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School of Post Graduate Studies

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

**DETERMINANTS OF VOLUNTARY TAX COMPLIANCE:
EVIDENCE FROM ADDIS ABABA CITY ADMINISTRATION TAX OFFICE**

BY

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**December, 2021
Addis Ababa, Ethiopia**

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**A THESIS SUBMITTED TO ST. MARY'S UNIVERSITY GRADUATE STUDIES
PROGRAM IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE
AWARD OF THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION IN
GENERAL MANAGEMENT**

**December, 2021
Addis Ababa, Ethiopia**

DECLARATION

I, Kassu Felmi, declare that this work entitled “**Determinants of Voluntary Tax Compliance: Evidence from Addis Ababa City Administration Tax Office**” is my own original work for the partial fulfillment of the requirement for the award of the degree of Master of Business Administration [MBA], specialized in General Management and has not been submitted for any degree in this University or any other Universities. All sources of materials used for the study have been duly acknowledged. I have produced it independently except for the guidance and suggestion of my research advisor Abraham G. (Assistant Professor).

By: Kassu Felmi

Signature_____

Date_____

ENDORSEMENT

This is to certify that this thesis works entitled, “**Determinants of Voluntary Tax Compliance: Evidence from Addis Ababa City Administration Tax Office**” undertaken by Kassu Felmi for the partial fulfillment of the requirements for the Degree of Master of Business Administration [MBA], specialized in General Management at St. Mary’s University, is an original work and has been submitted for examination with my approval as a university supervisor.

Abraham G. (Assistant Professor)

Advisor

Signature

Date

December, 2021

Addis Ababa, Ethiopia

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SCHOOL OF POST GRADUATE STUDIES**

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ABSTRACT

Tax is an important source of revenue for government's spending and development projects. The main objective of this study was to examine the deterrents of voluntary tax compliance of the tax payer's at Addis Ababa city administration tax office. The study adopted a quantitative research approach to test the hypotheses and answer research questions. The data was collected from category A and B tax payer's Addis Ababa city administration tax office. Two analysis methods were used; descriptive statistics and inferential statistics to examine significant determinant factors of voluntary tax compliance using statistical package for social science (SPSS). The result founds that majority of tax payers were compliant. It was also found that Government expenditure negatively affects voluntary tax compliance. Tax audit, Referral groups, and Personal financial status positively affect voluntary tax compliance. Tax knowledge, Service delivery of tax office, Penalties and fines, and Equity and fairness were found insignificant. The study suggests to the tax office create awareness on importance of government spending, tax laws, availability and amount of penalties and fines on tax evasion and late declarations. The study also advices the tax office to work on service delivery system (training workers, using appropriate technologies, etc.) in order to improve efficiencies of its workers dealing with taxpayers. The study suggests, further investigations on this and related topic to be done, which helps to analyze these and other factors from different perspectives.

Key words: Tax, Compliance, Voluntary, Determinants

ACRONYMS

AA	Addis Ababa
AACATO	Addis Ababa City Administration Tax Office
Br	Birr
ERCA	Ethiopian Revenues and Customs Authority
LTP	Large Tax Payers
MBA	Master of Business Administration
M/T/P	Micro Tax Payers
RW CD	Raw Writeable CD
R&D	Research & Development
SPSS	Statistical Package for Social Science
TC	Total Cost

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CHAPTER ONE

1. INTRODUCTION

This chapter summarizes summary of background information of the study; statement of the problem, objective of the research, the scope, limitation and significance of the study. Organization of the thesis is provided at the end of the chapter.

1.1. Background of the Study

Taxes are fundamental to the existence of governments, because of the tax revenues help to finance the bulk of services that governments provide including education, welfare, public safety, infrastructure and other basic public services (Tilahun and Yidersal, 2014). These public expenditures are meant for public goods and services that are very essential for the development and wellbeing of the society (Asamnew, 2011). Improved tax compliance amplifies the revenues available for supporting public services without increasing the current tax burden on compliant taxpayers (James and Edwards, 2008). Thus, Voluntary tax compliance has been an important subject of research in a large number of developed and a number of developing countries.

Since each country has its own approach to managing tax compliance levels and each has different tax laws and regulations, the factors impacting tax compliance behavior appear to vary among countries (Palil, 2010). One measure used to determine a country's tax mobilization (tax compliance) is tax as a percentage of GDP. To deal with the obvious risks involved, the response was to require that taxpayers should declare that the tax paid was not less than the required 10 per cent of their income (Ann and Diane, 1985).

Most developing countries now days are dependent more on external financial resources to fund their development activities. According to(Akalu, 2016), in Ethiopia the tax contribution to GDP ratio remained consistently low and is relatively shrinking because of low tax compliance. Taxpayers' resentment and noncompliance may be due to taxpayers' perceptions and attitudes on paying taxes (Yesegat and Fjeldstad, 2016). This requires measures both to enhance internal tax collection and also to reduce the barriers that are quite simply not fit for their intended purposes, educating the taxpayers, counseling service to taxpayers on tax rules and procedures and increasing audit coverage (Gebrewahid, 2015). Hence, understanding voluntary tax compliance

requires a detailed understanding of the factors that affects the tax payer's decision to pay their taxes.

Therefore, the objective of this study is to examine the determinants of voluntary tax compliance at Addis Ababa city tax administration office. The results of the study are expected to give an insight for policy makers and be a baseline for the next researches on the related topics.

1.2. Statement of the Problem

Previous studies indicated that tax non-compliance is causing serious challenge in income tax administration and tax revenue performance in Ethiopia, as it does in most of the developing countries. Like other developing countries, Ethiopia experiences difficulties in raising revenue to the required level in order to answer the countries development needs (Geletaw, 2017; Meaza, 2018; Yohannes and Zerihun, 2013; Amina and Saniya, 2015;). These studies further discussed the fact that the country has experienced long time huge gap between surplus expenditure over limited revenue. To address this problem, the government introduced direct and indirect taxes to increase public revenue although previous statistical evidence shows that the role of income taxes to the government's total revenue remained low.

The tax compliance literature has provided evidence suggesting that compliance is influenced by several factors. Those studies has identified factors such as economic, social and psychological (Geletaw, 2017; Meaza, 2018, Amina and Saniya, 2015). To overcome the issue of tax non-compliance, it is also important to understand factors influencing taxpayers' decision to comply with tax laws.

According to Selamawit(2012); Yohannes and Zerihun, (2013); Meaza, (2018); and Manaye, (2018) tax compliance determinants are classified in to four categories. 1) economic factors (tax rates, tax audits and perceptions of government spending); 2) institutional factors (the role of the tax authority, simplicity of the tax returns and administration and probability of detection); 3) social factors (ethics and attitude, perceptions of equity and fairness, political affiliation and changes on current government policy, referent groups); and 4) individual factors (personal financial constraints, awareness of offences and penalties). Even if those studies tried to incorporate all the possible factors, they have failed to focus on more significant factors determining the voluntary tax compliance of tax payers.

Even though Ethiopian modern tax administration is not older than half a century, it has undergone several legal amendments during this period. But, the progress is not as big as its age as far as citizen's voluntary compliance is concerned. The tax system in the country mainly strains on legal enforcement to ensure its proper functioning. For instance, the current income tax proclamation no. 979/2016 has raised the amount of penalties while it states nothing about how to create and increase positive attitude of the taxpayers.

Most of the reform mainly targeted institutional capacity building and putting legal enforcement frameworks while only insignificant effort, was deployed to change public attitude on paying tax to the nation. The taxpayers training are carried on very seldom, focusing more about teaching the contents of the tax laws and penalties rather than promoting citizens' sense of responsibility toward taxation. In addition, studies on the factors determining voluntary tax compliance of tax payer's at Addis Ababa city tax administration office has not much researched. Therefore, this study can address the aforementioned taxation problems and research gaps in the study area (Addis Ababa City Administration tax office) and be able to become baseline information for next studies by initiating the researchers to further study on related topics.

1.3. Research Questions

- ✓ What does looks the level of compliance of tax payers at Addis Ababa city administration tax office?
- ✓ How do economic factors affect voluntary tax compliance?
- ✓ How do institutional factors affect voluntary tax compliance?
- ✓ How do social factors affect voluntary tax compliance?
- ✓ How do individual factors affect voluntary tax compliance?

1.4. Objective of the Study

1.4.1. General Objective

The general objective of this study is to examine the determinants of voluntary tax compliance of the tax payer's at Addis Ababa city administration tax office.

1.4.2. Specific Objectives

The specific objectives of the study are:

- ✓ To assess compliance level of category “A and B” tax payers at Addis Ababa city administration tax office,
- ✓ To examine the economic factors effect on voluntary tax compliance,
- ✓ To investigate the institutional factors effect on voluntary tax compliance,
- ✓ To examine the effects of social factors on voluntary tax compliance, and
- ✓ To investigate the effects of individual factors on voluntary tax compliance.

1.5. Significance of the Study

The results of this study have varies significant in various aspects. Firstly, on the bases of finding of the study, the real problems with tax compliant and draw reasonable conclusions and give signal (indication) to concerning body bodies as per of the requirements to take remedial actions. Second it has a giant of contributions to provide necessary information’s to those compliant and government organ (Tax Authority) in Ethiopia. In other words it has advantages to aware the problems with its solutions with tax compliance issue and disadvantages (impacts) not solving the problems to both complaints and government itself. Thirdly, the studies contribute to the past studies by accessing the current problems and give updated solutions on the issue. Finally the study also used as point of reference for others researchers who want to conduct in further study on the related issue.

1.6. Scope of the Study

There are multiple factors that affect tax compliance, however this study limited to examine only eight factors (government spending, tax knowledge and education, service delivery of tax office, tax audit, financial status, referral groups, penalties and fines, and equity and fairness) which will affect tax payer’s voluntary compliance. In addition, the study focused on the category A and B tax payers of Addis Ababa city administration tax office.

1.7. Limitation of the Study

The limitation of this study starts with its methodology. Determinants of voluntary tax compliance were analyzed only based on a limited coverage of the income tax law. But, the results might have been different if a wider scope of tax rules were used. However, using wider coverage of tax law would make the questioner bulky and this may potentially affects respondent's response quality.

Due to a large number of taxpayers in the study area it is not possible to cover all individual taxpayers. Therefore the researcher is required to take the sample to draw inferences. Taking samples by its nature have its limitation.

