

# ST. MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES MASTER OF BUSINESS ADMINISTRATION

# Effect of Tax Audit Practices on Revenue Collection: A Case Study of Eastern Addis Ababa Small Tax Payers Branch Office

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A Thesis Submitted to St Mary's University, In Partial Fulfilment for the Requirements of Masters Business Administration

# EFFECT OF TAX AUDIT PRACTICES ON REVENUE COLLECTION: A CASE STUDY OF EASTERN ADDIS ABABA SMALL TAX PAYERS BRANCH OFFICE

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### **DECLARATION**

I, Abenezar Tafese, the undersigned person declare that the thesis entitled, Impact of Tax Audit on Revenue Generation: A Case Study of Eastern Addis Ababa Small Tax Payers Branch Office, is my genuine and original work; prepared under the guidance of Abebaw Kassie (PhD). All sources of materials used for this thesis have been duly acknowledged. I further confirm has not been submitted either in part or in full to any other higher learning institution for any academic purposes.

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# **ENDORSEMENT**

| This | thesis  | has  | been  | submitted    | to   | St.   | Mary's    | University, | School | of | Graduate | Studies | for |
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# LIST OF ABBREVIATIONS

AA: Auditee Attributes

AQ: Audit Quality

EBDSN: Ethiopian Business Development Services Network

ECC: Ethiopian Chamber of Commerce

MOR: Ministry of Revenue

IT: Information Technology

OECD: Organization for Economic Cooperation and Development

OI: Organizational Independence

OS: Organizational Setting

TAE: Tax Audit Effectiveness

TMS: Top Management Support

VAT: Value Added Tax

VIF: Variance Inflation Factor

#### **ABSTRACT**

The purpose of this study is to assess the effect of tax audit practice on revenue collection in Eastern Addis Ababa small tax payers branch office. The study stands to answer how audit management support, organizational independence, auditee attributes and organizational setting affect tax audit effectiveness; and in turn how effective tax audit can affect revenue collection in Eastern Addis Ababa small taxpayers branch office. In light of this objective the study adopted quantitative method of research approaches to test a research hypothesis. Purposive sampling was employed based on the situations where the researcher reaches the targeted population quickly. The study used a structured questionnaire for the collection of data from tax auditors. The collected data were analyzed using descriptive statistics and multiple regression analysis. The study used two models for analysis; the first model is that tax audit effectiveness the dependent variable is explained by audit quality, top management support, organizational setting, auditee attributes, and organizational independence. The second model is that revenue the dependent variable explained by independent variable effective tax audit. The result showed that there is no statistical significant positive relationship between top management support, organizational independence and tax audit effectiveness. Besides, the results indicated that there is no statistical significant negative relationship among organizational setting and tax audit effectiveness. The researcher found that there is strongly significant positive relationship among audit quality, audit attributes and tax audit effectiveness. There is also strongly significant positive relationship between tax audit effectiveness and revenue.

Key words: Revenue; Revenue Generation; Tax; Tax Audit; Tax Audit Effectiveness.

#### **CHAPTER ONE**

#### INTRODUCTION

#### 1.1. Background of the Study

Government as any organization needs revenue in order to run both public and administrative activities. For this, it uses different sources of finances under different circumstances. Tax is one among them and it is a contribution demanded by the state. It is not punitive but compulsory and unreturned transfer of resources from the private to the public sector, levied based on prearranged criteria (Adefolake & Omodero, 2022).

Taxation is one of a critical instrument for development and growth in a given country in the world. Within a country, economic workouts struggle to measure development and growth through significant records of public wealth (Garry and Ivo, 2010). Employment is another way of wealth formation at national level that citizens have a capacity to earn income to cater for their needs and additionally support taxes to the government as a portion of their commitment to National Development (Eric and Jonathan, 1996). Thus, based on the countries tax rules, citizens pay tax to contribute for the development of their country.

Governments issue tax laws (different rules, regulation, and directives) to administer the overall tax systems of a country. To cover national expenditure, a government should mobilize sufficient revenue by imposing adequate tax on citizens, in turn, citizens benefitted from economic diversification, education, infrastructure, and stability.

According to classical economic view, the only objective of taxation was to raise government revenue (Ricardo, 2001). But, this view changed through time in different circumstances and ideologies and then the aim of tax has been changed. Moreover, now a day apart from the objective of raising the public revenue, taxes are levy to affect consumption, production, and distribution with a view to ensuring the social welfare through economic development of a country (Mohani, 2001).

According to Organization for Economic Cooperation and Development (OECD) (2009), taxation is central to the contemporary economic development program. It provides a stable flow of revenue to finance development priorities to the government, such as strengthening physical

infrastructure, interlink with many other policy areas and good governance, and formalizing the economy to stimulate growth. To run such contemporary economic development program, one of strong tool to a government is tax policy. It shapes the circumstances of international trade and investment activities. However, in African countries the main challenge is finding an optimal balance in a tax regime that business and investment are not working in collaboration to have leveraged enough revenue for public service delivery to enhance the desirability of the economy. According to Okoye and Ezejiofor (2014), the main function of a tax system is to raise enough revenue to finance essential expenditures on the goods and services provided by government. In similar understanding, the Ethiopian Chamber of Commerce (ECC) and Ethiopian Business Development Services Network (EBDSN) (2005) emphasizes that tax is an important source of public revenue. As a result, the existence of collective of goods and services necessitates putting some of our income into government hands. This is because public goods such as roads, education, health, power, municipal services, and other public infrastructures have positive results on all peoples, business enterprises, industries and the general public. Those Public goods are normally supplied by public agencies due to their natures of non-rivalry and nonexcludability.

The Ethiopian tax was assessed by the ECC and EBDSN (2005) and stated about the nature of consumption of public goods. According to the assessment, consumption by one does not reduce consumption for others. Besides, the consumption of public goods by an agent does not exclude others from doing same rather it consumed by all. Such nature of public goods therefore makes them impossible for private suppliers to avail them at market prices like the commodities. Thus, government intervention in the supply of public goods is inevitable and can only be done if the public pays taxes for the production and supply of such goods.

Taxes play an essential role in economic planning and development. Thus, to enhance the role of tax, domestic revenue mobilization is important to sustainable development of a nation. This is because, economic policies are depending on expected tax revenue and then the tax policy is a fundamental component of economic policies for every country. The government revenue is generated from internal and external sources such as tax revenue, non-tax revenue and grants. Therefore, a government should collect taxes effectively from private and public sectors to cover its expenditure by internal sources of revenue.

Thus, tax audit is important to increase tax revenue and taxpayer compliance in order to cover government expenditure. Tax audit is a further exploration into the activities of a taxpayer to determine whether he/she has been correctly declaring the tax liabilities (OECD, 2006). In this understanding, this study will focus to assess the impact of tax audit effectiveness on revenue generation of Ethiopian Ministry of Revenue (MOR).

#### 1.2. Statement of the Problem

Tax is the main source of government revenues in any country. Regarding to this fact, all governments are obliged to fulfill various public facilities such as schools, health care services, defense, maintain laws and various administrative expenses to regulate the development condition of a country. These government activities are obtained through taxation.

In many developing countries, the potential amount of tax revenue has not been collected in an effective and equitable manner because of inadequate tax administration and ineffective audit program (Adefolake & Omodero, 2022). The government set tax laws which used to administer the overall tax system of a country is supported with different rules, regulation and directives to meet the main objective of taxation. The main objective of the government imposes tax on citizens is to cover the national expenditure. This helps the government to improve the life of its people. Thus, in this reality, inspections of the taxpayers' activities are indirectly drive voluntary tax compliance and directly generate additional tax revenue collections. As a result, according to Barreca and Ramachandran (2004), compliance by the taxpayers and the additional tax revenue collected help tax agencies to reduce the tax gap between the amount due and collected.

The tax gap (the actual tax revenues deducts from the potential tax yield) reflects the financial extent of the risk field. Although the determination of the tax gap is not easy, a rough assessment is usually done. The calculated gap can be further broken down into areas such as barely legitimate tax avoidance, fraud, serious noncompliance, error, and debt. This provides additional information on areas of risks that should be addressed. According to Thomson (2008), compliance risk reduces tax yield and can be categorized as register risk, filing risk, payment risk, and declaration risk. This classification makes tax administration in a stronger position to determine the appropriate technique to take action.

A tax audit is an examination of a taxpayer that has correctly reported its tax liability and fulfilled other obligations. It is often more detailed and extensive than other types of examination such as general desk checks, compliance visits or document matching programs; it also has significance role in revenue collection (OECD, 2006). Tax audit contributes to revenue collection in two ways: one is directly contributes by additional tax assessment and the second is indirectly by creating and improving tax compliance with tax laws and regulations (Barreca and Ramachandran, 2004).

Ethiopia has a plan to cover public expenditure by domestic revenue. Even if the domestic taxes collected from tax payers have good progress, covering of public expenditure by domestic taxes is not yet improved as expected. The tax collected by the government is very low. This is due to insufficient tax administration, inadequate tax personnel, lack of intensive audits or audit qualities, fraudulent activities of tax collectors, and lack of understanding why the tax payers should pay tax (Abera, 2016). To improve the way of tax collection and to solve the above problems, effective tax auditing is important. Effective tax audit can assist to monitor tax payers in complying with tax procedures so as to reduce tax evasion and then to increase the revenue generation through tax by creating good tax administration and collection system.

Many studies devote their time on tax audit practice and internal audit effectiveness, but some researchers also focused on tax audit effectiveness. They are (Netsanet 2014, Ayalew 2014, and Abera 2016). However, their research focused on audit practices and factors affecting tax audit effectiveness. As per their studies effective tax audit is affected by audit quality, auditee attributes, top management support, organizational settings and organizational independence. Abera (2016) tried to address issues related to tax audit on large tax payer's office of Ethiopian Ministry of Revenue. His research has great contribution to literature and help full to see gaps tax revenue expenditure. However, they couldn't address the main gaps of tax audit effectiveness on revenue generation to improve its impact. To address some gaps of effective tax audit to government revenue, this study has assessed the impacts of tax audit effectiveness on revenue generation by focusing on Ethiopian Ministry of Revenue Easter Addis Ababa Small Tax Payers Branch Office.

#### 1.3. Research Questions

- 1. What are the factors affecting tax audit effectiveness?
- 2. How dose tax audit effectiveness has significant contribution to revenue generation?
- 3. What is the relationship of effective tax audit and revenue generation?

#### 1.4. Objective of The Study

#### 1.4.1. General Objective

The main objective of this study is to assess the effect of tax audit practice on revenue collection of the Ethiopian Ministry of Revenue.

### 1.4.2. Specific Objectives

More specifically the study has tried to:

- 1. Assess factors affecting tax audit effectiveness.
- 2. Determine the effect of tax audit effectiveness on revenue generation.
- 3. Determine the relationship of effective tax audit with revenue generation.

# 1.5. Hypotheses of the Study

Several statements of supposition can be made in view of the factors affecting tax audit effectiveness at Eastern Addis Ababa Small Tax Payers Branch office. In light of the above research objective the following discussion covers the hypotheses that the study attempted to test.

