

International Institute of Social Studies



Factors Affecting Tax Compliance in Ethiopia: A Case Study on Large Taxpayers of the Large Taxpayers' Branch Office in the Ministry of Revenues

A Research Paper Presented by:

Lake Ayalew Anteneh

Ethiopia

in partial fulfillment of the requirements for obtaining the degree of

MASTER OF ARTS IN DEVELOPMENT STUDIES

Major:

Governance and Development Policy

Members of the Examining Committee:

Supervisor: Zemzem Shigute (PhD)

Second Reader: Marijn Faling (PhD)

The Hague, The Netherlands

November, 2023

Disclaimer:

This document represents part of the author's study programme while at the International Institute of Social Studies. The views stated therein are those of the author and not necessarily those of the Institute.

Inquiries:

International Institute of Social Studies
P.O. Box 29776
2502 LT The Hague
The Netherlands

t: +31 70 426 0460
e: info@iss.nl
w: www.iss.nl
fb: <http://www.facebook.com/iss.nl>
twitter: [@issnl](https://twitter.com/issnl)

Location:

Kortenaerkade 12
2518 AX The Hague
The Netherlands

Table of Contents

Contents	Page
Table of Contents.....	i
List of Tables.....	iv
List of Figures.....	iv
List of Acronyms and Abbreviations.....	v
Acknowledgments.....	vi
Abstract.....	vii
Relevance to Development Studies.....	viii
Chapter 1: Introduction.....	1
1.1 Background of the Study.....	1
1.2 Statement of the Problem.....	3
1.3 Objectives of the Study	5
1.3.1 General Objective.....	5
1.3.2 Specific Objectives.....	5
1.4 Research Questions.....	6
1.5 Significance of the Study.....	6
1.6 Scope of the Study.....	6
1.7 Organization of the Study.....	7
Chapter 2: Review of Literature.....	8
2.1 Introduction	8
2.2 Theoretical Literature	8
2.2.1 Concepts and Their Definitions.....	8
2.2.1.1 Definition of Tax.....	8
2.2.1.2 Tax Compliance.....	8
2.2.2 Theories Related to Tax Compliance.....	9
2.2.2.1 Theory of Social Interactions.....	9
2.2.2.2 Comparative Treatment Theory.....	10
2.2.2.3 The Social Contract Theory	10
2.2.2.4 Economic Deterrence Theory	10
2.2.2.5 Social Influence Theory	11

2.3 Empirical Literatures	11
2.3.1 Factors Affecting Tax Compliance.....	11
2.3.1.1 Demographic Factors	12
2.3.1.2 Economic Factors	13
2.3.1.3 Institutional Factors.....	14
2.3.1.4 Socio-Cultural Factors	15
2.3.1.5 Individual Factors	15
2.3.2 Review of Related Researches in the Context of Ethiopia.....	16
2.4 Research Gaps	19
2.5 Conceptual Framework	19
Chapter 3: Research Methodology.....	21
3.1 Introduction.....	21
3.2 Research Methods.....	21
3.3 Research Approaches.....	21
3.4 Population and Sampling Design	22
3.4.1 Population of the Study	22
3.4.2 Sampling Design and Technique	22
3.5 Data Source and Methods of Data Collection.....	23
3.6 Methods of Data Analysis	23
3.7 Model Specification.....	24
3.8 Data Description	24
3.9 Evaluating the Binary Logistic Regression Model.....	26
3.10 Ethical Considerations.....	27
Chapter 4: Analysis and Discussion of Results	28
4.1 Introduction.....	28
Part I-Quantitative Data Analysis and Findings.....	28
4.2 Descriptive Analysis.....	28
4.2.1 Tax Compliance.....	28
4.2.2 Demographic Factors.....	30
4.2.3 Other Factors Affecting Tax Compliance.....	31

4.3 Econometric Analysis.....	34
4.3.1 Factors Affecting Large Taxpayers' Tax Compliance in Ethiopia.....	35
4.3.1.1 Demographic Factors.....	37
4.3.1.2 Economic and Institutional Factors.....	38
4.3.1.3 Social and Individual Factors	40
Part II- Qualitative Data Analysis and Findings.....	42
4.4 Demographic Backgrounds of the Respondents.....	42
4.5 Tax Compliance of the Large Taxpayers Branch Office.....	43
4.6 Major Problems and Challenges of the Branch Office and Large taxpayers.....	44
4.7 Strategies to Enhance Large Taxpayers' Tax Compliance	44
Chapter 5: Conclusion and Recommendation.....	46
5.1 Conclusion.....	46
5.2 Recommendations.....	47
References.....	49
Appendixes.....	58
Appendix A- Hosmer and Lemeshow Tests.....	58
Appendix B- Omnibus Tests of Model Coefficients.....	58
Appendix C- Correlation of Matrix of Coefficients of Logit Model.....	58
Appendix D- Logistic Regression Results.....	59
Appendix E-Questionnaires.....	60
Appendix F-Interview Guide Questions.....	63
Appendix G-Checklists.....	64

List of Tables

Table 3.1: Variables and Their Expected Sign.....	24
Table 4.1: Summary of the Secondary Data.....	28
Table 4.2: Demographic Factors	29
Table 4.3: Economic Factors.....	30
Table 4.4: Institutional Factors.....	31
Table 4.5: Social Factors.....	32
Table 4.6: Individual Factors.....	32
Table 4.7: Marginal Effects after Logit.....	35
Table 4.8: Demographic Information of the Respondents.....	41

List of Figures

Figure 2.1: Sketch of the Conceptual Framework.....	19
Figure 4.1: Tax Compliance.....	27

List of Acronyms and Abbreviations

ERCA	Ethiopian Revenues and Customs Authority
FDRE	Federal Democratic Republic of Ethiopia
GDP	Growth Domestic Product
IFS	Institute for Fiscal Studies
LTO	Large Taxpayers' Branch Office
MOFED	Ministry of Finance and Economic Development
MoF	Ministry of Finance
MoRs	Ministry of Revenues
OECD	Organization for Economic Co-Operation and Development
UN	United Nations

Acknowledgments

First, I would like to express my deepest gratitude to my supervisor Zemzem Shigute (PhD) and seconder reader Marijn Faling (PhD) for their constructive comments and professional guidance throughout conducting this research. This thesis couldn't have the present content and shape without the meticulous contribution and genuine supervision of my supervisor and the second reader. My heartfelt gratitude also goes to all participants in the study including data collectors, the management team in the Large Taxpayers' Branch Office, interviewees and large taxpayers as their willingness to answer questionnaires and give pertinent information is very valuable for conducting this research. Besides, I would like to thank the government of Ethiopia for giving me a study leave.

My special thanks also go to individuals who have inspired, encouraged, guided and supported me onto the completion of this thesis in particular and my study at ISS in general. Hence, I am deeply indebted to Mr Dillu Enyew and the discussant Mr Alemeneh Getaneh, for their invaluable comments, critical readings, encouragements and moral support that help me to shape the whole of this thesis.

Lastly, my special sense of gratefulness goes to my family members whose moral support and encouragement cannot be comprehended and quantified here. Moreover, I would like to thank my dear wife, Tigist Getnet, who has been shouldering and sharing the burden of family matters when I had been abroad for my study.

Abstract

In Ethiopia's Ten-Years National Prosperity Plan (2021–2030), it has been shown that the tax revenue-to-GDP ratio of the country should be increased by collecting tax that the economy generates and improving taxpayers' voluntary tax compliance. Accordingly, it is worthwhile to conduct a research examining the factors affecting taxpayers' tax compliance. Hence, this research was conducted to evaluate the factors affecting tax compliance in Ethiopia using Large Taxpayers of the Large Taxpayers Branch Office of the Ministry of Revenues as a case. The study used mixed research approach utilizing both primary and secondary data. The primary data were collected via questionnaires from 427(92.03%) of 464 large taxpayers using census and interviewing 13 interviewees. Checklist was used to collect secondary data. The collected data were analyzed both quantitatively (using descriptive statistics and binary logistic regression model) and qualitatively (using thematic analysis). Among the sixteen factors used in the binary logistic regression model, twelve factors were found to be statistically significant on tax compliance. The findings of the marginal effect after logit showed that large taxpayers' tax compliance was affected by legal form of the business, education, sector of the business activity, gender, attitude, tax knowledge, tax rate, tax incentives, awareness on tax penalties, tax audit, simplicity of the tax system and financial constraints in descending order of the level of percentage points. However, government spending, fairness and equity, tax authority's efficiency and social norms were found to be not statistically significant on tax compliance. The thematic analysis identified the problems and challenges that large taxpayers and the branch office were facing, and the strategies to be used to enhance large taxpayers' tax compliance. Henceforth, it is recommended that the non-governmental business organizations should be given particular attention to make them compliant, the taxation system and procedures should be simple, tax laws should be clear, accessible and ratified accordingly, and tax rates should be reduced and allotted based on the sector of the business activities.

Key words: tax, tax compliance, factors, binary logistic regression, large taxpayers, marginal effect

Relevance to Development Studies

It is apparent that taxes are the main sources of finance for countries to stimulate their economic and social development. Owing to this, collecting tax revenue is very essential for countries like Ethiopia that have faced frequent budget deficits and low tax-to-GDP ratio. Besides, raising tax revenue is one of the most significant ways in which countries like Ethiopia shall mobilize their own resources for sustainable development and delivering basic goods and services for citizens. Thus, to raise the tax revenue that the economy generates, taxpayers' tax compliance behaviour has a paramount importance. Hence, evaluating the factors affecting taxpayers' tax compliance becomes the subject of this study as identifying the factors contributes to resolve taxpayers' non-compliance with tax laws. This is because collecting tax revenue plays a fundamental role in promoting sustainable development. Moreover, developing countries like Ethiopia are required to raise at least 20% of their growth domestic product from their tax revenues and mobilize their domestic resources for their sustainable development as taxes play pivotal role for sustainable development. This goes with UN's sustainable development goals.

Generally, this research is believed to have relevance to development studies by evaluating the factors affecting taxpayers' compliance with tax laws in the Large Taxpayers Branch Office. This is mainly because raising tax revenues by identifying and solving tax non-compliance problems are crucial to sustainable development as tax revenues provide countries with domestic income to be invested for economic growth, poverty reduction, quality education, creating job opportunities, delivering goods and services to citizens.

CHAPTER ONE: INTRODUCTION

It is apparent that taxes are the main sources of income for countries to pay their expenses and to subsidize their development budgets (Kraan, 2004). However, the amount of tax revenue generated in the economy and collected by the government in the form of taxes depends on the capability and readiness of taxpayers to abide by tax rules and meet the terms of tax procedures. This demonstrates how the tax revenue of a country is affected by its citizens' level of adhering to tax laws. The compliance of taxpayers with tax laws is known to be affected by a variety of factors. To raise tax revenue to the required level for a given country, it is essential to evaluate the major factors affecting taxpayers' tax compliance and assess their effect level of affecting tax compliance. Hence, researches need to be conducted on factors affecting tax compliance.

There are thirteen branch offices administered under the Ministry of Revenues of Ethiopia. Among these branches of the Ministry of Revenues, this study focused on the Large Taxpayers' Branch Office to evaluate the factors that are affecting taxpayers' tax compliance in Ethiopia. The reason why large taxpayers from the Large Taxpayers' Branch Office became the subject of this study is to prove the researcher's close scrutiny on the low compliance of taxpayers, and they contribute the highest share of the tax revenue in Ethiopia, which accounts for about 70% of the total annual tax revenue for five consecutive years (MoRs, 2018-2022).

1.1 Background of the Study

Every government in every country is obliged by law to defend fundamental human rights, keep peace and security, provide social infrastructures, monitor broader economic conditions, and guarantee equitable income distribution, among other things. Any government needs financial resources to execute its functions and meet its obligations. According to Deyganto (2018) and Ndekwa (2014), taxes are the main sources of finance for governments to fulfill these obligations and duties. The government levies direct and indirect taxes as part of its civic duty and as a crucial contribution to the main sources of funding for providing basic things and amenities to its citizens.

Taxes must equally drain everyone in a similar economic situation to be feasible, but they must also be levied in a way that encourages everyone and every organization to voluntarily obey with tax regulations. Contrary to developed countries, low income nations mostly collect very little tax revenues. Based on the data from the World Bank (2022), taxes only accounted for less than 20% of the GDP in Sub-Saharan African states. This is because the low income Sub-Saharan African states lack an efficient and equitable tax system. This lack of efficient and equitable tax system allows taxpayers to evade and avoid taxes as there are limited monitoring infrastructures and technologies for tax non-compliance. Subsequently, Ponoricia and Al-Saedi (2015) asserted that tax compliance encourages the effectiveness of the taxation and promotes economic growth whereas tax non-compliance undermines the fairness and the effectiveness of the tax system, and hinders long-term economic growth.

According to Jayawardane and Low (2017), tax compliance refers to taxpayers' capacity and decision to adhere to tax rules and procedures, report their revenue correctly, and pay the required levies on time. Conversely, failing to file tax returns within the allotted timeframe or failing to pay the accurate sum of taxes by the prescribed date can result in tax non-compliance. Taxpayers engage in illegal activities, whether on purpose or accidentally to avoid paying taxes to the appropriate tax authority (Sinnasamy and Bidin, 2017). This is known as taxpayers' non-compliance with tax laws.

In comparison to its capacity to collect tax revenue that its economy is able to generate, Ethiopia, like other low income countries, does not collect enough taxes. A report released by the Ministry of Finance (2021) showed that there has been a long-standing disparity between the annual national budget and the collected actual tax revenue. There are factors that make Ethiopian businesses continue to show a high level of tax non-compliance. Hence, evaluating the factors affecting taxpayers' tax compliance and assessing their effect level on taxpayers' compliance is worth investigating here. Thus, this study was mainly intended to do on this subject. However, the features that could be considered to design the tax system and other factors that caused insufficient tax collection were not the subject of this study. To evaluate the factors affecting taxpayers' tax compliance in Ethiopia, this study used large taxpayers from the Large Taxpayers' Branch Office of the Ministry of Revenues as a case.

The Ministry of Revenues in Ethiopia is entitled to collect taxes from Inland Revenue, and foreign trade duties and taxes. The Inland Revenue of the Ministry of Revenues has thirteen branch offices. These branch offices include the Large Taxpayers' Branch Office, two Medium Taxpayers' Branch Offices and ten Small Taxpayers' Branch Offices. Of the thirteen branch offices mentioned above, the Large Taxpayers' Branch Office is the biggest branch office in terms of the amount of tax revenue collection. Therefore, a huge amount of taxes is collected from the Large Taxpayers' Branch Office in every fiscal year. Almost 70% of the federal tax income is collected from large taxpayers in this branch office (MoRs, 2018-2022). Therefore, this study focused on large taxpayers of the Large Taxpayers' Branch Office in the Ministry of Revenues.

The Ministry of Revenues and Customs Commission (a commission in charge of the Ministry of Revenues) replaced the Ethiopian Revenues and Customs Authority (ERCA) after the executive organs of the Federal Democratic Republic of Ethiopia were re-structured in 2018 (Proclamation, 1097/2018). Thus, Ministry of Revenues is predominantly in charge of managing large, medium and small taxpayers' branch offices to collect domestic tax revenues from federal taxpayers. The federal taxpayers were segmented into branch offices based on their capital size, annual revenue (turnover) and number of employees (MoRs, 2019). From these segmented taxpayers, large taxpayers, as the target population, and the Large Taxpayers' Branch Office, as a branch office, were subjects of this study. Large taxpayers were reached via questionnaires, and selected staffs from the Large Taxpayers' Branch Office were addressed via interview guide questions.

1.2 Statement of the Problem

Tax compliance is a very important subject to tax authorities and public policy makers since tax non-compliance has an adverse impact on collecting tax revenue. Most developing countries have been struggling to generate enough financial resources to meet the expectations of their citizens. Despite taxpayers' tax non-compliance being a global issue, studies have shown that it is more severe in underdeveloped states, mainly in Sub-Sahara African nations.

An inadequate supply of local financial resource is a common problem in many developing countries including Ethiopia. As compared to developing countries, developed countries collect more tax revenue. Since they are unable to raise sufficient tax revenues, developing countries consistently have budget deficits (World Bank, 2019). As compared to other Sub-Sahara African states and lower-

income nations, Ethiopia collected very low tax in 2018 (IFS, 2021). The government income dataset shows that Ethiopia significantly falls behind most other countries in terms of tax revenue collection. According to data from the government, Ethiopia was ranked 29th in terms of tax-to-GDP ratio out of a sample of 36 Sub-Sahara African countries in 2018. Ethiopia was also ranked 13th among seventeen lower-income countries with regard to its tax-to-GDP ratio 10.7% (IFS, 2021). This ratio is lower than both the global average tax-to-GDP ratio of 33.9% and the average tax-to-GDP ratio of 29.2% for low-to middle-income countries (OECD, 2019).