1.8. Organizing of the Study

The research contains five chapters. The first chapter deals with introductory part which consists of abstract, introduction, background of the study, statement of the problem, objectives of the study, significance of the study, scope and limitations of the study. The second chapter deals with review of related literature while the third chapter deals with research methodology. The fourth chapter contains the findings of the determinants of voluntary tax compliance of tax payer's in the study area. The final chapter highlights the summary of the finding, conclusions and recommendations based on the findings.

CHAPTER TWO

2. LITERATURE REVIEW

2.1. The Concept and Definition of Tax Compliance

Tax compliance is a major problem for many tax authorities and it is not an easy task to persuade taxpayers to comply with tax requirements even though tax laws are not always precise (Hite and Hasseldine, 2001). The meaning of tax compliance has been defined in various ways. Palil and Rusyidi, (2013) defines tax compliance as the degree to which a taxpayer complies or fails to comply with the tax rules of their country. According to Atawodi and Ojeka, (2012) tax compliance is fulfilling all tax obligations as specified by the law freely and completely.

Tax compliance is the ability and willingness of taxpayers to comply with tax laws, declare the correct incomes in each year and pay the right amount of taxes on time. James et al., (2006) claimed that tax compliance should be defined as taxpayers' willingness to obey tax laws in order to obtain the economic equilibrium of a country. Song and Yarbrough, (1978); Nsubuga et al., (2017) suggested that due to the remarkable aspect of the operation of the tax system in the United States and that it is largely based on self-assessment and voluntary compliance, tax compliance should be defined as taxpayers' ability and willingness to comply with tax laws which are determined by ethics, legal environment and other situational factors at a particular time and place.

Alm et al., (1990) defined tax compliance as the declaring all incomes and payment of all taxes by fulfilling the provisions of laws, regulations and court judgments. Compliance in administration terms, therefore, includes registering or informing tax authorities of status as a taxpayer, submitting a tax return every year (if required) and following the required payment time frames (Palil, 2010). In contrast, the wider perspective (Singh et al., 2003) defined tax compliance in a pure administration term the degree of honesty, adequate tax knowledge and capability to use this knowledge, timeliness, accuracy, and adequate records in order to complete the tax returns and associated tax documentation.

Palil, (2010) claimed since the total amount of tax payable is highly dependent on the levels of tax compliance; this perspective reveals the primary perspective of compliance becomes a major issue in a self-assessment, although it is inevitable that tax authorities will seek to „influence“ the areas taxpayers have influence over determining to reduce the risks of noncompliant behavior they face otherwise e.g. through continuously conducting tax audits or a continuous assessment of different sorts and other means such as various compliance influencing activities including tax education. Some authors have viewed tax compliance from a different perspective. For example, A wider definition of tax compliance defined by Brown and Mazur, (2003), tax compliance is multi-faceted measure and theoretically, it can be defined by considering three distinct types of compliance such as payment compliance, filing compliance, and reporting compliance into categories in considering definitions of tax compliance.

The wider perspective of tax compliance was also illustrated in the definition provided by Snow and Warren, (2005) in which they included the desired outcome as a result of obedience to tax laws to obtain an economic equilibrium. Michael and Agnar, (1972) enjoy tax saving or penalty. Singh et al., (2003) described tax compliance as voluntary action without having to wait for follow up actions from tax authority.

Apart from these, Song and Yarbrough, (1978) included some factors of compliance in their definition i.e. determined by ethics, legal environment, and other situational factors. Since there have been many empirical studies attempts have been made to define tax compliance, for the purpose of this study (Alm et al., 1990; Maciejovsky et al., 2007) tax compliance is defined as taxpayers willingness to comply with tax laws, declare the correct income, claim the correct deductions, relief and rebates and pay all taxes on time.

2.2. Tax Compliance Theories

There are two broad approaches which researchers have used to explain evasion behavior, namely, Fiscal psychology Models and economic deterrence models(Trivedi at al., 2003). An economic based theory emphasizes incentives whereas psychology based theories emphasize attitude (Trivedi et al., 2003).

James et al., (2001) reported that there are two main approaches to understand tax compliance issues: the economic approach and behavioral approach. The economic approach is premised on the concept of economic rationality, while the behavioral approach applies concepts from disciplines such as psychology and sociology.

A. Economic Based Theories

They are also known as deterrence theory and they place emphasis on incentives. The theory suggests that taxpayers are amoral utility maximizers- they are influenced by economic motives such as profit maximization and probability of detection. As such they analyze alternative compliance paths for instance whether or not to evade tax, the likelihood of being detected and the resulting repercussions and then select the alternative that maximizes their expected after tax returns after adjusting for risk. This process is referred to as “playing the audit lottery” by (Trivedi et al., 2003). Therefore, according to the theory, in order to improve compliance, audits and penalties for non-compliance should be increased.

Deterrence can be achieved through a number of approaches, punitive and persuasive. That is, deterrence may take on the form of increasing the probability of detection, increasing the tax rate or by the imposition of tougher penalties. Alternatively, it may take on the form of better education, increased advertising/publicity and incentives. The economic definition of taxpayer compliance views taxpayers as perfectly moral, risk-neutral or risk-averse individuals who seek to maximize their utility, and chose to evade tax whenever the expected gain exceeded the cost (Devos, 2014).

Besides the economic factors like tax Audit and penalty (Tittle and Michael, 2017) analyzed the effect of religiosity on tax compliance according to Tittle and Welch religiosity have an effect on tax compliance behavior of an individual. Taxpayers exhibit a range of behavioral possibilities influenced by several factors. These factors may be economic factors such as income, tax rate, tax determinants of tax compliance penalty; psychological factors such as norm, moral, attitude of taxpayers; and social factors such as demographic factor (Hite and Hasseldine, 2001).

B. Social Factors Theories

The theory suggests that taxpayers are compliance behavior is influenced by Fairness of the tax system and effects of referrals. Fairness of the tax system is a concept of having equitable tax system. Fairness of the tax system is believed by the taxpayers and tax authority as one of the significant determinants of compliance decision (Shiferaw and Tesfaye, 2020).

When we come to see effects of Referrals: Individual taxpayers do not live alone in this world and they have to interact with others in their daily life. Thus influence of one person on another in their compliance is an important part of their continuous existence in society. Perception of peers not to comply with the tax laws resulted in the taxpayers' non-compliance action (Marandu et al., 2015). A Behavioral research by Puspitasari and Meiranto, (2014) states that peer groups have a strong impact on behavior, preferences and personal values of the individual person. However, James and Alley; (2009) found that there is no significant correlation between taxpayer noncompliance and knowing non-compliant peers.

C. Psychological Theories

Psychology theories on the other hand posit that taxpayers are influenced to comply with their tax obligations by psychological factors. They focus on the taxpayer's morals and ethics. The theories suggest that a taxpayer may comply even when the probability of detection is low. As Yesegat and Fjeldstad (2016) noted, opposed to the economic theories that emphasize increased audits and penalties as solutions to compliance issues, psychology theories lay emphasis on changing individual attitudes towards tax systems. The essential thrust of this approach is that individuals are not simply independent utility maxi misers rather individuals are recognized to contain an array of attitudes and beliefs which interact and respond to social norms. Social psychology models inductively examine the attitudes and beliefs of taxpayers in order to understand and predict human behavior (Devos, 2014).

D. Cultural Theories

Torgler et al., (2008) suggests that culture influences tax compliance. Their study examined the effect of culture on tax morale to comply with the tax law in Switzerland, Belgium and Spain. The findings suggest that it is possible for culture and national pride to influence tax morale in complying with the tax laws. Ethical decision making is a social process which is

transferred within culture from generation to generation (Puspitasari and Meiranto, 2014) and thus different cultures embrace different values and behavior (Hamid, 2015). The importance of culture in the context of tax compliance has been supported in various studies (Torgler et al., 2008). However, there is no standard measure to examine the influence of culture in tax compliance, which leads to mixed findings on the importance of culture in some studies (Kirchler, Muehlbacher, Kastlunger, & Wahl, 2010).

2.3. Overview of determinants of Tax Compliance (Independent Variables)

Various studies in developing countries resolute various determinants of tax compliance, as we have seen above, economic, social, psychological and cultural factors are influencing tax. Other works of literature like (James et al., 2006; Chau and Leung, 2009) suggests the need for more studies on tax compliance in developing economies.

Michael and Agnar, (1972) conduct an empirical analysis into compliance behavior of taxpayers and they made a model which became known as A-S model. In the model, the determinants of the taxpayer are being affected by the income of the taxpayer, tax rate, probability of audit, and fine rate. However, factors influencing compliance behavior of taxpayers are numerous than suggested in the A-S model (Alm et al., 1990; Nkwe, 2012). Therefore, Alm et al., (1990) conclude that Social and psychological factors are influencing compliance behavior of taxpayers beyond the A-S model.

2.3.1. Attitude and Perceptions on the Government Spending

Studies on the relationship between the specifics of actual government spending and tax compliance, particularly on tax evasion, are very limited. Logically, taxpayers, and especially those who pay high amounts of tax, will be sensitive to what the government spends their money on. Although there is limited empirical evidence, it is reasonable to assume that taxpayers will tend to evade tax if they perceive that the government spends tax money unwisely (Kirchler et al., 2008). However, in most developed countries like the United Kingdom, which implement Pay as You Earned (PAYE), it is quite difficult to evade much of their tax liability as deductions are made at the source for the majority of many taxpayers' liabilities.

Unlike the United Kingdom, in other countries where PAYE is not as extensively used, taxpayers have a larger opportunity to under-report their income and therefore pay less tax (Tayler 2006).

Cullis and Lewis, (1985) suggests that attitudes should be examined for the degree to which they are a product of myth and misperception. He argued that when myths and misperceptions are replaced by knowledge, a change in attitudes towards taxation would occur even if the taxpayers' basic ideology and values remain unchanged and the tax law is unchanged. He also claimed that misperception probably plays a major role shaping fairness evaluations. Meanwhile, Michael et al., (1994) also suggest that attitude to one's own tax evasion (tax ethics), and attitude to other people's tax evasion are important. If the government is wisely spending the national revenue, for example for basic facilities like education, health and safety and public transportation, it is likely that voluntary compliance will increase. In contrast, if taxpayers perceive that the government is spending too much on something considered unnecessary or unbeneficial to them then taxpayers will feel deceived and attempt to evade.

