St. Mary's University

School of Graduate Studies

The Effectiveness of Tax audit on Revenue Collection:

The Case of Ethiopian Revenues and Customs Authority

Large Taxpayers Branch Office (LTO)

By

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BY

GIZAW BEKURETSION

APPROVED BY BOARD OF EXAMINERS

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DEAN, GRADUATE STUDIES SIGNATURE

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ADVISOR SIGNATURE

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EXTERNAL EXAMINER SIGNATURE

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INTERNAL EXAMINER SIGNATURE

DECLARATION

I, the undersigned, declare that this thesis is my research work, prepared under the guidance of Dr. HabtamuBirhanu. And all the materials used for this study have been duly acknowledged.

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Name Signature

St. Mary's University, Addis Ababa   June, 2017

ENDORSEMENT

This thesis has been submitted to St. Mary's University School of Graduate

Studies for examination with my approval as a university advisor.

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Advisor Signature

St. Mary's University, Addis Ababa June, 2017

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TABLE OF CONTENTS

ACRONYMS AND ABBREVIATIONS

AS   –   Audit Selection Process

APMS   –   Auditors Performance and Management Support

ERCA –   Ethiopian Revenue and Customs Authority Large Taxpayers Branch

Office

ETA   –   Effectiveness of Tax Audit

GDP   –   Gross Domestic Product

LA   –   Legal Framework

TE   –   Tax Incentives and Tax Exemptions

LTO   –   Large Tax Payers Branch Office

OECD   -   Organization for Economic Co-operation and Development

OLS   -   Ordinary Least Square

TAXEFF   –   Tax Effectiveness

LIST OF TABLES AND FIGURES

ABSTRACT

The main objective of this study is to find out the effectiveness of tax audit on revenue collection in Ethiopian Revenues and Customs Authority Large Taxpayers Branch office regarding the effects of tax incentive and exemption , legal framework , risk selection criteria and auditors performance and management support on effectiveness of tax audit and revenue collection . The target groups for the study were 85 tax auditors for questioners and six managers and supervisors for interview by censes method used. The study also uses secondary data collected from a sample of 33 audited taxpayers in three consecutive years from 2012-201 by convenience sampling method. Data was then analyzed on quantitative basis using Pearson's correlation, linear regression analysis and descriptive statistics. The result of the study revealed that tax audit effectiveness in LTO was determined by the following core issues legal frame work, audit selection process and auditors' performance and management support. And also tax incentives and tax exemption have a negative impact on the effectiveness of tax audit in revenue generation. The amount of tax collected from a certain company after the audit and total tax paid it's clear that after the audit the taxpayers paid more tax. LTO should give emphasis for all level of taxpayers audit selection process by using the separate risk criteria for each sectors to identify taxpayer compliant and non-compliant taxpayers, maximize the revenue collection and minimize the tax office and taxpayers administrative cost. The revenue office should give attention to increase the audit coverage to gain additional revenue from the audit.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Research

Taxation is one of the important elements in managing national income, in both developed and developing countries. Tax is defined as 'a compulsory levy, imposed by government or other tax raising body, on income, expenditure, or capital assets, for which the taxpayer receives nothing specific in return'(Lymer and Oats, 2009).On the other hand taxes are important sources of public revenue. The existence of collective consumption of goods and services necessitates putting some of our income into government hands. Such public goods like roads, power, municipal services, and other public infrastructures have favorable results on many families, business enterprises, industries and the general public. Public goods are normally supplied by public agencies due to their natures of non-rivalry and non-excludability. The nature of consumption of public goods is such that consumption by one does not reduce consumption for others. Besides, consumption of public goods by an agent does not exclude others from doing same. Such nature of public goods therefore makes them impossible for private suppliers to avail them at market prices like other commodities. Government intervention in the supply of public goods is therefore inevitable and can only be done if the public pays taxes for the production and supply of such goods. (Tax in Eth., 2005)

ERCA was established in 2008 (by proclamation number 587/2008) through the merger of the former Ministry of Revenues, Federal Inland Revenue Authority and the Ethiopian Customs Authority. The formation of ERCA signals the Ethiopian Government's commitment to establishing a modern tax and customs administration dedicated to meeting the requirements of the business community, encouraging voluntary compliance, combating smuggling, tax evasion and fraud as well as other illegal activities, thereby, contributing to the economic and social development of Ethiopia.

As the name indicates Large Taxpayers are enterprises which engage in large-scale, complex/specialized, and often global operations. Such enterprises are complex because of being characterized by; (1) multiple operating entities and/or diverse business interests; (2) high volume of transactions in day-to-day business activities; (3) large number of employees; (4)

international dealings, often involving cross-border transactions with related parties; (5) operations in an industry that presents unique tax issues (e.g. banking and insurance); (6) wide spread in geographical terms; (7) dealings in complicated issues involving complex tax law and accounting principles; and (8) complex financing and tax planning arrangements (OECD, 2009).

As per Packman and Lopez-Claros, (2017) tax audit is one of the most sensitive interactions between a taxpayer and a tax authority. Although tax audits have a role in ensuring tax compliance, they impose a burden on the taxpayer to a greater or lesser extent depending on the number and type of interactions and the level documentation requested by the auditor. It is therefore the essential that the right legal framework is in place to ensure integrity in the way tax authorities carry out audits. Additionally, an audit must have defined start and end points and tax payer must be notified once the audit process is completed.

Generally, an audit will examine the issues seen as most significant to achieving an accurate assessment of a taxpayer's tax liability. Typically, these issues will include any indications of significant unreported income (for example, as may be suggested by a very low ratio of net/gross business income ratio computed from a taxpayer's return) or potentially over-claimed deduction items that may be apparent from an examination of a taxpayer's tax return and other information. As well as income tax returns and other reporting, this includes supporting documents, which the taxpayer should normally have. In the case of business audits, national law often requires a business to obey certain bookkeeping and accounting standards. The audit may also involve physical enquiries, such as the inspection and examination of goods in stock, premises etc. (OECD, 2006)

According to Biber (2010), tax audit is an examination to determine whether a taxpayer has correctly reported and assessed their tax obligations. However, the role of an audit program in a modern tax administration must extend beyond merely verifying a taxpayer's reported obligations and detection of discrepancies between a taxpayer's declaration and supporting documentation. An effective audit program will have significantly wider impacts than just raising revenue directly from audit activities. By selecting the highest risk cases, efficiently detecting non-compliance, applying appropriate sanctions, and publicizing results of audit activity (either generally or specifically), taxpayers are put on notice that attempting to avoid tax will result in a high likelihood of detection and imposition of significant sanctions. Thereby, a

well-planned audit program can provide the administration with significant leverage across the community rather than only impacting on the taxpayer selected for audit and collecting the tax that should have been paid in the first place.

In recent decades, globalization and the pace of economic change have increased, bringing new opportunities and challenges to our societies. Governments are confronted by a world where the effectiveness of domestic policies is increasingly impacted by the external environment. The mobility of people, assets, as well as new business models emerging from the digital world, have all had important implications for the structure and operation of our tax systems. As the world becomes increasingly globalized and cross-border activities become the norm, tax administrations need to work together to ensure that taxpayers pay the right amount of tax to the right jurisdiction. (OECD, 2017)

1.2 Statement of the Problem

Obviously, a properly designed and administered taxation system is very vital in generating revenue as well as increasing the tax base to the government of developed, developing, and transitional economies. As Bird (2008) noted, the revenue collected from tax should be raised in efficient and effective manner although it is difficult without fear or favor in countries that are politically fragile. However, the tax base of developing countries is adversely affected by administration problems including poorly conceived tax policies and lack of certainty regarding policy changes.

In Ethiopia, the total tax revenue as percentage of GDP is very low compared to its tax capacity. According to International Monetary Fund 2013 (as cited in Ayenew 2016 p. 71) over the period 1999/2000-2011/12 the average tax revenue was 4.8% of GDP, derived from international transactions and according to MOFEC, 2016 (as cited ERCA, 2016) absolute tax revenues grew 31% annually from 2009/10 to 2014/15. Tax as a share of GDP has also improved, reaching 13% in 2014/15, but progress has been uneven – with 2008/9 seeing a dip to 7%. Tax as a share of GDP also lags regional leaders – e.g., South Africa at 26% as of 2013.

The role of tax revenue is imperative in bringing economic development, where its working or efficiency is determined by different socio economic and political factors. Furthermore, the ability to generate adequate fiscal revenue is determined by different socio economic and

political factors, which may have different effects on tax revenue either negatively or positively. Therefore, examining the effects of tax audit on economic performance depends on identifying the factors affecting tax audit effectiveness. Therefore, understand the rationale for low level of tax revenue pose remedial mechanisms to correct prevailing problems of tax revenue.

Tax audit helps the revenue authority achieving its objectives, and ensuring the fiscal health by means of indirectly drive voluntary compliance and directly generate additional tax collections, both of which help tax authorities to reduce the tax gap between the tax due and tax collected.

A well designed tax audit needs a risk based audit program and application of standardized technology to determine the type of audit, procedures and duration of audit so as to achieve its objective. However, according to large taxpayers branch office tax audit strategies review result indicate well designed risk based tax audit is not in place.

The research intended to fill the gap identified in some researchers done by some few scholars so far literatures (Bortey, 2011) Improving Revenue Collection through Tax Audit Practice: The Case of Ghana Revenue Authority, (Mirera, 2014) The Effects of Tax Audit on Revenue Collection: Case of Kenya Revenue Authority, (Mihret, 2011) Tax Audit Practice in Ethiopia: The Case of The Federal Government and (Ayalew, 2014) Factors Affecting Tax Audit Effectiveness a Study on Category 'A' Taxpayers in Bahir Dar City Administration Revenue Office .

Moreover, this study uses recent secondary data and increased number of variables in order to explore effectiveness of tax audit on revenue generation. The variables are tax incentives and exemption, legal framework, Audit Selection process and Auditors performance and management support influence the effectiveness of tax audit in LTO were examined and answered.

1.3 Research Questions

On the basis of the problem area this study tries to address the following research questions.
  i.   What are the effects of tax audit on revenue generation in LTO?
  ii.   What are the impact of tax incentives regarded to tax exemptions and tax incentives on tax audit effectiveness and revenue generation?
  iii. How legal framework to acquires available information to audit function?

    iv.   Does LTO have effective tax audit selection process to identify taxpayers they have high risk?

    v.   How far the revenue office's auditor's performance and management support towards tax audit effectiveness?

1.4 Objective of the Research

The main objective of this study is to examine the effectiveness of tax audit in Ethiopian Revenue and Customs Authority Large Taxpayers Office. Specifically, the study attempts to:

    i.   To examine the effectiveness of tax audit on revenue collection.

    ii.   To examine the impact of tax policy relates; tax exemptions and tax incentives on the tax audit effectiveness and revenue generation.

    iii.   To check the effect of tax audit legal framework to acquires available information to audit function.

    iv.   To examine the revenue office's tax audit selection process for tax audit effectiveness.

    v.   To evaluate the revenue office's auditors performance and management support towards tax audit effectiveness.

1.5 Hypotheses of the Study

The following four hypotheses are designed to uncover the relationships between the independent factors selected for the study, i.e., tax incentives and tax exemption, legal frame work, audit selection process and auditor's performance and management support and the dependent factors effectiveness of tax audit.

Audit effectiveness is measured by examining the amount of evidence selected for examination in relation to the total available evidence and an optimal level of evidence. Audit efficiency is then defined as audit effectiveness per unit of time by taking the audit effectiveness measure divided by minutes spent on the task (Kangave, 2004).

H1: Tax incentives and tax exemption is negatively related to effectiveness of tax audit in LTO.

Large firms often make use of this tax incentive mechanism to avoid paying taxes (Gauthier and Reinikka, 2001). Governments of developing countries are much eager to attract

investment in their countries, in so doing they end up granting exemptions to large firms as incentive to boost investment whilst in other large firms see as the loophole to avoid paying taxes. The exemption granted either can cover one of these taxes; corporate income tax, sales tax/VAT and import duties or both of them to a specific firm.

H2: Legal frame work is positively related to effectiveness of tax audit in LTO.

The efficiency and effectiveness of a revenue body's audit activities depends critically on the nature and scope of powers in the underlying legal framework in place, including the provision of adequate powers for obtaining information and an appropriate regime of sanctions to deter and penalize non-compliance. The efficient and effective conduct of audit activities requires that a revenue body 's audit and investigation staff have appropriate powers of access to information held by the taxpayer and other parties so that taxpayers liabilities reported in their returns can be properly verified or, in the absence of returns, be accurately established. There should also be an appropriate regime of sanctions to punish and deter non-compliance (OECD, 2006).

H3: Audit selection process is positively related to effectiveness of tax audit in LTO.

In tax administration, a risk is anything that can negatively affect the administration ability to achieve its compliance and revenue objectives. Risk management is a formalized and systematic approach, based on sound analysis, designed to set the best course of action under the uncertainty o f risk. The technique involves identifying, assessing, understanding, and acting on risks that impinge on the organization's ability to achieve its objectives (Thomson 2008).

Managing an effective auditing program involves decisions as to the selection of best audit case strategy or combination of strategies. The selection strategies may vary by tax type. It may be based on either reported tax amounts or the industry type (Barreca and Ramachandran 2004).

H4: Auditors performance and management support is positively related to effectiveness of tax audit in LTO.

Management support is linked to hiring trained and experienced staff, providing sufficient resources, enhancing the relationship with external auditors, and having an independent internal audit department(Gwilliam, 2014).

1.6 Scope of the Study

The study focused on the effectiveness of tax audit on revenue generation in Large Taxpayers Branch Office excluding other branch offices due to time and resource constraints. The study has examined the effectiveness of tax audit in terms of tax incentives and exemption, audit selection process, legal framework and auditors' performance and management support. The researcher uses mixed researcher method approach.

1.7 Limitation of the study

The major limitation was shortages of adequate secondary data for each type of tax. Shortage of time and absence of research fund were also other limiting factors of the findings of the study. However, necessary precautions were made so that these limitations was not affect the findings of the study through taking appropriate sample size of secondary data and triangulating different data collection methods.

