Assessment on Effectiveness of Tax Administration in Ethiopia
The Case Kolfe Keranio Sub City Administration Revenue Office

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Abstract
Tax administration is the identification of tax liability, the assessment of this liability, and the collection, prosecution and penalties imposed on reluctant tax payers. If the tax administration is not effective, it is difficult for the government to collect the required amount of domestic revenue for its activities. Therefore, improving tax administration is quite necessary for developing countries like Ethiopia to improve the domestic tax revenue through voluntary compliance. This study aimed to assesses the effectiveness of tax administration in Kolfe Keranio sub city administration revenue office. The target population of the study included tax payers and employees of the office with 150 tax payers and 75 employees. In order to address the research questions, qualitative and quantitative research approaches were employed. The researcher used both primary and secondary sources of data. In order to get primary information, questionnaire and interview were employed. As important as the primary data, the researcher also collected essential data from secondary sources. Non-probability technique which is convenience sampling was utilized to select sample tax payers and purposive sampling method was used to select sample employees. Data also analyzed on quantitative basis using Pearson’s correlation, multiple linear regression analysis and descriptive statistics. Based on the analysis and discussion of the research, it can be concluded that the tax laws, procedures, quality of human, capital and time resources, technological infrastructure, public awareness of tax, and quality of tax report has a significant effect on effectiveness tax administration. It is advisable to provide E filing and E payment system to tax payers that could facilitate filing and paying of taxes by using internet service online. Efforts also have to be made to increase tax revenue by applying continuous follow-up to collect the tax arrears.

Keywords: Effectiveness, Tax administration, Kolfe Keranio Sub-City
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CHAPTER ONE: INTRODUCTION

1.1 Background of the Study
Taxes are payment that any citizen pays to the government. Especially, at this time for developing countries like Ethiopia taxes are used to obtain higher tax revenue (compare to time history) to cover public expenditure and to get rid of poverty. Governments use taxation because without any money the government cannot operate public goods such as health, basic education and infrastructure. So taxation is very important for the development of a country even though every taxpayer complains about higher rate of taxes. However, in order to make the tax acceptable and successful, tax must be simple, efficient and effective to implement. Different types of taxes are imposed by government VAT is one. According to the EFIRA 2007 Report published for the year VAT is contributing 41%, of total federal revenue from domestic sources (Yesegat, 2008).

Richard M. Bird and Milka C de Jansher, (1992) wrote that best tax administration is not simple one that collects the most revenue, but revenue is raised – that most revenue, but how that revenue is raised that is, the effort on equity, on the political fortunes of the government and on the level of economic welfare may be equal important.

In many developing countries, tax administration reform has been part of a broader fiscal reform effort aimed at restoring microeconomic stability and at restructuring tax systems so that taxes are more efficient, less distorting and easier to administer. In countries with economies in transition, the impetus to modernize tax administration has also come from the need to establish a tax administration that can respond to the demands of a growing market economy and the resulting increase in the number of taxpayers.

Tax administrators in developed and developing countries face challenge of modernizing tax administration so it can operate effectively in an increasingly global economy characterized by difficult-to-tax sectors and by sophisticated computer and communications technology. Experience shows that a reform strategy over the long-term is required to significantly increase the effectiveness of the tax administration’s operations. Short term measures to remedy tax evasion rarely bring about substantial improvements (Tanzi, 1997).

Effectiveness and efficiency in tax administration is very important and it involves simplification wherever feasible, but it sometimes requires more complex procedures in order to secure even enforcement. The aim of this is to eliminate unnecessary burden on the taxpayer and the tax officials and to secure a more equitable and effective application of the tax laws. Thereby, the morale and cooperation of the taxpayer as well as the tax official will be improved and better revenue structure obtained. An increase in resource dedicated to tax administration should
also be contemplated (Richard and Oliver, 1975). However according to The IMF, OECD and UN report for G-20 working group, yet many tax administrations continue to be staffed by poorly trained and low paid officials, have structures which do not encourage an integrated approach to different taxes, and are marked by imbalanced service and enforcement functions.

Governments require effective tax administration and compliance to produce revenue from private entities to provide public goods and services. Unfortunately, according to UNDP, 2010 report, half of sub Saharan African countries still mobilize less than 17% of their GDP in tax revenues, below the minimum level of 20% considered by the UN as necessary to achieve the Millennium Development Goals. Several Asian and Latin American countries fare little better. In addition, many tax systems have little impact on reducing inequalities in income and wealth and only a small proportion of citizens are within the tax system. This is the result of poor tax administration practice in the countries.

Therefore a well-functioning tax administration is a key to mobilize domestic resources for those countries whose tax to GDP ratio is below 20% and the design of the tax system should be influenced by the ability of tax administrations to administer it. According to Misrak, 2011, an administratively sound system of taxation is the one that is fair, neutral, efficient, certain and simple. Thus, the principles and canons of fairness, neutrality, efficiency, certainty and simplicity should be reflected in the design of the tax system and its administration. On the other hand (Bird and Jantscher, 1992) a poor quality tax administration may collect large amounts of taxes from easy to tax sectors like wage earners, while being unable to enforce taxes on business enterprises and professionals. This implies that the level of collection is somewhat unsophisticated measure of the effectiveness of the tax administration.

Over the last three decades the governments of many Latin American and Caribbean countries, as well as those of the Iberian Peninsula, have made considerable efforts to improve the effectiveness of their tax administrations (Bird and Jantscher, 1992).

Ethiopia like many other countries made considerable effort to improve the tax administration throughout the country in order to collect the adequate tax revenue. Kolfe Keranio sub city administration revenue office is one of the main sub city administrations in Addis Ababa that are required to generate the lion share of the city’s tax revenue. Kolfe Keranio sub city administration revenue office is one of the major tax administrations offices in Addis Ababa responsible for effective tax administration. However the sub city is unable to meet its targets. The above table shows that from 2004 to 2010 Ethiopian budget year, there is no single year in which the office could achieved its target. On the other hand as indicated in the above table the recent three budget year collection is below 50% of the target which is 48.65% in 2008, 47.19% in 2009, 49.83% in 2010 Ethiopian budget year which clearly show problems in effectiveness of tax administration and this research aims to explore it.

**TABLE 1.1: TARGET AND ACHIEVEMENT OF KOLFE KERANIO SUB CITY ADMINISTRATION FROM 2004 TO 2010 ETHIOPIAN BUDGET YEAR IN ETB**

| Ethiopian Budget year | Target in million | Collection in million | Achievement (%) |
|-----------------------|-------------------|-----------------------|-----------------|
| 2004                  | 434.52            | 422.13                | 92.15%          |
| 2005                  | 589.81            | 464.93                | 78.83%          |
| 2006                  | 546.05            | 332.56                | 60.90%          |
| 2007                  | 517.72            | 299.92                | 57.93%          |
| 2008                  | 488.63            | 237.71                | 48.65%          |
| 2009                  | 657.14            | 309.94                | 47.16%          |
| 2010                  | 805.92            | 401.63                | 49.83%          |

(Source:-Kolfe Keranio Sub City Administration Revenue Office)

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1.2 Statement of the Problem

Revenue requirements for relieving poverty and improving physical and social infrastructure are substantial. Achieving the Millennium Development Goals, for instance, may require low-income countries to raise their tax-GDP ratios by around four percentage points (United Nations, (2005), Even though this is the case many developing countries rely on foreign loan and aid due to their inability to generate domestic source revenue. So, to generate the required tax revenue it is very important that the revenue authorities are efficient and effective in their tax administration.

Ethiopia like any other developing countries faces deficit and difficulty in rising revenue from domestic sources to the level required for reliving poverty and improving physical and social infrastructure. The tax revenue GDP ratio remained low compared to the rationally accepted level of developing countries, which is 20-25 percent. According to Yesegat (2008), one of the main problems in the fiscal system of the Ethiopian government is poor performance of revenue administration.

Kolfe Keranio Sub City Administration Revenue Office is one of the major tax administrations offices in Addis Ababa responsible for effective tax administration. However the sub city is unable to meet its targets. The 2010 fiscal year’s annual report shows that it has achieved 49.83% of its total revenue collection target in the 2010...
budget year. Moreover it has never met the revenue collection target over the past three years. This situation can be attributed to the fact that the inability of the tax administration to cope up with challenges.

In Ethiopia few studies have been carried out in relation to effective tax administration; Teklu (2011), Yesegat (2008), Mesfin (2008), Asamnew. The study undertaken by Teklu (2011) tried to assess the effectiveness of the VAT administration at Arada Sub City Revenue Office and it was found that VAT administration is poor because of lack of trained and credible tax officials, not supportive office facilities and procedures, lack of risk based audit plan, weak enforcement, absence of well-organized taxpayers’ education and poor refund management. Similarly Yesegat (2008) examined VAT administration in Ethiopia and it was found that there is divergence between the effective VAT taxation and the legislation and also the tax administration capacity is weak. On the other hand Asamnew (2009), investigate tax assessment and collection problems and causes and found that there is inefficient and insufficient number of officers and taxpayers lack knowledge of tax assessment and collection procedures. These problems lead the tax payers to negligence, delay in tax payment and evasion.

Although aforementioned studies have attempted to state a few inputs for tax administration effectiveness still no study has tried to assess effectiveness of tax administration specifically on turnover tax. The studies are conducted with special emphasis on only one tax type i.e. VAT or only one aspect of tax administration tasks i.e. for example tax collection. But this study focuses on all aspects assessment of tax administration. Moreover, according to the knowledge of the researcher, there is no recorded study that has been conducted in Kolfe Keranio sub city administration in particular, to assess the effectiveness of the tax administration practice. This study is therefore to fill this research gap by conducting comprehensive assessment of the tax administration.

1.3 Basic Research Questions
In order to achieve objectives of the study and to come up with applicable conclusions and recommendations the following major questions were attempted to answer by the study:
1. What are the effects of policies, laws and procedures on the effectiveness of tax administration?
2. To what extent the human, capital and time resource affect the implementation process of the tax policies, laws and procedures?
3. What are the impacts of the capacity of technological infrastructure on the implementation process of the tax policies, laws and procedures?
4. What is the level of public awareness on the significance of tax?
5. What is the effect of report quality of the tax payers on tax policy implementation and tax management?

1.4 Objectives of the Study
1.4.1 General Objective of the Study
The general objective of this study is to assess the effectiveness of tax administration in Kolfe Keranio Sub City Administration Revenue Office to indicate the strategic intervention areas that might improve the tax administration and then collect the potential tax through voluntary compliance.

