that process it protects the interest of all parties who have economic attachment with that company and not only the interest of shareholders.

2.1.3.3 Institutional theory

Many formal organizational structures arise as reflections of rationalized institutional rules. Institutional rules function as myths which organizations incorporate, gaining legitimacy, resources, stability, and enhanced survival prospects (Meyer, and Rowan, 1977). Evaluation and inspection are public assertions of societal control which violate the assumption that everyone is acting with competence and in good faith. Violating this assumption lowers morale and

confidence. Thus, evaluation and inspection undermine the ceremonial aspects of organizations (Meyer, and Rowan, 1977). Prevailing theories assume that the coordination and control of activity are the critical dimensions on which formal organizations have succeeded in the modern world. But an earlier generation of researchers concluded that there was a great gap between the formal and the informal organization (Meyer, and Rowan, 1977). External auditor's task is in line with different kind of pressures within an audit firm activities than criterion embedded in an institutional context.

2.1.3.4 Stewardship theory

Stewardship theory believes that managers to be a good administrators of shareholders and do not include the expression of agency costs that arises due to the personal self-interests of managers that is best characterization of agency theory.

Stewardship theory defines situations in which managers are not motivated by individual goals, but rather are stewards whose motives are aligned with the objectives of their principals (Davis, et al., 1997). Because the steward perceives greater utility in cooperative behavior and behaves accordingly, his or her behavior can be considered rational (Davis et al., 1997). Auditors' accountabilities predominantly have been in the form of penalties (Peecher, Solomon, and Trotman, 2013). It would be beneficial to identify new ways to reward financial statement auditors, and in some circumstances to reframe auditors' current incentives in reward terms (Peecher et al., 2013).

However, the problem occurs when there is a difference in the choice of relationship for principal and the manager - agency or steward. If principal chooses an agency relationship and the manager chooses a steward relationship, the result is likely to be a very frustrated manager who feels betrayed by the principal (Davis et al., 1997). If principal chooses a steward relationship and the manager chooses an agency relationship, the manager acts opportunistically and takes advantage of the principal. A manager whose psychological Profile fits that of an agent will behave as a "fox in the henhouse" (Davis et al., 1997).

2.1.4 Liability of External Auditors and the Crisis due to Litigation

Research has demonstrated that if audit firms lower the quality of their audit work by yielding to management pressure or by omitting parts of the audit program, the chance of financial

statements containing material errors and misstatement would be high (Onatuye and Nwabuko, 2016). They further elaborated that if users of financial statements discover these errors and if these errors cause financial losses, thus, injured parties would try to recover their losses by filing lawsuits and claims against the ham-fisted audit firm.

Orlinski (1994) stated circumstances under which auditors may be liable as follows:

> Auditors may be legally responsible to third parties who have economical interest for example owners of the business, suppliers of the business company, Banks, government etc. to make a financial decision based on the financial statements audited by external auditors in the course of damage encountered as a result of their decision relying on the independent auditors' opinions. This happens when a third party invests in the company under audit to whom the auditor issues unqualified audit opinion while the company was insolvent.

According to Orlinski (1994), there are three standards of auditor liability namely, Ultramares rule of Torts, Restatement rule of Torts and Reasonable Foreseeability rule of Torts and the definitions of each were stated as follows: (a) Ultramares rule: this rule was traditionally accepted in some parts of the world after Ultramares Corporation accuses an external audit firm, Touche, Niven & Co. in New York, for auditor's unqualified opinion on Fred Stern & Company's books, which was artificially prepared meant for obtaining the loan. As a result, Ultramares sustained financial losses Stern suddenly declared bankruptcy. Touche seeking recovery under theories of both fraud and negligence. Judge Cardozo, however, disallowed recovery on negligence grounds, holding that recovery in negligence will be allowed only when the third party and the accounting firm or CPA are in privity. Privity is a doctrine of contract law that says contracts are only binding on the parties to a contract and that no third party can enforce the contract or be sued under it.

(b) Restatement rule of Torts: an accountant should be held liable for negligent financial misrepresentations if such misrepresentations are relied upon by actually foreseen and limited classes of persons. One who, in the course of his profession has an economic interest, gives false

information for others is liable for loss caused to them because of their reliance on the information. For this rule to apply, an auditor must be informed that an identified class of third party will use the audited financial statements. (c) Reasonable Foreseeability rule of Torts: arguing that accountants should be held liable to third parties on the same basis as other tortfeasors, Justice Howard Wiener advocated a rejection of the *Ultramares* privity rule in a 1983 law review article.171, instead, he proposed a rule based on the foreseeability of injury to third persons. Some of the reasons that courts propose that auditors should be liable for the losses third parties incur as a result of the negligent misrepresentation is to impose auditors make a thorough review while conducting their audit and there is a reservation for auditors to obtain insurance, if auditors are made liable for their negligent representation.

In Ethiopia according to the commercial code 1960 Art. No. 380, Auditors shall be civilly liable to the company and third parties for any fault in the exercise of their duties which occasioned loss; and an auditor who knowingly gives or confirms an untrue report concerning the position of a company or fails to inform the public prosecutor of an offence which he knows to have been committed shall be punished under Art. No. 438 or Art. No. 664 of the Penal Code, as the case may be (Commercial code of Ethiopia, 1960). Research conducted by Palmrose (1988) highlighted that enhancing the quality of auditing is the means of mitigating exposure to audit litigation and the consequences which lead to the audit firms' failure.

2.2 Empirical studies on the determinants of external Audit Quality

Generally lots of studies have been conducted to examine the determinant factors that might have impact on external audit quality with different findings. Therefore the aim of this empirical study is not to present the result of all past studies, but to make some evaluation on some of the previous studies about factors affecting the quality of external auditing. That is to consider the impact of the independence of an auditor and competence of an auditor on the quality of auditing

from the angle of definition of De Angelo on audit quality. Assuming all other attributes which have been considered by prior researches as determinant factors, but in this study these attributes as only results which emanate due to the impacts of auditor independence and auditor competence. And this approach is different from prior studies in that it does not simply collect and analyze factors that may affect audit quality but it is a new version of thought and a concept based approach and views determinant factors from this basic perspective. The study presents the empirical review in two parts – Other country studies and Studies in Ethiopia.

2.2.1 Audit independence

Hardiningsih et al. (2019) conducted their study on the Determinants of Audit Quality on the population of auditors of the public accounting firm in Central Java and Yogyakarta Indonesia. They conducted analysis of audit quality factors to identify effect of professional ethics in the association between audit independence, audit competence, audit tenure, professional skepticism on the quality of auditing. They applied multiple linear regression. The researchers make use of convenience sampling with 105 samples of auditors. Their findings revealed that audit independence, audit competence and professional skepticism have a positive and significant effect on the quality of auditing. However, tenure audit does not affect audit quality. Auditors need to improve professional certification to increase the auditor's competence and credibility; auditors need to improve specific expertise to support the preparation of the audit program and the determination of the method used in carrying out the audit duties (Hardiningsih et al., 2019).

Nwanyanwu et al. (2017) conducted a study on Audit Quality Practices and Financial Reporting in Nigeria. The study used independence of Auditor, proficiency, training, and Performance of Engagement as explanatory variables to measures the quality of auditing. Data were collected from a sample of 30 accounting firms with 120 employees were identified from the Southern zone of the country through questionnaires. By using descriptive statistics, stepwise regression and analysis of multivariate was done. The Finding of the study shows that there is a positive and statistically significant association between independence of Auditor, proficiency, training, and Performance of Engagement and financial reporting. And independence of Auditor scores the highest value in measuring the reliability of financial statements. Auditor independence is a prime audit quality in financial reporting. Accounting practitioners should imbibe the ethics of

independence to achieve credibility and reliability required of financial reports (Nwanyanwu et al., 2017).

2.2.2 Audit competence

Mansouri et al. (2009) have studied about Audit Competence and Audit Quality in Iran. 180 respondents were completed the research questionnaire. Out of the sample 16% were independent auditors, 17% were internal auditors, 33% were financial and banking managers, 17% were faculty members and 17% were accounting students. The study used the so called binomial test to identify the percentage of participants who are accepting the effects of explanatory variables on dependent ones. The researcher divided the respondents in to two groups, the group which agrees with the hypotheses and the group which disagrees with the hypotheses. The results of this study shows that specialization of AICPA strongly affected fraud detection, in addition the competency of AICPA member affected detecting important fraud. The study findings implied that auditors who are certified in American institute of certified public accountants (AICPA) and members of AICPA can detect fraud than others who are not certified. The competence of auditors obtained due to certifying by AICPA have effect in detecting fraud with 5% confidence level confirming the first and third hypotheses. However, for the second hypothesis 58% of respondents disagreed to the effect of auditing efficiency (audit profit to expenditure ratio) on auditor willingness in detecting fraud; then this hypothesis was rejected. The Iranian legislators should force the AICPA member for attending up-to date accounting and auditing short time courses (Mansouri et al., 2009). The auditors should do in a manner that they keep audit prestige. In such a condition they have to follow as well as obey their regulations and framework (Mansouri et al., 2009).

Al-Khaddash et al. (2013) has conducted a study on Factors that might affect the quality of Auditing in the Commercial Banks of Jordan. The study used the efficiency of audit, the reputation of audit firm, and fees for auditing, audit firm size, and the proficiency of auditor as independent variables for the measurement of Audit quality. The study collected data through questionnaires. This survey was distributed over a random sample of external auditors who have experience with banks audit and a random sample of internal auditors in commercial banks of Jordan to obtain desired data of their opinions about the factors which are assumed to affect auditing quality, and the best measures of audit quality. SPSS was utilized to predict linear

regression. The results indicate that Efficiency, Reputation, Fee, and Specialty are the only variables that have a positive and significant effect (at 5% significant level) on auditing quality, but the size of auditing was reported as it has no effect.

The study recommended that Auditors should maintain higher level of specialty through training, seminars, and possess a necessary experience. In addition to these an auditors must be familiar to the policies and regulations of the organization under audit. It also recommended, communicating with people who have specialization in auditing field will benefit and affect positively on their proficiency and further suggested that professional auditors should know the banking policies, rules, restrictions and directions in the process of their auditing. Banks should offer competitive fees and rewards, and bonuses for internal as well as external auditors, to enable them work in a better manner (Al-Khaddash et al., 2013).

2.2.3 Studies in Ethiopia

Chemeda (2016) has studied with the aim of assessing the quality of external audit services like quality of services and sufficiency of resources, exercises of professional skepticism, professional independence and objectivity and external auditors' communications in Ethiopian Grades 'A' Private Audit Firms. The attributes studied to measure the quality of external audit services are quality of services and sufficiency of resources, exercises of professional skepticism, professional independence and objectivity and external auditors' communications. The data collection was through Self-administered questionnaires and based on convenience sample selection on 10 head of private audit firms, 10 auditor managers and 10 senior auditors. Totally 30 respondents selected. Totally 30 questionnaires were distributed and collected to 10 grades 'A' private Audit firms. Quantitative analysis techniques was used and the data was analyzed by using spreadsheets such as Excel™ and SPSS 20 for Windows™. The findings of the study revealed that External auditors are not independent and objective, they ignored the General Accounting and Auditing Standards (GAAS) requirements, the audit partner does not or partially communicate the nature of non-audit services, the audit firm does not or partially rotates the engagement partner in line with commercial code and the fees charged by the auditors does not fairly reflect the nature of the entity.

Kitata (2016) in his part has conducted a research on the topic "Factors affecting quality of External Auditing: The case of Ethiopian Commercial Banks". This study aims at identifying the

determinant factors that affect audit quality in 18 commercial banks of Ethiopia from 2005 to 2014. Using the practice of earnings management (discretionary accruals) as a proxy for audit quality. The data was gathered from the audited financial statements particularly balance sheet and income statement of all commercial banks. The data were analyzed through EViews 9 software package. Quantitative research method is used. In this study only secondary data is utilized. Descriptive statistics, correlation analysis and least square regression analysis is used to determine the significant relationships between bank audit quality and its various determinants.

The study assess whether audit quality is influenced by auditors' specialization, Length of Contract between the Auditor and Financial Institution versus audit quality, Bank size, Banks' earning management The Study finds out that Audit quality has positive relationship with the bank size and negative relationship with audit fee paid by the bank. That means the lower the audit fee, the more qualitative the audit work will be. The positive relationship means that the bigger the firm, the higher the quality of audit is likely to be.

Nebiye (2007) has also conducted on the topic "The determinants of external audit quality: A case study of Ethiopian audit firms". To identify the determinant factors that might have affected the quality of Auditing in external Audit firms of Ethiopia. The factors were independence, audit experience, accountability, audit fee, firm size and regulation. The study utilized quantitative method of research by using a primary data source. The study used primary data through close ended questionnaires. A sample of fifty two audit firms were selected based on convenience sampling technique and one hundred four questionnaires were distributed. so that each respondent dealt with two questionnaires. The questionnaires were answered by principal/partners and or employed auditors in senior audit position. The close-ended questions were developed on a five point Likert scales. Data were analyzed using linear multiple regression. The analysis of data was done with the help of the statistical software of Statistical Package for Social Sciences (SPSS). The result showed that Auditor independence, experience, accountability and regulation have positive and significant impact on audit quality, whereas audit fee and firm size have not significant impact on audit quality. Finally the researcher recommended that Ethiopian external audit firms and AABE should consider factors as independence, experience, accountability and regulation identified by this study so as to effective

regulation on the audit industry in order to increase the stockholders trust on the audited statement.

2.3 Justification of the research project

The history of Auditing predates the Christian era. Anthropologists have found records of auditing activity dating back to early Babylonian times around 3000 BC (Hayes et al., 2005). Since then it lasts being one of the mandatory tasks in the field commercial industries as well as in governmental enterprises and NGOs. However, as most researchers agree, findings regarding factors that can enhance or weaken audit quality are inconsistent and sometimes contradict each other. This is an indication for the necessity of further research in searching appropriate determinants for external audit quality and the right methodology thereof.

Auditing is a task of giving a testimony of whether or not the financial statements of the auditee present fairly in all material respects the financial position and results of the business (DeZoort et al., 2012). Therefore, it is believed to reduce the problem of agency to a greater extent and is assumed to be the main tool in sustaining Good governance.

In Ethiopia in contrast to developed countries only few studies have been done and this knowledge gap assessment focuses in Ethiopian context. In Ethiopia studies have been done by different researchers. As for instance Chemeda (2016) has studied on the topic "The Assessment of Quality External Audit Services: Evidence from Grades 'A' Private Audit Firms of Ethiopia". The study assessed explanatory variable as quality of services and sufficiency of resources, exercises of professional skepticism, professional independence and objectivity and external auditors' communications. The findings of the study showed that External auditors are not independent and objective, they ignored the General Accounting and Auditing Standards (GAAS) requirements, the audit partner does not or partially communicate the nature of non-audit services, the audit firm does not or partially rotates the engagement partner in line with commercial code and the fees charged by the auditors does not fairly reflect the nature of the entity. Data in this study were assessed simply by the use of spreadsheets such as Excel™ and the data were not regressed to reach at a robust result. So the findings are not reliable weak in filling the knowledge gaps.

