

# ST. MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES

# THE EFFECT OF E-TAX FILING APPLICATION SYSTEMS ON TAX COMPLIANCE: THE CASE OF THE ETHIOPIAN REVENUE AND CUSTOMS AUTHORITY

BY FITSUM GETU WOYESSA

> JUNE 2023 Addis Ababa, Ethiopia

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## Declaration

I, Fitsum Getu have carried out this thesis entitled "**the Effect of E-Tax Filing Application Systems on Tax Compliance: the Case of the Ethiopian Revenue and Customs Authority.**" independently in partial fulfillment of the requirement of the Masters of Business Administration with the guidance and support of the research advisor, Dr. Getachew Wagaw.

I, also declare that this thesis is my original work and that all sources of materials used for the thesis have duly acknowledged.

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**JUNE 2023** 

## Endorsement

This thesis has been submitted to St. Mary's University, School of Graduate Studies for examination with my approval as a university advisor.

<u>Getachew Wagaw (Phd.)</u> Advisor

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**JUNE 2023** 

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## List of Acronyms

CSA: Central Statistical agency
FDI: Foreign Direct Investment
MIS: Management Information System
NBE: National Bank of Ethiopia
NEA: National Education Association

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#### Abstract

Tax compliance is important in the sense that by paying their taxes, individuals and businesses are funding the government's tax revenue. Government tax revenue is important for a variety of reasons, from balancing the budget to providing goods and services to its citizens.

This study is conducted to determine the influence of electronic tax filing system on tax compliance in large tax payers' branch office. The specific objectives of the study include examination of the impact of network connectivity and technical skills of filing concerns of e-tax filing on Tax Compliance among large taxpayers. The study used descriptive and explanatory research design in which quantitative data have been collected. Primary data had been obtained by using structured questionnaire. . Respondents of this study were large taxpayers who registered in large taxpayers' branch office. A sample size of 240 respondents had been selected from registered large taxpayers at LTO and 220 questionnaires have been returned with a 91.7% response rate. Results of the research variables have been described, correlation and regression analysis had been conducted, Hypothesis and Data validity, and goodness of fit had been tested with composite reliability. Results interpreted from Regression Table using SPSS Software. This study reveals that e- tax filing system and technical skill of filing had a statistically significant effect on taxpayer compliance. But the network connectivity had not able to statistically significant influence on taxpayer compliance. The researcher finally recommended that the electronic tax filing process should be simplified with clear instructions and guidelines provided on the website and the system server should be upgraded to increase on the system stability experienced. Tax consultation centers should be increased in the country where taxpayers can acquire knowledge and filing skills.

Keywords: E-tax, Tax compliance, Tax payer

## **Chapter One**

## Introduction

#### **1.1 Background of the study**

Taxation is frequently thought to be a terrible thing and no one likes it, with governments attempting to deprive citizens of their hard-earned money. <sup>1</sup>Taxes, on the other hand, are critical regarding the economic justice and human rights of the country for some reasons, which consist of funds to provide the services that citizens require, address poverty and inequality, encourage public goods, and other reasons. Taxes are an important source of public revenue for governments, allowing them to provide public works, and services such as roads, schools, hospitals, and so on. Revenue from taxes has considerably contributed to the growth and prosperity of the economy in different countries (Coccia, 2018; OECD, 2012).

Tax compliance is strongly influenced by personal ethics, and research has shown that ethics are situation-specific. There may be enough difference between a traditional paper tax return filing situation and an e-filing situation to impact tax filer ethics (Becker & Lacktorin Revier, 2008). Furthermore, it also benefits the taxpayers in terms of tax compliance cost reduction and cost related to the time spent preparing the tax compliance documents (Anna & Yusniza, 2009). Bojuwon (2015) notwithstanding the above fact, also indicated that e-filing enhances the efficiency, effectiveness, and convenience of the tax authority and taxpayers. As a result of these advantages, different economies are adopting the e-filing system to enhance their service delivery and tax compliance, and increase their tax revenue. For instance, according to the World Bank Paying Tax 2018 report, only in 2016 did about 92 economies fully implemented electronic filing and tax payment systems.

In most developing countries government tax departments are characterized by an unlimited bureaucracy, a lot of manual paperwork, long waiting lines, and wide procedures for submitting the papers. Any tax authority aims to establish a system of tax administration that allows for the collection of required taxes at the lowest possible cost. As web technology is becoming more and

<sup>&</sup>lt;sup>1</sup> Wonder polis. "Why do we have to pay taxes?" Retrieved 10 Oct 2021

more popular, the introduction of Internet filing has brought fundamental changes to the method of filing tax returns (Hwang, 2000)

This day's technology is having a major turn on different aspects of the whole world. Ethiopian revenue and customs authority (ERCA) is one of the governmental organizations that has now implemented modern technology in its taxing activity in which they introduced an electronic taxing system so that clients can use this platform from anywhere anytime. With the growing demands of citizens and changing global rules and regulations, governments are under pressure to deliver services at the right time and with quality. The desire to ease administrative duties and services offered to citizens is a goal for every government. Simplicity can be realized through the use of ICTs like the electronic filing system (Mutula, 2012).

The Ethiopian Customs Authority started providing online service in September 2020, avoiding the need for customers to physically appear at customs stations. To this end, the Authority has provided video and in-person training to all its employees across the country. Customers can now upload the necessary documents online and obtain the required documents for clearing goods ensuring considerable savings for both the Authority and the customers in terms of time, cost, and service satisfaction. (BDO, 2021)

The Ethiopian Revenue and Customs Authority (ERCA) has brought significant benefits to the business community and Ethiopia's wider economy by developing an e-tax system. This system makes taxpayers able to submit their tax returns electronically to the tax authorities and it is believed to improve the delivery of public services and the dissemination of public administration information to the public (Anna & Yusinza, 2009). A tax authority engages in many activities, such as processing returns and related information from taxpayers', entering tax return data into a database, matching returns against filing requirements, processing tax payments and matching them against assessments, and issuing assessments and refunds. One way of assessing the tax authority's efficiencies is by expanding its use of information and communication technology (ICT). Such technology can facilitate a broad range of services, including registering taxpayers, filing returns, processing payments, issuing assessments, and checking against third-party information (Clarke, 2001).

The Ethiopian Revenues and Customs Authority (ERCA) was established by proclamation No.587/2008 on 14 July 2008, by the merger of the Ministry of Revenue, Ethiopian Customs Authority, and the Federal Inland Revenue Authority to enhance the mobilization of government revenues while providing effective tax and Customs administration and sustainability in revenue collection. The main objective of the establishment of ERCA was to streamline the public revenue generation function by bringing the relevant agencies under the umbrella of the central revenue collector body. This structuring aimed at improving service delivery, facilitating trade, enforcing the tax and customs laws, and thereby enhancing the mobilization of Government revenue in a sustainable manner. A study called "Business Process Re-engineering" had taken place before the merger of the foregoing administrations. The study was undertaken for a year and a half beginning in November 2007 by teams of officials selected from within the administration. The study has looked into the selected key business processes and has come across inefficient organizational structure and unnecessarily complicated procedures that permitted insufficient service delivery. The study has also indicated that there was corruption within the administrations and that smuggling and tax evasion were serious problems. These problems have depressed the attempt of the foregoing administrations to be successful in achieving their objectives. (Proclamation No.587/2008, July 2008)

The Ethiopian Revenues and Customs Authority (ERCA) is the federal government revenue authority. Its Head Quarter (HQ) is found in Addis Ababa around Meganegna. It has about 36 branch offices both Customs and Domestic tax branches. It has one Large Tax payer's office (LTO) in Addis Ababa which is the case study of this research. This body is responsible for collecting revenue from Customs duties and Domestic taxes. In addition to raising revenue, it is responsible to protect the society from adverse effects of smuggling and contraband. It seizes and takes legal action on the people and vehicles involved in the act of smuggling, any tax evasion, and avoidance while it facilitates the legitimate movement of goods and people across the border.

Ethiopian Revenues and Customs Authority are the larger and the only governmental tax collector office in our country. It has the responsibility of collecting different taxes from different taxpayers. The federal government used taxes as revenue for governmental activities with the responsibility of giving facilitating effective and comfortable service to address

customers' expectations and satisfaction. ERCA has more and more customers who are coming in every month so it is a mandatory requirement to have good quality service for customers.

Accordingly, ERCA has been good progress in the development, delivery, and exploitation of electronic services. From time to time, the electronic tax payment system starts in its 3 different tax collecting branches, at a time medium large taxpayers and Easter branch office taxpayers start an e-tax payment system to declare their taxes. Thus, an electronic tax payment system implemented well and used by most taxpayers, benefits both tax authorities and customers.

#### **1.2** Statement of the Problem

The main role of revenue authorities is to ensure compliance with tax laws. Their effectiveness is dependent on a variety of external factors such as the state of the economy, public support for the priorities of the government, and the willingness of taxpayers to comply with tax rules. In an ever-changing environment, revenue authorities must have a clear focus on what their goals are and continually review their operating approaches and procedures to ensure they are making the most effective and efficient use of the resources available to them. By adapting and adopting appropriate technologies as well as by being open to the benchmarking and testing of their operations to achieve "best practice", good revenue authorities improve both their public image and the organization of work processes. (OECD, 2001)

While referring to the tax system and administration tax authority engages in many activities and bureaucracies, such as processing returns and related information from taxpayers, entering tax return data into a database, matching returns against filing requirements, processing tax payments, and matching them against assessments, and issuing assessments and refunds. To minimize the cost, time, and energy used and enhance the effectiveness and efficiency of the tax authority by expanding its use of Information and Communication Technology (ICT) and is now using an online system known to as the E-tax system.