- H 1: Greater audit quality is positively related to tax audit effectiveness.
- H 2: Greater support from top management is positively related to tax audit effectiveness.
- *H 3: The organizational setting is positively related to tax audit effectiveness.*
- H 4: More auditee attributes for tax auditors in the organization is positively related to tax audit effectiveness.
- H 5: Greater organizational independence is positively related to tax audit effectiveness.
- H 6: Greater tax audit effectiveness is positively related to revenue collection

# 1.6. Scope of the Study

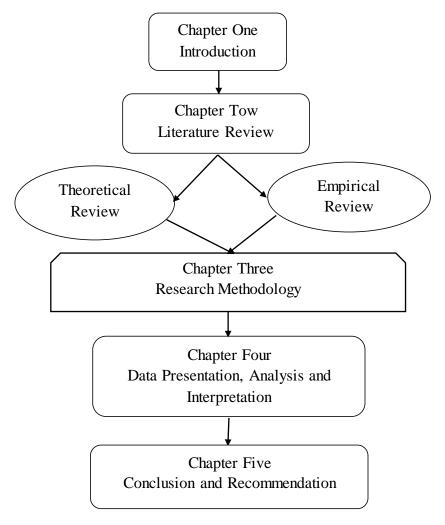
The scope of this study has been delimited in terms of geography, population and variable. Geographically, the study has been conducted in Addis Ababa on Ethiopian Ministry of Revenue Eastern Addis Ababa Small Tax Payers Branch Office. In terms of population, the study would be targeted tax auditors at the mentioned branch office. The variable of this study has been confined to the impact of tax audit effectiveness on revenue generation of the Ethiopian Ministry of Revenue on domestic tax only.

#### 1.7. Significance of the Study

The study might have invaluable importance. In the first place, Revenue Authority understands the existing tax audit performance and evaluating tax audit effectiveness contribution to revenue generation to make some adjustment in the procedure and strengthens the weakness of effective tax audit performance. Secondly, it may be helpful for the stake holders and Tax payers to have knowledge on tax audit. Finally, the study might have invaluable significances for future researchers who need to conduct a study in this and related fields.

#### 1.8. Organization of Chapters

Figure 1: Organization of the thesis



Source: own constructed

As shown in the above figure the thesis is organized in to five chapters. Chapter one is deal with introduction, which includes: background of the study, statement of the problem, research question, objective of the study, hypothesis of the study, significance of the study, and delimitation of the study.

Chapter two deals with the review of the related literature; under literature review there is theoretical review which includes audit theories and types of tax audit, and empirical review which includes tax audit effectiveness, factors affecting tax audit effectiveness and contribution of tax audit to revenue. Under this chapter conceptual frame work is also included.

Chapter three contains the research methodology; which describes about the research design, sources of data and sampling techniques, research instruments and methods of data analysis.

Chapter four contains data presentation, analysis and interpretation; which includes descriptive and regression analysis with post estimation test. Chapter five draws conclusions and forward recommendations suggested based on the findings.

#### 1.9. Key Definitions

#### Tax audit effectiveness:

The tax auditors have performed the audit work effectively without any impact in the taxpayers.

#### **Audit quality:**

The audit work has been performing based on general accepted auditing standard and tax audit manual.

#### Top management support:

The audit findings are accepted or responsible by top management.

#### **Organizational setting:**

The structure of organization, and its profile.

#### **Auditee attributes:**

The cooperation or support of taxpayers at the time of auditing for tax auditor.

#### Organizational independence:

The audit office has ethics of international profession in addition to which is free from any intervention or influence.

# CHAPTER TWO LITERATURE REVIEW

#### 2.1. Theoretical Review

Audit is an examination of accounting documents and of supporting evidence for the purpose of reaching an opinion concerning their propriety (Adesina, 2005). That is to say that, audit is an examination intended to serve as a basis for an expression of opinion regarding the fairness, consistency, and conformity with accepted accounting principles of statement ready by a company or different entity for submission to the general public or to different interested parties. Tax audit may be a systematic examination of business's relevant industrial system to see whether or not a taxpayer's declaration states the tax liabilities properly and obliging with the provisions of the tax laws and related subsidiary legislations (MOR audit manual, 2019). Auditing involves examination of financial statements, books of accounts and vouchers of a taxpayer by Tax Auditors so as to ascertain whether the taxpayer has accurately considered revenues and expenses when determining the taxes shown in the declarations as per the requirements of the tax laws. It conjointly involves different approaches like observation of premises, direct monitoring of receipts in cash businesses, use of mark-up techniques and analysis of key ratios. Tax audit is, therefore, a means of ensuring and enhancing compliance level among taxpayers with the tax laws. According to Naiyeju (1996), tax audit is a department set up to seek and ensure the implementation of tax laws fairly, faithfully, firmly and equitably, irrespective of the status of the persons and organizations involved or the character of goods, and services involved. Dike (2000) also identifies audits as the review of tax returns (made up of financial statements and schedules, as well as income tax and capital allowances computations submitted by a taxpayer with a view to ensuring they comply with the relevant tax laws and other statutory regulations.

Tax audit rather like attestation service involves the gathering of data and process it for crucial the amount of compliance of a corporation with tax laws of the territory. For effective audit, it is necessary that the auditor organizes his work in such a way that the assignment is accomplished completely and efficiently. More significantly, however, knowledgeable tax auditor or investigator should possess sound accounting and taxation knowledge, should be sharp in

understanding the tax laws, systematic and should show high intelligence in applying tax laws, and must have sound knowledge of investigation techniques (MOR, 2019).

#### 2.1.1 Audit Theories

Several theories of auditing developed to specify and determine the audit functions (Appah and Eze, 2013; Akinbuli, 2010; and Hayes, et al., 2009). Some theories focus to explain the demand for audit services based on research or perception. To understand the theoretical concept of audit, the following section discuss briefly.

The Policeman Theory: This theory is developed by Awe in 2008. The main concept is that once monitoring is done on the systems at unspecified times then that is like policeman guarding a place. This theory is purely focused on arithmetical accuracy and prevention and detection of fraud. It claims that the auditor is responsible for searching, discovering, and preventing fraud. This theory makes the auditor to detect and prevent errors and fraud in organizations. It then adds a factor of monitoring to the auditing theory.

The Lending Credibility Theory: For this theory, the primary function of auditing is to add credibility to the financial statements. Akinbuli (2010) states that audited financial statements can enhance stakeholders' faith in management's stewardship assumed that for one to be sure that the financial statements are true and fair then an independent person has to go through the statement, substantiate them then produce a report. It asserted that shareholders and stakeholders trust the report of the auditor and feel secure. The theory was modified by Hayes, et al., (1999) through financial statements that the revenue authorities are able to ascertain the amount to be collected. The factor of credibility was added to the theory of auditing. In this view, the service that the auditors are selling to the clients is credibility. Audited financial statements are seen to have elements that increase the financial statement users' confidence in the figures presented by the management (in the financial statement). The users are supposed to gain benefits from the enhanced credibility; these benefits are typically considered to be that the quality of investment decisions improve when they are based on reliable information.

Theory of Inspired Confidence: This theory sometimes called as theory of rational expectations. It states that the demand for audit service is the direct consequence of the participation of third parties (interested parties of a company) in the company. These parties

demand responsibility from the management, in return for their investments, in the company. Accountability is realized through the issuance of periodic financial reports. It was made on the assumptions that stakeholders want to know how their resources are utilized and that the managers are responsible and geared towards the same objectives as stakeholders. The theory asserted that it is through audited financial statements that the accountability can be substantiated and then accountability is introduced in auditing.

The Moderator of Claimants Theory: This theory states that it's necessary that each one important participants in a company still contribute. In order to continue these contributions, it is important that each group believes it receives a fair share of the organizations revenue. This is based on the assumption that when one gets a fair share then a fair share will be contributed. To the auditing theory then fairness is introduced.

Agency Theory: This theory is associated with interest based conflict of shareholders and management of organizations, suggesting that the less informed party will have to demand for information that monitors the behavior of better informed manager (Akinbuli, 2010). In this theory the auditor is appointed in the interests of both the third parties as well as the management. According to Hayes, et al. (1999), agency theory can be wont to justify the availability aspect of the audit market. The contribution of an audit to third parties is basically determined by the probability that the auditor will detect errors and missing values in the financial statements and the auditor's willingness to report these errors and then independence is emphasized in auditing.

# 2.1.2. Types of Tax Audits

Tax audits have various types in their scope and the level of intensity to which they are performed. The risks to be addressed and desired audit coverage of the tax payer population is reflected based on the nature of audits conducted. Desk audit or issue audit which has low range of testing provides a high level of audit coverage, however at the expense of audit quality, revenue, and missed opportunities to properly detect taxpayers' noncompliance. On the other hand, audit activities with an excessive range of detailed examinations decrease the numbers of audits that might be audited, possibly leading also to less overall deterrent effect (OECD, 2006). According to MOR (2019), types of audits are defined by the audit scope and intensity, the

period(s) under examination and the location of the audit activity. The major types of audit in MOR are discussed below.

Comprehensive or Full Audit: Ebrill (2001) defined comprehensive audit as comprehensive examination of all information relevant to the calculation of a taxpayer's tax liability for a given period. Comprehensive audit may cover all types of tax obligations over a number of tax periods, or extended to several years up to the limit provided for within 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. MOR (2019) also defines as a comprehensive audit is all-encompassing in scope and entails an in-depth examination of all information relevant to the calculation of a taxpayer's tax liability for all tax type for a given period. The objective is to assess the correct tax obligation for a tax return as a whole. As this audit is usually time consuming and needs more resource 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.

This type of audit is more important for both the tax authority and the tax payers. For the tax authority it helps to collect more additional taxes and creates compliant tax payers while for tax payers it is a lesson for correcting their mistakes for future declaration because the audit entails detailed examination and examines each and all documents in detail (MOR, 2019).

Issue Audit: This is a limited scope audit that may be confined to specific issues in a tax return and/or a particular tax type. 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). It should emphasis on a single tax type and covers no more than one or two reporting periods. Single issue audits are limited to one item of potential noncompliance that may be apparent from examination of a taxpayers return. The objective here is to examine key potential risk areas of non-compliance. Given their narrow scope, single-issue audits typically take less time to conduct and can be used to review large numbers of taxpayers involved in similar schemes to cover noncompliance.

**Desk Audit:** A desk audit is used as a preliminary examination of declarations analyzing accuracy, completeness, ratios, and crosschecking information to determine if further audit or investigation is warranted. By implication, returns which are stated on certain level of risk. It is usually carried out annually and primarily based on: (1) a review of income tax and Value Added Tax (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 encompasses basic tests conducted at the tax office when the auditor is confident that all necessary information can be ascertained through in-office examination. According to Ebrill (2001), Information Technology (IT) systems should provide strong support for these verifications.

Field Audit: It is a detailed examination of taxpayers' books of accounts and records to determine whether the right amounts were reported on the tax returns. The auditor may also acquire information from third parties such as banks, creditors and suppliers, to confirm items on returns. A field audit usually includes one or more of the following taxes: income, franchise, sales and use, withholding, and excise taxes. The audit is conducted at the place of business of taxpayers, or office, or at the office of their accountant, attorney, or other person who may represent them. The auditor tries to select the place that is most appropriate under the circumstances and most convenient for them.

**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 and a quick check on businesses to determine that they're properly registered. It should not take more than half a day (OECD, 2006). According to Ebrill (2001), in this observation, the tax officer confirms that the taxpayer: (1) has 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.

**Advisory Audits:** It involves the auditors visit to newly established businesses. They advise them regarding on different types of tax obligations, filing of returns, payment of amounts due, record keeping to be maintained, refund claims, risk of audit and sanctions of noncompliance.

These visits are more important when introducing new tax laws issues. All registered taxpayers or businesses need to be visited with the aim of offering advice on tax obligations and the taxpayer's rights, and any other developments pertinent to the tax system and administration.

**Special Audit Projects:** Audits can be organized as a separate project for a targeted or specific group of taxpayers in a given period to verify compliance in the sector. These audit projects may cover an industry, trade, profession or a line of businesses. They will consist of specific checks and are used to address a particular risk or to establish the degree of non-compliance in a particular sector, industry or trade. For this audit type to be effective, all taxpayers in the targeted sector must be considered and handled within the shortest time possible.