Tax revenue-to-GDP ratio, which is directly influenced by taxpayers' level of compliance with tax, is one criterion used to evaluate the performance of collecting tax revenue. Data from the Ministry of Finance (2020) showed that the tax revenue-to-GDP ratio has been dropping recently. It was 11.5% in 2010–2011, but it dropped to 9.96% in 2019. According to Alemayehu (2021), this ratio was found to be very little when juxtaposed with other underdeveloped states like Botswana (35.2%), Djibouti (20%) and Kenya (18.4%).

Based on Ethiopia's Ten-Year National Prosperity Plan (2021–2030) of the Planning and Development Commission, tax revenue only covered 9.2% of Ethiopia's GDP in 2017–2018 (IFS, 2021). This is primarily related to, among other things, low use of technology in tax administration, inability to bring the informal economy into the tax net, lack of tax awareness, a culture that discourages paying tax voluntarily revealing income, high amount of tax avoidance and evasion, and most importantly, a state of low tax compliance among businesses. Esmael and Mohammed (2023) demonstrated that the complicatedness of the tax system, incompetence of tax authorities, insufficient knowledge of tax, taxpayers' poor awareness about why they pay taxes, unfavorable behavior of tax auditors, absence of clarity in the taxation system, subjective tax assessment, individual financial shortages, political discord and untimely tax assessment are the main factors affecting tax compliance in Ethiopia.

In the last 20 years, the Ethiopian government has implemented several tax reforms. However, these efforts did not produce a satisfactory outcome. Because of this, tax non-compliance is still posing a substantial challenge on tax authorities. Abdulsemed (2019) showed that out of the total files audited by Addis Ababa City Administration Revenue Bureau, 86% reflect taxpayers' tax disobedience activities in the taxation system. This reveals unequivocally the critical need for Ethiopia to address

tax compliance as a subject. To address the subject of tax compliance, conducting researches to identify its root causes is very crucial for governments to reduce the level of tax non-compliance.

All the previous studies this researcher managed to access in the area were primarily macro-economic in nature and fundamentally focused on identifying the determinant factors for tax compliance. Thus, there is no research done to evaluate the factors affecting large taxpayers' tax compliance in Ethiopia. The majority of the previous researches focused primarily on listing the determinant factors that are affecting tax compliance. However, this study tried to assess the factors affecting large taxpayers' compliance with tax and to analyze their level of influence on taxpayers' tax compliance.

Reports from the Large Taxpayers' Branch Office reveal that this branch is where roughly 70% of the tax revenues for the federal government have been collected. Thus, this is one of the bases for selecting the Large Taxpayers' Branch Office as a case to raise the tax revenue of Ethiopia using the findings of this study. Moreover, previous researches focused primarily on medium and small taxpayers even after the federal taxpayers were categorized into the new branches. Hence, more research is required to evaluate the factors affecting taxpayers' tax compliance at the corporate level.

1.3 Objectives of the Study

1.3.1 General Objective

The general objective of this study is to evaluate the factors affecting tax compliance in Ethiopia using large taxpayers under the Large Taxpayers' Branch Office of the Ministry of Revenues as a case.

1.3.2 Specific Objectives

The specific objectives of this study were:

- to examine the major factors affecting large taxpayers' tax compliance at the Large Taxpayers' Branch Office.
- to assess the effect level of the factors affecting large taxpayers' tax compliance, and
- to identify strategies in enhancing large taxpayers' tax compliance.

1.4 Research Questions

In line with the objectives of the study, the researcher tried to answer the following research questions.

- What are the major factors affecting large taxpayers' tax compliance at the Large Taxpayers' Branch Office?
- What is the effect level of the factors affecting large taxpayers' tax compliance?
- What are the strategies that could be used to enhance large taxpayers' tax compliance?

1.5 Significance of the Study

This study could have policy relevance by revealing the factors affecting large taxpayers' tax compliance in the taxation system of Ethiopia. Since large taxpayers are contributing a large share of the tax revenue collected, conducting a research to evaluate the factors affecting large taxpayers' tax compliance in Ethiopia has paramount importance for collecting tax revenue. By evaluating the factors affecting large taxpayers' tax compliance, this study could also contribute to improve tax revenue collection. The results of the study could help tax authorities to identify the factors affecting taxpayers' tax compliance and address problems related to tax compliance. Besides, all stakeholders in the tax administration system, including accountants, auditors, tax policy makers and tax law legislators, could benefit from the findings of the study by playing their respective roles to gain the tax revenue that the economy generates. This study could also serve as a steppingstone for future studies.

1.6 Scope of the Study

All large taxpayers are accountable to the Large Taxpayers' Branch Office. Therefore, this study is delimited to large taxpayers (population of the study) and the Large Taxpayers' Branch Office of the Ministry of Revenues.

The study would have been more exhaustive if it had included other branch offices of the Ministry of Revenues. Nevertheless, due to the short time available for the study and to make the study manageable, the researcher took only large taxpayers from the Large Taxpayers' Branch Office as population of the study. Different factors which are affecting taxpayers' tax compliance can be examined for evaluation, but demographic, economic, social, institutional and individual factors were taken into account to assess their effect level on large taxpayers' tax compliance.

1.7 Organization of the Study

This study is organized into five chapters. The first chapter comprises the introduction of the study and contains background, statement of the problem, objectives, research questions, scope and significance of the study. The second chapter deals with the review of related literature that states theoretical and empirical literatures, identifies the research gap and presents the conceptual framework of the study. The third chapter describes the methodology, the research approaches, methods of data collection, and model specification of the study. The fourth chapter provides the analysis and discussion of the findings. The last chapter is dedicated to the conclusion and recommendations of the study.

CHAPTER TWO: REVIEW OF LITERATURE

2.1 Introduction

This chapter attempts to review concepts and theories related to tax, tax compliance, taxation, tax fraud and evasion. It also confers empirical literatures on the factors affecting tax compliance that include demographic, economic, institutional, social, and individual factors. The chapter also comprises the research gap and the conceptual framework materialized for the study.

2.2 Theoretical Literature

2.2.1 Concepts and Their Definitions

2.2.1.1 Definition of 'Tax'

Tax is an unavoidable charge imposed on taxpayers. It is different from fines and penalties that the government levies as reimbursement for taxpayers' tax non-compliance. According to Khasawneh et al. (2008), a taxpayer is any individual or business entity that is duty-bound by law to pay taxes levied by the government. Tax is described as a mandatory charge placed on individual revenues, business profits and properties by a government and/or other tax collectors for whom the taxpayer obtains no explicit advantage (Lymer and Oats, 2009). In this study, this definition is applied. A good tax system should be adequate, practical, effective and equitable. A tax is believed to be adequate if it can bring in enough revenue for the government to spend on public goods and services. If the process of collecting tax is transparent and recognized by all taxpayers, it is supposed to be convenient. Taxes are mainly levied on individual revenues such wages, corporate incomes, interests, shares, and royalties along with other types of income like company profits, petroleum profits and capital gains as a required levy and a source of revenue for the government (Akintoye et al., 2019). Taxes are usually levied on employment, properties, businesses and/or transactions. This confirms that paying taxes is an imposed payment supported by law and enforced by the government, but not a voluntary gift, donation or contribution.

2.2.1.2 Tax Compliance

The term tax compliance has been defined by different scholars in different ways. Among these, James and Alley (2002) defined tax compliance as "the willingness of individuals and other taxable entities to act in line with the spirit as well as the letter of tax law and administration without the application of enforcement activity" (p.32). Besides, the term tax compliance denotes the capacity and the

readiness of taxpayers to obey the tax laws, report the actual sum of taxes on the prescribed period, and pay the reported amount of taxes on the due date (Jayawardane and Low, 2017, p.47). Similarly, Song and Yarbrough (1978), as quoted in Netsanet and Biniam (2020), described tax compliance as the capability and the readiness of taxpayers obeying to tax rules and procedures “which are determined by ethics, legal environment and other situational factors at a particular time and place” (p.47). Briefly, tax compliance is taxpayers’ readiness to obey tax rules and regulations of a given country, declare the accurate tax amount to the tax authority, and pay all tax liabilities on a given stipulated time. Generally, tax compliance denotes the action of obeying to the tax rules and regulations proclaimed by the government or other authorized tax authorities. It involves fulfilling one’s tax obligations by accurately reporting all taxable incomes, claiming only eligible deductions and credits, timely filing tax returns and making required tax payments.

2.2.2 Theories Related to Tax Compliance

There are many theories explaining the factors affecting tax compliance. There are five theories that are discussed in this section and a combination of these theories is used to guide the research under discussion.

2.2.2.1 Theory of Social Interactions

The main focus of this theory is the connection between social interaction and a nation’s taxation system. The actions of taxpayers may be a mirror of their peers or institutions such as parents, friends, family, neighbors, taxing authorities, and the government and its agencies. According to the principle, a nation’s tax laws must be equally applied to all of its citizens, which mean that they must be fair in their application. Individuals’ tax payments and tax compliance grow depending on how equitable tax laws are applied to them. According to Gangl et al. (2015), a fair system increases tax compliance and tax revenue by boosting tax confidence. Consequently, accountability and openness increase tax income and compliance at the governmental level. Moreover, Gangl et al. (2015) conceived the degree of taxpayers’ belief on the government and its executive bodies is a determinant factor in the attitude of the taxpayer. Thus, taxpayers’ view of corruption and abuse of tax revenue in the government system might discourage them from paying the right taxes or even make them refuse to do.

2.2.2.2 Comparative Treatment Theory

This theory was developed to improve commercial relations between governments and taxpayers to promote tax compliance (McKerchar and Evans, 2009). Therefore, it is widely accepted that people observe tax rules and regulations when they are satisfied that the basic framework and intended purpose of the laws are usually reasonable and honest. With an impartial tax system as a whole, a better level of tax compliance may be shown (OECD, 2010). Walsh (2012) stated that perception on the impartiality of the taxation system affects people's decisions to follow the law in a variety of ways, including how each individual taxpayer feels about paying taxes and how other people are considered to be following the law.

2.2.2.3 The Social Contract Theory

This theory holds that all parties are bound by a contract between the ruled and their rulers, which sets their rights and duties (Chinyere, 2000). In accordance with this theory, citizens could only concede their rights to the state provided that it guarantees them adequate security and social benefits. This is important because citizens will not pay taxes unless the government promises to provide social amenities like power, good roads, hospitals, schools, etc. in an adequate manner. To Moore (2004), tax compliance improves with people's awareness on the accessibility of civic goods and facilities. Hence, what taxpayers obtain in direct interchange for their tax contributions in type of community services is their key priority. This argument holds that collecting taxes and delivering goods and services to the public represent a binding legal agreement between the taxpayer and the state. People could pay taxes due to their appreciation for products and services that the government offers and their knowledge that their contributions are necessary both to support the provision of those goods and services and to inspire more contributions from other people (Fjeldstad and Semboja, 2001).

2.2.2.4 Economic Deterrence Theory

Based on this theory, taxpayers are considered as rational calculating actors and immoral utility utilizers who are influenced by commercial concerns containing chances of discovery and profit maximization. Thus, tax rate, chance of being discovered, and fines on tax fraud are some of the factors affecting taxpayer behavior in terms of the benefits and costs of tax evasion. This infers that if the discovery is probable and the penalties are substantial, fewer taxpayers would try to avoid paying taxes.

When audit probabilities are low and penalties are modest, the estimated return to tax avoidance is becoming high. The model goes on to predict a considerable lack of compliance. Despite claims that deterrence strategies are ineffective in managing tax non-compliance, there is some evidence to the contrary. Notwithstanding the criticism that the model primarily stresses the strong aspect at the cost of the united side of compliance with tax, there is certain indication to care the importance of deterrent measures to manage tax disobedience (Sandmo, 2005). For instance, it has been found that in some circumstances, employing the fear of being found out and punished is an effective method to promote honest performance.

2.2.2.5 Social Influence Theory

Based on this theory, taxpayers' tax compliance performance and their outlook to the system of tax collection are affected by social norms and behavior of their reference group. It is conceivable to think that social relations affect tax-related conduct in a way comparable to how they do with other kinds of behavior (Snively, 1990). The community's social structure has an effect on how strictly its members adhere to the tax laws. In other words, peer networks may influence taxpayers to follow or disregard the law on taxes. Peers have an impact on a person's expectation about the acceptability or disapproval of that tax non-compliance activity.

2.3 Empirical Literature

2.3.1 Factors Affecting Tax Compliance

Scholars have highlighted a number of criteria that taxpayers must consider to obey the tax rules, regulations and administrative procedures. Among these, Barbuta-Misu (2011) classified the factors that are affecting taxpayers' tax compliance as economic and non-economic factors. For Barbuta-Misu (2011), the economic factors that are affecting tax compliance include revenue level, fines, tax rate, tax audit, audit probabilities, tax benefits and penalties. Moreover, the non-economic factors affecting tax compliance are "taxpayers' attitude towards tax; personal, social and national norms; and perceived fairness of the tax system" (Barbuta-Misu, 2011, p.73).

In this study, Deyganto's (2018) categorization of the factors affecting tax compliance is applied. Deyganto divided the factors affecting tax compliance into five categories (2018, p.94). Thus, the factors affecting tax compliance like demographic factors (gender, education, etc.), economic factors (tax rate, tax audit, tax incentives and government spending), institutional factors (tax fairness and

equity, simplicity of the tax system, and efficiency of the tax authority), social factors (attitude of taxpayers and social norms), and individual factors (awareness on penalties, tax knowledge and financial constraints) are considered. As far as the researcher's access to get empirical literatures is concerned, the following summaries of empirical literatures are presented under each category of the factors affecting tax compliance.

2.3.1.1 Demographic Factors

According to Deyganto (2018), several scholars have considered age, gender and education as demographic factors that are affecting taxpayers' tax compliance. Regarding age, the research findings about how age affects taxpayers' tax compliance differ from research to research. Some researches revealed a negative link between age and compliance. This signifies old taxpayers are less compliant than young ones (Tadesse and Goitom, 2014). Others asserted as there is a positive connection between age and tax compliance, but there is no any major impact on taxpayers' tax compliance (Manchilot, 2018). However, several studies have shown no link between age and tax compliance (Torgler, 2007), and old taxpayers exhibit higher levels of tax compliance than young ones (Mohani, 2001).

Regarding gender, Hasseldine and Hite (2003) found that female taxpayers were more compliant than male taxpayers. Tadesse and Goitom (2014) also presented that female taxpayers were more compliant than males. In contrast, Niway and Wondwossen (2016), and Amina and Saniya (2015) claimed that gender has no relation with tax compliance. Moreover, empirical evidences show that there is a positive connection between taxpayers' educational level and their tax compliance. Niway and Wondwossen (2016) found that educated taxpayers are more compliant than uneducated ones. Chan et al. (2000) also asserted that taxpayers' educational level has a significant influence on how closely they adhered to tax laws. Besides, studies revealed that educational level of taxpayers has a negative correlation with their tax compliance. Nevertheless, Tadesse and Goitom (2014) found that educational level of taxpayers has not any significant effect on their tax compliance.

2.3.1.2 Economic Factors

The economic factors under discussion are tax rate, tax audit, government spending, and tax incentives. According to Amina (2013), tax rates were major factors in affecting tax compliance, and they had negative correlation with it. Masud et al. (2014) found a considerable negative link between tax rates and taxpayers' tax compliance in Africa. In contrast, the researches of Ali (2018), Waithira (2016) and Aronmwan et al. (2015) portrayed that the rate of tax had a positive and substantial effect on the compliance of taxpayers.

Moreover, tax audits are conducted by tax authorities to realize whether taxpayers paid the actual amount of tax or not. Therefore, it is thought to affect taxpayers' tax compliance (Mohani, 2001). Based on this, the frequency and the comprehensiveness of the audits may motivate taxpayers to be more careful when filing the tax forms, disclose all revenues and declare the appropriate deductions to decide their tax due on time (Niway and Wondwossen, 2016). According to Daba (2017), Tadesse and Goitom (2014), and Palil and Mustapha (2011), audit was taken as a key factor affecting taxpayers' tax compliance. Based on Ahmed and Kedir (2015), tax audit has a negative impact on taxpayers' tax compliance. Contrarily, Tilahun and Yidersal (2014) examined that an audit does not have influence on tax compliance.

It is noticeable that taxpayers usually give attention to how the government expends the tax collected from the public. Thus, taxpayers feel good about paying their fair share of tax if the government wisely uses the money for essential goods and services. However, if the government spends too much on items that are deemed useless the wider public, they will feel deceived and try to avoid paying their fair share of taxes. To this end, James and Alley (2002) claimed that tax compliance is positively and considerably influenced by taxpayers' awareness on government expenditures.

According to Gadi (2016), Jayawardane and Low (2016), Ahmed and Kedir (2015), Tilahun and Yidersal (2014), taxpayers' insight on government spending has a considerable effect on their compliance with tax rules. Nevertheless, Tadesse and Goitom (2014), Abdul-Razak and Adafula (2013) and Amina (2013) discovered no significant connection between tax compliance and government's liability and transparency on spending public money.

Regarding tax incentives, they were found significantly raised small and medium enterprises' tax compliance level in Tanzania (Ndekwa, 2014). Besides this, Daba (2017) found the existence of a strong and a positive linking between government incentives and taxpayers' tax compliance.