For tax authorities, electronic filing lightens the workload and reduces operational costs such as the costs of processing, storing, and handling tax returns. At the same time, it increases tax compliance and saves time. For taxpayers, electronic filing saves time by reducing calculation errors on tax returns and making it easier to prepare, file, and pay taxes. The tax policy and tax administration as well as the level of taxpayer compliance and government enforcement level can affect tax revenues in an economy. Developments in information and communication technology (ICT) in recent decades, both for electronic filing and payment of taxes, have presented many opportunities for revenue bodies to increase government revenue, improve efficiency, and enhance the quality of services delivered to taxpayers, while at the same time reducing taxpayer compliance burden and government administration costs, and improving enforcement (OECD, 2017).

Besides this, there are limited studies made on identifying and exploring the electronic tax payment system operating in Ethiopia. Studies made by Ruta (2017) and Samuel (2015) are among the few types of research made on the assessment and perspective of the online tax payment system. Particularly, the researcher could not get single research made on identifying and exploring the determinants of satisfaction on online tax payment developed by ERCA. A collection of tax is not only a service delivery system but it is a relationship between tax collector offices and the taxpayers. Tax is the work that is done with the participation of the two parties. The taxpayers must require to fill out any tax-related forms that are given by the tax authority offices and the tax collector employees must know what they do. Giving satisfaction to customers' needs is the best method to get positive thinking from its customers. However, when the researcher goes to pay taxes to the tax authority office, most of the time ERCA's customers have large complaints about the organization's service because when they go there to pay their different taxes it may take a long time. Therefore, understanding the electronic tax collection system and customers' satisfaction with the system is important. Hence, the focus of this study is to explore and identify the determinants of customer satisfaction to fill the gap to examine the perception and satisfaction of customers on the online tax payment system of ERCA. The study also intended to explain the relationship between the determinant factors and customers' satisfaction with the online tax payment system in Ethiopia.

Different research had been conducted on the implementation of E-tax filing. However, the majority of the studies were made regarding the challenges and benefits of adopting the E-tax Filing system on one side only, i.e., either the taxpayer's side or ERCA's side. For instance benefits and challenges of the electronic tax filing system: the case of the Ethiopian ministry of revenue large taxpayers -branch office [LTO] (Haymanot, 2020), assessment of the electronic tax

filing system in selected branch offices of Ethiopian revenues and customs authority (ERCA) (Ruth, 2017). Therefore, this study is motivated because of the absence of studies on both sides of the area of the E-tax filing system: what is the impact of adopting an E-Tax system on tax compliance by large taxpayer's offices? Moreover, it is important to notice that Ethiopia's environment is different from the developed countries' environment where the E-tax filing system is more enhanced.

Hence, the main aim of this research is to investigate the impacts of adopting the E-Tax system on tax compliance by large taxpayers under the ERCA Large Tax Payers Branch Office of-Addis Ababa, Ethiopia.

### **1.3 Research Questions**

The study aims to answer the following research questions:

- 1. What is the feature of E-tax filing system within the Ethiopian Revenue and Customs Authority?
- 2. What is the level of customers' tax compliance within the Ethiopian Revenue and Customs Authority?
- 3. What is the effect of E-tax filing application system on tax compliance in the context of Ethiopian Revenue and Customs Authority?

#### **1.4** The objective of the Study

The study will have both general and specific objectives which will be achieved in this study.

## **1.4.1 General Objective**

The general objective of the study is to investigate the effect of e-tax filing application system on tax compliance at ERCA Large Taxpayer's Branch Office of- Addis Ababa.

## **1.4.2 Specific Objectives**

To meet the overall objective of the study, these specific objectives are set:

1) To assess the feature of E-tax filing system in the Ethiopian Revenue and Customs Authority.

2) To assess the level of customers' tax compliance in the Ethiopian Revenue and Customs Authority.

3) To investigate the effect of E-tax filing system on tax compliance in the Ethiopian Revenue and Customs Authority.

### **1.5** Significance of the study

This study's output is significant in various aspects as the result of the study will give insights into the impact of E-tax and its effect on tax compliance within the context of ERCA. It will provide information for ERCA from both the authority's point of view and the taxpayer's point of view which could be used to see the level of effect that this system offers tax compliance and helps to revise strategies upon the E-tax filing system before the upcoming accounting period. Furthermore, the result of the study will contribute as a base for researchers to conduct further studies on the E-tax filing system.

### **1.6** Scope and Delimitation of the Study

Conceptually, this study is delimited to examine the impact of and adopting the E-tax filing system on tax compliance in a selected branch office of the Ethiopian Revenues and Customs Authority (ERCA).

Ethiopian Revenues and Customs Authority (ERCA) can be found throughout the whole region of Ethiopia with different districts. This study does not address all the branch offices. By considering the similarity of the system, the Addis Ababa branch office is assumed to be representative. Therefore, the study is delimited to the Addis Ababa branch offices of the Ethiopian Revenues and Customs Authority (ERCA). Thus, by compiling all these delimitations this thesis paper will only examine the Large Tax Payers branch offices of ERCA, Addis Ababa, Ethiopia.

## 1.7 Organization of the Study

The study is organized into five chapters. The first chapter is the introduction part which consists of the background of the study, statement of the problem, objectives of the study, research questions, significance of the study, the scope of the study, limitations of the study, and

organization of the paper. The second chapter consists related literature review that deals with the theoretical and empirical kinds of literature. The third chapter deals with the research design and methodology of the study. The fourth chapter will consist of the findings and discussion of the study. The fifth chapter which is the last will focus on the summary of findings, conclusions, and recommendations of the study.

#### **1.8** Operational Definitions of Key terms and Words

- Electronic Tax System: It is the system that has developed to replace the current manual system. A web-enabled and secure application system provides a fully integrated and automated solution for administration of domestic taxes.
- Tax compliance: It is the timely filing and reporting of required tax information, the correct self-assessment of taxes owed, and the timely payment of those taxes without enforcement action (Jones, 2009).
- Number of Large Taxpayers: it is the number of large tax payers that pay tax each year to the Government of Ethiopia. It is expected to have a positive effect on tax revenue.
- E-taxation: It is a web enabled and secure platform that provides a fully-integrated and automated solution for administration of domestic taxes. It's measured in terms of dummy variable

## **Chapter Two**

## **Literature Review**

### **2.1 Introduction**

This chapter highlights the views of different academicians, researchers and scholars that have been advanced in the field of tax compliance, Electronic tax filing systems, tax payer's attitudes towards technology acceptance, network connectivity of e-tax filling, technical skills of filing and automation in organizations for improved efficiency and service delivery.

## 2.2 Theoretical Literature Review

#### 2.2.1 Theory of taxation

Taxation is essential for sustainable economic development, and tax administration is a basic function of a successful state. Taxation also helps make a government accountable to its citizens. When governments spend taxpayers' money, they are more accountable to make budget decisions transparent and accessible (Bank, 2013).

Smith and Seminar (1903), the father of modem political economy, have laid down four principles or cannons of taxation in his famous book "Wealth of Nations". These principles are still considered to be the starting point of sound public finance. Adam Smith's celebrated cannons of taxation are: Cannon of equality or ability, Cannon of certainty, Cannon of economy and Cannon of convenience means that the tax should be levied at the time and the manner which is most convenient for the contributor to pay it.

#### 2.2.1.1 Canon of equality or ability

Canon of equality or ability is considered to be a very important canon of taxation. By equality we do not mean that people should pay equal amount by way of taxes to the government. By equality is meant equality of sacrifice that is people should pay taxes in proportion to their incomes. This principle points to progressive taxation. It states that the rate or percentage of taxation should increase with the increase in income and decrease with the decrease in income. In the words of Adam Smith (indicate year and page number):

"The subject of every state ought to contribute towards the support of the government as early as possible in proportion to their respective abilities that is in proportion to the revenue which they respectively enjoy under the protection of the State".

#### 2.2.1.2 Canon of certainty

The Canon of certainty implies that there should be certainty with regard to the amount which taxpayer is called upon to pay during the financial year. If the taxpayer is definite and certain about the amount of the tax and its time of payment, he can adjust his income to his expenditure. The state also benefits from this principle, because it will be able to know roughly in advance the total amount which it is going to obtain and the time when it will be at its disposal. If there is an element of arbitrariness in a tax, it will then encourage misuse of power and corruption Adam smith in this connection remarks: "The tax which each individual is bound to pay ought to be certain and not arbitrary. The time of payment, the manner of payment, the quantity to be paid all ought to be clear and plain to the contributor and to every other person".

#### 2.2.1.3 Canon of convenience

By this canon, Adam smith the tax should be levied at the time and the manner which is most convenient for the contributor to pay it. For instance, if the tax on agricultural land is collected in installments after the crop is harvested, it will be very convenient for the agriculturists to pay it. Similarly, property tax, house tax, income tax, etc., should be realized at a time when the taxpayer is expected to receive income. The manner of payment of tax should also be convenient. If the tax is payable by cheques, the contributor will be saved from much inconvenience. In the Words of Adam Smith: "Every tax ought to be levied at the time or in the manner in which it is most likely to be convenient for the contributor to pay it".

#### 2.2.1.4 Canon of Economy

The canon of economy implies that the expenses of collection of taxes should not be excessive. They should be kept as little as possible, consistent with administration efficiency. If the government appoints highly salaried, staff and absorbs major portion of the yield, the tax will be considered uneconomical. Tax will also to regard as uneconomical if it checks the growth of capital or causes it to immigrate to other countries, in the words of Adam Smith:

"Every tax is to be so contrived as both to take out and keep out of the pockets of the people as little as possible over and above what it brings into the public treasury of the state".

According to Mwansa, (2013) taxes help in reducing the gap between the rich and the poor (Inequality).Taxes also play a critical role in encouraging economic growth (Economic growth-reducing poverty). Furthermore, (Todaro, 2009) noted that tax revenue is currently the only reliable and sustainable source of government revenue unlike other sources such as debt, aid and remittances, which are not reliable as they are unpredictable and can thus be unsustainable (Sources of revenue).