1.8 Significance of the Research

The study is provided feedback to taxpayers and tax authority regarding the significance and application practice of tax audit. The study also contributes in evaluating the prevailing tax audit practice and in making some adjustments on the existing tax audit systems.

Moreover, it is providing constructive feedback about the efficiency and effectiveness of the existing tax audit practice in Ethiopian Revenue and Customs Authority Large Taxpayers Branch Office. Finally, for those who are interested to make further study on the related issue may be used as indication.

1.9 Organization of the Study

This paper comprises five chapters the first chapter deals with introduction, which contains the background of the study, statement of the problem, objectives of the study, research methodology and significance of the study. Chapter two deal with the review of related literature. Chapter three offers the research design and methodology. Chapter four presents data presentation and analysis. Finally, chapter five gives the summary, conclusions and recommendations of the study.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Theoretical Studies

2.1.1 Meaning of Tax and Tax Audit

Tax and tax audit have been defined by different scholars and books in various way saccording to (Packman and Lopez-Claros, 2016)taxes are essential to finance public services. Governments need sustainable funding for social programs and public investments to promote economic growth and development. Programs providing health, education, infrastructure and other amenities are important to achieve the common goal of a prosperous, functional and orderly society. And they require that governments raise revenues. But the challenge is to design a tax system that will not discourage taxpayers from formally participating. The design of a tax system can influence firms' decisions on whether to operate in the formal sector as well as have other important economic effects.

As per (OECD, 2006) A tax audit is an examination of whether a taxpayer has correctly assessed and reported their tax liability and fulfilled other obligations. Tax audits are often more detailed and extensive than other types of examination, such as general desk checks, compliance visits/ reviews or document matching programs. There are, of course, exceptions to this rule. Conditions and approaches vary from country to country.

Generally, an audit will examine the issues seen as most significant to achieving an accurate assessment of a taxpayer's tax liability. Typically, these issues will include any indications of significant unreported income (for example, as may be suggested by a very low ratio of net/gross business income ratio computed from a taxpayer's return) or potentially over-claimed deduction items that may be apparent from an examination of a taxpayer's tax return and other information. As well as income tax returns and other reporting, this includes supporting documents, which the taxpayer should normally have. In the case of business audits, national law often requires a business to obey certain bookkeeping and accounting standards. The audit may also involve physical enquiries, such as the inspection and examination of goods in stock, premises etc.

2.1.2   Type of Tax Audit

Audit can vary in their scope and the level of intensity to which they conducted. tax audit program in a function based administration includes registration check, advisory audit, record keeping audit, desk audit, issue-oriented audit , refund audit, comprehensive or full audit and fraud investigation. The following briefly reviews these tax audit types.

❖ **Registration Check**

Registration check is a form of unannounced visits to taxpayer's premises for new enterprises (mainly small and medium sized) to detect businesses operating outside the tax system anda quick check on businesses to establish that they are correctly registered. It should not take more than half a day (OECD, 2006) According to Ebrill (2010) in this visit, the tax officer ensures that the taxpayer: (1) has a basic understanding of their obligations; (2) keeps appropriate records (book keeping review should be mandatory in case of voluntary compliance when the turnover of the taxpayer is below the registration threshold); and (3) issues proper invoices when required by law.

❖ **Record keeping audits**

It is unannounced visits to the taxpayers' business premises to check whether the appropriate records are kept and VAT invoices are issued. The visit points out the obligations of the taxpayer regarding the keeping of records and followed up with penalties if the taxpayer continues to disregard record keeping requirements (OECD,2006).

❖ **Desk audits**

Desk audit usually carried out annually and primarily based on: (1) a review of income tax and VAT returns, or basic ratios comparing with previous periods or other taxpayers in similar industries, and (2) the crosschecking of information included in the taxpayer files. It involves basic checks conducted at the tax office when the auditor is confident that all necessary information can be ascertained through in-office examination. Information technology (IT) systems should provide strong support for these verifications (Ebrill,2010).

❖ **Issue audits**

According Grandcolas (2005), issue oriented audit focus on a single tax type and covers no more than one or two reporting periods. It should be directed at verifying items for which errors have been detected in the returns (atypical ratios, gross revenues, comparison of gross sales to imports). Single-issue audits are confined to one item of potential noncompliance that may be apparent from examination of a taxpayer's return.

❖ **Comprehensive (full) audits**

Ebrill (2011) defined comprehensive audit as comprehensive examination of all information relevant to the calculation of a taxpayer's tax liability for a given period. This audit may cover all tax obligations over a number of tax periods, or extended to several years up to the limit provided for in the law. All cases where serious underreporting or evasion has been detected under any of other audits should be forwarded to a unit responsible for undertaking comprehensive audits of all tax liabilities. The objective is to determine the correct tax liability for a tax return as a whole. As this audit is usually time consuming and costly to undertake, it should only be applied to those taxpayers if there is an indication of under reporting that may impact across taxes. It requires considerable resources and reduces the rate coverage of taxpayers that could otherwise be achieved by a more varied mix of audit types.

According to OECD 2006 the types of tax audit is categorized in different based on the scope and its intensity of the audit performed. Based on the scope and intensity there are different types of audit activities.

i. **Full Audits:** The scope of a full audit is all encompassing. It typically entails a comprehensive examination of all information relevant to the calculation of a taxpayer's tax liability for a given period. The objective is to determine the correct tax liability for a tax return as a whole.

ii. **Limited Scope Audits:** Limited scope audits are confined to specific issues on the tax return and/or a particular tax scheme arrangement employed by the taxpayer. The objective is to examine key potential risk areas of noncompliance. These audits

consume relatively fewer resources than full audits and allow for an increased coverage of the taxpayer population.

iii. **Single Issue Audits:** Single issue audits are confined to one item of potential non-compliance that may be apparent from examination of a taxpayer's return. Given their narrow scope, single issue audits typically take less time to perform and can be used to review large numbers of taxpayers involved in similar schemes to conceal non-compliance

2.1.3 Tax Evasion, Avoidance and Other Tax Gaps

Tax gap can be defined by different professionals. Raczkowski (2015) 'tax gap' the difference between the tax that taxpayers should pay and what they actually pay on a timely basis or otherwise the difference between the true tax liability in any year and the amount of tax that is paid voluntarily and on time.

Mascagni, Moore and Mccluskey (2014) argued that the term 'tax gap' refers to the difference between revenue collected and what could be collected. It is hard to give numerical estimates for tax gaps in developing countries. Tax evasion and avoidance, tax exemptions, and inequitable rent-sharing in the extractive sector are all significant sources of these tax gaps. As a result of globalization, competition between countries to attract capital, and large grey areas created by differences in tax legal systems, transnational corporations make widespread use of aggressive tax planning and transfer mispricing in order to minimize their tax payments. These practices lead to an estimated revenue loss for developing countries that is three times greater than the amount they receive in foreign aid each year. Although they have proven ineffective at attracting foreign investment, tax incentives still result in large revenue losses. In the extractive sector, rent-sharing agreements are often negotiated directly between companies and politicians, in a way that is often not transparent and which leads to highly favorable terms for investors at the expense of lower public revenues.

As well, Mascagni et al., (2014) says developing countries face extensive political, economic and administrative challenges in closing tax gaps. Tax reform is often difficult due to interest groups who benefit from the current system. Meanwhile, tax authorities suffer from weak

capacity due to a shortage of skilled staff and the lack of modern infrastructure such as IT systems and property registers. Developing country economies are also challenging to tax given the large size of their agriculture sectors, small tax bases, and their high degree of informality.

2.1.3.1 Tax Avoidance and Tax Evasion

Business entities always optimize their operations so as to make them profitable and one of the common methods is tax optimization, increasingly carried out in an aggressive form by combining legal tax avoidance with illegal tax evasion. (Raczkowski, 2015 p.3)

It may be therefore ascertained that the primary component embedded in the tax gap is tax evasion, alongside with the tax avoidance and tax debt included by numerous authors. Tax evasion comprises the following determinants Murphy 2014,(cited in Raczkowski, 2015)

1. Trading in shadow economy,
2. Untaxed proceeds of frauds and other crime,
3. Capital gains tax,
4. Inheritance tax,
5. Offshore tax abuse,
6. Criminal attacks on the tax system,
7. Failure to take care (taxpayers' errors or negligence),
8. Error (resulting from the action).

2.1.3.2 Tax Incentives

Governments from low income countries typically offer various tax exemptions with the aim of attracting investors' and fostering economic growth. Such fiscal benefits are widespread in developing countries, in the form of tax holidays and a myriad of tax exemptions and exceptions that are difficult to categorize and control, and that eventually result in low effective tax rates. However evidence shows that tax incentives are not an important driver of foreign investment, if they are one at all. Investors are more likely to be driven into a country by a stable economic and political environment, good infrastructure and availability of basic services.

By providing tax incentives, governments in low-income countries forego substantial revenue that instead could be used to foster the elements that really drive foreign investment (e.g. infrastructure, education and electricity). Eliminating or substantially reducing tax incentives is

usually seen as a low-hanging fruit in tax revenue mobilization. Since most of the companies involved are already in the tax net, additional revenue could be obtained at a relatively low administrative cost (Murphy et al., 2014).

Tax Incentive in Ethiopia

Investment incentives

The current Investment Proclamation offers various incentives to investors with projects in the preferential investment sectors. The Council of Ministers Regulations No.270/2012 specifies the areas eligible for investment incentives as follows:

Customs duty

The Council of Ministers Regulations No.270/2012 specifies the areas eligible for investment incentives. The Government of Ethiopia grants customs duty exemption provided for investors engaged in eligible new enterprises or expansion projects, such as manufacturing, agriculture, agro-industries and other sectors.

- ✓ 100 percent exemption from the payment of customs duties and other taxes levied on imports is granted to all capital goods, such as plant, machinery and equipment and construction materials.
- ✓ Spare parts worth up to 15 per cent of the total value of imported investment capital goods, provided that the goods are also exempt from the payment of customs duties.
- ✓ An investor granted with a customs duty exemption will be allowed to import capital goods duty free indefinitely if his investment is in manufacturing and agriculture and for five years if his investment is in other eligible areas.
- ✓ An investor entitled to a duty-free privilege that buys capital goods or construction materials from local manufacturing industries will be refunded the customs duty paid for raw materials or components used as inputs for the production of such goods.
- ✓ Investment capital goods imported without the payment of custom duties and other taxes levied on imports may be transferred to another investor enjoying similar privileges.

Income tax exemption

Investors engaged in manufacturing and agro-processing, the production of agricultural products, the generation, transmission and supply of electrical energy, and information and communication technology development will be entitled to income tax exemption (Invest in Ethiopia, 2016):

✓ Foreign investors who establish a new enterprise in selected areas of Ethiopia (such as Gambella; Benishangul-Gumuz; Afar, Somali, Guji and Borena Zones in Oromia and other regions) will be entitled to an income tax deduction of 30 per cent for three consecutive years after the expiry of the income tax exemption period.
✓ An investor who expands or upgrades his existing enterprise and increases in volume by at least 50 per cent is entitled to income tax exemption.
✓ Investors that export at least 60 per cent of products or services, or supply the same to an exporter as production of service input, will be exempt from income tax for an additional two years.

Export incentives

The fiscal incentives given to all exporters are the following:

✓ With the exception of a few products (e.g. semi processed hides and skins-150 per cent), no export tax is levied on export products of Ethiopia.
✓ Duty drawback scheme: this scheme offers investors an exemption from the payment of customs duties and other taxes levied on imported and locally purchased raw materials used in the production of export goods.
✓ Bonded factory and manufacturing warehouse schemes: producers not eligible for voucher schemes but having been licensed for bonded factory and manufacturing warehouse schemes are entitled to operate such factories or warehouses to import raw materials duty free.
✓ Exporters are allowed to retain and deposit in a bank account up to 20 per cent of their foreign exchange earnings for future use in the operation of their enterprises, and no export price control is imposed by the National Bank of Ethiopia.

✓ Exporters can benefit from the export credit guarantee scheme presently in place in order to ensure an exporter receives payment for goods shipped overseas, in the event the customer defaults, reducing the risk of exporters' business and allowing it to keep competitive prices.

Remittance of capital

A foreign investor has the right to make the following remittances out of Ethiopia in convertible foreign currency:

✓ Profits and dividends.

✓ Principals and interest payments on external loans.

✓ Payments related to technology transfer agreements.

✓ Proceeds from the sale or liquidation of an enterprise.

✓ Compensation paid to an investor.

✓ Proceeds from the sale or transfer of shares or partial ownership of an enterprise to a domestic investor.

Loss carried forward

Business enterprises that suffer losses during the income tax exemption period can carry forward such losses, following the expiry of the income tax exemption period, for half of the tax exemption period.

2.1.4 The Efficiency and Effectiveness of Tax Audit

The effectiveness of tax audit program according to (Barreca and Ramachandran, 2014) Managing an effective auditing organization involves many decisions. What is the best audit selection strategy or combination of strategies? Should it be based on reported tax amounts or on the industry type? How should authority allocate audit resources among different tax types? Some tax types may yield greater per-audit adjustments. Others may be associated with a higher incidence of noncompliance. An audit is a process with many progressive stages, from audit selection and assignment to hearings, adjudication, and negotiation, to collection and, in some

cases, enforcement. Each stage involves decisions that can increase or reduce the efficiency of the overall auditing program.

The audit program of a revenue body performs a number of important roles that, effectively carried out, can make a significant contribution to improved administration of the tax system (OECD, 2006). A well-managed audit program plays a major role in managing compliance. An effective audit program will have significantly wider impacts than just raising revenue directly from audit activities (Biber, 2010).

By selecting the highest risk cases, efficiently detecting non-compliance, applying appropriate sanctions, and publicizing results of audit activity (either generally or specifically), taxpayers are put on notice that attempting to avoid tax will result in a high likelihood of detection and imposition of significant sanctions. Thereby, a well-planned audit program can provide the administration with significant leverage across the community rather than only impacting on the taxpayer selected for audit and collecting the tax that should have been paid in the first place. Additionally, a tax system that is perceived to be fair and equitable by punishing taxpayers who do not comply builds com-munity confidence and encourages compliance from the broader population as compliant taxpayers support the administration's efforts to deal with non-compliance (Biber, 2010 p. 10).