Another research in assessing determinants of Audit Quality is the study conducted by Kitata (2016). The study tried to assess whether audit quality is influenced by attributes like auditors'

specialization, Length of Contract between the Auditor and Financial Institution versus audit quality, Bank size, Banks' earning management in private commercial banks of Ethiopia. Using the practice of earnings management (discretionary accruals) as a proxy for audit quality, he analyzed the secondary data collected (the audited financial statements of banks) through linear regression and by the use of EViews 9 software package. The Study finds out that Audit quality has positive relationship with the bank size and negative relationship with audit fee paid by the bank. That means the lower the audit fee, the more qualitative the audit work will be. The positive relationship means that the bigger the firm, the higher the quality of audit is likely to be. The hypothesis assumed by the researcher that the long length of relationships as an element that negatively affects the quality of the audit, is not empirically confirmed.

This study has Substantial contribution in filling the knowledge gap in searching the determinant factors for external audit quality that the study has used linear regression, the right tool for analyzing secondary continuous variables and predicting the outcome relatively. It is to mean that, the results will be robust for the users of the research findings.

Nebiye (2007) has also conducted on the topic "The determinants of external audit quality: A case study of Ethiopian audit firms". To identify the determinant factors that might have affected the quality of Auditing in external Audit firms of Ethiopia. The factors were independence, audit experience, accountability, audit fee, firm size and regulation. Data were collected through questionnaires from private audit firms of Ethiopia. The close-ended questions were developed on a five point Likert scales. Data were analyzed using linear regression and analyzed by the help of SPSS. The result showed that Auditor independence, experience, accountability and regulation have positive and significant impact on audit quality, whereas audit fee and firm size have not significant impact on audit quality. This study has tried to identify important determinants, yet the way the data was analyzed is not dependable. This is because the data collected were primary data in Likert scales which is categorical and ordinal not quantitative as continuous variables. Such data is not recommended to be analyzed by linear regression rather, a logistic regression like ordinary logistic regression analysis methods were better to be utilized as per econometrics consults. Therefore the reliability of the study findings in filling the knowledge gap is minimal.

Thus, this study has the objective of contributing its part in answering the research question (identifying the factors which are assumed to affect the quality of external auditing) and tried to play its role in filling the knowledge gap and communicate its findings to those parties who have attachment and interest to the field of study.

2.4 Conceptual Framework

2.4.1 IAASB Framework on Audit Quality

Due to the fact that research on audit quality has still gaps, to fill the gaps some international entities like International Auditing and Assurance Board (IAASB) have tried to set up frame works to enhance the quality of auditing. The IAASB believes that such a framework is in the public interest as it will encourage national audit firms, international networks of audit firms, and professional accountancy organizations to reflect on how to improve audit quality and better communicate information about audit quality (IAASB, 2014). Auditors are required to comply with relevant auditing standards and standards of quality control for audit firms, as well as ethics and other regulatory requirements. The framework is not a substitute for such standards, nor does it establish additional standards or provide procedural requirements for the performance of audit engagements (IAASB, 2014).

IAASB (2014) stated, in its pronouncement, the framework distinguishes the following elements: (1) input factors, (2) process factors, (3) output factors, (4) key interactions within the financial reporting supply chain and, (5) contextual factors.

Input factors:- According to IAASB (2014), quality audits involve input factors which are auditors exhibiting appropriate values, ethics and attitudes, being sufficiently knowledgeable, skilled, experienced and having sufficient time allocated to them to perform the audit work applying at audit engagement level, at the audit firm level, and at a national level. IAASB (2014) further documented in Paragraph 41-58 of this pronouncement that the audit engagement partner has a critical role in ensuring that the engagement team exhibits the values, ethics and attitudes necessary to support a quality audit and the engagement team collectively has the appropriate competences and that the team has sufficient time to be able to obtain sufficient appropriate audit evidence before issuing the audit opinion. In paragraph 59-70 of this pronouncement it detailed that at the audit firm level, the importance of each firm's culture in determining how its partners

and staff function in the public interest and at the same time achieve the firm's commercial goals, such that key necessary personal characteristics are promoted through appraisal and reward systems supporting audit quality.

On the stage of process factors as per paragraph 81-93 of this pronouncement IAASB listed audits to be performed in accordance with auditing standards focusing on firm's quality control procedures complying with ISQC1 which provide a disciplined approach to risk assessment, planning, performing audit procedures and ultimately forming and expressing an opinion.

Output Factors IAASB (2014) stated mainly include an auditor's opinion that provides users with confidence as to the reliability of the audited financial statements. According to this pronouncement, auditor's reports are also issued to those charged with governance regarding information about threats to auditor objectivity and the related safeguards that have been applied. The pronouncement further pointed out that auditor's reports shall be issued to management to communicate on financial reporting issues and to gain recommendations for improvement in areas of the entity's business and systems.

IAASB (2014) stated that key interactions within the financial reporting supply chain plays an important role in supporting high-quality financial reporting and include interactions between auditors and management, interactions between auditors and those charged with governance, interactions between auditors and financial statement users, interactions between auditors and regulators, interactions between management and those charged with governance, interactions between management and financial statement users, interactions between those charged with governance and regulators, interactions between those charged with governance and financial statement users, and interactions between regulators and financial statement users.

Regarding Contextual factors, according to the pronouncement of IAASB (2014), the environment in which financial reporting and audit takes place varies between countries. External financial reporting may be limited in less developed countries where business practices are relatively informal and commercial law relatively less developed. It further elaborated that as countries develop, and as businesses grows in size and need to obtain finance from capital markets, the environment becomes more complex, and as a result financial reporting becomes more important and user expectations of its reliability

continuously grow, that resulted in financial reporting requirements and corporate governance processes to evolve.

Chapter Three: Research Methodology

Chapter Introduction

In the previous chapter the study deals with literature review on factors affecting the quality of auditing in external audit services. This chapter discusses about Research approach, research design, sampling design, data analysis techniques and diagnostic tests to fulfil the objective of the study. Lastly tests of reliability and validity test of the instrument were presented at sections 3.6.4 and 3.6.5 respectively. The study focuses only on two explanatory variables Audit competence and Audit independence, it is perceived better to collect samples from all private external audit firms of Ethiopia. Widening the base scope of the population but concentrating on only two variables is the approach.

3.1 Research Approach

Researchers shape their research approaches - Quantitative, qualitative or mixed based on their philosophical assumptions (paradigm) they believe. Thus, in the scientific method—the accepted approach to research by post positivists - a researcher begins with a theory, collects data that either supports or refutes the theory, and then makes necessary revisions and conducts additional tests (Creswell and Creswell, 2018). Quantitative research is based on the measurement of quantity or amount. It is applicable to phenomena that can be expressed in terms of quantity. Qualitative research, on the other hand, is concerned with qualitative phenomenon, i.e., phenomena relating to or involving quality or kind (Kothari, 2019). A mixed methods study can employ either the qualitative or the quantitative approach (Creswell, 2009). To achieve the aforementioned objectives, this study adopted mixed research approach since qualitative data (mainly opinions of the respondents) on the questionnaires were obtained from respondents on Likert scale. Also data were converted to a measurable quantity by means of SPSS, it qualifies for quantitative research approach.

3.2 Research design

Research design constitutes the blueprint for the collection, measurement and analysis of data (Kothari, 2019). The study makes use of an explanatory design, since the aim of the study is to investigate the impact of Auditor's independence and auditor's competence on Audit quality. This type of research aims at for instance, explaining social relations or events, advancing knowledge about the structure, process and nature of social events, linking factors and elements of issues into general statements and building, testing or revising a theory ((John, Hafiz, Robert & David ,2007).

3.3 Sampling Design

The study uses a convenience sampling design because the population of this study are homogeneous in Geography and other aspects and due to ease of access. When population elements are selected for inclusion in the sample based on the ease of access, it can be called convenience sampling (Kothari, 2019).

3.4 Population of the study, Data Source & Sample Size

Population of the study

The population of the study is private audit firms of Ethiopia. According to AABE (2021), there are 137 private audit firms in Ethiopia.

Data Source

The study used Primary data source. Data is collected through self-administered Closed-ended questionnaires focused on impacts of Audit competence and audit independence on the quality of external audit. Closed-ended questionnaires are questionnaires in which respondents are asked to choose an answer from a list of questionnaire prepared by the researcher. A pilot test is conducted to some certified auditors to pretest and refine the final questionnaires to be distributed to target respondents.

Sample size

While we calculate the size of the sample making use of the above data, it follows that 102 samples should be drawn from the total population. Giving a tolerance for non-response, 120 questionnaires were distributed to the respondents and 102 questionnaires were responded and 18 questionnaires were not responded.

According to Miaoulis and Michener (1976), the statistical formula for sample size is formulated as: $n = \frac{N}{1+N(e)^2}$

Where N is the population size n is the sample size e is desired level of precision (the degree of accepted error). At p=0.5 maximum variability and Z at 95% confidence level. In this study N= 137 e = 0.05

While the numbers are inserted in the formula it follows that sample size (n) results to be 102.

3.5 Data Analysis & Technique

In order to examine the demographic status of the respondents easily and concisely descriptive statistics was applied. Descriptive statistics are utilized to describe the fundamental features of data in the study as frequencies percentages etc. It help us to get lots of numbers in variables in a little space. Measures of frequency are used for categorical data, moreover, frequency tables give us manageable tabular outputs. The sample data collected from the private audit firms of

Ethiopia in 5 point Likert scale was sorted, coded and summarized in table, imported in to SPSS (statistical package for social sciences version 25). Information was extracted from SPSS through which tests for Parametric and non-parametric was conducted and standardized figures were obtained in the form of tables and graphs by use of which the results were interpreted.

3.6 Diagnostic Tests for Model

Parametric and non-parametric tests shall be conducted to decide the right kind of data analysis model. Except when the right statistical techniques are used on a right data, the research result might not be valid and reliable and subsequently the decisions may be misleading (Mukasa and Christopher, 2021). Before data analysis is done a suitable tool of data analysis must be determined, that is a parametric test including a normality test must be done, if data stored fulfill the requirements of parametric test including a normally distribution criteria, a linear regression will be used for analysis but if the data collected through questionnaire while tested will not qualify for the assumption of parametric including normality, ordinal regression method will be used for data analysis.

The OLS method which is commonly used to predict dependent variable based on the knowledge of one or more independent variables is useful only for continuous dependent variables; while logistic regression is for dependent variables that are categorical (Adeleke and Adepoju, 2010).

3.6.1 Tests of Normality

We commonly refer to the normal distribution, when it is symmetric about its mean value, with

the measures of central tendency. (The Mean=Median=Mode). If the data is extracted from a normal distribution, the standard error for kurtosis which implies the “peakdness” of the data distribution will be closer to 3 and the skewness will be closer to 0. This study will use Kolmogorov-Smirnov p value to find out whether the data fit well to the model or not.

H0: The data fit well to the model

H1: The data do not fit well to the model

Decision Rule: Reject H0 Kolmogorov-Smirnov p value test value is less than 0.05. Otherwise, do not reject H_0.

3.6.2 Model testing Information

It is recommended that before observing the effect of explanatory variables in the model, it is better to decide if our model can improve the ability to predict the outcome. This is done by comparing the model with "intercept only" model that is excluding all predictors against model which includes all explanatory variables which SPSS calls it as "final" model. By doing this we see if the inclusion of explanatory variables has improved significantly the fitness of the model to the data. The model fitting information provides the -2 log likelihood which is sometimes termed as deviance for the intercept only and final models. The SPSS uses a chi-square to calculate the difference of the chi-square for the two models. Theoretically the less the value of the -2 log likelihood, the better the model fits the data.

3.6.3 Test of parallel Lines

If the assumptions of the ordered logit model are met, then the coefficients (other than the constants) should be the same for each logistic regression, i.e. the regression lines will be parallel for each thresholds, differing only in their intercepts. The null hypothesis states that the location

Parameters (slope coefficients) are the same across response categories. That is the assumption of proportional odds.

$H_{o:}$ The model fits the data well.

$H_{a:}$ The model does not fits the data well.

3.6.4 Test of Reliability

A measuring instrument is reliable if it provides consistent results (Kothari, 2019). Reliability of questionnaires is tested through measuring the internal consistency. Cronbach's alpha is a statistic that measures the internal consistency among a set of survey items that (a) a researcher believes all measure the same construct, (b) are therefore correlated with each other, and (c) thus could be formed into some type of scale. It belongs to a wide range of reliability measures (Lavrakas, 2008).

Alpha was developed by Lee Cronbach in 1951 to provide a measure of the internal consistency of a test or scale; it is expressed as a number between 0 and 1 (Tavakol and Dennick, 2011). There are different reports about the acceptable values of alpha, ranging from 0.70 to 0.95. Low

value of alpha could be due to a low number of questions, poor interrelatedness between items or heterogeneous constructs (Tavakol et al., 2011).

Table 1: Cronbach's Alpha Reliability statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No of Items
.897	.918	3

Source: Extracted from our data computed through SPSS 255

Table 2: Alpha-Item Total statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
AC	8.7002	.711	.823	.684	.891
AI	9.0090	.457	.857	.741	.806
AQ	8.8137	.471	.823	.677	.840

Source: Extracted from our data computed through SPSS 25

As shown in Table 2 the value of Cronbach's Alpha for Auditor's competence is 0.823, Auditor's independence is 0.857 and for Audit Quality is 0.823 and according to Tavakol et al. (2011), it is assumed to be very good. And it shows that the questionnaires are very consistent and reliable that the process of data analysis can be proceeded.

3.6.5 Validity test of the instruments

The term validity refers to whether or not the test measures what it claims to measure. Criterion-r

elated validity is assessed when one is interested in determining the relationship of cores on a test to a specific criterion. It is a measure of how well questionnaire findings stack up against another instrument or predictor (Bolarinwa, 2015).

The result of validity testing is shown in table 16 in the appendix. It shows that out of the total of 102 questionnaires analyzed by SPSS 25, 99 questionnaires are valid and 3 questionnaires are invalid and as a whole it can be considered that the validity test is good enough for the study to

proceed. In table 16 the Pearson correlation value is processed by SPSS 25 and the result generated for each item of the questionnaires is shown in the column under total. The critical value of the standard (criteria) is shown in table 17 of the appendix. The number of sample is 102. Degree of freedom (DF) is calculated as N-2. DF=102-2. In the table for DF 100, at 5% significance level the Pearson correlation value is found 0.195.

For Validity test criteria: this study makes use of the criterion type of validity. If the obtained value is greater than the critical value of the table it is assumed as valid and if the obtained value is less than the critical value it is invalid.

Chapter Four: Results (or Findings)

Chapter Introduction

In the preceding chapter, discussions were made about research methodology, research design, research methods and, data analysis. In this chapter, the regression analysis results will be presented under which the results of tests of parameters, tests of Normality, model fitting information, tests of parallel lines will be presented. And explained and discussed in detail in this chapter. This chapter is organized in to four sections. These are tests of parameters, tests of normality, model determination and regression analysis results respectively.

4.1 Tests of parameters

Before data analysis is done a suitable tool of data analysis must be determined, that is a parametric test including a normality test must be done, if data stored fulfill the requirements of parametric test including a normally distribution criteria, a linear regression will be used for analysis but if the data collected through questionnaire while tested will not qualify for the assumption of parametric including normality, ordinal regression will be used for data analysis.