**Refund audit:** Refund audit should focus only on the period covered by the claim. A pre-refund audit should be undertaken to verify the taxpayer's entitlement to a refund prior to processing a first refund claim particularly for new registrants. It is also carried out wherever the refund claim varies considerably from established patterns and trends. Audits of further claims should be carried out selectively.

Fraud Investigation Audit: It is criminal investigation that arises where the most serious cases of noncompliance that have criminal implication fraud, evasion, and criminal activity are detected. Such investigation requires special skill including meeting evidentiary requirements, seizure of evidences or records, testimony from key witnesses and preparing briefs for courts. Hence, it should be undertaken in accordance with criminal procedure laws. As OECD (2004) states, tax authorities should maintain a dedicated organizational unit responsible for the handling of serious cases of tax fraud or evasion.

# 2.2. Empirical Review

#### 2.2.1. Tax Audit Effectiveness

Bender (2006) defines effectiveness that can be regarded as a composite of competence, procedural arrangements, quality control and quality assurance. A clear understanding of audit effectiveness could be a requirement of audit analysis. Effectiveness has several aspects, relating both to the specific audit and to the audit firm in general. Audit is effective if it provides the required service from the function or in other words if it achieves the objectives of the function

(Mihret and Yismaw, 2007). Barrett (1986) noted that effectiveness of internal audit can be described, but it is difficult to quantify and thus, effectiveness is determined mainly by the fit between the auditing work and also the goals set by managers, the qualifications of the company's auditor, management support for the auditing staff, and several characteristics of the auditing department itself. Tax audit is effective if it meets the intended outcome it is supposed to bring about (Ayalew, 2014). For this study, tax audit effectiveness stands for the functions ability to provide the required service based on tax audit standards to achieve the tax audit objective which is bringing compliance tax payers and increasing self-assessment.

#### 2.2.2. Factors Affecting Tax Audit Effectiveness

Previous studies reveal that internal audit effectiveness is significantly affected by Audit Quality; Management Support; Organizational Setting; Attributes of Auditee; and Organizational Independence (Mihret and Yismaw, 2007; Husam Al-Khaddash, 2013; Shamsuddin, 2014; George, etal, 2015; and Salehi, 2016). According to Ayalew (2014) and Abera (2016), tax audit effectiveness is also affected by such determinant factors which are audit quality, management support, organizational setting, auditee attributes, and organizational independence. Though these factors affect tax audit effectiveness and they have positive relationship some factors have positively significant effect to tax audit effectiveness and others have positive effect but not as such significant

Regarding audit quality, Saidin (2014) reveals that audit experience has a significant positive relationship with internal audit effectiveness. Thus, effective audit committee has significant potential to moderate such relationship. On the other hand, audit experience, auditors' proficiency, internal control system, and auditor's profession are a supportive tool for audit quality. For instance, Al-Khaddash (2013) investigated the Jordanian banking sector and reveal that internal control system, independence of the auditor, auditor efficiency, reputation of the auditing office, auditing office fee, specialty and proficiency of the auditor, and the size of the auditing office does affect auditing quality. In this research finding, there are no differences in auditing quality between internal and external auditors.

George, et al. (2015) examines the relationship among tax audit effectiveness, tax legislation, and the use of specialized information system tools. According to George, there is a positive and

significant relationship between "Information Systems" and "Tax Infringements Tracking" while "Tax Legislation" has been found negative and significant association with "Tax Infringements Tracking."

Mihret & Yismaw (2007) explain that internal audit quality and management support strongly affects internal audit effectiveness but organizational setting and auditee attributes don't have a strong impact on audit effectiveness. Similarly, Ayalew (2014) states that there is no statistical significance of negative relationship between auditee attributes and tax audit effectiveness; there is no statistical significance of positive relationship among organizational setting, top management support, and tax audit effectiveness; and there is strongly significance positive relationship among audit quality, organizational independence, and tax audit effectiveness.

Audit firm industry specialization and ratio of certified audit professionals have statistically significant and positive relationship with Ethiopian manufacturing share companies' external audit quality (Leilina, 2015). On the opposite hand, jointly providing of audit and non-audit service has a negative and statistically significant relationship with manufacturing share companies' external audit quality. However, the relationship between audit firm size and audit firm tenure is found to be statistically insignificant.

The measure of internal audit effectiveness based on quality of the function as perceived by auditees, specifically managers of audited departments within the investigated organizations. This overall measure was obtained by aggregating auditee responses to survey questions on aspects of the internal audit function including ability to plan, improvement of the organization's productivity, assessment of the consistency of results with established objectives and goals, implementation of internal audit recommendations, evaluation and improvement of risk management, evaluation of internal control systems, and recommendations for improvement (Alzeban & Gwilliam, 2014).

Ayalew (2014) states that tax audit effectiveness can be measured by the extent to which a tax audit office meets arguably a result of the interplay among five factors such as audit quality, management support, organizational setting, attributes of the auditee, and organizational independence. A tax audit function's capability to provide useful audit findings and recommendations would help raise management's interest in its recommendations. The

management support with resources and commitment to implement the tax audit recommendations is essential in attaining audit effectiveness. Also, the organizational setting in which tax audit operates, i.e. the structure standing of the workplace, its internal organization and the policies and procedures applying to each auditee, should enable smooth audits that lead to reaching useful audit findings. Further, the potential, attitudes, and level of cooperation of the auditee impact on the effectiveness of audits.

According to Abera (2016), audit quality, organizational setting, organizational independence, auditee attributes, and top management support as a linear combination significantly influence tax audit effectiveness in the organization studied. However, as individual predictors organizational setting and auditee attributes are not significant enough to undermine tax audit effectiveness. Audit quality is a dominant factor in predicting tax audit effectiveness whereas organizational independence and top management support has moderate significant influence on effectiveness of the organization being studied. Audit quality; in comparison to top management support, organizational independence, organizational setting, and auditee attributes; is greater influence on tax audit effectiveness.

#### Quality of Audits

Audit quality to internal audit is considered as a determinant of internal audit effectiveness (Mihret & Yismaw, 2007; Sayag, 2010; and Ayalew, 2014). It is a function of extensive staff expertise; reasonableness of the scope of service; and effective planning, execution and communication of tax audit. A quality audit is one that focused on identified risks; applies the correct law and technical interpretation; follows consistent procedures; properly documented, and properly communicated. George, et al. (2015) reveal that audit quality is examined as one of the variables associated with internal audit effectiveness.

Audit quality, which is verified by the office's capability to give valuable audit findings and opinions or recommendations, is one of the most prominent issues on which audit effectiveness is improved. The performance standards of the tax audit require the auditor to plan and perform the work such that he or she would be able to arrive at useful audit findings and forward recommendations for improvement. The office's ability to properly plan, perform and communicate the results of audits is a proxy for audit quality (Ayalew, 2014).

#### Management Support

Top management is crucial to the acceptance and appreciation of the internal audit effectiveness within an organization (Dellai & Ali Brahim, 2016). Top management should support the audit department with full of resources and commitment to implement audit findings, opinion and recommendations in order to improve audit effectiveness. Salehi, (2016) management support is positive and significant relation to internal audit effectiveness. Management support also is a significant factor for audit quality which in turn audits effectiveness. It is the key driver of internal audit effectiveness.

Sayag (2010) found that management support was strongly related to the three auditing effectiveness dimensions (auditing quality, auditees' evaluations, and added contribution of Internal Audit) in Israeli organizations. Alzeban and Gwilliam (2014) found that management support was the most significant factor influencing internal audit effectiveness in the Saudi Arabian public sector organizations. They noted that internal audit effectiveness would be enhanced by hiring trained and experienced staff, and providing sufficient resources. Furthermore, Mihret and Yismaw (2007) found that management support is the second most important factor influencing internal audit effectiveness within the higher educational institution in Ethiopia, after internal audit quality.

#### Organizational Setting

According to Mihret and Yismaw (2007), organizational setting to internal audit is considered as one of a determinant factor of internal audit effectiveness. Organizational setting refers to the organizational profile, internal organization and budgetary status of the tax audit in the organization structure; and also the organizational policies and procedures that guide operation of auditees. It provides the context in which tax audit operates. Thus, organizational setting can exert influence on the level of effectiveness that audit could achieve. The auditee attributes relate to the competence of the auditee to meet its planned objectives. Auditee attributes with implications on audit effectiveness contain the auditees' proficiency to competently and effectively meet organizational sub-goals; their perspective towards internal audit; and also the level of cooperation provided to the auditor (Mihret and Yismaw, 2007). Moreover, Ayalew (2014) reveals that proper internal organization is vital to achieve audit effectiveness. In

addition, independence of individual auditors is essential to the effectiveness of the tax audit function.

#### Auditee Attributes

The auditee attributes relate to the competency of the auditee to achieve its anticipated objectives. Auditee attributes with implications on audit effectiveness include the auditees' cooperation. To achieve effective audit work, the auditors should have needed to own full and unrestricted access to all activities, records and properties, and be given with cooperation from the auditee. The ease of access to required records in the auditee varies among the units audited. The capability of the auditees to meet their objectives also reflects on audit quality. Auditee attributes considered as determinant factors to tax audit effectiveness. It has a positive relationship with tax audit effectiveness but not statistically significant (Mihret and Yesmaw, 2007; Ayalew, 2014; and Abera, 2016).

#### Organizational Independence

Organizational independence contributes to the accuracy of the auditors' work and gives employers confidence that they can rely on the results and the report. Differentiate among three dimensions of independence: programming independence, investigative independence and reporting independence. Mihret and Yesmaw (2007), argue that for internal audit effectiveness organizational independence is more crucial, as it protects the auditor from pressure or intimidation, and increases the objectivity of the auditing work. According to Ayalew (2014), organizational independence has greater influence on tax audit effectiveness in comparison to other determinant factors.

#### 2.2.3. Contribution of Tax Audit to Revenue

The primary purpose of a tax system in any government is to raise enough revenue to finance necessary expenditures on the goods and services provided by government. According to Pius and Raymod (2014), taxation is one of the best instruments to boost the potential for public sector performance, to finance the social insurance program and for the repayment of public debt. A country's revenue generation primarily depends upon its sufficient capacity to tax more in both economic and administrative term. Developing countries collect a small amount of

revenue from taxation because these countries face a number of institutional challenges in the process of tax administration and revenue generation. One of the main problems is tax evasion and avoidance. Tax evasion is the illegal practice of not paying taxes, by under reporting or not reporting income, reporting legally disallowed expenses, or by not paying taxes owed. It is the illegal act or practice of failing to pay taxes which are owed. In businesses, tax evasion can occur in connection with business profit taxes, employment taxes, sales and excise taxes, and other federal, state, and local taxes. Tax evasion is most regularly thought of in relation to business income taxes, but tax evasion can be practiced by businesses on state sales taxes and on employment taxes. In fact, tax evasion able to be practiced on all the taxes a business owes. Tax avoidance on the other hand, is the use of legal methods to modify an individual's financial situation to lower the amount of income tax owed. This is mostly accomplished by claiming the allowable deductions and credits. This practice differs from tax evasion, which uses illegal techniques, like underreporting income to avoid paying taxes (MOR 2019).

Tax audit is one of a mechanism among detecting of tax evasion and avoidance. It is one of the main influential factors for increasing revenue collected from taxes. Tax audit may increase tax revenue in two ways one is directly through assessment of additional taxes, and the other way is indirectly by improving taxpayer compliance with the tax laws and regulations (MOR 2019).