The impact of an effective audit should be seen in terms of the following effects:

- Corrective – making adjustments to rectify instances of non-compliance.
- Deterrent – influencing the behavior of the audited taxpayer or group of taxpayers to be compliant in future.
- Preventative – persuading the broader community to comply.

A well-structured audit program plays an important part in improving the effectiveness of other parts of the administration. As well as detecting and addressing non-compliance, audit can provide valuable support in the following areas: (Biber, 2010 P. 2)

- ❖ **Information and Intelligence.** By having extensive access to the business community, the audit program can gain a lot of information and intelligence that may inform the revenue administration of practices that may be jeopardizing compliance and revenue collection. This information is critical to the development of appropriate treatment strategies in other parts of the administration, for example, taxpayer service, policy and

legislation, collections and filing and payment enforcement, issuing taxpayer alerts,1 as well as influencing the selection of future audit and investigation cases.

❖ **Addressing deficiencies in the law.** Auditors will often detect taxpayer practices that exploit weaknesses in the law. Although not classified as evasion, these systemic avoidance practices may actually undermine the original intent of the relevant laws. Instances should be escalated to policy and legislation managers to address the issues through amending legislation.

Furthermore, if auditors observe recurring patterns of avoidance, it may indicate inappropriate penalty provisions that may need to be amended to provide an adequate deterrent.

❖ **Law clarification and education.** The audit program also plays an important part in clarifying the law and educating taxpayers on appropriate compliance measures, such as legal filing requirements, deductibility of expenses, and improved record keeping. As well as providing direct guidance to taxpayers during audit activity, the audit program should refer common areas of non-compliance to the taxpayer services program managers so that they can be addressed in wider taxpayer education initiatives.

According to Apostolou et al., 1993(as cited in Gebeyehu, 2008 p. 31) Audit effectiveness was measured by examining the amount of evidence selected for examination in relation to the total available evidence and an optimal level of evidence. Audit efficiency was then defined as audit effectiveness per unit of time by taking the audit effectiveness measure divided by minutes spent on the task. The key findings were that time pressure (manipulated by four levels of a time budget for the task) affected performance only at the extremes, with the highest time pressure group performing more efficiently than the auditors in the lowest time pressure group. Efficiency was also affected by audit program structure, with high structure (more detailed audit procedures listed) being associated with increased efficiency.

Audit efficiency is the ability to meet the budget and operational it as the percentage deviation between actual and budgeted hours. This research examined the effect of leader behavior on audit efficiency. Two leader behaviors—(1) facilitating cooperation and teamwork and (2)

administering discipline—resulted in increased audit efficiency. On the other hand, showing consideration contributed to reduced audit efficiency.

2.1.5 Legal Framework of Revenue Authority

The efficiency and effectiveness of a revenue body's audit activities depends critically on the nature and scope of powers in the underlying legal framework in place, including the provision of adequate powers for obtaining information and an appropriate regime of sanctions to deter and penalize non-compliance.

The efficient and effective conduct of audit activities requires that a revenue body's audit and investigation staff have appropriate powers of access to information held by the taxpayer and other parties so that taxpayers liabilities reported in their returns can be properly verified or, in the absence of returns, be accurately established. There should also be an appropriate regime of sanctions to punish and deter non-compliance. (OECD, 2016)

2.1.5.1 Tax payers Record Keeping Obligations

According to OECD (2006) all audit activities rely on the books and records kept by taxpayers. Throughout the world the legal requirements for recordkeeping only vary regarding the level of detail required. This may also depend on the type or size of the business being audited. Business enterprises in different countries are obliged to keep books and records; private persons are only required to in exceptional cases. Most countries have simplified accounting requirements for small enterprises and self-employed taxpayers.

2.1.5.2 Giving Tax Officials Access to Taxpayers' Books and Records

Legal provisions should give an auditor access to all tax-relevant information during an audit. Tax-relevant information is any piece of information (such as books and records, bank statements, trade letters, contracts etc.), which is essential to determine the correct amounts of tax due. Domestic information is information kept in the home country. It must be available to the auditor during an audit at his request within an acceptable time, whether in paper form or electronically.

Information held abroad mostly concerns multinational enterprises (MNE's) either as a parent company or as a foreign subsidiary. The ability to access information held abroad is subject to the provisions of the revenue body's Double Taxation Agreements and domestic laws.

The legal basis to require original documentation varies from across countries. In most countries, tax auditors can return to their office with any piece of information provided by the taxpayer (e.g. to make copies).

An auditor's ability to enter the taxpayer's premises adds value to an examination. The auditor can obtain an impression of the daily workflow and various assets used by the taxpayer to run his enterprise. Most countries allow access to the business premises. The majority of administrations require that any full audit is carried out at the business premises (OECD, 2006).

2.1.5.3 Giving Tax Officials Access To Third Party Information

All countries have legal provisions to support the auditor in cases where the taxpayer provides unsatisfactory information or the auditor must verify taxpayers' information using an independent or third party source. However, these provisions set limitations for auditors that can be summarized as follows:

   • Protection under a professional pledge of secrecy (e.g. lawyers, public and tax accountants);

   • Protection of trade or industrial secrets; and

   • Protection of taxpayers' privacy (OECD, 2006).

2.1.6   Audit Case Selection Methods

According to (OECD.2006) stated that the first key to successful audit is in the case selection methodology. Case selection through the use of risk management techniques is necessary to ensure that the audit program is fully in line with the administrations compliance strategy, and to set up the necessary audit trails to show why cases have, and have not, been made the subject of an audit. This subject is dealt with in some detail in companion papers to this document, the second of which also gives detailed case studies of some case selection frameworks in place.

Pre-contact analysis is considered an essential part of the audit process. Time invested here can pay dividends in terms of a reduced burden on taxpayers and reduced compliance resources expended during the audit. As the name suggests, this activity takes place before the audit begins, and where a thoroughgoing risk management process is in place, is an essential part of the risk analysis and prioritization process. In other circumstances the activity will be carried out by the auditor in preparing the audit plan.

One element of many case selection procedures that usually sits within audits teams is the manual review or screening of tax returns. There are a number of key facets in this process.

- Screening needs to be supported by appropriate training and guidance regimes, and to be fully integrated with the risk management process. The screening role can be carried out in local audit teams or in specialized (and centralized) units.

- The process is monitored to assure accuracy and the proper application of guidance. There are two general techniques:

- Managerial Review is a centralized screening procedure in which, a supervisory official reviews the work of the employees in the centralized unit. If the screening takes place at the local office, the auditor's manager conducts the quality review.

- Secondary Review is a centralized review function, which is responsible for all case processing activities. Once a no-audit decision is made, a sample of no audit cases is forwarded to the central review function for quality assessment. This activity may also be conducted as a post closed case review.

- An essential part of any such screening review is a review of prior audit history of the taxpayer, looking for evidence of previous issues with tax compliance, or conversely confirmation of a previously blameless compliance history.

- Where IT-based initial selection procedures are in use, the physical screening is usually a second order check, to validate the decision to audit or to give evidence supporting a decision not to audit.

- Written documentation of a no-audit decision is usually required.

2.1.7 Audit Work Force Management

Appelgren (2008) stated that, internationally, the practice of staffing the tax audit department with career auditors is becoming less common, with more organizations using the function as a training ground for future management personnel. This practice is designed to help the organization train well-rounded senior managers. Tax auditors perform a wide variety of activities across different departments within the organization. They have opportunities to learn how these departments function and how they are managed. Furthermore, managers who have had experience in tax auditing should have a better understanding of the importance of internal control. The ability to use tax audit roles as a stepping stone to managerial positions is seen as one of the advantages of having an in-house tax audit function rather than outsourcing audit activities.

The degree to which tax auditing can lead to a managerial career in the organization may influence the effectiveness of tax auditing. This is perhaps more true today than in the past. As noted, career auditors are becoming less common than generalists who are interested in management careers and who therefore are more likely to take a local than a cosmopolitan point of view. It can be argued that under these conditions, tax auditors who operate in settings with more organizational career opportunities will invest more effort in their work in order to increase their promotion opportunities. Those with fewer opportunities for organizational advancement will invest less effort in their work, resulting in a lower performance level. This is likely to be true even if the individuals working in such settings are cosmopolitans who place less value on an organizational career, since – given current trends – they have fewer opportunities than in the past for career growth as specialist tax auditors Appelgren et al., (2008).

As OECD (2006a) stated, revenue bodies must manage and develop their audit workforce to deliver their planned outcomes through increasingly designing and implementing capability or competency models. Capability or competency model refers to a formal specification of the skills, knowledge and attributes of staff that are required to perform a specific job in an efficient and effective manner. The model generally contains job descriptions, functional descriptions, and competency profiles using task related competencies.
It is typically supported by training, exams, and educational requirements to ensure and build capability. The model is used as a basis for managing performance, training, staff development, and recruitment across the audit function.

- **Required capability**

According to OECD (2006a) stated, the required capabilities of auditors are generally identified by analyzing the activities required to perform particular audit tasks, and through practice and experience. In addition to their primary role of detecting and deterring noncompliance, tax auditors are often required to interpret complex tax laws and conduct intensive examinations of taxpayers' books and records. Hence, revenue bodies pay close attention to the overall management of the tax audit function, and particularly to the strategies and methods used for recruiting, developing and managing individual audit staff.
Thus, tax auditors should have a capability to: conduct investigations, determine compliance, tax accounting and financial analysis, conduct research and analysis, make effective

decisions under the law, effective communication, apply work processes and procedures, and manage own work and relationships (OECD 2006b).

- **Competency assessment**

It is important for tax administrations to assess and evaluate the competencies of their staff. The direct manager commonly performs competency assessments during recruitment and promotional processes on an annual or semiannual basis for those staff maintaining current positions (OECD 2006a). Assessments performed as part of recruitment processes are often performed by external specialists, human resource departments and/or panels of internal subject matter experts. Other events triggering capability assessments include prior to performing a new type of work, prior to starting a new role, and ongoing informal assessments and learning and development activities (OECD 2006b).

- **Improving competency and addressing capability gaps**

Responsibility and accountability for improving auditors, audit managers and audit directors commonly lies with the staff member in question and their direct manager and/or local management team. Competency improvement should be integrated (not be seen as extra task) into normal business activities. Together with tax auditing or training departments, human resource departments (where applicable) often have joint responsibility and be significant contributors to the improvement process (OECD 2006a).

Revenue bodies may develop staff and address capability gaps through recruitment processes and the use of programs such as training and development programs, mentoring and coaching programs, accreditation models, job rotation and/or placement programs, career paths, knowledge sharing initiatives and knowledge tests. Capability gaps are typically gathered from various sources including quality management system results, performance system interviews and appraisals, client professionalism, satisfaction and other similar surveys, and training program evaluations (OECD 2006b).

2.2 Empirical Evidences

This topic of the research covers topics about the findings of different researchers about the effectiveness of tax audit in revenue collection in different countries separately and in case of Ethiopia. Each finding by researchers was summarized separately and was used to analyze with what the researcher did.

2.2.1 Empirical Evidences on Determinants of Tax Revenue in Different Countries

Bortey (2011) in a study found that Tax Audit is a key component in any attempt to enhance revenue generation and has a major part to play in tax administration, it has become even more important under the current dispensation of tax administration which is gearing more towards self- assessment by tax payers rather than administrative or provisional assessment of taxpayers by tax officers. The self-assessment regime requires for a very efficient and effective tax audit to maximize tax collection and eliminate tax avoidance and evasion. It is recommended that the tax audit unit be expanded to cover the whole nation and tax auditors be aided to be abreast with the tax law and their skills be enhanced through training, refresher courses and attachment to well established tax audits units of revenue collecting agencies of friendly nations.

Mirera (2014) investigates that Tax audit actually has an effect to revenue collection as according to the t – tests there is significance in the correlation between tax collected before the audit and after the audit. This clearly indicates that tax audit increases revenue collection. That in essence means that the more the tax audit conducted the more revenue is collected. Thus it is right to say that tax audit is directly related to revenue collection. All the tax audits are important because they add something to revenue and thus should be encouraged as it assists the government in collecting appropriate tax revenue necessary for budget, maintaining economic and financial order and stability, to ensure that satisfactory returns are submitted by the tax payers, to organize the degree of tax avoidance and tax evasion, to ensure strict compliance with tax laws by tax payers, to improve the degree of voluntary compliance by tax payers and to ensure that the amount due is collected and remitted to government.

2.2.2 Empirical Evidences on Tax Revenue in Case of Ethiopia

Ayalew (2014) found that perceived adequacy or inadequacy of both organizational independence and audit quality extends noticeable influence on perception of tax audit effectiveness. The influence of organizational independence on tax audit effectiveness may be attributed to the audit quality. Tax audit effectiveness and their perception come from the independence; tax auditors' positive attitude towards various components and their professional proficiency.

The research examines the taxpayers' cooperation with the tax systems and auditors during auditing. Findings of the research indicated that majority of the respondents replied that, most taxpayers may not cooperate to the tax system and the tax auditors without knowledge of sufficient tax laws and regulations, according to this perception, auditors penalize taxpayers instead of educating them, low level encourage honest taxpayers, and also deliberately some taxpayers do not support the tax auditors during the audit. It can be concluded that most taxpayers are noncompliance as result they impeded the tax audit effectiveness.

Mihret (2011) investigated that the problems in tax audit practice in Ethiopia (the case of the federal government). The study was conducted to investigate the tax audit practice, and to identify the main problems of the tax audit program performed that affects tax revenue collection and taxpayers" voluntary compliance in the Ethiopian tax system. The study adopted both quantitative and qualitative approaches. Specifically, the techniques used in the study include survey with tax auditors and investigators, in-depth interviews with tax officials and taxpayers, and documentary analysis.