Numerical descriptive measures associated with a population of measurements are called parameters; those computed from sample measurements are called statistics (Mendenhall, Beaver and Beaver, 2013). Examples of Parameters include the mean and variance of a distribution of a population. To make the generalization about the population from the sample, statistical tests are used. It is recommended by many scholars that business analysis uses parametric and non-parametric inferential statistics in making decisions about effects of independent variables on dependent variables (Mendenhall et al., 2013). Prakash (2013) cited in Mukasa et al. (2021) Stated that a parametric test is used when information about the population is completely known by with help of its parameters. For example, t-test, z-test, ANOVA, however, if there is no knowledge about the population or parameters, but still it is required to test the hypothesis of the population, we use a non-parametric test. For example, Mann-Whitney, rank sum test, Kolmogorov-Smirnov test and Kruskai-wallis test. Stone (2015) cited in Mukasa et al. (2021) in his part stated that non-parametric tests are also called distribution-free tests because they don't assume that your data follow a specific distribution. You may have heard that you should use non-parametric tests when your data don’t meet the assumptions of the parametric test, especially the assumption about normally distributed data.

Felix (2015) Cited in Mukasa et al. (2021) stated the following statements regarding wrongs of using statistical analysis: (1) these errors can make research results not to be valid reliable thus influencing decision making especially when it comes to forecasting, (2) the parametric analysis for ordinal data, (3) the inappropriate use of parametric analysis in general, (4) the failure to consider the possibility of committing type II statistical error, (5) the use of unmodified t-tests for multiple comparisons, (6) the failure to employ analysis of covariance, multivariate regression, nonlinear regression, and logistical regression when indicated, (7) the habit of

reporting standard error instead of standard deviation and the under use or over use of statistical consultation .

Mukasa et al. (2021) further detailed that, these errors do not only influence reliability of results but also aggressively influence and affect business decision making in real life context. The basis of both errors 1 and 2 is disregarding specific conditions about the parameters of the population being studied. The first sin is the use of a parametric statistical test for ordinal data analysis. Expressing ordinal data using integers does not justify the use of parametric statistics. Instead scale data is necessary to be used.

Non-parametric statistical tests may be, and often are, more powerful in detecting population differences when the Parametric assumptions are not satisfied. For this reason, some statisticians advocate the use of nonparametric procedures in preference to their parametric counterpart (Mendenhall et al., 2013).

4.1.1 Test of Normality by kurtosis and skewness

Table3: Test of Normality by kurtosis and skewness

AQ	Mean		4.4477	.04392
	95% Confidence Interval for Mean	Lower Bound	4.3606	
		Upper Bound	4.5348	
	5% Trimmed Mean		4.4659	
	Median		4.4167	
	Variance		.197	
	Std. Deviation		.44359	
	Minimum		3.50	
	Maximum		5.00	
	Range		1.50	
	Interquartile Range		.77	

	Skewness		-.210	.239
	Kurtosis		-.988	.474
AC	Mean		4.5613	.02725
	95% Confidence Interval for Mean	Lower Bound	4.5072	
		Upper Bound	4.6153	
	5% Trimmed Mean		4.5672	
	Median		4.5000	
	Variance		.076	
	Std. Deviation		.27525	
	Minimum		4.00	
	Maximum		5.00	
	Range		1.00	
	Interquartile Range		.50	
	Skewness		-.157	.239
	Kurtosis		-.903	.474
AI	Mean		4.2525	.04398
	95% Confidence Interval for Mean	Lower Bound	4.1652	
		Upper Bound	4.3397	
	5% Trimmed Mean		4.2703	
	Median		4.2500	
	Variance		.197	
	Std. Deviation		.44414	
	Minimum		3.17	
	Maximum		5.00	
	Range		1.83	
	Interquartile Range		.67	
	Skewness		-.596	.239
	Kurtosis		-.242	.474

Source: Extracted from our data computed through SPSS 25

A normal distribution is not skewed and is defined to have a coefficient of kurtosis of 3. It is possible to define a coefficient of excess kurtosis, equal to the coefficient of kurtosis minus 3; a normal distribution will thus have a coefficient of excess kurtosis of zero (Brooks, 2014).

In table 3, the kurtosis is 0.474 and the skewness is .239 for all variables. Skewness is the standardized third moment of a distribution that shows whether it is symmetrical around its mean value (Brooks, 2014).

If the residuals are normally distributed, the histogram should be bell-shape (Brooks, 2014).

This shows that the data of this study is not extracted from normally distributed population.

Table 4: Test of Normality by Kolmogorov-smirnov

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
AQ	.139	102	.000	.911	102	.000
AC	.117	102	.001	.948	102	.001
AI	.155	102	.000	.942	102	.000

a. Lilliefors Significance Correction

a. Lilliefors Significance Correction

Extracted from our data computed through SPSS 25

Theoretically the Kolmogorov-Smirnov p value should be less than 0.05 to reject the null hypothesis for the presence of goodness of fit of the data to the model at 0.05 significance. As shown in the table, Kolmogorov-Smirnov p value is at less than .05 significance level. This means that it rejects the null hypothesis and confirms that the data do not come from normal distribution.

In summary the test result recommend that a non-parametric statistics must be used since data doesn't meet the assumptions of the parametric test, particularly the assumption of normal distribution. Another reason why this study prefers to use non-parametric statistics is that our data is ordinal and use 5 point Likert scale which best fit the use of non-parametric statistics.

Expressing ordinal data using integers does not justify the use of parametric statistics. Instead scale data is necessary to be used. However, on many occasions, several common parametric tests (the t-test in particular for example) are "tolerant" of relaxation of these two criteria, in strict terms; parametric analysis should only be employed if they can be fulfilled (Mukasa et al., 2021). Since it is recommended that this study. A Type I error for a statistical test happens if you reject the null hypothesis when it is true. A Type II error for a statistical test happens if you accept the null hypothesis when it is false and some alternative hypothesis is true (Mendenhall et al., 2013).

4.1.2 Model fitting information

Table 5: Model Fitting Information

Model	**-2 Log Likelihood**	Chi-Square	df	Sig.
Intercept Only	445.858			
Final	32 8.968	116.890	2	.000

Link function: Logit
Source: Extracted from our data computed through SPSS 25

Table 5 shows the model fitting information. It is recommended that before observing the effect of explanatory variables in the model, it is better to decide if our model can improve the ability to predict the outcome. This is done by comparing the model with "intercept only" model that is excluding all predictors against model which includes all explanatory variables which SPSS calls it as "final" model. By doing this we see if the inclusion of explanatory variables has improved significantly the fitness of the model to the data. The model fitting information provides the -2 log likelihood which is sometimes termed as deviance for the intercept only and final models. The SPSS uses a chi-square to calculate the difference of the chi-square for the two models.

Theoretically the less the value of the -2 log likelihood, the better the model fits the data. In our case the chi-square for the -2 log likelihood decreases from 445.85 to 328.96 which decreases by 116.89 that improved the fitness of the model to the data. Moreover, the chi-square statistics p value is less than 0.05 indicates that the model gives a significant improvement over the intercept only model.

4.1.3 Test of parallel Lines

Table 6: Test of parallel Lines

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	328.968			
General	306.118[b]	22.850[c]	26	.641

Source: Extracted from our data computed through SPSS 25

a. The null hypothesis states that the location parameters (slope coefficients) are the same across response categories. b. The log-likelihood value cannot be further increased after maximum number of step-halving. c. The Chi-Square statistic is computed based on the log-likelihood value of the last iteration of the general model. If the assumptions of the ordered logit model are met, then the coefficients (other than the constants) should be the same for each logistic regression, i.e. the regression lines will be parallel for each thresholds, differing only in their intercepts. The null hypothesis states that the location parameters (slope coefficients) are the same across response categories. That is the assumption of proportional odds.

H_o: The model fits the data well.

H_a: The model does not fits the data well.

The test of parallel lines in table 6 shows that the significance value is >0.05 that it cannot reject the null hypothesis and we can conclude that the model fits the data best and we can use ordinal regression model for our analysis. If the verification of model assumption fails, the multinomial logistic regression model that does not require the assumption should become an alternative tool (Adeleke et al., 2010).

4.1.4 Nonparametric Correlations

Table 7: Spearman correlation

Correlations					
			AC	AI	AQ
Spearman's rho	AC	Correlation Coefficient	1.000	.846**	.750**
		Sig. (2-tailed)	.	.000	.000
		N	102	102	102
	AI	Correlation Coefficient	.846**	1.000	.839**
		Sig. (2-tailed)	.000	.	.000
		N	102	102	102
	AQ	Correlation Coefficient	.750**	.839**	1.000
		Sig. (2-tailed)	.000	.000	.
		N	102	102	102

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Extracted from our data computed through SPSS 25

This study's data set is non-parametric and not normally distributed, we adopt spearman correlation rank correlation not Pearson correlation. The correlation between Audit competence (AC) and Audit Quality (AQ) shows a high correlation i.e. 0.75 which is statistically significant at probability value < 0.05. The correlation between Audit Independence (AI) and Audit Quality (AQ) shows high correlation i.e. 0.846 which is statistically significant at probability value < 0.05.

4.2 Model Determination

Ordinal Logistic Regression Model

The OLS method which is commonly used to predict dependent variable based on the knowledge of one or more independent variables is useful only for continuous dependent variables; while logistic regression is for dependent variables that are categorical (Adeleke et al., 2010). There are occasions when the scale of a multiple category outcome is not nominal but ordinal. Common examples of ordinal outcomes include variables such as extent of disease (none, some, severe), job performance (inadequate, satisfactory, outstanding), and opinion on a political candidate's position on some issue (strongly disagree, disagree, agree, strongly agree) (Hosmer, Lemeshow, and Sturdivant, 2013).

The statistical model for Audit Quality is $AQ = \lambda 0 + \lambda 1\ AC + \lambda 2AI + \sigma \times \varepsilon$ according to Hosmer et al. (2013).

Where σ is proportional to the variance and ε follows the standard logistic distribution with cumulative distribution function

$$\Pr(\varepsilon \leq z) = \frac{e^z}{1 + e^z}$$

Evans, Hastings, and Peacock (2000) discusses this distribution cited in Hosmer et al. (2013).

Ordinal Logistic Regression Model, according to Adeleke et al. (2010) **is** $\mathbf{Y_i *= \beta + \varepsilon_i}$ (1)

However, since the dependent variable is categorized, we must instead use:

$$\mathbf{Cx\ (X)} = \text{Ln}\left[\frac{\Pr(Y \leq J|x)}{\Pr(Y > J|x)}\right]$$

$$\text{And: Ln}\left[\frac{\Sigma\text{pr (event)}}{1 - \Sigma\text{pr (event}}\right] = \beta_{oj+}\ \beta_1 X_1 + \beta_2 X_{2+\ldots+}\ \beta_K X_K \quad (2)$$

$$\text{Or: Ln}\left[\frac{\Sigma\text{pr}\ (Y \leq J|x)}{1 - \Sigma\text{pr}\ (Y > J|x)}\right] = \beta_{oj+}\ \beta_1 X_1 + \beta_2 X_{2+\ldots+}\ \beta_K X_K \quad (3)$$

The model in this study can be formulated as

$$\text{Ln}\left[\frac{\Sigma \text{pr}\,(AQ \leq J)}{1-\Sigma \text{pr}\,(AQ > J)}\right] = \beta_{oj+}\,\beta_{1AC} + \beta_{2AI} \qquad (4)$$

This general formula can be put for individual thresholds (cuts) of the output variable as predicted probabilities for each threshold of the dependent variable. Predicted probability calculates the probabilities for each category of the dependent variable. Ordered logit model estimates a score 'P' as a linear function of explanatory variables (Adelke et al., 2010).

For example the log-odds for threshold 1 is: $\text{Ln}\left[\frac{\text{pr}\,(AQ<=3.50)}{1-\text{pr}\,(AQ>3.50)}\right] = 29.564_{+}\ 3.445_{AC} + 4.750_{AI.}$

For example the log-odds for threshold 2 is: $\text{Ln}\left[\frac{\text{pr}\,(AQ<=3.67)}{1-\text{pr}\,(AQ>3.67)}\right] = 30.352_{+}\ 3.445_{AC} + 4.750_{AI.}$

.

The coefficients for the above equations is extracted from table 16 of the regression result.

If a regression graph is plotted based on the above two equations, the two prediction lines will have two lines with different intercepts (because the equations have different intercepts), and the lines shall have similar slopes (because the two equations have similar coefficients) that resulted in parallel lines. This is tried to show on only two thresholds but the concept works for all the 14 thresholds which SPSS computes, this is consistent with the Assumption of Proportional Odds (parallel lines) which is defined in the coming paragraphs.

Where j is the j^{th} ordered category (threshold)

k is the number of predictors

Y is ordered output categories (threshold)

AQ is Audit quality, βo is intercept

β1 and β2 are Coefficients

AC is Audit firm's competence,

AI is audit firm's Independence.

X1, X2 = predictors

Ln is the natural logarithm

Appropriate when: Y is ordered categories

Parameter Estimation: Maximum Likelihood

Model fit: deviance (-2LL)

Assumption: Proportional Odds (parallel lines)

The most frequently used ordinal logistic regression model in practice is the constrained cumulative logit model (called the proportional odds model). The proportional odds model describes a less than or equal versus more comparison. For example if the outcome is extent of disease the model gives the log-odds of no more severe outcome versus a more severe outcome (Hosmer et al., 2013).

The inferences from fitted proportional odds models lend themselves to a general discussion of direction of response and do not have to focus on specific outcome categories (Hosmer et al., 2013). The proportional odds assumption: The assumption that all the logit surfaces are parallel must be tested. A non-significance test is evidence that the logit surfaces are parallel and that the odds ratio can be interpreted as constant across all possible cut point of the outcome. The intercepts in the equations may vary, but the parameters would be identical for each model (Adeleke et al., 2010).

4.3 Regression Analysis Results

Under this sub section the regression analysis results will be explained and discussed in detail. Descriptive statistics, inferential statistics and results of hypothesis testing are presented sequentially. Additionally explanations will be given regarding the relationship between explanatory factors Audit competence and Audit independence that are assumed to affect the dependent variable, Audit Quality.

4.3.1 Summary of Variables

Table 8: Case processing summary of Variables

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
AQ	102	100.0%	0	0.0%	102	100.0%
AC	102	100.0%	0	0.0%	102	100.0%
AI	102	100.0%	0	0.0%	102	100.0%

Source: Extracted from our data computed through SPSS 25

Table 8 shows the case processing summary. SPSS shows the variables with their values which are included in the analysis. The case processing summary shows that there are no missing values in the data and all 102 are valid. This is important that it shows the modelling of the three variables AQ, AC and AI.