#### **2.2.2 Tax Compliance Theory**

During the 1980s structured research into tax evasion and non-compliance became widespread following the political concerns in the United States of an increasing –tax gap (Tanzi & Shome, 1994) Initially, the literature which emerged from the United States had a strong focus on economic theory. Utility theory, developed by (Allingham & Sandmo, 1972) assumed taxpayers to be utility minimisers' in decisions of tax reporting and compliance, where tax evasion was viewed as worthwhile if the financial gains purely outweighed the financial costs.

More recently, however, tax compliance studies (Murphy, 2004;Tan, 1998;Hite, 1997) and (Torgler & Murphy, 2004) have been based on social and psychological theories. Research studies in this field have argued that the human element plays a vital role in individual taxpayer compliance decisions. However, while the tax compliance literature has emerged from a wide variety of disciplines, there has been a lack of consensus and agreement as to why people do or do not pay their taxes. Indeed, the tax compliance literature indicates that there are still many research gaps that need to be filled with respect to issues concerning tax morals, tax fairness and deterrence measures, for the likely improvement in overall taxpayer compliance.

The main theoretical approaches to tax compliance have commonly been divided into the economic deterrence' approach, and the wider behavioral approach which incorporates both

social and fiscal psychological approaches. The economic deterrence model has been commonly used to examine tax evasion and compliance from a theoretical perspective (Jackson & Milliron, 1986). Factors that have been examined in the economic deterrence model include: Complexity of the tax system, Level of revenue information services, Withholding and information reporting, Preparer responsibilities and penalties, Probability of receiving audit coverage, Progressive and actual level of tax rates, and Penalties for non-compliance. The social/fiscal psychological model on the other hand, focuses on psychological variables which include moral values and the perception of fairness of the tax system and the tax authorities. This approach has often been used in empirical research (Ajzen & Fishbein, 1980).

The economic definition of taxpayer compliance views taxpayers as \_perfectly moral, riskneutral or risk-averse individuals who seek to maximize their utility, and chose to evade tax whenever the expected gain exceeded the cost. (Milliron & Toy, 1988) Thus, a pure cost-benefit 'approach is given for why or why not taxpayers may comply with the tax laws. Some researchers propose that individuals are expected to weigh the uncertain benefits of successful evasion against the risk of detection and punishment. (Fischer, Wartick & Mark, 1992) Consequently, a penalty structure forms part of the punishment, and is a critical factor in an individuals' choice to evade tax.

Despite the positive effect of increased sanction levels on taxpayer compliance having been found to hold where relatively low (and realistic) penalty levels are used, (Carnes & Englebrecht, 1995) their overall impact has been questionable. Consequently, traditional economic deterrence models which draw upon expected utility theory and deterrence, mainly in the form of sanctions, have been found wanting. Little empirical evidence to support the predictions of economic deterrence models as a whole has surfaced. Researchers (Roth & Scholz, 1989).have, therefore, summarized the effect of factors that determine the monetary cost of compliance as including the tax rate, detection probability, the level of income and the penalty structure and suggest that, for all of them, existing empirical evidence provides no firm conclusions (Hasseldine, 2000).

Fiscal psychology models blend together aspects of economic deterrence models and social psychology models. The essential thrust of this approach is that individuals are not simply independent utility maximizes rather individuals are recognized to contain an array of attitudes

and beliefs which interact and respond to social norms. Social psychology models inductively examine the attitudes and beliefs of taxpayers in order to understand and predict human behavior.

#### 2.2.3 Technology Acceptance Model (TAM)

The technology acceptance model has been a theory that is most widely used to explain an individual's acceptance of an information system. In the area of research to investigate the individual acceptance behavior on Information technology and Information systems, many models were suggested by the researchers. These include the Theory of Reasoned action (TRA), Theory of planned behavior (TPB), Technology Acceptance Model (TAM) and Unified Theory of Acceptance and Use of Technology (UTAUT).

Technology Acceptance Model has been developed by Davis (1989) is one of the most popular research models to predict use and acceptance of information systems and technology by individual users. TAM has been widely studied and verified by different studies that examine the individual technology acceptance behavior in different information systems constructs.

In TAM model, there are two factors perceived usefulness and perceived ease of use is relevant in computer use behaviors. Davis defines perceived usefulness (PU) as the prospective user's subjective probability that using a specific application system will enhance his or her job or life performance. Perceive ease of use (EOU) can be defined as the degree to which the prospective user expects the target system to be free of effort. According to TAM, ease of use and perceived usefulness are the most important determinants of actual system use. These two factors are influenced by external variables. The main external factors that are usually manifested are social factors, cultural factors and political factors. Social factors include language, skills and facilitating conditions. Political factors are mainly the impact of using technology in politics and political crisis. The attitude to use is concerned with the user's evaluation of the desirability of employing a particular information system application. Behavioral intention is the measure of the likelihood of a person employing the application.



*Figure 2.1: Technology acceptance Model (TAM) Adapted from Davis (1989)* 

#### **2.3 Empirical Literature Review**

Several studies have been made regarding this study either in exploring the challenge or the benefits which the e-tax system has brought to the tax authority and these studies have been made in various parts of the world.

Kamau (2014) conducted a study on the impact of adopting technology as a strategic tool in enhancing tax compliance in Kenya. The study focused on the LTO of the Kenya revenue authority. The finding of the study was that the adoption of technology does impact the tax compliance levels of large taxpayers. The adoption of technology as a strategy by the Kenya Revenue Authority has led to increased compliance levels by the LTOs. The study revealed that the Kenya Revenue Authority has effectively implemented its internet and communication technology strategy and the majority of LTOs are happy with the implementation. Secondly, it has been revealed that the LTOs feel that technology has helped them to easily comply with tax laws i.e. filing returns and making payments on time hence increasing their compliance levels.

According to Ruth (2017), a study on the assessment of the electronic tax filing system in selected branch offices of the Ethiopian Revenue and customs authority (ERCA) was made. This study focused on assessing the E-tax filing system in selected branch offices of the Ethiopian Revenues and customs Authority (ERCA). ,o achieve its objective a review of relevant literature was done and primary data were gathered using a Likert scale questionnaire format. Data analysis was carried out using descriptive analysis. Findings revealed challenges like taxpayers' attitudes, taxpayers' fault, and governmental problems and benefits which include data handling, accuracy, job performance, and tax compliance. In addition, the study found that the E-tax filing

system and tax compliance have a positive relationship. The study recommended the organization improve its internet connection by collaborating with Ethio-telecom as well as to create awareness about the system and provide an electronic payment system.

Ofurum et al. (2018) conducted a study on the impact of e-taxation on Nigeria's revenue and economic growth. The study intended on assessing how the implementation of e-taxation has affected the tax revenue generation to GDP ratio in Nigeria. The study made use of secondary data sourced from the Federal Inland Revenue Service, and the central bank of Nigeria. In this study, data was sourced from statistical and economic reports every quarter from the second quarter of 2013 to the fourth quarter of 2016 and this data was grouped into two parts that are pre-e-tax period, and -post-e-tax period, the two data were compared using paired sample t-test. The findings from the study revealed that federally collected revenue and tax-to-GDP ratio significantly decreased after e-tax was implemented.

Leh, Bui, and Nguyen (2020) conducted a study on Factors Affecting Electronic Tax Compliance of Small and Medium Enterprises in Vietnam. In Vietnam, tax compliance has become an important goal in the tax reform strategy. In the context of technology 4.0, the application of the electronic tax system is of great significance to small- and medium-sized enterprises (SMEs). The paper explores factors influencing the electronic tax compliance of SMEs in Vietnam. Data from 402 SMEs, who are business taxpayers, was selected through a researcher-designed questionnaire survey method. The results indicate that four groups of factors have significant effects on electronic tax compliance among Vietnamese SMEs. These groups include Taxpayer Awareness (TA), Perceived Ease of use (PTE), Vietnamese tax administration (VTA,) and Efficiency of Vietnamese tax policy (VTP). The factor analysis was adopted; Cronbach's alpha coefficients were calculated, and exploratory factor analysis (EFA) was used. The findings found that among these four groups, the most influencing factor is taxpayer awareness. It is suggested that the Vietnamese government should pay attention to promoting and supporting SMEs to raise full awareness of tax obligations. This could be done through various methods such as conducting workshops for updating tax policies and short courses for business taxpayers on electronic tax compliance. The study is expected to provide some important implications for policy-makers and practitioners in tax policy reform in Vietnam.

The research purpose is to examine the effects of e-filing and e-payment on revenue collection by the Rwanda Revenue Authority. With the introduction of e-filing in 2012, it is believed that it will improve tax revenue and bridge the gap in the budget but still there are challenges associated with the electronic tax management system in realizing the targets of the planned budget. In the finding, it was established that an electronic tax management system was introduced especially from 2003 to 2010 tax collection low ranging was below the national budget. This implies that tax collection was not meeting the budget target hence the country was operating below the budget. In 2012 E-filing and e-taxation payment was introduced by the Rwanda revenue authority 2012 with a functioning e-filing system in places such as Mobile declaration, Electronic Single for domestic taxpayers Window (ESW), and Authorized Economic Operator (AEO) for importers and exporters to improve on tax collection and meet the targeted budget accordingly. And this was done to enable the taxpayers to deal with Rwanda's revenue authority electronically anywhere and anytime as well as to enhance tax administration to collect tax revenue in short term and as a measure to improve tax compliance and efficiency. It offers an option to the clients to file taxes like VAT, PAYE, Excise duty, and Withholding taxes electronically on RRA"s website without having to visit a Rwanda revenue authority premise especially if there is tax education, com-pliancy aspect is guaranteed. The system managed to raise tax collection drastically in 2012 and 2013 by 48.1% and 42.9% respectively though still they were unable to meet the target. This was believed to be due to a lack of awareness among the taxpayers about the electronic tax management system in place and a lack of skills, especially among the taxpayers on how to use the system. In 2014 tax collection was increased to 888.2 against the budget which was 773.9. This implies that the Rwanda revenue authority managed to collect revenue above the budget line by 12.6%. Consequently in 2015 revenue collection was about the budget by 98.1%. This implies that as stated in the hypothesis, especially electronic billing machine, and mobile payment system has a relationship with revenue collection although the internet system small relationship. Therefore, the study summarized that the electronic tax management system has improved tax collection in Rwanda.