2.3.1.3 Institutional Factors

Empirical researches have shown that institutional factors such as tax authority's effectiveness, tax system's simplicity, tax fairness and equity, and the probability of being discovered have a significant effect on taxpayers' tax compliance. As stated by Dubin (2004), to decrease the reported tax difference and improve taxpayers' voluntary tax compliance, tax authorities have considerable impact. Amina and Saniya (2015) stated that if the tax system is easily recognized by taxpayers, it motivates them to obey tax laws. Moreover, Oluwaremi and Yusuf (2014) found that the efficiency of the tax authority affects taxpayers' motivation to adhere to tax laws. Equally, Daniel and Pasha (2017) discovered that taxpayers' volunteer compliance with tax is positively influenced by tax authority's efficiency and its effectiveness in enhancing taxation and tax collection procedures. However, Tadesse and Goitom (2014) and Olaoye et al. (2017) found the absence any evidence to show the significant link between taxpayers' tax compliance and the efficiency of tax authorities.

Generally, a functional and efficient tax authority plays a key role to promote tax compliance. It involves timely processing of tax returns, providing accurate information and guidance to taxpayers, conducting audits and investigations, and effectively addressing taxpayer concerns. When the tax authority runs efficiently, it builds confidence in taxpayers, reduces administrative burdens, and facilitates tax compliance. Efficient tax authorities can also implement systems and technologies that simplify tax processes and improve overall taxpayers' experience. Furthermore, fostering a culture of ethics and integrity within the tax administration can enhance public trust and reliance on the taxation system. According to Agbadi (2011), the tax system's simplicity and tax compliance have favorable and substantial link. Alternatively, the tax system's complexity has a negative impact on tax compliance decisions (Jayawardane and Low, 2016) and raises the risk of underreporting tax liability (Alstadsaeter, et al., 2013; Sawyer et al., 2014).

Gadi (2016), and Tilahun and Yidersal (2014) discovered that taxpayers' intuition on the equity and fairness of the taxation system significantly affects their tax compliance. However, Tadesse and Goitom (2014), Amina (2013), and Agbadi (2011) indicated lack of connection between taxpayers'

view on the tax system's fairness and equity, and their tax compliance. Conversely, Geletaw (2015) showed that the fairness and equity of the system of taxation has a statistically substantial effect on taxpayers' compliance with tax.

2.3.1.4 Socio-Cultural Factors

One of the social factors that influence tax compliance is taxpayers' attitude towards the taxation system. Hence, it is apparent that taxpayers who have a positive attitude towards the taxation system are more compliant with taxes than taxpayers who have a negative attitude towards the tax system (Gadi, 2016). He also showed that the attitude of taxpayers towards tax is analytically significant to affect tax compliance (Gadi, 2016). Moreover, Waithira (2016) showed that having a positive attitude towards taxes can increase taxpayers' tax compliance and decrease the tendency to avoid and evade taxes. In several researches, Aronmwan et al. (2015), Beza (2014), and Chebusit et al. (2014), it has been shown that taxpayers' attitude regarding the system of tax has a positive substantial effect on compliance. Besides claims that were made by researchers, individual taxpayers must participate in efforts made by the government to improve the level of tax compliance.

2.3.1.5 Individual Factors

According to Mohani (2001), the decision on whether to comply with tax laws or not depends greatly on individual taxpayer's tax knowledge, awareness on penalties and personal financial constraints. According to Redae and Sekhon (2016), and Ermias (2014), tax knowledge has an effect on taxpayers' attitude towards tax compliance. This shows that the educational level of taxpayers has effects on understanding tax laws and the taxation system. Thus, Ali (2018), Manchilot (2018), Daba (2017), Mansor (2016), Oladipupo and Obazee (2016), and Nzioki and Peter (2014) discovered that there is a strong connection between taxpayers' tax knowledge and their tax compliance that suggests improving taxpayers' knowledge on tax rules and regulations increases their voluntary tax compliance. According to Thiga and Muturi (2015), tax knowledge positively affected tax compliance, but ignorance of the tax laws resulted in tax non-compliance, which had a negative impact on tax compliance. Moreover, Geletaw (2015), Saad (2014), and Ndekwa (2014) found that taxpayers' tax understanding and their educational level have a substantial negative effect on tax compliance. However, Ahmed and Kedir (2015), Tadesse and Goitom (2014), and Amina (2013) claimed tax compliance was not considerably connected to taxpayers' tax knowledge.

Furthermore, Tilahun and Yadersal (2014), Mascagni et al. (2014), and Fjeldstad (2012) found that tax penalties and the probability of having audit chance have effects on taxpayers' tax compliance behavior. The greater the probability of having an audit and the tax penalty, it is more likely to discourage tax evasion. However, taxpayers may be less likely to avoid taxes if they are informed of the crimes they are committing and the penalties to be incurred for doing so.

Taxpayers' financial restrictions have effects on tax avoidance and evasion as financial suffering experienced by individuals may motivate them to arrange what must be deducted first as basic necessities such as (clothes foods, housing, etc.). When compared to taxpayers who have less financial shortage, taxpayers who have been experiencing financial constraints are more likely to commit tax evasion (Mohani, 2001).

2.3.2 Review of Related Researches in the Context of Ethiopia

There are a number of international studies that have been done using the factors affecting tax compliance as their subjects by different scholars at various levels throughout the world. The current researcher was able to access the following previous studies for review in terms of their similarities and differences with this study to identify the research gap in the context of Ethiopia.

Among these studies, Habtamu's (2019) MSc thesis entitled "Factors Affecting Tax Compliance Behavior of Addis Ababa Number Two Medium Taxpayers Branch Office" is one of them. The general objective of this thesis was to examine the factors that are affecting the compliance behavior of taxpayers in Addis Ababa. The data of the thesis were collected through researcher administrated questionnaires. In this study, the researcher applied quantitative research method to analyze the data. Thus, descriptive statistics was used to summarize the result for possible interpretation. The findings revealed that taxpayers' tax compliance behavior in Addis Ababa was influenced by factors such as recognized fairness of taxation system, tax education and knowledge, fines and penalties, and trust in the power of the tax authority. This study used elements that have impacts on tax compliance. However, the current study evaluated the factors affecting large taxpayers' tax compliance but not analyzing taxpayers' compliance behavior towards taxation and assessed the effect level of the factors affecting large taxpayers' tax compliance.

Besides, Deyganto (2018) wrote an article entitled “Determinants of Tax Compliance Attitude with Taxation: Evidence from Category ‘A’ Taxpayers in Gedeo Zone, SNNPRS, Ethiopia”. The objective of this study was to “identify the determinants of the tax compliance attitude of taxpayers with the tax system” (Deyganto, 2018, p.33). Deyganto used a cross-sectional survey research method along with qualitative and quantitative approaches. Lastly, Deyganto discovered that educational level and tax authority’s efficiency were not significant factors of taxpayers’ tax compliance whereas gender, age, attitude, tax knowledge, tax system’s simplicity, insight on tax equity and fairness, understanding on tax penalties, tax rate, tax audit and tax evasion were significant determinants. Deyganto’s study is comparable to the current study because it used the determinant factors affecting tax compliance. However, Deyganto identified determinants of tax compliance attitude with taxation, and the current study utilized factors affecting tax compliance to assess their effect level on taxpayers’ tax compliance.

Daniel and Pasha (2017) also conducted a research on “Factors Affecting Voluntary Compliance of Category ‘C’ Taxpayers Attitude of Arbaminch, SNNPR, Ethiopia”. In this article, Daniel and Pasha aimed at assessing the factors affecting taxpayers’ voluntary compliance. They used descriptive statistics methods of analysis. The study found that lack of understanding on tax was the most central factor for the absence of voluntary compliance among the factors affecting the attitude of taxpayers. Besides, the study discovered that the effectiveness and the efficiency of the tax authority to enhance the procedures of tax collection and assessment, create awareness, and enforce the tax law positively affected voluntary compliance. The study is similar with the current study in assessing factors affecting tax compliance. However, Daniel and Pash (2017) focused on identifying the factors affecting voluntary tax compliance rather than evaluating the factors affecting taxpayers’ tax compliance and assessing the effect level of the factors affecting taxpayers’ tax compliance in general terms.

Additionally, Tilahun and Yidersal (2014) wrote an article on “Determinants of Tax Compliance Behavior in Ethiopia: The Case of Bahir Dar City Taxpayers”. The study’s objective was identifying the determinants that affect tax compliance behavior of taxpayers at Bahir Dar City. To achieve this objective, the study employed quantitative research methods. The study applied a structured questionnaire for data collection, and the researchers used a one-way ANOVA, two samples and one sample T-test techniques for analyzing the data. Therefore, findings indicated that tax penalties, individual financial limitations, government policies, referral groups, perception on equity and fairness of the tax, and attitude towards government spending were the factors significantly determined the

tax compliance behavior of taxpayers (Tilahun and Yidersal, 2014, p.268). Nevertheless, the findings showed that neither gender nor the likelihood of an audit significantly affected how taxpayers behaved with regard to paying their taxes.

The other research conducted using determinants of taxpayers' tax compliance was Gezahegn's (2012) MSc thesis entitled "An Assessment of Determinants of Taxpayers' Compliance towards Taxation (The Case of Assosa Zone in Benishangul Gumuz Regional State)". The research's general objective was to distinguish determinants of taxpayers' compliance towards taxation in Assosa Zone of Benishangul Gumuz Region. To attain the objective, the researcher employed descriptive research methods using both primary and secondary data. It was found that Assosa Zone's taxpayers' compliance with taxation was influenced by a number of factors, including the fairness and equity of the tax system, attitudes toward the government, social factors, culture, social norms, tax authorities' structural strength, and taxpayer awareness and education. This thesis is also similar to the current study in identifying the factors affecting taxpayers' tax compliance. However, the current study used the factors affecting taxpayers' tax compliance for evaluating them and assessing their level of influence on the taxpayers' tax compliance.

As we can see from the review of the related researches conducted previously, their findings are different and do not go beyond identifying the different factors affecting taxpayers' compliance. This drew the curiosity of the present researcher to evaluate the factors affecting taxpayers' tax compliance and to assess the effect levels of the factors affecting taxpayers' tax compliance. Furthermore, the studies that have been done so far in the context of Ethiopia by various scholars have not dealt with the collective effect of the factors affecting taxpayers' compliance that have been identified. This also initiated the researcher to look into evaluating the factors affecting taxpayers' tax compliance, assessing the effect levels of the factors affecting taxpayers' tax compliance, and identifying the strategies that could be employed to enhance taxpayers' tax compliance. Thus, this research is carried out to fill this knowledge gap.

2.4 Research Gaps

Based on the current researcher's understanding and the studies summarized above, the research gap here refers to the area that academics and scholars have not addressed. The primary focus of this section is identifying the gaps found during theoretical and empirical evaluations. Different results were found in earlier empirical researches. They indicated that the conclusions are very different. While certain factors were significant in one research, they were not in another. Additionally, earlier empirical studies showed that there are regional differences in the factors affecting tax compliance. This indicates that there are no common conclusions drawn by studies conducted on the factors that really affect whether people pay their taxes in different countries with comparable tax laws and cultures. Ethiopia's story serves as a good illustration of this circumstance. Hence, the purpose of this study was to close the study gap that was not addressed by any of the previous researches, mainly issues relating to taxpayers' tax compliance and the tax authority in Ethiopia. Besides, this study aimed to close a knowledge gap regarding the factors affecting taxpayers' tax compliance. The following research gaps were found as a result of the review:

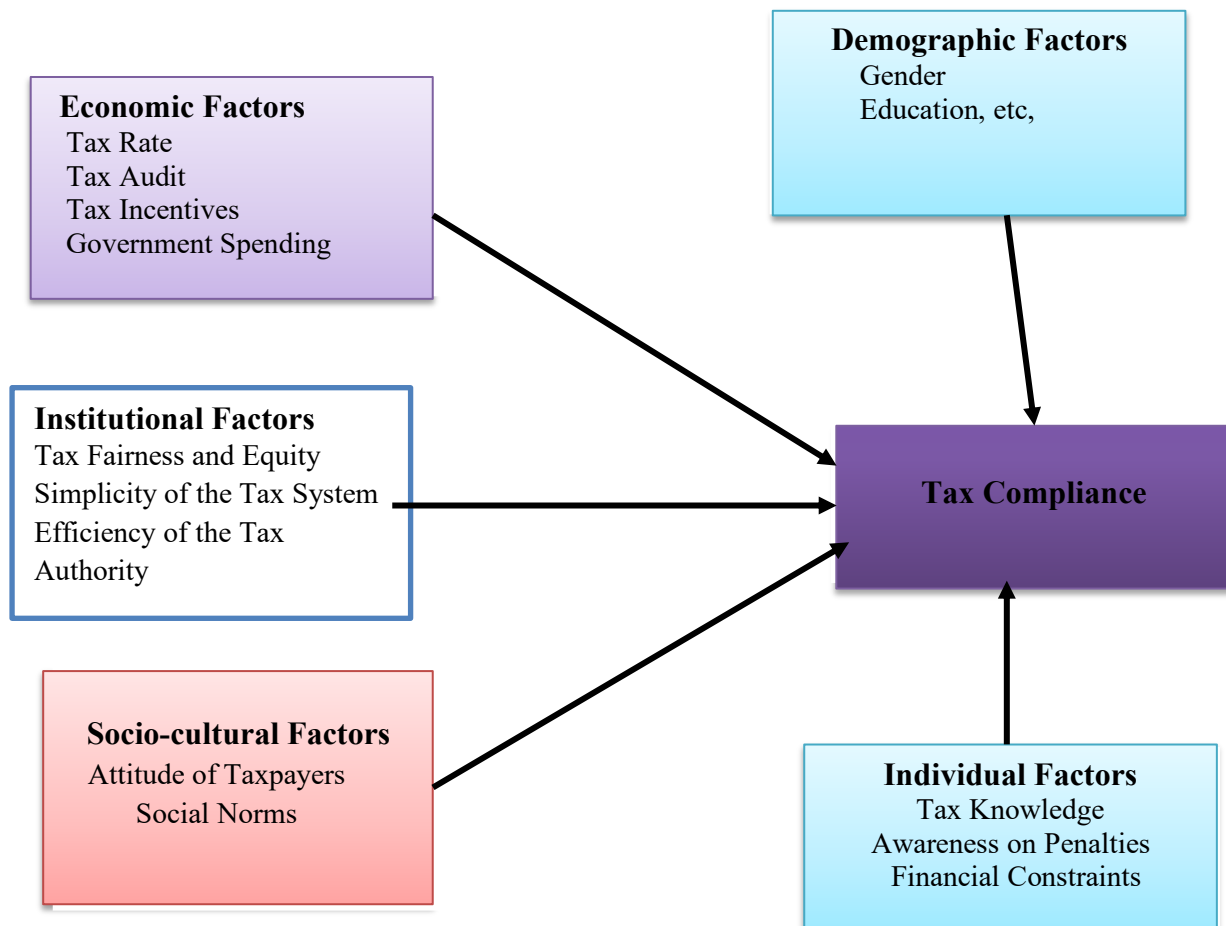
- Most of the researches conducted on tax compliance used secondary data. However, this study used both primary and secondary data.
- Most of the studies reviewed relied on quantitative methods. This study employed a mixed methods design (quantitative and qualitative) as that increases the explanatory power of the research.
- Most of the studies targeted either small-scale or medium-level taxpayers. This study focused on large taxpayers.
- This research used additional variables which were not applied in the previous studies. Here, this study used sector of business activities and legal form of the business as new variables.

2.5 Conceptual Framework

Based on Maxwell (2013), a conceptual framework is a tool rationalizing and streamlining the procedures and approaches used in research projects. As stated by Merriam and Tisdell (2016), conceptual framework contains the basic structure of a study that considers questions, variables, data collecting instruments, and methods of data analysis in the research. According to the empirical literatures reviewed and the theoretical issues stated above, the conceptual framework of this study was contextualized and framed herewith. As a result, the conceptual framework that is presented here

is developed from the concepts and theories that have already been explored in this chapter. Therefore, the modeling and the analytic process of this study was governed by the conceptual framework depicted below in Figure 2.1.

Figure 2.1: Sketch of the Conceptual Framework



Source: Researcher's Construction from the Literatures, 2023

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the methodology of the study. Hence, it comprises the research design, research approaches, population size and sampling design, data sources and methods of data collection, and methods of data analysis.

3.2 Research Methods

A descriptive research method is used in this study. Descriptive research method is used for non-experimental studies that explain the features of a specific individual or groups (Calderon and Gonzalez, 2018). Descriptive research methods deal with the relationship between variables used in a study. They also include actions that have already happened and may be associated with the existing situations (Kothari, 2004). This study used survey method to collect primary data from all large taxpayers via questionnaires. The survey method allowed the researcher to obtain quantitative data from all large taxpayers which have been evaluated quantitatively using descriptive statistics (Saunders et al., 2019). The primary data collected via questionnaires were analyzed using binary logistic regression model. The qualitative data were collected through interview guide questions and analyzed thematically.