Table 9: Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	79	77.5	77.5	77.5
	Female	23	22.5	22.5	100.0

Source: Extracted from our data computed through SPSS 25

Table 10: Qualification

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	Bachelor's Degree	48	47.1	47.1	47.1
	Master's Degree	29	28.4	28.4	75.5
	ACCA	25	24.5	24.5	100.0
	Total	102	100.0	100.0	

Source: Extracted from our data computed through SPSS 25

Table 11: position

		Frequency	Percent	Valid percent	Cumulative percent
Valid	**Junior Auditor**	9	8.8	8.8	8.8
	Senior Auditor	59	57.8	57.8	66.7
	Audit Manager	14	13.7	13.7	80.4
	Partner/Principal	20	19.6	19.6	100.0
	Total	102	100.0	100.0	

Source: Extracted from our data computed through SPSS 25

Table 12: Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-5	19	18.6	18.6	18.6
	6-10	51	50.0	50.0	68.6
	11-15	10	9.8	9.8	78.4
	16-20	12	11.8	11.8	90.2
	>20	10	9.8	9.8	100.0
	Total	102	100.0	100.0	

Source: Extracted from our data computed through SPSS 25

Bar Chart

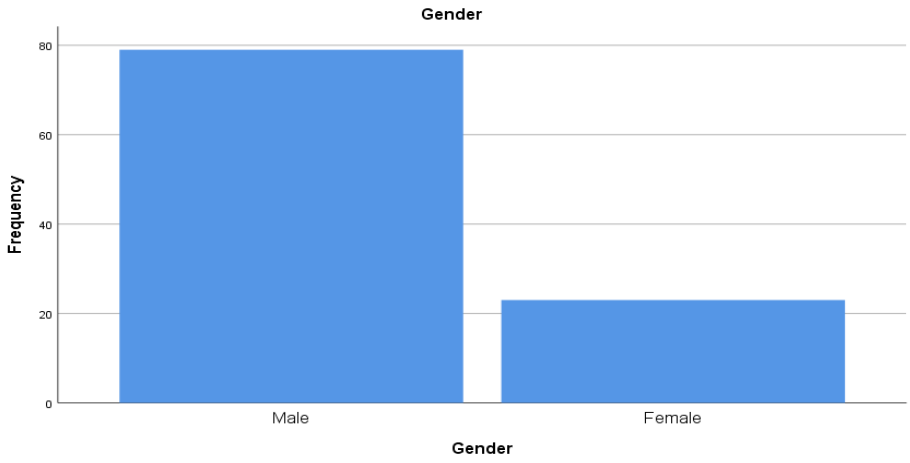

Figure 1: Gender

Source: Extracted from our data computed through SPSS 25

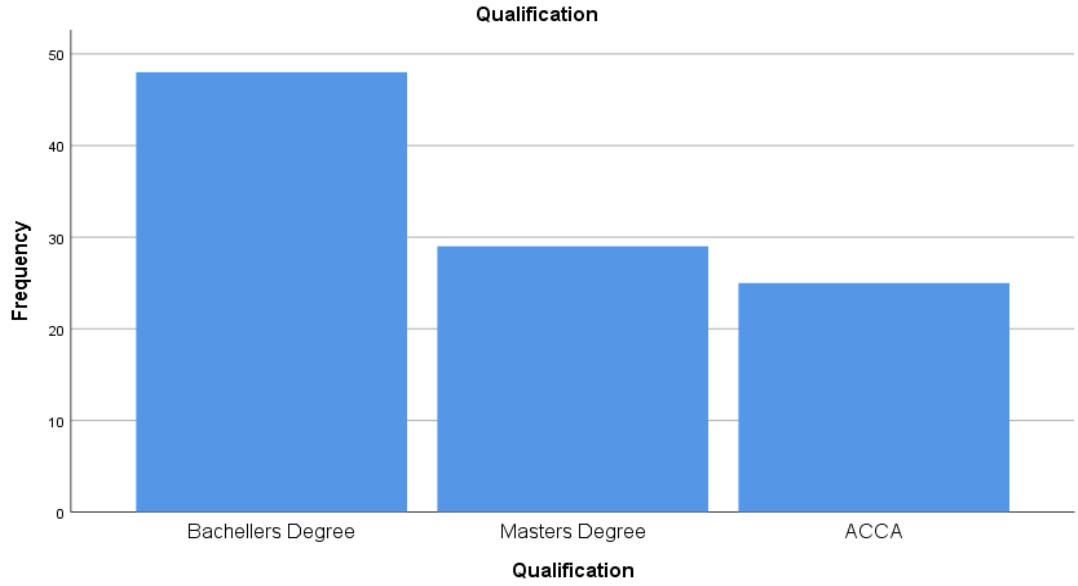

Figure 2: Qualification

Source: Extracted from our data computed through SPSS 25

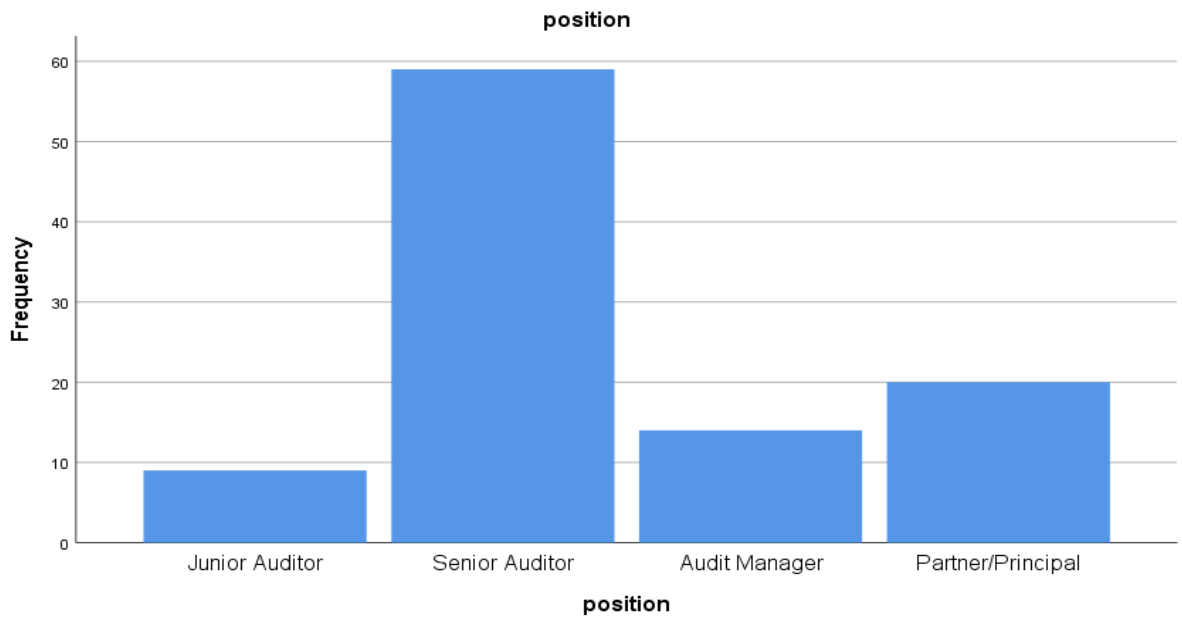

Figure 3: Position

Source: Extracted from our data computed through SPSS 25

Descriptive statistics are utilized to describe the fundamental features of data in the study as frequencies percentages etc. It help us to get lots of numbers in variables in a little space. Measures of frequency are used for categorical data, moreover, Frequency tables give us (1) Short tabular output, (2) Quick method of tracing errors and (3) Proportions for indicators.

4.3.2 Summary of Dependent Variable

Table 13: Summary of Dependent Variable

		N	Marginal Percentage
AQ	3.50	3	2.9%
	3.67	3	2.9%
	3.75	3	2.9%
	3.92	9	8.8%
	4.00	1	1.0%
	4.17	12	11.8%

	4.25	13	12.7%
	4.33	5	4.9%
	4.42	8	7.8%
	4.50	6	5.9%
	4.67	1	1.0%
	4.75	5	4.9%
	4.83	4	3.9%
	4.92	4	3.9%
	5.00	25	24.5%
Valid		102	100.0%
Missing		0	
Total		102	

Source: Extracted from our data computed through SPSS 25

Table 13 shows the case processing summary for the dependent variable, AQ (audit Quality) shows the frequency of mean values of AQ in fifteen thresholds in the increasing order. This summary shows that there are no missing values in the data and all 102 are valid. Another method of testing the goodness of fit is pseudo R2. The literature proposes numerous so-called pseudo-R2 measures for evaluating "goodness of fit" in regression models with categorical dependent variables. Unlike ordinary least square-R2, log-likelihood-based pseudo-R2s do not represent the proportion of explained variance but rather the improvement in model likelihood over a null model (Hemmert, Schons, and Wieseke, 2016).

Table 14: Pseudo R-square

Cox and Snell	.682
Nagelkerke	.688
McFadden	.240

.

Link function: Logit

Source: Extracted from our data computed through SPSS 25

Researchers have tried to compare different pseudo R^2 indices values used in logistic regression with Ordinary least squares R^2 values.

Walker and smith (2016) represented the Cox and Snell index is as

$$R^2_{cs} = 1 - \left[\frac{L(Null)}{L(Full)}\right]^{2/N}$$

Where L (Null) and L (Full) are the likelihood functions for the constant-only model and the model with the predictors, respectively, and N is the sample size. The Nagelkerke index, which is a "corrected" version of the Cox and Snell index in the sense that it constrains the index value so that it does not exceed 1.0, is expressed as

$$R^2_N = \frac{1 - \left[\frac{L(Null)}{L(Full)}\right]^{2/N}}{1 - L(Null)^{2/N}}$$

As a result of their study they found that seven of the nine indices were much lower in value than the R^2 (0.522) or the R^2 adjusted (0.515) values computed from an OLS model using the same predictors as the logistic regression model.

The values of the Nagelkerke and the Veall and Zimmermann indices, both of which are "corrected" indices, were noticeably similar (i.e., 0.436 and 0.489, respectively) to the OLS R^2 values. These indices' comparability in value to the OLS R^2 values was also found in Smith and McKenna (2013) (Walker et al., 2016).

It should be noted, though, that the lower values of these indices compared to OLS R^2 values may reflect, in part, less precision in the outcome due to the dichotomization of the continuous dependent variable for use in logistic regression (Walker et al., 2016). Based on the above study findings, the pseudo R^2 value of our study which is Nagelkerke 0.688 has an indication of a good fit to the model. It will be about 0.82 if approximated to Ordinary least squares R^2 values.

Table 15: Parameter Estimates 1

								95% Confidence Interval	
			Estimate	Std. Error	Wald	df	Sig.	Lower Bound	Upper Bound
Threshold	[AQ 3.50]	=	29.564	4.321	46.807	1	.000	21.094	38.033
	[AQ 3.67]	=	30.352	4.332	49.082	1	.000	21.861	38.843
	[AQ 3.75]	=	30.821	4.343	50.373	1	.000	22.310	39.333
	[AQ 3.92]	=	32.239	4.389	53.950	1	.000	23.637	40.842
	[AQ 4.00]	=	32.443	4.398	54.420	1	.000	23.824	41.063
	[AQ 4.17]	=	34.272	4.522	57.432	1	.000	25.408	43.136
	[AQ 4.25]	=	35.455	4.604	59.313	1	.000	26.432	44.478
	[AQ 4.33]	=	35.830	4.630	59.898	1	.000	26.756	44.904
	[AQ 4.42]	=	36.515	4.682	60.835	1	.000	27.339	45.690
	[AQ 4.50]	=	37.097	4.729	61.538	1	.000	27.828	46.365
	[AQ 4.67]	=	37.202	4.737	61.666	1	.000	27.916	46.487

	[AQ = 4.75]	37.693	4.776	62.276	1	.000	28.332	47.055
	[AQ = 4.83]	38.068	4.804	62.805	1	.000	28.653	47.482
	[AQ = 4.92]	38.468	4.829	63.455	1	.000	29.003	47.933
Location	AC	3.445	1.183	8.488	1	.004	1.128	5.763
	AI	4.750	.837	32.227	1	.000	3.110	6.390

Link function: Logit.

SPSS specifies the prediction mean values of the dependent variable in Thresholds. That are [AQ=3.5] to [AQ= 4.92] as stated on table 15. These are termed as cuts in Stata and there are 14 cuts. On Table 16 the coefficient values of the independent variables Ac and AI are 3.445 and 4.750 respectively at significance level of < 0.05. These values are the log Odds (logit) values of the respective covariates which are not subject to direct interpretation, rather it shall be converted to odds ratios before interpretation that is done by exponentiation. Therefore parameter Estimates2 on table 16 has additional column, EXP(B), which SPSS uses it to show the exponentiation values (odds ratio) of the logit values of the independent variables AC and AI. These values are 31.357 and 115.599 for AC and AI respectively.

First test of Hypothesis

H1:There is a significant positive relationship between the external audit firm's auditor's Competence and the quality of auditing.

The Exp(B) column on table 16 contains Odds ratios which reflect the multiplicative change in the odds of being in a higher category on the dependent variable for every one unit increase on the independent variable, holding the remaining independent variables constant.

An odds ratio >1 suggests an increasing probability of being in a higher level on the dependent variable as values on an independent variable increase. Whereas an odds ratio <1 suggests a decreasing probability of being in a higher level on the dependent variable with increasing values

on an independent variable. An odds ratio=1 suggests no predicted change in the likelihood of being in a higher category as values on an independent variable increases.

The odds ratio for AC (Audit Competence) indicates that the odds of being in a higher level of ordinal categories (from strongly disagree to strongly agree) on Audit Quality increases by 31.38 for every one unit increase on Audit Competence. That is the null hypothesis is rejected at 0.004 p-value and it is positively statistically significant at 0.05 significance level and the result supports the first research hypothesis.

Second test of Hypothesis

H2: There is a significant positive relationship between the external audit firm's auditor's independence and the quality of auditing.

The odds ratio for AI (Audit Independence) indicates that the odds of being in a higher level of ordinal categories (from strongly disagree to strongly agree) on Audit Quality increases by 115.60 for every one unit increase on Audit Independence. That is the null hypothesis is rejected at 0.000 p-value and it is positively highly statistically significant at 0.05 significance level and the result supports the second research hypothesis. If the null hypothesis is rejected at the 5% level, it would be said that the result of the test is 'statistically significant'. If the null hypothesis is not rejected, it would be said that the result of the test is 'not Significant, or that it is 'insignificant'. Finally, if the null hypothesis is rejected at the 1% level, the result is termed 'highly statistically significant' (Brooks, 2014). As we previously noted that the log odds (Logit) values are not suitable to interpretation directly, thus it should be converted to odds ratio though the suggested formula.

On table 17 the coefficient values on column B for Audit competence and Audit Independence are 3.44 and 4.750 respectively. SPSS convert these log odds (logits) to exponents as shown on table 16. Whereas we could convert them to exponent terms by using Microsoft excel or scientific calculators to reach at similar results that Exp(3.44) is exactly 31.38 and Exp(4.750) is 115.60.

The following report come in to existence by regressing the same data through Stata 14 command and helps us to extract additional information which SPSS uses it intrinsically but

doesn't display in report forms. This helps us to crosscheck the results in different statistical

Parameter	B	Std. Error	95% Wald Confidence Interval	Hypothesis Test	Exp(B)	95% Wald Confidence Interval for Exp(B)

packages, moreover it help us understand how these packages are doing intrinsically.