2.3.2. Tax Knowledge

Studies shown that the importance of tax knowledge in a tax system (Eriksen and Fallan, 1999; Singh et al., 2003). Eriksen and Fallan, (1999) claimed that 'knowledge about tax law is assumed to be important for preferences and attitudes towards taxation. Murad et al., (2018) examine the influence of tax knowledge on compliance behavior by dividing the tax knowledge in to groups those are, knowledge explicitly focused at possible opportunities to evade tax and knowledge gained through formal education. Study result indicated that, regarding the rules and regulation of the taxation, the level of education received by taxpayer' is an important factor that contributes to the general understanding.

Murad et al., (2018) presents 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. Eriksen and Fallan, (1999) suggested that a taxpayer should be given better tax knowledge to improve perceptions of fairness, tax ethics and attitudes to others tax evasion and thus suggesting that a successful means of preventing tax evasion is to provide more tax knowledge to larger segment of society in order to improve tax .

2.3.3. Structure of Tax System

Structure of tax system is concerned with economic factors (actions that are associated with the costs and benefits of performing the actions) in relation to tax compliance and other factors that associated with the structure of the tax system (Loo and Chow, 2006). Torgler and Friedrich, (2004) assumed that taxpayers are rational economic evaders who likely would assess the costs and/or benefits of evasion. They would attempt to minimize their tax liability, for example, by intentionally under-reporting their income and would enjoy tax savings if the tax authorities did not detect them. On the other hand, they would be willing to pay more, including a penalty, if they were caught (Song and Yarbrough, 1978).

2.3.4. Tax Rates

James et al., (2006) claimed that the theoretical models indicate that, as income rises, tax evasion should increase over most ranges. Although there are special cases in which cheating declines with income, the regressive bias of tax evasion is the general prediction. By contrast, theoretical models generate no clear predictions on the effects of tax rates on compliance. The presence of both income and substitution effects complicates the analysis, and special assumptions about the form of penalties, distribution of income, and shape of preferences are often required to identify any comparative statics. Charles, (1983) claimed that “reducing tax rates is not the only policy that has the potential to discourage tax evasion” but the tax rate is an important factor in determining tax compliance behavior although the exact impact is still unclear and debatable (Maciejovsky et al., 2007).

Charles (1983) also suggests that there was a significant relationship between tax rates and evasion due to tax rates being used as an instrument that can be manipulated for policy goals in particular. Raising marginal tax rates will be likely to encourage taxpayers to evade tax more (Ann and Diane, 1985; Ali et al., 2001) while lowering tax rates does not necessarily increase tax compliance (V. U. Trivedi et al., 2003). This uncertainty and conflicting issue (for example reducing tax rate to increase compliance) has attracted the attention of tax researchers aiming to come up with more certain and concrete evidence of the impact of tax rates on evasion

Since the impact of tax rates was debatable (positive, negative or no impact on evasion), (Maciejovsky et al., 2007) suggested that the degree of trust between taxpayers and the government has a major role in ascertaining the impact of tax rates on compliance. When trust is low, a high tax rate could be perceived as an unfair treatment of taxpayers and when trust is high, the same level of tax rate could be interpreted as the contribution to the community (Kirchler et al., 2010). In summary, evidence suggests tax rates have mixed impact on tax compliance i.e decreasing tax rates do not necessarily always increase compliance. Increase in tax rates might have a positive or negative impact on evasion. Moreover, increasing tax rates will not necessarily always decrease compliance behavior (Sandmo, 2005).

2.3.5. Tax Audits

Studies claimed that tax audits have a positive impact on tax evasion (Dubin, 2007). These findings suggest that in self-assessment systems, tax audits can play an important role and their central role is to increase voluntary compliance. Audit rates and the carefulness of the audits could encourage taxpayers to be more cautious in completing their tax returns, report all income and claim the correct deductions to ascertain their tax liability (Mohd et al.,(2011). In contrast, taxpayers who have never been audited might be attracted to under-report their actual income and claim false deductions.

2.3.6. Efficiency of the Tax Authority

For many aspects of tax compliance, there is a debate in the literature as to how the effective operation of the tax system by the tax authorities influences taxpayers' compliance behavior as researchers from different countries have been unable to achieve agreement about this issue, which appear to differ from country to country (Mohd et al.,(2011). Therefore, different countries have proposed and developed a different solution to the relationship between taxpayer compliance and their operation of the tax system.

The role of the tax authority in minimizing the tax gap and increasing voluntary compliance is clearly very important. Hasseldine and Li, (1999) illustrated this, placing the government and the tax authority as the main party that needs to be continuously efficient in administering the tax system in order to minimize tax evasion. The government plays a central role in designing the

tax systems itself, and the specific enforcement and collection mechanisms (Hasseldine and Li, 1999). Furthermore, Marandu et al., (2015) suggested that in order to increase compliance, maximize tax revenue and be respected by taxpayers, a government must first have an economical tax system, which is practicable; they must discourage tax evasion and not induce dishonesty; they must avoid the tendency to dry up the source of the tax and should avoid provoking conflict and raising political difficulties; they should also have a good relationship with the international tax regime.

2.3.7. Ethics toward Tax Compliance

In a tax system which is based largely on voluntary compliance (such as a SAS), the taxpayers standard of ethics is extremely important (Song and Yarbrough, 1978). Ethics are a subjective scale and the level of ethical behavior is heavily reliant on how people perceive the behavior being considered. Studies on tax psychology, which predicts first introduced people's behavior using the Theory of Reasoned Action (TRA) and Theory of Planned Behavior (TPB) (Song and Yarbrough, 1978). These theories attempt to predict people's behavior based on their intentions. It is assumed that ethics encourage individuals to act according to them and a taxpayer with a negative attitude towards tax evasion tends to be less compliant (Kirchler et al., 2010).

In summary it can be noted that tax compliance has been a vital subject of research in an extensive number of developing as well as developed countries. Since every country has, its own particular way to deal with tax compliance levels and each has distinctive tax laws and regulations, the components influencing tax compliance behavior seem to differ among countries (Witte and Woodbury, 2008). Factors affecting tax compliance can be seen from different continuums; for instance, economists and policy analysts have given increasing attention to tax compliance theoretically and empirically (Charles, 1983).

Economic factors such as tax rates, tax audits and perceptions, view of citizens on government spending and as well as institutional variables those incorporates the role of the tax authority, simplicity of the tax return and administration, and the probability of detection have both positive and negative associations with tax compliance (Mohd et al.,(2011).

2.3.8. Equity and fairness of the tax system

One of the main principles of the taxation system design is equity or fairness, which can be perceived via three dimensional views – horizontal equity (people with the same income or wealth brackets should pay the same amount of taxes), vertical equity (taxes paid increase with the amount of the tax base) and Exchange Equity (Richardson, 2006). The perceived fairness of the tax system also has an influence on the inclination towards tax evasion (Jackson and Milliron, 1986).

Alm et al., (1992) suggest that compliance occurs because some individuals value the public goods as their tax finance. If there is an increase in the amount individuals receive from a given tax payment, their compliance rate increases. Individuals then pay taxes to receive government services even when there is no chance to be detected or punished when evading. Cowell, (1992) shows that taxpayer will reduce tax evasion when perceiving equity. Falkinger, (1995) has pointed out concrete economic situations in which individuals reduce evasion if the socioeconomic system is considered to be relatively equal and fair. The fairness of a system in which a person lives may result in bad reputation for evaders if people consider evasion to be blameworthy, so that risk aversion will increase with perceived equity.

2.3.9. Referent Group

Researches on tax compliance have evidenced that the influence of friends and family members in making decisions may be important. Decisions either to evade or not to evade tax sometimes are influenced by family members or friends (Michael and Agnar, 1972) although the extent of the influence was not clearly stated in this research.

Charles, (1983) also claimed that referent groups play a significant role in evasion although it was also not clearly discussed which was stronger (family members or friends) in this paper. Hasseldine and Li, (1999) report that the numbers of evaders known to the respondent made the largest contribution to the model of under reporting income which means that the more respondents know the evaders, the more under reporting of income may happen.

2.3.10. Awareness of Offences and Penalty

Various arguments arise regarding the impact of fines and penalties on tax compliance to explain this lack of a clear impact relationship. For example, fines that are too low could be perceived as an indicator that the authorities are weak and unable to control non-compliant taxpayers, thereby undermining trust among honest taxpayers and leading to a lack of encouragement to comply with tax law. Osebe, (2013) employed in their study that fines and penalties play a vital role in improving tax compliance.

Fines and audit rates may substitute each other due to their multiplicative linkage as long as neither of them is set to zero (Kirchler et al., 2008). The most extreme penalties will have no effect, if it is common knowledge that audits virtually do not occur. The increasing tax avoidance and tax resistance due to an increase of fines puts into question how fines should be assessed to be effective. On the one hand fines should be high enough to decrease the expected value of tax evasion and to assure its deterrent effect on tax payers.

2.3.11. Demographic factors (Gender, Age and Education)

Some studies found that males are more compliant though other studies revealed contradictory results or no significant difference at all. As agreements on the findings still maintain, the need to explore current results is relevant. A study found that female taxpayers were more compliant than males. However, the study reported that males were more compliant compared to females when a negatively framed message was used, and females were more compliant than males when a positively framed message was used (James et al., 2001).

A study by Wärneryd and Walerud, (1982) posit negative association - older people are less compliant. In contrast, Trivedi and Chung, (2003) argued that age was positively related with compliance. However, there have been a significant number of studies which found no relationship between age and compliance (Spicer and Beckler, 1980).

Previous literature supports the direct, positive relationship between educational level and tax payer compliance (Nur and Kanybek, 2008). Chan et al., (2000) also postulate that education level is directly linked to a likelihood of compliance. Educated taxpayers may be aware of non

compliance opportunities, but their potentially better understanding of the tax system and higher level of moral development promote a more favorable tax payer attitude and greater compliance.

2.4. The dependent variable: Voluntary tax compliance

Tax compliance determinants from a social perspective relates to taxpayers' willingness to comply with tax laws in response to other people's behavior and their social environment (i.e. the government, friends and family members) (Torgler, 2007). On the other hand, Kirchler (2007) suggested that social factors should be viewed in a broader sense than Torgler's perspective; this includes the psychology of the taxpayers. Jackson and Milliron (1986), in their earlier review of tax compliance studies undertaken identified fourteen key variables of compliance behavior, which include: age; gender; education; income level; income source; occupation; peer influence; ethics; fairness; complexity; tax authority contact; sanctions; probability of detection; and tax rates.

Previous studies revealed that probability of being audited; perception on government spending; perception on equity and fairness of the tax system; penalties; financial constraint; changes on current government policies; and referral group (friends, relatives etc.) are also important factors in assessing tax compliance behavior (Palil,2010; Troutman,1993; Chan et al, 2000).