Tax audit is one in all the longest standing and accepted compliance methods in tax administration. The tax audit provides visibility to the compliance and enforcement arm of the tax administration (Thomson, 2008). Compliance risk is the failure to comply with the tax law by taxpayers whether due to their ignorance, carelessness, recklessness, deliberate evasion, or weaknesses in tax administration itself, and have been addressed only by legal enforcement through an audit-based approach (OECD, 2004). The major purpose of tax audit is to preserve the confidence in the integrity of the self-assessment system. It helps to improve voluntary compliance by detecting and bring to book those who do not pay the exact amount of tax expected from them. According to MOR (2019), the overall objective of tax audit is to improve the compliance of taxpayers, whether they declare the correct amount of tax and paid at the right time. The expectation by a taxpayer of an audit should have a deterrent impact and encourage the taxpayer to declare as far as possible a believable tax return. It also improves the taxpayer's understanding and awareness of the relevant taxes.

As Biber (2010), tax audit is extending beyond verifying a taxpayer's reported obligations and detection of discrepancies between a taxpayer's declaration and supporting documentation. Most taxpayer's report their tax liabilities more perfectly if they believe that the tax administration has the capability to find any unreported liabilities which significant penalty could also be applied when they are detected. Therefore, according to Barreca and Ramachandran (2004), the purpose of tax audit is to check the evasion of tax and ensure compliance in accordance with the laws and regulations.

As Appah and Eze (2013), tax audit is one of the strategies in achieving tax compliance; conducting tax audit increases compliant tax payers by raising awareness of tax payers on tax laws and regulations. According to Kennedy and John (2014), tax audit and tax compliance has a positive relationship; this means that the compliance rate rises if the tendency of being tax audited is high. If the tax payers are informed that their fillings will be closely examined, there is a tendency for the tax payers' behavior to change in response to an increased probability of been tax audited. They revealed that the joint effect of tax audit and penalties have a tendency to significantly influence tax compliance. The tax audit increases the compliance rate which will impact positively the tax revenues. This means that the tax audit leads to the tax revenues growth (Samuel and De Dieu, 2014).

Tax audit can lead to an increase in government revenue to a great extent (Adediran, et al., 2013). Tax audit has a significance impact in increasing government revenue by serving as a motivating factor to the tax payers in carrying out their tax obligations. Tax audit is directly related to revenue collection the more the tax audit conducted is the more revenue collected. They suggested that tax audit ought to be administered more typically and as thorough as able to accomplish its task of improving the revenue base and eliminate tax evasion. Onoja and Iwarere (2015) argue that tax audit has significant relationship with revenue generation, an increase in tax audit increases revenue generation from taxes; an increase in tax audit, increases tax bases for the government and an increase in tax audit which means more perform in tax audit, reduce tax fraud in the tax system because tax audit is a tool for reducing illegal practices in taxpayers. Tax audit ensures tax compliance by reducing tax fraud.

Niu (2010) founds a positive association between the audit and the voluntary compliance which in turn revenue collected from taxes could significantly increase. The finding suggests that the

audit productivity may be under estimated in many studies in the literature. It recalls us that when considering the productivity of the audit work. Moreover, the direct audit collections, we should also take the audit impact on the voluntary compliance into consideration. For this reason, the finding could give tax professionals and tax authorities with encouragements to strengthen the audit power and to establish better structure on their audit organization to generate more revenue for the government.

Palil and Mustapha (2011) argue that audits could encourage taxpayers to be more prudent in completing their tax returns, report all income and claim the correct deductions to ascertain their tax liability. In the contrary, taxpayers who have never been audited might be tempted to under report their actual income and claim dishonest deductions. In this relation, they also argued that audits could have significant contribution to government revenue collected from taxes.

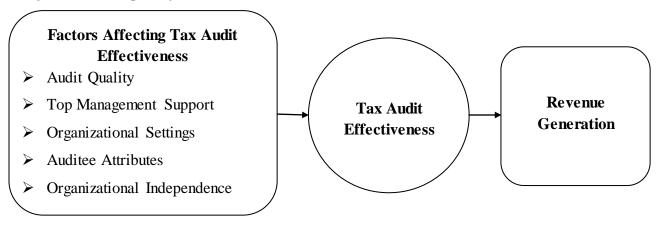
As Adediran, et al. (2013), all the tax audits are important because they add something to revenue and thus should be encouraged. It assists that the government in collecting appropriate tax revenue necessary for government fiscal budget, keeping economic and financial demand and stability, to ensure that reasonable 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.

In all understanding discussed above, 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 (Bortey, 2011).

### 2.3. Conceptual Frame Work

As argued in the earlier discussions, audit quality, top management support, organizational settings, attributes of auditee and organizational independence will affect tax audit effectiveness. Based on the literature reviews, it is therefore postulated that effective tax audit leads to greater revenue generation in Ethiopian Ministry of Revenue.

Figure 2: Conceptual framework



Source: Self-constructed

#### **CHAPTER THREE**

#### **RESEARCH METHODOLOGY**

#### 3.1. Research Design

Research design is one of the key tools to have the right track of a research. In this understanding, a research method is selected based on the research questions of a specific study. This is because research design is a roadmap of a research plan to reach on the objectives of the study by giving answer for each research questions. Thus, research design is a methodological procedure of a research. According to Hammersly and Atkinson (1995), a researcher must develop a sound plan for selecting a sample, collecting data, and analyzing the data. As to them, if the plan is flawed, the results of the study will be difficult or impossible to interpret.

There are three alternative research approaches: qualitative, quantitative and mixed approaches. These approaches are different in terms of their philosophical assumptions as well as techniques used in data collection, analysis and interpretation. In order to address the research questions, the researcher chose quantitative method of research approach among the three alternative research approaches for this study.

Quantitative research is used to quantify the problem by way of generating numerical data or data that can be transformed into useable statistics. It generates statistical data through the use of large scale survey research, using methods which are structured closed ended questioners and/or structured interviews (Dawson, 2002). Creswell (2009) noted that quantitative approach employs strategies of inquiry such as experiments and surveys, collect data on predetermined instruments that yield numeric data that can be analyzed using statistical procedures. It is a means for testing objective theories through examining the relationship among variables. It is used to quantify attitudes, opinions, behaviors, and other defined variables and generalize results from a larger sample population. Quantitative research uses measurable data to formulate facts and uncover patterns in research. It is advantageous as it, procedurally, follow scientific approach, tests reliability and validity of instruments. It minimizes bias from the researcher's influence and employs large sample size. Hence, the results can be believed on and the results can be generalized to larger population.

Therefore, based on the research objective using quantitative method of research approach, the researcher used to analyze the data, descriptive and explanatory types of research.

In the following section, source of data, sampling technique, tools of data collection, and ways of data analysis has briefly discussed.

#### 3.2. Source of Data and Sampling Technique

#### 3.2.1. Source of Data

For this study, only primary data have been employed. From the primary sources of data questionnaire only is used for this study. The questionnaires have collected from the experts of tax auditors in the Eastern Addis Ababa small tax payers' branch office. Those tax auditors are expected to have full firsthand information about the impacts of tax audit effectiveness on revenue generation.

#### 3.2.2. Sampling Technique and Sample Size

Sampling can be defined as the process or technique of selecting a suitable sample, representative of the population from which it is taken, for the purpose of determining parameters or characteristics of the whole population (Singh, 2007). There are two types of sampling: probability sampling and non-probability sampling. For this study, non-probability sampling is selected. From non-probability sampling, purposive sampling is more suitable for this study. This sampling technique is selected because it is useful for situations where the researcher need to reach a targeted sample quickly. For the selected target population, random process of selection or proportionality is not the primary concern. Thus, purposive sampling technique has been employed.

In the Ethiopian Ministry of Revenue, Eastern Addis Ababa small taxpayers branch office organizational structure the Tax Audit work process is one of the core work processes among four main work processes which are Tax Assessment and Collection Work Process, Tax Audit Work Process, Law Enforcement Work Process, and Customer Service Work Process.

Tax Audit work process has a total of 85 staff experts which are three work process owner, three secretary typist, 10 team coordinators, and 69 auditors. Except to secretary typists all

professional experts are the total population of this study. In order to get clear information regarding on impact of tax audit effectiveness on revenue generation the researcher distributed 82 questionnaires to those tax audit experts directly concerned and collected 79 questionnaires from the 82 questionnaires distributed to the tax auditors and team coordinators.

#### 3.3. Research Instruments

Several methods of data collections instruments are possible to use in quantitative research approach. The main research instrument that applied for this study is administrating surveys with Likert scale questions. Therefore, a structured close-ended questionnaires has taken as the main research instrument of data collection for this study. The study used structured questionnaire, which is a widely used and useful instrument for collecting survey information. As Wilson and McLean (1994) noted, questionnaire could provide structured information, being administered without the presence of the researcher, and often comparatively straightforward to analyze.

Questionnaire as a tool for data collection has its own advantage and limitations. The advantage found from the literature includes that the data collected through the use of questionnaire are efficient, reliable because of anonymous, honest, economical (in terms of time and money), quick, consistent, and enables the anonymity of the data sources to be preserved. Nevertheless, the major limitations are nonflexible (no longer possible to backtrack once the administration phase is under way), lack of qualitative depth, and low response rate (Cohen et al., 2000).

Structured questionnaire is appropriate to gather straightforward and uncomplicated information. It is easy to classify and quantify, require less time and effort, and ingenuity to answer. Nevertheless, it is tedious and time consuming to prepare questions. The researcher also may not have a full range of response to prepare closed-ended questionnaire. In addition, the respondents have no chance to express their own views, and to qualify, develop or clarify their own answers. Thus, for this study the researcher employed mere structured questionnaire for required data collection.

#### 3.4. Method of Data Analysis

In quantitative method of this study, data have analyzed using descriptive statistics that are used to describe, summarize, or explain a given set of data. Thus, based on descriptive statistics data

analysis, the collected data have been analyzed through multiple regression model with the help of SPSS. Based on this, the researcher tried to specify the variables and models used under the study. Accordingly, the study identified a total of seven variables including two dependent variables and five independent variables, and then has two models.

The first model is that Tax Audit Effectiveness (TAE) the dependent variable which is explained by five independent variables including, Audit Quality (AQ), Top Management Support (TMS), Organizational Setting (OS), Auditee Attributes (AA), and Organizational Independence (OI). In this model the researcher tried to see how tax audit effectiveness is affected by audit quality, top management support, organizational setting, auditee attributes, and organizational independence.

$$TAE = \beta 0 + \beta 1(AQ) + \beta 2(TMS) + \beta 3(OS) + \beta 4(AA) + \beta 5(OI) + \epsilon$$

The second model is that Revenue the dependent variable, which is explained by Tax Audit Effectiveness (TAE). This model deals the relationship between tax audit effectiveness and revenue generation in Eastern Addis Ababa Small Tax Payers Branch Office.

$$Rvenue = \beta 0 + \beta 1(TAE) + \epsilon$$

In the research, the raw data is changed into a data structure that enables to generate meaningful and useful bits of information. The variables are measured through different questions as follows.

The dependent variable Tax Audit Effectiveness is measured by seven question starting from question number nine to question number fifteen. These questions are coded and summarized into one variable and entered into SPSS.

The independent variable Audit Quality is also measured by five questions staring from question number sixteen to question number twenty. These questions are coded and summarized into one variable and entered into SPSS.

The independent variable Top Management Support is measured by four questions starting from question number twenty-one to question number twenty-four. These questions are also indexed and summarized into one variable and entered into SPSS.

The independent variable Organizational Setting is measured by four questions starting from question number twenty-five to question number twenty-eight. These questions are indexed and summarized into one variable and entered into SPSS.

The independent variable Auditee Attributes is also measured by six questions starting from question number twenty-nine to question number thirty-four. These questions are indexed and summarized into one variable and entered into SPSS.