One of the information is the iteration that is ordered from 0 to 5. These iterations help us to understand what the SPSS and Stata packages do for us regarding the chi-squares, log likelihoods and pseudo R^2 s. Based on the data we obtain from the first and last iterations we can calculate the values of chi- square, -2 log likelihood (Deviance) and pseudo R^2

Table 16: Parameter Estimates 2

				Lower	Upper	Wald Chi-Square	df	Sig.		Lower	Upper
Threshold	[AQ=3.50]	29.564	4.6997	20.352	38.775	39.571	1	.000	6907262347525.609	690106046.689	69134698016990488.000
	[AQ=3.67]	30.352	4.6963	21.147	39.557	41.770	1	.000	15196586607624.710	1528407671.522	15109597316605184 0.000
	[AQ=3.75]	30.821	4.6998	21.610	40.033	43.007	1	.000	24292428214313.570	2426508104.715	24319806202212924 8.000
	[AQ=3.92]	32.239	4.7549	22.920	41.559	45.971	1	.000	10031228157609 5.780	8993979987.385	11188098983003888 60.000
	[AQ=4.00]	32.443	4.7660	23.102	41.784	46.337	1	.000	12300236676046 3.970	10790760869.395	14020866935886717 40.000
	[AQ=4.17]	34.272	4.9038	24.661	43.883	48.844	1	.000	76583948385939 6.600	51287916724.319	11435639279142840 000.000
	[AQ=4.25]	35.455	4.9670	25.719	45.190	50.951	1	.000	24990476928740 17.500	147852233957.385	42239736283315100 000.000
	[AQ=4.33]	35.830	4.9877	26.054	45.606	51.605	1	.000	3637520917671073.000	206660337541.359	6402563057774237 0000.000
	[AQ=4.42]	36.515	5.0427	26.631	46.398	52.434	1	.000	7212309808869996.000	367923455738.160	1413810725243393 10000.000
	[AQ=4.50]	37.097	5.1002	27.100	47.093	52.905	1	.000	1290659024290 8274.000	588235801823.924	2831858774692489 50000.000
	[AQ=4.67]	37.202	5.1118	27.183	47.220	52.964	1	.000	1433548673933 4570.000	638668769652.164	3217727088261440 00000.000

	[AQ=4.75]	37.693	5.1593	27.581	47.805	53.375	1	.000	23437109451232356.000	951213349875.968	577470973783818040000.000
	[AQ=4.83]	38.068	5.1872	27.901	48.234	53.858	1	.000	34088757274509184.000	131003218287 3.167	887034217718075600000.000
	[AQ=4.92]	38.468	5.2160	28.245	48.691	54.390	1	.000	50860371704169040.000	184721230776 9.450	140036821918419900000.000
AC		3.445	1.2063	1.081	5.810	8.158	1	.004	31.357	2.948	333.515
AI		4.750	.8493	3.085	6.415	31.280	1	.000	115.599	21.878	610.803
(Scale)		1a									

Dependent Variable: AQ
Model: (Threshold), AC, AI
a. Fixed at the displayed value.

Source: Extracted from our data computed through SPSS 25

4.4 Result of Hypothesis Testing

The result of ordinal regression analysis is presented in table 16 above. According table 16 the regression equation is mathematically presented as follows:

For example the log-odds for threshold 1 is: $\text{Ln}\left[\frac{\text{pr (AQ<=3.50)}}{\text{1-pr (AQ>3.50)}}\right] = 29.564_{+}\ 3.445_{AC}+\ 4.750_{AI.}$

For example the log-odds for threshold 2 is: $\text{Ln}\left[\frac{\text{pr (AQ=3.67)}}{\text{1-pr (AQ=3.67)}}\right] = 30.352_{+}\ 3.445_{AC}+\ 4.750_{AI.}$

Adelke et al. (2010) proposed the formula for chi-square (X^2) and the pseudo (McFadden) R^2 as discussed below.

$X^2 = -2(\text{lnLi-lnLf})$

Where LI = Initial iteration - analogues to RSS in OLS

Lf = Final iteration - analogues to TSS in OLS

=-2(-243.87875 - -185.34251)

=-2(-58.5362)

= 117.0725

The pseudo (McFadden) R^2= $1 - \frac{\ln Lf}{\ln Li} = \left[\frac{1-(-185.34251)}{-243.87875}\right]$

= .240022

This R^2 value is Equivalent to McFadden=.24 and Nagelkerke .688 as shown in table 12.

4.5 Discussion

The study finding reveals that Audit competence has a high positive and significant effect on Audit Quality. This is in line with researches conducted by Al-Khaddash et al. (2013), Mansouri et al. (2009) and Kertarajasa et al. (2019). This indicates that private Audit firms of Ethiopia are relatively competent enough to render a high quality Audit services partly due to their attachment with attribution theory. Heider (1958) cited in Kertarajasa et al. (2019) stated that attribution theory refers to how someone explains the causes of the behavior of others or themselves which will be determined whether from internal such as the nature, character, attitude, etc. or external such as the pressure of certain situations or circumstances that will influence individual behavior. Audit competence an internal factor affects the way auditors perform their duties and affects audit quality. This finding is in line with the findings of Hardiningsih et al. (2019). Mansouri et al. (2009) supports the finding of this research that Audit competence affects audit quality in detecting important frauds.

Prior researchers as Sawan et al. (2013), and De Angelo (1981) claimed that Audit firm size among other factors significantly affects Audit quality. Yet others as Arnett et al. (1979) cited in Sawan et al. (2013) commented that the size of the firm should not necessarily be a consideration for to affect audit quality but what matters is the ability of auditors (audit firms) to provide a high quality audit services. In line with this perspective the study conducted by Arnet and Danos (1979) cited in Nwanyanwu et al. (2017) that so far as professional standards and qualifications are maintained, it is not fair to arbitrarily

distinguish between the largest eight and all other Certified Public Accountants (CPA) Firms. To enhance this perspective in halting the discrimination among audit firms basing on audit firm size, the Derieux Committee De Angelo (1981) set up by the AICPA. The issue recommended that the selection of a CPA firm should be based not on size, but on the ability to provide service as stated in Nwanyanwu et al. (2017).

The study finding also reveals that Audit Independence has a positive and very high significant effect on Audit Quality. This finding is in line with researches conducted by Hardiningsih et al. (2019), Nwanyanwu et al. (2017), and Nebiye (2007). This indicates that private Audit firms of Ethiopia are relatively impartial and objective enough to render a high quality Audit services partly due to their attachment with attribution theory, independence is an internal factor that affects the behavior of auditors. That is manifested through their willingness to report any breach they may encounter in the process of auditing which is supported by Heider (1958) cited in Kertarajasa et al. (2019). All this evidences strengthen the very perspective of this study that measurement for audit quality better establishes its basement on the concept of the definition of audit quality by De Angelo (1981) - Which are Auditor Competence and Auditor independence.

Chapter Five: Conclusions and recommendations

Chapter Introduction

In the previous chapter, discussion about the research findings have been detailed, this chapter deals with conclusion, the recommendations, and future research suggestions.

5.1 Conclusions

The essence of the agency problem is the separation of management and finance. There is a conflict of interest between the owners of the company (shareholders) and the management who are administering the operations of companies being remunerated by the owners for the administration services they render. This problem necessitates us to search for the ways of

resolution. Auditing is believed to be the major tool though which this problem shall be solved by rendering an impartial audit report. Due to lack of the quality of auditing huge businesses were subject to failure out which (Enron, World com and Qwest) were a few to name in 2001 and early 2002. If that is the case a high quality audit report is a need. But how is quality maintained? This study aims to answer this question. To achieve this objective, Data were collected from a sample of 102 private audit practitioners found in Ethiopia. Analysis of the data were performed through SPSS 25 to find out the determinant factors which are assumed to affect audit quality. The pseudo R^2 value of our study which is Nagelkerke 0.688 has an indication of a good fit to the model. It will be about 0.82 if approximated to Ordinary least squares R^2 values. The study uses Audit competence and Audit Independence as explanatory variables in measuring Audit quality.

Based on the study findings, this study concludes the following:

Audit competence has a high positive and significant effect on Audit Quality (at 5% confidence level). This is to mean that audit firms which are equipped with highly competent auditors are more likely to issue a high quality audit reports of the financial statements. Audit independence has a very high positive and significant effect on Audit Quality (at 5% confidence level). This implies that whenever auditors come across a breach, in the process of examining the books of an auditee, the breach shall be reported if and only if the auditors are professionally independent in attitude both in fact and appearance of their clients, and if they are objective.

5.2 Recommendations

(1) Fulfilling Competence and independence must be a criteria for licensing applicants to engage in an Audit firm. An audit firm must recruit competent auditors. Competence in terms of holding a predefined type of certification, a predefined number of years of experience and testimonials that assure his/her independence like free from accusations. All Audit firms regardless of the size of Audit firm must be oversighted regularly consistently for the fulfilment of these requirements in a predefined time gap. AABE shall hold a strong position in considering these requirements in the process of awarding License.

(2) Special attention shall be given by private audit firms and AABE in enhancing auditors' competency through different schemes like through continuous training, and aiding practicing auditors for certification.

(3) The perspective of this study that is focusing on conceptual factors more than on mechanical factors is believed to pave the way for researchers to thinking critically and scientifically in the process of pointing out the determinant factors of audit quality basically.

(4) Ethiopian private audit firms and AABE should give attention on factors as independence and competence while designing their audit procedures in order to increase the stockholders trust on the audited financial statement.

5.3 Future research suggestions

As to the knowledge of the researcher, this thesis is the very rare if not any in the field of auditing researches in the Ethiopian context to make use of the ordinal regression model for the ordered categorical data which are responded by respondents in ranks as disagree, agree, strongly agree etc. such data are advised by many, in fact in methodological principle to be analyzed through ordinal regression model to yield best results. In the same analogy it is also logical to analyze continuous data by using Ordinary least square (OLS) method. That is linear regression. Yet in practice there are times when categorical data are analyzed by use of linear regression model. This could be partly due to the familiarity of linear regression model and due to the belief that linear regression model is powerful in predicting the outcomes. Another reason can be the complexity of ordinal regression model particularly in interpreting the results by far than the linear regression models' out puts interpretations.

And the researcher suggest future researchers to analyze categorical data which are allowed to be tested by non-parametric method by use of logistic regression models including ordinal regression model than linear regression model.

References

AABE (2015). Establishment and determination of the procedure of the Accounting and Auditing Board of Ethiopia. Council of Ministers Regulation No. 332-2014, January 2015.

Adeleke, K.A., Adepoju, A.A. (2010). Ordinal Logistic Regression Model: An Application to Pregnancy Outcomes, Journal of Mathematics and Statistics, *6*(3), 279-285

Albeksh, A. & Mohamed, H. (2017). Factors affecting the independence of the external auditor with in the auditing profession. I*nternational Journal of Management and Commerce Innovations, 4*(2), 680-689.

Al-khaddash, H., Al Nawas, R. & Ramadan, A. (2013). Factors affecting the quality of auditing: The Case of Jordanian Commercial Banks. International Journal of Business and Social Science, *4*(11), 206-222.

Bolarinwa, O.A., (2015). Principles and Methods of Validity and Reliability Testing of Questionnaires Used in Social and Health Science Researches. (Vol. 22, (4), pp.195-201).

Nigerian Postgraduate Medical Journal, https://www.doi.org /10.4103/1117-1936.173959

Brooks, C. (2014). Introductory Econometrics for Finance, (3rd ed.) London: Cambridge university press.

Bryman, A., & Bell, E. (2011). Business research methods (3rd .ed.) Newyork: Oxford university press.

Chemeda, Z. (2016, January). *The Assessment of Quality External Audit Services: Evidence from Grades 'A' Private Audit Firms of Ethiopia*. Unpublished master's thesis, Addis Ababa University, Addis Ababa.

Commercial code, (1960). Civil Code of the Empire of Ethiopia Proclamation, 165.

Creswell, J. W. (2009). Research design: Qualitative, quantitative, and mixed methods approaches, (3rd ed.) New Delhi: Sage publications.

Creswell, J.W. and Creswell, J.D. (2018). Research Design: Qualitative, Quantitative, and mixed methods approaches, (5th ed.) Los Angeles: Sage Publications.

Davis, J.H., Schoorman, F.D. and Donaldson, L. (1997). Toward a stewardship Theory of Management. *The academy of management Review*, *22*(1), 20-47.

De Angelo, L. E. (1981). Auditor Size and Audit Quality. *Journal of Accounting and Economics*, *13*(3), 183-199.

DeZoort, F.T., Holt, T., Taylor, M.H. (2012). A test of the auditor reliability framework using lenders' judgments. *Accounting, Organizations and Society*, *37*(8), 519-533.

Ethics Standards Board for Accountants. (2008). International code of ethics for professional accountants (including international independence standards). International Federation of Accountants.

Financial Reporting Proclamation No. 847/2014. (2014, December). Federal Negarit Gazette, 81.

FRC. (2018, February). The Audit Quality Framework. Financial Reporting council. Retrieved January 3, 2021 from https://www.frc.org.uk.

Freeman, E. (1999), Divergent stakeholder Theory. *The Academy of Management Review, 24*(2), 233-236.

Hardiningsih, P., Januarti, I., Oktaviani M, R., Srimindarti, C., Udin, U. (2019). Determinants of Audit Quality: *An Empirical Insight from Indonesia. International Journal of Science & Technology Research. 8*(07).

Hayes, R., Dassen, R., Schilder, A., & Wallage, (2005). *Principles of Audinting: An Introduction to International Standards on Auditing* (2nd ed.). London, England: Pearson education limited.

Hemmert, G., Schons, L. & Wieseke, J. (2016). Log-likelihood-based Pseudo-R2 in Logistic Regression: Deriving Sample-sensitive Benchmarks. Research Article Http// doi.org/10.1177/0049124116638107.

Hosmer, D.W., Lemeshow, S. and Sturdivant, R.X. (2013). *Applied Logistic Regression* (3rd .ed.) New York: Wiley

IAASB. (2014). a framework for audit quality: key elements that create an environment for audit quality. International Auditing and Assurance Standards Board (IAASB).

IAASB. (2018). *Handbook of international quality control, Auditing, Review, Other Assurance, and Related Services pronouncements* (2018th ed. Vol. I). NY, USA: IFAC.

IFRS Foundation (2015, July). A Guide through IFRS, Part A, the Conceptual framework and requirements.

International Ethics Standards Board for Accountants (2018, April). International Code of Ethics. Final pronouncement for Professional Accountants.

John, A., Hafiz, T.A., Robert, R., & David, W. (2007). Research Methods for Business & Management. Research Article doi:https://dx.doi.org/10.4135/9788132108498.

Kertarajasa, A.Y., Mariwa, T., and Wahyudi, T. (2019). The effect of Competence, Experience, Independence, due professional care, auditing integrity on audit Quality with Ethics as Moderating. *Journal of Accounting, Finance and Auditing Studies, 5*(1), 80-99

Kitata, S. (2016, March). *Factors affecting quality of External Auditing : The case of Ethiopian Commercial Banks*. Unpublished master's thesis, Addis Ababa University, Addis Ababa.