3.3 Research Approaches

This research employed both quantitative and qualitative research approaches. The quantitative approach was used for evaluating the factors affecting large taxpayers' tax compliance and assessing the effect levels of the factors affecting large taxpayers' compliance. The qualitative approach was applied to identify the challenges that large taxpayers are facing and leading them to non-compliance with tax laws and to identify the strategies to be used for enhancing tax compliance. Hence, the researcher administered a questionnaire to large taxpayers to collect quantitative data and conducted interviews with purposively selected staffs from the Large Taxpayers' Branch Office to collect qualitative data. This is because using both quantitative data and the qualitative data in a research has advantages to complement one approach with the other and make the study more complete while making analysis.

3.4 Population and Sampling Design

3.4.1 Population of the Study

According to Creswell (2014), population is defined as a collection of persons who have one or more characteristics in common and in which a researcher is interested. The target population of this study is all large taxpayers which were categorized under the Large Taxpayers' Branch Office in the Ministry of Revenues of Ethiopia. Thus, the total population was 742 taxpayers on July 7, 2023 after a revision on categorization of taxpayers was made by employing certain criteria. These criteria include 50% the amount of annual tax payment, 45% annual turnover (revenue) and 5% fixed assets for the last three years. Among these taxpayers, 278 came from other branch offices, and they were not involved in the population of this study. This is because they had not yet been exposed to the working system and environment of the Large Taxpayers' Branch Office to be able to reply to the questionnaires. Hence, the previous 178 taxpayers were moved from the branch office reducing the total number to 464 large taxpayers and all were targeted as the total population of the study. These taxpayers are engaged in various business sectors in Ethiopia. More specifically, 120 of them are engaged in the manufacturing sector, 114 of them in the service sector, 164 of them in the trading sector, 46 of them in the construction sector and 16 of them in the agriculture sector. The researcher supposed that some of these taxpayers were complying with tax laws and some others were not doing so.

3.4.2 Sampling Design and Technique

Since the target population was not large enough to apply sampling techniques, census was used. Therefore, all the 464 large taxpayers of the branch office were targeted for the data collection. From all 464 respondents, 427 responded to the distributed questionnaires. Hence, the response rate was 92.03%, which was adequate enough to make the data analysis. The response rate of the respondents based on sector of business activity was as follows: manufacturing-110(91.66%), service-105(92.10%), trading-151(92.07%), construction-46 (92%) and agriculture-15 (93.75%).

Regarding the interview conducted with staffs, the researcher used a purposive sampling method. There were three directorates that had 23 staffs who had been working directly with issues of tax compliance. These were the tax audit directorate, the tax appeal directorate and the tax filing directorate. From the 23 staffs of the directorates, 13(56.52%) were interviewed applying purposive sampling technique. The purposive selection criteria of the interviewees were their service year (< 10 years' service was not considered) and their position in the branch office. Regarding their position,

they ranked from team leader to branch manager level, and they had been working from 10-21 years. They were sufficiently exposed to the theoretical and practical aspects of tax compliance in general and the factors affecting large taxpayers' tax compliance in particular. The responses of these interviewees were recoded and transcribed by the researcher.

3.5 Data Source and Methods of Data Collection

This study used primary and secondary sources of data. The required data were collected via a self-administered questionnaire that included both close and open-ended questions. The primary data were collected from 427 (92.03%) large taxpayers by administering questionnaires. The data were collected via email, Google forms, and in person (10 data collectors were used). A questionnaire that had both close and open-ended questions was used as data collecting tool. Standard questions were prepared by the researcher to evaluate the factors affecting large taxpayers' compliance with tax rules and to assess the effect levels of the factors affecting tax compliance. To make a pilot test, 10 questionnaires were distributed to 10 large taxpayers and a few things were amended based on the respondents' feedback. Moreover, 13 (56.52%) staffs of the branch office were selected purposively using their service year, and they were asked using interview guide questions for collecting the qualitative data. The researcher used both the quantitative and the qualitative data to triangulate the findings of the study applying the data collected from different primary sources. Lastly, checklists were used to collect relevant secondary data from official documents of the Large Taxpayers' Branch Office.

3.6 Methods of Data Analysis

The data collected from primary sources and secondary sources were analyzed using descriptive and inferential statistics with the help of STATA 18 software. The effect levels of the factors affecting large taxpayers' tax compliance were described using marginal effect in binary logistic regression. Marginal effect is valuable to identify the effect levels of the factors affecting large taxpayers' tax compliance. Besides, the factors affecting tax compliance were analyzed using binary logistic regression model. Using this model, the dependent variable is tax compliance that is measured by binary indicators as 'Yes'-(compliance) and 'No'-(non-compliance), and the independent variables are factors affecting large taxpayers' tax compliance. These factors are demographic, economic, institutional, social and individual factors. Besides, the qualitative data collected from interviewees were analyzed using thematic analysis. The thematic analysis of the qualitative data was conducted deductively using the conceptual framework of the study. The interviewees were coded from 01 to 13

based on their convenient time while conducting the interview to collect the qualitative data. The analysis results of the qualitative data used to triangulate with the findings quantitative data. The results of the qualitative data helped to identify the strategies to be used to enhance taxpayers' tax compliance and the challenges large taxpayers are facing to comply with tax laws.

3.7 Model Specification

This study employed the binary logistic regression model. The binary logistic model is the most commonly used model for estimating how a dichotomous dependent variable (whether taxpayers are compliant [Y=1] or non-compliant [Y=0]) depends on diverse explanatory variables (X_i) = gender, education, etc.

The binary logistic regression model is specified as follows:

$$\text{Ln} \left[\frac{P_i}{1-P_i} \right] = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_n x_n + U_i$$

Where:

- p = the probability of being a compliant
- $1-p$ = the probability of being a non-compliant
- $\text{Ln} \left[\frac{P_i}{1-P_i} \right]$ = is the log of the odds ratio
- $X_i = X_1, X_2, \dots, X_n$: are the independent variables used in the model.
- $\beta_i = \beta_1, \beta_2, \dots, \beta_n$: are the regression coefficients indicating the magnitude of change (increased or decreased) in the independent variable.
- U_i is the disturbance/error term. (Derived from Berkson, 1944 and emphasis added).

3.8 Data Description

From the theoretical and the empirical literatures discussed before, the major factors affecting taxpayers' tax compliance are summarized with their respective unit of measurement, variables, and their expected sign in Table 3.1 below.

Table 3.1: Variables and Their Expected Sign

Variables	Description of Variables	Measurement of Variables	Expected sign
Dependent Variable			
Tax Compliance	Large taxpayers' tax compliance	Categorical coded as: 1= compliance 0= non-compliance	
Independent Variables			
1. Gender	Sex of taxpayers	Categorical coded as: 1= male and 0= female	+/-
2. Education	Educational level of taxpayers	1= Primary 2= Secondary 3= College 4= University 5= No education	+/-
3. Sector of business activities	Sector of taxpayers' business activities	1= Manufacturing 2= Service 3= Trade 4= Construction 5= Agriculture	+
4. Legal form of the businesses	The legal forms	1= Private limited company 2= Share company 3= Government enterprise 4= Sole proprietorship 5= Joint venture & partnership	+
5. Tax Rate	Perception of taxpayers on tax rate	Likert Scale	-
6. Tax Audit	Perception of taxpayers on tax audit	Likert Scale	+/-
7. Tax Incentives	Perception on tax incentives	Likert Scale	+
8. Government spending	Perception on government spending	Likert Scale	+
9. Tax Fairness & Equity	Perception on tax fairness & equity	Likert Scale	+
10. Simplicity of the Tax System	Perception on the simplicity of the tax system	Likert Scale	+
11. Tax Authority's efficiency	Perception on the efficiency of the tax authority	Likert Scale	+

12. Attitude of taxpayers	Perception on government's tax collection	Likert Scale	+
13. Social Norms	Perception on social norms	Likert Scale	+
14. Tax Knowledge	Perception on tax knowledge	Likert Scale	+/-
15. Awareness on Tax Penalties	Perception on tax penalties	Likert Scale	+
16. Financial Constraints	Perception on financial constraints	Likert Scale	-

Source: Researcher's Construction from the Literatures, 2023

3.9 Evaluating the Binary Logistic Regression Model

It is essential to evaluate this model after it has been constructed if the model could be utilized for the intended use. To evaluate the model, a goodness-of-fit statistics can be used to assess the fit of the logistic model against the actual results of the model. Thus, for testing the model the researcher used Hosmer and Lemeshow Tests (Appendix A) and Omnibus Tests (Appendix B). Besides, prior to running the logistic regression model, it is essential to assess the existence of multicollinearity among the explanatory variables. Multicollinearity refers to the correlation between the explanatory variables (Appendix C).

Logistic regression models are widely used by researchers to calculate odds ratios when working with categorical variables (Appendix D). This model aims at predicting the likelihood of an outcome based on individual characteristics (Peng et al., 2002). Hence, the researcher used marginal effect after logit. The marginal effect in logistic regression is a valuable measure used to analyze the effect levels of the factors affecting tax compliance (independent variables) and on the dependent variable especially when the dependent variable is binary (e.g., 0 or 1, Yes or No). The marginal effect quantifies how a one-unit change in an independent variable affects the probability of the dependent variable taking a particular value (usually 1 in the case of binary logistic regression).

3.10 Ethical Considerations

It is obvious that research ethics is one of the essential issues to be included in a study. Owing to its importance, the researcher has considered the following points. First, the researcher presented a letter to the manager of the Large Taxpayers' Branch Office that requested permission to conduct a research on the selected topic. Then, the researcher introduced himself and stated the purposes of the study to the respondents to let them understand the type of data to be collected. After this, they were asked for their consent to take part in the research. Then, the researcher declared that participation was entirely voluntary. The researcher also informed the respondents about the anonymity of participants and the confidentiality of the collected data. In doing so, the researcher did not take any position while conducting the interview. Finally, the researcher informed the respondents that the findings of the study would be used not only writing the research paper but also to inform policy for enhancing tax compliance.

CHAPTER FOUR: ANALYSIS AND DISCUSSION OF RESULTS

4.1 Introduction

This chapter treats the analysis and the discussion of the findings of the study. Part one of the chapter presents the analysis and the discussions of the econometric tests conducted using descriptive analysis, correlation analysis and binary logistic regression. Part two of the chapter contains the qualitative data analysis and discussion of the findings. The findings were analyzed to meet the objectives and hypotheses of the study.

Part I: Quantitative Data Analysis and Findings

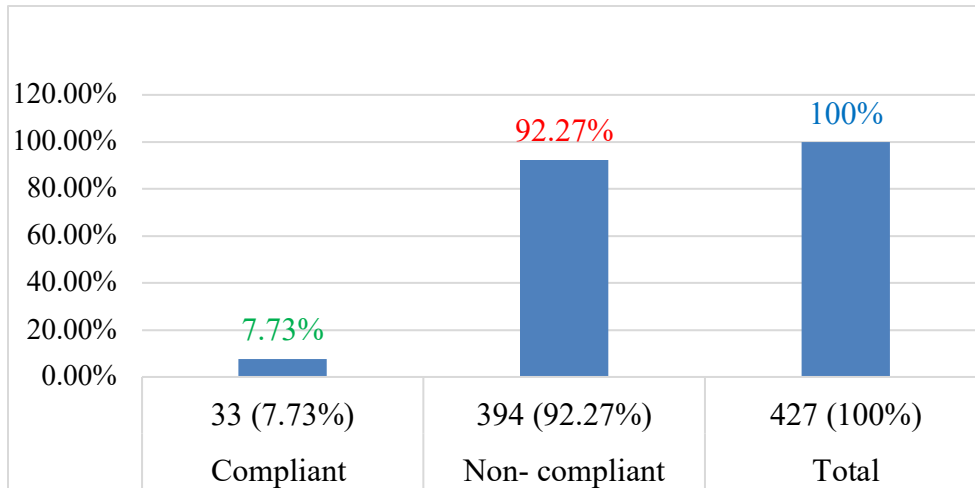
4.2 Descriptive Analysis

From the population (464 large taxpayers) of the study, 427(92.03%) large taxpayers reacted to the questionnaires administered during data collection. Based on the analyses, large taxpayers' tax compliance situation and the factors affecting their tax compliance were illustrated in Figure 4.1 and the Tables that follow.

4.2.1 Tax Compliance

As stated above, the tax compliance situation of the 427 large taxpayers were described in Figure 4.1 below.

Figure 4.1: Tax Compliance



Source: Own Survey, 2023

As can be observed from Figure 4.1 above, 33(7.73%) large taxpayers are complying with tax laws, and 394(92.27%) respondents are tax non-compliant from the total 427 respondents. This means 394 large taxpayers have paid penalties and interests due to their non-compliance with tax laws and procedures, but it does not mean that these large taxpayers did not pay taxes at all. Besides, it means that the tax authority found differences between the self-assessed amount of tax declared to it by taxpayers and the amount of tax found by its auditors. This result indicates that large taxpayers in Ethiopia are not complying with pertinent tax laws, proclamations and directives. Thus, it needs serious attention to make large taxpayers compliant with tax rules.

Moreover, the analysis result of large taxpayers' non-compliance with tax laws and procedures is fully supported by the secondary data collected from the branch office in the last five years. As indicated in Table 4.1 below, large taxpayers' non-compliance with tax has been observed in the last five years based on the tax audit conducted from 2018/2019 (2011 Ethiopian calendar) to 2022/2023 (2015 Ethiopian calendar). Therefore, 161(99.38%) large taxpayers from 162 large taxpayers in 2011 budget year, 139 (95.86%) large taxpayers from 145 large taxpayers in 2012 budget year, 180 (98.90%) large taxpayers from 182 large taxpayers in 2013 budget year, 213 (94.25%) large taxpayers from 226 taxpayers in 2014 budget year, and 243(95.29%) large taxpayers from 225 taxpayers in 2015 budget year were found to be non-compliant with tax laws. This summary of the secondary data evidently shows and correlates with the analysis results of the primary data collected from large taxpayers.

Table 4.1: Summary of the Secondary Data

Year (Ethiopian Calendar)	Audited Companies	Difference after Audit /Non-compliance/		No difference after Audit/ Compliance/	
		Frequency	Percentage	Frequency	Percentage
2011E.C	162	161	99.38	1	0.62
2012 E.C	145	139	95.86	6	4.14
2013E.C	182	180	98.90	2	1.1
2014 E.C	226	213	94.25	13	5.75
2015 E.C	255	243	95.29	12	4.71
Total	970	936	96.49	34	3.51

Source: Secondary Data from LTO, 2023

4.2.2 Demographic Factors

The demographic factors of the 427 large taxpayers are presented in Table 4.2 below. This table demonstrates gender, educational level, sector of business activities and legal form of businesses of large taxpayers.

Table 4.2: Demographic Factors of Large Taxpayers

1. Demographic Factors		Compliant		Non-compliant		Pearson χ^2 test P-value	Total	
		Frequency	%	Frequency	%		Frequency	%
1.1 Gender	1.1.1 Female	11	14.29	66	85.71	0.017	77	18.03
	1.1.2 Male	22	6.29	328	93.71		350	81.97
1.2 Educational level	1.2.1 College and below	1	5.56	20	95.24	0.602	21	4.92
	1.2.2 University	32	7.88	374	92.12		406	95.08
1.3 Sector of business activities	1.3.1 others	25	10.87	205	89.13	0.009	230	53.86
	1.3.2 Construction & trading	8	4.06	189	95.94		197	46.14
1.4 Legal form of the businesses	1.4.1 non-governmental	28	6.73	388	93.27	0.000	416	97.42
	1.4.2 Governmental	5	45.45	6	54.55		11	2.58
Total / for each/		33	7.73	394	92.27		427	100

Source: Own Survey, 2023

As presented in Table 4.2, 77(18.03%) respondents were females, and 350(81.97%) respondents were males. Regarding education, 406(95.08%) large taxpayers were educated at the university level. This displays that majority of the management teams of large taxpayers are university graduates. Moreover, when we see the sector of business activities, 197(46.14%) respondents are based in the construction and trading sectors, and 230 (53.86%) respondents are engaged in the rest sectors (manufacturing, service and agriculture).

As shown in Table 4.2 above, legal form of the businesses is the other variable that provides demographic background of large taxpayers. Hence, based on legal form of the businesses, 416(97.42%) respondents are non-governmental organizations (private limited companies and share companies), and 11(2.58%) respondents are governmental organizations (government enterprises and a joint venture partnership).

As it is evidently seen in Table 4.2, tax compliance practice is relatively more common among female than male. The distribution of tax compliance by gender is also statistically significant (p -value=0.017). There is also significance difference in the distribution of tax compliance practice based on the legal formation of the business is relatively more common among governmental than non-governmental. There is also variations among other business sectors, and construction and trading. On the contrary, educational level is not significantly associated with the practice of tax compliance.

4.2.3 Other Factors Affecting Tax Compliance

As presented in Table 4.3 below, the researcher merged the alternatives ‘strongly agree’ and ‘agree’ in the questionnaires to “agree” and the alternatives ‘strongly disagree’, ‘don’t know’ and ‘disagree’ to “disagree” respectively. Thus, the questionnaires distributed to large taxpayers are summarized in Tables 4.3, 4.4, 4.5 and 4.6 below.