1.4.2 Specific Objectives of the Study
➢ To identify effects of policies, laws and procedures on effectiveness of tax administration
➢ To investigate the extent to which human, capital and time resource affect the implementation of the tax policies, laws and procedures
➢ To access the impacts of the capacity of technological infrastructure on the implementation process of the tax policies, laws and procedures
➢ To investigate the level of public awareness on the significance of tax
➢ To identify the effect of report quality of the tax payers on tax policy implementation and management

1.5 Significance of the Study
This study primarily focuses on achieving the objective, which is to assess the effectiveness of tax administration and its challenges that help to know what effective tax administration is and the challenges posed on tax administration. In addition, the study also serves as springboard to investigate uncovered areas and to use it as a secondary data in due course of further research for those who are interested to make further study on the related issue. Moreover findings of the study are expected to indicate the strategic intervention areas that might improve the tax administration policy. Therefore this study may be used by the authority to have clear understanding about the effectiveness of the existing tax administration practice and the challenges posed on the tax administration and then improve the tax administration practice.

1.6 Scope of the Study
The study is confined to Kolfe Keranio Sub City Administration revenue office in which only category “A” and “B” taxpayers will be administered. Category “C” taxpayers and other sub city Revenue Administrations were not included because of time and resource constraint. And also the study delimited itself to variables such as policy,
This thesis is organized in five chapters. The first chapter presents the introductory part which contains background of the study, statement of the problem, basic research questions, objectives of the study, significance of the study, scope of the study, limitations of the study. The second chapter shows the literature review while the third chapter contains description of the research methodology. The fourth chapter contains data presentation analysis and discussion. Finally, the chapter five presents summary of major findings, conclusion and recommendations of the study.

CHAPTER TWO: REVIEW OF RELATED LITERATURE
This section presents a brief review of existing theoretical and empirical literature of tax administration. At the end of the review, an attempt will be made to summarize the major drawbacks of the existing empirical studies and to identify the knowledge gap to be filled in by further investigation.

2.1 Theoretical Literature Review

“No one likes taxes. People do not like to pay them. Governments do not like to impose them. But taxes are necessary both to finance desired public spending in a non-inflationary way and also to ensure that the burden of paying for such spending is fairly distributed. While necessary, taxes impose real costs on society. Good tax policy seeks to minimize those costs.” (Richard Bird, 2003).

Tax administration like any other public administration in modern societies offers services to citizens. It more clearly resembles an institution for financial services than other public administration in charge of, for example, education or health service (Jenkins, 1993). According to Jantscher, (1990) (cited in Yesegat 2008) responsibilities of tax authorities include a range of related activities such as taxpayer identification and registration, invoicing, filing and payment requirements, control of filing and payments, refunds, audits and penalties.

On the other hand according to Tanzi and Pellechio, (1995) cited in Tessema Abuye, (2013) the main functions of tax administration involve: (1) information and instruction to taxpayers, (2) registration, organizing and processing tax returns (inputs of data, processing declarations and payments), (3) coercive collection (4) control and supervision (discovering lacking and insufficient tax returns and controls of books of taxpayers), (5) legal services and complaints. Similarly Das-Gupta & Mookherjee, (1998) describe tax administration as the interactions between taxpayers and tax authorities concerning identification of tax liabilities, actual tax payment and collection, and prosecution and penalty of tax evaders.

Since the above mentioned tasks are responsibilities of the tax authorities and since taxes are an involuntary payment for government services, administering in good manner or good tax administration therefore is necessary to collect the adequate tax revenue.

Moreover, according to World Bank, (1999) tax administration has to secure compliance with the laws by applying an array of registration, assessment and collection procedures. A government can keep taxpayers from doing activities like avoidance and evasion, and thus successfully avoiding these activities depends on the effectiveness of the tax administration. Tax administration therefore, should aim at improving on laws regarding the registration, assessment, revenue collection, and exploiting fully taxation potential of a country. But according to Bird, (2008) good tax administration is a difficult task even at the best of time and in the best of places and conditions. This also is further explained by (Ott, 1998) cited in Tessema Abuye, (2013) that there may be weaknesses in how administrators perform their duties this, in turn, has adversely impact on government’s policy objectives as a whole. In this regard, Tanzi and Pellechio, (1995) (cited in Yesegat (2008) noted that poor tax administration would change the manner in which taxation affects government’s policy objectives, namely economic stabilization, resource allocation and redistribution of income.

In developing countries the poor performance of taxes is likely to be due to weak tax administration (i.e., the incapacity of the administration to implement the tax in practice). This is perhaps caused by such factors as resource constraint and designing the tax separately from the administration (Ibid).

On the other hand as of Silvani, (1997) cited in Tessema Abuye, (2013) the main goal of tax administration
is to foster voluntary tax compliance and thereby to reduce tax gap and noncompliance. Tax gap can be explained as the difference between taxes paid and owed for all taxes by all taxpayers. The tax gap can be done through assessment of potential taxpayers, identifying and registering the taxpayers and provision of taxpayer services. Among others it is expected from tax administrations that tax administrations should collect revenues in accordance with the law and at the same time provide an optimum service (Ibid). This is further noted by Bird, (2008), there is no best tax policy in the world without efficient and effective implementation and administration.

2.2 Factors that Contribute to Effectiveness of Tax Administration

According to Richard M. Bird and Milka Casanegra de Jantscher, (1992) the best tax administration is not simply one that collects the most revenue. A poor quality tax administration may collect large amounts from easy to tax sectors such as wage earners while being unable to enforce taxes on business enterprises and professionals. Therefore the level of collection is unsophisticated measure of the effectiveness of tax administration. This implies that for the tax administration to be effective there should be effectiveness on the other aspects of tax administration not only the level of revenue collection. These aspects include effectiveness in taxpayer education, effectiveness in taxpayer identification and registration, effectiveness in tax payers audit and enforcement.

2.2.1 Tax Payers' Education

Tax payers' education is one of the major tax administration tasks that can affect the tax compliance behavior of taxpayers and the tax revenue collection accordingly. Bird and Casanegra de Jantscher, (1992) also noted that almost in all countries taxpayers assistance, information and education is one of the fundamental concerns of tax administration in their effort to achieve the maximum possible level of voluntary compliance by taxpayers and there by collecting the necessary tax revenue.

Unless taxpayers education and awareness creation get due attention by any tax administration, complexity, multiplicity of requirements which are laid upon taxpayers, uncertain administration system, can lead to compliance problems (Mikesell and Birskyte, 2007) (cited in Tessema Abuie (2013). This compliance problem may proof the tax administrations’ ineffectiveness. Similarly according to Mohd, (2010) taxation knowledge is necessary to increase public awareness especially in areas concerning taxation laws, the role of tax in national development, and especially to explain how and where the money collected is spent by the government. This also implies that if the tax education is poor the taxpayers may not know how and where the money is spent and may not be motivated to pay tax.

Moreover, according to Brand (1996), it is less expensive to collect taxes through voluntary compliance than through the use of enforcement. This implies that taxpayer education and information is very essential in promoting tax compliance and there by collecting the potential tax revenue.

2.2.2 Taxpayer Identification and Registration

According to OECD, (2009) comprehensive systems of taxpayer registration and numbering are a critical feature of the tax administration arrangements in most countries, supporting numerous tax administration processes and underpinning all returns filing, assessment and collection activities. Tax administration includes the proper identification and registration of taxpayers, assessing taxable income and timely collecting of the assessed tax. An effective and efficient tax administration requires the prevalence of clear and transparent rules and regulations in order to accomplish these activities.

2.2.3 Taxpayer’s Audit and Enforcement

Tax audit is one of the longest standing strategies in tax administration. Tax audit program provides visibility to the compliance enforcement arm of the tax administration (Thomson, 2008) as cited in (Getaneh, 2011). To minimize the gap between the tax reported by the taxpayers and the statutory tax, an adequate audit plan should be implemented. Tait (1991). Lack of effective and consistent tax audit program can weaken the functioning of the tax administration and leads to huge tax gap. Therefore effectiveness of the tax audit is another implication for effective tax administration.

Effectiveness of audit should not be measured in terms of its direct revenue yield-that is the amount of additional tax assessed-but the extent to which audit contributes to better tax compliance. Judging the effectiveness of audit by the amount of additional tax assessment is similar to evaluating traffic authority by the fines collected from drivers. Therefore, the audit effort should be evaluated in terms of the quantity and quality of audits conducted and of “voluntary” collections generated (Ibid).

Moreover, Tax administration should be effective in tax enforcement and penalty also. Theoretically both the probability of detection and the penalty are inversely related with underreporting of income. This means that if taxpayers think the probability of detection and the penalty rate applied when tax evasion has been detected is low, taxpayers may tend to underreport their income Hennemann, (1996) as cited in (Bisrat, 2010). According to Tait, (1991), if probability of penalty is low the taxpayer will accept the risk, even if the penalty itself is sizable and vice versa.

In Allingham and Sandmo, (1972) as cited by Tessema, (2013) economic deterrence theory, it was sated that taxpayer behavior is influenced by factors determining the benefits and costs of evasion, such as the tax rate, the
probability of detection and penalties for fraud. This implies that if detection is likely and penalties are severe, few people will evade taxes and the intended tax revenue will be collected if the tax enforcement and penalty is poorly administrated evasion and avoidance cannot be controlled and there will be huge revenue lose.

2.2.4 Fairness and Quality of Service Delivery of the Tax Administration
Kirchler and Hoelzl, (2006) cited in Siahaan, (2012) argue that fair treatment of taxpayers and trustworthiness of tax authorities will enhance voluntary compliance and show the effectiveness of the tax administration. On the other hand when taxpayers observe unfairness in tax administration they will respond by trying not to pay taxes as per the laws (Siahaan 2012).

Moreover the way how the tax administration behaves towards their clients have the role on the tax administrations effectiveness. Tax payers expect better service from the tax authorities. Theoretically it has been known that dissatisfaction with the tax authorities can be categorized as one of the factors which affect tax compliance, for example, Elffers, 1991 and Wallschutzky, 1984 perceived it as one of the motivators of the avoidance as cited in Bisrat (2010).

Therefore the tax administration to be effective the above mentioned tasks should be effective. Bird, (2008) noted that good tax administration is a difficult task even at the best of time and in the best of places, and conditions. On the other hand if the political will exists, the techniques needed for effective tax administration are not secret: have a clear strategy; keep it simple; treat taxpayers as clients; chase down defaulters; keep a tight check on corruption; and use available technology wisely.

2.3 Efficiency of Tax Administration
It is generally known that tax laws and tax policy are as good as good is the tax administration. Jenkins, (1991) emphasizes that the tax system can never work better than its tax administration, but even the best tax administration would certainly fail to turn a bad tax system into a well-operating one. He also warns that many ambitious tax reforms failed because of the inefficient tax administration.

Obviously it costs something to tax administration. Depending on the types of tax, the actual cost of collecting taxes in developed countries is roughly 1 percent of tax revenues. In developing countries, the costs of tax collection may be substantially higher: Gallagher, (2004) reports administrative costs ranging from 0.9 to 3.9 percent for six developing countries; Warlters and Auriol, (2005) report results for an additional nine countries in the range of 1.1 to 3.6 percent.

Less obviously, but more importantly, taxpayers incur “compliance costs” over and above the actual payment of tax. Third parties also incur compliance costs. For example, employers may withhold income taxes from employees, and banks may provide taxing authorities information or may collect and remit taxes to government. Compliance costs include the financial and time costs of complying with the tax law, such as acquiring the knowledge and information needed to do so, setting up required accounting systems, obtaining and transmitting the required data, and payments to professional advisors. Although the measurement of such costs is still in its infancy, studies in developed countries (Evans 2003) suggest that compliance costs are, as a rule, about four to five times larger than the direct administrative costs incurred by governments.