Kothari, C.R., & Garg, G. (2019). *Research methodology: Methods and Techniques*. New Delhi: New Age International publishers.

Mansouri, A., Pirayesh, R. & Salehi, M. (2009). Audit Competence and Audit Quality: Case in Emerging Economy. *International Journal of Business and management, 4*(2).

Mautz, R. K., & Sharaf, H. A. (1961). *The Philosophy of Auditing*. (Sarasota, Ed.) (1st ed.). America: American Accounting Association.

Mendenhall, W., Beaver, R., & Beaver, B. (2013). *Introduction to Probability and Statistics* (14th .ed.) Boston: Richard Stratton.

Meyer, J.W., & Rowan, B. (1977). Institutionalized Organizations: Formal Structure as Myth and Ceremony, *American Journal of Sociology*, *83*(2), 340-363

Miaoulis, G., and Michener,R.D.(1976). An Introduction to Sampling. Dubuque, Iowa: Kendall/Hunt Publishing Company.

Mukasa, E.S., Christopher, W., Ivan, B. and Kizito, M. (2021). The Effects of Parametric, Non-Parametric Tests and Processes in Inferential Statistics for Business Decision Making: A Case of 7 Selected Small Business Enterprises in Uganda. *Open Journal of Business and Management*, 9, 1510-1526

Lavrakas, P. J. (2008). Cronbach's alpha. In Encyclopedia of survey research methods (Vol. 1, pp. 169-170). SAGE Publications, Inc., https://www.doi.org/10.4135/9781412963947.n117

Nebiye, T. (2017, June). *The determinants of external audit quality: A case study of Ethiopian audit firms.* Unpublished master's thesis, Addis Ababa University, Addis Ababa.

Nwanyanwu, A., Loveday, N. (2017). Audit Quality Practices and Financial Reporting in Nigeria. *International Journal of Academic Research in Accounting, Finance and Management Sciences 7*(2), 145–155.

OFAG (2009, December). Office of the Federal Auditor General. Ethiopian Code of Ethics for Professional Accountants.

OFAG (2010, May). Office of the Federal Auditor General establishment (Amendment) Proclamation No.669/2010.

Onatuyeh, A. E., Nwabuko, O. B. (2016). Audit Firm Characteristics and Litigation Risk in Nigeria. *Journal of Finance and Management in Practice*, 4(1).

Palmrose, Z. (1988). An analysis of auditor litigation and audit service quality. The Accounting review, *63*(1), 55 – 73

Peecher, M.E, Solomon, I., and Trotman, K.T. (2013). An accountability framework for financial statement auditors and related research questions. *Journal of accounting, organizations and society, 38*(1), 596-620.

Sawan, N. and Alsaqqa, I. (2013). Audit firm size and quality: Does audit firm size influence audit quality in the Libyan oil industry? *African Journal of Business Management*, 7(3), 213-226.

Shleifer, A., & Vishny, R.W. (1997). A survey of corporate governance. *The Journal of Finance*. 52(2). Retrieved from http://scholar.harvard.edu/files/shleifer/files/surveycorpgov. Pdf

Soltani, B. (2007). *Auditing: an international approach*. London: Financial time prentice hall.

Tavakol, M. Dennick, R. (2011). Making sense of Cronbach's Alpha. (Vol. 2, pp.53-55). *International Journal of Medical Education Correspondence*, http://creativecommons.org/licenses/by/3.0

Thibodeau, J., & Frieir, D. (2009). *Auditing after Sarbanes-Oxley: Illustrative cases*. New York, NY: McGraw-Hill companies.

Walker, D.A. & Smith, T. J. (2016) JMASM36: Nine Pseudo R^2 Indices for Binary Logistic Regression Models (SPSS*), Journal of Modern Applied Statistical Methods*, 15(1). DOI: 10.22237/jmasm/1462077720.

Watts, R.L & Zimmerman, J.L. (1983). Agency Problems, Auditing, and the Theory of the Firm. *The Journal of Law & Economics*, *26*(3), 613-633.

Yalew, T. (2021, April). Effects of Fraud on Bank Performance in Ethiopian Commercial Banks. Unpublished master's thesis, Addis Ababa University, Addis Ababa.

Appendix (A)

Descriptive Statistic

Bar Chart

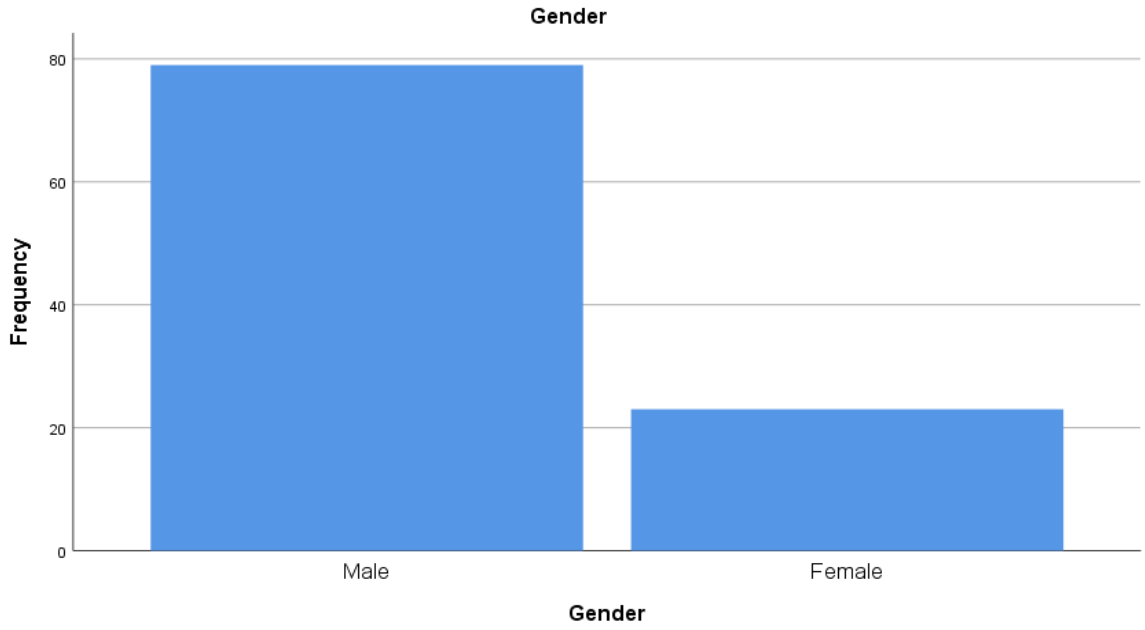

Figure 4 Gender

Source: own computation Extracted from sampled Audit firms through SPSS 25

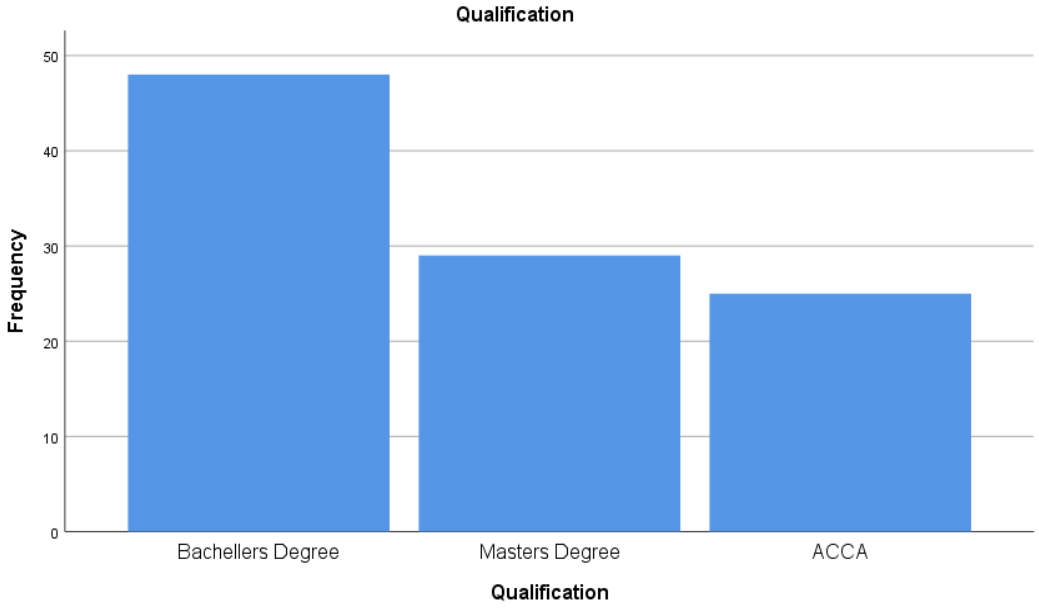

Figure 5 Qualification

Source: own computation Extracted from sampled Audit firms through SPSS 25

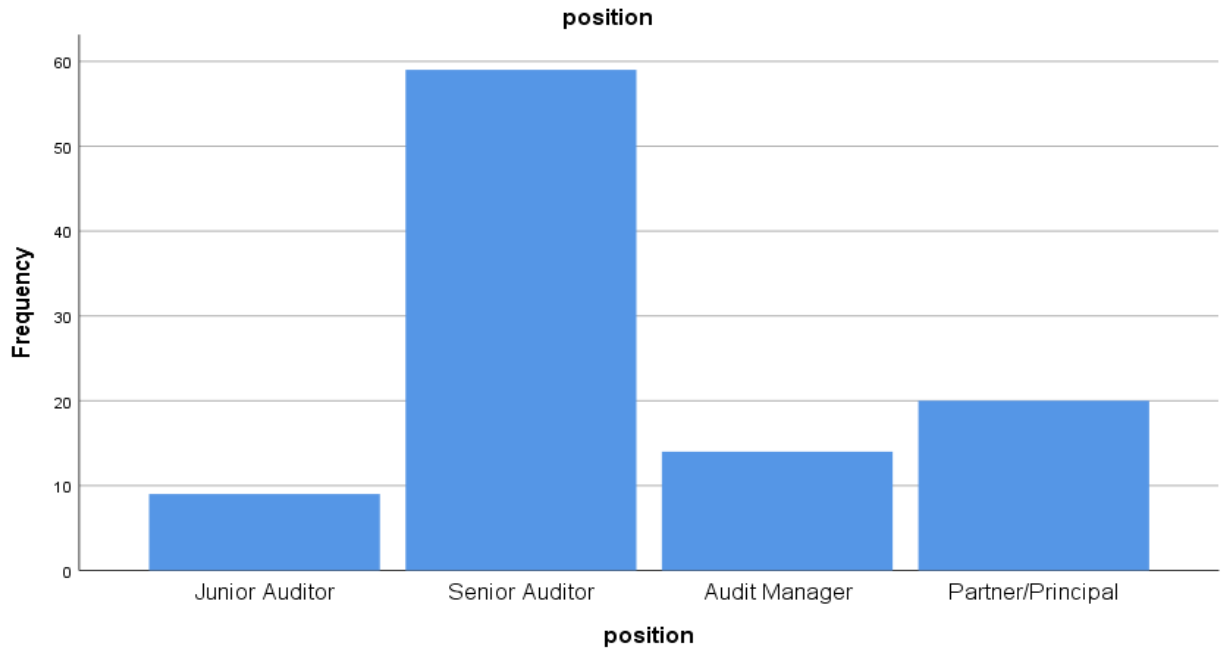

Figure 6 Position

Source: own computation Extracted from sampled Audit firms through SPSS 25

Table 17: SPSS Validity Test Value

Correlations					
		Total	obtained value	critical value	validity test
AC1	Pearson Correlation	.369**	0.369	0.195	Valid
	Sig. (2-tailed)	0.000			
	N	102			
AC2	Pearson Correlation	-.336**	-0.336	0.195	Invalid
	Sig. (2-tailed)	0.001			
	N	102			
AC3	Pearson Correlation	.311**	0.311	0.195	Valid
	Sig. (2-tailed)	0.001			
	N	102			

Correlations					
AC4	Pearson Correlation	.702**	0.702	0.195	Valid
	Sig. (2-tailed)	0.000			
	N	102			
AC5	Pearson Correlation	.287**	0.287	0.195	Valid
	Sig. (2-tailed)	0.004			
	N	102			
AC6	Pearson Correlation	.802**	0.802	0.195	Valid
	Sig. (2-tailed)	0.000			
	N	102			
AC7	Pearson Correlation	0.141	0.141	0.195	Invalid
	Sig. (2-tailed)	0.157			
	N	102			
AC8	Pearson Correlation	.596**	0.596	0.195	Valid
	Sig. (2-tailed)	0.000			
	N	102			
AC9	Pearson Correlation	.667**	0.667	0.195	Valid
	Sig. (2-tailed)	0.000			
	N	102			
AC10	Pearson Correlation	.436**	0.436	0.195	Valid
	Sig. (2-tailed)	0.000			
	N	102			
AC11	Pearson Correlation	.778**	0.778	0.195	Valid
	Sig. (2-tailed)	0.000			
	N	102			

Correlations					
AC12	Pearson Correlation	.616**	0.616	0.195	Valid
	Sig. (2-tailed)	0.000			
	N	102			
AI1	Pearson Correlation	.724**	0.724	0.195	Valid
	Sig. (2-tailed)	0.000			
	N	102			
AI2	Pearson Correlation	.680**	0.68	0.195	Valid
	Sig. (2-tailed)	0.000			
	N	102			
AI3	Pearson Correlation	.611**	0.611	0.195	Valid
	Sig. (2-tailed)	0.000			
	N	102			
AI4	Pearson Correlation	0.035	0.035	0.195	Invalid
	Sig. (2-tailed)	0.728			
	N	102			
AI5	Pearson Correlation	.575**	0.575	0.195	Valid
	Sig. (2-tailed)	0.000			
	N	102			
AI6	Pearson Correlation	.626**	0.626	0.195	Valid
	Sig. (2-tailed)	0.000			
	N	102			
AI7	Pearson Correlation	.564**	0.564	0.195	Valid
	Sig. (2-	0.000			

Correlations					
	tailed)				
	N	102			
AI8	Pearson Correlation	.440**	0.44	0.195	Valid
	Sig. (2-tailed)	0.000			
	N	102			
AI9	Pearson Correlation	.272**	0.272	0.195	Valid
	Sig. (2-tailed)	0.006			
	N	102			
AI10	Pearson Correlation	.723**	0.723	0.195	Valid
	Sig. (2-tailed)	0.000			
	N	102			
AI11	Pearson Correlation	.764**	0.764	0.195	Valid
	Sig. (2-tailed)	0.000			
	N	102			
AI12	Pearson Correlation	.678**	0.678	0.195	Valid
	Sig. (2-tailed)	0.000			
	N	102			
AQ1	Pearson Correlation	.664**	0.664	0.195	Valid
	Sig. (2-tailed)	0.000			
	N	102			
AQ2	Pearson Correlation	.769**	0.769	0.195	Valid
	Sig. (2-tailed)	0.000			
	N	102			
AQ3	Pearson Correlation	.810**	0.81	0.195	Valid