Tax audit program remains undeveloped with an emphasis on comprehensive and desk audit with the exclusion of other audit methodologies. There is a slight range of tax audit activities performed targeting aptly specific risks, which might result in less proportionate and measured responses in terms of additional revenue collection and voluntary compliance improvement.

Further, the audit program performed in ERCA could detect noncompliance behavior of individual taxpayers, and used as a compliance enforcement tool to collect unpaid or evaded tax return and to ensure the deterrent effect. Through audit, ERCA utilizes its enforcement powers in addressing tax revenue in arrears and evasion challenges, and

makes its power visible to the community to encourage noncompliant taxpayers to comply. However, tax audit practice in ERCA is a toddler tool in improving voluntary compliance through helping taxpayers to understand their tax and customs obligations that could generate the right tax revenue at the right time.

Currently, segmentation approach is adopted and would provide one spot customer service that might result customer satisfaction, and minimizes both taxpayer compliance costs and tax administrative costs. However, tax audit program is mainly directed to specific segments and sectors those have large tax potential with less emphasis to medium and small category of taxpayers" community. In addition, the audit coverage is unsatisfactory that might be due to inappropriate audit type adopted and resource constraint.

2.3 Summary and Knowledge Gap

Tax audit is important because it assist the government in collecting appropriate tax revenue necessary for budget, maintaining economic and financial order and stability, to ensure that satisfactory returns are submitted by the tax payers, to organize the degree of tax avoidance and tax evasion, to ensure strict compliance with tax laws by taxpayers, to improve the degree of voluntary compliance by tax payers and to ensure that the amount due is collected and remitted to government.

From the empirical literature studied it can be noted that effectiveness of tax audit are determined by the tax incentives and tax exemption, legal frame work, audit selection process, and auditor's performance and management support. Effectiveness of tax audit plays a key role in the revenue generation. Therefore, this study also aims to establish the relationship between effectiveness of tax audit (ETA) and the independent variables that affect the effectiveness of tax audit in the case of Ethiopian Revenues and Customs Authority Large Tax Payers Branch Office.

The research intended to fill the gap identified in some researchers done by some few scholars so far literatures (Bortey, 2011) Improving Revenue Collection through Tax Audit Practice: The Case of Ghana Revenue Authority, (Mirera, 2014) The Effects of Tax Audit on Revenue Collection: Case of Kenya Revenue Authority, (Mihret, 2011) Tax Audit Practice in Ethiopia: The Case of The Federal Government and (Ayalew, 2014) Factors Affecting Tax Audit Effectiveness a Study on Category 'A' Taxpayers in Bahir Dar City Administration Revenue Office .

To enhance efficiency and effectiveness of tax audit by eliminating bureaucracy, by educating tax payer and giving training to the audit staff. To eliminate tax evasion, tax avoidance and other irregularities by simplifying and streamlining procedures and improving tax payer service and education there by increasing the amount of revenue. Therefore my study is focuses on LTO have good tax audit practice to eliminate or reduce tax evasion and avoidance and give some comments regarding this issue.

2.4 Conceptual Framework (Model)

The conceptual framework effectiveness of tax audit explains the relationship between the revenue collection, legal framework, audit selection process and auditors' performance and management support. It tries to explain the factors that can contribute to effectiveness of revenue collection. Tax incentives such as exemptions to several entities to motivate them as well as to encourage investment can lead to ineffective tax collection. Tax evasion also can lead to ineffective revenue collection LTO cannot reach the target of tax collection. Due to these variables LTO should revise the policy used in revenue collection and reduce exemptions as well as filling the gap for tax evasion.

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Tax Incentives and Tax
Exemptions
                                    Effectiveness of Tax
Legal Framework                     Audit

Audit Selection Process

Auditors Performance and
Management Support
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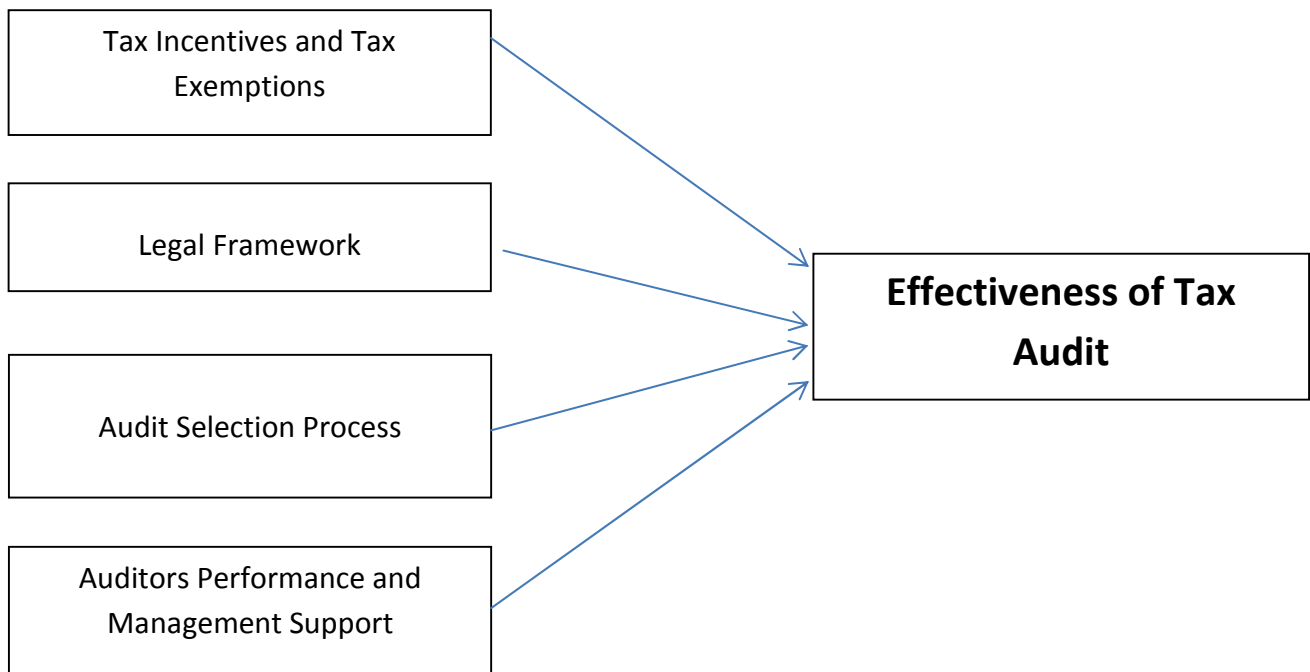
CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

The previous chapter reviewed both theoretical and empirical studies, and it is tried to give a brief conclusion and analysis. This chapter specifies the methods and procedures employed in carrying out this research. It also specifies the study area, research design, sources of data, procedures for data collection, sample size determination, sampling procedure, as well as method or technique employed in the analysis of data.

3.2 Description of The Study Area/Location

ERCA has categorized tax payers in different segments based on the amount of annual turnover as: large, medium and small and micro tax payers. Based on this, Large Tax Payers Office is among the branches. The study conducted at branch level Ethiopian revenue and customs authority large tax payer's branch office.

3.3 Research Approach

In order to achieve the general and specific objective of this study, the researcher adopted mixed methods approach; mixed approach includes the use of theory deductively in theory testing and verification, or inductively in an emerging theory or pattern (Creswell, 2007). For this study, the researcher applied qualitative (interview and document analysis) and quantitative (questionnaire), and they are discussed in the following sub-sections. The researcher distributed the questioners to the 85 tax auditors of LTO and the data was processed on SPSS version 20.0 to make multiple regression and descriptive statistics.

3.3.1 Qualitative Research Approach

Qualitative research is an approach for exploring and understanding the meaning individuals or groups attribute to a social or human problem. The process of research involves emerging questions and procedures, data typically collected in the participant's setting, data analysis inductively building from particulars to general themes, and the researcher making interpretations of the meaning of the data (Creswell et al, 2007).

❖ **Interview**

As a part of the qualitative research method, interviews were conducted by the researcher with some managers of LTO. The aim of such interviews was to find out the perceptions of these managers about the tax auditing situation in Ethiopia. As regards interviews with the managers of LTO, it is to be pointed out that prior to conducting interviews; attempts were made to gather information through unstructured interviews.

3.3.2 Quantitative Research Approach

Quantitative research is an approach for testing objective theories by examining the relationship among variables. These variables, in turn, can be measured, typically on instruments, so that numbered data can be analyzed using statistical procedures (Creswell et al, 2007).

❖ **Questionnaire**

Questionnaire design for tax audit surveys typically helps to extract information on the characteristics of the audit practice, the time spent on each tax audit case by tax auditors, issues of tax evasion, and tax related malpractices by tax payers; and any other related issues.

3.3.3 Mixed Research Method

Mixed methods research is an approach to inquiry involving collecting both quantitative and qualitative data, integrating the two forms of data, and using distinct designs that may involve philosophical assumptions and theoretical frameworks (Creswell et al, 2007).

3.4 Data Collection Method

The data used in this study consists of both primary and secondary data. The primary data were collected through questionnaire and interview. The questionnaire comprised of both closed and open ended questions. Closed ended questions are quicker and easier both for respondents and researcher. Most of the closed ended questions are designed on an ordinal level of measurement basis, and others are closed ended questions were a five scored likert scales (Kothari, 2004) to provide respondents a wider range of alternatives to provide respondents a wider range of alternative with end points where "5" the level of agreements are represent by 1 to 5. Strongly agree 5, agree 4, neutral 3, disagree 2, and strongly disagree represented by. Adding one open

ended questions allows respondents to offer an answer that the researcher didn't include in the questions. And also, interviews were made for those most related tax officials.

Secondary data were also collected from the Ethiopian Revenues and Customs Authority Large Taxpayers Branch Office Tax Audit Annual Report and Customer Service Process the data was number of taxpayers by sector for the year 2016/2017 and revenue performed and audit coverage from the year 2003 – 2008E.C.

Twelve questions were developed as a guide for the semi-structured interview sessions. These interview questions were formulated with reference to the topics under study. The interviews was designed and administered to tax manager and supervisors. The prepared interviews guide were verified and checked for its authenticity for the use in this study. The interview aims at the capacity of tax collection, type of tax audit, the impact of tax incentives and tax exemption, legal framework about tax audit, the audit selection process and the auditor performance and management support.

3.5 Sampling Technique

3.5.1 Target Population

The population of the study includes the entire set tax auditors in large tax payer's office. Accordingly, the target groups for the study were 85 tax auditors of large tax payer's office. In large taxpayer's office there were 2 audit processes, which coordinate 85 audit experts which were available on the two processes of large tax payer's office as of May, 2017.

3.5.2 Sampling Techniques

To achieve the objective of the study the researcher used Census method. Because Census method is most reliable sampling techniques especially if the number of population is small. All items in any field of inquiry constitute a 'Universe' or 'Population.' A complete enumeration of all items in the 'population' is known as a census inquiry. It can be presumed that in such an inquiry, when all items are covered, no element of chance is left and highest accuracy is obtained. To ensure the validity of the findings, the study used adequate sample size. (Kothari, 2004). Secondary data sampling the study used a sample of 33 taxpayers audited in three consecutive years from 2012-2014 by using convenience sampling method.

3.6 Definition of Variables

3.6.1 Dependent Variable

The dependent variable for this research is the effectiveness of tax audit. The researcher used the summative score techniques for the questions in each factor for each participant. This is because Likert scale is the common summative scores (Balnaves and Caputi, 2001).

3.6.2 Independent Variable

This study focused on four independent variables that might have an impact on the effectiveness of tax audit in revenue generation in LTO. Those predicted variables investigated in this research are: tax policy regarding tax incentives and tax exemption, legal frame work, audit selection process and Auditors performance and management support. It should be noted that the data for the independent variables were collected from the tax auditors of Ethiopian Revenues and Customs Authority Large Taxpayers Branch Office.

3.7 Data Analysis

Data analyses are conducted through a descriptive statistics to provide details regarding the demographic question and the various factors that affect the effectiveness of tax audit in the LTO. To evaluate the effects of tax audit in revenue generation in LTO the correlation analysis were used.

And also, the Statistical Package for Social Sciences (SPSS) version 20 and Excel were used for the data analysis. In order to assess the reliability and consistency of the instrument the Cronbach's Alpha (α) analysis was conducted. Whereas, to determine the relationship among the variables and to test the research hypothesis correlation and regression analysis method are used by meeting the ordinary least square (OLS) assumptions of the linear regression.

3.8 Model Specification

The researcher use Classic Linear Model the model was formulated for this research in order to test the research hypothesis developed.

$$ETA = \alpha_i + \beta_1 * TI + \beta_2 * LFW + \beta_3 * ASP + \beta_4 * APMS + E$$

Where;

ETA: Effective Tax Audit

TI: Tax Incentives and Tax Exemption

LFW: Legal Framework

ASP: Audit Selection Process

APMS: Auditors Performance and Management Support

α_i: is a constant, which represent the effectiveness of Tax Audit when every independent variables are zero.

β_1 to β_4: are the coefficients, in which every marginal change in the independent variables that affect tax audit, and

E: The error term

The predictors mean score values and the beta coefficient values found from the SPSS output and presented in the regression table show how each variable was operational and measured to show its marginal contribution to the dependent variable that is the effectiveness of tax audit.

CHAPTER FOUR
DATA ANALYSIS AND FINDINGS

4.1 Introduction

This chapter gives an overview of the effectiveness of tax audit in revenue generation in the case of LTO. The chapter analysis the data collected by questionnaire, interview and also discusses the different finding from document. The questionnaire was prepared and distributed to collect primary date from the tax auditors. The target population for this study was tax auditors in Ethiopian Revenue and Customs Authority Large Taxpayers Branch Office. Questionnaires was filled by 85 tax auditors of LTO at the end of the collection process, I had received 79 respondents.

The descriptive statistics utilized in this research used to analyze the demographic data included frequency and percentages. The data collected from the returned questionnaire were entered into SPSS (Statistical package for social science software) version 20 for analysis. The data was sorted to group questions according to applicable constructs under test. Finally correlation and regression analysis was performed. In this study, a multiple regression analysis was performed by using all the discrete variables (dependent and independent) variables available in the dataset. The location of the study was LTO.