According to Kirchler (2007) and Loo (2006), tax compliance determinants are classified in four categories based on an interdisciplinary perspective representing a wider perspective of tax compliance determinants compared to other researchers. The four categories are 1) economic factors (tax rates, tax audits and perceptions of government spending); 2) institutional factors (the role of the tax authority, simplicity of the tax returns and administration and probability of detection); 3) social factors (ethics and attitude, perceptions of equity and fairness, political affiliation and changes on current government policy, referent groups); and 4) individual factors (personal financial constraints, awareness of offences and penalties).

2.5. Model of Tax Compliance Behavior

Theoretical Background Scholars like (Alm et al., 1990; Richardson, 2006) also defined tax compliance as the reporting of all incomes and payment of all taxes by fulfilling the provisions of laws, regulations and court judgments. However, we adopted the definition of (Sarker, 2003; Juahir et al., 2014) as “the degree to which a taxpayer complies or fails to comply with the tax rules of their country”. In this study we attempted to use the Neoclassical Behavioral model of tax compliance variables such as institutional factors, Economic factors and Social factors.

In the Ethiopian context, institutional issues such as perceptions to government spending and services of tax authority have been missed by many researchers. The models of tax payer behavior which explain the decision whether to pay or not to pay taxes according to the tax laws and procedures reflect certain theories. Economic theories of tax compliance behavior which reflect tax payers’ decision to settle tax liabilities are either the classical Economic deterrence or its extension of Behavioral tax compliance behavior model.

In the Classical Economic deterrence theory, tax payer’s behavior is influenced by economic factors (such as tax rate) that determine the benefit of evasion, probability of detection and penalties for fraud (Ali et al., 2014). The model assumes rational behavior among tax payers. The model predicts that an increase in probability of detection and penalty lead to higher level of tax compliance. Several studies including (Michael and Agnar, 1972; Alkhatib et al., 2020) showed that the tax rates, penalty and probability of detection affect tax payers’ behavior.

Despite the great contribution to the development of tax compliance literature, the model faces many critics. Mostly the model fails to address the level of tax compliance besides the assumption of rational utility maximization (Eric, 2000). The classical economic models generally conclude that most people are tax evaders. However, many empirical evidences suggest that many people are honest tax payers. Even with low level of deterrence some people will report the totality of their income There are some people who never paying tax even then the risk is sufficiently low to encourage cheating behavior (Coricelli et al., 2014).

The study of Siqueira and Ramos, (2005) argue that tax evasion cannot be fully explained by financial determinants and economic incentives. Thus Following the limitation of the class call’s

approach of tax compliance model, this study adopt the behavioral aspect of tax compliance decision model which it has gained ground in the literature. This is because the Tax Compliance Behavioral model of Neoclassical ,as it is explained by (Mumford, 2001; Michael, 2002) is built based on the basis of sociological and psychological determinants. In the model tax payers are seen to no longer selfish utility maximizes like the classical Economic Deterrence of tax compliance behavior. Tax Payers act as human beings motivated to pay taxes on the bases of different attitudes, norms, beliefs, perceptions, feelings, social characteristics, cultural backgrounds like age, gender, race, religion, and etc.

The model is framed using socio-psychological determinants and works with “slippery slip “framework of (Kirchler et al., 2008). Having two dimensions; trust in authorities and power of authorities. Trust in authorities is the opinion of individuals and social groups that the tax authorities benevolent and work beneficially for the common good without any kind of inequality. The power of authority is concerned with tax payer’s perception of potential of tax officers to detect illegal tax evasion and to punish tax evasion.

Even though the behavioral model of tax compliance have received an increasing attention from researchers, there is still a lot to explore in order to develop a model that can fully explain tax compliance behavior in developing countries like Ethiopia. Based on the two dimensions, we identified important factors that affect tax payers’ compliance behavior specially the socio-psychological determinants. Economic, social, demographic, institutional and individual factors are also involved using empirical evidences and contextual issues.

This study contribute to the development of tax compliance /behavioral model of tax compliance with its view of crucial behavioral policy variables such as tax payers’ perceptions to government spending, and change in governmental policies. It also adds knowledge on methodology of tax compliance study of Sub-Saharan countries by using Choice Dilemma Questioner Approach for the measurement/control of tax payers’ influential factors and use of Behavioral Tax Compliance model.

According to Charles, (1983) an important early study of the empirical relationships among income, the marginal tax rate, and evasion, reports elasticity’s for the after-tax income,

and marginal tax rate variables for each of a separate audit classes. Coefficients on both the after-tax income and marginal tax rate variables are positive and significant. The author therefore suggests that there was a significant relationship between tax rates and evasion due to tax rates being used as an instrument that can be manipulated for policy goals in particular (Kirchler et al., 2010). The tax rate is an important factor in determining tax compliance behavior although the exact impact of tax rate on tax compliance is still unclear and debatable. On the other hand James et al., (2006) claims that studies using laboratory experiments typically find that high tax rates are associated with greater evasion. Increase in tax rates might have positive or negative impact on evasion.

Moreover, increasing tax rates will not necessarily always decrease compliance behavior. Michael and Agnar, (1972) concluded that taxpayers might choose either to fully report income or report less, regardless of tax rates. Tax rates appeared to be insignificant in determining tax evasion. Ann and Diane, (1985) found that tax audit could change compliance behavior from negative to positive. Witte and Woodbury in their study of small proprietors found that tax audits have a significant role in tax compliance.

They did not empirically test individual taxpayers, thus left open room to conduct research in this area. According to Studies by Dubin, (2007) claimed that tax audits have a positive impact on tax evasion. These findings suggest that in self-assessment systems, tax audits can play an important role and their central role is to increase voluntary compliance

A study conducted by Richardson, (2006) also suggested that the role of government has a significant positive impact on determining attitudes toward tax. This study attempted to investigate the determinants of tax evasion in different countries including the USA, the UK, Argentina, Thailand, Canada, Chile, and Brazil. Richardson also suggested that the government should increase their reputation and credibility in order to obtain trust from the taxpayers.

Although previous studies could not provide conclusive results on the measurable impact of the efficiency of the government on compliance, however, researchers from different countries have discussed this issue and some authors have described how the role of government in inducing tax compliance is important and relevant in self-assessment systems (Hasseldine and Li, 1999).

Trivedi et al., (2003) found a significant (but weak) relationship between tax evasion and ethics. Henk et al., (1987) earlier found that ethics, attitudes and moral beliefs influenced upon tax compliance behavior according to their psychological model of tax compliance. The evidence clearly shows various attitudes towards taxation, such as tax ethics and the fairness of the tax system and that these have an influence on the inclination towards tax evasion (Jackson and Milliron, 1986).

Individuals comply with tax laws because it is in their own financial interests to minimize their tax bill, but also because of their perceived moral obligation to obey tax laws. Roth et al., (1989) validates that there was a consistently positive relationship between moral commitment and compliance behavior. Roth et al., (1989) finding seems to theorize that ethics have a positive effect on compliance behavior, more than financial self-interest. Henk et al., (1987) claimed that the best predictor of a person's behavior is ethics, but argued that this link can be disrupted by the passage of time, unforeseen events or new information. In addition, low involvement behaviors are likely to be based on few, weakly held or possibly unstable views.

As suggested by previous studies Kirchler et al., (2010); Jackson and Milliron, (1986) attitudes and ethics remain important in determining evasion behavior. Based on Henk et al., (1987) the theory of reasoned action or the intention to evade will encourage a taxpayer to behave negatively toward taxation and thus attempt to under-report income. On the other hand, attitudes towards the tax authority are also important as tax attitudes and ethics generally depend on the perceived use of the money collected by the government (Kirchler et al., 2010).

2.6. Empirical Studies

This section of the research covers the findings of different researchers about the determinants of tax compliance's empirical evidence around the Globe. Several empirical studies have been undertaken to assess and understand the compliance behaviors or determinants of tax compliance across different countries. The compliance behavior of taxpayers and scholars especially in developed countries have concluded that economic, social, individual and institutional factors influence tax compliance (Michael and Agnar, 1972).

Determinants of Tax Compliance in Ethiopia: Empirical Evidences Tax compliance behavior is not simple phenomena. It is affected by economic determinants, institutional factors, social factors, and individual and demographic factors (Alm et al., 1992). The study of Kidist, (2013) on “tax assessment problems and collection procedure in tax payers of Addis Ababa Nifas Silk sub-city” was aimed to identify problems in the process of tax collection procedure. Using a descriptive method of analysis, the study found that the method of collection is too vulnerable to unfair treatment of tax payers and created a loop hole for corruption. It also found that tax payers do not know the rules and regulations of different types of taxes they pay. This led them to delay for tax payments and evasion.

Similarly the study of Selamawit, (2012) indicated that lack of awareness about tax procedures, problem of equity and simplicity of paying taxes and lack of objective tax estimation are the main problems happenings on collection of tax payers. The study of Lemessa, (2007) also aimed in assessing the factors that affect voluntary tax compliance behavior in Dire Dawa City tax payers. Using purposive sampling and descriptive method, it found that fairness & equity, knowledge gap of tax payers and provision of social services by the governments were the main factors which influence tax compliance behavior.

On the other hand, Yohannes and Zerihun, (2013) assessed challenged by business community tax payers of Dire Dawa Administration using qualitative information gathered through a survey and focus group discussions with the city’s chamber of commerce and sectarian association, tax and revenue authority and federal custom and internal revenue authority. Using descriptive statistics, the study found that most tax payers face problems related to taxation system, and tax rate is reported as it is beyond their ability to pay.

In Ethiopia, different researches have been made on tax. Tilahun and Yidersal, (2014) on the title Determinants of Tax Compliance Behavior in Ethiopia: The Case of Bahir Dar City Taxpayers with the objective to identify factors that determine tax compliance behavior. The researcher used one-way ANOVA, two samples and one sample T-test, the data were collected using structured questionnaire. The results revealed that perception on government spending, perception on equity and fairness of the tax system, penalties, personal financial constraint,

changes on current government policies, and referral group (friends, relatives etc.) are factors that significantly affect tax compliance behavior.