Correlations					
	Sig. (2-tailed)	0.000			
	N	102			
AQ4	Pearson Correlation	.844**	0.844	0.195	Valid
	Sig. (2-tailed)	0.000			
	N	102			
AQ5	Pearson Correlation	.680**	0.68	0.195	Valid
	Sig. (2-tailed)	0.000			
	N	102			
AQ6	Pearson Correlation	.760**	0.76	0.195	Valid
	Sig. (2-tailed)	0.000			
	N	102			
AQ7	Pearson Correlation	.457**	0.457	0.195	Valid
	Sig. (2-tailed)	0.000			
	N	102			
AQ8	Pearson Correlation	.844**	0.844	0.195	Valid
	Sig. (2-tailed)	0.000			
	N	102			
AQ9	Pearson Correlation	.483**	0.483	0.195	Valid
	Sig. (2-tailed)	0.000			
	N	102			
AQ10	Pearson Correlation	.313**	0.313	0.195	Valid
	Sig. (2-tailed)	0.001			
	N	102			
AQ11	Pearson Correlation	.814**	0.814	0.195	Valid

Correlations					
	Sig. (2-tailed)	0.000			
	N	102			
AQ12	Pearson Correlation	.605**	0.605	0.195	Valid
	Sig. (2-tailed)	0.000			
	N	102			
Total	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	102			

Source: own computation Extracted from sampled Audit firms through SPSS 25

Table 18: Critical value Pearson correlation

	Significance Level			
1-tailed	0.05	0.025	0.01	0.005
2-tailed	0.1	0.05	0.02	0.01
df				
1	0.988	0.997	0.9995	0.9999
2	0.9	0.95	0.98	0.99
3	0.805	0.878	0.934	0.959
4	0.729	0.811	0.882	0.917
5	0.669	0.754	0.833	0.874
6	0.622	0.707	0.789	0.834
7	0.582	0.666	0.75	0.798
8	0.549	0.632	0.716	0.765
9	0.521	0.602	0.685	0.735
10	0.497	0.576	0.658	0.708
11	0.476	0.553	0.634	0.684
12	0.458	0.532	0.612	0.661
13	0.441	0.514	0.592	0.641
14	0.426	0.497	0.574	0.628
15	0.412	0.482	0.558	0.606
16	0.4	0.468	0.542	0.59
17	0.389	0.456	0.528	0.575
18	0.378	0.444	0.516	0.561
19	0.369	0.433	0.503	0.549
20	0.36	0.423	0.492	0.537
21	0.352	0.413	0.482	0.526
22	0.344	0.404	0.472	0.515
23	0.337	0.396	0.462	0.505
24	0.33	0.388	0.453	0.495
25	0.323	0.381	0.445	0.487
26	0.317	0.374	0.437	0.479
27	0.311	0.367	0.43	0.471
28	0.306	0.361	0.423	0.463
29	0.301	0.355	0.416	0.456
30	0.296	0.349	0.409	0.449
35	0.275	0.325	0.381	0.418
40	0.257	0.304	0.358	0.393
45	0.243	0.288	0.338	0.372
50	0.231	0.273	0.322	0.354
60	0.211	0.25	0.295	0.325
70	0.195	0.232	0.274	0.302
80	0.183	0.217	0.256	0.284
90	0.173	0.205	0.242	0.267
100	0.164	0.195	0.23	0.254

Source: https://researchbasics.education.uconn.edu/r_critical_value_table/

Appendix (B)

Questionnaires

Addis Ababa University (AAU)

College of Business and Economics

Questionnaire to be filled by external Auditors

Dear Respondent,

My name is Kumsa Bersisa. I am currently a student of Addis Ababa University, doing MSC thesis on a topic entitled "Factors Affecting the Quality of Auditing in External Auditing services: Evidence from Private Audit firms of Ethiopia."

The purpose of this questionnaire is to gather data regarding factors which are perceived to affect the quality of Auditing in private audit firms of Ethiopia. The study is purely for the purpose of academic research and all of your response to the given question will be kept confidential. Your frank and timely response is vital and without which the success of this thesis wouldn't be possible. Therefore I kindly request you to respond to each question with this consideration.

Thank you in advance for your cooperation and timely response!

Note: This questionnaire has two sections

Section one is about demographic background and section two is about data directly related to the study.

Instruction: For questions with choices**,** please choose one which you believe is appropriate and put "X" mark in the box found in front of your choice.

Section 1: ***Demographic Background***

1. Gender: □ Female □ Male

2. The educational Background

□ Diploma □ Bachelor's Degree □ CPA or ACCA

□ Master's degree □ PHD □ other _____

3. Years of work experience: □ 1 to 5 years □ 6 to 10 years □ 11 to 15 years

□ 16 to 20 years □ over 20 years

4. Your current position _____

Section 2: ***Data related to research topic***

Please put "**X**" mark for the rate that best represents your perspective.

SA= Strongly Agree (5) **A= Agree (4)** **N=Neutral (3)**

DA= Disagree (2) **SD= Strongly Disagree (1)**

A: Auditor Competence

S/N	Statements	SA	A	N	DA	SD
1	The increase in the number of auditors with academic and practical qualifications are positive elements for the quality of the audit					
2	Defining an Audit procedures as the processes and methods auditors use in the course of auditing a given account, auditors makes use of Audit procedures for each account during auditing.					
3	The audit engagement team have access to appropriate specialists and/or national office resources during the audit					
4	Being membership of ACCA increases the ability of detecting important fraud					
5	The Audit firm provides training to new members of the firm to make them familiar with the quality control procedure.					
6	Auditors demonstrate appropriate technical knowledge and expertise, including access to specialists, as required					

S/N	Statements	SA	A	N	DA	SD
7	The audit team has the necessary knowledge and skills (company-specific, industry, accounting, auditing) to meet the company's audit requirements and the right resources dedicated to the audit.					
8	The audit firm provides the necessary training, resources and assistance to enable auditors to develop and maintain the required competence and capabilities.					
9	There are programs and clear guidelines set by the audit firm to ensure continuous professional improvement and assign appropriate authority to a person or individuals					
10 11	The engagement team provides a sound risk assessment at the start of the audit, including an assessment of fraud risk Training programs are updated as needed and in light of new developments and changing circumstances					
12	Individuals are encouraged to prepare articles, participate in professional activities, and communicate information to employees about current developments in occupational and technical standards governing the profession.					

B: **Auditor Independence**

S/N	Statements	SA	A	N	D	SD
1	The auditor has freedom to develop his/her own audit program, both as procedures to be followed and the amount of work to be performed.					
2	The auditor is free from pressures in the selection of areas, activities, personal relationships and managerial policies to be examined.					
3	The auditor is free from pressures or influences in stating facts or expressing opinion as a result of the examination.					
4	Defining Professional skepticism as an attitude that includes a questioning mind and a critical assessment of audit evidence, the firm and its auditors exercise Professional skepticism in the course of					

S/N	Statements	SA	A	N	DA	SD
5	auditing. The firm complies with the principle of objectivity, which requires an auditor not to compromise professional or business judgment because of bias, conflict of interest or undue influence of others					
6	The performance of individuals are periodically assessed by collecting information about their performance and using specific models for this purpose and verifying the completion of the evaluation on time					
7	The auditor evaluates the methods and assumptions used and challenge, where necessary, management's assumptions and application of accounting policies, including the completeness and transparency of the related disclosures.					
8	The audit partner communicates the nature of non-audit services, including the safeguards put in place to protect independence.					
9	The audit firm rotates the engagement partner in line with their own firm or commercial code					
10	There is evidence that the audit team challenges, rather than rationalizes significant estimates, judgments and accounting policy choices made by management.					
11	There were discussions between the auditors and management on fraud risk, prevention and detection led at the appropriate level and were challenging and comprehensive.					
12	If auditors have restricted access to all necessary information from the client, they should not accept the engagement.					

C**: Audit Quality**

1	The firm has established and maintained a system of quality so that auditors comply with professional standards and applicable legal and regulatory requirements as per ISA 220.					

S/N	Statements	SA	A	N	DA	SD
2	The audit firm should establish strict policies of punishment if quality control policies are not performed by members of the firm.					
3	Defining an audit program as a tool which tells an auditor what procedure is required to follow during an audit, the audit firm has maintained an audit program and Auditors strictly utilize it during Auditing.					
4	Defining an **audit checklist** as a set of questions that must be answered to verify requirements or standards are being met and all tasks are completed, the audit firm has maintained audit check list					
5	Before planning the nature, timing and extent of an audit, the risk of material misstatement should be assessed					
6	An auditor is practicing his/her responsibility for obtaining reasonable assurance that the financial statements taken as a whole are free from material misstatement, whether caused by fraud or error.					
7	The internal quality control system and their actual compliance with updated audit standards are being constantly monitored by the AABE					
8	The firm has established policies and procedures for ethical requirements and firm and its personnel comply with these requirements.					
9	More audit competence cause more fraud detection					
10	Excessive reliance placed on internal auditors' work reduces the responsibility of auditors to maintain audit quality.					
11	The engagement team members should investigate the client's ethical requirements in the subsequent audit engagements to update their audit plans					
12	Verification of the internal control system through direct observation of control will ensure the quality of audit.					

Appendix (C)

List of Certified Auditors

No.	Firm's Name	Physical Address	Tell	E-mail
1	A.A BromHaed Certified Audit Firm	ጆሞ ኬንያታ ጎዳና	0911200074	aabromhead@gmail.com
2	A.R Certified Certified Audit Firm	ባምቢስ	0911231380	arauthorized@gmail.com
3	A.W Thomas Certified Audit Firm		0911241255	awthomas4@gmail.com
4	Abebe Arega kassa Certified Audit Firm	ባህር ዳር	0917705200	abearega@yahoo.com
5	Abebe Kifle Melaku Certifed Audit Firm	Imperial hotel Yemeron senay building 6th floor	0912614761	abebekiflem@gmail.com
6	Abraham Berhanu Admasu Certified Audit Firm	አሎምፒያ-ግሪክ ት/ቤት ፊት ለፊት	0911-220346	abrahamberahnu@gmail.com
7	Abraham Teshome Ageze Certified Audit Firm	22 ማዞሪያ	0911231365	atco2016@gmail.com
8	Adane Batiso Aniye Certified Audit Firm	ሀይሌ ገ/ስላሴ መንገድ	0911160878	batisoadane@gmail.com
9	Adanech Feyisa Dori Certifed Audit Firm	ኢትዮ ቻይና	0930102754	adanech_2008@yahoo.com
10	Addisu Alemu Bimirew Certified Audit Firm	ባህር ዳር	0920807930	addiananiya@gmail.com
11	Aderaw Gashayie Ayalew Certified Audit Firm	ባህር ዳር	0930375204	
12	Akalu Nurye Ibrahim Certified Audit firm	ታይሌ ገ/ስላሴ ጎዳና	09300132656	akalunurye@yahoo.com
13	Alemayehu Endale Berta Certified	Arada giorigis	0912503131	alemaenda@gmail.co

No.	Firm's Name	Physical Address	Tell	E-mail
	Audit Firm	square		m
14	Alemgena and Tesfaye Certified Accountant and Auditor Partnership /ALETA Authorized Accountants and Auditors /	Haya hulet area-AFRO HOUSE	911517413 911517413	aleta.company@gmail.com
15	Alemu Abegaz Ali Certified Audit Firm	ደሴ	0914600403	
16	Alia Abdulahi Certified Audit Firm	Bole Worda 04	0911200258	alia1993audit@yahoo.com
17	Ama-Hai Certified Audit Firm	Around Meskel flower	0911213405	haigeb2004@gmail.com
18	Amare Getu Certifed Audit Firm	ቦሌ	0930013328	amaregetu@gmail.com
19	Ashenafi Mengesha Mekonnen Certified Audit firm	ደብረ ብርሀን	0911777036	ashuma07@gmail.com
20	Ashenafi Tadesse Nega Certified Audit Firm	መቀለ ጋራድ ህንፃ	0914707507	ashenafitadesse23@yahoo.com
21	Asnake Engida Tadesse Certified Audit Firm	መስቀል ፍላወር	0911806626	asnakeengda@yahoo.com
22	Asrat, Gezahegne & Birbirssa Audit General Partners	መስቀል ፍላወር አካባቢ	0930014627	info@asgbpartners.com
23	Audit Services Corporation Certified Audit Firm	ፍላሚንጎ	0115515222	asc@ethionet.et
24	Aweke Gebreselassie Fite Certified Audit Firm	ቱሌ ገራጅ አካባቢ ወረዳ 2	0911221141	awekegselassie@gmail.com
25	Bahru and Tadele Certified Audit Partnership	እታለም ህንፃ 5ኛ ፎቅ	0114701800	tggebeyehu@gmail.com

No.	Firm's Name	Physical Address	Tell	E-mail
		ቢሮ.ቁ 504፣505፣502		
26	Belayneh Molla Adgeh Certified Audit Firm	ወሎ ሰፈር	0911-420942	belaym59@yahoo.com
27	Belete Tensaye Wakeyo Certified Audit Firm	meshualekiya	0911478963	Wtensayebelete@gmail.com
28	Berhanu Retta Tessema Certified Audit Firm	ሃይሌ ገ/ስላሴ ጎዳና	0911234415	berhamureta@gmail.com
29	Bezuayehu Mengesha Wibetu Certified Audit Firm	ledeta infront of balcha hospital	0911149392	
30	Bilal MohammedAuditing Certified Audit Firm	ደብረዘይት መንገድ	0911230648	bilmoh32@gmail.com
31	Birtukan Ademe Seyoum Certified Audit Firm	ባህር ዳር	0918701053	birtukanademeseyoum@gmail.com
32	Biruk Hailu Debele Certified Audit Firm	መካነየሱስ ህንፃ ባምቢስ አካባቢ	0911691316	birukhailu14@gmail.com
33	Brkti Abay Tesfamariam Certified Audit Firm	ቀዳማይ ወያኔ	0914726251	brktiabay@gmail.com
34	Dagne Mekonnen Yetemegne Certified Audit Firm	መስቀል ፍላወር	0911422105	dagnemek23@gmail.com
35	Dagninet Ayalew Melese Certified Audit Firm	ባህር ዳር	0918025442	
36	Daniel Getaneh Tiruneh Certified Audit Firm	ቦሌ መድሃኒዓለም አካባቢ	0947358511	danielauditors@gmail.com
37	Debebe and Mekonnen Audit Service Partenership	ቦሌ ወረዳ 4 ባታ ህንፃ New / SF2018	0913-082781	ydebebeyilma@yahoo.com
38	Degefa & Tewodros Audit Services Parnership		0911223210	deg.lem@ethionet.et