4.2 Demographic Data

In these section provides information on the personal information of the respondents, educational background and work experience in the study. By two sections the first section includes gender and age and the second section include educational background and work experience.

4.2.1 Background of Respondents

This section provides information on the backgrounds of the respondents in the study. Personal details of respondents covered are gender and age. Table 1 show that majority of respondent tax auditors (69.6 per cent) were between 26 and30 years and (2 per cent) were above 50. And also shows the gender distribution of the total respondents, 53.2 per cent were males and 46.8 per cent were females. This shows that majority of tax auditors in LTO male and the ages between 26 and 30 years.

Table-1Gender and Age

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	42	53.2	53.2	53.2
Female	37	46.8	46.8	100.0
Total	**79**	**100.0**	**100.0**	
Below 25	17	21.5	21.5	21.5
Between 26 and 35	55	69.6	69.6	91.1
Between 36 and 45	5	6.3	6.3	97.5
Above 45	2	2.5	2.5	100.0
Total	**79**	**100.0**	**100.0**	

Source: Questionnaires and SPSS output (2017)

4.2.2 Educational Background and Work Experience of Respondents

Educational levels, field of study, work experience and position of the tax auditors in LTO are the most important variables that can affect the performance of tax audit as well as tax administration system. Generally the respondent's level of education and work experience are presented in Table 2. Regarding educational level, 87.3 per cent of respondents were BA degree holder, and 12.7 per cent of respondents were MSc/MA and above holders. The respondents studied Accounting (70.9 per cent), Management (11.4 per cent), Economics (12.7 per cent), and Others (5.1 per cent). Regarding work experience in LTO, most of the auditors (58.2 per cent) 0-5 years' work experience, 6-10 years' work experience (35.4 per cent), and above 10 years' work experience (6.4 per cent). Regarding position in LTO most of LTO auditors are Senior Auditors (48.1 per cent), Junior Tax Auditors (36.7 per cent), Team Leader (8.9 per cent) and Tax Auditor (6.3 per cent). And also regarding experience in current position in LTO 0-2 years (60.8 per cent), 3 – 5 years (30.4 per cent), 6 – 10 years (8.9 per cent).

Table 2 Educational Level and Work experience

Level of education				
	Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Degree (BA/BSc)	69	87.3	87.3	87.3
MSc/MA and Above	10	12.7	12.7	100.0
Total	79	100.0	100.0	
Field of Study				
Accounting	56	70.9	70.9	70.9
Management	9	11.4	11.4	82.3
Economics	10	12.7	12.7	94.9
Others, please specify	4	5.1	5.1	100.0
Total	79	100.0	100.0	
Current Position in LTO				
Junior Tax Auditor	29	36.7	36.7	36.7
Tax Auditor	5	6.3	6.3	43.0
Senior Auditor	38	48.1	48.1	91.1
Team Leader	7	8.9	8.9	100.0
Total	79	100.0	100.0	
Experience in LTO				
0 – 5 years	46	58.2	58.2	58.2
6 – 10 years	28	35.4	35.4	93.7
11 – 15 years	4	5.1	5.1	98.7
More than 15 years	1	1.3	1.3	100.0
Total	79	100.0	100.0	
Experience in current position				
0 – 2 years	48	60.8	60.8	60.8
3 – 5 years	24	30.4	30.4	91.1
6 – 10 years	7	8.9	8.9	100.0
Total	79	100.0	100.0	

Source: Questionnaires and SPSS output (2017)

4.3 Reliability Analysis

To measure the consistency of the questionnaire particularly the Likert-type scale the reliability analysis is essential in reflecting the overall reliability of constructs that it is measuring. To carry out the reliability analysis, Cronbach's Alpha (α) is the most common measure of scale reliability and a value greater than 0.700 is very acceptable (Field, 2009; Cohen and Sayag, 2010) and according to Cronbach's (1951), a reliability value (α) greater than 0.600 is also acceptable.

Table 3 Reliability Statistics

Reliability Statistics		
Cronbach's Alpha	**Cronbach's Alpha Based on Standardized Items**	**N of Items**
.732	.628	5

Source: Questionnaires and SPSS output (2017)

From table 3 above, the value for Cronbach's Alpha (α) was 0.732 for all variables. When these calculated reliability values are greater than 0.700, and compared with the minimum value of alpha 0.600 advocated by Cronbach's (1951), then the responses generated for all of the variables' used in this research were reliable enough for data analysis.

4.4 Descriptive Statistics

Descriptive statistics (mean and standard deviation) of the respondent scores were completed. Analysis has been done by comparing these mean scores and deviation among respondents. The reason for using descriptive statics is to compare the different factor that affect the effectiveness of tax audit of LTO by using the mean and standard deviation values. The respondents' perception on the effectiveness of tax audit in LTO was done on each variable.

4.4.1 Tax Policy Regarding Tax Incentives and Tax Exemption

The study conducted on the tax policy regarding tax incentive and tax exemption reveals the mean score value of the category in average was 1.86 which falls on a level of agreement was disagree. This implied that the overall average response for the tax incentive and tax exemption

was disagreed by the respondents. All the questions under the category have got relatively low rate as explained by mean scores of each of 1.44, 1.84, 1.30, 1.82 and 1.90 respectively. The summative score of questionnaires designed for the tax incentives and tax exemption category revealed that tax incentives and exemption have a negative impact on the effectiveness of tax audit by reducing amount of revenue collected, tax avoidance, evasion and imbalance computation.

Table 4 Tax Incentive and Tax Exemption

Tax Incentive And Tax Exemption	N	Mean	Std. Deviation
Large taxpayers are properly using their tax incentives.	79	1.44	.500
Investors are more likely to be driven in to a country by tax incentive and exemptions instead of a stable economic and political environment, good infrastructure and availability of basic services.	79	1.84	.373
The lack of proper valuation of imported item free from duty and taxes have not impact on domestic taxes loss by overstated the cost of capital goods.	79	1.30	.463
Tax exemption and incentives can not a means of tax avoidance, evasion and imbalance computation.	79	1.82	.384
Tax incentives have a positive impact on the revenue collection.	79	1.90	.304
	79	**1.86**	**.348**

Source: Questionnaires and SPSS output (2017)

4.4.2 Legal Framework of Tax Audit

The study sought to establish the view of the respondents regarding the determinant factors for the effectiveness of tax audit. The findings are presented in the Table 5 as follows:-The study conducted on the legal framework reveals that the mean score value for the category in average was 3.28 which falls on an agree degree of agreement. This implied that the overall average response for the legal frame work of tax audit was agreed by the

respondents. All the questions under the category have got relatively high rate as explained by mean scores of each of 1.86, 2.48, 4.48, and 3.58 respectively. The summative score of questionnaires designed for the legal frame work of tax audit revealed that appropriate powers of access to information held by the taxpayers, tax directive, accounting software and the new Federal Income Tax proclamation is very important for the effectiveness of tax audit. The legal frame work of tax audit contributed in particular as indicated with a mean score of 3.28.

Table 5 Legal Framework of tax audit

Legal Framework of Tax Audit	N	Mean	Std. Deviation
A revenue body's audit and investigation staff have appropriate powers of access to information held by the taxpayers and other parties.	79	1.86	.348
Tax directives are manageable and easily reachable to the auditors and taxpayers.	79	2.48	.890
Accounting software's uses taxpayers are not easily accessible by the tax auditors and have own impact the efficiency and effectiveness of tax audit.	79	4.48	.845
The new Federal Income Tax Proclamation No. 979/2016 and Federal Tax Administration Proclamation No. 983/2016 are simplifying the legislation and avoid the law interpretations in different ways.	79	3.58	.744
The large taxpayers' branch office obligates the taxpayers for properly using the whole accounting software modules and provides information to the tax auditor.	79	2.34	1.475
	79	3.28	.530

Source: Questionnaires and SPSS output (2017)

37

4.4.3 Tax Audit Selection Process

The study conducted on the tax audit selection process revealed that mean score value for the category in average was 2.67 which falls on the neutral degree of agreement. This implied that the overall average response for audit selection process was neutral. All the questions under this category have got mean scores of each 2.56, 2.85, 2.0, 2.66 and 2.82 respectively. So, the study revealed that the existence of tax audit selection process does affect to some extent like other variables. In other words, the mean score in the category was 2.67.

Table 6 Tax Audit Selection Process

Tax Audit Selection Process	N	Mean	Std. Deviation
The risk selection team timely available accurate and comprehensive data from the system, taxpayers and third parties.	79	2.56	.916
Taxpayers are selected to audit is based on their associated compliance risk.	79	2.85	.975
The risk management staffs in numbers and the availability of relevant knowledge and skills to updating audit case selection process are enough on the level of the branch.	79	2.01	1.160
The current risk-based tax audit system optimizes tax collection, while being fair, equitable, and less prone to corruption.	79	2.66	.973
Taxpayers that were audited in the previous audit period and found no tax liabilities owed during an audit are selected for audit in the current audit period.	79	2.82	.997
	79	**2.67**	**.828**

Source: Questionnaires and SPSS output (2017)

4.4.4 Auditors Performance and Management support

The study conducted on the Auditors performance and management support revealed that the mean score value for the category in average was 3.25 which falls on an agree degree of

agreement. This implied that the overall average response for the auditors' performance and management support was agreed by the respondents. All the questions under this category have got high rate as explained by mean scores of each of 2.53, 2.57, 2.59, 3.99 and 4.57 respectively. The summative score of questionnaires designed for the auditors performance and management support in terms of Adequate man power, knowledge and experience to conduct tax audit, Management assistance, and encouraging tax official.

Table 7 Auditors performance and Management Support

Auditors Performance and Management support	N	Mean	Std. Deviation
Large taxpayer's branch office has adequate man power in numbers, knowledge and experience to conduct tax audit.	79	2.53	.985
The management of LTO gives close attention for the tax audit by assigning appropriate and skilled persons allocating sufficient resources.	79	2.57	.983
LTO perform a continuous assessment to improve the capability or competency of staff resources, auditors and investigators.	79	2.59	.954
Encouragement of the tax officials could promote productivity.	79	3.99	.742
Corruption and gross abuse of powers of tax official can lead to ineffectiveness.	79	4.57	.728
	79	**3.25**	**.588**

Source: Questionnaires and SPSS output (2017)

In summary, it is found from the descriptive analysis that all the independent variables except the tax incentives and tax exemption affect the effectiveness of tax audit in Ethiopia Revenue and Customs Authority Large Tax Payers Branch Office.

Table 8 Effectiveness of Tax Audit

Effectiveness of Tax Audit	N	Mean	Std. Deviation
Effects of Tax Audit on Revenue Collection	79	3.43	.547
Tax Policy regarding to tax incentive and tax exemption	79	1.86	.348
Legal Framework of Tax Audit	79	3.28	.530
Tax Audit Selection Process	79	2.67	.828
Auditors performance and management support	79	3.25	.588

Source: Questionnaires and SPSS output (2017)

4.5 Assessment of Multicollinearity

Multicollinearity exists when there are strong correlations among the predictors and the existence of r value greater than 0.80, tolerance value below 0.10 and Variance Inflation factor (VIF) greater than 10 in the correlation matrix are the causes for the multicollinearity existence (Field, 2009). Tolerance is a statistics used to indicate the variability of the specified independent variable that is not explained by the other independent variables in the model.

Table 9 Colinearity Statistics

Coefficients[a]		
	Collinearity Statistics	
Model	**Tolerance**	**VIF**
1 (Constant)		
Tax policy regarding to tax incentive and tax exemption	.857 1.167	
Legal framework of tax audit	.637	1.570
Tax audit selection process	.396	2.522
Auditors performance and management support	.529	1.891

a. Dependent Variable: Effectiveness of Tax Audit on Revenue Collection

As shown in the Collinearity table, the tolerance levels for all variables are greater than 0.10 and the VIF value are less than 10 (see table 9 above), and also the correlation matrix of all the variables have the paired values among the predictors are less than 0.80 (see table 9 above) indicates that there were no multicollinearity problems that alters the analysis of the findings, rather it leads to the acceptance of r value, tolerance and VIF values.

4.6 Correlation

In this section the correlation between effectiveness of tax audit and explanatory variables; tax incentives and tax exemption, legal framework, audit selection process and auditors' performance and management support have been presented and analyzed. A correlation matrix is used to ensure the correlation between explanatory variables.

There were strong correlation between the dependent variable effectiveness of tax audit (ETA) and independent variables Legal Frame work (r = 0.687), Audit Selection process (r= 0.854) and Auditors performance and management support (r = 0.733) with (P<0.01) level of significant, shows a strong support for second, third and fourth hypothesis respectively. However tax audit effectiveness is negatively related to tax incentives with r = -.421, p>0.01.

Table 10 Correlation Matrix

Correlations

		TI	LF	AS	APMS
ETA	Pearson Correlation	1	-.421**	.687**	.854**	.733**
	Sig. (2-tailed)		.000	.000	.000	.000
TI	Pearson Correlation	-.421**	1.000	-.274*	-.339**	-.327**
	Sig. (2-tailed)	.000		0.015	0.002	0.003
LF	Pearson Correlation	.687**	-.274*	1.000	.592**	.347**
	Sig. (2-tailed)	.000	0.015		0.000	0.002
AS	Pearson Correlation	.854**	-.339**	.592**	1.000	.674**
	Sig. (2-tailed)	.000	0.002	0.000		0.000
APMS	Pearson Correlation	.733**	-.327**	.347**	.674**	1.000
	Sig. (2-tailed)	.000	0.003	0.002	0.000	
	N	79.000	79.000	79.000	79.000

*. Correlation is significant at the 0.05 level (2-tailed).

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

Source: Questionnaires and SPSS output (2017)

4.7 Linearity Test

Linearity refers to the degree to which the change in the dependent variable is related to the change in the independent variables. To determine whether the relationship between the dependent variable effectiveness of tax audit in revenue generation; tax incentives and tax

exemption, legal frame work, tax audit selection process, and Auditors performance and management support are linear; plots of the regression residuals through SPSS software had been used.