Vadde and Gundarapu, (2012) on the title factors that influence rental taxpayers' compliance with tax system: an empirical study of Mekelle city, Ethiopia with the objective of identifying factors that influence rental taxpayers' and their degree or level of compliance with the tax system in Mekelle city. The researchers concluded that there were some dishonest rental taxpayers. Some rental taxpayers were intentionally understating their taxable income by substantial amounts. Even some individuals entirely do not report their taxable income to the concerned body. Consequently, it affects the attitudes and compliance behavior of genuine rental taxpayers towards the tax system. The study also disclosed that with the exception of minority of the rental taxpayers who hold certificate and diploma, majority of them were with an educational background of elementary and high school completed. Hence, it can be concluded that rental taxpayers lack knowledge of easily understanding the laws and regulations of the tax system and how their taxable income is computed. With respect to providing tax awareness training, it is the duty and responsibility of the tax authority to conduct a series of training to the rental taxpayers, especially for those whose educational background was elementary and secondary school completed.

A study made by Amina and Saniya, (2015) on tax compliance and its determinant the case of Jimma zone, Ethiopia, with the aim of investigating the determinants of tax compliance for the case of Jimma zone category "A" taxpayers. By distributing 384 questionnaires to category A sample taxpayers, the study tried to explore the main determinants of tax compliance. The findings shows that age, sex, penalty, audit, simplicity, fairness and government perception were found to affect tax compliance. As discussed above the empirical study on determinants of tax compliance around the world shows that different variables have been taken into account to investigate what determine tax compliance of different taxpayers. According to the results of the various study tax compliance has been influenced specifically by probability of being audited, perceptions of government spending, penalties, personal financial constraints, Ethics and attitude toward tax compliance.

CHAPTER THREE

3. RESEARCH METHODOLOGY

3.1 Research Design

The study used an explanatory research design using a survey method, which allowed the researcher to collect a wide range of data pertinent to the subject at hand. To assess the magnitude and nature of cause-and-effect relationships between variables, explanatory research is used. It examined the reasons for a variety of processes as well as the effects of change on current norms and procedures (Meaza, 2018).

To achieve the study objectives, the researcher used both quantitative research approaches involving numerical or statistical data. Whereas, qualitative research approach is an approach to gather non-numerical data in which words and observations are used to express the reality where 'getting close to the data' and an 'in-depth' approach are key concerns. In addition to this, the qualitative research method would also use to define attitude, behaviors, observation and experiences from the environment when interviews were made to collect data to get an in depth from participants of the research about the topic and describe the results as it is.

1.2 Data Sources

Data collection for this research was employed that the researcher-administered questionnaire survey method. This method of data collection was used as a method to obtain more reliable survey responses with a possibility of getting a higher response rate, thus increasing the validity of this research. In most cases, questionnaires were personally distributed to get the person's willingness to participate in this research. This scenario also provided the chance for researcher to explain orally on the importance of the research. Researcher was carefully giving some clarifications and examples, when needed, with respect to certain difficult, sensitive or important questions. To avoid bias in this study, however, the researcher only got involved when respondents asked for explanation.

Table 3-1 Population and Selected sample size from each category

No	Tax payers category	Population Size(N)	Sample size (n)
1	A	68,639	252
2	B	40,203	147
Total		108,842	399

Source: Addis Ababa city administration tax office

3.3. Methods of Data Analysis

Respondent responses were counted, collated, categorized, and organized from the questionnaires' distributed. The respondents' data were statistically analyzed using Statistical Package for Social Science SPSS Version 20. Data were summarized using descriptive statistics and various inferential statistics. The descriptive interpretation use the mean as a base and inferential interpretation will use the p value, the coefficients β of the independent variables, and necessary regression analysis.

A research model use to examine the voluntary tax compliance using eight major independent variables: Perception of taxpayers about government spending, Tax knowledge and education of tax payers, Service deliveries of tax offices, Tax audit, Personal financial constraint of the tax payer, Referral groups, Penalties and fines and Perception of taxpayers about equity and fairness of tax.

3.4. Model Specification

The respondent's data were statistically analyzed using Statistical Package for Social Science SPSS Version 20. Data summarized using descriptive statistics and various inferential statistics. Multiple regression analysis allows researchers to assess the strength of the relationship between an outcome (the dependent variable) and several predictor variables as well as the importance of each of the predictors to the relationship, often with the effect of other predictors statistically eliminated (Moges, 2020).

In addition, the β coefficients for each independent variable generate from the model will be subject to a different tests, in order to test each of the hypotheses under study. So, Y (Voluntary tax compliance) is the dependent variables which could be influenced by the independent variables like $X_1, X_2, X_3, \dots X_8$

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 \dots \dots \dots \text{eqn 3.2}$$

Where; Y –Voluntary tax compliance

α -Constant

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \text{ and } \beta_8$ -Coefficient indicating rate of change of voluntary tax compliances with the independent variables $X_1, X_2, X_3, X_4, X_5, X_6, X_7, \text{ and } X_8$ representing Perception of taxpayers about government spending, Tax knowledge and education of tax payers, Service deliveries of tax offices, Tax audit, Personal financial constraint of the tax payer, Referral groups, Penalties and fines and Perception of taxpayers about equity and fairness of tax, respectively.

ϵ -Error term

3.5. Definition of Variables

3.5.1. Dependent Variable

If one variable depends upon or is a consequence of the other variable, it is called as a dependent variable (Kirchler et al., 2008). In this study voluntary tax compliance is a dependent variable.

3.5.2. Voluntary tax compliance

For the purpose of this research voluntary tax compliance is defined as taxpayers’ willingness to comply with tax laws, declare the correct income, claim the correct deductions, relief and rebates and pay all taxes on time (Kasipillai and Abdul Jabbar, 2003). As mentioned earlier the survey instrument of this is research is a questionnaire. The research measured in this question is likert scale ranges from 1 to 5 strongly disagree to strongly agree respectively. The items of the questionnaires are measured based on the variables of the research.

3.5.3. Independent Variables

A variable that is antecedent to the dependent variable is termed as an independent variable (Meaza, 2018). Each independent variable has several questions which in turn used for the measure of tax compliance. In this study, we have eight independent variables defined as follows.

- ***Economic Factors:-***

- a. Perception of Government spending**

Taxpayers, and especially those who pay high amounts of tax, will be sensitive to what the government spends their money on. If the government is wisely spending the national revenue, for example, for basic facilities like education, health and safety and public transportation, it is likely that voluntary compliance will increase. In contrast, if taxpayers perceive that the government is spending too much on something considered unnecessary or unbeneficial to them, then taxpayers will feel betrayed and attempt to evade.

H1: Perception of taxpayers about government spending positively affects voluntary tax compliance.

- b. Tax Audit**

Some studies claimed that audits have a positive impact on tax evasions (Modugu and Anyaduba, 2014). These findings suggest that in self-assessment systems, tax audits can play an indispensable role and their essential role is to increase voluntary compliance. Frequencies and meticulousness of audits could encourage taxpayers to be more prudent in completing their tax returns, reporting all income and claiming the correct deductions to ascertain their tax liability. In contrast, taxpayers who have never been audited might be tempted to under report their actual income and claim false deductions.

H2: Tax auditing positively affects voluntary tax compliance.

- ***Social Factors:-***

- c. Referral groups (family, friends and etc.)**

Research in ascertaining the importance of referent groups such as family members and friends in tax compliance is limited although (Charles, 1983) (in their Theory of Reasoned Action (TRA) and Theory of Planned Behavior (TPB) theorized that referent groups play a significant role in determining people's intentions and behavior. Decisions either to evade or not to evade tax sometimes are influenced by family members or friends. Therefore, the influence of referent groups is seemingly important in making a decision, particularly involving monetary aspects and the obedience to laws (tax compliance).

H3: Referral groups positively affect voluntary tax compliance

- d. Equity and fairness**

One of the main principles of the taxation system design is equity or fairness, which can be perceived via three dimensional views - horizontal equity (people with the same income or wealth brackets should pay the same amount of taxes), vertical equity (taxes paid increase with the amount of the tax base) and Exchange Equity (Richardson, 2006). The perceived fairness of the tax system also has an influence on the inclination towards tax evasion (Chau and Leung, 2009).

H4: Equity and fairness of tax positively affects voluntary tax compliance.

- ***Individual Factors:-***

- e. Tax knowledge**

The influence of tax knowledge on compliance behavior has been described in various researches. The level of education received by taxpayers is an important factor that contributes to the understanding about taxation especially regarding the laws and regulations of taxation (Eriksen and Fallan, 1999). Previous studies have evidenced that tax knowledge has a very close relationship with taxpayers' ability to understand the laws and regulations of taxation, and their ability to comply (Singh and Bhupalan, 2001).

H5: Tax knowledge and education of tax payers positively affects voluntary compliance.

f. Personal financial Status

Personal financial constraints are believed to have an impact on tax evasion as financial distress faced by an individual and may encourage him to priorities what has to be paid first as basic survival needs (foods, clothing, housing etc.) or where immediate demand on limited income is enforced (for example, perceived threat of action from money lenders etc.) rather than tax liabilities. People who face personal financial problems are likely to be more prone to evade tax when compared to people in less financial distress (Loo, 1968).

H6: Personal financial status of the tax payer positively affects voluntary tax compliance.

- ***Institutional Factors:-***

g. Service delivery of tax office

For many aspects of tax compliance, there is a debate in literature as to how the effective operation of the tax system by the tax authorities influences taxpayers' compliance behavior. The role of the tax authority in minimizing the tax gap and increasing voluntary compliance is clearly very important. Hasseldine and Li, (1999) illustrated tax compliance is placing the government and the tax authority as the main party that need to be continuously efficient in administering the tax system in order to curtail tax evasion. Besides, the study of (Alm et al., 1992) also suggested that the role of a government has a significant positive impact on determining attitudes toward tax.

H7: A Service delivery of tax offices positively affects voluntary tax compliance.

h. Penalties and fines

A theoretical economic model introduced by (Michael and Agnar, 1972) has clearly indicated that penalties as well as audit probability have an impact on tax compliance. The higher the penalty and the potential audit probability the greater the discouragement for potential tax evasion. If the taxpayers are aware of the offences they are committing when evading tax and the consequences of being non-compliant taxpayers, they might reduce their tendency to evade tax.

H8: Penalties and fines positively affect voluntary tax compliance.