One of the few reported studies of compliance costs in developing countries by Chattopadhyay and Das Gupta 2002 (for the Indian personal income tax) actually found compliance costs to be more than ten times higher than in developed countries. Similarly, (Shekidele 1999) found compliance costs for excises in Tanzania to be more than 15 times higher than similar costs in more developed countries. As World Bank, (2006) reports, compliance costs vary considerably from one country to another.

2.4 Tax Administration as a Factor that Affects Tax Compliance
According to Richard &Oliver, (1975) tax compliance may be affected seriously where administrative deficiencies make evasion and avoidance simple to achieve.

The issue of tax compliance is so complex and is defined by different scholars differently. Roth, (1989) defined tax compliance as compliance with filing all required tax returns at the proper time by taxpayers. On the other hand according to Zelalem, (2011), tax compliance can be defined as the degree to which the tax payers comply with the tax laws. And again similarly Bisrat, (2010) defined tax compliance as the degree to which a taxpayer complies or not to comply with national tax laws. And also according to Alm, (1999) it is the reporting of all tax returns and paying of all taxes by fulfilling the provisions of laws, regulations and court judgments. It means a taxpayers act of filling and declaring all tax returns accurately, and paying out all payable taxes with in the stipulated period without having to wait for follow-up actions from the tax administration. Generally, tax compliance means obedience to the national tax laws, which are different from country to country or origin to origin.

To date many factors were identified as determinants of tax compliance. For example, Yesegat, (2008) identified the factors as, effectiveness of tax enforcement, economic factors associated with fiscal policy and fiscal structure, the structure of government constitution and perception of taxpayers towards the three and Kirchler,
(2007) and Loo, (2006) as cited in Stephen, (2011), classifies the factors in to three categories: structure of the tax system (tax rates, tax audits, complexity, and simplicity of the tax returns, staff attitude and performance, efficiency of the tax authority) attitude and perception (perceptions of fairness, ethics and attitude, perception of government spending, poor influence) and socio demographic characteristics (age, income level, education, gender). Even though those factors have different classification and also they are classified by different scholars differently, the current study focused on some major factors such as the effectiveness of tax enforcement, effectiveness of audit, perceived fairness or equity of tax system and dissatisfaction on the tax administration by the tax payers which are tasks of tax administration.

2.5 Challenges to Tax Administration
According to IMF, (1988) tax administrations face major problems: a large proportion of the economy is at a subsistence level; many taxpayers do not keep records, and even where records are kept, they are not necessarily reliable. Taxpayer cooperation is also low because of chronic shortages of trained officials, traditions of corruption, and lack of visible improvements in government services. As a consequence, countries often develop tax systems that exploit whatever obvious revenue-generating options they have rather than develop modern and efficient tax systems that create wide tax bases from which to draw revenue. Hence many developing countries often end up with too many small tax sources, too heavy a reliance on foreign trade taxes, and a relatively small use of personal income taxes (Tanzi and Zee, 2000).

Moreover, according to Asian Development Bank, (2001) in many developing countries tax administration reforms are needed simply to achieve macroeconomic stability. So, there is the need to establish the legitimacy of tax collection. In all countries tax administrators face the challenge of modernizing the tax administration so that it can operate effectively in an increasingly global economy.

2.6 How to Fix Tax Administration
Several countries’ recent experiences in improving the effectiveness of their tax administration have shown that fundamental reform is possible. According to Rose-Ackerman, Susan, (2006) over the past two decades many developing countries have implemented comprehensive reforms of their tax administrations in order to increase revenue and curb corruption (Rose-Ackerman, Susan. 2006).

In recent years, there has been a considerable amount of study on the steps that should be taken to improve tax administration and reform. Of fundamental importance to all reform efforts, to improve the effectiveness of tax administration significantly, the government must be politically committed to reform, the major obstacles to an effective tax administration have to be identified, and there has to be well-designed strategies for addressing them (Rose-Ackerman, Susan. 2006). According to Bird, (2007) three ingredients are essential to effective tax administration: the political will to administer the tax system effectively, a clear strategy for achieving this goal and adequate resources for the task. It helps, of course, if the tax system is well designed, appropriate for the country in question, and relatively simple, but even the best designed tax system will not be properly implemented unless these three conditions are fulfilled.

Most attention is often paid to the resource problem the need to have sufficient trained officials, adequate information technology and so on. However, without a sound implementation strategy even adequate resources will not ensure success and without sufficient political support even the best strategy cannot be effectively implemented. If the political will exists, the blueprint for effective tax administration is relatively straightforward. The tax administration should be given an appropriate institutional form, which may (or may not) mean a separate revenue authority. It should be adequately staffed with trained officials. It should be properly organized, which usually means an organizational structure based on function or client groups (e.g. large – and small – taxpayer offices) rather than on a tax-by-tax basis. Computerization and appropriate use of modern information technology are important, but technology alone is not sufficient and these improvements must be carefully integrated into the tax administration.

2.7 Empirical Literature Review
In discussing the importance of tax administration in general Bird, (1989 and 2004) noted that tax administration dimension ought to be placed at the centre, not periphery, of tax reform. Jantscher, (1990: 179) also stated that “...in developing countries tax administration is tax policy.” Considering the significance of tax administration, many studies have been conducted in some developing and transitional countries with respect to the effectiveness of the major tax administration tasks. These studies include Yayira, (2011), Teklu (2011), Yosegat (2008) and Mesfin (2008). These papers assessed how tax administrators in developing and transitional countries perform their duties and how the effective taxpayer requirements differ from the legislation. More specifically, the analyses focused on practices of different developing countries with respect to taxpayer identification, invoicing, filing and payment process, control of VAT administration tasks.

Agbezani Yayira Constant, (2011) discussed efficiency and effectiveness of tax administration agencies in
Ghana’s context by applying the McKinsey 7s Model Approach which consist structure, strategy, systems, skills, style, and staff and shared values as the effectiveness factors. It then discussed Ghana’s tax administration effectiveness and examined the reasons for the low level of tax collection, the challenges facing the Berekum District Domestic Tax Division in Ghana; moreover he investigated the level of voluntary tax compliance in the Berekum Districts tax office. The author in his research identified low tax education; inadequate resources and low staff motivation as key reasons for the low compliance. And also, tax efficiency and effectiveness has not been attained in the district he conclude that the office is ineffective. The author recommended that urgency in tax education effort, strict enforcement of laws on taxation and severe punishment of employees who misconduct themselves in fraudulent activities, the utilization of IT in tax system, tax promotions, training the personnel of tax system, reduction in bureaucratic formalities in tax collection process, increase in manpower and quality of personnel, increase in resources devoted to the tax office if well implemented help the office to be efficient and effective.

Tessema Abuye, (2013) assesses the effectiveness of Ethiopian revenue and customs authority (ERCA) with special emphasis on VAT administration and identifies factors which can result in tax noncompliance behavior of taxpayers by implementing mixed method approach and descriptive and comparative analysis method. His study reveals that Ethiopian VAT administration appears with a slight progress in some of its VAT administrative functions however in major functions such as taxpayer identification and registration, VAT audit program, self-assessment process, VAT returns and arrears collection and controlling and following non-compliant tax payers did not show much change even if there are slim improvements. Then he recommended enhancing revenue collection performance, apply consistent and effective taxpayer education, enforcement measures, give due attention for VAT refund system.

Teklu Kassu, (2011) analyzes VAT administration effectiveness in Ethiopian context. The study discussed major issues related to VAT administration such as assessment, collection, investigation, refund and Tax payers Service Delivery to address factors affecting VAT revenue performance. The author found that the main constraints for VAT administration are lack of well trained and credible tax officials mainly in taxpayers identification and registration process; lack of well-trained officials to use SIGTAS (Standard Integrated Government Tax Administration System) so not possible to know the exact number of active VAT registrants, to identify and control non-filers or stop filers using the computer system. In addition; the office facilities and procedures are not supportive to comply for taxpayer and tax officer, no audit plan based on risk assessment, weak enforcement, absence of well-organized taxpayers’ education and assistance program about VAT, poor refund management and low voluntary compliance of taxpayers. Improving taxpayer identification and registration, improving VAT collection, develop planned auditing; establish effective enforcement mechanisms and improving service delivery improving voluntary compliance of taxpayers and refund management are solutions recommended by the researcher.

Wollela Abehodie Yesegat, (2008) examines VAT administration in Ethiopia. In depth interview with officials and surveys on both taxpayers and tax officials was conducted by using semi-structured questionnaires. Then the study found that in Ethiopia there is divergence between the effective VAT taxation and the legislation. The main areas where there are gaps and problems include taxpayers identification and registration; lack of adequate management information system, extensive work must be done by the tax office to gather information and register taxpayers, who have refused to be registered, it should also identify taxpayers, who present under invoicing, commit sale without invoice, and extraordinary credit declaration. To be effective, however, such technological approaches need to be implemented effectively. Build a favorable alliance with third party to get relevant information about the taxpayer under audit.

Mesfin Gobeyehu, (2008) analyzes the tax audit practice and its significance in revenue generation in Ethiopia.
Then the researcher found that the tax audit practice in Ethiopia is weak as seen in Addis Ababa city revenue agency and this weak tax audit practice negatively affect the performance of the revenue generated from the tax. He concludes that the poor tax audit practice makes Ethiopia to generate tax revenue below the rationally accepted tax GDP ratio.

Bisrat Alemayehu, (2010) similarly the study examines the link between tax administration and VAT compliance and the author found and argued that there is a link between tax administration and VAT compliance. Weakness in the VAT administration practice is found to be one factor of noncompliance. Moreover the study found that the audit probability at ERCA is very low, there is fairness problems on VAT, the tax authority is courteous and efficient but not that much flexible. Then the author recommended that the tax authority should give due attention for the most serious issues that audit probability and the perceived fairness of VAT to improve the taxpayers voluntary compliance.

Zelalem Berhane, (2011) examines the influence of tax education on the compliance attitude of tax payers which is one of the tax administration activities. The study explores how provision of tax education influences tax compliance attitude of tax payers. Quantitative research approach and both experimental and survey methods of data collection are used. He found that tax compliance is influenced by tax education positively that means there is a positive relationship between the two. The researcher suggest that the ministry of education has to try to include the public finance and taxation course in the curriculum of all departments and ERCA must frequently provide tax awareness programs for taxpayers to reduce their tax noncompliance attitude.