Table 4.3: Economic Factors

2. Economic Factors		Agree		Disagree		Pearson χ^2 test P-value	Total	
		Frequency	%	Frequency	%		Frequency	%
2.1 Tax Rates	Yes	24	5.99	9	34.62	0.000	33	7.73
	No	377	94.01	17	65.38		394	92.73
	Total	401	93.91	26	6.09		427	100
2.2 Tax Audit	Yes	26	6.58	7	21.88	0.002	33	7.73
	No	369	93.42	25	78.12		394	92.27
	Total	395	92.51	32	7.49		427	100
2.3 Tax Incentives	Yes	26	6.5	7	25.93	0.000	33	7.73
	No	374	93.54	20	74.07		394	92.27
	Total	400	93.68	27	6.32		427	100
2.4 Gov't Spending	Yes	27	6.65	6	28.57	0.112	33	7.73
	No	379	93.35	15	71.43		394	92.27
	Total	406	95.08	21	4.92		427	100

Source: Own Survey, 2023

As shown in Table 4.3 above, 401(93.91%) large taxpayers replied “agree” on tax rates. These taxpayers replied “agree” on tax rate means they acknowledged that the tax rate in Ethiopia is very high and unfair. Besides, 395(92.51%) large taxpayers answered “agree” on tax audit. This shows that these taxpayers are willing to be audited, and they disclosed all of their taxes while they were being audited. Moreover, 400(93.68%) large taxpayers also replied “agree” on tax incentives. This means these taxpayers believe that tax incentives encourage taxpayers to comply with their tax obligations and increase their tax compliance. Additionally, 406(95.08%) large taxpayers answered “agree” on government spending. This signifies that these large taxpayers comply with taxes if the government

spends public money efficiently and equitably. Conversely, 26(6.09%) large taxpayers on tax rate, 32(7.49%) large taxpayers on tax audit, 27(6.32%) large taxpayers on tax incentives, and 21(4.92%) large taxpayers on government spending replied “disagree” respectively. Among the various types of economic factors, tax rate, tax audit and tax incentives are significantly associated with tax compliance status. Nevertheless, there is no statistically significant relationship between government spending and tax compliance.

Table 4.4: Institutional Factors

3.Institutional Factors		Agree		Disagree		Pearson χ^2 test P-value	Total	
		Frequency	%	Frequency	%		Frequency	%
3.1 Fairness & Equity	Yes	19	5.22	14	22.22	0.006	33	7.73
	No	345	94.78	49	77.78		394	92.27
	Total	364	85.24	63	14.75		427	100
3.2 Simplicity of tax system	Yes	24	6.54	9	15	0.023	33	7.73
	No	343	93.46	51	85		394	92.27
	Total	367	85.95	60	14.05		427	100
3.3 Efficiency of the tax authority	Yes	15	20.55	18	5.08	0.000	33	7.73
	No	58	29.45	336	94.92		394	92.27
	Total	73	17.09	354	82.91		427	100

Source: Own Survey, 2023

As revealed in Table 4.4 above, 364 (85.24%) large taxpayers replied “agree” on tax fairness and equity. This shows that large taxpayers agree on the need to get equal treatment and equitable service to be compliant. Besides, 367(85.95%) large taxpayers replied “agree” on the simplicity of the taxation system. This denotes that large taxpayers agree on the complication of the taxation system and the vagueness of the tax laws. Moreover, 73(17.09%) large taxpayers answered “agree” on the efficiency of the tax authority. This shows that these taxpayers think that the tax authority uses its power as prescribed in the law, and they have trust on the tax authority.

However, 63(14.75%) respondents on tax fairness and equity, 60(14.05%) respondents on the simplicity of the tax system, and 354(82.91%) respondents on the efficiency of the tax authority replied “disagree” respectively. This means these large taxpayers replied against those large taxpayers who agreed on the factors affecting tax compliance. As it is seen in Table 4.4, all institutional factors such as fairness and equity, simplicity of tax system and efficiency of tax authority are statistically significant associated with tax compliance.

Table 4.5: Social Factors

4. Social Factors		Agree		Disagree		Pearson χ^2 test P-value	Total	
		Frequency	%	Frequency	%		Frequency	%
4.1 Attitude of Taxpayers	Yes	18	32.73	15	4.03	0.000	33	7.73
	No	37	67.27	357	95.97		394	92.27
	Total	55	12.88	372	87.12		427	100
4.2 Social Norms	Yes	12	24.49	21	5.56	0.000	33	7.73
	No	37	75.51	357	94.44		394	92.27
	Total	49	11.48	378	88.52		427	100

Source: Own Survey, 2023

As displayed in Table 4.5 above, 372(87.12%) and 378 (88.52%) large taxpayers responded “disagree” on the attitude of taxpayers and social norms respectively. This shows that these large taxpayers believe that the government is not doing the right thing to collect taxes and to enhance tax compliance. These taxpayers also believe that paying taxes is not yet developed as a culture in Ethiopia. However, 55(12.88%) respondents on the attitude of taxpayers, and 49(11.48%) respondents on social norms replied “agree” respectively. As seen in column four of Table 4.5, social factors such as attitude of taxpayers and social norms have a significant association with tax compliance.

Table 4.6: Individual Factors

5. Individual Factors		Agree		Disagree		Pearson χ^2 test P-value	Total	
		Frequency	%	Frequency	%		Frequency	%
5.1 Tax Knowledge	Yes	26	6.53	7	17.65	0.001	33	7.73
	No	372	93.47	22	75.86		394	92.27
	Total	398	93.21	29	6.79		427	100
5.2 Awareness on tax penalties	Yes	26	9.09	7	4.96	0.133	33	7.73
	No	260	90.91	134	95.04		394	92.27
	Total	286	66.98	141	33.02		427	100
5.3 Financial Constraints.	Yes	20	6.54	13	10.74	0.142	33	7.73
	No	286	93.46	108	89.26		394	92.27
	Total	306	71.66	121	28.34		427	100

Source: Own Survey, 2023

As shown in Table 4.6 above, 398(93.21%) respondents replied “agree” on tax knowledge, and 286(66.98%) respondents answered “agree” on the awareness of tax penalties. This means 398 large taxpayers are aware of tax obligations and the intent of tax, and 286 large taxpayers are fully aware of

tax penalties that could be incurred being non-compliant with tax. Moreover, 306(71.66%) respondents replied “agree” on financial constraints. This indicates that 306 large taxpayers believe their financial constraints affect their tax compliance. Nevertheless, 29(6.79%), 141(33.02%) and 121(28.34%) large taxpayers replied “disagree” on tax knowledge, awareness on tax penalties and personal financial constraints respectively. The result from Pearson χ^2 test indicates that there is a statistically significant association between tax knowledge and tax compliance ($p=0.001$). On the contrary, there is no significant difference in the distribution of awareness on tax penalties and financial constraints based on the status of tax compliance.

4.3 Econometric Analysis

A binary logistic regression model was estimated to examine the factors affecting tax compliance among large taxpayers in Ethiopia. The model calculated the marginal effects of the independent variables and assessed their statistical significance. The findings showed that several independent variables had a significant impact on tax compliance. Through further analysis and interpretation of marginal effects, valuable insights were developed about the strength of these relationships.

The discussion section explores the implications of the research findings and their association with the research objectives. It investigates the theoretical foundations of the variables under investigation and draws contrasts between the results obtained from previous studies or pertinent literatures. Thus, it offers valuable insights into the factors affecting tax compliance in Ethiopia, thereby enhancing the existing knowledge base on this topic.

4.3.1 Factors Affecting Large Taxpayers' Tax Compliance in Ethiopia

The researcher used marginal effects to measure the strength of association between predictors and the outcomes of interest. This is because; marginal effects can present the sign, the size and the significance level of the effect all together. The result from the estimated model, using tax compliance as the dependent variable and various factors as explanatory variables, are presented in Table 4.7 below.

The variables in the model exhibited both negative and positive marginal effects, and they were found to be statistically significant in affecting large taxpayers' compliance. However, to address the possible concern of heteroskedasticity (association with a binary outcome) and to enhance precision of estimated coefficients, robust standard errors were employed. The use of robust standard errors was believed to address the concern of heteroscedasticity.

In the descriptive analysis, we examined the summery of the statistics of the variables based on their outcome on tax compliance. Therefore, we included the statistically significant variables related to the dependent variable while considering multicollinearity issues in the model.

Table 4.7: Marginal Effects after Logit

	Model-1	Model-2	Model-3
1. Gender	-0.074 ** (0.029)	-0.079 *** (0.028)	-0.051 ** (0.023)
2. Education	0.034 (0.079)	0.025 (0.076)	0.093 ** (0.042)
3. Sector	-0.078 ** (0.031)	-0.073 ** (0.029)	-0.070 *** (0.023)
4. Legal		0.164 *** (0.040)	0.109 *** (0.023)
5. Tax rate			-0.022 ** (0.011)
6. Tax audit			-0.020 ** (0.009)
7. Tax incentive			-0.022 * (0.013)
8. Government spending			0.014 (0.014)
9. Fairness and equity			0.009 (0.010)
10. Simplicity			0.018 ** (0.008)
11. Authority efficiency			0.007 (0.011)
12. Attitude			0.039 *** (0.009)
13. Social norms			0.012 (0.011)
14. Knowledge			-0.036 *** (0.013)
15. Awareness			0.021 ** (0.010)
16. Financial constraints			-0.016 ** (0.007)
Number of observations	427	427	427

*** p<.01, ** p<.05, * p<.1

Source: Own Computation using own Survey Data, 2023

As shown in the most complete model, Model 3 presented in Table 4.7 above, among the sixteen variables that were considered in the model, the marginal effect results demonstrated that twelve variables had statistically significant effect on tax compliance. More specifically, variables such as male gender, education, sector of the business, legal form of the business, tax rate, tax audit, tax incentives, simplicity of the tax system, attitude of taxpayers, tax knowledge, awareness on tax penalties and financial constraints were found to be statistically significant on large taxpayers' compliance. While male gender, sector of the business, tax rate, tax audit, tax incentives, tax knowledge and financial constraints have negative correlation with tax compliance, but the variables such as education, legal form of the business, simplicity of the tax system, attitude of taxpayers and awareness on tax penalties have positive correlation with tax compliance. Based on Table 4.7 above, all the significant variables illustrated in three categories are demographic, economic, institutional, social and individual factors.

4.3.1.1 Demographic Factors

Based on the analysis made on the factors, all of the four demographic factors such as male gender, education, sector of the businesses activities and the legal forms of the business have a marginal effect. From the four demographic factors, male gender and sector of the business activity were found negatively significant whereas education and legal form of the business were positively significant. The analyses of the democratic factors are illustrated below.

The binary logistic regression results in Table 4.7 showed a negative marginal effect of 0.051 for male gender variable suggesting that holding other factors constant, the probability of tax compliance for a male respondent reduces by 5.1 percentage points as compared to that for a female respondent. The effect is significant at the 5% level of significance. The results of this research go with the results of researches conducted by Hasseldine and Hite (2003), and Tadesse and Goitom (2014). Besides, interviewees stated that female taxpayers were complying with tax laws better than male taxpayers. As summarized from the qualitative data, this was supported by 12(92.31%) respondents. This implies that large taxpayers that are managed by females are more compliant than large taxpayers that are managed by males.

Looking at the education variable, holding other factors constant, transitioning to a university level education is associated with a 9.3 percentage points increase in the probability of tax compliance on average, and the effect is significant at 5% significance level. This indicates a strong positive association with higher education and tax compliance. Regarding education variable, the results of this study correlates with the findings of Niway and Wondwossen (2016), Admasu and Jerene (2016) and Kirchler (2007). Moreover, interviewees believed that education plays a significant role on taxpayers' tax compliance. Moreover, based on the qualitative data collected from respondents, 12 (92.31%) respondents believed that education contributes to obey tax laws and procedures. This is because; respondents thought that education plays a significant role in knowing tax laws and tax administration procedures.

Turning to sectorial categories, the results from the most complete model show a 7-percentage points reduction in the probability of tax compliance on average for construction and trading sectors compared to other sectors, *ceteris paribus*. The effect is significant at 1% level of significance. On the other hand, the results show on average 10.9 percentage points increase in the likelihood of tax compliance for taxpayers defined as government in their legal forms compared to those in the non-government category, *ceteris paribus*. The effect is significant at 1% level of significance.

4.3.1.2 Economic and Institutional Factors

As shown in Table 4.7, from the variables categorized under economic and institutional factors, tax rate, tax audit and tax incentives variables were found to have a statistically significant negative effect while simplicity of the tax system was positively significant. More specifically, everything being equal, on average an increase in tax rate was associated with a 2.2 percentage point's reduction in the probability of tax compliance at 5% level of significance. It revolves around the idea that as tax rates increase; taxpayers may be more inclined to engage in tax evasion or tax non-compliance.

In this study, the negative relationship between tax rates and tax compliance implies that as tax rates rise, taxpayers' voluntary tax compliance tends to decrease. In simple terms, taxpayers may be more motivated to evade taxes or engage in tax non-compliance when they face high tax rates. Regarding tax rates, the results of this study correlates with Masud et al. (2014) findings that tax rates affect taxpayers' compliance with tax. Moreover, interviewees had the same opinion on tax rates illustrating that reasonable tax rates make taxpayers more compliant with the tax law.

Thus, 7(53.84%) respondents stated that “the current tax administration law of Ethiopia imposed 30% tax on all business transactions”. Respondents also claimed that the tax rate of Ethiopia was not accepted by many taxpayers.

Likewise, holding other factors constant, a higher level of tax audit seems to lead to a 2.0 percentage point’s reduction in the likelihood of tax compliance. The effect is significant at 5% level of significance. In this study, the negative relationship between tax audit and tax compliance implies that as the perception of tax audit rise, taxpayers’ voluntary tax compliance tends to decrease. In simple terms, taxpayers may be more demotivated to comply with taxes when there is frequent tax audit. The analysis results of this study correlate with the findings of Ahmed and Kedir (2015). However, the analysis result of the qualitative data showed that tax audit could make large taxpayers compliant with tax laws and procedures. This was supported by 7(53.84%) respondents though they thought that the quality of tax audit is still a problem.

A surprisingly negative effect of tax incentive has been shown in the most complete model, after controlling for the effect of other variables. More specifically, an increase in tax incentive is associated with a 2.2 percentage points’ reduction in the probability of compliance and the result is significant at 10% level of significance. The result of this study is in contrary with Ndekwa’s (2014) findings. Ndekwa (2014) found that there is a strong and positive connection between government incentives and taxpayers’ tax compliance in small and medium enterprises’ level of tax compliance in Tanzania. However, this research focused on large taxpayers. Hence, it needs further investigation to know the specific reasons why tax incentives discourage the compliance of large taxpayers.

On the other hand, simplicity of the tax systems shows a relatively small effect in the probability of tax compliance. As such simplicity of the tax systems is associated with a 1.8 percentage points in the predicted probability of tax compliance at 5% significance level. The positive relationship between taxpayers’ perception on the tax system and tax compliance is a well-established concept in the field of taxation. When taxpayers perceive that the tax system is not complex, clear and well-administered, they are more likely to comply with tax laws voluntarily. In this regard, this study shows positive and significant relationship between the tax system and large taxpayers’ tax compliance in Ethiopia. This finding correlates with the finding of Agbadi (2011). Furthermore, the interviewees’ idea is consistent with the results of this research that the tax system’s simplicity affects taxpayers’ compliance.

Hence, 9(69.23%) respondents advised that there is a need to simplify the tax system in Ethiopia to increase tax compliance.

4.3.1.3 Social and Individual Factors

Turning to the social and individual factors, the analysis includes four variables. Accordingly, taxpayers' awareness on tax penalties and their attitude towards tax show a positive marginal effect whereas tax knowledge and financial constraints show a negative marginal effect on tax compliance.

As shown in Table 4.7 above, on average taxpayers' positive attitude towards tax is associated a 3.9 percentage points increase in the predicted probability of tax compliance at the 1% significance level, *ceteris paribus*. This suggests that taxpayers' attitude has a meaningful impact on their tax compliance. More specifically, having a more positive attitude is linked to a higher likelihood to complying with tax laws. This result underscores the importance of psychological factors such as perceptions, beliefs and attitudes in shaping tax compliance decisions. Taxpayers who view the tax system more positively may be more motivated to voluntarily comply with tax obligations. This finding goes with the results of Gadi (2016), Waithira (2016), Aronmwan et al. (2015) and Beza (2014) that means the attitude of taxpayers affects their tax compliance. Besides this, 12 (92.31%) respondents believed that the attitude of taxpayers towards taxation has effects on their compliance.