The independent variable Organizational Independence is measured by four questions starting from question number thirty-five to question number thirty-eight. These questions are indexed and summarized into one variable and entered into SPSS.

The other dependent variable Revenue is also measured by fifteen questions starting from question number thirty-nine to question number fifty-three. These questions are indexed and summarized into one variable and entered into SPSS.

With this end, the next chapter presents the results and analysis of the study.

#### **CHAPTER FOUR**

#### DATA PRESENTATION, ANALYSIS AND INTERPRETATION

This chapter contains discussion and analysis of findings of the study. It presents the findings in relation with the study objective. Thus, the primary focus of this study is to examine the impact of tax audit effectiveness on revenue generation of Ethiopian Ministry of Revenue Eastern Addis Ababa Small Tax Payers Branch Office. Administered questionnaires were prepared and distributed to collect primary data from the respondents. The target population for this study was experts of tax audit department of Eastern Addis Ababa Small Tax Payers Branch Office. The questionnaire distributed to the respondents dealt with the effectiveness of the revenue office tax auditing processes, and covered the independent variables.

In this study both descriptive analysis and regression analysis were used to analyze the data. The descriptive statistics utilized in this research used to analyze the demographic data included frequency, percentages, etc. Inferential analysis is concerned with the various test of significance, for diagnostic testing, heteroscedasticity, multi-collinearity, test of omitted variables, and link test in order to determine what validity data can be said to indicate some conclusions. The data collected from the returned questionnaire were entered in to SPSS for analysis. The data was indexed and sorted to group questions according to applicable constructs under test. In this study, a multiple regression analysis was performed by using all the discrete variables (dependent and independent) variables available in the dataset.

#### 4.1. Descriptive Statistics Results of Respondents

#### 4.1.1. Respondents Profile

This section provides a profile of respondents who involved in the study and data collected basic characteristics. Accordingly, the following variables about the respondents were summarized and described in the following tables. These variables include gender of respondents, age of respondents, educational level of respondents, field of study, current position of respondents, years of experience of respondents, special work related training taken and time taken of the special work related training.

Table 4. 1: Summery statistics for Gender and Age Level of Respondents.

|                    | Gend | ler    |         |        |
|--------------------|------|--------|---------|--------|
| Age                | Male | Female | Percent | Total  |
| less than 30 years | 26   | 21     | 59.5    | 47     |
| 30 to 40 years     | 18   | 11     | 36.7    | 29     |
| 41 to 50 years     | 3    | 0      | 3.8     | 3      |
| Percent            | 59.5 | 40.5   |         | 100.00 |
| Total              | 47   | 32     | 100.00  | 79     |

Source: Own computation of SPSS output data

As shown in the table above 59.5% of the respondents are male and the remaining 40.5% of the respondents is female; in addition, the age of the respondents shows that 59.5% of the total respondents is less than 30 years old, 36.7% is 30 to 40 years and only 3.8% of the respondents is 41 to 50 years. This indicates that most of the auditors of the Eastern Addis Ababa Small taxpayer's branch office are male and less than 30 years age, they are young.

Table 4. 2: Summery statistics for Educational level of the respondents.

| Education       | Freq. | Percent |
|-----------------|-------|---------|
| Degree          | 75    | 94.9    |
| Masters & above | 4     | 5.1     |
| Total           | 79    | 100.00  |

Source: Own computation of SPSS output data

Education is a basic issue for doing in every profession. Accordingly, if auditors are qualified they can easily understand tax laws, proclamations, regulations, and tax audit principles and practices. Education level of auditors of Ethiopian Ministry of Revenue Eastern Addis Ababa Branch Office is that 94.9% are degree holder and the remaining 5.1% are masters & above degree. Table 4.2 above clearly reveal that all the auditors are university graduate, auditors' educational qualification of tax office is adequate to perform audit tasks. It is known that educational qualification is important on individual's attitude for understanding and knowing the tax laws and regulations and other international business transactions, the consequence of this is that an organization will be achieved audit objective. Although, most of the audit staffs are bachelor degree holders not only this but also auditors should have more professionalism to do

best audit practices, activities and responsibilities in order to enhance audit efficiency, gain audit effectiveness, receive audit performance, and audit success.

Table 4. 3: Summery statistics for respondents' field of study.

| Study      | Freq. | Percent |
|------------|-------|---------|
| Accounting | 57    | 72.2    |
| Management | 18    | 22.8    |
| Economics  | 4     | 5.1     |
| Total      | 79    | 100.00  |

Source: Own computation of SPSS output data

The auditors' field of study shows that 72.2% of respondents are in accounting, 22.8% are in management, and 5.1% of respondents are in the economics field of studies. The result indicates that most of them are accounting and management graduates, to perform audit works an employee should have deep knowledge of accounting and management theory and principles therefore, the audit staff of the Ethiopian Ministry of Revenue Eastern Addis Ababa Branch office almost may have sufficient knowledge of their field of study in order to achieve the tax audit objectives.

Table 4. 4: Summery statistics for work experience of respondents.

| Experience                    | Freq. | Percent |
|-------------------------------|-------|---------|
| Less than two years           | 14    | 17.7    |
| 2-5 years                     | 35    | 44.3    |
| Greater or equal to six years | 30    | 38.0    |
| Total                         | 79    | 100.00  |

Source: Own computation of SPSS output data

Even if educational qualification and field of study is a basic issue, it should be supported by relevant work experience in order to be more effective for achieving tax audit objective with in relatively short period of time. The result in the table 4.4 above shows the work experience of Ethiopian Ministry of Revenue Eastern Addis Ababa branch office is 17.7% of respondents have less than two years, 44.3% of respondents are within two to five years of work experience and 38.0% of respondents have above five years of work experience. It is clearly known that to be a

good auditor it should have two and above two years of work experience, when we see the results most of the tax audit staffs have above two years of work experience, hence tax auditors with more work experience tend to perform effective audit practice, and achieve good audit outcomes, which in turn have positive effect on effective tax audit.

Table 4. 5: Summery statistics for Current Position of respondents

| Position         | Freq. | Percent |
|------------------|-------|---------|
| Process owner    | 2     | 2.5     |
| Team coordinator | 9     | 11.4    |
| Auditor          | 68    | 86.1    |
| Total            | 79    | 100.00  |

Source: Own computation from SPSS output.

When we see the position of the staff the study includes all position of the tax audit of Ethiopian Ministry of Revenue Eastern Addis Ababa Branch Office. The tax audit staff includes two process owner 2.5% of respondents, 11.4% are team coordinators and 86.1% of respondents are auditors.

Table 4. 6: Summery statistics for respondents' special work related training taken and time taken for the special work related training.

| how Long you take training | Training |      |  |  |
|----------------------------|----------|------|--|--|
| now hong you take training | yes      | No   |  |  |
| less than 16 days          | 22       | -    |  |  |
| 16 to 30 days              | 2        | -    |  |  |
| 31 to 60 days              | 1        | -    |  |  |
| Percent                    | 31.6     | 68.4 |  |  |
| Total                      | 25       | 54   |  |  |

Source: Own computation from SPSS output.

Respondents were also asked whether they take special training or not for updating their knowledge. As table 4.6 above shows 68.4% of respondents didn't take any training and only 31.6% of respondents were take training, among these 88% were attend for less than 16 days and 8% and 4% were attend for 16 to 30 days and 31 to 60 days respectively. The result indicates that

the revenue office didn't provide special training to improve the capability or competency of auditors, this in turn have its own effect on audit quality and audit performance.

#### 4.2. Descriptive analysis results on variables

The descriptive statistics (such as the mean of the distribution, median of the distribution, minimum/maximum of the range of distribution, and standard deviation of the distribution) were employed to investigate and present an overview of both dependent (TAE) and independent variables (AA, AQ, OI, OS, and TMS) used in the study. Table 4.7 shows the descriptive statistics output of all variables.

Table 4.7 shows the descriptive statistical results of the corresponding 79 total observations of each variable in the study. It also describes the overall nature of variables employed in the study and their interpretation is presented as follows.

Table 4. 7: Descriptive Statistics result

| Descriptive Statistics      |         |         |        |  |  |  |  |
|-----------------------------|---------|---------|--------|--|--|--|--|
| Variables                   | Minimum | Maximum | Mean   |  |  |  |  |
| Tax Audit Effectiveness     | 2.57    | 5.00    | 3.7288 |  |  |  |  |
| Audit Quality               | 1.00    | 5.00    | 3.8000 |  |  |  |  |
| Top Management Support      | 1.75    | 5.00    | 3.4304 |  |  |  |  |
| Organizational Setting      | 1.00    | 5.00    | 3.4451 |  |  |  |  |
| Audit Attributes            | 1.83    | 4.83    | 3.6076 |  |  |  |  |
| Organizational Independence | 1.00    | 5.00    | 3.5981 |  |  |  |  |

Source: Own computation from SPSS output.

The mean of the score from 1-1.80 is strongly disagree, from 1.81-2.60 is disagree, from 2.61-3.40 is Neutral, from 3.41-4.20 is agree, and 4.21-5 is considered strongly agree.

The mean distribution of the dependent variable (TAE) of the study is 3.7288 which is greater than 3. It shows that most of the auditor's responses agreed with tax audit effectiveness on revenue. The auditor's response shows on the 7 item questions that tax audit effectiveness in revenue is high.

Quality of audit is determined by tax auditors having an appropriate audit plan, tax auditors focused on identified risks in their audit activities, tax auditors applying the correct tax laws and technical interpretation, tax auditors following consistent procedures as per the tax audit manual, and tax auditors should properly document their working papers and properly communicate with other parties. The mean value of audit quality was 3.8000. This implies that most of the respondents have agreed to the quality of audit in tax audit effectiveness.

The average mean value of top management support in tax audit effectiveness was rated as 3.4304. So the respondents agreed with the perception of top management's role in the tax audit effectiveness.

The organizational setting is determined by organizational structure, policies, procedures, training and preparing employees, and promotion process of employees. The mean value of organizational setting was 3.4451. So its implication is auditor's responses are agreed on organizational settings.

The mean distribution of the auditee attribute was 3.6076 which indicates that most of the respondents agreed that the auditee attribute positive effect on tax audit effectiveness.

The mean value of organizational independence was 3.5981 which indicates that most of the respondents agreed on organizational independence.

#### 4.3. Regression Analysis

Linear regression estimates the coefficients of the linear equation, involving one or more independent variables that best predict the value of the dependent variable. As mentioned in the previous chapter method of data analysis, the study has a total of seven variables which have two dependent variables and five independent variables. TAE (Tax Audit Effectiveness) is one dependent variable which is explained by five independent variables AQ (Audit Quality), TMS (Top Management Support), OS (Organizational Setting), AA (Auditee Attributes), and OI (Organizational Independence).

On the other way Tax Audit Effectiveness is one independent variable which explains the dependent variable of Revenue. Here under the regression analysis and discussion of the two models is presented.

#### 4.3.1. Regression Analysis of Dependent Variable Tax Audit Effectiveness

The first model examines under how Tax Audit Effectiveness is affected by independent variables: Audit Quality, Top Management Support, Organizational Setting, Auditee Attributes, and Organizational Independence.

#### **Model Summary**

Table 4. 8: R Square Table

| Model Summary <sup>b</sup>   |                   |      |          |               |  |
|------------------------------|-------------------|------|----------|---------------|--|
| Adjusted R Std. Error of the |                   |      |          |               |  |
| R                            | R R Square Square |      | Estimate | Sig. F Change |  |
| .722a                        | .522              | .489 | .42084   | .000          |  |

a. Predictors: (Constant), Organizational Independence, Top Management Support, Organizational

Setting, Audit Attributes, Audit Quality

b. Dependent Variable: Tax Audit Effectiveness

Source: Own computation from SPSS output.