Figure 1 Linearity Test

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: EFFECTS OF TAX AUDIT ON REVENUE COLLECTION
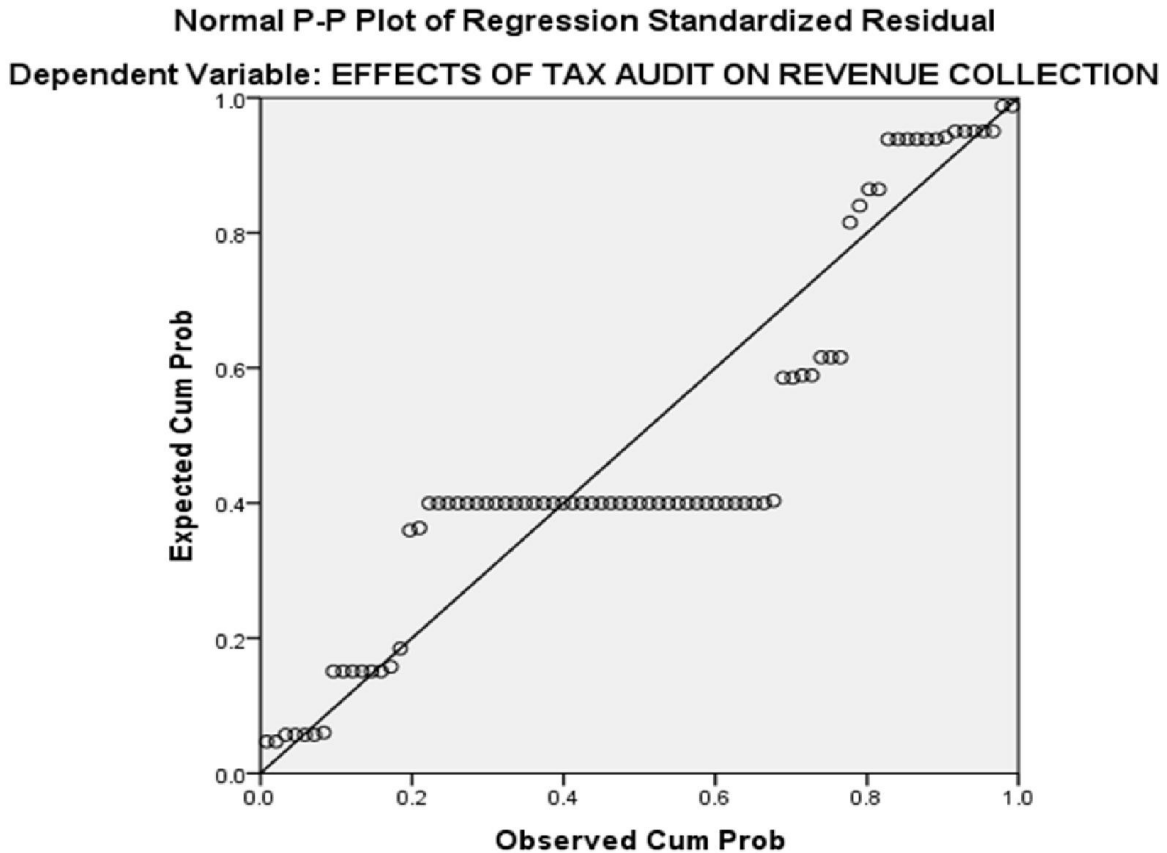
Source: Questionnaires and SPSS output (2017)

The scatter plot of residuals shows no large difference in the spread of the residuals as you look from left to right on figure. This result suggests the relationship we are trying to predict is linear. Similarly, the above figure shows the normal distribution of residuals around its mean of zero. Hence the normality assumption is fulfilled as required based on the above figure, it is possible to conclude that the inferences that the researcher will made about the population is somewhat valid.

4.8 Normality Test

The figure shows the frequency distribution of the standardized residuals compared to a normal distribution. As you can see, although there are some residuals (e.g., those occurring around 0) that are relatively far away from the curve, many of the residuals are fairly close. Moreover, the histogram is bell shaped which lead to infer that the residual (disturbance or errors) are normally distributed. Thus, no violations of the assumption normally distributed error term.

Figure 2 Normality Test

Histogram
Dependent Variable: EFFECTS OF TAX AUDIT ON REVENUE COLLECTION

Mean = -2.05E-15
Std. Dev. = 0.974
N = 79
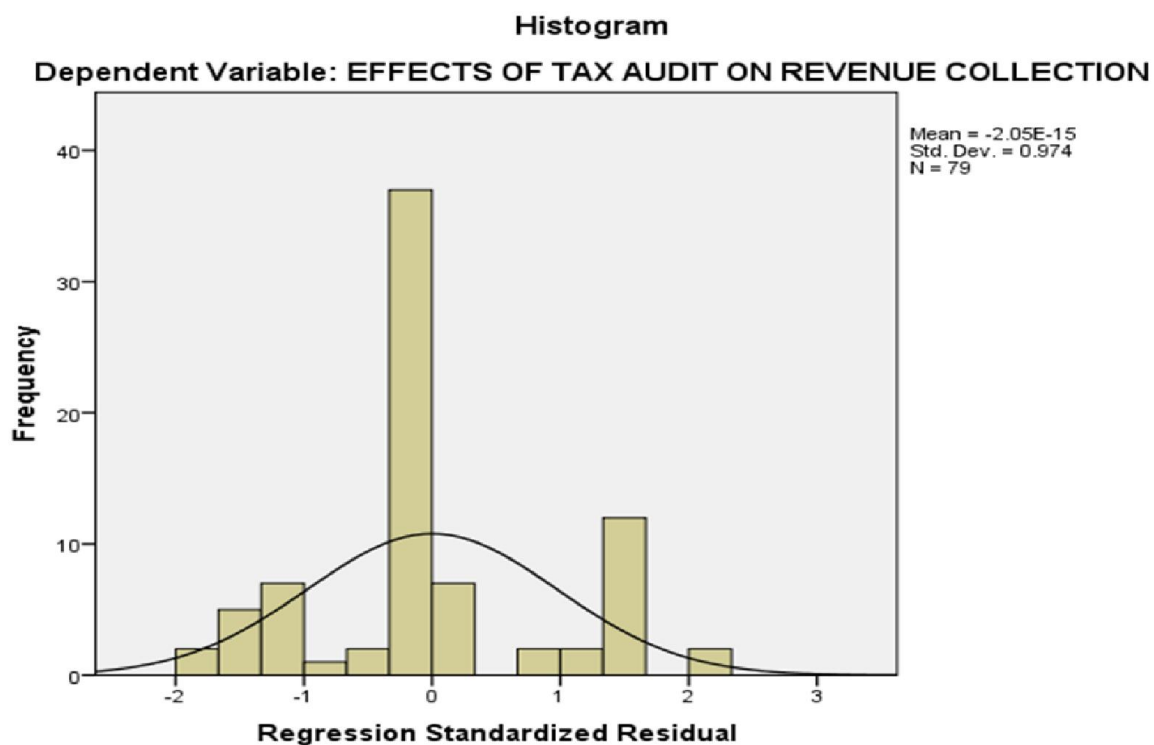
Source: Questionnaires and SPSS output (2017)

Thus, from an examination of the information presented in all the three tests the researcher conclude that there are no significant data problems that would lead to say the assumptions of classical linear regression have been seriously violated.

4.9 Regression Analysis

The study conducted a cross-sectional multiple regression analysis for the independent variables and the dependent variable. Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (effectiveness of tax audit) that is explained by all the four independent variables (Tax Incentives and Exemption, Leal Framework, Audit Selection process and Auditors performance and Management Support). As indicated in the model summery (Table11) the appropriate indicators of the variable used to identify the ETA were explored. That is, the value of R square used to identify how much of the variance in the dependent variable (ETA) identified by the model. The larger the value of R square, the better the model is. The overall contribution of Tax Incentives and Exemption, Leal Framework, Audit Selection process and Auditors performance and Management Support for the effectiveness tax audit, accounted for 83% (adjusted R2 = 0.833). The rest 17% represents other independent `variables not included in this study. Therefore, further research should be conducted to investigate the other (17%) factors influencing tax audit effectiveness in Ethiopian Revenue and Customs Authority Large Tax Payers Branch Office.

Table 11 Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.918[a]	.842	.833	.223	1.775

A. Predictors: (constant), auditors performance and management support, tax policy regarding to tax incentive aand tax exemption, legal framework of tax audit, tax audit selection process

B. Dependent variable: effects of tax audit on revenue collection

Source: Questionnaires and SPSS output (2017)

From the ANOVA test in table 1 it shows the Sig. value 0.01 is greater than the calculated Sig. value 0.000. It reflects there was a statistically significant correlation between dependent variable

and independent variables at 1% significant level. Which means the explanatory variables; tax incentives and tax exemption, legal frame work, tax audit selection process, and Auditors performance and management support have great contribution to improve revenue generation by effective tax audit. But it does not mean that all these factors have equally significant correlation with effectiveness of tax audit. The results of the linear regression analysis signal that there is variation in the effect of tax audit in revenue generation. Beside the F statistics (98.578) which is used to measure the overall test of significance of the model was presented, and null hypothesis can be clearly rejected since the p-value is 0.000 which is sufficiently low, the model is well fitted at 1 percent level of significance.

Table 12 ANOVA results of the regression

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.675	4	4.919	98.578	.000[b]
	Residual	3.692	74	.050		
	Total	23.367	78			

A. Dependent variable: effects of tax audit on revenue collection

B. Predictors: (constant), auditors performance and management support, tax policy regarding to tax incentive and tax exemption, legal framework of tax audit, tax audit selection process

Source: Questionnaires and SPSS output (2017)

The regression results have indicated that the impact of four dimensions of effectiveness of tax audit in revenue generation in LTO. In the present study, it has been epitomized that out of the four dimensions; three dimensions have significantly influenced effectiveness of tax audit. Legal Framework (β = .302, p = .000); tax audit selection process (β = .296, p = .000); and auditors performance and management support (β = .279, p =.000); have been found to be significant at 1 percent level of significance. From the revenue generation point of view, legal framework, tax audit selection process, and auditors' performance and management support are the most important dimensions in the context of effectiveness of tax audit.

Furthermore, as shown in table 13, based on the standardized beta estimates, legal frame work (β = .302) has emerged as the most important dimension which has highest impact on the

effectiveness of tax audit, followed by tax audit selection process (β = .296) and auditors performance and management support (β = .279).

Table 13 Regression results of ETA

	Coefficients[a]					
	Unstandardized coefficients		Standardized coefficients			
Model	B	Std. Error	Beta	T	Sig.	
1 (constant)	1.008	.291		3.458	0.001	
Tax policy regarding to tax incentive and tax exemption	-.144	.078	-.092	-1.835	0.070	
Legal framework of tax audit	.302	.060	.293	5.054	0.000	
Tax audit selection process	.296	.049	.448	6.107	0.000	
Auditors performance and management support	.279	.059	.299	4.711	0.000	

A. Dependent variable: effects of tax audit on revenue collection
Source: Questionnaires and SPSS output (2017)

4.10 Hypothesis Test

The regression results obtained from the model were utilized to test the hypotheses developed in chapter One. The hypotheses sought to test significant influences of tax incentives and tax exemption, legal framework, audit selection process and auditors' performance and management support on the effectiveness of tax audit.

H1: Tax incentives and tax exemption is negatively related to the effectiveness of tax audit in revenue generation in LTO.

Based on the regression analysis of the above model, there is no significant correlation or relationships between the variables of tax incentives and tax exemption and tax audit effectiveness (β = -0.144, p<0.05), thereby accepting hypothesis 1. The regression result does not support that hypothesis. It indicates that tax incentives and tax exemption has a negative influence on tax audit effectiveness.

H2: Legal frame work is positively related to the effectiveness of tax audit in revenue generation in LTO.

The legal frame work has a positive effect or correlation on tax audit effectiveness ($\beta = 0.302$, $p<0.05$). Hence, hypothesis 2 was supported. It implies that audit quality has a positive influence on tax audit effectiveness.

H3: Tax audit selection process is positively related to the effectiveness of tax audit in revenue generation in LTO.

Based on the regression analysis of the above model, the tax audit selection process also has a positive effect or correlation on tax audit effectiveness ($\beta = 0.296$, $p<0.05$). Hence, hypothesis 3 was supported. It implies that tax audit selection process has a positive influence on tax audit effectiveness.

H4: Auditors performance and top management is positively related to the effectiveness of tax audit in revenue generation in LTO.

There is a positive relationship between auditors performance and top management support and tax audit effectiveness ($\beta =0.279$, $p<0.05$), providing support for hypothesis 4. It indicates that auditor's performance and top management support has a positive influence on tax audit effectiveness.

4.11 Interview

The information gained from manager and supervisors in-depth interview showed regarding to the revenue collection capacity, type of tax audit, tax incentives and exemption; even though the LTO achieve the budgeted revenue but compared to the GDP percentage is low this implies that the authority budget is not properly budgeted, the type of tax audit mostly applied in LTO was Comprehensive Audit, Investigation Audit and Desk Audit. Tax incentives and tax exemption were a cause of tax avoidance and evasion it reduces audit effectiveness and efficiency.

Regarding legal framework and audit selection process; LTO have sufficient power to penalize non-compliance but the administration and the capacity of employees for such cases are not sufficient. The major problem tax auditors face to obtaining available information and properly

using the taxpayers accounting software are don't understand the accounting software and how obtaining the information and the knowledge of analyzing such information according to tax laws. The taxpayers audit selection process include the amount of sales turnover, number of branch, number of employees, the length of audit period, gross profit margin, the previous audit period findings and others but the authority use the same selection criteria for all sector this is the weakness. The tax audit selection team is not effective because the team used Data Base information and some other information which is not sufficient to accurately select taxpayers. Most of the time manufacturing companies are selected for audit because they have large number of branches and employees.