Haymanot (2020) conducted a study on the benefit and challenges of the electronic tax filing system: the case of the Ethiopian ministry of revenue large taxpayers -branch office [LTO]. Research aimed to investigate the benefits & practical challenges of e-filing large taxpayers in

Ethiopia. To achieve this objective the researcher used an exploratory study and used a questionnaire for 138 large taxpayers from the Ethiopian Ministry of Revenue Large Taxpayers office. Data analysis was carried out using descriptive analysis. The finding revealed that the e-tax filling system promotes the taxpayers' satisfaction and saved time cost by avoiding emotional stress due to long queue and makes them efficient and effective as they can administer their taxes and have great flexibility to timely record tax credit and refund tax any time. The study also indicates that some of the practical challenges faced while using e-filling are; unreliable e-filing service, system inefficiency as it isn't fully operational, and the e- filing is not also very well supported with e- payment supplementary system, so taxpayers still forced to go to the tax office. The Study recommended that tax authorities increase the excellence of the system fully launched by providing an electrical registration, clearance, and payment system.

#### 2.4 Conceptual framework of the Study

Based on the theoretical and empirical literature review the author drafted conceptual framework is developed as follows. This part of the study presents a conceptual framework that explains the focal collaboration of interrelated variables and their interdependencies in affecting tax revenue collection. The variables in the framework and relations between them are derived from current empirical and theoretical studies on the influence of e taxation system on tax revenue collection.



Figure 1.1 Conceptual framework of the study *Source*: Authors computation using Tadesse (2015) and Ofurum et al. (2018),

## **2.5 Research Hypotheses**

After related literatures were extensively reviewed on electronic tax filing system, network connectivity and taxpayers' technical skills of filing, the following directional research hypotheses were developed.

- H1: E-tax filing has a statistically significant effect on taxpayers' compliance.
- H2: Network connectivity has a statistically significant effect on taxpayers' compliance.
- H3: Taxpayers' technical skill has a statistically significant effect on taxpayers' compliance

## **Chapter Three**

## **Research Methodology**

## **3.1 Introduction**

This part has discussed the steps of the research process. By seeing the methodology, one can get a preview of the case and the way of analyzing it. The following points are described by the research methodology: which includes a quantitative method of data analysis, sampling and sampling techniques, instruments of data collection, sources of data collection, method and techniques of analysis, and ethical consideration

#### 3.2 Research design

Research design is a comprehensive arrangement for information collection in an observational investigation project. It is a general plan for empirical research aimed at answering research questions or testing specific hypotheses (BhattacherjeeA, 2012) Research can be classified as descriptive, explanatory, and exploratory depending on the particular reason that the inquiry about tries to address. **Descriptive** research sets out to depict and decipher what it looks at people, bunches, institutions, strategies, and materials in arrange to depict, compare, differentiate, classify, analyze and interpret the entities and the occasions that constitute the different areas of inquiry. It points to portray the state of issues because it exists. On the other hand, **explanatory** research points at building up the cause and impact relationship between variables, the researcher employments the realities or information as of now accessible to analyze and make a basic assessment of the data/information. **Exploratory** research is frequently conducted in unused regions of request, where the objectives of the inquiry are: (1) to scope out the greatness or degree of a specific phenomenon, (2) to generate some initial ideas about that phenomenon, or (3)to test the feasibility of undertaking a more extensive study regarding that phenomenon (HusssenM, 2012).

In this study, the researcher used descriptive and explanatory research designs since it is most fitting to achieve the objective of the study. Therefore, this study will use both descriptive explanatory research to attain its research objectives since it is concerned with studying the impact of adopting e-tax on tax compliance it shows the present-day relationship between the dependent and independent variables and answers the research questions and highlights the most important factors that can negatively or positively affect the adoption and development of E-taxing in Ethiopia.

#### 3.3 Research Approach

Fundamentally, there are three kinds of research methods; the primary one is the Qualitative method which contains studies that do not endeavor to qualify their results through measurable summary or analysis. The second approach is the Quantitative approach, which occupies systematic and scientific examination of quantitative properties and wonder and their association. The last one is a mixed approach consisting of both qualitative and quantitative approaches (Abiy, Alemayehu, Daniel, Melese, and Yilma, 2009). In this study, a mixed research approach design was applied. Moreover, it has been a co-relational research type as it was test relationships between variables.

#### 3.4 Population, Sampling design, and Response Rate

#### **3.4.1 Population**

The population forms a basis from which the sample or subjects for the study is drawn. (Cooper and Schindler, 2001). The population of this study consists of both the taxpayers and the employees of the e-tax department in the ERCA Large Taxpayers Branch Office (LTO) in Addis Ababa, Ethiopia. The category "A" or the large taxpayers currently 632 in number and the employees are 3 consisting of 1 team leader and 2 employees. According to ERCA, large taxpayers are classified into four based on their sectors. This is indicated in Table 3.1. -

 Table 3.1 Population distribution

No.	Sectors	No. of taxpayers
1	Manufacturers	156
2	Construction	76

3	Bank and Insurance	29
4	Others	371
TOTAL		632

#### **3.4.2 Sampling Design**

The selection of sampling technique was through the non-probabilistic sampling technique of convenience sampling. The reason the researcher has used this technique is due to the large population. Because all the populations of the ERCA cannot be available at the same time and elements have been selected from the target population based on their accessibility. Convenience sampling also called coincidentally or support testing could be a method in which a test is drawn from that part of the population that is close to hand, readily available, or convenient. The questionnaires have been distributed to customers of the ERCA.

The sample size for this study will be determined with the use of the (Cochran, 1963) formula as presented below

#### $S = X 2NP (1-P) \div d 2 (N-1) + X2P (1-P)$

S = required sample size.

 $X_2$  = the table value of chi-square for 1 degree of freedom at the desired confidence level

(1.96\*1.96= 3.841).

N = the population size (632).

P = the population proportion (assumed to be .50 since this would provide the maximum sample size).

d = the degree of accuracy expressed as a proportion (.05).

$$\frac{3.841 * 632 * 0.5(1 - 0.5)}{0.05^2(632 - 1) + 3.841 * (1 - 0.5)} = 240$$

Table 3.2	Sample	distribution
1 4010 5.2	Sampic	aistrionion

No.	Sectors	No. of taxpayers	Percentage	Sample size
1.	Other	371	58.7%	141

Total		632	100%	240
4.	Bank and Insurance	29	4.6%	11
3.	Construction	76	12.02%	29
2.	Manufacturing	156	24.68%	59

#### 3.5 Types of Data

The type of Data for this research is Quantitative and the source of data used in this research was comprised of both primary and secondary. Primary data are collected to meet the specific research need, customized, and required specialized data collection procedures. The researcher for the specific problem at hand collects primary data. The standardized questionnaire will be used to collect primary data (Saunders, 2012).

Secondary data analysis is an analysis of data that has to collect and tabulate by other sources (Saunders, 2012). For this research, secondary data will screen from marketing books and journals, company publications and annual reports, and banking sector reports. The secondary data will be taken as a specific reference and explore different constructs important to this study.

### 3.6 Method of Data Analysis

The researcher used both descriptive statistics and econometric analyses to analyze information collected from both primary and secondary sources of information. The result of descriptive statistics (mean, standard deviation, and Frequency) is useful in providing information and detecting the normality of the collected data.

The researcher used inferential statistics (multiple linear regression analysis and correlation). The personal information of the users will be analyzed by using percentage, frequency, and cumulative percentage. The statistical method of Pearson Correlation will also be used to determine the existence of any relationship between the independent variables and dependent variables. Additionally, multiple linear regression analysis was conducted to examine the effect of the independent variables on the dependent variable. To examine the quantitative data, the researcher used SPSS software version 20.

#### 3.6.1 Descriptive Analysis

The descriptive statistical results were displayed by tables, frequency distributions, and percentages to analyze the data. This was achieved through summary statistics, which includes the mean values and standard deviation which were computed for each variable in this study.

#### 3.6.2 Econometric Analysis

In this study, econometric data analysis will be used. The researcher will use the multiple regression models together with descriptive methods for analyzing the data because Pearson's coefficient of correlation technique helped to show how the relationship of the variable, whether they are statistically and positively or negatively significant between dependent and independent variables. An econometrics model such as multiple regression techniques was applied to show the correlation between the dependent and independent variable.

$$y_1 = \alpha_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + + e$$

Where y is the dependent variable is tax compliance x1 is E-tax filing, x2 is Network connectivity and x3 is Taxpayers' technical skill

#### **Chapter Four**

#### **Data Presentation, Analysis and Interpretation of Result**

#### 4.1 Introduction

The purpose of this thesis is to investigate the effect of E-tax filing on tax compliance of large tax payers branch office in Addis Ababa. And in this chapter, the data gathered from respondents via surveys is displayed, evaluated, and translated in order to meet the study questions and goals stated in chapter one. The SPSS 26 software was used to conduct the research. This chapter covers nonresponse bias, survey pilot testing, respondents' profiles, information quality, figure evaluation, and observational findings. As a result, utilizing the Statistical Package for Social Science Students (SPSS) software version 26, this chapter deals with data analysis and presentation using descriptive and inferential statistics.

This subsection of the study attempted to explain the general information related to customers selected. The structured questionnaires were distributed to 240 respondents of which 220 replied to the questions and returned in time. Based on the fact, the researcher believed that the respondents who filled the questionnaire were quite enough to address and answer the specific objectives of the study because the respondents covered 91.7% of the total expected respondents.