On the opposite, taxpayers' tax knowledge is associated with a statistically significant reduction in the likelihood of their tax compliance. That is, tax knowledge predicts a 3.6 percentage points' reduction in the probability of tax compliance, significant at 1% level of significance. It may be well that highly knowledgeable taxpayers may encourage those taxpayers to misuse their understanding of tax laws and engage in more sophisticated tax evasion and avoidance strategies including legally optimizing their tax liability through deductions, credits, and/or other tax incentives. Thus, they may report lower income, resulting in reduced tax compliance. Regarding tax knowledge, the results of this study go with the results of the researches that were conducted previously like Geletaw (2017), Saad (2014), Ahmed (2013) and Palil (2010). On the contrary, 9(69.23%) respondents replied that taxpayers' knowledge about tax plays an important role to understand their obligation to pay taxes or being compliant with tax laws. Respondents further justified that tax knowledge affects large taxpayers' tax compliance as a taxpayer who has the knowledge and understanding on how to declare taxes and how to pay taxes, fulfills his/her duty to pay taxes appropriately and complies with tax laws.

On the parallel, the estimates show a positive relationship between taxpayers' awareness on tax penalties and their compliance. More specifically, *ceteris paribus*, on average awareness on tax penalties is associated with a 2.1 percentage points' increase in the probability of tax compliance. The effect is significant at 5% level of significance. This implies that taxpayers who are well-informed about tax penalties are more likely to comply with tax regulations to avoid unnecessary penalties. When taxpayers are well-informed about the potential consequences of tax non-compliance, they are more likely to comply with tax obligations. The positive relationship between taxpayers' awareness on tax penalties and tax compliance suggests that when taxpayers are aware of penalties, fines and legal consequences associated with tax non-compliance, they are more convinced to fulfill their tax obligations willingly and honestly.

Regarding awareness on tax penalties, the findings of this study correlate with the results of Tilahun and Yadersal (2014) and Mascagni et al.(2014). The result of this study is also supported by the views of interviewees that awareness on tax penalties leads taxpayers to be compliant with tax laws. This view was supported by 11(84.6%) respondents claiming that there would not be non-compliant large taxpayers as tax penalties were levied by tax authorities. In reference to the relationship between financial constraints faced by taxpayers and their tax compliance, we found a statistically significant negative effect of about 1.6 percentage points. The effect is significant at 5% level of significance. This implies that when taxpayers face financial constraints to meet their tax obligations, it may become challenging to comply with their tax obligation. This effect underscores the complex interplay between economic factors and tax compliance. It revolves around the idea that taxpayers facing financial constraints may be more inclined to engage in tax non-compliance due to their limited financial resources.

The results of this category of the study are consistent with Mohani's (2001) research. Besides, the result of this research is supported by interviewees from the qualitative data that financial constraints and cash shortage at hand increased tax non-compliance. This view was supported by 10(76.92%) respondents claiming that financial constraints affect large taxpayers' compliance with tax laws and procedures.

Part II: Qualitative Data Analysis and Findings

4.4 Demographic Backgrounds of the Respondents

As discussed in the previous chapter, the researcher purposively selected respondents from the Large Taxpayers Branch Office to collect qualitative data. Thus, the following table presents the background information of the respondents.

Table 4.8: Demographic Information of the Respondents

Interviewees	Gender	Age	Qualification (Degree)	Field of Study	Experience	Position
1	Male	43	Master's	Accounting	21 years	Branch Manger
2	Male	34	Master's	Econ. Law & Bus. Admn	14 years	Review Committee Deputy Manager
3	Male	43	Master's	Acc.& Finance	17 years	Tax Operation Deputy Manager
4	Male	38	Master's	Accounting	14 years	Tax Law Enforcement Deputy Manager
5	Male	36	Master's	Accounting	14 years	Audit Process Coordinator
6	Male	35	Master's	MIS	12 years	Tax Filing Process Coordinator
7	Male	35	Master's	MBA	14 years	Team Coordinator
8	Male	36	Master's	Acc. & MBA	12 years	Team Coordinator
9	Male	41	Mater's	Acc.& Finance	10 Years	Team Coordinator
10	Female	33	Master's	Accounting	11 years	Team Coordinator
11	Male	37	BA	Accounting	13 years	Senior Tax Audit Expert
12	Male	38	BA	Acc. & Finance	14 years	Tax Audit Process Coordinator
13	Male	35	BA	Accounting	11 years	Team Coordinator

Source: Own Construction based on the Data, 2023

As shown in Table 4.8, four of the selected interviewees were leaders in the Large Taxpayers' Branch Office: the Branch Manager, the Review Committee Deputy Manager, the Tax Operation Deputy Manager and the Tax Law Enforcement Deputy Manager respectively. Moreover, the rest nine interviewees were team coordinators and experts in the branch office. Regarding the work experience of the interviewees, there was one staff in each with 21, 17, 13 and 10 years' of experience in descending order. There were also two staffs in each with 12 and 11 years' of experience. Besides, there were five staffs with 14 years' of experience. As far as the educational level of the interviewees was concerned, they had bachelor's degree or above as shown in Table 4.8 above.

Therefore, they were thought to be well-informed about the theoretical and practical aspects related to taxpayers' behavior and tax compliance.

4.5 Tax Compliance of the Large Taxpayers' Branch Office

Interviewees were asked to express their opinion on the tax compliance situation of the Large Taxpayers' Branch Office in Ethiopia. Regarding the tax compliance situation of the branch office, 10(76.92%) of the respondents replied that "taxpayers in the branch office had been improving from time to time in terms of their tax compliance". They stated that the improvement of taxpayers' tax compliance these days in the branch office by making a reference to "the financial declarations and related pieces of evidences provided by the taxpayers themselves". This is due to the fact that the taxation system in Ethiopia is a self-assessment declaration. Moreover, interviewees responded that "the branch office was only detecting the tax compliance situation of taxpayers using the self-assessed financial declarations submitted by taxpayers themselves" as evidences during tax audit.

Responding to the question on accurate declaration of taxes by taxpayers, 12 (92.31%) of them responded that "although many taxpayers reported on time, there was a wide gap in reporting the correct amount of their taxes". Continuing their discussion on reasons for inaccurate tax declarations, undeserved losses and demand for improper refunds were indicated as the major reasons for inaccurate declarations which were considered as tax avoidance and evasion. Generally, interviewees answered that many taxpayers did not declare their taxes correctly.

Almost all of the interviewees responded that large taxpayers' tax compliance situation is getting better these days in contrast to the previous years. This means large taxpayers' compliance with tax shows incremental change compared to the previous years. Furthermore, 11(84.6%) of the interviewees proposed subsequent conditions that should be used to increase large taxpayers' tax compliance. These conditions were closing the attempts made by taxpayers to evade and avoid taxes exploiting legal loopholes, identifying illegal invoices, clarifying ambiguous tax laws and treating taxpayers equally.

4.6 Major Problems and Challenges of the Branch Office and Large Taxpayers

Regarding the major problems and challenges that the Large Taxpayers' Branch Office is facing, 11(84.6%) interviewees identified lack of execution capacity of human capital, absence of audit quality, turnover of professionals, lack of continuous legislative framework reforms, failure to provide prompt and efficient service to taxpayers, unavailability of accurate data, inadequate use of information technology, unreliability of information technology infrastructures (out-dated and incomplete), lack of integration between the information technology systems in use, and failure to solve problems of tax evasion and avoidance.

Interviewees also discussed the major problems and challenges faced by large taxpayers to comply with tax laws in Ethiopia. These include, among other things, absence of developed culture in providing and receiving receipts during business transactions, incapacity to escape from tax evasion and avoidance, failure to provide the required information during tax audit, inability to identify illicit transactions, and lack of appropriate knowledge on tax laws.

4.7 Strategies to Enhance Large Taxpayers' Tax Compliance

Responding to the strategies that could be used to enhance large taxpayers' tax compliance, all the 13(100%) interviewees discussed possible strategies. The major strategies that could be used for enhancing large taxpayers' tax compliance are building the capacity of executive bodies, supporting the tax administration procedures with modern information technology, ensuring information technology security, applying efficient usage of resources, formulating and applying binding memorandums of understanding with stakeholders that govern collaborative practices, and resolve performance issues arising from organizational activities. The following points provide further discussions of the proposed strategies by the interviewees:

- **Strengthening legal enforcement and tax audit**

To strengthen legal enforcement and tax audit, interviewees proposed conducting technology-assisted audits and data analysis. Besides this, interviewees also propose carrying out capacity building work on transfer pricing audits, reinforcing law enforcement activities and building the capacity of judicial bodies to adjudicate taxes as strategies to strengthen legal enforcement and tax audit.

- **Improving relationships with the public and taxpayers**

The other strategy that could be used to enhance large taxpayers' tax compliance is improving relationship with the public and taxpayers. Interviewees recommend preparing plans for frequent discussions with the public and taxpayers on tax administration procedures and service delivery to improve the relationship with the tax office.

- **Providing the necessary information and training to taxpayers**

To provide the necessary information and training to large taxpayers as strategies, interviewees advised activities such as improving tax information collection system, increasing sector-specific training and awareness platforms for taxpayers and updating the tax administration system to be carried out in accordance with the tax law.

Interviewees also recommend that the training of taxpayers shall be conducted regularly, with the possibility of remote and online participation. Besides, training and consultancy of each business organization is enhancing its capacity. This strategy is expected to play a vital role in integrating taxpayers who inadvertently violate the tax law into the tax system.

CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

This study was conducted to evaluate the factors affecting tax compliance in Ethiopia using large taxpayers from the Large Taxpayers' Branch Office of the Ministry of Revenues as a case. The researcher administered questionnaires, and prepared interview guide questions and checklists to collect appropriate primary and secondary data. The researcher also implemented binary logistic regression model to analyze the quantitative data. Besides, the researcher used thematic analyses for qualitative data. Sixteen factors affecting tax compliance of large taxpayers were considered in the research. These factors are demographic factors (gender, educational level, sector of the business activities and legal form of the business), economic factors (tax rate, tax audit, tax incentives and perception on government spending), institutional factors (tax fairness and equity, simplicity of the tax system and efficiency of the tax authority), social factors (attitude of taxpayers and social norms) and individual factors (tax knowledge, awareness on tax penalties and financial constraints).

From the above listed potential factors affecting taxpayers' tax compliance, twelve of them were found to be statistically significant and affected large taxpayers' tax compliance whereas four of them were not statistically significant. As stated in the analysis, gender, sector of business activities, tax rate, tax audit, tax incentive, tax knowledge and financial constraints affected tax compliance negatively. However, educational, legal form of the businesses, simplicity of the tax system, attitude of taxpayers and awareness on tax penalties affected tax compliance positively.

The qualitative data collected from interviewees were analyzed thematically. Based on the analysis, the strengths of the taxation system in Ethiopia were found to be creating favorable working environment for employees, identifying procedural and legal loopholes and correcting them, increasing tax decisions, identifying illegal invoices through investigation audit, increasing the coverage of tax audit, inspecting frequently sales registration machines and penalizing taxpayers for their non-compliance. Besides this, the weaknesses of the tax system were lack of motivation and commitment among employees, unable to execute tasks based on plans, having inadequate audit quality, failing to use information technology and unable to execute procedural works in teamwork.

Furthermore, the major problems and challenges that the Large Taxpayers' Branch Office and large taxpayers are facing were identified using the qualitative data. Hence, the problems and challenges were turnover of professionals, lack of continuous legislative framework reforms, failure to provide efficient service, unreliability of information technology infrastructure and unavailability of accurate data. Additionally, the strategies that could be used to increase large taxpayers' tax compliance were analyzed thematically using the qualitative data. Based on the analysis, the strategies were found to be strengthening legal enforcement through tax audit, improving relationship with the public, providing necessary information and training, and giving frequent training on tax laws and procedures.

5.2 Recommendations

It is apparent that growth and development of countries are mainly depending on tax revenue. Without collecting adequate tax revenue, governments could not give goods and services for citizens at large. Therefore, collecting tax revenue is crucial not only for the country but also for citizens. In the context of Ethiopian, the Large Taxpayers' Branch Office has contributed around 70% of the domestic revenue collected from taxes for the last five years. Based on the findings, the following recommendations are forwarded to the concerned bodies of the Large Taxpayers' Branch Office in the Ministry of Revenues in particular and stakeholders of tax policy makers in Ethiopia in general.

- As the research found that non-governmental business organizations were not complying with tax laws in contrast to governmental business organizations, the Large Taxpayers' Branch Office should give critical attention to these business organizations and implement technology based assessment mechanisms to make them compliant with tax laws. Moreover, exhaustive trainings on the tax administration system of Ethiopia and the consequences of non-compliance with tax laws on good governance should be given to non-governmental businesses to enhance their voluntary tax compliance. Following these, different incentive schemes should be administered to enable non-governmental businesses compliant with tax laws. As far as the sector of businesses activities of the non-governmental businesses are concerned, the business organizations that engaged in trading and construction sectors need serious attention compared to other sectors.
- It was also found that the simplicity of the tax system strongly affected the compliance of large taxpayers in the branch office. Therefore, the Ministry of Revenues in general and the Large Taxpayers' Branch Office in particular should work hard to simplify the taxation system. Tax laws

including tax proclamations, regulations, directives, rules, procedures and manuals should be easily accessible to taxpayers and less complex. Moreover, the Ministry of Revenues and the branch office should consult taxpayers and stakeholders in the tax administration system of the country before ratifying tax laws and tax procedures. At large, extensive trainings on tax proclamations, directives, manuals and procedures of tax reporting should be given to all taxpayers.

- As stated in the qualitative analysis, interviewees claimed that the tax rates are very high in Ethiopia and applying them equally on all sectors of business activities is not fair. Therefore, it needs government's intervention to decrease the tax rate, revise the tax rate based on the sector of the business activity and consider other tax policy aspects that could increase tax compliance.

Generally, this study was conducted only on the factors affecting large taxpayers' tax compliance using the Large Taxpayers' Branch Office as a subject. Thus, the findings did not go beyond identifying the level of the significance effect of those factors affecting tax compliance and suggesting the possible strategies to enhance tax compliance in the context of Ethiopia. As a result, further studies could be conducted on the policy implications for the Ministry of Revenues and other tax policy makers which can offer insights to those concerned bodies to design new policy measures on the status of tax non-compliance. This could help to raise the tax revenue that the economy generates and to enable the government to use its capacity of tax collection.

References

- Abdulsemmed Shafi (2019) Determinants of Tax Compliance in the Case of Value Added Tax Registered Individual Taxpayers in Addis Ketema Sub City. MSc Thesis. Addis Ababa University.
<http://etd.aau.edu.et/handle/123456789/18641>
- Abdul-Razak, A. & Adafula, C. J. (2013) Evaluating Taxpayers' Attitude and Its Influence on Tax Compliance Decisions in Tamale, Ghana. *Journal Accounting and Taxation*, 5(3), 48-57.
<https://Doi.Org/10.5897/Jat2013.0120>.
- Agbadi, S. B. (2011). Determinants of Tax Compliance: A Case Study of VAT Flat Rate Scheme Traders in the Accra Metropolis. Kwame Nkrumah University of Science and Technology.
<https://ir.knust.edu.gh/items/1f250056-5bd1-45f3-9829-79dd36cda332>
- Ahmed, A. & Kedir, S. (2015) Tax Compliance and its Determinant: The Case of Jimma Zone, Ethiopia. *International Journal of Research in Social Sciences*, 6(2), 7–21.
<https://www.semanticscholar.org/paper/TAX-COMPLIANCE-AND-ITS-DETERMINANT-THE-CASE-OF-ZONE-Ahmed-Kedir/295db85ef72ae92ef5aba11d9c46fbb4abf27a07>
- Akintoye, I.R, Adegbe, F.F. & Awotomilusi, N.S. (2019) Determinants of Tax Revenue: A Case of Nigeria. *The International Journal of Business & Management*, 7(4), 23-31.
DOI: 10.24940/theijbm/2019/v7/i4/BM1904-009
- Alemayehu Geda (2021) The Macroeconomic and Social Impact of COVID-19 in Ethiopia in the Global Context. UNCTAD Research Paper No. 75, UNCTAD/SER.RP/2021/18
https://unctad.org/system/files/official-document/ser-rp-2021d18_en.pdf
- Ali, Z. A. (2018) Tax Evasion Determinants in Banadir Region, Somalia. Department of Accounting, Faculty of Business and Management, Simad University, Mogadishu, Somalia.
https://www.researchgate.net/publication/323538349_Tax_Evasion_Determinants_in_Banadir_Region_Somalia
- Alstadsaeter, A. & Jacob, M. (2013) The Effect of Awareness and Incentives on Tax Evasion. *Working Paper Series No. 4369*
https://www.econstor.eu/bitstream/10419/80497/1/cesifo_wp4369.pdf
- Amina Ahmed (2013) Determinants of Tax Compliance: The Case of Jimma Town. MSc Thesis, Jimma University.
<https://repository.ju.edu.et/handle/123456789/2508>
- Amina Jibril & Saniya Kedir (2016) Tax Compliance and Its Determinant the Case of Jimma Zone. *International Journal of Research in Social Science*, 6(2), 7-21
<https://www.semanticscholar.org/paper/TAX-COMPLIANCE-AND-ITS-DETERMINANT-THE-CASE-OF-ZONE-Ahmed-Kedir/295db85ef72ae92ef5aba11d9c46fbb4abf27a07>