Regarding auditors' performance and management support; in general the manpower of tax audit staffs has not sufficient tax knowledge and experience. Monetary incentive is one factor of motivation but in LTO there is no enough incentives to the staffs and external market is much more attractive because of this the staff resign.

4.12 Secondary Data Analysis

4.12.1 Document Analysis

According to the data gain from the Customer Service Process Ethiopian Revenues and Customs Authority Large Taxpayers Branch Office have a total 1,154 taxpayers from these Construction Sector 11%, Import & Export Sector 20%, Manufacturing Sector 19%, Wholesale Trade Sector 18%, Financial Sectors 3%, Transport and Storage Sector 2%, Educational & Health Sector 2%, Hotel Sector 1% and others 24%.And from out of the total 146 taxpayers have a tax holiday this implies that the branch office loss the tax collected from those taxpayers.

Figure 3 Number of taxpayers in LTO
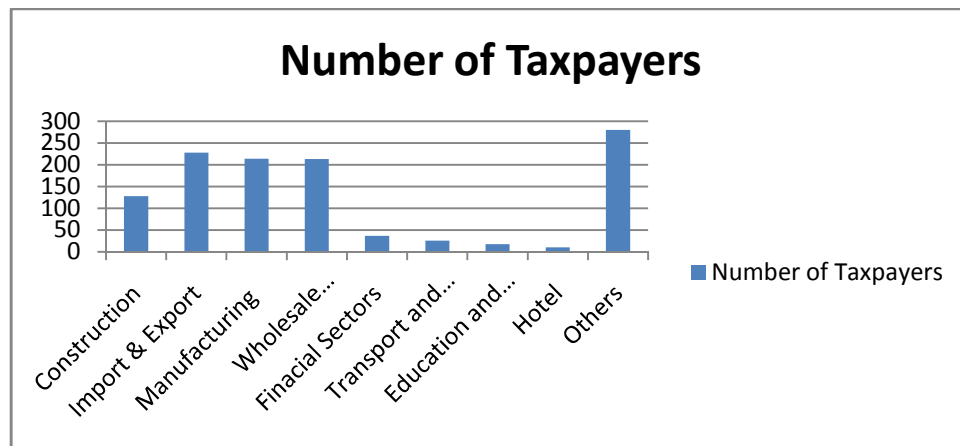
This section presents secondary data gained from LTO selected 33 taxpayers which audited for three consecutive period from 2012-2014 to evaluate the contribution of tax audit in total tax revenue. The term audit, review and notice are used to describe enforcement tax codes and filling returns accurately. No errors have to be found for the revenue authority to examine the tax return.

Table 14 Tax Paid Before and After Audit during the year 2012-2014 in LTO

No.	Tax paid Before Audit	Tax paid During Audit	Total Tax paid
		2012-2014	
1	124,555,911.81	11,905,349.18	136,461,260.99
2	9,553,802.58	36,298,222.41	45,852,024.99
3	10,133,101.50	5,200,376.05	15,333,477.55
4	25,271,811.70	1,953,999.48	27,225,811.18
5	10,089,770.10	4,475,697.85	14,565,467.95
6	90,745,067.74	85,804,013.64	176,549,081.38
7	102,488,817.07	125,391,296.75	227,880,113.82
8	18,686,021.70	13,600,663.20	32,286,684.90
9	1,372,160.80	3,311,180.52	4,683,341.32
10	3,598,453.92	26,837,747.41	30,436,201.33
11	5,015,173.70	13,232,427.49	18,247,601.19
12	113,589,124.23	22,978,038.77	136,567,163.00
13	-	116,356,666.98	116,356,666.98
14	17,848,301.70	3,857,195.19	21,705,496.89
15	23,117,548.82	7,487,131.16	30,604,679.98
16	-	196,721,491.97	196,721,491.97
17	4,238,207.98	401,116.39	4,639,324.37
18	3,470,354.87	4,026,975.15	7,497,330.02
19	12,338,737.60	19,321,259.03	31,659,996.63
20	322,394,510.26	1,016,270,523.70	1,338,665,033.96
21	17,976,210.78	33,238,633.07	51,214,843.85
22	55,965,906.96	12,664,314.00	68,630,220.96
23	22,361,449.66	167,381,756.29	189,743,205.95
24	4,515,981.59	1,982,766.84	6,498,748.43
25	13,519,040.57	6,695,703.19	20,214,743.76
26	8,723,607.68	6,356,627.45	15,080,235.13
27	7,715,619.50	14,822,864.88	22,538,484.38
28	2,784,193.80	771,065.52	3,555,259.32
29	66,924,316.92	9,586,060.17	76,510,377.09
30	-	18,555,902.70	18,555,902.70
31	68,155,642.55	18,886,084.93	87,041,727.48
32	11,177,582.32	64,155,431.76	75,333,014.08
33	3,116,638,882.50	76,255,583.75	3,192,894,466.25
	4,294,965,312.91	**2,146,784,166.87**	**6,441,749,479.78**

Source: ERCA LTO data (2012 - 2014)

When a tax audit conducted there is revenue collected in the process as noted from table an amount of Birr 2,146,784,166.87 collected in the process. Some taxpayers submit the taxes but either from ignorance or innocent error they submit the wrong amount of tax. After

50

an audit the remaining figure has to be submitted within a stipulated time or else it will attract a penalty. When you compare the amount of tax collected from a certain company after the audit and total tax paid its clear that after the audit the taxpayers paid more tax.

Table 15 Descriptive Statics Secondary Data

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Profit Tax paid on Self-Assessment	33	0	3,116,638,883	130,150,464.03	539,717,791.126
Additional Profit tax paid on Audit	33	401,116	1,016,270,524	65,054,065.66	177,867,351.596
Total profit tax Paid	33	3,555,259	3,192,894,466	195,204,529.69	585,604,290.091
Valid N (list wise)	33				

Source SPSS output 2017

From the findings, the lowest mean score according to the descriptive statistics from secondary data was tax audit report for the 33 audited companies additional profit tax paid on audit was 65 million; profit tax paid on self-assessment was 130 million while 195 million was total profit tax paid.

Table 16 Correlations Secondary Data

Correlations

		Additional Profit tax paid on Audit	Total profit tax Paid
Additional Profit tax paid on Audit	Pearson Correlation	1	.400[*]
	Sig. (2-tailed)		.021
	N	33	33
Total profit tax Paid	Pearson Correlation	.400[*]	1
	Sig. (2-tailed)	.021	
	N	33	33

*. Correlation is significant at the 0.05 level (2-tailed).
Source SPSS Output 2017.

The results indicate that the parametric Pearson correlation or "r" value is significant at 0. 400 and the p-value (Sig) for the correlation coefficient is less (p < .05) and significant.

Table 17 One Sample Test

One-Sample Test

				Test Value = 0		
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
Additional Profit tax paid on Audit	2.101	32	.044	65,054,065.663	1,985,045.19	128,123,086.14

Source SPSS Output 2017

From the findings, the t calculated at 32 degrees of freedom at 95% confidence interval of the difference = 2.101. Since p=.000 (less than 0.05 at 95% level of confidence), the researcher believe there is significant relationship between additional profit tax paid on audit and total tax paid. Therefore, the existence of effective tax audit in large taxpayers' branch office contributes for additional revenue collection by increasing the audit coverage and risk based audit selection process.

CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

The source of every government's revenue is mainly through taxation, however just like any developing country Ethiopia relies on foreign sources of finance like loans and grants; this is because the country has weak tax administration and collection ability. To change this situation there must be a major shift in the way tax matters are handled. This shift must include the setting up of an efficient and effective tax audit unit within the tax revenue collecting outfit. This will enable the government to keep up with the increasing sophistication of business activity and tax evasion schemes; it will also aid in identifying potential taxpayers and enlighten those who are already in the tax net about their rights and obligations.

The basic interest of this study is to find out the effectiveness of tax audit in revenue generation in Ethiopian Revenues and Customs Authority Large Tax Payers Branch Office. The 25 item of the TAXEFF model is used to investigate the relationship between the effectiveness of tax audit and revenue generation. The data obtained from the respondents was analyzed using various statistical tools.

The result of the background information of respondents indicated that the majority of the respondents are male (53.2%) aged in the range of 26 to 30(69.6%). Regarding the education background, 87.3% of the respondents are degree holder.
;
According to the regression output most of the predictors were positively contributed for the effectiveness tax audit in revenue generation in LTO. Therefore, the revenue authority should give emphasis to use these determinant variables to increase the revenue collection. Moreover the legal framework of tax audit, audit selection process, and auditors' performance and management support were the major determinants of ETA in the revenue authority. However, the tax incentives and tax exemption were negatively contributed for the ETA in the revenue authority.

The final portion of this research aims to conclude the finding of the study;6 focusing on the core determinants that have significant impacts to the effectiveness of tax audit and

to provide recommendations based on the research findings of the study. These conclusions and recommendations are drawn from the findings of the study specifically related to the tax incentives and tax exemption, legal frame work of tax audit, audit selection process and auditor's performance and management support in the revenue authority.

5.2 Conclusion

This study conducted to find out the effectiveness of tax audit in revenue collection in Ethiopian Revenue and Tax Authority Large Tax Payers Branch Office. The existences of effective tax audit in the LTO improve the collection of revenue. By taking this aspect into consideration, this study was identified factors that determine the ETA in the LTO and then analyzed the branch office dimensions in which the revenue office should carry out to enhance the effectiveness of tax audit. And also by testing of the proposed hypotheses showed relations of these independent variables with the ETA the following conclusions were drawn.

- ✓ The ETA in the revenue office increases, when there were adequate legal frame work, more support from management, have adequate and competent tax auditors and good audit selection process. The regression analysis (shown on table 13) shows very strong contributions of these variables for the ETA. From the revenue generation point of view, legal framework, tax audit selection process, and auditors' performance and management support are the most important dimensions in the context of effectiveness of tax audit. But tax incentives and tax exemption has negatively affect ETA.

- ✓ In addition, the correlation analysis (shown on table 10) shows there were strong correlation between the dependent variable effectiveness of tax audit (ETA) and independent variables Legal Frame work (LA), Audit Selection process (AS) and Auditors performance and management support (APMS).

- ✓ Furthermore, the correlation analysis (shown on table 10) showed the contributions of the tax incentives and tax exemption independent variables were negatively correlated to the effectiveness of tax audit. Tax incentive and exemption forego substantial revenue that instead could be used to foster the elements that really drive foreign investment (e.g. infrastructure, education and electricity). This conclusion requires future research should consider the impact of these determinants on Tax audit effectiveness.

- ✓ The interview of manager and supervisor of LTO and the documents showed tax incentives and tax exemption may a cause of tax avoidance and evasion it reduces the ETA. LTO have sufficient power to obtain available information and penalize non-compliant taxpayers but there is a gap of administration. The taxpayers audit selection processes have used same criteria for all sectors which leads the wrong decision.
- ✓ To compare the amount of tax collected from a certain company after the audit and total tax paid it's clear that after the audit the taxpayers paid more tax. Therefore, the existence of effective tax audit in large taxpayers' branch office contributes for additional revenue collection by increasing the audit coverage and risk based audit selection process

5.3 Recommendations

Based on the analysis and subsequent findings from the study, the following recommendations are forwarded to the Ethiopian Revenue and Customs Authority Large Tax Payers Branch Office would consider in its attempt for improved tax audit effectiveness.
These recommendations may provide feasible solutions for the revenue office.

- ✓ Tax incentives and tax exemption led misinterpreted by tax payers and cause tax avoidance and evasion. It reduces audit effectiveness and efficiency so the management takes measure.
- ✓ The revenue office should give training to the auditors deeply and continuously about tax laws, regulations and directives, and specialized computer assisted audit techniques.
- ✓ LTO should improve taxpayers audit selection process by using the separate risk selection criteria for each sectors of taxpayers and adjust the weight each risk criteria based on its risks to identify compliant and non compliant taxpayers, maximize the revenue collection and minimize the tax office and taxpayers administrative cost.
- ✓ LTO should give attention to recruit and hiring skilled and adequate personnel in the tax audit and design mechanism to retain and attract the staff to achieve the effectiveness tax audit and revenue collection.
- ✓ The revenue office should give attention to increase the audit coverage and risk based audit to gain additional revenue from the audit activity.

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St. Mary's University
School of Graduate Studies
Department of Accounting and Finance (MBA)
Research Questionnaire

Dear respondent,

I am a postgraduate student of the St. Mary University in Accounting and Finance Department. As part of the requirement of the program, I am required to undertake a researchproject in my area of study. My research topic is on "***The Effectiveness of Tax Audit for Revenue Collection the case of Ethiopian Revenues and Customs Authority Large Tax payers Office***". Therefore, the audit and investigation staffs of LTO have been selected as a respondent in this project. Your sincere and correct answers will be important in attaining this goal. All information will be treated with utmost confidentiality for learning purpose only.

I thank you in advance for your cooperation.