2.8 Conclusion and Research Gap

To conclude, the above studies are focused on tax administration with special emphasis on VAT and specific tasks of tax administration to assess the effectiveness. For instance Tesema (2013), Teklu (2011), Yesegat (2008), Alemayehu (2010) focused on VAT administration in Ethiopia. On the other hand, Yayira (2011) and Asamnew (2009) focused on tax collection which is one aspect of tax administration. Moreover Mesfin (2008) focused on tax audit practices in Ethiopia and Zelalem focused on tax education aspect of tax administration. Generally all the above studies do not assess the tax administration from different perspectives rather than focusing on specific VAT tax administration ignoring important turnover tax category A and B taxpayers. Therefore this research gap also motivates the researcher to conduct comprehensive evaluation of tax administration effectiveness in Kolfe Kerano Sub City Revenue Office.

CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY

The purpose of this chapter is to present the underlying principles of research methodology and the choice of the appropriate research method for the thesis.

3.1 Research Design

In this study Descriptive type of research design was applied. The reason is that it describes the effectiveness of Kolfe Keranio Sub City Administration revenue office in performing tax administration activities and then to answer the question what is the best way for effective tax administration in order to collect the potential revenue through voluntary tax compliance.

3.2 Research Approach

In this study the researcher used both quantitative and qualitative research approaches. By means of employing both approaches, the researcher obtains the advantages of both quantitative and qualitative approaches and overcomes their limitations.

3.3 Types and Sources of Data
3.3.1 Primary Data Source

The primary data sources were the taxpayers who are administered in the head office i.e. Category ‘A’ and ‘B’ taxpayers, the tax officials, and managers in Kolfe Keranio Sub City Administration revenue office. Open and closed ended questionnaires and interview guideline were prepared for the respondents in English since they can read, understand and write in English.

3.3.2 Secondary Data Source

Secondary source of data were documents and files belongs to Kolfe Keranio Sub City revenue office. Among the secondary data, to analyze the tax collection trends, seven years revenue reports, from 2004 to 2010 E.C and other relevant unpublished documents were collected from the main Office. Moreover different tax related rules and regulations, manuals, literatures, World Bank Reports, and websites were used with reliability and relevance considerations.
3.4 Sample Size Determination
To find the representative sample size of the total study population 10,323 tax payers of which 4,854 are category “A” and 5,469 are category “B” taxpayers. The study utilized Calvahno sample size determination formula. Carvalho (1984) puts sample size to be selected from a given population based on 95% confidence interval and 5% sample error as follows;

Table 3.1:- Carvahlo Sample Size Technique

| Population Size | Small | Medium | Large |
|-----------------|-------|--------|-------|
| 51-90           | 5     | 13     | 20    |
| 91-150          | 8     | 20     | 32    |
| 151-280         | 13    | 32     | 50    |
| 281-500         | 20    | 50     | 80    |
| 501-1,200       | 32    | 80     | 125   |
| 1,201-3,200     | 50    | 125    | 200   |
| 3,201-10,000    | 80    | 200    | 315   |
| 10,001-35,000   | 125   | 315    | 500   |
| 35,001-150,000  | 200   | 500    | 800   |

Source: Carvahlo (1984)

Therefore; considering the capacity and the quality of the research, the researcher took 150 tax payers which means as Carvalho standard more than small but less than medium sample size.

The total employees of the office are 247 of which 43 works on assessment, enforcement, collection, customer service officers, and 32 auditors. It is impossible to collect from the whole population because the numbers are not manageable 75 the sample respondents of staff employees were selected using Carvalho’s sample size techniques and 150 tax payers of the office.

3.5 Sampling Techniques
The sampling technique for this research in selecting tax payers was convenience sampling method because of their convenient accessibility and proximity to the researcher to take sample from the tax payers. Purposive Sampling method was used to take sample from staff employee whose work is related to the research.

3.6 Data Collection Methods
Structured questionnaire that consist both open and close ended questions was used to collect data from tax payers and employees. And also semi-structured interview was employed to get qualitative data with tax office heads.

3.7 Methods of Data Analysis
In order to analyze the data the researcher will use both qualitative and quantitative approaches. Data processing and analysis procedures were undertaken by computer using SPSS software program version 23.0. It was to minimize errors that can occur during data processing and analysis by manual computations. The results of this survey presented in descriptive way using numbers, percentiles and ratios, in addition with the help of graphs, tables and charts.

Different authors have studied effectiveness of tax administration using the following variables Based on McLannan B. (1997) for the variable tax policy, law and procedure, Aizenman, J. and Jinjarak,Y. (2005) for the variable Human, capital and time resource, Doherity, P. (1999) for the variable technological infrastructure, Irena Vlassenko, (2001) for the variable tax payers report quality, Yesegat, W.A. (2008) for the variable public awareness, a model could be developed. Therefore; the model for effectiveness of tax administration that was used in this research is as follows:

\[ Y = \beta_0 + \beta_1(X_1) + \beta_2(X_2) + \beta_3(X_3) + \beta_4(X_4) + \beta_5(X_5) + \epsilon \]

Where,
Y is the response or dependant variable-effectiveness of tax administration
X1=Policy, laws and procedures, X2=Human, capital and time resource, X3=Technological infrastructure, X4=Tax payers report quality X5=Public awareness
\( \beta_0 \) is the intercept term- constant which would be equal to the mean if all slope coefficients are 0.
\( \beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \text{ and } \beta_8 \) are the coefficients associated with each independent variable which measures the change in the mean value of Y, per unit change in their respective independent variables.

By running the multiple linear regression model above the relationship between the efficiency and effectiveness and the rest explanatory variables were analyzed

CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND INTERPRETATION
This chapter deals with a data presentation analysis and interpretation. The data was collected through
questionnaires, interviews and document review. Questionnaires were distributed to authority’s staffs and tax payer’s. In addition, interviews were conducted with the authority’s team coordinator, process owner and branch managers.

4.1. Questionnaires Distributed and Response Rate Analysis
From the sample size of 75 employees selected for the study, 69 usable questionnaires were retrieved representing approximately 92% response rate and from 150 tax payers, 143 usable questioners were retrieved approximately 95% response rate. According to (Mugenda, 1999) a 50% response rate is adequate, 60% good and above 70% is rated very well. This implies that based on these assertions; the response rate for this study is very good.

4.2 Employees’ Profile Analysis
Table 4.1 Age, Gender, Education and Department of Employees

|                | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------|-----------|---------|---------------|--------------------|
| Age            |           |         |               |                    |
| Below 25       | 15        | 21.7    | 21.7          | 21.7               |
| Between 26 and 35 | 37      | 53.6    | 53.6          | 75.4               |
| Between 36 and 45 | 13      | 18.8    | 18.8          | 94.2               |
| Above 45       | 4         | 5.8     | 5.8           | 100.0              |
| Gender         |           |         |               |                    |
| Male           | 40        | 58.0    | 58.0          | 58.0               |
| Female         | 29        | 42.0    | 42.0          | 100.0              |
| Education      |           |         |               |                    |
| Below degree   | 12        | 17.4    | 17.4          | 17.4               |
| Degree         | 47        | 68.1    | 68.1          | 85.5               |
| Masters and above | 10    | 14.5    | 14.5          | 100.0              |
| Department     |           |         |               |                    |
| Tax collection and enforcement | 25 | 36.2 | 36.2 | 36.2 |
| Tax audit      | 30        | 43.5    | 43.5          | 79.7               |
| Tax assessment | 14        | 20.3    | 20.3          | 100.0              |
| Total          | 69        | 100.0   | 100.0         |                    |

(Source: Own Survey, 2019)

As you observe from table 4.1 above there are 21.7% (15) respondents in the age category of below 25 years, 53.6% (37) are between 26-35 years, 18.8% (13) are between 36-45 years, and the remaining respondents are 5.8% (4) above 45 years. This result shows that most of the respondents are between 26-35 years. If we see the gender composition of the respondents 58% (40) are male and the remaining 42% (29) are female. Therefore, from the table it shows that respondents are dominated by the number of male.

Respondents participated in the study were of different level of education. 68.1% (47) respondents have degree and 17.4% (12) respondents have degree and the remaining 14.5% (10) have masters and above. In terms of the department they work in, 36.2% (25) of respondents are from tax collection and enforcement department where as 43.5% (30) employees are belongs to tax audit department. The remaining 20.3% (14) respondents are working in tax assessment office.
4.3 Tax Payers Profile Analysis

Table 4.2 Age, Gender, Education, Type of business and Level of knowledge

|                      | Frequency | Percent | Cumulative Percent |
|----------------------|-----------|---------|--------------------|
| **Age**              |           |         |                    |
| Less than 30         | 42        | 29.4    | 29.4               |
| 30 to 39             | 41        | 28.7    | 58.0               |
| 40 to 49             | 39        | 27.3    | 85.3               |
| 50 to 59             | 19        | 13.3    | 98.6               |
| 60 years or above    | 2         | 1.4     | 100.0              |
| **Gender**           |           |         |                    |
| Male                 | 83        | 58.0    | 58.0               |
| Female               | 60        | 42.0    | 100.0              |
| **Educational**      |           |         |                    |
| Illiterate           | 30        | 21.0    | 21.0               |
| Secondary school     | 55        | 38.5    | 59.4               |
| Certificate          | 47        | 32.9    | 92.3               |
| Diploma              | 11        | 7.7     | 100.0              |
| **Type of Business** |           |         |                    |
| Import and export    | 6         | 4.2     | 4.2                |
| Service providers    | 49        | 34.3    | 38.5               |
| Manufacturing        | 44        | 30.8    | 69.2               |
| Real estate developer| 2         | 1.4     | 70.6               |
| Wholesaler and retailers| 41    | 28.7    | 99.3               |
| financial institution| 1         | .7      | 100.0              |
| **Level of knowledge**|          |         |                    |
| almost all           | 19        | 13.3    | 13.3               |
| partially            | 102       | 71.3    | 84.6               |
| I don’t know         | 22        | 15.4    | 100.0              |

(Source: own survey, 2019)

From the table 4.2 above there are 29.4% (42) respondents in the age category of below 30 years, 28.7(41) are between 30-39 years, 27.3% (39) are between 40-49 years, 13.3% (19) are between 50-59 years and the remaining respondents are 1.4% (2) are 60 years or above.

This result shows that most of the respondents are below 30 years. If we see the gender composition of the respondents 58% (83) are male and the remaining 42% (60) are female. Therefore, from the table it shows that respondents are dominated by the number of males.

Regarding educational status of tax payers, 38.5% (55) respondents has completed secondary school, 32.9% (47) has certificate, 21% (30) are illiterate and the remaining 7.7% (11) of them has diploma.

Concerning the number of years the tax payers stay in the business 39.9% (57) tax payers stayed in the business above five years, 42.7% (61) respondents stayed in the business from two years to five years and the remaining 17.5%(25) stayed in the business below two years.

In relation to type of business 34.3% (49) of respondents are engaged in providing services, 30.8(44) are involved in manufacturing sector, 28.7(41) are wholesaler and retailer. The remaining percentage of tax payers engaged in real estate developer, import and export as well as financial institutions. It can be concluded that most respondents are doing as service providers.

Concerning on their level of knowledge about tax, 71% (102) respondents said they know about tax law partially, 13.3 (19) said they know almost all about tax law and the remaining 15% (22) respondents do not know about tax. This indicates the respondents in this research have sufficient educational background and knowledge which makes the information obtained from these respondents to have a better quality.