According to SPSS result in the table 4.8 above to summarize the overall model fit the F statistics of 15.0941 has P value 0.0000 but R-Squared 0.522 which mean the variation in the dependent variable tax audit effectiveness can be explained by the variations in the independent variable by 52.2% and the mean square error 0.4208 below one shows that the overall model is good.

#### **ANOVA Test**

Table 4. 9: ANOVA Table

|            |                | ANOVA <sup>a</sup> |             |        |       |
|------------|----------------|--------------------|-------------|--------|-------|
|            | Sum of Squares | df                 | Mean Square | F      | Sig.  |
| Regression | 14.116         | 5                  | 2.823       | 15.941 | .000b |
| Residual   | 12.928         | 73                 | .177        |        |       |
| Total      | 27.045         | 78                 |             |        |       |

a. Dependent Variable: Tax Audit Effectiveness

b. Predictors: (Constant), Organizational Independence, Top Management Support, Organizational Setting, Audit Attributes, Audit Quality

Source: Own computation from SPSS output.

Analysis of variance in this study was used to determine whether the model was a good fit objective. The F value of the test for the data in above Table 4.9 is 15.941. The p-value is associated with the F value of .000 which is lower than the alpha value of 0.05. In addition, the ANOVA table indicates that there was a significant impact of the independent variables on the dependent variable and the model applied was significantly suitable to predict the dependent variable.

Table 4. 10: Regression Results for model (1)

| Coefficients <sup>a</sup>                             |           |            |      |        |      |  |  |  |
|---|-----------|------------|------|--------|------|--|--|--|
| Unstandardized Coefficients Standardized Coefficients |           |            |      |        |      |  |  |  |
|   | В         | Std. Error | Beta | t      | Sig. |  |  |  |
| (Constant)  | 1.113     | .454       |      | 2.454  | .017 |  |  |  |
| Audit Quality   | .337      | .097       | .393 | 3.475  | .001 |  |  |  |
| Top Management Support                                | 114       | .085       | 115  | -1.342 | .184 |  |  |  |
| Organizational Setting                                | .224      | .080       | .263 | 2.802  | .006 |  |  |  |
| Audit Attributes                                      | .300      | .101       | .287 | 2.956  | .004 |  |  |  |
| Organizational Independence                           | 035       | .072       | 051  | 484    | .630 |  |  |  |
| a. Dependent Variable: Tax Audit Effe                 | ctiveness |            |      |        |      |  |  |  |

Source: Own computation from SPSS output.

Post estimation test in to consider, the SPSS output result in above table 4.10 indicates that two independent variables (Audit Quality and Auditee Attributes) have significant effect at 1% and 4% respectively significant level, one independent variable (Organizational setting) has significant effect to tax audit effectiveness at 6% significant level. The result shows that except top management support and organizational independence all other variables have positive effect to tax audit effectiveness. To interpret each variable that when audit quality increases the tax audit effectiveness increases by 0.337, top management support increases the tax audit effectiveness decreases by 0.114, organizational setting increases tax audit effectiveness increases by 0.30, and as organizational independence increases tax audit effectiveness decreases by 0.035.

#### 4.3.2. Regression Analysis of Dependent Variable Revenue

The second model examines that how the independent variable Tax Audit Effectiveness affects the dependent variable Revenue.

Table 4. 11: Regression Results for model (2)

| Coefficients <sup>a</sup>      |               |                 |                           |       |      |
|--------------------------------|---------------|-----------------|---------------------------|-------|------|
|                                | Unstandardize | ed Coefficients | Standardized Coefficients |       |      |
|                                | В             | Std. Error      | Beta                      | t     | Sig. |
| (Constant)                     | 2.220         | .268            |                           | 8.284 | .000 |
| Tax Audit Effectiveness        | .437          | .071            | .574                      | 6.152 | .000 |
| a. Dependent Variable: Revenue |               |                 |                           |       |      |

Source: Own computation from STATA 13 output.

As table 4.11 above shows that tax audit effectiveness has significant effect at 1% significant level, and the variables have positive relationship. This indicted that increasing the effectiveness of tax audit will generate more revenues.

#### 4.4. Post Estimation Tests

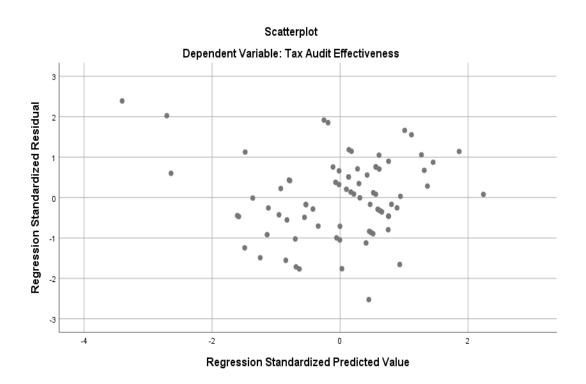
Post estimation test is made to make sure that the selected model violated or not. In this study an attempt is made to test heteroscedasticity, multi-collinearity problem, link test, and test of omitted variables and finally, correlation analysis among variables was done. Here under the post estimation results and discussion is presented.

#### 4.4.1. Homoscedasticity Test

This assumption of homoscedasticity is central to the linear regression model. It describes a situation in which the error term (that is, random disturbance in the relationship between the independent variables and the dependent variables) is the same across all values of the independent variables. Assumptions can be checked by a scatter plot diagram. The result plots the values the model would predict, against the residuals obtained. As the predicted values increase, the variation in the residuals should be roughly similar. The graph looks like a random array of dots. So, the model is this assumption of homoscedasticity is central to the linear regression model. It describes a situation in which the error term (that is, random disturbance in

the relationship between the independent variables and the dependent variables) is the same across all values of the independent variables. Assumptions can be checked by a scatter plot diagram. The result plots the values the model would predict, against the residuals obtained. As the predicted values increase, the variation in the residuals should be roughly similar. The graph looks like a random array of dots. So, the model is homoscedasticity.

Figure 3: Homoscedasticity Test



Source: Own computation from SPSS output.

#### 4.4.2. Multi-collinearity Analysis

The study undertakes post estimation tests of multi-collinearity test. Multi-collinearity is a situation in which two or more explanatory variables in multiple regression models are highly linearly related. Multi-collinearity exists when there is a strong correlation between two or more predictors in a regression model. Multi-collinearity poses a problem only for multiple regression because it involves more than two predictors. Perfect collinearity exists when at least one predictor is a perfect linear combination of the other.

Table 4. 12: Multi-collinearity test results

| Coefficients <sup>a</sup> |        |      |            |          |      |              |              |
|---------------------------|--------|------|------------|----------|------|--------------|--------------|
|                           |        |      | Corr       | elations |      | Collinearity | y Statistics |
|                           | t      | Sig. | Zero-order | Partial  | Part | Tolerance    | VIF          |
| (Constant)                | 2.454  | .017 |            |          |      |              |              |
| AQ                        | 3.475  | .001 | .638       | .377     | .281 | .511         | 1.957        |
| TMS                       | -1.342 | .184 | 123        | 155      | 109  | .895         | 1.117        |
| OS                        | 2.802  | .006 | .464       | .312     | .227 | .742         | 1.348        |
| AA                        | 2.956  | .004 | .545       | .327     | .239 | .694         | 1.441        |
| OI                        | 484    | .630 | .425       | 057      | 039  | .592         | 1.689        |

a. Dependent Variable: Tax Audit Effectiveness

Source: Own computation from SPSS output.

The multi-collinearity test checks whether there is a correlation among independent variables. The result is shown in above table 4.12 that the mean of VIF is 1.51, much lower than the standard value of 10. Hence, there is no multi-collinearity problem.

#### 4.4.3. Hypothesis Testing

The most common specification test is to include additional regression tests whether they are statistically significant by the Wald test of the null hypothesis that the coefficient is zero.

Table 4. 13: Output data for test of P-value

| Coefficients <sup>a</sup>  |       |            |      |        |      |  |  |  |  |
|--|-------|------------|------|--------|------|--|--|--|--|
|  |       |            |      |        |      |  |  |  |  |
|  | В     | Std. Error | Beta | t      | Sig. |  |  |  |  |
| (Constant)   | 1.113 | .454       |      | 2.454  | .017 |  |  |  |  |
| Audit Quality  | .337  | .097       | .393 | 3.475  | .001 |  |  |  |  |
| Top Management Support   | 114   | .085       | 115  | -1.342 | .184 |  |  |  |  |
| Organizational Setting   | .224  | .080       | .263 | 2.802  | .006 |  |  |  |  |
| Audit Attributes   | .300  | .101       | .287 | 2.956  | .004 |  |  |  |  |
| Organizational Independence                                      | 035   | .072       | 051  | 484    | .630 |  |  |  |  |
| Organizational Independence  a. Dependent Variable: Tax Audit Ef |       | .072       | 051  | 484    |      |  |  |  |  |

Source: Own computation from SPSS output.

As shown in Table 4.13 above if the p-value is lower than 0.05 significant level we can reject the null hypothesis otherwise we fail to reject the null hypothesis. For this understanding, the p-value of audit quality, organizational setting, and audit attributes are 0.001, 0.006, and 0.004 respectively. This implies that all p-values are less than 0.05 p-value so we can reject the null hypothesis. On the other hand, top management support and organizational independence have insignificant p-value at the conventional level of a 95% confidence interval. The top management support has a p-value of 0.184 and the organizational independence has a p-value of 0.630 which is higher than the conventional p-value therefore we fail to reject the null hypothesis that the coefficient of p-value has greater than 0.05.

#### 4.4.4. Autocorrelation Test

Table 4. 14: Output data for link test

|       | Model Summary <sup>b</sup> |                   |                   |                   |               |  |  |  |  |  |
|-------|----------------------------|-------------------|-------------------|-------------------|---------------|--|--|--|--|--|
|       |                            |                   | Std. Error of the | Change Statistics |               |  |  |  |  |  |
| R     | R Square                   | Adjusted R Square | Estimate          | Sig. F Change     | Durbin-Watson |  |  |  |  |  |
| .722a | .522                       | .489              | .42084            | .000              | 1.937         |  |  |  |  |  |

a. Predictors: (Constant), Organizational Independence, Top Management Support, Organizational Setting, Audit

Attributes, Audit Quality

b. Dependent Variable: Tax Audit Effectiveness

Source: Own computation from SPSS output.

Durbin-Watson statistic is used to test for the presence of serial correlation among the residuals. The residuals are not correlated if the Durbin-Watson statistic is approximately 2, and an acceptable range is 1.50 - 2.50. As it can be shown in Table 4.14 the Durbin-Watson statistic value is 1.937 and this value almost approaches 2 therefore, there is no autocorrelation problem in this model.

#### 4.4.5. Correlation Analysis

Correlation analysis is a statistical tool which is used to measure the strength or degree of linear association among variables. The correlation coefficient always falls between negative one and positive one, is used to measure the strength or degree of linear relationship between two variables. A correlation coefficient of 1 indicates that there is a strong linear relationship, while a correlation coefficient of 0 shows that there is no linear relationship between two variables. On

the other hand, a correlation coefficient of +1 indicates that positive linear relationship, while a correlation coefficient of -1 shows that a negative linear relationship.