#### 4.2 Demographic Profile of Respondents

From the table below, which describes the demographic characteristics of the respondents, 88 (40%) of the respondents were female and 132 (60%) of the respondents were male. The result indicated that the share of employment in each and every sector the share of male is greater than that of females and also it is indication of improvement only 10 percent gap. Regarding the age of the respondents, respondents with the age group of 20-25,26-30, 31-35, 36-40 and above 40 have accounts for 13(6%), 37(17%), 88(40|%), 42(19%) and 40(18%) respectively. From the result the researcher understands that most of the respondents were in the age group of 31-35 age intervals. Regarding to the level of education, 12%, 18%,54% and 16% of the respondents were holders of vocational, diploma, degree and MSc and above respectively. From the result we can understand majority of the respondents were holders of bachelor's degree. When we come to the types of industry they engaged, 10 percent engaged in agriculture, 16 percent actively participated in chemical industry, 40 percent of the respondents actively engaged in financial

sector, 12 percent in health sector, 18 percent in manufacturing sector and 4 percent in telecommunication. From the result most of the respondents engaged in financial sector this is the indication of the financial sectors were the major tax payers in the country.

Variable	Category	Frequency	Percentage
Gender	Female	88	40%
	Male	132	60%
	Total	220	100%
Age	20-25	13	6%
	26-30	37	17%
	31-35	88	40%
	36-40	42	19%
	Above 40	40	18%
	Total	220	100.0%
Level of education	Vocational	26	12%
	Diploma	40	18%
	Degree	119	54%
	MSc and above	35	16%
	Total	220	100%
What is your industry	Agriculture	22	10%
type	Chemical	35	16%
	Financial Service	88	40%
	Health Care	26	12%
	Manufacturing	40	18%
	Telecome	9	4%
	Total	220	100%

 Table 4. 1 Demographic profile of respondents
## 4.3 Descriptive results of the research variables

The study pursued to establish the impact of electronic tax system on tax compliance among large taxpayers in large taxpayers' branch office. Four main questions were framed and the same given to the respondents i.e. tax compliance, electronic tax filing system, network connectivity and technical skills of filing of the respondents. Each question had several components tested in order to realize the objectives of the study In order to present the descriptive results of the variables of the study, an analysis of the number of responses, Means, Standard Deviations, minimum and Maximums.

The researcher employed various statistical data analysis tools such as mean and standard deviation to analyses the collected data. The summary of descriptive statistics of all variables that are evaluated based on a 5-point Likert scale (from "1" "strongly disagree" to "5" "strongly agree"). According to Zaidaton and Bagheri (2009) the mean score below 3.39 was considered as low, the mean score from 3.40 up to 3.79 was considered as moderate and mean score above 3.8 was considers as high as illustrated by comparison bases of mean of score of five-point Likert scale instrument.

The interpretation was made based on the following measurement scale intervals or ranges. Mean scores 4.51-5.00 excellent or very good, 3.51-4.50 good, 2.51-3.50 average or moderate, 1.51-2.50 fair and 1.00-1.50 is poor (Btawee, 1987). An itemized rating scale was used to construct the range. This range was later used to measure the perceived level of the respondents towards each variable. The following formula was used to construct the range. Alhakimi and Alhariry (2014) state that Likert scale response has to be put on an interval of mean, based on the following formula.

Interval= minimum-maximum/n =5-1/5=0.8

Thus, the mean value of each individual item is ranging from 1-5 falls within the following interval.

Interval	Interval of mean perception
1.00-1.80	Strongly dis agree

1.81-3.60	Dis agree
2.61-3.40	Neutral
3.41-4.20	Agree
4.21-5.00	Strongly agree

Source: Authors Computation using SPSS 26

#### 4.3.1 E- Tax Filling System

E-filing is the short form of electronic filing of income taxes. E-filing is when you electronically file your income tax returns online for a particular year. This means you no longer need to visit the nearest Income Tax Department's office to file your returns physically. Electronic tax filing or e filing is a process where tax documents or tax returns submitted through the internet, usually without the need to submit any paper return. The e-filing system encompasses the use of internet technology, the Worldwide Web and Software for a wide range of tax administration and compliance purposes. Electronic taxation differs among countries hence the name of the system differs from country to country.

From the table below, the first question "Using e-filing in my job would enable me to accomplish tasks more quickly has a mean of 3.61 and standard deviation of 0.72. From the result we can clearly understand that more than half of the respondents agreed that using e-filing in my job would enable me to accomplish tasks more quickly. The second item using e-filing would improve my job performance has a mean of 3.18 and standard deviation of 0.738. From the result we can clearly understand that the customer is neutral with the idea using e-filing would improve my job performance. The third item, using e-filing would enhance my effectiveness on the job, has a mean of 3.84 and standard deviation of 0.786.

The fourth item has a mean of 4.15 and standard deviation of 0.695. From the result we can clearly understand that Using e-filing would make it easier to do my job is practiced in the better way. The fifth item, I would find it easy to get e-filing system to do what I want it to do, has a mean of 3.72 and standard deviation of 0.653. The result clearly indicated that it would find it easy to get e-filing system to do what they want it to do. The sixth item has a mean of 4.60 and standard deviation of 0.620. The result indicated that it would find e-filing easy to use for

customers. The seventh item has a mean of 4.47 and standard deviation of 0.59. The researcher argued that there are enough computers and necessary materials to do E-tax filing related tasks in ERCA. The eighth item has a mean of 4.35 and standard deviation of 0.635. The result clearly indicated that E-tax filing is much better compared to manual for my job performance.

Table 4. 2 Descriptive	Statistics of E-	• Tax Filling System

	N	Mean	Std. Deviatio n	Skew	ness	Kurtosis	
	Stat isti c	Statisti c	Statistic	Statist ic	Std. Error	Statist ic	Std. Erro r
Using e-filing in my job would enable me to accomplish tasks more Quickly	220	3.6182	.72756	131	.164	.596	.327
Using e-filing would improve my job performance	220	3.1864	.73825	036	.164	637	.327
Using e-filing would enhance my effectiveness on the job	220	3.8409	.78639	450	.164	.273	.327
Using e-filing would make it easier to do my job	220	4.1500	.69588	211	.164	923	.327
I would find it easy to get e-filing system to do what I want it to do	220	3.7273	.65388	444	.164	1.005	.327
I would find e-filing easy to use	220	4.6091	.62073	-1.347	.164	.695	.327
There are enough computers and necessary materials to do E-tax filing related tasks in ERCA.	220	4.4727	.59233	625	.164	551	.327

E-tax filing is much	220	4.3545	.63514	464	.164	664	.327
better compared to							
manual for my job							
performance.							
Valid N (listwise)	220						

From the result above in general the researcher understands that E-tax filing is much better compared to manual for my job performance. It is the indication of improvement of the electronic tax filling system in the branch office for the staffs. When we see the respondents response regarding the availability of computer and other related accessories the branch offices is in almost all scenarios fulfilled the necessary equipment for its employees.

## 4.3.2 Network Connectivity

Under Network connectivity (Second independent variable) respondents are asked Five Likert type Questions to state whether their businesses had network connectivity or not. The question had checked respondents' opinion by measuring their business internet connectivity in regard of system stability. Respondents were asked whether their business faced on system hang-ups which lead to delay in tax submission. From the table below it has a mean of 4.422 and standard deviation 0.599. The result clearly showed that systems hang-leads to delay tax submission are completely affected management. The second item, System hang ups leads to unwillingness to file tax returns has a mean of 0.595. The clearly showed that System hang ups leads to were willingness to file tax returns.

The third item, System hang ups leads to inability to file tax returns without Assistance, has a mean of 4.290 and standard deviations of 0.687. The result clearly showed that System hang ups lead to inability to file tax returns without Assistance. The forth item has a mean of 4.45 and standard deviation of .583. The study clearly showed that system hang ups leads to incurrence of costs to pay third parties to file tax returns on my behalf. The fifth item has a mean of 4.386 and standard deviation of 0.752. We can clearly understand that system hang ups leads to compromise of tax information to be submitted.

#### Table 4. 3 Descriptive Statistics of Network Connectivity

	Descriptive Statistics									
	Ν	Mean	Std.	Skewr	ness	Kurtosis				
			Deviation		[					
	Stati	Statistic	Statistic	Statistic	Std.	Statisti	Std.			
	stic				Error	С	Error			
System hang-ups	220	4.4227	.59559	614	.164	.176	.327			
leads to delay in tax										
submission										
System hang ups	220	3.0091	.92154	018	.164	-1.831	.327			
leads to										
unwillingness to file										
tax returns										
System hang ups	220	4.2909	.68707	791	.164	.763	.327			
leads to inability to										
file tax returns										
without Assistance										
System hang ups	220	4.4500	.58306	501	.164	673	.327			
leads to incurrence										
of costs to pay third										
parties to file tax										
returns on my behalf										
System hang ups	220	4.3864	.75295	-1.162	.164	1.035	.327			
leads to compromise										
of tax information to										
be Submitted										
Valid N (listwise)	220									

From the result above the researcher understand that system hang ups and leads to compromise of tax information to be submitted. This indicated that the necessity for using that recover the saved data on the users when the system is hangs up or the branch has to use different mechanism to solve the problem like to buy domestic internet access from tele.

## 4.3.3 Technical Skills of Filing

Azmi and Kamarulzaman (2010) in their study of the Malaysian e-filing system also point out the technical aspect of the filing process as a challenge facing taxpayers with regard to its use. It is in this regard that this research sought to investigate the technical skills of filing tax returns as a factor that influences tax compliance. A need to explore tax compliance and network connectivity as well as technical skills of filing behavior of the self-employed is very important. Tax payers offend and upset when system stability disturbed due to extra cost and effort requesting which is manual 6 tax filing system. (Kiringa & Jagongo, 2017) study shows the knowledge of taxation system, internet familiarity, professionals' assistance and website ease of use of tax payers are also the other factors that tax payers to be compliance.