No.	Firm's Name	Physical Address	Tell	E-mail
39	Desta Yifter Kahsay Certified Audit Firm	መቀለ ቀዳማይ ወያኔ ገበያ	0912697466	destayifter@gmail.com
40	Eliab Tilahun Oluma Certified Audit Firm	ጉርድሾላ አትሌቲክስ ፌዴሬሽን ህንፃ	0911227451	eliab.tilahun.co@gmail.com
41	Elias Zeleke Weldekidan Certified Audit Firm	ቦሌ መንገድ ጂሲሲ ህንፃ	0911689854	zelekee@yahoo.com
42	Enderis Adem Hassen Certified Audit Firm	ባህር ዳር	0918705072	
43	Ephrem Demissie Banjaw Certified Audit Firm	ላፍቶ || ቄራ	0911359090	efrem.demissie@gmail.com
44	Ephrem Melaku Tasew Certified Audit Firm	አየር ጤና	0911251765	eph.melaku@gmail.com
45	Ermias Akalu kebede Certified Audit Firm	ባህር ዳር	0918728520	akalu_e@yahoo.com
46	Ermias Negussie Abebe Certified Audit Firm	ጂቡቲ መንገድ	0911-229495	info@encauditing.com
47	Eshetu & Mesfin Certified Audit Partnership	ሜክሲኮ ቴሌ ባር አካባቢ	0913041231	eandmaudit@gmail.com
48	Eyasu W/Mariam Certifed Audit Firm	ብስራተ ገብርኤል	0911465573	eyasuwma2014@gmail.com
49	Fasil Engida Gebeyhu Certified Audit Firm	ጦመንጃ ያዥ	0911881681	fasil_e2004@yahoo.com
50	Fekadeab Goshime Retta Certified Audit Firm	ቸርቸል መንገድ /ቴዎድሮስ አደባባይ/ ኤሌክትሪክ ዎርልድ ህንፃ	0911518181 /0911220371	Fekadeab@gmail.com

No.	Firm's Name	Physical Address	Tell	E-mail
51	Feysel Takele Reta Certified Audit Firm	ልደራ ባልቻ AIA Business center	0911121548	feyselta@gail.com
52	Frezer Habtewold Bahru Certifed Audit Firm	ደምበል አፍሪካ አቬኑ	0930078410	frehab504@gmail.com
53	Geberemelak Bereded Woldetsadik Certified Audit Firm	ቦሌ	0911631580	gebreamlakberededede@gmail.com
54	Gebreamlak Arage Gubena Certified Audit Firm	ብስራት ህንፃ ቢሮ.ቁ 3	0931581227	gebrshaudit@gmail.com
55	Geta Mehary Temesgen Certified Audit Firm	Bole Atlas -Salfaz Building	o913791008	gmehary@yahoo.com
56	Getachew Benalfew Kassa Certified Audit Firm	ሰሜን ሆቴል ጀርባ	0911216991	gb.auditors@yahoo.com
57	Getachew Kassaye Temis Certified Audit Firm	ስቴዲየም	0911202392	getachewkassaye@ethionet.et
58	Getachew Tabor Certified Audit firm	ቄራ ዳውን ታወን ህንፃ	0911882563	gttbtabor@yahoo.com
59	Getachew Wakjira Wario Certified Audit Firm	ኢሰማኮ ህንፃ 6ና ፎቅ	0911212087	getwok611@gmail.com
60	Getachew Yimeneshoa Bezabeh Certified Audit Firm	ሀይሌ ገ/ስላሴ መንገድ	0911211800	
61	Getenet Worku Beyene Certified Audit Firm	BOLE MEDHANIALEM	0911694065	gechove16@gmail.com
62	Girma and Fasil Audit Service Partnership	አፍሪካ አቬኑ ዳቢ ኮምፕሌክስ ቢሮ.ቁ 507	0911212635	info@gandfauditpartners.com
63	Habtamu Tesfaye Certifed Audit Firm	ካሳንቺስ እናት ታወር 9ኛ ፎቅ	0911227475	habtamuu@gmail.com
64	Habtewold Menker Wassie	Behind Commercial	0935997982	habteauditor@gmail.c

No.	Firm's Name	Physical Address	Tell	E-mail
	Certifed Audit Firm	college		om
65	Hadush Belay Gidey Certified Audit Firm	መቀለ	0914761242	had2002@yahoo.com
66	Haftu Tsegay Ketema Certified Audit Firm	ሀወልቲ	0914300522	haftutsegay@gmail.com
67	Hailegiorgis Terefe Anbessie Certified Audit Firm	bambis zegyla complex biulding	0930105504	haileterefe@gmail.com
68	Haileyesus Chekol Ayalew Certified Audit Firm	ሜክሲኮ በቀለ ህንፃ	0911871788	hailech2011@gmail.com
69	Hassen Abata Abegaz Certified Audit Firm	መስቀል ፍላወር	0911858250	wassenabate@yahoo.com
70	Hassen Seid Hamid Certified Audit Firm	ቂርቆስ ወረዳ 04	0911-645529	
71	Hiwot Tadesse Akuma Certified Audit Firm	Bambis Near To Noc Building	o911603073	hiwottadesse2112@gmail.com
72	Hruy Abebayehu Mergia Certified Audit Firm	አትላስ	0911733289	hruydbebaw@gmail.com
73	Jemal Ali Boru Certified Audit Firm	meskel square C.E.T.U building 2nd floor room no 205/206	0911206903	jemalalbr@gmail.com
74	Kalid Mohammed Ismael CerTified Audit Firm	መዚድ ፕላዛ ኮሜርስ አካባቢ	0911125235	kmiaudit@gmail.com
75	Kassa Yilala Certified Audit Firm	ቦሌ ሚካኤል አካባቢ	0911243694	tassayilala@yahoo.com
76	Kassaye Assefa Alemu Certifed Audit Firm	ሜክሲኮ	0911235039	kassaycassefa10@gmail.com
77	Kokeb and Melkamu Certified	Africa Avenu near	0911203778	

No.	Firm's Name	Physical Address	Tell	E-mail
	Audit Partnership	bole printing press		
78	Leul Zewdie Shoatatek Certified Audit Firm	22 ማዞሪያ	0911515682	leulzewdie@gmail.com
79	Lotfi Bibawi Hanna Certified Audit Firm		0911200165	lotfi.bibawi@ethionet.et
80	Meberatu Bayih Birhanu Certified Audit Firm	ሚሊተሪ ተራ	0913584290	mebaratubaie@gmail.com
81	Mekonnen Gebeyehu G/Hana Certified Audit Firm	bambis infront of ministry of justice hailegebreil building 5th floor	0911226567	mekgeb@yahoo.com
82	Menbere Leul Kokeb Certified Audit Firm	ከሀርሞኒ ሆቴል ፊት ለፊት	0911230461	
83	Mesfin Ezezewe Yenineh Certified Audit Firm		0930110850	
84	Mohammed Yasin Muzeyin Certified Audit Firm	ላፍቶ ከአቢሲኒያ ባንክ ፊት ለፊት	0911544632	mohammedaudit@gmail.com
85	Mubarik Zinab Abadega certified auditing firm	Atkilt Tera Kelifa Bldg	o911131763	mubznb@gmail.com
86	Muhaba Muhammed Seid Certifed Audit Firm	ከሊፋ ህንፃ ቢሮ.ቁ 806	0911252038	
87	Mulat Belay Dagnew Certified Audit Firm	ጎንደር	0918703823	dagnewgobezu@gmail.com
88	Mulubrhan Meressa Hailu Certified Audit Firm	urael atlas awash insurance building 5th flor	0930105505 0118-223683	mulubrhan0478@gmail.com
89	Mulugeta Eshetu Certified Audit Firm		0911692611	amenmuller@gmail.com

No.	Firm's Name	Physical Address	Tell	E-mail
90	Nigusu Abatneh Muluye Certified Audit Firm	ባህር ዳር	0918779477	nigusuabat@yahoo.com
91	Paulos Basazenew Amogne Certified Audit Firm		0911642405	paulosbasazenew@yahoo.com
92	Salahadin Mohammed Abbubeker Certified Audit Firm	ልደታ ክፍለ ከተማ ወረዳ 8	0911602230	salahadinmohammed@yahoo.com
93	Samson Worku Bejga Certifed Audit Firm	ቦሌ	0911428488	sami_thow@yahoo.com
94	Seyoum Tamene Temesgen Certified Audit Firm	24 መገናኛ ኮከብ ህንፃ አካባቢ	0913012302	siyoumtamene@yahoo.com
95	Siyoum Kidane G/mikeal Certified Audit Firm	ሸሬ እንደስላሴ ሸራሮ ሁመራ መንገድ	0914026754	
96	Soliyana Kiros Certified Audit Firm	ልደታ ባልቻ ሆስፒታል	0911155779	
97	Solomon Demena Certifed Audit Firm	መገናኛ አደባባይ ማራቶን ሞተርስ ህንፃ ቢሮ ቁ. 107	0930110292	tomime76@gmail.com
98	Solomon Eshete Negash Certified Audit Firm	5 KILLO INFRONT OF TECHNOLOGY FACULTY	0911404989	sol2000e@yahoo.com
99	Solomon Shewaye G/hiwot Certified Audit Firm	አብነት	0912848329	solomonsgh@yahoo.com
100	Solomon Tiruneh Tamerat Certified Audit Firm	meskel flower road near Dreamliner Hotel	0911433904	soltir2000@yahoo.com
10	Solomon Wassyihun Shumye		0911237386	swsauditors@gmail.c

No.	Firm's Name	Physical Address	Tell	E-mail
1	Cerfified Audit Firm			om
102	Surafel Akalu G/Tsadik Certified Audit Firm	kazanchis Bahran Building	o911730670	sacertifiedauditor@gmail.com
103	Tambizot Minwuye Walle Certified Audit Firm	መገናኛ	0911151297	tambizot@gmail.com
104	Tamerat Abebe Nebso Certified Audit Firm	የሺ ታም ህንፃ 3ኛ ፎቅ ቁጥር 301 እና 302	0911648716	tamratabebe@gmail.com
105	TAY Certified Audit Firm	ethio-china friendship street wengelawit tadesse building 1st floor	0911515039	tayco@ethionet.et
106	Taye Gebregiorgis W/Micheal Certified Audit Firm	ጀሞ ሚካኤል ቀለበት-ጲየኒ ህንፃ	0922990572	tayedagm@yahoo.com
107	Te/Ge/So/Gi/Ge/Je/Yo/Ha/ and So Certified Audit Firm / HST General Partnneship/	ወሎ ሰፈር ኢትዮ-ቻይና ፍሬንድ ሺፕ አቬኑ	0911220658	
108	Tekestebirhan Dagne Desta Certifed Audit Firm	መገናኛ	0911717558	tekelife@gmail.com
109	Teklehaimanot Hagos G/Michael Certified Audit firm	ባልቻ ሆስፒታል አካባቢ ሶሊያና ኮሜርሺያል ሴንተር	0913074217	tasaud@yahoo.com
110	Tensae Nebiye Gebretekle Certified Audit Firm	Gabon street - Meskel Flower	o911108367	tensaenebiye@gmail.com
111	Tesfaye Gedlu Certified Audit Firm	ንግስት ኤልሳቤጥ 2ኛ መንገድ 4ኪሎ	09301014496	mtgedla@yahoo.com
11	Tesfaye Teferi Anbesse Certified	መስቀል ፍላወር	0911219104	tesfayetaf@gmail.co

No.	Firm's Name	Physical Address	Tell	E-mail
2	Audit Firm	ከድሪምላይነር ሆቴል ፊት ለፊት		m
113	Tesfaye Tesema Shibeshi Certified Audit Firm	ባሚቢስ መንገድ ጆኒ ህንፃ 6ኛ ፎቅ	0911429035	tests1947@gmail.com
114	Tewodros Assefa Beshahe Certified Audit Firm	ገነት ሆቴል	0911672422	tewodrosassetab@gmail.com
115	Tibebe Mengistu Robi Certified Audit Firm	አብሲኒያ ፕላዛ 6ኛ ፎቅ	0911-516027	tibebemengistu@gmail.com
116	Tigist & Eyob Audit Service Partnership	ቄራ	0911258350	teauditservice@gmail.com
117	Tinsae Tekeste Dires Certified Audit Firm	መገናኛ	0911141647	dtinsae@gmail.com
118	Tiumezgi Redae Berhe Certified Audit Firm	አዲሺሆ	0930369193	tium2005@gmail.com
119	TMS Plus Certified Audi Firm	22 ማዞሪያ	0118961752	tmsplus@ethionet.et
120	Tsega Reta Demeka Certified Audit Firm	ሀይሌ ገ/ስላሴ መንገድ	0912095872	tsega2@yahoo.com
121	T Tadesse W/Gebreal and Seifemicheal Shewagezaw /TSY /Certified Audit Partnership	Gabon Av(meskel flower area)	0911637836	tadwogc@gmail.com
122	Wegderes Nigussie Agonafir Certified Audit Firm	መገናኛ መተባበር እድገት ህንፃ 5ኛ ፎቅ ቢ.ቁ 509	0911886231	wegderes2020@gmail.com
123	Wubeshet and Alemayehu Audit Service Partnership	debrezeit road	0911527274	wubalempartners@gmail.com
12	Wudu and Hussien Certified Audit	Dembel City center	0911666982	whauditors@gmail.co

No.	Firm's Name	Physical Address	Tell	E-mail
4	Partnership	12th floor		m
125	Yared Desalegn Feyssa Certified Audit Firm	መገናኛ ገነት ኮሜርሺያል ሴንተር 4ኛ ፎቅ ቢሮ.ቁ 401(54)	0911180356	yared_1803@yahoo.com
126	Yirgalem Wolde Gebissa Certified Audit Firm	ሐረር ወረዳ ጄኔ ቦቴ አካባቢ	0921-159221	woldeyirgalem@gmail.com
127	Yitages Tefera Yadete Certified Audit Firm	ስታዲየም አካባቢ ንግድ ባንክ ፊንፊኔ ቅርንጫፍ ጀርባ ባሰፋ ህንፃ 2ኛ ፎቅ	0911-121291	yitfera@gmail.com
128	Yitayish Tesfa Bitew Certified Audit Firm	ባህር ዳር	0918782466	yitayishtesfa@ymail.com
129	Yohannes Kelemu Mihretie Certified Audit Firm	ባህር ዳር	0923420266	yohannekkelemu@gmail.com
130	Yohannes Kindeya Ashebr Certified Audit Firm	መቀለ ገበያ ማዕከል	0914728571	joon.2002@yahoo.com
131	Yonas Fekede Bonger Certified Audit Firm	ሜክስኮ -አይመል ኮሜርሻል ሴንተር 6ኛ ፎቅ ቢሮ ቁ-605	0930589645	yfekede@gmail.com
132	Yonas Kiros Kasa Certified Audit Firm	መቀለ ቀዳማይ ወያኔ ሮማናት አደባባይ	0914708130	yonaskiros70@yahoo.com
133	Zelalem Tilahun Deresse Certified Audit Firm	መገናኛ መተባበር ህንፃ 4ኛ ፎቅ	0930109816	zelalemtil@gmail.com
134	Zemedhun Adane Befirdu Certified Audit Firm	meskel square/sebeta	0118961677	zemedhun_adane@yahoo.com

No.	Firm's Name	Physical Address	Tell	E-mail
135	Zemzem Kelifa Mohamedsalih Certified Audit Firm	ሀዋልቲ	0914700947	zedkelifa@gmail.com
136	Yeshanew Gonfa Dechassa Certified Audit Firm	Africa Avenue, Bole, Back of Frendship City Center, Afomi Building, 2nd Floor	+251911678117	y.gonfa@ygandco.com
137	Fekadu Abiy Kedir Authorized Accounting Firm	Figa area on the way to CMC from Gurdshola trafic light	0912623002	fekaduaxum1996@gmail.com