Table 3-2 Variables description and expected associations with the level of tax compliance

Variable		Unit of measurement	Expected signs/hypotheses
Dependent Variable	Voluntary tax compliance	(1-5) Likert scale	+ (high probability and high frequency, high compliance)
Independent Variables	Perception of Government spending	(1-5) Likert scale	+ (Good perception on government spending, high compliance)
	Tax knowledge and education	(1-5) Likert scale	+ (high tax knowledge, high compliance)
	Service delivery of tax office	(1-5) Likert scale	+ (efficient service, high compliance)
	Tax Audit	(1-5) Likert scale	+(high audit probability, high compliance)
	Personal financial Status	(1-5) Likert scale	+(Better financial status, high compliance)
	Referral groups	(1-5) Likert scale	+ (high referent influence, high compliance)
	Penalties and fines	(1-5) Likert scale	+ (High penalty, high Compliance)
	Equity and fairness	(1-5) Likert scale	+ (Fair tax system, high compliance)

CHAPTER FOUR

4. RESULT AND DISCUSSION

This chapter describes the results of the research starting with respondents' profile. The remaining part of this chapter will then be divided into the two sections: The first section covers descriptive analysis of determinants factors of tax compliance behavior and the second section presents inferential statistics analysis of dependent and independent variables.

4.1. Respondents general back ground

This section describes respondents' general information such as Gender, Age, Educational level and business period in years. Table 4-1 illustrates gender of respondents which shows that 69.3 % of the respondents were males and 30.7% were females. This shows that the majority of Addis Ababa city administration tax office customers are male.

Table 4-1 Respondents general back ground – Gender

Gender		
Variable	Frequency	Percent
Male	271	69.3
Female	120	30.7
Total	391	100

Sources: Questionnaire result, 2021

Table 4-2 shows the age groups of the respondents. Since the study give emphasis to business taxpayers, a minimum age of 21 years old was considered as reasonable. There were four age groups involved in this study with a 15-year range in each group except between 21-30 and above 65 years old. The largest group of the respondents was between ages of 31 – 45 and 46 – 60; having 46.3% and 39.1% respectively. A respondent in the group of above 65 years old represents 8.7% of the total population. The lowest numbers of the respondents were ages 21-30 that are only 5.9% of the total population. Generally, respondents within the age group of 31 and 60 and made up with 85.4% of the total respondents.

Table 4-2 Respondents general back ground – Age

Age		
Age	Frequency	Percent
21-30	23	5.9
31-45	181	46.3
46-60	153	39.1
Above 60	34	8.7
Total	391	100

Sources; Questionnaire result, 2021

With the regard the survey collected the educational background of the respondents in table 4-3 indicates there is no PhD holder and 10% respondents had MA/MSc of educational qualification; 21% of the total respondents had BA /BSc. On the other hand, the numbers of respondents who had a College Diploma were 29.7%; the largest of the respondents were 10th/12th grade complete 39.4% who can understand and respond to the prepared questionnaires. Cumulatively, all of the respondents were in possession of at least reading and writing and none of the respondents were bellow high school.

Table 4-3 Respondents general back ground – Education

Education		
Educational Level	Frequency	Percent
PhD	0	0
MA/MSc	39	10.0
BA/BSC	82	21.0
College Diploma	116	29.7
10th/12th grade complete	154	39.4
Total	391	100

Source: Questionnaire result, 2021

According to table 4-4 15.9% of the respondents were in business for 2-5 years; those who have been in the business between 5-10 years account about 23.3% of the total population. The largest ones are 32.7% and 28.1% those who are running business for 10-15 and over 15 years respectively. This indicates that the majority of business taxpayers were well educated to know the need for taxation and they can understand and interpret the tax law as well.

Table 4-4 Respondents general back ground – Business Period

Business Period		
Years	Frequency	Percent
2-5	62	15.9
5-10	91	23.3
10-15	128	32.7
Over 15	110	28.1
Total	391	100

Source: Questionnaire result, 2021

4.2. Descriptive Analysis of Dependent Variable

4.2.1. Voluntary Tax Compliance

This study is determined to see taxpayers' voluntary tax compliance is affected by the Perceptions on the government expenditure (Spending), Knowledge and education about tax of tax payers, Service delivery of tax office, Perceptions on the tax audit, Personal financial Status, Referral group, Penalties and fines of tax office, Perception of tax payers about equity and fairness of taxes. Although this is based on a Likert scale, where strongly Disagree to 1; Disagree to 2; Neutral to 3; Agree to 4, and Strongly Agree to 5. The effort is also made to calculate the mean and standard deviation of the result as well as used by (Meaza, 2018). Moreover, the survey results on the voluntary tax compliance are summarized here below in the table as follows.

Table 4-5 Summary of voluntary tax compliance issue

S.N	Statement	SD(1)	D(2)	N(3)	A(4)	SA(5)	Avg	Sd	Grand Avg
1	Taxpayers not evade taxes most of the time	51 (13.0%)	36 (9.2%)	17 (4.3%)	103 (26.3%)	184 (47.1%)	3.85	1.43	3.6
2	I pay my tax on time	37 (9.5%)	29 (7.4%)	75 (19.2%)	101 (25.8%)	149 (38.1%)	3.76	1.29	
3	I pay my correct amount of tax	46 (11.8%)	35 (9.0%)	61 (15.6%)	109 (27.9%)	140 (35.8%)	3.67	1.35	
4	I believe that I declare my tax return on time	63 (16.1%)	76 (19.4%)	31 (7.9%)	117 (29.9%)	104 (26.6%)	3.31	1.45	

Sources: Questionnaire result, 2021

Remark: SD (1) = Strongly Disagree, D (2) = Disagree, N (3) = Neutral, A (4) = Agree, and SA (5) = Strongly Agree

Table 4-5 describes respondent's tax compliance level based on their response regarding to voluntary tax compliance. Accordingly majority (\bar{x} =3.85, σ = 1.43)of the tax payers comply their taxes most of the time. On the other hand (\bar{x} =3.76, σ = 1.29)of the respondents have confirmed that they pay their tax on time. When it comes to paying the correct amount of tax (\bar{x} =3.67, σ = 1.35)of the said that they the pay the correct amount of tax and (\bar{x} =3.31, σ = 1.45)of the respondents agreed that they declare their tax return on time.

4.3. Descriptive Analysis of Independent Variables

4.3.1. Economic Factors

1. Perception on the Government expenditure (Spending)

Table 4-6 Summary of perception of tax payers on the government expenditure

S.N	Statement	SD(1)	D(2)	N(3)	A(4)	SA(5)	Avg	Sd	Grand Avg
1	I believe that the government's spending is reasonable.	134 (34.3%)	106 (27.1%)	41 (10.5%)	43 (11.0%)	67 (17.1%)	2.50	1.48	2.38
2	I believe that the taxpayers have a good impression of government spending.	123 (31.5%)	116 (29.7%)	32 (8.2%)	64 (16.4%)	56 (14.3%)	2.52	1.44	
3	I believe that public investment by the government is transparent.	152 (38.9%)	137 (35.0%)	13 (3.3%)	43 (11.0%)	46 (11.8%)	2.22	1.37	
4	I believe that the tax revenue collected by the tax administration office is distributed fairly.	128 (32.7%)	136 (34.8%)	34 (8.7%)	47 (12.0%)	46 (11.8%)	2.35	1.35	
5	I believe that the government does not waste too much money.	137 (35.0%)	142 (36.3%)	11 (2.8%)	49 (12.5%)	52 (13.3%)	2.33	1.40	

Source: Questionnaire result, 2021

From the above questions asked, majority of the respondents from each sub-contract (\bar{x} =2.5, σ = 1.48), (\bar{x} =2.52, σ = 1.44), (\bar{x} =2.22, σ = 1.37), (\bar{x} =2.35, σ = 1.35), and (\bar{x} =2.33, σ =

1.4)believed that; government's spending is not reasonable, taxpayers does not have a good impression on the government spending, public investment by the government is not transparent, the tax revenue collected by the tax administration office is distributed unfairly, the government does wastes too much money respectively. The result shows that the overall average means and standard deviation are 2.38 and 1.41 respectively that means the majority of the respondents strongly disagreed that the level of governmental, fairness, resource wastage, accountability and transparency and perception of government spending has significantly impact on the voluntary tax compliance.

2. Tax audit

Table 4-7 Summary of the perception of the tax audit

S.N	Statement	SD(1)	D(2)	N(3)	A(4)	SA(5)	Avg	Sd	Grand Avg
1	I don't believe that tax audit increases tax revenue.	139 (35.5%)	66 (16.9%)	17 (4.3%)	121 (30.9%)	48 (12.3%)	2.68	1.51	2.60
2	I believe that the tax authority has been investigating all tax reports fairly.	117 (29.9%)	86 (22.0%)	24 (6.1%)	91 (23.3%)	73 (18.7%)	2.79	1.53	
3	I believe that auditing services are conducted on time.	145 (37.1%)	127 (32.5%)	12 (3.1%)	54 (13.8%)	53 (13.6%)	2.34	1.43	

Sources: Questionnaire result, 2021

The above three questions in relation to tax audit were posed to the respondents. From the study result ($\bar{x}=2.68, \sigma = 1.51$), ($\bar{x}=2.79, \sigma = 1.53$), ($\bar{x}=2.34, \sigma = 1.43$), replied that they don't believe that tax audit increases tax revenue, believe that the tax authority has been investigating all tax reports fairly, believe that auditing services are conducted on time respectively. The result shows that the overall average means and standard deviation are 2.6 and 1.5 respectively that means the majority of the respondents strongly disagreed that there is no influence of tax audit on the voluntary tax compliance.

4.3.2. Social Factors

1. Referral group

Table 4-8 Summary of the effect of referral groups

S.N	Statement	SD(1)	D(2)	N(3)	A(4)	SA(5)	Avg	Sd	Grand Avg
1	My friends do comply; as a result they have got recognition from government.	67 (17.1%)	56 (14.3%)	25 (6.4%)	125 (32.0%)	118 (30.2%)	3.44	1.47	3.57
2	My parents comply with their tax, so they don't worry about penalty.	39 (10.0%) 10.0	51 (13.0%)	20 (5.1%)	149 (38.1%)	132 (33.8%)	3.73	1.32	
3	My friends comply with their tax and they have good relationship with the tax offices.	64 (16.4%)	46 (11.8%)	27 (6.9%)	121 (30.9%)	133 (34.0%)	3.54	1.46	

Sources; Questionnaire result, 2021

Regarding the referral group respondents their friends do comply; as a result they have got recognition from government (\bar{x} =3.44, σ = 1.47), their parents comply with their tax, so they have never been penalized (\bar{x} =3.73, σ = 1.32), and their friends comply with their tax and they have good relationship with the tax offices (\bar{x} =3.54, σ = 1.46). In line with previous literature tax payers agreed that they are influenced by referral group (\bar{x} =3.57) of grand mean.