Table 4. 15 Correlation results among variables

|             | Correlations                     |       |       |       |       |       |       |  |  |  |  |
|-------------|----------------------------------|-------|-------|-------|-------|-------|-------|--|--|--|--|
|             |                                  | TAE   | AQ    | TMS   | os    | AA    | OI    |  |  |  |  |
| Pearson     | Tax Audit Effectiveness (TAE)    | 1.000 | .638  | 123   | .464  | .545  | .425  |  |  |  |  |
| Correlation | Audit Quality (AQ)               | .638  | 1.000 | 150   | .410  | .522  | .603  |  |  |  |  |
|             | Top Management Support (TMS)     | 123   | 150   | 1.000 | .188  | 014   | 100   |  |  |  |  |
|             | Organizational Setting (OS)      | .464  | .410  | .188  | 1.000 | .280  | .374  |  |  |  |  |
|             | Audit Attributes (AA)            | .545  | .522  | 014   | .280  | 1.000 | .450  |  |  |  |  |
|             | Organizational Independence (OI) | .425  | .603  | 100   | .374  | .450  | 1.000 |  |  |  |  |

Source: Own computation from SPSS output.

The correlation coefficient of tax audit effectiveness and audit quality is 0.638. it shows that there is strong and positive relationship among these two variables. Thus audit quality positively increases tax audit effectiveness. The correlation coefficient of top management support and tax audit effectiveness is negatively weak relationship. The result indicates that top management support decreases tax audit effectiveness. The correlation coefficient of organizational setting and tax audit effectiveness is 0.464 indicates that there is positively weak relationship. The correlation coefficient of auditee attributes and tax audit effectiveness 0.545. Thus they have positive relationship. The correlation coefficient of organizational independence tax audit effectiveness is 0.425 indicates that they have positive relationship.

#### **CHAPTER FIVE**

#### **CONCLUSION & RECOMMENDATION**

The previous chapter presented the results and analysis of output data of the study. This chapter provides the conclusions and recommendations in line with the findings of the study. The chapter has organized in two sections. The first section states with conclusions, whereas, the second section presents recommendations suggested in line with the findings of the study.

#### 5.1. Conclusion

Based on the discussion and analysis made in the preceding chapter the researcher conclude its findings as follows.

The results of the study enable us to conclude that audit quality, auditee attributes, and organizational setting have significant positive relationship with tax audit effectiveness in Ethiopian Ministry of Revenue, Eastern Addis Ababa Small Tax Payers Branch Office. But top management support and organizational independence have no significant effect to tax audit effectiveness, in addition, they have also negative relationship with tax audit effectiveness.

The findings of this study also support the previous studies that audit quality, auditee attributes, and organizational setting have significantly positive effects on tax audit effectiveness (Mihret & Yesmaw, 2007, Ayalew 2014, and Abera, 2016). However, regarding top management support and organizational independence, the finding is that varying from previous studies.

Audit quality in comparison to other variables is a dominant factor to tax audit effectiveness. Tax audit effectiveness and its perception come from quality of audit, its implication is as the audits are done from risk selection through planning to working paper preparation as per the audit manual of Ethiopian Ministry of Revenue.

However, top management support and organizational independence have no significant effect on tax audit effectiveness, top management provides or does not support which expected from them, the tax audit effectiveness doesn't affect. Here the result indicates that the tax audit effectiveness is simply not affected by whether the top management gives emphasis on a tax audit or not.

Unlike audit quality, auditee attributes have also a significant effect to tax audit effectiveness, which the taxpayers have good attitude and cooperation to the tax auditors tax audit effectiveness increase in a great extent. Whereas organizational setting has moderately affect the tax audit effectiveness in comparison to audit quality and auditee attributes.

The research also examines the effects of tax audit effectiveness to revenue generation in Ethiopian Ministry of Revenue- Eastern Addis Ababa Small Tax Payers Branch Office. Finding of the research indicates that tax audit effectiveness has significantly positive effect to revenue generation. Effective tax audit can lead to an increase in government revenue. The finding also supports the previous studies; effective tax audit has a significant impact in increasing government revenue by serving as a motivating factor to the tax payers in carrying out their tax obligations (Adediran, et al., 2013 and Onoja and Iwarere, 2015). Thus, effective tax audit is directly related to revenue collection and it has significant impact to government revenue as well.

#### 5.2. Recommendations

The researcher made the following recommendations based on the conclusions derived above. In order to improve tax audit effectiveness and revenue collection Ethiopian Ministry of Revenue, Eastern Addis Ababa Small Tax Payers Branch Office should consider the following points.

It is clear that if there is effective tax audit, the revenue collection could improve. So the Ethiopian Ministry of Revenue, Eastern Addis Ababa Small Tax Payers Branch Office should strengthen the tax audit effectiveness in order to collect adequate revenue from tax payers what the economy generates.

As it was explained that audit quality is a key factor and play significant role on tax audit effectiveness, Eastern Addis Ababa Small Tax Payers Branch Office of Ethiopian Ministry of Revenue should give emphasis on improving audit quality by following consistent audit procedures, audit techniques and audit operation through strengthen audit standard and tax audit manual.

Since organizational setting is play significance role on tax audit effectiveness, Ethiopian Ministry of Revenue should also have considered it because strengthening tax audit effectiveness, will increase government revenue.

Auditee attributes has also significant effect to tax audit effectiveness, so Ethiopian Revenue Eastern Addis Ababa Branch office should create a good working environment by encouraging relationships among taxpayers and tax auditors so that they are motivated in performing activities in the office.

#### REFERENCES

- Abera, M. (2016). Factors Affecting Tax Audit Effectiveness, Evidence from Large Tax Payers Office of Ethiopian Ministry of Revenue, Addis Ababa Ethiopia.
- Adediran, S.A., Alade, S.O. & Oshode, A.A. (2013). The Impact of Tax Audit and Investigation on Revenue Generation in Nigeria. European Journal of Business and Management, Vol.5, No.26.
- Adesina, O.O. (2005). Auditing and Investigations Theory and Practice. Mindex Publishing Company Limited, Nigeria.
- Akinbuli, S.F. (2010). The Effect of Audit Expectation Gap on the Work of Auditors. The Profession and Users of Financial Information. The Nigerian Accountant, 43(4), 37-47.
- Alzeban, A., & Gwilliam, D. (2014). Factors affecting the internal audit effectiveness: A survey of the Saudi public sector. Journal of International Accounting, Auditing and Taxation, 23(2), 74-86.
- Appah E. & Eze G. (2013). A Causality Analysis between Tax Audit and Tax Compliance in Nigeria. European Journal of Business and Management, Vol.5, No.2.
- Awe, O.I. (2008). The theory and practice of auditing. Gilgal Publications, Lagos.
- Ayalew, E. (2014). Factors Affecting Tax Audit Effectiveness a Study On Category 'A' Taxpayers in Bahir Dar City Administration Revenue Office, Bahir Dar, Ethiopia.
- Ayeni Olasubomi Adefolake & Cordelia Onyinyechi Omodero (2022) Tax Revenue and Economic Growth in Nigeria, Cogent Business & Management,
- Barreca, D. and S. Ramachandran, (2004). Improving tax administration with data mining. Executive Report, TCWP-0504, Elite Analytics, LLC,
- Barrett, M.J. (1986). Measuring internal auditing performance. Internal Auditing, Vol. 2, pp. 30-35.
- Bender, R. (2006). What is an effective audit and how can you tell? Paper prepared for the Audit Committee Chair Forum, Cranfield University School of Management.
- Biber, E. (2010). Revenue Administration: Taxpayer Audit Development of Effective Plans. Technical Notes and Manuals, IMF, Fiscal Affairs Department.
- Bortey, E.N. (2011). Improving Revenue Collection Through Tax Audit Practice: The Case of Ghana Revenue Authority. Akra, Ghana.

- Cohen, Louis, Lawrence Manion and Keith Morrison (2000). Research Methods in Education. Routledge Falmer 11 New Fetter Lane, London EC4P 4EE, UK.
- Creswell, John W. (2007). Research design: Qualitative, Quantitative, and Mixed Methods Approaches. 2nd edn. Sage Publications, London, UK.
- Creswell, John W. (2009). Research design: Qualitative, Quantitative, and Mixed Methods Approaches. 3rd edn. Sage Publications, California, USA.
- Dawson, C. (2002). Practical Research Methods: A user-friendly guide to mastering research techniques and projects. How to Books Ltd, Oxford OX4 1RE, UK.
- Dellai, H. and Ali Brahim, M. (2016). Factors Affecting the Internal Audit Effectiveness in Tunisian Organizations. Research Journal of Finance and Accounting. Vol.7, No.16.
- Dike, V.E. (2000). Governance and Challenges Facing Nigerian Economy: Is Jonathan the Answer? Social Science Research Network.
- Ebrill, L, M Keen, J. Bodin and V. Summers, (2001). The Modern VAT, IMF, Washington DC
- ECC and EBDSN, (2005). Taxation in Ethiopia: Direct and Indirect Taxes Categories of Taxpayers Declaration of Income and Assessment of Taxes Tax Incentives. German Technical Cooperation, Addis Ababa, Ethiopia.
- MOR, (2019). Domestic Tax Audit Manual. unpublished document, Addis Ababa, May 2019.
- Eric, E. and Jonathan, S. (1996). Taxation and Economic Growth. National Tax Journal, 49 (4), 617-42
- Garry, J. and Ivo, S. (2010). Indicators of Economics Progress: The Power of measurement and Human Welfare. A papers series of the south-east European division of the World academy of art and science, Vol. 1, No. 1.
- George, D., Sorros, I., Karagiorgou, D., and Diavastis I. (2015). Tax audit effectiveness in Greek firms: Tax auditors' perceptions. Journal of Accounting and Taxation Vol. 7(7), pp. 123-130.
- Gujarati, D.N. (2004). Basic Econometrics. 4th ed., McGraw-Hill, New York.
- Hammersley, M. and Atkinson, P. (1995). Ethnography: Principles in practice. 2nd ed. New York: Rutledge.
- Hayes, R., Schilder, A., Dassen, R. and Wallage, P. (1999). Principles of auditing: an international perspective. McGraw-Hill Publishing Company, London.

- Husam Al-Khaddash, R. A. (2013). Factors affecting the quality of Auditing: The Case of Jordanian Commercial Banks. International Journal of Business and Social Science Vol. 4 No. 11.
- Kennedy P.M. & John O. A. (2014). Impact of Tax Audit on Tax Compliance in Nigeria. International Journal of Business and Social Science, Vol. 5, No. 9.
- Kothari, C.R. (2004). Research Methodology: Methods and Techniques. New Age International Publishers Ltd. New Delhi:
- Leilina, B. (2015). The determinants of external audit quality evidence from manufacturing share companies of Addis Ababa Ethiopia. Addis Ababa University.
- Maddala, G.S. (1999). Introduction to Econometrics. 4th ed, MacMillan Publishing Company, New York.
- Mihret, D.G. and Yismaw, A.W. (2007). Internal Audit Effectiveness: An Ethiopian public sector case study. Managerial Auditing Journal, Vol. 22, No. 5, pp. 470-484.
- Mohani, A. (2001). Personal income tax non-compliance in Malaysia. Thesis (PhD), Victoria University: Melbourne, Australia.
- Naiyeju, J.K. (1996). Improving the Nigeria tax System from Canadian Experience. Wordsmith Printing and Packaging ltd.
- Niu, Y. (2010). Tax Audit impact on voluntary compliance. Unpublished, Munich Personal RePEc Archive.
- OECD, (2004). Compliance Risk Management: Managing and Improving Tax Compliance. Centre for Tax Policy and Administration: Forum on Tax Administration's Compliance Sub-group.
- OECD, (2006). Strengthening Tax Audit Capabilities: General Principles and Approaches. Centre for Tax Policy and Administration: Forum on Tax Administration's Compliance Sub-group.
- OECD, (2009). Managing and Improving Compliance: Recent Developments in Compliance Risk Treatments, Information Note, Forum on Tax Administration and Compliance Sub-Group.
- Okoye, V. C. and Ezejiofor, R. (2014). The Impact of E-Taxation on Revenue Generation in Enugu, Nigeria. International Journal of Advanced Research, Vol. 2, No 2, 449-458