4.4 Descriptive Analysis of Effectiveness of Tax Administration

Descriptive statistics are summary statistics that quantitatively describe or summarize features of collection information. The researcher simply state what the data shows. It helps us understand the data set in detail and tell us everything we need. It was employed to investigate and present an overview of both dependent (ETA) and independent variables (X1, X2, X3, X4 and X5) used in the study. Table 4.3, table 4.4, table 4.5, table 4.5 and table 4.6 shows the descriptive statistical results of corresponding 143 total tax payers observations.
4.4.1 Descriptive Statistics from Tax Payers’ Point of View

| Statements                                                                 | Strongly Disagree | Frequency | Percent | Cumulative Percent |
|---------------------------------------------------------------------------|-------------------|-----------|---------|--------------------|
| Tax laws, proclamations, regulations and directives is clear and easy to follow | Strongly Disagree | 19        | 13.3    | 13.3               |
|                                                                            | Neutral           | 18        | 12.6    | 26.9               |
|                                                                            | Disagree          | 73        | 51.0    | 77.9               |
|                                                                            | Agree             | 33        | 23.1    | 100.0              |
| There is complexity in tax laws and multiplicity of requirements          | Strongly Disagree | 2         | 1.4     | 1.4                |
|                                                                            | Disagree          | 16        | 11.2    | 12.6               |
|                                                                            | Neutral           | 25        | 17.5    | 30.1               |
|                                                                            | Agree             | 77        | 53.8    | 83.9               |
| Pay tax as per the policies, laws and procedures                          | Strongly Disagree | 13        | 9.1     | 9.1                |
|                                                                            | Disagree          | 68        | 47.6    | 56.6               |
|                                                                            | Neutral           | 38        | 26.6    | 83.2               |
|                                                                            | Agree             | 24        | 16.8    | 100.0              |
| The criterion required by the office to collect tax is reasonable          | Strongly Disagree | 24        | 16.8    | 16.8               |
|                                                                            | Disagree          | 80        | 55.9    | 72.7               |
|                                                                            | Neutral           | 27        | 18.9    | 91.6               |
|                                                                            | Agree             | 12        | 8.4     | 100.0              |
| The tax policy is fair, uniform and comprehensive which treats all tax payers similarly | Strongly Disagree | 35        | 24.5    | 24.5               |
|                                                                            | Disagree          | 74        | 51.7    | 76.2               |
|                                                                            | Neutral           | 17        | 11.9    | 88.1               |
|                                                                            | Agree             | 17        | 11.9    | 100.0              |
| Total                                                                     | 143               | 100.0     |         |                    |

(Source: own survey, 2019)

From the above table 4.3, it can be seen that 51% (73) tax payers disagreed concerning the clarity of tax laws, proclamations, regulations and directives where as 23.1% (33) of respondents agreed on the same issue. On the other hand, 53.8% (77) of respondents agreed that there is complexity in tax laws and multiplicity of requirements but 17.5% (25) of them chosen to be neutral. Concerning the reasonability of the criterion required by the office to collect tax, 55.9% (80) disagreed and 16.8% (24) strongly disagreed on the question raised. The respondents were also asked whether the tax policy is fair, uniform and comprehensive which treats all tax payers similarly and 51.7% (74) of them disagreed and 24.5 (35) of tax payers strongly disagreed.

Therefore, from the above table, it can be concluded that tax laws, policies and procedures are not clear and easy to follow, there is complexity in tax laws and multiplicity of requirements, criteria required by the office to collect tax is not reasonable and tax policy is not fair, uniform and comprehensive in treating all tax payers equally.
Table 4.4 Extent to which the human, capital and time resource affect the effectiveness of tax administration

| Statements                                                                 | Frequency | Percent | Cumulative Percent |
|---------------------------------------------------------------------------|-----------|---------|--------------------|
| Satisfied with tax collection process by employees                        |           |         |                    |
| Strongly Disagree                                                         | 27        | 18.9    | 18.9               |
| Disagree                                                                  | 80        | 55.9    | 74.8               |
| Neutral                                                                   | 13        | 9.1     | 83.9               |
| Agree                                                                     | 23        | 16.1    | 100.0              |
| Employees deliver quality and timely services to tax payers               |           |         |                    |
| Strongly Disagree                                                         | 32        | 22.4    | 22.4               |
| Disagree                                                                  | 83        | 58.0    | 80.4               |
| Neutral                                                                   | 14        | 9.8     | 90.2               |
| Agree                                                                     | 14        | 9.8     | 100.0              |
| Employees are effective in taxpayer identification and registration        |           |         |                    |
| Strongly Disagree                                                         | 29        | 20.3    | 20.3               |
| Disagree                                                                  | 76        | 53.1    | 73.4               |
| Neutral                                                                   | 22        | 15.4    | 88.8               |
| Agree                                                                     | 16        | 11.2    | 100.0              |
| Employees’ treatment and their service quality is high                     |           |         |                    |
| Strongly Disagree                                                         | 28        | 19.6    | 19.6               |
| Disagree                                                                  | 84        | 58.7    | 78.3               |
| Neutral                                                                   | 21        | 14.7    | 93.0               |
| Agree                                                                     | 10        | 7.0     | 100.0              |
| There is frequent discussion with revenue office and tax payers concerning various problems |           |         |                    |
| Strongly Disagree                                                         | 36        | 25.2    | 25.2               |
| Disagree                                                                  | 89        | 62.2    | 87.4               |
| Neutral                                                                   | 10        | 7.0     | 94.4               |
| Agree                                                                     | 5         | 3.5     | 97.9               |
| Strongly Disagree                                                         | 3         | 2.1     | 100.0              |
| Total                                                                     | 143       | 100     |                    |

(Source: own survey, 2019)

Concerning table 4.4 above, 55.9% (80) respondents disagreed, 18.9% (27) tax payers strongly disagreed where only 16.1% (23) of them agreed that they are satisfied with tax collection process by employees. On the other hand, 58% (83) respondents disagreed and 22.4% (32) tax payers strongly disagreed that employees deliver quality and timely services to tax payers. In connection with these, 53.1% (76) tax payers disagreed, 20.3(29) respondents strongly disagreed where only 15.4% (22) of them agree that employees are effective in taxpayer identification and registration. Moreover, tax payers were asked that employees’ treatment and their service quality is high and 58.7% (84) of them disagreed and 19.6% (28) tax payers strongly disagreed with the statement. Also respondents were asked that there is frequent discussion with revenue office and tax payers concerning various problems and 62.2% (89) disagreed and 25.2% (36) respondents strongly disagreed on the issue raised. From this analysis, we can conclude that the majority of tax payers are not satisfied with tax collection process, employees do not deliver quality and timely services to tax payers. By the other token, the data shows that employees are ineffective in tax payers identification and registration. Employees’ treatment and their service quality is also poor. The respondents also confirmed that as there is no frequent discussion between revenue office and tax payers.

Table 4.5 Impacts of the capacity of technological infrastructure on the effectiveness of tax administration

| Statements                                                                 | Frequency | Percent | Cumulative Percent |
|---------------------------------------------------------------------------|-----------|---------|--------------------|
| The Authority utilizing modern technology to easy tax matters             |           |         |                    |
| Strongly Disagree                                                         | 58        | 40.6    | 40.6               |
| Disagree                                                                  | 68        | 47.6    | 88.1               |
| Neutral                                                                   | 11        | 7.7     | 95.8               |
| Agree                                                                     | 6         | 4.2     | 100.0              |
| E filing system is constrained by internet connectivity                    |           |         |                    |
| Disagree                                                                  | 12        | 8.4     | 8.4                |
| Neutral                                                                   | 20        | 14.0    | 22.4               |
| Agree                                                                     | 73        | 51.0    | 73.4               |
| Strongly agree                                                            | 38        | 26.6    | 100.0              |
| E filing system makes it easier to pay tax.                               |           |         |                    |
| Disagree                                                                  | 10        | 7.0     | 7.0                |
| Neutral                                                                   | 11        | 7.7     | 14.7               |
| Agree                                                                     | 78        | 54.5    | 69.2               |
| Strongly agree                                                            | 44        | 30.8    | 100.0              |
| Total                                                                     | 143       | 100     |                    |

(Source: own survey, 2019)

From the above table 4.5, it can be seen that 47.6% (68) respondents disagreed and 40.6(58) tax payers are strongly disagreed that the office authorities are utilizing modern technology to easy tax matters. Respondents were also asked that E-filling system is constrained by internet connectivity and 51.0% (73) agreed and 26.6(38)
tax payers strongly disagreed respectively. On the other hand, 54.5% (78) respondents agreed and 30.8% (44) strongly agreed that E-filing system makes it easier to pay tax. From these figures, we can conclude that the office does not have modern technology and prevalence of internet connectivity problem.

Table 4.6 Level of public awareness on the significance of tax administration

| Statements                                                                 | Frequency | Percent | Cumulative Percent |
|----------------------------------------------------------------------------|-----------|---------|--------------------|
| You have positive perception about paying tax                               | Disagree  | 45      | 31.5               |
|                                                                           | Neutral   | 37      | 25.9               |
|                                                                           | Agree     | 61      | 42.7               |
| Tax knowledge acquired helps taxpayer to comply with tax laws              | Strongly Disagree | 9   | 6.3                |
|                                                                           | Disagree  | 78      | 54.5               |
|                                                                           | Neutral   | 31      | 21.7               |
|                                                                           | Agree     | 25      | 17.5               |
| The education and awareness creation program through television, brochures | Strongly Disagree | 26 | 18.2             |
| magazines, newspapers and others is sufficient to improve tax collection  | Disagree  | 88      | 61.5               |
|                                                                           | Neutral   | 24      | 16.8               |
|                                                                           | Agree     | 5       | 3.5                |
|                                                                           | Strongly agree | 26 | 18.2             |

(Source: Own Survey, 2019)

Table 4.6 above shows that 42.7% (61) of respondents agreed and 31.5% (45) tax payers disagreed that they have positive perception about paying tax. On the other hand, 54.5% (78) of tax payers disagreed and 17.5% (25) agreed on the statement tax knowledge acquired helps tax payers to comply with tax laws. Moreover, 61.5% (88) of respondents disagreed and 18.2% (26) tax payers strongly disagreed on the statement that education and awareness creation program through television, brochures, magazines, newspapers and others is sufficient to improve tax collection. From these data, it can be inferred that tax payers have no positive perception towards paying tax, there is no acquired knowledge which helps tax payers to comply with tax laws and also education of awareness creation only through television, brochures and newspaper are not sufficient to improve tax collection.