From the below table 4.4, the first item has a mean of 3.25 and standard deviation of 0.625. The result clearly showed that on average the customers can't accurately determine their tax obligations and file returns on time using the online tax system. The second item has a mean of 4.48 and standard deviation of 0.705. The result on average indicated that the customer can file tax returns without any body help. The third item has a mean of 4.74 and standard deviation of 0.547. The result indicated that the information on online tax declaration is easily to comprehend. The forth item, I have ability to navigate the e- filing system quickly and efficiently, has a mean of 3.40 and standard deviations of 0.962. From the result the researcher clearly understand that on the average the customer moderately agreed with the idea that they have the ability to navigate the e-filing system quickly and efficiently.

The fifth item has a mean of 3.07 and standard deviations of 0.851. The researcher understands that on average the respondents were neutral with the ability to use the self-help menus available in the website. Finally the last item, the technical competence of filing tax returns influences my use of electronics Tax system has a mean of 3.17 and standard deviations of 0.954. The result indicated that the respondents were not sensitive to the technical competence of filing tax returns influences my use of electronics Tax system.

 Table: 4. 4 Descriptive Statistics of Technical Skills of Filing

Descriptive Statistics									
	Ν	Mean	Std.	Skewness		Kurtosis			
			Deviati						
			on						
	Statisti	Statisti	Statisti	Statist	Std.	Stat	Std.		
	с	c	с	ic	Error	istic	Error		
I Can accurately	220	3.2545	.62572	247	.164	-	.327		
determine my tax						.620			

obligations and file returns on time using the online tax system							
I can file tax returns	220	4.4818	.70526	-	.164	2.35	.327
without anybody's help				1.472		3	
The information on	220	4.7455	.54791	-	.164	12.3	.327
online tax declaration is				2.918		44	
easy to Comprehend							
I have ability to navigate	220	3.4000	.96230	380	.164	.041	.327
the e- filing system							
quickly and Efficiently							
I can use the self-help	220	3.0727	.85163	050	.164	-	.327
menus available in the						1.42	
website						7	
Valid N (listwise)	220						

The researcher discussed that technical skills of filling has been improving in the branch office with combination effect of the employees ability to file tax without any body help, the easy way to declare tax online, the ability of the employees to navigate e-fillings systems quickly and efficiently and in some extent accurately determine the employees tax obligations and file returns on time using the online tax system, the ability of employees self-help menus available in the website.

## 4.3.4 Tax Compliance

Tax compliance has been shown to be strongly influenced by personal ethics, and research has shown that ethics are situation-specific. Tax compliance is the individual or business decision to comply with the tax laws in a given country. There are many tax laws that exist at the state and federal levels. In addition, tax laws can differ from state to state. For example, some states may not have property taxes, while others may have higher sales taxes. Tax compliance is defined as the accurate reporting of income and claiming of expenses in accordance with stipulated tax laws. Thus, the failure of corporations to accurately report or pay tax is considered corporate tax non-compliance.

From the result below in table 4.5 regarding on the result of tax compliance, the first item, paying tax is the right thing to do, have a mean of 3.495 and standard deviations of 1.004. The

result indicated that the respondents moderately agreed that paying tax is the right thing to do. The second item has a mean of 3.795 and standard deviations of 0.983. The result indicated that the respondents agreed that paying tax is a responsibility that should be willing accepted by all society. The third item has a mean of 3.84 and standard deviations of 1.03. The result indicated that on average the respondents agreed that they feel a moral obligation to pay their tax. The forth item, Paying my tax finally advantages everyone, has a mean of 2.76 and standard deviations of 1.13. The result on average indicated that paying their tax finally does not advantage everyone. The fifth item has a mean of 3.31 and standard deviations of 1.04. The respondents were nearly neutral not sensitive to with the idea of I think of tax paying as helping the government do worthwhile Things. The sixth item has a mean of 2.80 and standard deviations of 0.89. The result indicated that the respondents do not accept responsibility for paying their fair share of tax since the overall mean for this questions is less than 3. Finally the last item has a mean of 3.33 and standard deviations of 0.99. The researcher understands that, the respondents moderately pay their tax with good will.

Descriptive Statistics									
	Ν	Mean	Std. Deviation	Skewness		Kurtosis			
	Statist	Statisti	Statistic	Statisti	Std.	Statisti	Std.		
	ic	с		с	Error	с	Error		
Paying tax is the right	220	3.4955	1.00455	492	.164	522	.327		
thing to do									
Paying tax is a responsibility that should be willingly accepted by all society	220	3.7955	.98341	916	.164	.635	.327		
I feel a moral obligation to pay my tax	220	3.8409	1.03684	-1.090	.164	.862	.327		
Paying my tax finally advantages everyone	220	2.7682	1.13712	.165	.164	-1.055	.327		

**Table: 4.5 Descriptive Statistics of Tax Compliance** 

I think of tax paying as	220	3.3136	1.04107	486	.164	588	.327
helping the							
government do							
worthwhile Things							
I accept responsibility	220	2.8091	.89131	.346	.164	.559	.327
for paying my fair							
share of tax							
Overall, I pay my tax	220	3.3318	.99949	013	.164	711	.327
with good will							
Valid N (listwise)	220						

# 4.4 Inferential Statistical Analysis

## 4.4.1 Correlational Analysis

Correlation coefficient is known as a method of measuring the correlation between the dependent variable and independent variables and it was based on the method of covariance. Pearson's correlation coefficient indicates the relationship among all the variables that were measured at an interval or ratio level (i.e. E-tax filling, network connectivity, tax payers technical skill and tax payers compliance). The number representing Pearson's correlation is referred to as a correlation coefficient. Correlations of +1 mean that there is a perfect relationship between two variables.

Coefficient range	Strength of Association
±0.91 to ±1.00	Very strong
±0.71 to ±0.90	High
±0.41 to ±0.70	Moderate
±0.21 to ±0.40	A small but definite relationship
±0.01 to ±0.20	Slight, almost negligible

Table 4. 6 Rules of Thumb about Correlation Coefficient Size

Source: Adapted from Hair, celsi, Money, samouel, miki, 2015)

A correlation analysis was conducted between the dependent and the independent variables of the study to infer and understand the nature of the relationship between them. The correlation analyses were conducted between the determinants of tax compliance (mentioned above).

From the table 4.7, this displayed the correlation coefficient among each variable, the first item ETFS (electronic tax filing system) is positively and strongly correlated with the network connectivity (NC). The correlation coefficient for ETFS and NC was (r=0.917, n=220, p=0.000). There was a high positive relationship between the two variables. Likewise, the correlation between electronic tax filing system (ETFS) and technical skills of filings (TFS) is moderately strongly and positively correlated with (r=0.793, n=220, p=0.000). Whereas electronic tax filing system (ETFS) has week and positive but significant correlation with tax compliance (r=0.291, n=220, p=0.000).

The other variable, Network connectivity (NC) has a positive significant and strongly correlated with technical skills of filings (TFS) (r=0.813, n=220, p=0.000). In addition network connectivity has a week but positive and significant correlation with tax compliance ((r=0.311, n=220, p=0.000). Finally, technical skills of filings (TFS) has positively and significantly correlated with tax compliance (r=0.468, n=220, p=0.000) as displayed in the table below.

Correlations							
		ETFS	NC	TFS	TC		
ETFS	Pearson	1					
	Correlation						
	Sig. (2-tailed)						
	Ν	220					
NC	Pearson	.917**	1				
	Correlation						
	Sig. (2-tailed)	.000					
	Ν	220	220				
TFS	Pearson	.793**	.813**	1			
	Correlation						
	Sig. (2-tailed)	.000	.000				
	N	220	220	220			
ТС	Pearson	.291**	.311**	.468**	1		

Table 4.7 Person correlation Coefficient among study variables

Correlation								
Sig. (2-tailed)	.000	.000	.000					
Ν	220	220	220	220				
**. Correlation is significant at the 0.01 level (2-tailed).								

Whereas ETFS is electronic tax filling system, NC is network connectivity, TFS is technical skills of filings, and TC is tax compliance.

# 4.4.2 Multiple Regression Analysis

Regression analysis is a precise strategy that can be utilized to examine the effect of one or more indicator factors on dependent variable. Consequently, it helps us to make statements about how one or more independent variables will predict the value of a dependent variable. According to the normality test the data has 95% level of confidence.

The equation of multiple regressions on this study is made on around two sets of variables, namely dependent variables (tax compliance) and independent variables (Electronic Tax Filing System, Network Connectivity, Technical Skills of Filings). The basic objective of using regression equation on this study is to make the researcher more effective at describing, understanding, predicting, and controlling the stated variable.

## 4.4.2.11 Post Estimation test / Diagnostic test

In this section of study, diagnostic test on the model has conducted to the check the average value of the error is zero, whether the residual is normally distributed or not, the variance of the error is constant, the covariance between the error term over the time is zero and the variables stated in this study were not violating the classical linear regression assumption. As per Brooks, (2008) the first assumption required that the average value of the errors is zero (E(ut) = 0). In fact, if a constant term is included in the regression equation, this assumption will never be violated (Brooks, 2008). Since there is no intercept parameter without constant term, the first assumption will never go against. This means there is no potentially severe bias in the slope coefficient estimates in the regression model. However, the rest assumptions of CLRM were properly tested and presented as follows:

## 4.4.2.1Linearity Test

The linearity of associations between the dependent and independent variables can be tested by looking at the P-P plot for the model. The closer the dots lie to the diagonal line, the closer to normal the residuals are distributed. As depicted in the below graph, the visual inspections of the p-p plot revealed that there exists linear relationship between the dependent and independent variables.



## 4.4.1.2 Homoscedasticity Test

The second assumption of CLRM states that the variance of the errors is constant,  $\sigma^2$  this is known as the assumption of homoskedasticity (Brooks, 2008). If the errors do not have constant variance, they are said to be Heteroskedasticity. In other words, if the residuals of the regression have systematically changing variability over the sample, that is a sign of Heterosckedasticity (Brooks, 2008). The violation of this assumption results in the OLS estimator inefficient.