2. Equity and fairness of taxes

Table 4-9 Summary of perception of tax payers about the equity and fairness of taxes

S.N	Statement	SD(1)	D(2)	N(3)	A(4)	SA(5)	Avg	Sd	Grand Avg
1	I believe that higher income earners are paying more taxes than lower income earners.	78 (19.9%)	83 (21.2%)	44 (11.3%)	87 (22.3%)	99 (25.3%)	3.12	1.49	3.25
2	I believe that I am paying about the same amount of taxes as others making the same income.	77 (19.7%)	94 (24.0%)	21 (5.4%)	93 (23.8%)	106 (27.1%)	3.15	1.53	
3	By paying right amount of tax, I believe that other people especially the poor will get the benefit.	51 (13.0%)	67 (17.1%)	35 (9.0%)	121 (30.9%)	117 (29.9%)	3.48	1.40	

Sources: Questionnaire result, 2021

With regard to Principle of equity and fairness respondents replied higher income earners are paying more taxes than lower income earners (\bar{x} = 3.12, σ = 1.49), they pay the same amount of taxes as others making the same income (\bar{x} = 3.15, σ = 1.53), By paying right amount of tax they replied that other people especially the poor will get the benefit (\bar{x} = 3.48, σ = 1.40). When we sum up responses on perception of equity fairness, results indicated that most tax payers agree about equity and fairness of the tax system (\bar{x} = 3.25).

4.3.3. Individual Factors

1. Knowledge about tax

Table 4-10 Summary of tax payer's knowledge and education about tax

S.N	Statement	SD(1)	D(2)	N(3)	A(4)	SA(5)	Avg	Sd	Grand Avg
1	I know all tax laws with regard to my business.	96 (24.6%)	70 (17.9%)	22 (5.6%)	91 (23.3%)	112 (28.6%)	3.14	1.59	3.28
2	I took part in several tax-related training sessions provided by the tax administration.	61 (15.6%)	83 (21.2%)	15 (3.8%)	109 (27.9%)	123 (31.5%)	3.38	1.49	
3	Tax authority-created awareness regarding taxation that helps us improving our tax knowledge.	74 (18.9%)	89 (22.8%)	31 (7.9%)	92 (23.5%)	105 (26.9%)	3.17	1.51	
4	I have enough information about tax system	67 (17.1%)	82 (21.0%)	59 (15.1%)	85 (21.7%)	98 (25.1%)	3.17	1.44	
5	I understand that I should pay taxes within the prescribed period	52 (13.3%)	70 (17.9%)	13 (3.3%)	124 (31.7%)	132 (33.8%)	3.55	1.44	
6	I know penalties and fines related to not declaring and paying taxes timely.	73 (18.7%)	71 (18.2%)	25 (6.4%)	106 (27.1%)	116 (29.7%)	3.31	1.51	

Source: Questionnaire result, 2021

It has been described in previous study that tax knowledge has strong relationship with taxpayers' ability to understand the laws and regulations of taxation, and their ability to comply.

Table 4.7 also revealed that most of the respondents (\bar{x} = 3.14, σ = 1.59) said that they know all tax laws with regard to their business, (\bar{x} = 3.38, σ = 1.49) have confirmed that they have took

part in several tax-related training sessions provided by the tax administration, (\bar{x} =3.17, σ = 1.51) of the respondents also said that tax authority created awareness regarding taxation that helped them improving our tax knowledge, (\bar{x} =3.17, σ = 1.44) of them are also sure about getting the required information about tax system, , (\bar{x} =3.55, σ = 1.44) of the respondents also agreed that they should pay their taxes within the prescribed period, and finally (\bar{x} =3.31, σ = 1.51) said that they know penalties and fines related to not declaring and paying taxes timely. The result shows that the overall average means and standard deviation are 3.28 and 1.5 respectively that means the majority of the respondents strongly disagreed that knowledge and education about tax strongly influence voluntary tax compliance in the study area.

2. Personal financial Status

Table 4-11 Summary of the effect of personal financial status

S.N	Statement	SD(1)	D(2)	N(3)	A(4)	SA(5)	Avg	Sd	Grand Avg
1	My income always exceeds my expenditure.	83 (21.2%)	71 (18.2%)	32 (8.2%)	94 (24.0%)	111 (28.4%)	3.20	1.54	3.37
2	I am paying my tax before non-business related expenditures.	42 (10.7%)	75 (19.2%)	27 (6.9%)	145 (37.1%)	102 (26.1%)	3.49	1.34	
3	Despite increase in basic needs, I am paying my tax timely.	78 (19.9%)	67 (17.1%)	15 (3.8%)	118 (30.2%)	113 (28.9%)	3.31	1.53	
4	Even though my cash level is low I prefer to declare my taxes to safely run my business.	59 (15.1%)	72 (18.4%)	9 (2.3%)	128 (32.7%)	123 (31.5%)	3.47	1.47	

Sources; Questionnaire result, 2021

According to the survey result most of the respondents agreed that their income always exceeds their expenditure (\bar{x} =3.20, σ = 1.54), they pay their tax before non-business related expenditures

(\bar{x} = 3.49, σ = 1.34), despite increase in basic needs, they pay their tax timely (\bar{x} = 3.31, σ = 1.53), and even though their cash level is low they prefer to declare their taxes to safely run their business (\bar{x} = 3.47, σ = 1.47). In general tax payers agreed that personal financial constraint affects their compliance behavior (\bar{x} = 3.37, σ = 1.47)

4.3.4. Institutional Factors:-

1. Service delivery of tax office

Table 4-12 Summary of efficiency of the tax authority

S.N	Statement	SD(1)	D(2)	N(3)	A(4)	SA(5)	Avg	Sd	Grand Avg
1	I believe that the existing modernized taxpayer registration system provide good services.	141 (36.1%)	112 (28.6%)	24 (6.1%)	61 (15.6%)	53 (13.6%)	2.42	1.45	2.49
2	I believe that employees of tax office can quickly adapt to new technology developments in order to provide better service.	124 (31.7%)	115 (29.4%)	52 (13.3%)	43 (11.0%)	57 (14.6%)	2.47	1.41	
3	I believe that there is positive relationship between tax officials and taxpayers that helps us to get good services.	133 (34.0%)	107 (27.4%)	38 (9.7%)	64 (16.4%)	49 (12.5%)	2.46	1.42	
4	I believe that tax officials have sufficient skills to provide quality services.	121 (30.9%)	108 (27.6%)	21 (5.4%)	78 (19.9%)	63 (16.1%)	2.63	1.49	

Source: Questionnaire result, 2021

As it is shown in table above, most of respondents strongly disagreed that ($\bar{x}=2.42, \sigma = 1.45$), ($\bar{x}=2.47, \sigma = 1.41$), ($\bar{x}=2.46, \sigma = 1.42$), and ($\bar{x}=2.63, \sigma = 1.49$); they believe that the existing modernized taxpayer registration system provide good services, employees of tax office can quickly adapt to new technology developments in order to provide better service, there is positive relationship between tax officials and taxpayers that helps us to get good services, officials have sufficient skills to provide quality services respectively.

2. Penalties and fines of tax office

Table 4-13 Summary of the effect of penalties and fines of tax office

S.N	Statement	SD(1)	D(2)	N(3)	A(4)	SA(5)	Avg	Sd	Grand Avg
1	I believe the penalty rates are very high and I cannot afford to pay the penalty.	126 (32.2%)	117 (29.9%)	25 (6.4%)	67 (17.1%)	56 (14.3%)	2.51	1.45	2.53
2	I believe that the tax enforcement is very strong.	139 (35.5%)	122 (31.2%)	13 (3.3%)	63 (16.1%)	54 (13.8%)	2.41	1.45	
3	I believe that the tax authority is not tolerant.	121 (30.9%)	96 (24.6%)	31 (7.9%)	75 (19.2%)	68 (17.4%)	2.68	1.51	

Sources: Questionnaire result, 2021

In respect of the penalties and fines of the tax office most of the respondents strongly agreed that the penalty rates are very high and they cannot afford to pay the penalty ($\bar{x}=2.51, \sigma = 1.45$), the tax enforcement is very strong ($\bar{x}=2.41, \sigma = 1.45$), and the tax authority is not tolerant ($\bar{x}=2.68, \sigma = 1.51$). The average of responses towards awareness on offences and penalty is inclined to strongly disagreement having the average mean of ($\bar{x}=2.53$). So majority of them know about the penalty rates and the office acts.

a. Correlation and Multiple Regression Analysis

i. Correlation Analysis

In this section correlation analysis and discussions are included in order to investigate the relationship among the variables of the dependent and independent variable. Correlation shows, how the strength or the magnitude and direction of the variable relationship with each other's. The linear relationship between variables can be measured by correlation coefficient (r), which is commonly collected as Pearson product-moment correlation. Pearson's " r " mainly measures the data from the interval or ratio level and used to measure based on the deviation from the mean (Muluadam, 2015).

The strength and direction of association that exists between two continuous variables are measured by Pearson's correlation. The inter-correlations are an important part of trying to find the associations between variables. In other words, it sorts the relationship between the independent variables. Pearson's correlation coefficient can take a range of values from -1 to +1. Any value different from zero indicates some correlation among variables or relationship among regression variables. A value of zero indicates that there is no association between the two variables. A value greater than zero indicates a positive association; that is, as the value of one variable increases, so does the value of the other variable and the value less than zero indicates a negative association among regression variables. Table 4-14 shows the measure of association and descriptive adjectives between the predictor variables, which was suggested by (Moges, 2020).

Table 4-14 Standards of Pearson correlations coefficient

Standards	Degree
0.00 to 0.20; -0.00 to -0.20	Very weak or Very low
0.20 to 0.40; -0.20 to -0.40	Weak or Low
0.40 to 0.60; -0.40 to -0.60	Moderate
0.60 to 0.80; -0.60 to -0.80	Strong or High
0.80 to 1.00; -0.80 to -1.00	Very strong or Very high

Accordingly here in the below table is provided the correlation analysis result between dependent and independent variables generated from IBM SPSS 20.