GizawBekuretsion

Email – natigizbekure@gmail.com

Mobile – 0911726496

Part I: <u>Background Information</u>

Please tick the correct answer"√"

1. Gender

   Male ☐ 1   Female ☐ 2

2. Age

   Below 25 ☐ 1
   Between 26 and 35 ☐ 2
   Between 36 and 45 ☐ 3
   Above 45 ☐ 4

3. Highest Level of education achieved

   Certificate ☐ 1
   Diploma ☐ 2
   Degree (BA/BSc) ☐ 3
   MSc/MA and Above ☐ 4

4. Field of Study

   Accounting ☐ 1
   Management ☐ 2
   Economics ☐ 3
   Others, please specify _____

5. How long have you been working in LTO?

   0 – 5 years ☐ 1
   6 – 10 years ☐ 2
   11 – 15 years ☐ 3
   More than 15 years ☐

6. Your position in LTO

   Junior Tax Auditor ☐ 1   Senior Auditor ☐ 3
   Tax Auditor 2 ☐   Team Leader   4 ☐

7. How long have you been working in this position

   0 – 2 years ☐ 1
   3 – 5 years ☐ 2
   6 – 10 years ☐ 3

Put a "√" mark in one of the columns provided for each possible indicator. Use the scales:

Strongly agree (5), Agree (4), Neutral (3), Disagree (2), strongly disagree (1)

Part II. Effects of Tax Audit on Revenue Collection						
S.No.	**Statement**	**5**	**4**	**3**	**2**	**1**
8.	The existing role of tax audit is significant to increase the revenue base of LTO.					
9.	Tax audit ensures arithmetic accuracy of all figures in account and computation in tax payers' records.					
10.	Tax audit solves the problems of tax evasion, avoidance and other irregularities.					
11.	The current working capacity of audit staff is well aware of the tax laws and regulations.					
12.	Auditors give sufficient education to the taxpayers about the tax laws and regulations during auditing.					
Part III. Tax policy regarding to tax incentives and tax exemptions		**5**	**4**	**3**	**2**	**1**
13.	Investors are more likely to be driven in to a country by tax incentive and exemptions instead of a stable economic and political environment, good infrastructure and availability of basic services.					
14.	Large taxpayers are properly using their tax incentives.					
15.	The lack of proper valuation of imported item free from duty and taxes have not impact on domestic taxes loss by overstated the cost of capital goods.					
16.	Tax exemption and incentives can not a means of tax avoidance, evasion and imbalance computation.					
17.	Tax incentives have a posetive impact on the revenue collection.					
Part IV. Legal frame work of tax audit		**5**	**4**	**3**	**2**	**1**
18.	A revenue body's audit and investigation staff have					

		5	4	3	2	1
	appropriate powers of access to information held by the taxpayers and other parties.					
19.	Tax directives are manageable and easily reachable to the auditors and taxpayers.					
20.	Accounting software's uses taxpayers are not easily accessible by the tax auditors and have own impact the efficiency and effectiveness of tax audit.					
21.	The new Federal Income Tax Proclamation No. 979/2016 and Federal Tax Administration Proclamation No. 983/2016 are simplifying the legislation and avoid the law interpretations in different ways.					
22.	The large taxpayers' branch office obligates the taxpayers for properly using the whole accounting software modules and provides information to the tax auditor.					
Part V. Tax audit Selection process		**5**	**4**	**3**	**2**	**1**
23.	The risk selection team timely available accurate and comprehensive data from the system, taxpayers and third parties.					
24.	Taxpayers are selected to audit is based on their associated compliance risk.					
25.	The risk management staffs in numbers and the availability of relevant knowledge and skills to updating audit case selection process are enough on the level of the branch.					
26.	The current risk-based tax audit system optimizes tax collection, while being fair, equitable, and less prone to corruption.					
27.	Taxpayers that were audited in the previous audit period and found no tax liabilities owed during an audit are selected for audit in the current audit period.					
Part IV. Auditors performance and management support		**5**	**4**	**3**	**2**	**1**

28.	Large taxpayer's branch office has adequate man power in numbers, knowledge and experience to conduct tax audit.					
29.	The management of LTO gives close attention for the tax audit by assigning appropriate and skilled persons allocating sufficient resources.					
30.	LTO perform a continuous assessment to improve the capability or competency of staff resources, auditors and investigators.					
31.	Encouragement of the tax officials could promote productivity.					
32.	Corruption and gross abuse of powers of tax official can lead to ineffectiveness					

33. Is there any additionalissue and commenton the effectiveness of tax audit on revenue generation please point at below

   _____

   _____

   _____

   _____

APPENDIX II

Management and supervisor of LTO in-depth interview

1. Do you think that LTO has currently collecting the potential amount of tax revenue? If yes, how is it achieved? If not, could you tell me the reason behind, and on what audit cases should LTO concentrate in its audit work?

2. What are the types of audit most usually applied in LTO?

3. What are the possible measures to eliminate or reduce tax evasion in LTO?

4. What are the impact of tax incentives and exemption on tax audit effectiveness and revenue generation?

5. Do you believe LTO have of adequate powers for obtaining information and an appropriate administration of allows deterring and penalizing non-compliance?

6. Are there any problem tax auditors to obtaining available information and properly using the taxpayers accounting software? If yes, how is it achieved? If not, could you tell me the reason behind, and what measures should be taken to increase the efficiency of tax audit?

7. What are the criteria used by the LTO in selecting taxpayers to be audited?

8. Do you believe the risk managementteam is effective to select the taxpayersbased on risks? If yes, how is it achieved? If not, could you tell me the reason behind and how the risk selection criteria improve?

9. Which sectors are usually selected for tax audit? What would be the reason behind this selection?

10. How do you evaluate the strength of the tax audit staff with respect to tax collection efficiency?

11. Do you believe adequate incentive of tax officials would encourage efficiency? If your response is yes how?

12. Is there any additional comment on the effectiveness of tax audit on revenue generation?

APPENDIX III

Ethiopian Revenues and Customs Authority

Large Tax Payers Branch Office

Number of Taxpayers By Sectors 2016/2017

Sectors	Number of Taxpayers
Construction	128
Import & Export	228
Manufacturing	214
Wholesale Trade	213
Finacial Sectors	37
Transport and Storage	26
Education and Health	18
Hotel	10
Others	280
Total	1154

Table - Gender and Age

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	42	53.2	53.2	53.2
Female	37	46.8	46.8	100.0
Total	**79**	**100.0**	**100.0**	
Below 25	17	21.5	21.5	21.5
Between 26 and 35	55	69.6	69.6	91.1
Between 36 and 45	5	6.3	6.3	97.5
Above 45	2	2.5	2.5	100.0
Total	**79**	**100.0**	**100.0**	

Table - Reliability Statistics

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.732	.628	5

Table - Effectiveness of Tax Audit

Effectiveness of Tax Audit	N	Mean	Std. Deviation
Effects of Tax Audit on Revenue Collection	79	3.43	.547
Tax Policy regarding to tax incentive and tax exemption	79	1.86	.348
Legal Framework of Tax Audit	79	3.28	.530
Tax Audit Selection Process	79	2.67	.828
Auditors performance and management support	79	3.25	.588

Table -Colinearity Statistics

<table>
<tr><td colspan="4" align="center">Coefficients^a</td></tr>
</table>

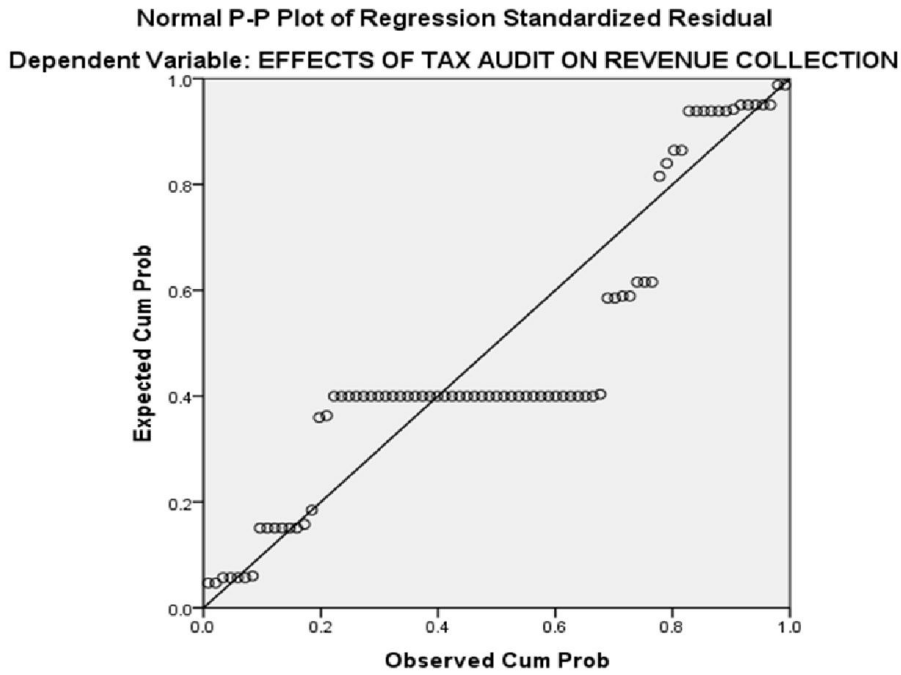| Model		Collinearity Statistics	
		Tolerance	**VIF**
1	(Constant)		
	Tax policy regarding to tax incentive and tax exemption	.857	1.167
	Legal framework of tax audit	.637	1.570
	Tax audit selection process	.396	2.522
	Auditors performance and management support	.529	1.891

Table - Correlation Matrix

		Correlations	TI	LF	AS	APMS
ETA	Pearson Correlation	1	-.421**	.687**	.854**	.733**
	Sig. (2-tailed)		.000	.000	.000	.000
TI	Pearson Correlation	-.421**	1.000	-.274*	-.339**	-.327**
	Sig. (2-tailed)	.000		0.015	0.002	0.003
LF	Pearson Correlation	.687**	-.274*	1.000	.592**	.347**
	Sig. (2-tailed)	.000	0.015		0.000	0.002
AS	Pearson Correlation	.854**	-.339**	.592**	1.000	.674**
	Sig. (2-tailed)	.000	0.002	0.000		0.000
APMS	Pearson Correlation	.733**	-.327**	.347**	.674**	1.000
	Sig. (2-tailed)	.000	0.003	0.002	0.000	
	N		79.000	79.000	79.000	79.000

*. Correlation is significant at the 0.05 level (2-tailed).

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

Figure 1 - Linearity Test

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: EFFECTS OF TAX AUDIT ON REVENUE COLLECTION

Source: Questionnaires and SPSS output (2017)

Figure - Normality Test

Histogram
Dependent Variable: EFFECTS OF TAX AUDIT ON REVENUE COLLECTION

Mean = -2.05E-15
Std. Dev. = 0.974
N = 79
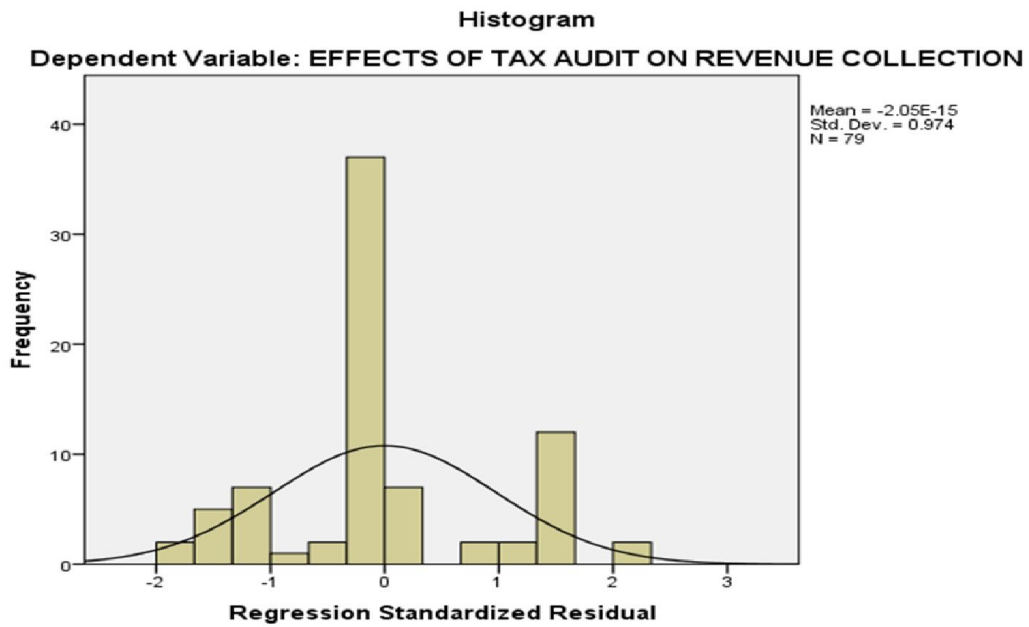
Source: Questionnaires and SPSS output (2017)

Table - Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.918[a]	.842	.833	.223	1.775

A. Predictors: (constant), auditors performance and management support, tax policy regarding to tax incentive a and tax exemption, legal framework of tax audit, tax audit selection process

B. Dependent variable: effects of tax audit on revenue collection

Table - ANOVA results of the regression

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.675	4	4.919	98.578	.000[b]
	Residual	3.692	74	.050		
	Total	23.367	78			

A. Dependent variable: effects of tax audit on revenue collection

B. Predictors: (constant), auditors performance and management support, tax policy regarding to tax incentive and tax exemption, legal framework of tax audit, tax audit selection process

Table - Regression results of ETA

		Coefficients[a]				
		Unstandardized coefficients		Standardized coefficients		
Model		B	Std. Error	Beta	T	Sig.
1	(constant)	1.008	.291		3.458	0.001
	Tax policy regarding to tax incentive and tax exemption	-.144	.078	-.092	-1.835	0.070
	Legal framework of tax audit	.302	.060	.293	5.054	0.000
	Tax audit selection process	.296	.049	.448	6.107	0.000
	Auditors performance and management support	.279	.059	.299	4.711	0.000

A. Dependent variable: effects of tax audit on revenue collection

Source: Questionnaires and SPSS output (2017)

Table - Descriptive Statics Secondary Data

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Profit Tax paid on Self-Assessment	33	0	3,116,638,883	130,150,464.03	539,717,791.126
Additional Profit tax paid on Audit	33	401,116	1,016,270,524	65,054,065.66	177,867,351.596
Total profit tax Paid	33	3,555,259	3,192,894,466	195,204,529.69	585,604,290.091
Valid N (listwise)	33				

Table - Correlations Secondary Data

Correlations

		Additional Profit tax paid on Audit	Total profit tax Paid
Additional Profit tax paid on Audit	Pearson Correlation	1	.400[*]
	Sig. (2-tailed)		.021
	N	33	33
Total profit tax Paid	Pearson Correlation	.400[*]	1
	Sig. (2-tailed)	.021	
	N	33	33

*. Correlation is significant at the 0.05 level (2-tailed).

Table - One Sample Test

One-Sample Test

					Test Value = 0	
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
Additional Profit tax paid on Audit	2.101	32	.044	65,054,065.663	1,985,045.19	128,123,086.14