- Aronmwan, E. J., Imobhio, E. & Izedonmi, F. (2015). Determinants of Personal Income Tax Compliance: Perception of Nigerian Taxpayers. Available at SSRN 2619855
<https://doi.org/10.2139/ssrn.2619855>
- Barbuta-Misu, N. (2011) A Review of Factors for Tax Compliance. Annals of “Dunarea de Jos” University of Galati Fascicle I. *Economics and Applied Informatics*, 1, 69-76.
https://www.researchgate.net/publication/254404758_A_Review_of_Factors_for_Tax_Compliance
- Berkson, J. M.D (1944) Application of the Logistic Function to Bio-Assay. *Journal of the American Statistical Association*, 39 (227), 357-365.
 DOI: 10.1080/01621459.1944.10500699
- Beza Muche (2014). Determinants of Tax Payer’s Voluntary Compliance with Taxation in East Gojjam-Ethiopia. *Research Journal of Economics & Business Studies*, 3(9), 41–50.
https://www.academia.edu/68687524/Determinants_of_Tax_Payers_Voluntary_Compliance_with_Taxation_in_East_Gojjam_Ethiopia
- Calderon, J. F. & Gonzalez, E. C. (2018). *Methods of Research and Thesis Writing* (4th ed.). Mandaluyong City: National Bookstore.
- Chan, C., Troutman, C.S., & O'Bryan, D. (2000). An Expanded Model of Taxpayer Compliance: Empirical evidence from the United States and Hong Kong. *Journal of International Accounting, Auditing and Taxation*, 9, 83-103.
<https://www.sciencedirect.com/science/article/abs/pii/S1061951800000276>
- Chebusit, C., Namusonge, G. S., Biraori, O. E., & Kipkoech, E. C. (2014) Factors Affecting Tax Compliance among Small and Medium Enterprises in Kitale Town Trans-Nzoia County, Kenya. *International Journal of Recent Research in Commerce Economics and Management (IJRRCEM)*, 1(3), 60–75.
<https://www.paperpublications.org/upload/book/FACTORS%20AFFECTING%20TAX%20COMPLIANCE-112.pdf>
- Chinyere C. J. (2000). The Use of Consultant in Tax Collection Analysis of the Accelerated Revenue Generation Program in Rivers State Nigeria: Nsukka.
- Creswell, J. W. (2014) *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*. (4th ed.). Thousand Oaks, CA: Sage Publishing Inc.
- Daba Geremew (2017) Factors Affecting Rental Income Tax Payers Compliance with Tax System: In Case of Hawassa City Administration, SNNRS, Ethiopia. *Research Journal of Finance and Accounting*, 8(9), 75–83.
<https://core.ac.uk/download/pdf/234631991.pdf>
- Daniel Mehari & Pasha, S.A.M. (2017) Factors Affecting Voluntary Compliance of Category ‘C’ Taxpayers’ Attitude of Arbaminch, SNNPR, Ethiopia. *International Journal of Scientific and Research Publications*, 7(6), 48-63.
<https://www.ijsrp.org/research-paper-0617/ijsrp-p6609.pdf>

- Deyganto, K.O. (2018) Factors Influencing Taxpayers' Voluntary Compliance Attitude with Tax System: Evidence from Gedeo Zone of Southern Ethiopia. *Universal Journal of Accounting and Finance*, 6(3), 92-107.
DOI: 10.13189/ujaf.2018.060302.
- Dubin, J. A. (2004) Criminal Investigation Enforcement Activities and Taxpayer Noncompliance. Working Papers 1200, California Institute of Technology, Division of the Humanities and Social Sciences.
<https://www.irs.gov/pub/irs-soi/04dubin.pdf>
- Ermias Ersodo (2014) The Impact of Tax Awareness on Tax Compliance (The case of Durame town) MA, Thesis, ECSU, Addis Ababa; Ethiopia. Unpublished material available in the library of ECSU.
- Esmael Abdu and Mohammmd Adem (2023) Tax Compliance Behavior of Taxpayers in Ethiopia: A review paper. *Cogent Economics & Finance* (2023), 11 (1), 1-13.
<https://doi.org/10.1080/23322039.2023.2189559>
- FDRE, Planning and Development Commission (2020) Ten Years Development Plan: A Pathway to Prosperity 2021-2030, Addis Ababa: Ethiopia.
https://www.ircwash.org/sites/default/files/ten_year_development_plan_a_pathway_to_prosp erity.2021-2030_version.pdf
- FDRE, National Planning Commission (2016) Growth and Transformation Plan II (GTP II) (2015/16-2019/20), Volume I: Main Text, Addis Ababa, Ethiopia.
[https://plasticsdb.surrey.ac.uk/documents/Ethiopia/National%20Planning%20Commission%20\(2016\)%20Growth%20and%20Transformation%20Plan%20II%20Vol%201,%20Ethiopia.pdf](https://plasticsdb.surrey.ac.uk/documents/Ethiopia/National%20Planning%20Commission%20(2016)%20Growth%20and%20Transformation%20Plan%20II%20Vol%201,%20Ethiopia.pdf)
- Fjeldstad, O-H., Schulz-Herzenberg, C. & Sjursen, I. H. (2012) People's Views of Taxation in Africa: A Review of Research on Determinants of Tax Compliance. ICTD Working Paper 8.
https://www.researchgate.net/publication/257603208_People's_Views_of_Taxation_in_Africa_A_Review_of_Research_on_Determinants_of_Tax_Compliance
- Fjeldstad, O.H & Semboja, J. (2001) Why People Pay Taxes: The Case of the Development Levy in Tanzania. *World Development*, 29(12), 2059-2074.
<https://www.cmi.no/publications/867-why-people-pay-taxes>
- Gadi, M. (2016) Factors Affecting Tax Compliance in Rwanda: An Empirical Analysis. *Research Journal of Economics*, 3(4), 1-23.
https://www.researchgate.net/publication/292615834_Factors_Affecting_Tax_Compliance_in_Rwanda_An_Empirical_Analysis
- Gangl, K., Hofmann, E., & Kirchler, E. (2015) Tax Authorities' Interaction with Taxpayers: A Conception of Compliance in Social Dilemmas by Power and Trust. *New Ideas in Psychology*, 37(2015), 13-23.
<http://dx.doi.org/10.1016/j.newideapsych.2014.12.001>

- Geletaw, Tsegaw (2015) Taxpayers' Tax Compliance Behavior- Business Profit Taxpayers' of Addis Ababa City Administration. MSc Thesis, Addis Ababa University.
<http://etd.aau.edu.et/handle/123456789/16648>
- Gezahegne Eredatie (2012) An Assessment of Determinant of Taxpayers' Compliance Towards Taxation (The case of Assosa Zone in Benishanguel Gumuz Regional State). MSc Thesis. Ethiopian Civil Service University.
https://www.academia.edu/32182506/Gezahegn_Paper
- Habtamu Lashetew (2019) Factors Affecting Tax Compliance Behavior of Addis Ababa Number Two Medium Taxpayers Branch Office, in Addis Ababa, Ethiopia. MSc Thesis. Addis Ababa University.
<http://etd.aau.edu.et/bitstream/handle/123456789/16648/Habtamu%20Lashetew.pdf?sequence=1&isAllowed=y>
- Harris, T. & Seid, E. (2021) 2019/20 Survey of the Ethiopian Tax System. The Institute for Fiscal Studies. IFS Report R187
- Hasseldine, J. & Hite, P.A. (2003) Framing, Gender and Tax compliance. *Journal of Economic Psychology*, 24 (4), 517-533.
 DOI: 10.1016/S0167-4870(02)00209-X
- James, S. & Alley, C.(2002) Tax Compliance, Self-assessment and Tax Administration. *Journal of Finance and Management in Public Services*, 2(2), 27-42.
<https://ore.exeter.ac.uk/repository/handle/10036/47458>
- Jayawardane, T.G.S. & Low, K. (2017) Exploring Key Determinants of Tax Compliance Decision among Individual Taxpayers in Sri Lanka. *European Journal of Business and Management*, 9(3), 125-135.
<https://www.semanticscholar.org/paper/Exploring-Key-Determinants-of-Tax-Compliance-Among-Jayawardane-Low/025708f417f1b59a8c0e7495fcc7fea3b921de76>
- Khasawneh, A., Obeidat, M.I & Al-Momani, M.A. (2008) Income Tax Fairness and the Taxpayers' Compliance in Jordan. *Journal of Economic & Administrative Sciences*, 24 (1), 14-39.
https://www.researchgate.net/publication/329356968_Income_Tax_Fairness_and_the_Taxpayers'_Compliance_in_Jordan
- Kirchler, E. (2007) *The Economic Psychology of Tax Behaviour*. Cambridge: Cambridge University Press.
https://social-econpsych.univie.ac.at/fileadmin/user_upload/p_wp_psy/files/Downloads_EK/Kirchler_2007_The_economic_psychology_of_tax_behaviour_Buchmanuskript.pdf
- Kothari, C. R. (2004) *Research Methodology, Methods & Techniques*. New Delhi: New Age International Limited.
<https://ccsuniversity.ac.in/bridge-library/pdf/Research-Methodology-CR-Kothari.pdf>

- Kraan, D.J. (2004) Off-Budget and Tax Expenditures. *OCED Journal Budgeting*, 4(1), 121-142.
<https://www.oecd.org/gov/budgeting/39515114.pdf>
- Lymer, A. & Oats, L. (2009) *Taxation: Policy and Practice (16th Edition 2009/10)*. Fiscal Publications: Birmingham, UK.
- Manchilot Tilahun (2018) Determinants of Tax Compliance: A Case of Gondar City, Ethiopia. *Research Journal of Finance and Accounting*, 9(13), 38-45.
- Mansor, M., & Gurama, Z. (2016) The Determinants of Tax Evasion in Gombe State Nigeria. *International Journal of Economics and Financial Issues*, 11(13), 165-170
https://www.researchgate.net/publication/311388185_The_Determinants_of_Tax_Evasion_in_Gombe_State_Nigeria
- Mascagni, G., Moore, M., & McCluskey, R. (2014). *Tax Revenue Mobilization in Developing Countries: Issues and challenges*. Luxembourg: European Union.
<https://www.ictd.ac/publication/tax-revenue-mobilisation-in-developing-countries-issues-and-challenges/>
- Mas'ud, A., Aliyu, A. A. & Gambo, El-M. J. (2014) Tax Rate and Tax Compliance in Africa. *European Centre for Research Training and Development*, 2(3), 22–30.
<https://www.eajournals.org/wp-content/uploads/TAX-RATE-AND-TAX-COMPLIANCE-IN-AFRICA1.pdf>
- Maxwell, J. (2013) *Qualitative Research Design: An Interactive Approach*. (3rd ed). Thousand Oaks: SAGE Publications Ltd.
- McKerchar, M. & Evans, C. (2009) Sustaining Growth in Developing Economies through Improved Taxpayer Compliance: Challenges for Policy Makers and Revenue Authorities. *eJournal of Tax Research*, 7(2), 171-201.
https://www.researchgate.net/publication/228183150_Sustaining_Growth_in_Developing_Economies_Through_Improved_Taxpayer_Compliance_Challenges_for_Policy_Makers_and_Revenue_Authorities
- Merriam, S. B., & Tisdell, E. J. (2015) *Qualitative Research: A Guide to Design and Implementation*. (4th ed). San Francisco, CA: Wiley.
- Ministry of Finance (2021) Macro-Fiscal Performance in Ethiopia and Recent Fiscal Policy Developments. Report No. 04/2021
https://www.mofed.gov.et/media/filer_public/44/33/44336247-02d5-499b-91f1-3427f8db22ed/final_macro-fiscal_performance.pdf
- Ministry of Finance (2020) Public Sector Debt Statistical Bulletin No. 34 (2015/16-2019/20).
https://www.mofed.gov.et/media/filer_public/95/7c/957c702d-c423-4d42-a2ae-f18372f8b979/public_sector_debt_statistical_bulletin_no_34_2015-16_2019-20.pdf
- Ministry of Revenues (2019) Annual Report on Tax Revenue Collection Performance, July 2019.

- Ministry of Revenues (2018-2022) Tax Revenue Collection Performance Report for Five Years, July 2022.
- Mohani, A. (2001) Personal Income Tax non-Compliance in Malaysia. PhD Thesis. Victoria University: Melbourne, Australia.
<https://vuir.vu.edu.au/15760/>
- Moore, M. (2004) Revenues, State Formation, and the Quality of Governance in Developing Countries. *International Political Science Review*, 25(1), 297-319.
<https://journals.sagepub.com/doi/10.1177/0192512104043018>
- Ndekwa, A. G. (2014) Factors for Improving Tax Compliance among Small and Medium Enterprises in Tanzania. *The International Journal of Business & Management*, 2(10), 285–290.
<http://repository.businessinsightz.org/bitstream/handle/20.500.12018/2904/Factors%20for%20Improving%20Tax%20Compliance%20Among%20Small%20and%20Medium%20Enterprises%20in%20Tanzania.pdf?sequence=1&isAllowed=y>
- Netsanet Shiferaw & Biniam Tesfaye (2020) Determinants of Voluntary Tax Compliance (The Case Category A and B Taxpayers in Dire Dawa Administration). *International Journal of Scientific and Research Publications*, 10 (6), 982-996.
https://www.researchgate.net/publication/343944383_Determinants_of_Voluntary_Tax_Compliance_The_Case_Category_A_and_B_Taxpayers_in_Dire_Dawa_Administration
- Niway Adimasu & Wondwossen Jerene (2016) Determinants of Voluntary Compliance Behaviour Evidence from SNNPR, Ethiopia. *International Journal of Science and Research*, 5(12), 967-973.
<http://dx.doi.org/10.21275/ART20163576>
- Nzioki, P.M., & Peter, O.R. (2014) Analysis of Factors Affecting Tax Compliance in Real Estate Sector: A Case of Real Estate Owners in Nakuru Town, Kenya. *Research Journal of Finance and Accounting*, 5(11), 1-11.
https://www.researchgate.net/publication/365038722_ANALYSIS_OF_FACTORS_AFFECTING_TAX_COMPLIANCE_IN_THE_REAL_ESTATE_SECTOR_IN_KENYA_A_CASE_OF_REAL_ESTATES_IN_ELDOROT_TOWN
- OECD (2019) Revenue Statistics 2019, OECD Publishing. Paris: France.
<https://doi.org/10.1787/0bbc27da-en>
- OECD (2010) Understanding and Influencing Taxpayers' Compliance Behavior.
<https://www.oecd.org/tax/forum-on-tax-administration/publications-and-products/46274793.pdf>
- Oladipupo, A. O., & Obazee, U. (2016) Tax Knowledge, Penalties and Tax Compliance in Small and Medium Scale Enterprises in Nigeria. *ibusiness*, 8(1), 1–9.
<http://dx.doi.org/10.4236/ib.2016.81001>

- Olaoye, C. O., Ayeni-Agbaje, A. R., & Alaran-Ajewole, A. P. (2017) Tax Information, Administration and Knowledge on Tax Payers' Compliance of Block Moulding Firms in Ekiti State. *Journal of Finance and Accounting*, 5(4), 131-138.
doi: 10.11648/j.jfa.20170504.12
- Oluwaremi, F. & Yusuf, S.A. (2014) The Level of the Effectiveness and the Efficiency of Tax Administration and Voluntary Tax Compliance in Nigeria: (A Federal Inland Revenue Service). *Research Journal of Social Science and Management*, 3(10), 44-58.
<https://www.semanticscholar.org/paper/THE-LEVEL-OF-THE-EFFECTIVENESS-AND-EFFICIENCY-OF-IN-Oluwaremi-Yusuf/bdf4674a0ac3f4224b645066837c81f1943caec4>
- Palil, M. R. & Mustapha, A. F. (2011) Factors Affecting Tax Compliance Behavior in Self-Assessment System. *African Journal of Business Management*, 5(33), 12864–12872.
<https://doi.org/10.5897/Ajbm11.1742>
- Palil, R. (2010) Tax Knowledge and Tax Compliance Determinants in Self-assessment System in Malaysia. PhD Dissertation. University of Birmingham.
<https://etheses.bham.ac.uk/id/eprint/1040/>
- Peng, C.Y.J, Lee, K.L & Ingersoll, G.M (2002) An Introduction to Logistic Regression Analysis and Reporting. *The Journal of Educational Research*, 96(1) 3-14
DOI: 10.1080/00220670209598786
- Ponorică, A. G., & Al-Saedi, A. H. J. (2015) The Importance of Taxation Systems for SME Tax Compliance. Proceedings of the International Management Conference, Faculty of Management, Academy of Economic Studies, Bucharest, Romania, 9(1), 129–136.
<http://conferinta.management.ase.ro/archives/2015/pdf/14.pdf>.
- Proclamation No. (1097/2018) Definition of Powers and Duties of the Executive Organs of the Federal Democratic Republic of Ethiopia.
<https://www.lawethiopia.com/index.php/volume-3/6741-proclamation-no-1097-2018-definition-of-powers-and-duties-of-the-executive-organs-of-the-federal-democratic-republic-of-ethiopia>
- Redae Berhe & Sekhon, S. (2016) Taxpayers' Knowledge and Tax Compliance Behavior in Ethiopia: A Study of Tigray State. *International Journal of Management and Commerce Innovations*, 3(2), 1090–1102.
<https://www.researchpublish.com/upload/book/Taxpayers%20Knowledge%20and%20Tax-3027.pdf>
- Saad, N. (2014) Tax Knowledge, Tax Complexity and Tax Compliance: Taxpayers' View. *Procedia- Social and Behavioral Sciences*, 109(2014), 1069–1075.
<https://doi.org/10.1016/j.sbspro.2013.12.590>