The assumption of homoscedasticity refers to equal variance of errors across all levels of the independent variables (Osborne & Waters, 2002). This implies it requires even distribution of residual terms or homogeneity of error terms throughout the data. Homoscedasticity can be

checked by visual examination of a plot of the standardized residuals by the regression standardized predicted value (Osborne & Waters, 2002). If the error terms are distributed randomly with no certain pattern, the problem is not detrimental for analysis. The scatterplot in Fig below shows that the standardized residuals in this research are distributed evenly which shows that no violation of homoscedasticity.



#### 4.4.1.3 Serial Correlation Test

One of the assumptions of the classical linear regression model is that the error is assumed uncorrelated across the time. In violation of this assumption, the OLS estimators are inefficient, so no longer BLUE. One of the assumptions of regression is that the observations are independent. If observations are made over time, it is likely that successive observations are related. If there is no autocorrelation (where subsequent observations are related), the Durbin-Watson statistic should be between 1.5 and 2.5. Values below 1 and above 3 are problematic and

	Model Summary <sup>b</sup>									
Model	R	R Square	Adjusted R Square	Std.Error	Durbin-Watson					
1	.873 <sup>a</sup>	.762	.755	.19131	1.875					
a. Predicto	ors: Predic	ctors: (Constant),	TFS, ETFS, NC							
b. Depend	lent Varia	ble: TC								

causes for concern. To check this assumption, we need to look at the Model Summary box presented below.

As the table above reveals that errors are responding independently and autocorrelation is not a concern with the Durbin-Watson value of 1.595. Therefore, it is possible to say the auto-correlation test has been met.

#### 4.4.1.4 Normality Test

Another fourth important diagnostic test conducted in this paper is the normality assumption (i.e. normally distributed errors). Brooks (2008) Stated that the normality assumption "(ut~ N  $(0,\sigma 2)$ )" is required in order to conduct single or joint hypothesis tests about the model parameters. Therefore, it is quite important, to have some general description for common types of distributions. In an ideal world our data would be distributed symmetrically around the center of all scores. As such, if we draw a vertical line through the center of the distribution then it should look the same on both sides. This is known as a normal distribution and is characterized by bell-shaped curve. This shape basically implies that the majority of scores lie around the center of the distribution (Field, 2006). The normal distribution graph was shown on Fig below and revealed that the assumption of normality has been met.



#### **4.4.1.5** Testing for Multicollinearity

Multicollinearity refers to a situation in which independent variables are highly correlated. Tolerance is an indicator of how much of the variability in the model. VIF (variance inflation factor) which is just the inverse of tolerance value (1 divided by tolerance value). A tolerance value of (>0.10) and the VIF value of (<10) are all acceptable VIF value and above 10 would be a presence of mlticollinearity. Therefore as displayed in the table below both tolerance value (>0.10) and the VIF value (<10) are all acceptable .

If one explanatory variable has shown exact linear relation with the other explanatory variable, then the model suffers from perfect collinearity, as a result it cannot be estimated or satisfied the OLS properties. For the purpose of measuring the existence of multicollinearity problem in the model the researcher was used Variance Inflation Factor (VIF). As noted by Gujarati (2004), the rule of thumb suggested that if variance inflation factor (VIF) exactly or exceeds 10 there is a problem of multicollinearity. As shown in the table below, the researcher measured the VIF and gets a value of less than 10 for all the explanatory variables. Consequently, one can know that there is no serious multicollinearity problem among the variables that can be included in the model estimation.

Model		Collinearity Statistics		
Tolerance VI			VIF	
1	(Constant)			
	TFS	.678	1.475	
	ETFS	.372	2.688	
	NC	.235	4.255	
	Mean VIF	.428	2.333	

#### **Table 4. 8 Multicolinearity Diagnostics**

#### 4.4.2.2 Results and Discussions of Multiple Regression Models

The regression analyses results are represented in table 4.9 (model summary), table 4.10(ANOVA), and Table 4.11 regression results (coefficient) below illustrate the three hypotheses of the study. From table 4.9, the regression model justifies that a 76 percent of the three explanatory explained the variation in tax compliance by (R2=0.762). The R2 value of 0.76 indicates a 76.2 percent relationship between explanatory variable and tax compliance. This implies that explanatory variable explains the variation of tax compliance by 76.2 percent. The regression model is significant as shown from the ANOVA table values (F=2785.30: p<0.05). From the coefficients table, the regression model established for the direct relationship was:

Tax Compliance =  $2.109 + 0.436 * ETFS + 0.468 * NS + 0.729 * TFS + \varepsilon$ .....(1)

#### **Table 4.9 Model Summary**

	Model Summary <sup>b</sup>									
Model	R	R Square Adjusted R Square		Std.Error	Durbin-Watson					
1	.873ª	.762	.755 .19131		1.875					
a. Predicto	ors: Predic	ctors: (Constant),	TFS, ETFS, NC							
b. Depend	b. Dependent Variable: TC									

#### Table 4.10 ANOVA

ANOVAª					
Model	Sum of	df	Mean	F	Sig.

		Squares		Square						
1	Regression	104.493	5	27.146	2785.304	.000 <sup>b</sup>				
	Residual	1.403	144	.010						
	Total	137.131	149							
a. Dep	a. Dependent Variable: TC									
b. Pre	b. Predictors: (Constant): Predictors: (Constant), TFS, ETFS, NC									

#### **Table 4.11 Regression Coefficient**

	Coefficients <sup>a</sup>									
Mo	del	Unstan	dardized	Standardized	t	Sig.				
		Coef	ficients	Coefficients						
		В	Std. Error	Beta						
1	(Constant)	2.109	.268		7.862	.000				
	ETFS	0.436	.056	0.424	7.78	.000				
	NC	.729	.096	.477	7.579	.000				
	TFS	.574	.091	.655	6.282	.000				
a. D	ependent Varia	able: TC								

## 4.4.3 Discussions oof Explanatory Variables

The unstandardized coefficients  $\beta$  column, gives us the coefficients of the independent variables in the regression equation including all the predictor variables as indicated above. In addition, the table above also shows that the explanatory variables included in this study can significantly explain at 95% confidence level to the variation on the dependent variable. The standardized beta coefficient column shows the contribution that an individual variable makes to the model. The beta weight is the average amount the dependent variable increases when the independent variable increases by one standard deviation (all other independent variables are held constant). Since these results are standardized, we can make comparisons among them. Among the variables, the one with the largest value of influence is network connectivity with a 0.729 value. The second most influential is tax payer's technical skills with a value of 0.574. The third most influence variable that affect e tax filling with a value of 0.436. As depicted in table above, among the three regressors included in the model that need to be statistically significant at 5% level of significance. All explanatory were statistically significant.

#### 4.4.3.1 E-Tax Filling

The coefficient (parameter estimate) is 0.436. So, for every unit (i.e., taxpayers Perception which are measured by e-tax filing system usefulness, ease of use & system acceptability) increase in E-tax filing system, a 0.436 unit increase in tax compliance is predicted, holding all other variables constant. (It does not matter at what value we hold the other variables constant, because it is a linear model.) or, for every increase of one unit on the E-tax filing system, the tax compliance is predicted to be higher by 0.436 units. That is there is a 0.436 unit significant influence of e-tax filing system on taxpayers' compliance.

There is a statistical significant influence of electronic tax filing system on tax compliance of large taxpayers at 5% significance level. The possible reason for the significant influence were using e-tax filing system might helped taxpayers to accomplish their task more quickly with high performance, its effectiveness on their job and makes their job to be easier and useful. In addition to this the ease to learn, the controllability, the flexibility, the clarity and understandability of e-tax filing system makes taxpayers ease to use. Those reasons could make taxpayers to accept the e-tax filing system and to be compliance. The results of this study can complement the previous research that has been done by (Tambun and Kopong , 2017).

#### 4.4.3.2 Network Connectivity

For every unit (i.e., taxpayers' system stability) increase in network connectivity, there is only 0.729 unit increase to influence in the predicted tax compliance, holding all other variables constant. The variable Network connectivity is able statistically significantly influence on taxpayers compliance. Why? Because the p-value, 0.000 is less than 0.05. The possible reason that network connectivity be significant to taxpayers complains were system hang- ups might leads interruption of tax submission, unwillingness to file tax, tax payers might need assistance to file tax, incurrence of costs to pay third parties on behalf of them and System hang ups leads to compromise of tax information to be submitted. Internet interruption at time of due date of tax filing in which the Interruption of e-tax database due to less server capacity and lack of upgrade the e-tax servers to calm down the pressure on the current servers might be the other reason. The inability of the system to handle huge information during the peak hours and may change the

perception of the tax payers that the system unreliable and tax payers might utilize the manual filing system. The results of this study can complement the previous research that has been done by (Gwaro, et al., 2016).

## 4.4.3.3 Technical Skills of Filling

The coefficient for Technical skills of filing is 0.574. This means that for a 1-unit (i.e., taxpayers Knowledge of taxation system, internet familiarity and skills, professionals assistance & website ease of use) increase in the technical skill of filing, we expect an approximately 0.574 unit effect increase that taxpayers can be tax compliance which is statistically significant; in other words, there is a 0.574 significant influence of taxpayers technical skills of filing on taxpayers compliance .

The possible reason of the significant influence can be taxpayers' knowledge of etax filing system, taxpayers' internet familiarity and skills of filing as well as website ease of use. According to LTO's 2016 training manual, taxpayers had been well informed of their support options and what to use when and how. The large taxpayers' branch office supports taxpayers by telephone, e-mail, Site support (at the taxpayers premise), and Office support (at tax center). The branch office also arranged frequent training in order to build taxpayers technical skills of filing specially e-tax application software. The results of this study can complement the previous research that has been done by (Kiringa & Jagongo, 2017).