- Onoja M. & Iwarere T. (2015). Effects of Tax Audit on Revenue Generation: Federal Inland Revenue Service, Abuja Experience. Journal of Good Governance and Sustainable Development in Africa, Vol. 2, No 4.
- Palil, M. R. & Mustapha, A. F. (2011). Tax audit and tax compliance in Asia: A case study of Malaysia. European Journal of Social Sciences, Volume 24, Number 1, 7-32
- Ricardo, D. (2001). The Principles of Political Economy and Taxation. Batoche books Kitchener, Ontario, Canada
- Saidin, M. S. (2014). Empirical Evidence of the Moderating Effect of Effective Audit Committee on Audit Experience in the Public Sector: Perception of Internal Auditors. Mediterranean Journal of Social Sciences Vol 5 No 10.
- Salehi, T. (2016). Investigation Factors Affecting the Effectiveness of Internal Auditors in the Company: Case Study Iran. Review of European Studies; Vol. 8, No. 2. Published by Canadian Center of Science and Education
- Samuel, M. and De Dieu, R. J. (2014). The impact of taxpayers' financial statements audits on tax revenue growth. International Journal of Business and Economic Development, Vol. 2, No 2.
- Sayag, A. C. (2010). The Effectiveness of Internal Auditing: An Empirical Examination of its Determinants in Israeli Organizations. journal of Austrian accounting review no.54 vol.20 issue 3.
- Shamsuddin, A. (2014). Factors That Determine the Effectiveness of Internal Audit Functions in the Malaysian Public Sectors. International Journal of Business, Economics and Law, Vol. 5.
- Singh, K. (2007). Quantitative social research methods. Sage Publications India Pvt Ltd, New Delhi.
- Thomson, R. (2008). Strengthening Risk Management and Audit Strategies to Improve Compliance. Paper presented at Caribbean Organization of Tax Administration (COTA) General Assembly, July 2008, CARTAC, Belize.
- Wilson, N. and McLean, S. (1994). Questionnaire Design: A Practical Introduction, Co. Antrim: University of Ulster Press, Newtown Abbey.

#### **Appendix**

# ST. MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES MASTER OF ARTS IN BUSINESS ADMINISTRATION

Research Questionnaires to the Ethiopian Ministry of Revenue Eastern Addis Ababa Small Tax Payers Branch Office Tax Audit Staffs

Dear participant,

First of all, I would like to give my special thanks for your genuine cooperation to fill this questionnaire. This research cannot be conducted without your support. This research is one of the requirements to complete Master of Arts (MBA) degree in the field of Business Administration at St. Mary's University. The research entitle: "Impact of Tax Audit on Revenue Generation in Eastern Addis Ababa Branch office".

This questionnaire is prepared for an academic purpose for the fulfillment of MSc degree. The objective of the study is to assess the impact of tax audit effectiveness on revenue generation in Addis Ababa, particularly in MOR Eastern Addis Ababa Branch Office. To supplement the data obtained from tax auditors by means of questionnaire, the researcher seeks to gather relevant information from total staffs in the tax audit department of MOR Eastern Addis Ababa Branch Office using a self-administered questionnaire.

Your participation is depending on your volunteer. No one compelled you to answer any question. Results will be recorded anonymously (without mentioning your name), and keep its confidentiality. Individual responses will not be directly reflected in the researcher's master's thesis.

Responding this questionnaire may not take much time. Any information provided would only be used for academic purpose only. As a result, it will be kept confidential and utmost your privacy will be maintained.

For further information, please contact me at the following address:

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The questionnaire has three parts:

Part I: Respondents' Profile,

Part II: Questions regarding on factors affecting tax audit effectiveness, and

Part III: Questions regarding on contribution of effective tax audit to revenue generation

### PART I: QUESTIONS RELATED TO PROFILE OF MOR EASTERN ADDIS ABABA BRANCH OFFICE TAX AUDIT STAFFS

| 1. | Gender: Male □ Female □   |
|----|---|
| 2. | Age: Less than 30 years □ 31-40 years □   |
|    | 40-50 years $□$ above 50 years $□$  |
| 3. | Level of education:   |
|    | Diploma □ Degree □ Master's degree or above □   |
| 4. | Field of study:   |
|    | Accounting   Management   Economics   Other   Other   |
| 5. | Current position in MOR in Eastern Addis Ababa Branch Office:                                 |
|    | Process owner $\square$ Team Coordinator $\square$ Auditor $\square$                          |
| 6. | Years of experience in this position:   |
|    | Less than two years $\square$ 2-5 years $\square$ Greater or equal to six years $\square$     |
| 7. | Did you attend any special training with your current position?                               |
|    | Yes □ No □  |
| 8. | If your answer is 'yes' for question no. 7 above, how long you have been taking the training? |
|    | Less than 16 days $\square$ 16-30 days $\square$ 31-60 days $\square$ more 60 days $\square$  |

# PART II: QUESTIONS REGARDING ON FACTORS AFFECTING TAX AUDIT EFFECTIVENESS

Put a ' $\sqrt{\ }$ ' mark in one of the columns provided for each possible indicator. Each indicator has the following scale: Strongly Agree (5), Agree (4), Neutral (3), Disagree (2) and Strongly Disagree (1).

| S.  | Questions regarding on Tax Audit Effectiveness                        | Strongl | Ag  | Neut | Disa | Strongly |
|-----|---|---------|-----|------|------|----------|
| No. |   | y Agree | ree | ral  | gree | Disagree |
| 9   | Tax Auditors are competent in all audit works required.               |         |     |      |      |          |
| 10  | Tax Audit provides all required services as per tax audit standards.  |         |     |      |      |          |
| 11  | Audit work could achieve the goals set by the managers.               |         |     |      |      |          |
| 12  | Tax audit improving organizational performance                        |         |     |      |      |          |
| 13  | The findings of tax audits are always based on documents and          |         |     |      |      |          |
|     | reliable data.  |         |     |      |      |          |
| 14  | The tax auditing reports are clear and well presented.                |         |     |      |      |          |
| 15  | Tax audit improves the effectiveness of the organization's internal   |         |     |      |      |          |
|     | control system.   |         |     |      |      |          |
|     | Audit Quality   |         |     |      |      |          |
| 16  | Tax Auditors have appropriate audit plan in all their audits.         |         |     |      |      |          |
| 17  | Tax Auditors focused on identified risks in their audit activities.   |         |     |      |      |          |
| 18  | Tax Auditors apply the correct tax laws and technical interpretation. |         |     |      |      |          |
| 19  | Tax Auditors follow consistent procedures as per tax audit manual.    |         |     |      |      |          |
| 20  | Tax Auditors should properly document their working papers and        |         |     |      |      |          |
|     | properly communicate with other parties.                              |         |     |      |      |          |
|     | Top Management Support  |         |     |      |      |          |
| 21  | Top management does provide support which expected from them.         |         |     |      |      |          |
| 22  | The numbers of tax auditors are enough as compare with a given        |         |     |      |      |          |
|     | amount of auditing work plan and it needs to audit coverage.          |         |     |      |      |          |
| 23  | Management is sufficiently aware of the needs of tax audit, as        |         |     |      |      |          |
|     | demonstrated by the small budget assigned to the tax audit.           |         |     |      |      |          |
| 24  | Management provides enough support and encourages training to         |         |     |      |      |          |
|     | improve the tax auditors' skill.                                      |         |     |      |      |          |
|     | Organizational Setting  |         |     |      |      |          |
| 25  | The organizational structure, policies and procedures are useful      |         |     |      |      |          |
|     | to guide tax audit functions.   |         |     |      |      |          |
| 26  | Tax audit is one stage in training and preparing employees in the     |         |     |      |      |          |
|     | organization.   |         |     |      |      |          |
| 27  | Tax audit is one stage in the promotion process of employees in the   |         |     |      |      |          |
|     | organization.   |         |     |      |      |          |
| 28  | Tax audit is considered a stage in the organizational independence of |         |     |      |      |          |
|     | employees in the organization.  |         |     |      |      |          |

|    | Auditee Attributes   |  |  |
|----|--|--|--|
| 29 | Taxpayers have a good attitude and cooperation with the tax system and tax auditors.   |  |  |
| 30 | Audit procedure is transparent and clear to the tax payers during the course of the audit.   |  |  |
| 31 | Tax auditors have full and unrestricted access to all activities of tax payers' transaction during audit process.  |  |  |
| 32 | Tax audit system is sufficiently promoting voluntary compliance tax payers.  |  |  |
| 33 | Tax Audit is a lesson to the taxpayers about the tax laws and regulations during auditing.   |  |  |
| 34 | There is a good work relationship between the taxpayers and tax auditors.  |  |  |
|    | Organizational Independence  |  |  |
| 35 | Tax auditors are independent in programming of audit works.  |  |  |
| 36 | Tax auditors have investigative independence in all activities of audit findings.  |  |  |
| 37 | Tax auditors have reporting independence in their audit works.   |  |  |
| 38 | The tax audit operates totally independent, can audit any issue it considers in need of auditing, and can access any necessary information even if it is classified. |  |  |

## Part III: Questions Regarding on Contribution of Effective Tax Audit to Revenue Generation.

Put a ' $\sqrt{\phantom{a}}$ ' mark in one of the columns provided for each possible indicator. Each indicator has the following scale: Strongly Agree (5), Agree (4), Neutral (3), Disagree (2) and Strongly Disagree (1).

| S.  | Questions regarding on contribution of tax audit to revenue          | Strongly | Ag  | Neut | Disa | Strongly |
|-----|--|----------|-----|------|------|----------|
| No. | generation.  | Agree    | ree | ral  | gree | Disagree |
| 39  | Tax audit improves and insures the level of compliance               |          |     |      |      |          |
| 40  | Tax auditors are expected to detect noncompliance behavior of        |          |     |      |      |          |
|     | taxpayer during an audit period.                                     |          |     |      |      |          |
| 41  | High probability of being audited solves the problems of tax         |          |     |      |      |          |
|     | evasion, avoidance and other irregularities.                         |          |     |      |      |          |
| 42  | The primary purpose of tax audit performed in tax administrations is |          |     |      |      |          |
|     | to ensure compliance in accordance with the tax law.                 |          |     |      |      |          |
| 43  | The primary purpose of tax audit that performed in tax               |          |     |      |      |          |
|     | administration is to assess and collect additional tax revenue.      |          |     |      |      |          |
| 44  | Tax audit performed by tax administration is to educate taxpayers.   |          |     |      |      |          |
| 45  | Tax auditors that expected to perform during audit period is         |          |     |      |      |          |
|     | detecting noncompliance behavior of individual taxpayer.             |          |     |      |      |          |
| 46  | Tax audit is for reducing tax evasion and tax fraud.                 |          |     |      |      |          |
| 47  | Audit is performed based on audit manual.                            |          |     |      |      |          |

| 48 | Standard risk identification criteria is applying to identify highly risky business for audit. |  |  |  |
|----|--|--|--|--|
| 49 | Review of financial statement and return type of tests are conducted                           |  |  |  |
|    | to check the accuracy of tax returns.  |  |  |  |
| 50 | Tax audit improves the level of compliance.  |  |  |  |
| 51 | Teaching tax evaders to deal effectively with their taxes would                                |  |  |  |
|    | reduce future offences.  |  |  |  |
| 52 | Tax evasion could be best handled through informing &  |  |  |  |
|    | encouraging tax payers to comply voluntarily.  |  |  |  |
| 53 | The awareness of tax audit makes the tax payers to render a                                    |  |  |  |
|    | satisfactory return.   |  |  |  |