Table 4.7 Report quality of the tax payers on the effectiveness of tax administration

| Statements                                                                 | Frequency | Percent | Cumulative Percent |
|----------------------------------------------------------------------------|-----------|---------|--------------------|
| The format prepared to be completed by the tax payers is friendly with the tax office filling system | Disagree  | 82      | 57.3               |
|                                                                           | Neutral   | 36      | 25.2               |
|                                                                           | Agree     | 17      | 11.9               |
|                                                                           | Strongly agree | 8   | 5.6                |
| Provide reliable recorded data to the office                                | Disagree  | 22      | 15.4               |
|                                                                           | Neutral   | 51      | 35.7               |
|                                                                           | Agree     | 60      | 42.0               |
|                                                                           | Strongly agree | 10 | 7.0                |
| Notify the office when you change your address                             | Strongly Disagree | 2   | 1.4                |
|                                                                           | Disagree  | 79      | 55.2               |
|                                                                           | Neutral   | 30      | 21.0               |
|                                                                           | Agree     | 31      | 21.7               |
|                                                                           | Strongly agree | 1   | 0.7                |
| Strictly follow the filling requirements by the office                      | Strongly Disagree | 1   | 0.7                |
|                                                                           | Disagree  | 24      | 16.8               |
|                                                                           | Neutral   | 31      | 21.7               |
|                                                                           | Agree     | 79      | 55.2               |
|                                                                           | Total     | 143     | 100                |

(Source: own survey, 2019)

Table 4.7 above shows that 57.3% (82) of tax payers disagreed while 25% (36) of respondents are undecided on the statement says the format prepared to be completed by the tax payers is friendly with the tax office filling system. Besides this, respondents were also asked that they provide reliable recorded data to the office and 42% (60) tax payers agreed and 35.7% (51) of them chose to be neutral. The researcher provide statement for tax payers that they notify the office when change their address and 55.2% (79) of them disagreed while only 21.7% (31) of tax payers agreed on the given statement. Moreover, 55.2% (79) of tax payers agreed and 16.8% (24) of them disagreed on the statement that says you strictly follow the requirements by the office. From responses of tax payers, we can conclude that the format prepared to be filled by the tax payers is not very much friendly with tax
office filling system. And also respondents do not notify the office when they change their address.

Table 4.8 Effectiveness of tax administration

| Statements                          | Frequency | Percent | Cumulative Percent |
|-------------------------------------|-----------|---------|--------------------|
| I am satisfied with tax collection process |           |         |                    |
| Strongly Disagree                   | 29        | 20.3    | 20.3               |
| Disagree                            | 93        | 65.0    | 85.3               |
| Neutral                             | 13        | 9.1     | 94.4               |
| Agree                               | 8         | 5.6     | 100.0              |
| High degree of voluntary tax compliance |         |         |                    |
| Strongly Disagree                   | 20        | 14.0    | 14.0               |
| Disagree                            | 89        | 62.2    | 76.2               |
| Neutral                             | 24        | 16.8    | 93.0               |
| Agree                               | 10        | 7.0     | 100.0              |
| Total                               | 143       | 100     |                    |

(Source: own survey, 2019)

Table 4.8 above constructed to measure dependant variable which is effectiveness of tax administration. The respondents provided the statement which says they are satisfied with tax collection process and 65% (93) of them disagreed while 20.3% (29) of tax payers strongly disagreed. Additionally, 62.2% (89) of respondents disagreed and 16.8% (24) of them strongly disagreed on prevalence of high degree of voluntary tax compliance. From these, it can be inferred that majority of the respondents are not satisfied with tax collection process of the office and no high degree of voluntary tax compliance.

4.4.2 Descriptive Statistics from Employees’ Point of View

Table 4.9 Tax Policies, laws and procedures on effectiveness of tax administration

| Statements                          | Frequency | Percent | Cumulative Percent |
|-------------------------------------|-----------|---------|--------------------|
| Taxpayers proclamation, regulation and directives is clear and easy to implement |           |         |                    |
| Strongly Disagree                   | 2         | 2.9     | 2.9                |
| Disagree                            | 9         | 13.0    | 15.9               |
| Neutral                             | 9         | 13.0    | 29.0               |
| Agree                               | 32        | 46.4    | 75.4               |
| Strongly Agree                      | 17        | 24.6    | 100.0              |
| The current tax revenue being collected by the office is fully achieved as per the policies, laws and procedures |           |         |                    |
| Strongly Disagree                   | 11        | 15.9    | 15.9               |
| Disagree                            | 30        | 43.5    | 59.4               |
| Neutral                             | 13        | 18.8    | 78.3               |
| Agree                               | 11        | 15.9    | 94.2               |
| Strongly Agree                      | 4         | 5.8     | 100.0              |
| The office has effective enforcement procedures of tax collection |           |         |                    |
| Strongly Disagree                   | 3         | 4.3     | 4.3                |
| Disagree                            | 6         | 8.7     | 13.0               |
| Neutral                             | 5         | 7.2     | 20.3               |
| Agree                               | 38        | 55.1    | 75.4               |
| Strongly Agree                      | 17        | 24.6    | 100.0              |
| There is complexity in tax laws and multiplicity of requirements |           |         |                    |
| Strongly Disagree                   | 11        | 15.9    | 15.9               |
| Disagree                            | 43        | 62.3    | 78.3               |
| Neutral                             | 8         | 11.6    | 89.9               |
| Agree                               | 5         | 7.2     | 97.1               |
| Strongly Agree                      | 2         | 2.9     | 100.0              |
| The tax policy is fair, uniform and comprehensive which treats all tax payers similarly |           |         |                    |
| Strongly Disagree                   | 1         | 1.4     | 1.4                |
| Disagree                            | 3         | 4.3     | 5.8                |
| Neutral                             | 5         | 7.2     | 13.0               |
| Agree                               | 38        | 55.1    | 68.1               |
| Strongly Agree                      | 22        | 31.9    | 100.0              |
| Total                               | 69        | 100     |                    |

(Source: own survey, 2019)

From table 4.9 above, about 46.4% (32) of respondents agreed and 24.6(17) of employees strongly agree that taxpayers proclamation, regulation and directives is clear and easy to implement. On the other hand, 43.5% (30) of respondents disagreed and 15.9(11) of them agreed that the current tax revenue being collected by the office is fully achieved as per the policies, laws and procedures. Moreover, 55.1% (38) of the respondents agreed and 24.6% (17) strongly agreed that the office has effective enforcement procedures of tax collection. And also, 62.3% (43) of employees disagreed and 15.9(11) of them strongly disagreed that there is complexity in tax laws and multiplicity of requirements. Lastly, respondents were given statement that states tax policy is fair, uniform and
comprehensive which treats all tax payers similarly and 55.1% (38) of them agreed and 31.9(22) of employees strongly agreed on the same issues. The above analysis therefore shows that taxpayer’s proclamation, regulation and directives is clear and easy to implement from employee point of view but the current tax revenue being collected by the office is not fully achieved as per the policies, laws and procedures. Majority of employees believe that the office has effective tax enforcement procedures and they do not agree on the multiplicity requirements of tax process.

From table 4.10 above, 50.7% (35) of the employees agreed and 24.6% (17) of them strongly agreed that the current level of education and work experience of the employees is enough to make the tax assessment effort successfully. Concerning transparency of tax, 52.2% (36) of the respondents agreed and 23.2(16) of employees strongly agreed that there is transparency and continuous follow up when evaluating employees. In connection with this, 46.4% (32) of respondents disagreed that Ethiopian Revenue and Customs Authority (ERCA) offered adequate training for employees. On the other hand,  39.1% (27) of employees agreed that they are effective in taxpayer identification and registration. In the same token, 44.9% (31) employees believe that their treatment and service quality is high. And also 43.5% (30) of respondents disagreed on the presence of frequent discussion concerning various problems encountered in the tax office. From this analysis one can inferred that the current education and work experience of employees is good enough to do their job and there is transparency in employees performance evaluation. Majority of the respondents stated that there is lack of adequate training given by ERCA.
Table 4.11 Impacts of the capacity of technological infrastructure on the effectiveness of tax administration

| Statements | Frequency | Percent | Cumulative Percent |
|------------|-----------|---------|--------------------|
| Almost all tax payers use electronic tax system | Strongly Disagree | 13 | 18.8 | 18.8 |
| | Disagree | 22 | 31.9 | 50.7 |
| | Neutral | 13 | 18.8 | 69.6 |
| | Agree | 19 | 27.5 | 97.1 |
| | Strongly Agree | 2 | 2.9 | 100.0 |
| There is efficient and effective organization of computerized system | Strongly Disagree | 9 | 13.0 | 13.0 |
| | Disagree | 36 | 52.2 | 65.2 |
| | Neutral | 15 | 21.7 | 87.0 |
| | Agree | 7 | 10.1 | 97.1 |
| | Strongly Agree | 2 | 2.9 | 100.0 |
| The office has adequate preparedness to provide E-filing system service | Strongly Disagree | 4 | 5.8 | 5.8 |
| | Disagree | 24 | 34.8 | 40.6 |
| | Neutral | 19 | 27.5 | 68.1 |
| | Agree | 21 | 30.4 | 98.6 |
| | Strongly Agree | 2 | 2.9 | 100.0 |
| Electronic tax system facilitates tax collection process | Strongly Disagree | 1 | 1.4 | 1.4 |
| | Disagree | 3 | 4.3 | 5.8 |
| | Neutral | 16 | 23.2 | 29.0 |
| | Agree | 36 | 52.2 | 81.2 |
| | Strongly Agree | 13 | 18.8 | 100.0 |

(Source: own survey, 2019)

Concerning the above 4.11 table, 31.9% (22) of the respondents disagreed and 18.8% (13) strongly disagreed that almost all tax payers use electronic tax system. In the same manner, 52.2% (36) of employees disagreed and 21.7% (15) of employees found to be neutral on the statement says there is efficient and effective organization of computerized system. Moreover, 34.8% (24) of respondents disagreed and 30.4% (21) of them agreed that the office has adequate preparedness (organizationally, legally and technologically) to provide E-filing system service. Besides, 52.2% (36) of respondents agreed that electronic tax system facilitates tax collection process. The conclusion that could be arrived from the above responses is that majority of tax payers are not using electronic tax system and the office has no adequate preparedness to provide E-filing system and also absence of inefficient and ineffective of computerized system.