- Sandmo, A.(2005) The Theory of Tax Evasion: A retrospective view. *National Tax Journal*, 58 (4), 643-463.
DOI: 10.17310/ntj.2005.4.02
- Sawyer, A., Richardson, G., Taylor, G., Wright, C., Jensen, E., Frecknall-Hughes, J. Bird, R. M. (2014). *Ejournal of Tax*, 12(1), 106–133.
- Saunders, M.N.K., Lewis, P. & Thornhill, A. (2019) *Research Methods for Business Students*. (8th Ed). London: Pearson Education Limited.
- Sinnasamy, P & Bidin, Z. (2017) The Relationship between Tax Rate, Penalty Rate, Tax Fairness and Excise Duty Noncompliance. SHS Web of Conferences 34, 11001.
https://www.researchgate.net/publication/313735203_The_Relationship_between_Tax_Rate_Penalty_Rate_Tax_Fairness_and_Excise_Duty_Non-compliance
- Snavely, K. (1990). Governmental policies to reduce tax evasion: Coerced behavior versus services and values development. *Policy Sciences*, 23, 57-72.
<https://www.semanticscholar.org/paper/Governmental-policies-to-reduce-tax-evasion%3A-versus-Keith/5e53403ade9536b8d02c7ffa97e492db5a1838a5>
- Song, Y.D. & Yarbrough, T.E. (1978) Tax Ethics and Taxpayer Attitudes. *A Survey of Public Administration Review*, 38(5), 442-452.
<https://www.semanticscholar.org/paper/Tax-Ethics-and-Taxpayer-Attitudes%3A-A-Survey-Song-Yarbrough/984d4a420701072128afeb0ad819b751c40eef0>
- Tadesse Getachew & Goitom Abera (2014) Factors Influencing Taxpayers' Compliance with the Tax System: An Empirical Study in Mekelle City. *eJournal of Tax Research*, (12)2, 433-452.
- Thiga, M.A & Muturi, W. (2015) Factors That Influence Compliance with Tax Laws among Small and Medium Sized Enterprises in Kenya. *International Journal of Scientific and Research Publications*, 5(6), 1-12.
- Tilahun Aemiro & Yidersal Dagne (2014) Determinants of Tax Compliance Behaviour in Ethiopia: The Case of Bahir Dar City Taxpayers. *Journal of Economics and Sustainable Development*, 5(15), 268-273.
<https://core.ac.uk/reader/234646522>
- Torgler, B. Cheltenham (2007) *Tax Compliance and Tax Morale: A Theoretical and Empirical Analysis*. Cheltenham, UK: Edward Elgar Publishing Limited.
https://www.researchgate.net/publication/27474421_Tax_Compliance_and_Tax_Morale_A_Theoretical_and_Empirical_Analysis/link/6020b44d45851589398c1fb7/download
- Waithira, A. W. (2016). Determinants of Residential Rental Income Tax Compliance by Property Owners in Thika Town, Kenya. MBA Thesis, University of Nairobi.
<http://erepository.uonbi.ac.ke/bitstream/handle/11295/100410/Waithira-Determinants%20Of%20Residential%20Rental%20Income%20Tax%20Compliance%20By%20Property%20Owners%20In%20Thika%20Town.pdf?sequence=1>

Walsh, K. (2012). Understanding Taxpayer Behavior – New Opportunities for Tax Administration. *The Economic and Social Review*, 43(3), 451–475.
https://www.researchgate.net/publication/286942082_Understanding_Taxpayer_Behaviour_-_New_Opportunities_for_Tax_Administration

World Bank (2022) Increasing Tax Collection in African Countries: The Role of Information Technology. Policy Research Working Paper 10182.
<https://documents1.worldbank.org/curated/en/099901209142220897/pdf/IDU049a724c20d3de042180b32f01e8d3a7bd276.pdf>

World Bank (2019) World Development Indicators 2019. Washington DC: US.
<https://databank.worldbank.org/source/world-development-indicators>.

Appendixes

Appendix A-Hosmer and Lemeshow Tests

Hosmer and Lemeshow Test		
Model	Chi-square	Sig.
Enter	1.42	0.700

Appendix B-Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	138.142	47	.000
	Block	138.142	47	.000
	Model	138.142	47	.000

Appendix C-Correlation Matrix of Coefficients of Logit Model

Correlation matrix of coefficients of logit model

e (V)	Complie	Gender	Educat-n	Sector	Legal	Taxrate	Taxaudit	Incent-e	Percep-n	TaxFai-h	System	TaxAut-4	Attitude	Social	Knowle-e	Awaren-s	Financ-n	_cons
Compliance	1.0000																	
Gender	-0.2360	1.0000																
Education	0.3366	-0.2867	1.0000															
Sector	0.0251	0.0442	-0.0963	1.0000														
Legal	0.1336	-0.2305	0.2829	-0.2203	1.0000													
Taxrate	-0.0863	-0.0908	0.1276	-0.1053	0.2614	1.0000												
Taxaudit	0.0080	-0.3934	0.1811	-0.0740	0.0932	-0.0859	1.0000											
Incentive	0.0453	0.0784	0.1342	0.4374	-0.0067	-0.2522	0.2070	1.0000										
Perception-n	0.2468	-0.2518	-0.2156	0.1304	0.1744	-0.0333	0.2182	0.0546	1.0000									
TaxFairnes-h	0.0161	0.0218	0.0890	-0.0643	-0.4481	-0.2432	-0.1884	-0.1396	-0.0306	1.0000								
System	-0.3630	0.0702	0.1304	-0.4274	0.3857	0.2550	-0.0040	-0.2264	-0.2491	-0.1839	1.0000							
TaxAuthori-4	-0.0428	-0.1164	0.2774	0.1490	-0.0781	-0.1216	0.0154	0.1319	-0.0048	0.4973	-0.1424	1.0000						
Attitude	0.3519	0.1181	-0.1195	0.3846	-0.2364	-0.0239	-0.1651	0.2444	0.2845	0.1205	-0.6496	-0.1165	1.0000					
Social	-0.0061	-0.1039	0.3353	-0.0141	-0.0055	0.0217	0.0750	-0.0243	-0.1104	-0.0062	0.0831	0.1347	-0.0027	1.0000				
Knowledge	-0.4347	0.3547	-0.6542	-0.0487	-0.3990	-0.1082	-0.3379	-0.3095	-0.0641	0.1384	-0.0216	-0.2585	0.0583	-0.1889	1.0000			
Awareness	0.2075	0.0228	-0.2263	0.1838	-0.0275	-0.0550	0.0896	0.1304	0.2756	-0.2227	-0.3975	-0.3969	0.4783	-0.0021	0.0083	1.0000		
FinancialCon	0.0471	-0.6318	-0.0362	-0.2774	-0.0513	-0.0389	-0.0020	-0.4802	-0.1792	-0.0292	0.0469	-0.1205	-0.3704	-0.1877	0.0069	-0.2033	1.0000	

Click to Open File: [Myfile.doc](#)

Appendix D- Logistic Regression Results

	Model-1	Model-2	Model-3
1.Gender	0.343 *** (0.142)	0.295 *** (0.126)	0.306 ** (0.173)
2.Education	1.638 (1.893)	1.473 (1.726)	8.565 ** (7.724)
3.Sector	0.320 *** (0.136)	0.326 ** (0.143)	0.197 *** (0.118)
4.Legal		12.480 *** (7.841)	12.518 *** (6.821)
5.Tax rate			0.604 * (0.161)
6.Tax audit			0.628 ** (0.143)
7.Incentive			0.596 * (0.184)
8. Government spending			1.392 (0.443)
9.Fairness and equity			1.229 (0.286)
10.Tax Simplicity			1.523 ** (0.318)
11.Authority efficiency			1.174 (0.303)
12.Attitude of taxpayers			2.478 *** (0.580)
13.Social norms			1.327 (0.337)
14.Tax Knowledge			0.433 *** (0.110)
15. Awareness on tax penalties			1.642 ** (0.396)
16.Financial constraints			0.692 ** (0.116)
Intercept	0.175 (0.196)	0.183 (0.207)	0.291 (0.769)
Number of observations	427	427	427
Pseudo R-squared	0.06	0.11	0.42

*** p<.01, ** p<.05, * p<.1
Standard errors are in parenthesis.

Appendix E-Questionnaires

Questionnaires to be filled by Large Taxpayers at LTO

These questionnaires are designed to collect primary data for the research projected titled “Evaluating the Factors Affecting Tax Compliance in Ethiopia”. The major objective of this research is to evaluate the factors that affect tax compliance in Ethiopia using Large Taxpayers under the Large Taxpayers’ Branch Office of the Ministry of Revenues. The information is going to be used as a primary data for this research purpose only, and then the confidentiality of data is highly guaranteed. You are, therefore, kindly requested to give genuine answers to all questions hereunder without providing your personal and company name. Thank you very much in advance for your cooperation and time. If you have further questions, you are kindly requested to contact us via E-mail ID lehulum2929@gmail.com and Mob. +251 977 062715

1. Demographic Factors

1.1. Age: _____

1.2. Gender: 1. Male 0. Female

1.3. Educational Background

1. Primary School 2. Secondary School 3. College Level
4. University Level 5. No Education

1.4. Family size: _____

1.5. Sector of the business activity: 1. Manufacturing 2. Service
3. Trading 4. Construction
5. Agriculture

1.6. The legal form of the business: 1. Private Limited Company
2. Share Company
3. Government Enterprise
4. Sole Proprietorship
5. Joint Venture and Partnership

1.7. Marital status: 1. Married 2. Single 3. Widowed 4. Divorced

1.8. What is your current position? _____

1.9. Monthly income of the respondent _____

1.10. Annual taxable revenue of the company _____

2. Economic Factors

5. Strongly agree, 4. Agree, 3. Don't know, 2. Disagree, 1. Strongly disagree

2.1. Tax Rate					
2.1.1 The tax rates are very high.	5	4	3	2	1
2.1.2 The tax rate is not fair.	5	4	3	2	1
2.2. Tax Audit					
2.2.1 I disclosed all my taxes throughout the audit.	5	4	3	2	1
2.2.2 I need my company to be audited.	5	4	3	2	1
2.3. Tax Incentives					
2.3.1 I believe rewards and tax incentives encourage taxpayers to comply with tax laws.	5	4	3	2	1
2.3.2 Rewarding and recognizing taxpayers can increase tax compliance.	5	4	3	2	1
2.3.3 The tax authority should establish tax incentive system to improve the compliance level of taxpayers.	5	4	3	2	1
2.4. Perception on Government Spending					
2.4.1 I believe that taxes should be paid when the government spends it to socio-economic services.	5	4	3	2	1
2.4.2 The expenditures of the government on public infrastructures are rational	5	4	3	2	1
2.4.3 I am confident that the government spends public money transparently	5	4	3	2	1
2.4.4 I am happy to pay taxes if the government spends it efficiently for the benefit of the public.	5	4	3	2	1

3. Institutional Factors

3.1. Tax Fairness & Equity					
3.1.1 Taxes should be paid only when the government provides equitable services.	5	4	3	2	1
3.1.2 People with more incomes must pay more taxes.	5	4	3	2	1
3.1.3 The tax system treats taxpayers equitably.	5	4	3	2	1
3.1.4 Equity is a principle in Ethiopian tax system.	5	4	3	2	1
3.2. Perception on the simplicity of the Tax System					
3.2.1 Tax laws, regulations and directives are not accessible and clear.	5	4	3	2	1
3.2.2 The tax administration system of Ethiopia isn't suitable for taxpayers.	5	4	3	2	1

3.3.Tax Authority's Efficiency					
3.4.1 Most taxpayers have positive response towards the power of the tax authority?	5	4	3	2	1
3.4.2 The tax authority uses its powers as prescribed in the law.	5	4	3	2	1
3.4.3 Taxpayers and the tax authority have great trust to each other.	5	4	3	2	1

4. Social Factors

4.1 Attitude of Taxpayers					
4.1.1 I believe that the government is doing the right thing related to tax collection.	5	4	3	2	1
4.1.2 People are aware of how the government uses the taxes it has gathered from them.	5	4	3	2	1
4.1.3 I think the government is combatting tax non-compliance and penalizing those who engage in it.	5	4	3	2	1
4.1.4 The tax payment burden is tolerable and modest.	5	4	3	2	1
4.2 Social Norms about Taxation					
4.2.1 Paying tax is a social norm in Ethiopia	5	4	3	2	1
4.2.2 I believe that paying tax is my social responsibility	5	4	3	2	1

5.Individual Factors

5.1.Tax Knowledge					
5.1.1 As a taxpayer, I am fully aware of the tax's intent.	5	4	3	2	1
5.1.2 As a taxpayer, I am aware of my tax obligations.	5	4	3	2	1
5.1.3 The tax computations are understandable to me as a taxpayer.	5	4	3	2	1
5.1.4 Taxpayer morale is increased through tax education.	5	4	3	2	1
5.2. Awareness on Tax Penalties					
5.2.1 I know that tax deductions and penalties are obvious.	5	4	3	2	1
5.2.2 I am aware of how to notify the tax department of the money collected from all tax bases.	5	4	3	2	1
5.2.3 I understand the effects of tax penalty	5	4	3	2	1
5.3. Financial Constraints					
5.3.1 Financial constraints do have impact on tax obligation.	5	4	3	2	1
5.3.2 Taxes are affected by taxpayers' financial constraint	5	4	3	2	1

6. Tax Compliance

1. Yes-(Compliance) 0. No-(Non-compliance)

6.1. My company hasn't paid any penalty and interest.	1	0
6.2. The tax authority didn't find any difference between the reported and the audited amount of tax in my company.	1	0

Appendix F- Interview Guide Questions

Interview Guide Questions for Staff Members at LTO

Dear Interviewee,

The questions below are posed to evaluate the factors affecting large taxpayers' tax compliance at your branch office. Thus, you are kindly requested to reply the questions professionally using your experience and personal encounter in the taxation system of Ethiopia. Your answers are solely used for the research.

1. Demographic Information

- 1.1 Gender-----
- 1.2 Age-----
- 1.3 Field of Study-----
- 1.4 Qualification (Degree)-----
- 1.5 Work Experience-----
- 1.6 Current Position in the Branch Office-----

2. How is the tax compliance situation of large taxpayers in your branch office?
3. What is your opinion related to the weaknesses and strengths of the current tax administration system in your branch office?
4. What are the major factors affecting large taxpayers' tax compliance in branch office?
 - 4.1 Demographic Factors (age, gender, education, etc.)
 - 4.2 Economic Factors (tax rate, tax audit, tax incentives, etc)
 - 4.3 Institutional Factors (fairness and equity, simplicity of the tax system, efficiency of the tax authority, etc.)
 - 4.4 Social Factors (attitude of tax payers, social norms, etc)

4.5 Individual Factors (tax knowledge, awareness on tax penalties, etc)

5. What are the major problems and challenges that Large Taxpayers and Large Taxpayers Branch Office face related to tax administration and tax compliance in Ethiopia?
6. What are the strategies could be done to increase the current compliance level that you could suggest in making Large Taxpayers more compliant with tax in Ethiopia?

Appendix G-Checklists

1. How many large taxpayers (companies) are there in Large Taxpayers Branch Office?
2. How many taxpayers (companies) are there in Large Taxpayers’ Branch Office related to the sector of business activities?
 - Manufacturing.....
 - Service.....
 - Trading.....
 - Construction.....
 - Agriculture.....
3. How many taxpayers (companies) are there in Large Taxpayers Branch Office related to the legal form of businesses?
 - Private Limited Company
 - Share Company.....
 - Government Enterprise.....
 - Sole Proprietorship
 - Joint Venture and Partnership.....
4. How many taxpayers (companies) have paid penalties and interests in the following years at your Branch Office?

Ethiopian Budget Years	No. of audited companies	No. of companies who have paid penalties and interest
1. 2011 E.C		
2. 2012 E.C		
3. 2013 E.C		
4. 2014 E.C		
5. 2015 E.C		

5. How many taxpayers (companies) have reported differences between their self-assessment declaration and audited amount of tax in the following years by your Branch Office?

Ethiopian Budget Years	Audited companies	Difference investigated	No difference found
1. 2011 E.C			
2. 2012 E.C			
3. 2013 E.C			
4. 2014 E.C			
5. 2015 E.C			

N.B: All types of tax audit and investigation should be included in question number 5 and 6.