## 4.4.4 Hypothesis Testing

Table 4.12: Hypothesis testing based on multiple models results

Hypothesis	Result	Justification
$\mathbf{H}_{1:}$ E-tax filing has a statistically significant effect on	Accepted	β = 0.436,p<0.05
taxpayers' compliance.		
H <sub>2</sub> : network connectivity has a statistical significant effect on tax compliance	Accepted	β = 0.729,p<0.05
H <sub>3</sub> : Technical Skills of filling has a statistical significant effect on customer satisfaction	Accepted	β = 0.574, p<0.05

After a thorough theoretical and empirical literature reviews, the researcher had specified four (3) hypotheses in chapter two namely:  $H_{1:::}$  e-tax filing has a positive and statistical significant effect on tax compliance,  $H_{2:}$  network connectivity has a positive and statistical significant effect on tax compliance,  $H_3$ . Technical Skills of filling has a positive and statistical significant effect on customer satisfaction.

# **Chapter Five**

# 5. Summary, Conclusions and Recommendations

## 5.1. Summary of Major Findings

This study aimed at establishing the influence of electronics tax system and compliance among large taxpayers in large taxpayers branch office in Ethiopia. There were three research questions answered by this study: how does electronics system influence tax compliance with regard to tax filing, network connections and technical skills of tax returns. Taxpayers were categorized into various sectors of the economy and ownership for ease of analysis. Significance is typically measured by our t-statistic, or our p-value in the regression readout.

The first hypothesis in this study is H1: There is a significant influence of e- tax filing system on the tax compliance of large taxpayers. Perceived usefulness, perceived ease of use and user acceptance was shown to be an important construct to influence taxpayers' perceptions on the electronic tax-filing system towards tax compliance. The findings show that a system that is usefulness and easy to use are important for taxpayers to be voluntarily e-file their tax returns in which they accept the system.

The findings also show that the relationship between e-tax filing system and tax compliance were positively correlated and there is a statistical significant influence of electronic tax filing system on tax compliance of large taxpayers at 5% significance level. Overall, it can be concluded that most of taxpayers at large taxpayers Branch office had a good perception towards electronic tax Filing. This in sensibly increase the number of taxpayers who wants to file their tax return through e-Filing in the future and hence, help the objective of LTO to achieve Electronic tax filing implementation.

The second hypothesis in this study is H2: There is a significant influence of network connectivity on tax compliance of large taxpayers. Server hang-ups due to system overload typically show up as slowly loading pages. The system may respond slowly for a period and then

return to normal operation. Server slowdowns typically happen at peak traffic periods, when scheduled tasks run, or when certain maintenance occurs.

The third hypothesis in this study is H3: There is a significant influence of taxpayers' technical skills of filing on tax compliance of large taxpayers. The tax knowledge, internet familiarity and skills with regard to the taxpayers understanding of the tax and professionals' assistance and website ease of use relating to the taxation system applied are important aspects of tax payers' technical skills of electronic tax filing system.

The result revealed that tax payers can accurately determine their tax obligation and file a return on time using the e- tax filing system, can file a return without anybody's help, the technical competence of filing tax returns they had influences their use of electronic tax system, agreed that the information on online tax declaration is easy to comprehend and had ability to use selfhelp menus on e-tax platform. This implies that tax payers had enough knowledge of taxation system; know how website eases of use, Internet familiarity and skills in which they don't need professional assistance. The study therefore infers that the technical skill of filing tax returns is a factor that influences the tax compliance. The result shows that the technical skill of filing had a significant effect on taxpayer compliance of large taxpayers at 5% significance level.

## **5.2 Conclusions**

This research provides several important implications for the implementation and promoting of effective electronic tax filing system. These findings have policy implications for the implementation of not only electronic tax filing system but also egovernment services. Understanding e-tax filing system use factors can extend the understanding of taxpayers decision making and lead to better strategies for a successful implementation of e-tax filing specifically and e-government generally

Taxpayers had limited internet access and the revenue service's information technology system could not handle the huge overcrowding of tax returns, especially in the few days just before the deadline. Therefore, large taxpayers' branch office continuously upgraded its electronic system and offered prefilled electronic forms to simplify the process for taxpayers. The tax authority should drive initiatives to overcome connectivity shortages by creating a public-private network of e-filing centers, providing more connectivity points. In addition, it should made arrangements

with internet cafes so that taxpayers could use their equipment for free and trained operators at access points.

This research indicates that the Ethiopian government needs to also focus on some specific areas of ease of use of the system. In order for smooth transition by the citizens towards higher acceptance of e-tax filing system initiatives, the federal government also must formulate a guideline for all related parties on the quality measures required in the development of all e-government systems.

## **5.3 Recommendations**

In achieving and following in better performance, organizations should adhere to the better conditions of tax compliance According to the findings and conclusions of the study, the researcher forwards the following recommendations for the managers of Ethiopian Revenue Authority.

- The researcher came up with several recommendations to encourage the use of electronics tax system that will improve tax compliance. Electronic systems for filing and paying taxes, if implemented well and used by most taxpayers, benefit both tax authorities and taxpayers.
- Tax authority should undertake intensive and increased sensitization of taxpayers to make them aware of the electronic tax filing, how it works and the advantages of using it so that taxpayers can understand and appreciate it. The authority should also frequently be involved in capacity building for instance holding training & seminars countrywide on the online tax filing process.
- LTO should undertake thorough taxpayer education from high school level so that taxpayers gain knowledge and understanding of the taxation system, appreciate it and be able to comply with the tax obligations.
- The electronic tax filing process should be simplified with clear instructions and guidelines provided on the website and the system server should be upgraded to increase on the system stability experienced. Tax consultation centers should be increased in the country where taxpayers can acquire knowledge and filing skills.

• This study proposes the following areas for further study. To begin with further research should be done to establish the impact of e- tax filing on tax evasion and avoidance as well as the impact of e-payment on tax compliance.

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# **APPENDICES**



# ST. MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES

#### Questionnaire

#### Dear Respondents,

This questionnaire is designed to gather data on the effect of E-tax filing on tax compliance of large tax payers branch office in Addis Ababa. The information you provide in response to the items in the questionnaire will be used as a part of the data needed for a study on "impact of E-tax filing system on tax compliance of large tax payers branch office". The study is being conducted as a part of the undersigned researcher's study for the partial fulfilment of the award of For the Degree of Marketing Management

The questionnaire is anonymous; so please do not write your name. You are highly encouraged and expected to respond to each question most truthfully and candidly possible. I would like to assure you that your response will only be used for the intended academic purpose and will be maintained confidential.

Thank You in advance for your time and cooperation.

Yours sincerely,

FITSUM GETU WOYESSA

## Section 1. Demographic data

Please tick ( $\sqrt{}$ ) to the appropriate answer where applicable.

1	. Gender of the respondent				
A	A. Male <b>D</b> . Fem	ale			
2	2. Age of the respondent				
A. B	elow 20 years B. 20-	-25 C.	. 26-30	D. 31-35	
	E. 36-40 <b>F</b> .	Above 40			
3	. Level of Education				
-	A. Vocational/technical sch				
	B. Diploma				
	C. Degree				
	D. Masters				
	E. PHD				
4	. What is your field of study?				
1	. Accounting				
2					
3	B. Economics				
4	. Business administration				
5	5. Other, specify	••••			
5	5. What is your industry type?				
A	A. Agriculture	B. Chemical		C. Financial Service	
Ι	D. Health Care	E. Manufacturing		2. Telecom	
F	F. Transportation	G. Mining	H H	I. Others (Specify)	

# Section 2: Electronic Tax Filing System

Please state your level of agreement or disagreement with the following statements. The scale ranges from Strongly Disagree (1), Disagree (2), Neutral (3), Agree (4) and Strongly Agree (5)

No	Statement	1	2	3	4	5
1	Using e-filing in my job would enable me to accomplish tasks more Quickly					
2	Using e-filing would improve my job performance					
3	Using e-filing would enhance my effectiveness on the job					
4	Using e-filing would make it easier to do my job					
5	I would find it easy to get e-filing system to do what I want it to do					
6	I would find e-filing easy to use					
7	There are enough computers and necessary materials to do E-tax filing related tasks in ERCA.					
8	E-tax filing is much better compared to manual for my job performance.					

# Section 3 Network Connectivity

Please state your level of agreement or disagreement with the following statements. The scale ranges from Strongly Disagree (1), Disagree (2), Neutral (3), Agree (4) and Strongly Agree (5)

No	Statement	1	2	3	4	5
1	System hang-ups leads to delay in tax submission					
2	System hang ups leads to unwillingness to file tax returns					
3	System hang ups leads to inability to file tax returns without Assistance					
4	System hang ups leads to incurrence of costs to pay third parties to file tax returns on my behalf					
5	System hang ups leads to compromise of tax information to be Submitted					

## Section 4: Technical Skills of Filing

Please state your level of agreement or disagreement with the following statements. The scale ranges from Strongly Disagree (1), Disagree (2), Neutral (3), Agree (4) and Strongly Agree (5)

No	Statement	1	2	3	4	5
1	I Can accurately determine my tax obligations and file returns on time using the online tax system					
2	I can file tax returns without anybody's help					
3	The technical competence of filing tax returns influences my use of electronics Tax system					
4	The information on online tax declaration is easy to Comprehend					
5	I have ability to navigate the e- filing system quickly and Efficiently					
6	I can use the self-help menus available in the website					

## **Section 5: Tax Compliance**

Please state your level of agreement or disagreement with the following statements. The scale ranges from Strongly Disagree (1), Disagree (2), Neutral (3), Agree (4) and Strongly Agree (5)

No	Statement	1	2	3	4	5
1	Paying tax is the right thing to do					
2	Paying tax is a responsibility that should be willingly accepted by all society					
3	I feel a moral obligation to pay my tax					

4	Paying my tax finally advantages everyone			
5	I think of tax paying as helping the government do worthwhile Things			
6	I accept responsibility for paying my fair share of tax			
7	Overall, I pay my tax with good will			