Table 4.12 Level of public awareness on the significance of tax administration

| Statements | Frequency | Percent | Cumulative Percent |
|------------|-----------|---------|--------------------|
| Public awareness on importance of tax is high | Strongly Disagree | 12 | 17.4 | 17.4 |
| | Disagree | 37 | 53.6 | 71.0 |
| | Neutral | 16 | 23.2 | 94.2 |
| | Agree | 3 | 4.3 | 98.6 |
| | Strongly Agree | 1 | 1.4 | 100.0 |
| There is public awareness creation program organized currently by the office | Strongly Disagree | 1 | 1.4 | 1.4 |
| | Disagree | 28 | 40.6 | 42 |
| | Neutral | 20 | 29.0 | 71 |
| | Agree | 10 | 14.5 | 85.5 |
| | Strongly Agree | 10 | 14.5 | 100.0 |
| The office provide advisory service to tax payers | Strongly Disagree | 2 | 2.9 | 2.9 |
| | Disagree | 28 | 40.6 | 43.5 |
| | Neutral | 15 | 21.7 | 64.9 |
| | Agree | 19 | 27.5 | 92.8 |
| | Strongly Agree | 5 | 7.2 | 100.0 |
| Tax payers aware where the money collected is spent by the government | Strongly Disagree | 1 | 1.4 | 1.4 |
| | Disagree | 34 | 49.3 | 50.7 |
| | Neutral | 12 | 17.4 | 68.1 |
| | Agree | 14 | 20.3 | 88.4 |
| | Strongly Agree | 8 | 11.6 | 100.0 |

(Source: own survey, 2019)
From table 4.12 above, 53.6% (37) of respondents disagreed and 23.2% (16) of them found to be neutral on the statement says public awareness on importance of tax is high. On the other side, 40.6% (28) of employees disagreed and 29% (20) of them being neutral there is public awareness creation program organized currently by the office. In connection with this, 40.6% (28) of employees disagreed and 27.5 (19) of them agreed that the office provide advisory service to tax payers. And also the respondents were asked that the tax payer aware where the money collected is spent by the government and the majority 49.3% (34) of them disagreed on the statement. What can be concluded from this analysis is that public awareness on importance of tax is not adequate and there is rare program organized to increase community understanding of tax significance. Moreover, advisory service provided by the office is also inadequate.

**Table 4.13 Report quality of the tax payers on the effectiveness of tax administration**

| Statements                                                                 | Frequency | Percent | Cumulative Percent |
|---------------------------------------------------------------------------|-----------|---------|--------------------|
| The format prepared to be completed by the tax payers is friendly with the tax office filling system | Strongly Disagree 1 | 1.4 | 1.4 |
|                                                                           | Disagree 27 | 39.1 | 40.5 |
|                                                                           | Neutral 15 | 21.7 | 62.2 |
|                                                                           | Agree 8 | 11.6 | 73.6 |
|                                                                           | Strongly Agree 18 | 26.4 | 100.0 |
| Tax payers keep records which is reliable                                  | Strongly Disagree 17 | 24.6 | 24.6 |
|                                                                           | Disagree 35 | 50.7 | 75.4 |
|                                                                           | Neutral 10 | 14.5 | 89.9 |
|                                                                           | Agree 5 | 7.2 | 97.1 |
|                                                                           | Strongly Agree 2 | 2.9 | 100.0 |
| Records of all financial data of tax payers prepared in accordance with financial accounting standards | Strongly Disagree 10 | 14.5 | 14.5 |
|                                                                           | Disagree 29 | 42.0 | 56.5 |
|                                                                           | Neutral 16 | 23.2 | 79.7 |
|                                                                           | Agree 12 | 17.4 | 97.1 |
|                                                                           | Strongly Agree 2 | 2.9 | 100.0 |
| There is a frequent change of tax payers address without the knowledge of the office | Strongly Disagree 9 | 13.0 | 13.0 |
|                                                                           | Disagree 6 | 8.7 | 21.7 |
|                                                                           | Neutral 14 | 20.3 | 42 |
|                                                                           | Agree 39 | 56.5 | 98.6 |
|                                                                           | Strongly Agree 1 | 1.4 | 100.0 |
| Total                                                                     | 69 | 100 | |

(Source: own survey, 2019)

From table 4.13 above, it can be seen that 39.1% (27) of the respondents disagreed and 21.7% (15) of them chosen neutral that the format prepared to be completed by the tax payers is friendly with the tax office filing system. On the second statement in the above table, 50.7% (35) of the employees disagreed and 24.6% (17) of them strongly disagreed that tax payers keep records which is reliable. Moreover, 42% (29) of the employees disagreed and 23.2% (16) of the respondents chosen to be neutral that records of all financial data of tax payers prepared in accordance with financial accounting standards. In addition to this, 56.5% (39) of employees agreed and 20.3% (14) of them chosen to be neutral that there is a frequent change of tax payers address without the knowledge of the office. Depending on the above analysis, we can conclude that the format prepared by tax payers is not very friendly with the tax office filing system and their record is unreliable. Financial data is not prepared along with financial accounting standards and prevalence of tax payer’s address without the knowledge of the office.
Table 4.14 Effectiveness of tax administration

| Statements                                      | Frequency | Percent | Cumulative Percent |
|------------------------------------------------|-----------|---------|--------------------|
| The branch has fewer amounts of arrears of uncollectable tax | Strongly Disagree | 14 | 20.3 | 20.3 |
|                                                 | Disagree  | 29 | 42.0 | 62.3 |
|                                                 | Neutral   | 12 | 17.4 | 79.7 |
|                                                 | Agree     | 12 | 17.4 | 97.1 |
|                                                 | Strongly Agree | 2 | 2.9 | 100.0 |
| costs of tax collection is substantially high   | Strongly Disagree | 2 | 2.9 | 2.9 |
|                                                 | Disagree  | 11 | 15.9 | 18.8 |
|                                                 | Neutral   | 9 | 13.0 | 31.9 |
|                                                 | Agree     | 32 | 46.4 | 78.3 |
|                                                 | Strongly Agree | 15 | 21.7 | 100.0 |
| Tax collection rate increase from year to year  | Strongly Disagree | 9 | 13.0 | 13.0 |
|                                                 | Disagree  | 20 | 29.0 | 42.0 |
|                                                 | Neutral   | 14 | 20.3 | 62.3 |
|                                                 | Agree     | 16 | 23.2 | 85.5 |
|                                                 | Strongly Agree | 10 | 14.5 | 100.0 |
| Total                                           |           | 69 | 100 |

(Source: own survey, 2019)

Table 4.14 above constructed to measure dependant variable which is effectiveness of tax administration. According to responses of the employees, 42% (29) of them disagreed and 20.3% (14) of the employees strongly disagreed that the branch has fewer amounts of arrears of uncollectable tax. Moreover, 46.4% (32) of respondents agreed and 21.7% (15) of them strongly agree that costs of tax collection is substantially high. Additionally, 29% (20) of respondents disagreed and 23.2% (16) of them agreed that tax collection rate increase from year to year. From these, it can be inferred that the branch office has high arrears of uncollectable tax and costs of its collection is high.

4.5 Inferential Statistical Analysis

In this section, the results of inferential statistics are presented. For assessing the objectives of the study, Pearson’s Product Moment Correlation Coefficient and regression analyses were performed. With the aid of these statistical techniques, conclusions are drawn with regard to the sample.

4.5.1 Pearson’s Product Moment Correlation Coefficient

In this study Pearson’s Product Moment Correlation Coefficient was used to determine whether there is significant relationship between Tax Policies, laws and procedures, human, capital and time resource, capacity of technological infrastructure, public awareness and report quality of the tax payers with effectiveness of tax administration.

The following section presents the results of Pearson’s Product Moment Correlation on the relationship between independent variables and dependent variable. According to Field, 2009 the correlation efficient (r) is as follows: ≤ 0.35 considered representing low or weak correlation; 0.36 – 0.67 is modest or moderate correlation; 0.68-0.89 is strong or high correlation and a correlation with r coefficient ≥0.90 is very high correlation.
| Independent Variables                          | Effectiveness of tax administration | Tax Policies, laws and procedures | Human, capital and time resource | Capacity of technological infrastructure | Public awareness | Report quality of the tax payers |
|-----------------------------------------------|-------------------------------------|----------------------------------|---------------------------------|------------------------------------------|-----------------|---------------------------------|
| Effectiveness of tax administration          | Pearson Correlation 1.000            | 1.000                            | 1.000                           | 1.000                                    | 1.000           | 1.000                           |
| Tax Policies, laws and procedures            | Pearson Correlation 0.539**          | 1.000                            | 0.714                           | 0.211*                                    | 0.016           | 0.191*                          |
| Human, capital and time resource             | Pearson Correlation 0.541**          | 0.031                            | 0.973                           | 0.003                                    | 0.016           | 0.022                           |
| Capacity of technological infrastructure     | Pearson Correlation 0.318*           | 0.201*                           | 0.973                           | 0.003                                    | 0.016           | 0.022                           |
| Public awareness                             | Pearson Correlation 0.427**          | 0.191*                           | 0.043                           | 0.183*                                    | 0.029           | 0.029                           |
| Report quality of the tax payers             | Pearson Correlation 0.386**          | 0.176*                           | 0.146                           | 0.134                                    | 0.112           | 0.058                           |

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Table 4.15 above indicates that the correlation coefficients between effectiveness of tax administration and its independent variables are linear and positive ranging from small effect to medium effect correlation coefficients. The results of the correlation analysis indicated that Tax Policies, laws and procedures factor is positively associated effectiveness of tax administration with a Pearson correlation coefficient of \( r = 0.541 \) and the significance value .000 two tailed and hence Tax Policies, laws and procedures factors had significant medium effect and positive association with effectiveness of tax administration. Similarly, the other factors such Human, capital and time resource, Public awareness and report quality of the taxpayers \( r = 0.541 \) and the significance value .000 two tailed, \( r = 0.427, p = 0.000 \)– two tailed and \( r = 0.386, p = 0.000 \)– two tailed had significant medium effect and positive association with effectiveness of tax administration respectively.

Capacity of technological infrastructure factor \( r = 0.318 \) and the significance value .000 two tailed had significant smallest effect and positive association with effectiveness of tax administration.
Table 4.16 Relationship between Independent Variables and Effectiveness of Tax Administration (Employees side)

| Effectiveness of tax administration | Pearson Correlation | Sig. (2-tailed) | N | Tax Policies, laws and procedures | Pearson Correlation | Sig. (2-tailed) | N | human, capital and time resource | Pearson Correlation | Sig. (2-tailed) | N | Technological infrastructure | Pearson Correlation | Sig. (2-tailed) | N | Public awareness | Pearson Correlation | Sig. (2-tailed) | N | Report quality of the tax payers | Pearson Correlation | Sig. (2-tailed) | N |
|------------------------------------|---------------------|-----------------|---|----------------------------------|---------------------|-----------------|---|----------------------------------|---------------------|-----------------|---|------------------------------|---------------------|-----------------|---|---------------------|----------------------|-----------------|---|---------------------|----------------------|-----------------|---|
| Effectiveness of tax administration | 1                   |                 |   | Tax Policies, laws and procedures | .442**              | .000            | 69 | human, capital and time resource | .684**              | .000            | 69 | Technological infrastructure | .340**              | .004            | 69 | Public awareness      | .365**              | .002            | 69 | Report quality of the tax payers | .435**              | .000            | 69 |
| N                                 | 69                  | 69              |   |                                  | 69                  | 69              |   |                                  | 69                  | 69              |   |                              | 69                  | 69              |   |                                  | 69                  | 69              |   |

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Table 4.16 above indicates that the correlation coefficients between effectiveness of tax administration and its independent variables are linear and positive ranging from small effect to high effect correlation coefficients.

The results of the correlation analysis indicated that human, capital and time resource factor is positively associated effectiveness of tax administration with a Pearson correlation coefficient of r = .684 and the significance value .000 two tailed and hence human, capital and time resource factors had significant high effect and positive association with effectiveness of tax administration.

Technological infrastructure and Public awareness had significant positive small association of r = .340, p = .004– two tailed and r = .365, p = .002– two tailed respectively. The other factors such as; Tax Policies, laws and procedures and report quality of the tax payer factors had significant positive medium association of r = .442, p = .000– two tailed and r = .435, p = .002– two tailed respectively.

4.5.2 Regression Analysis

For the purposes of determining, the extent to which the explanatory variables explain the variance in the explained variable, regression analysis was employed. The data was passed through the necessarily tests such as multi collinearity test. According to Field (2009) when the mean tolerance statistic is less than 0.1 and VIF is greater than 10 then there is multi collinearity. The result from regression analysis shows that the mean VIF is 1.09 and tolerances is 0.91 for employees’ response and mean VIF is 1.08 and tolerance is 0.92 for indicating that there is no multi collinearity problem.

The regression equation is obtained from the unstandardized regression coefficients of the association between the independent variables and the dependent variable are explained in the form of the following equation.

Predicted effectiveness of tax administration based from taxpayer response. = -1.415 + .4053 (Tax Policies, laws and procedures Factor) + .240 (human, capital and time resource factor) + .151 (capacity of technological infrastructure factor) + .174 (public awareness factor) + .232 (Report quality of the tax payers factor).
Table 4.17 Regression Analysis of Effectiveness of Tax Administration on the Selected Variables (Tax Payers side)

| Model                                | Unstandardized Coefficients | Standardized Coefficients | t      | Sig.  |
|--------------------------------------|-----------------------------|---------------------------|--------|-------|
|                                      | B                           | Std. Error                | Beta   |       |
| Tax Policies, laws and procedures    | .405                        | .043                      | .451   | 9.497 | .000  |
| Human, capital and time resource     | .240                        | .023                      | .495   | 10.620| .000  |
| capacity of technological infrastructure | .151                      | .043                      | .165   | 3.509 | .001  |
| public awareness                     | .174                        | .042                      | .198   | 4.147 | .000  |
| Report quality of the tax payers     | .232                        | .060                      | .181   | 3.839 | .000  |
| (Constant)                           | -1.415                      |                           | -1.910 | .366  |       |

R        R Square       Adjusted R Square
.847a     .718            .707

(Source: own survey, 2019)

The table 4.17 above revealed that, the contribution between the observed value of effectiveness of tax administration and the optimal linear combination of the independent variables (Tax Policies, laws and procedures, Human, capital and time resource, capacity of technological infrastructure, public awareness, and Report quality of the tax payers) is 0.847 as indicated by multiple R. Besides, given the R Square value of 0.718 and adjusted R square value of 0.707 it realized that 71.8% of the variation in effectiveness of tax administration can be explained by the independent variables. R Square has used to find out how well the independent variables are able to predict the dependent variables. The remaining 28.2 % of the variance is explained by other variables not included in this study. Further, it is widely accepted in the social and psychological applications that an R2 adjusted of above 75 per cent is very good; between 50–75 per cent is good; between 25–50 per cent is fair and below 25 per cent is poor (Sakaran, 2000). Based on the result the model is good (70.7%).

Tax Policies, laws and procedures factor - is significant at less than 1 percent (P= .000 P < 0.01) and positively contributed with effectiveness of tax administration.

Human, capital and time resource factor - is significant at less than 1 percent (P=.000 P < 0.01) and positively contributed with effectiveness of tax administration.

Capacity of technological infrastructure factor - is significant at less than 1 percent (P=.001 P = 0.01) and positively contributed with effectiveness of tax administration.

Public awareness factor - is significant at less than 1 percent (P=.000 P < 0.01) and positively contributed with effectiveness of tax administration.

Report quality of the tax payers factor - is significant at less than 1 percent (P=.000 P < 0.01) and positively contributed with effectiveness of tax administration.

Table 4.18 Regression analysis of effectiveness of tax administration on the selected variables (Employees side)

| Model                                | Unstandardized Coefficients | Standardized Coefficients | T   | Sig.  |
|--------------------------------------|-----------------------------|---------------------------|-----|-------|
|                                      | B                           | Std. Error                | Beta|       |
| (Constant)                           | .288                        | .317                      |      |       |
| Tax Policies, laws and procedures    | .319                        | .070                      | .300| 4.538 | .000  |
| human, capital and time resource     | .334                        | .045                      | .512| 7.479 | .000  |
| Technological infrastructure         | .191                        | .052                      | .240| 3.679 | .000  |
| Public awareness                     | .126                        | .044                      | .192| 2.892 | .000  |
| Report quality of the tax payers     | .156                        | .042                      | .249| 3.723 | .000  |
| (Constant)                           | -1.415                      |                           | -1.910| .366  |       |

R        R Square       Adjusted R Square
.862a     .742            .722

(Source: own survey, 2019)

The table 4.18 above revealed that, the contribution between the observed value of effectiveness of tax administration and the optimal linear combination of the independent variables (Tax Policies, laws and procedures, Human, capital and time resource, capacity of technological infrastructure, public awareness, and Report quality of the tax payers) is 0.862 as indicated by multiple R. Besides, given the R Square value of 0.742 and adjusted R square value of 0.722 it realized that 74.2% of the variation in effectiveness of tax administration can be explained.
by the independent variables. R Square has used to find out how well the independent variables are able to predict the dependent variables. The remaining 25.8% of the variance is explained by other variables not included in this study. Further, it is widely accepted in the social and psychological applications that an R2 adjusted of above 75 per cent is very good; between 50–75 per cent is good; between 25–50 per cent is fair and below 25 per cent is poor (Sakaran, 2000). Based on the result the model is good (72.2%).

Tax Policies, laws and procedures factor - is significant at less than 1 percent (P=.000 P < 0.01) and positively contributed with effectiveness of tax administration.

Human, capital and time resource factor - is significant at less than 1 percent (P=.000 P < 0.01) and positively contributed with effectiveness of tax administration.

Capacity of technological infrastructure factor - is significant at less than 1 percent (P=.001 P = 0.01) and positively contributed with effectivess of tax administration.

Capacity of technological infrastructure factor - is significant at less than 1 percent (P=.000 P <0.01) and positively contributed with effectiveness of tax administration.

Public awareness factor - is significant at less than 1 percent (P=.005 P < 0.01) and positively contributed with effectiveness of tax administration.

Report quality of the tax payers factor - is significant at less than 1 percent (P=.000 P < 0.01) and positively contributed with effectiveness of tax administration.

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of Findings and Conclusions

Based on the analysis and discussion of the research, the summary of the findings and conclusions show that the tax laws, procedures, and regulations, quality of human, capital and time resources, technological infrastructure, public awareness and quality of tax payers report have significant effect on effectiveness of tax administration.

Findings of Pearson correlation coefficient show that significant positive relationship was found between Tax Policies, laws and procedures and effectiveness of tax administration (r= .539), Human, capital and time resource and effectiveness of tax administration (r= .541), technological infrastructure and effectiveness of tax administration(r= .318), Public awareness and effectiveness of tax administration (r= .427,) and report quality of the tax payers and effectiveness of tax administration (r= .386). Therefore, tax policies, laws, procedures and human, capital and time resources are the topmost moderate influencers of effectiveness of tax administration according to data obtained from tax payers. But, as per correlation analysis of data collected from employees, tax policies, laws and procedures and report quality of the tax payer factors had significant positive medium association with effectiveness of tax administration r=.442, and r =.435 respectively.

It is also found that contribution between the observed value of effectiveness of tax administration and the optimal linear combination of the independent variables (Tax Policies, laws and procedures, Human, capital and time resource, capacity of technological infrastructure, public awareness, and Report quality of the tax payers) is 0.847 (84.7%) as indicated by multiple R given that R Square value of 0.718 and adjusted R square value of 0.707 and it realized that 71.8% of the variation in effectiveness of tax administration can be explained by the independent variables. R Square has used to find out how well the independent variables are able to predict the dependent. The remaining 28.2% of the variance is explained by other variables not included in this study. Further, it is widely accepted in the social and psychological applications that an R2 adjusted of above 75 per cent is very good; between 50–75 per cent is good; between 25–50 per cent is fair and below 25 per cent is poor (Sakaran, 2000). Based on the result the model is good (70.7%).

According to descriptive statistics, the following findings were obtained.

- The ultimate respondents evaluate the tax assessment procedure as unfair and overstated and the tax collection effectiveness as poor. From the secondary data it is also found that the office collected only 62.20% of the targeted over the seven years period under study. Moreover it does not meet its collection target for the past three consecutive budget years and could collect only 48.55%. In addition, it is found that the tax office has difficulty in recognizing and registering potential tax payers to the tax net.
- It is found that the ultimate taxpayers have no clear understanding about the tax proclamation, regulation, directives and procedure and also majority of them are found non voluntary complaints because of the poor taxpayer education program in the office.
- It is also found that majority of tax payers are not satisfied with tax collection process and quality and timely services’ given by the employees. The respondents also confirmed that as there is no frequent discussion between revenue office and tax payers. Absence of modern technology and prevalence of internet connectivity problems, limited implementation of IT supported modern tax administration are also part of the findings.
- Moreover, the analysis shows that tax payers have no positive perception towards paying tax due to inadequate knowledge towards significance of tax that helps them to comply with tax laws and also education of awareness creation only through television, brochure is not sufficient to improve tax
collection.

The researcher also came to know that the branch office has high arrears of uncollectable tax and a cost of its collection is so lofty. From employees’ side, it was found that lack of adequate training given by ERCA. The format prepared to be filled by the tax payers is not very much friendly with tax office filling system. And also respondents do not notify the office when they change their address.

5.2 Recommendations

- Thus, from the finding of the research the following recommendations were made to improve effectiveness of tax administration.
- Self-assessment system requires tax payers to have full understanding of tax procedures, laws and procedures. To support this the tax authority can make tax laws available to taxpayers in ERCA website. However, some tax payer may not know the existence of such website. It is necessary to create awareness for the tax payer to use that website.
- Tax office should make tax law and procedures, clear, simple, understandable, transparent and user friendly administrative system. Also explain clearly to their understanding for effective compliance.
- If taxpayers do not understand what their obligations are, any intervention to enforce compliance will be perceived as unfair. Taxpayers’ attitude toward taxation is improved through sustainable awareness creation programs. However, the branch office might not have skilled manpower to provide education related to tax and better to focus on capacity building to create skillful man power.
- Provision of E filing and E payment system to tax payers could facilitate filing and paying of taxes by using internet service online.
- In an effort to increase tax revenue, continuous follow-up should be done to collect the tax arrears.
- To increase effectiveness of tax administration, it is recommendable for the authority to establish permanent training and advisory service for tax payers including their right and duties. The authority office also shall be given well organized training continuously for the staffs, tax payers as well as the communities in general. It should create and develop positive attitude in all stakeholders mind about the benefits of tax.
- The authority office shall builds strong capacity through Human (by develop well training plan, recruited competent employees; develop marketable employees benefit and motivation plan, organized functional departments.

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