Table 4-15 Correlations

		Voluntary tax compliance	Government expenditure	Knowledge and education	Service delivery of tax office	Tax audit	Personal financial status	Referral groups	Penalties and fines	Equity and fairness
Voluntary tax compliance	Pearson Correlation	1	.798**	.935**	.835**	.859**	.952**	.972**	.841**	.931**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000	.000
	N	391	391	391	391	391	391	391	391	391
Government expenditure	Pearson Correlation	.798**	1	.864**	.978**	.942**	.857**	.819**	.971**	.871**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000	.000
	N	391	391	391	391	391	391	391	391	391
Knowledge and education	Pearson Correlation	.935**	.864**	1	.887**	.895**	.981**	.933**	.883**	.992**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000	0.000
	N	391	391	391	391	391	391	391	391	391
Service delivery of tax office	Pearson Correlation	.835**	.978**	.887**	1	.974**	.875**	.843**	.990**	.889**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	0.000	.000
	N	391	391	391	391	391	391	391	391	391
Tax audit	Pearson Correlation	.859**	.942**	.895**	.974**	1	.880**	.847**	.978**	.899**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000	.000
	N	391	391	391	391	391	391	391	391	391
Personal financial status	Pearson Correlation	.952**	.857**	.981**	.875**	.880**	1	.956**	.870**	.977**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.000
	N	391	391	391	391	391	391	391	391	391
Referral groups	Pearson Correlation	.972**	.819**	.933**	.843**	.847**	.956**	1	.851**	.928**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.000	.000

	N	391	391	391	391	391	391	391	391	391
Penalties and fines	Pearson Correlation	.841**	.971**	.883**	.990**	.978**	.870**	.851**	1	.886**
	Sig. (2-tailed)	.000	.000	.000	0.000	.000	.000	.000		.000
	N	391	391	391	391	391	391	391	391	391
Equity and fairness	Pearson Correlation	.931**	.871**	.992**	.889**	.899**	.977**	.928**	.886**	1
	Sig. (2-tailed)	.000	.000	0.000	.000	.000	.000	.000	.000	
	N	391	391	391	391	391	391	391	391	391

** . Correlation is significant at the 0.01 level (2-tailed). Own survey 2021 result

The result of the research in the above table 4-15 shows that each variable incorporated in the model has perfectly positively correlated with itself having Pearson correlation coefficient value 1.000. From the relationships between dependent variable voluntary tax compliance and eight independent variables displayed in the above table Referral groups has significant and positive relationship with voluntary tax compliance having Pearson correlation coefficient value of 0.972 and p-value or sig of 0.000 which is less than 1% significance level. Personal financial status, Knowledge and education, Equity and fairness, Tax audit, Penalties and fines, Service delivery of tax office, and Government expenditure have a significant and positive relationship to voluntary tax compliance having Pearson correlation coefficient value of 0.952, 0.935, 0.931, 0.859, 0.841, 0.835 and 0.798 respectively and p-value or sig of 0.000 each, which is less than 0.01 significance level.

Accordingly, from the above table 4-15 of the Standards of Pearson correlations coefficient, we can conclude that constructed variables have a positive correlation with Tax Compliance because the p (sig) value is less than $\alpha=.05$ level.

ii. Multiple Regression analysis

Table 4-16 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				Sig. F Change	Durbin-Watson
					R Square Change	F Change	df1	df2		
1	.980 ^a	.961	.960	.27781	.961	1181.502	8	382	.000	.227

a. Predictors: (Constant), Equity and fairness, Government expenditure, Referral groups, Tax audit, Personal financial status, Service delivery of tax office, Penalties and fines, Tax Knowledge and education

b. Dependent Variable: Voluntary tax compliance

Table 4.16 above shows, the adjusted R² indicating a significant positive relationship of 0.961 meaning 96% of the variance in the model can be predicted using the independent variables or in simple words 96% of tax compliance is explained by the constructed independent variables. However, the remaining 4% changes in the voluntary tax compliance in Addis Ababa city tax administration office are caused by other factors that are not included in this model. Therefore, the constructed voluntary tax compliance factors are good explanatory variables in the study area.

Table 4-17 ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	729.514	8	91.189	1181.502	.000 ^b
Residual	29.483	382	.077		
Total	758.997	390			

a. Dependent Variable: Voluntary tax compliance

b. Predictors: (Constant), Equity and fairness, Government expenditure, Referral groups, Tax audit, Personal financial status, Service delivery of tax office, Penalties and fines, Knowledge and education

Table 4-18 Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
1 (Constant)	.318	.040		8.009	.000	.240	.397
Government expenditure	-.237	.052	-.241	-4.545	.000	-.339	-.134
Knowledge and education	-.004	.085	-.005	-.052	.958	-.172	.163
Service delivery of tax office	.008	.086	.008	.088	.930	-.162	.178
Tax audit	.344	.051	.371	6.708	.000	.243	.445
Personal financial status	.176	.064	.187	2.772	.006	.051	.301
Referral groups	.705	.037	.721	19.145	.000	.632	.777
Penalties and fines	-.114	.085	-.120	-1.343	.180	-.281	.053
Equity and fairness	.057	.080	.060	.709	.479	-.100	.214

a. Dependent Variable: Voluntary tax compliance

The coefficients in table 4-18 presented the strength of the eight predictors toward the voluntary tax compliance and yielded the following result. Government expenditure yield $\beta = -0.237$ and $\text{sig.}(p) = 0.00 < 0.05$. Therefore, government spending has a significance impact at 5% significance level to determine voluntary tax compliance in this study. β being negative indicates that the respondents' awareness is weak on the government expenditure and this impression of them significantly affects the voluntary tax compliance negatively in the study.

Tax audit also yields $\beta = 0.344$ and $\text{sig.}(p) = 0.00 < 0.05$. This means that it has a significant influence to determine voluntary tax compliance in the proposed study at 5% significance level.

This shows that strong audit system results in better compliance behavior of the tax payers. Referral groups were also one of the independent variables expected to affect voluntary tax compliance in this study. Accordingly it yields $\beta = 0.705$ and $\text{sig.}(p) = 0.00 < 0.05$. Therefore, the expectation has been proven that it determines the voluntary tax compliance at 5% level of significance. This again indicates that the influence of the referral group to tax compliance of the tax payers is very high.

Personal financial status yields $\beta = 0.176$ and $\text{sig.}(p) = 0.006 < 0.05$, which was also one of the factors affecting voluntary tax compliance in the study area using 5% level of significance proposed. Accordingly, tax payers that are in better financial status are also better in the tax compliance.

Tax knowledge yield $\beta = -0.004$ and $\text{sig.}(p) = 0.958 > 0.05$. Therefore, this result shows that knowledge about tax has insignificant impact at 5% level of significance to determine voluntary tax compliance at the time of this study. However, as per other studies there is strong relationship between tax compliance and tax payer's knowledge Eriksen and Fallan,(1999;)Singh and Bhupalan, (2001).

Service delivery of tax office also yields $\beta = 0.08$ and $\text{sig.}(p) = 0.930 > 0.05$ and this again indicates that service delivery of tax office has insignificant impact at 5% level of significance to determine voluntary tax compliance in this study. However, Hasseldine and Li (1999); Richardson (2006)suggested that the role of efficiency of the office has a significant positive impact on determining attitudes toward tax.

Penalties and fines also yield $\beta = -0.114$ and $\text{sig.}(p) = 0.180 > 0.05$, which shows that this variable has insignificant impact at 5% level of significance to explain the dependent variable in this study. However, Michael and Agnar (1972) has clearly indicated that penalties as well as audit probability have an impact on tax compliance.

The last but not the least, equity and fairness yield $\beta = 0.057$ and $\text{sig.}(p) = 0.479 > 0.05$, which shows that it has insignificant impact at 5% level of significance to explain the dependent variable in this study. However, Jackson and Milliron (1986); Richardson, (2006)has perceived fairness of the tax system also has an influence on the inclination towards tax compliance.

Thus, summary of the hypothesized relationship between dependent variable (voluntary tax compliance) and all the eight independent variables have presented in the following table.

Table 4-19 Summary of Hypotheses testing

Hypothesis	P-value	Expected relationship	Result	Decision Accept/reject
<i>H1: Perception of taxpayers about government spending positively affects voluntary tax compliance.</i>	0.000	Positive	Negative	Accepted
<i>H2: Tax auditing positively affects voluntary tax compliance.</i>	0.000	Positive	Positive	Accepted
<i>H3: Referral groups positively affect voluntary tax compliance.</i>	0.000	Positive	Positive	Accepted
<i>H4: Equity and fairness of tax positively affects voluntary tax compliance.</i>	0.479	Positive	Positive	Rejected
<i>H5: Tax knowledge and education of tax payers positively affects voluntary compliance.</i>	0.958	Positive	Negative	Rejected
<i>H6: Personal financial status of the tax payer positively affects voluntary tax compliance.</i>	0.006	Positive	Positive	Accepted
<i>H7: Service deliveries of tax offices positively affect voluntary tax compliance.</i>	0.930	Positive	Positive	Rejected
<i>H8: Penalties and fines positively affect voluntary tax compliance.</i>	0.180	Positive	Negative	Rejected

Source: Questionnaire result, 2021

Therefore, form the independent variables; Government expenditure, Tax audit, Referral groups, and Personal financial status has been found the most important dominant factors explaining voluntary tax compliance in Addis Ababa city tax administration office. Accordingly, the regression model is presented as below;

$$VTC = -0.237GE + 0.344TA + 0.705RG + 0.176PFS + 0.318$$

Where, *VTC* = Voluntary tax compliance, *GE* = Government expenditure, *TA* = Tax audit, *RG* = Referral groups and *PFS* = Personal financial status. Regression analysis showed that the models were fit and the results were supporting the hypothesis.

CHAPTER FIVE

5.1. SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter presents summary of the findings, conclusion and recommendations. The aim of the chapter is to review the whole thesis and highlight future research directions. Accordingly, the first section summarizes the major findings of the study, the second section concludes the findings and the last one presents the recommendations with future research directions.

b. Summary of the findings

- ✓ Government expenditure has a negative and significant impact at a 5% level of significance to determine voluntary tax compliance.
- ✓ Tax audit has a positive and significant influence to determine voluntary tax compliance in the proposed study at a 5% level of significance.
- ✓ Referral groups have a positive and significant impact to determine voluntary tax compliance in the proposed study at a 5% level of significance.
- ✓ Personal financial status of the tax payers has a positive and significant impact to determine voluntary tax compliance in the proposed study at a 5% level of significance.
- ✓ Knowledge and education has a negative and insignificant impact to determine voluntary tax compliance in the proposed study at a 5% level of significance.
- ✓ Service delivery of tax office has a positive and insignificant impact to determine voluntary tax compliance in the proposed study at a 5% level of significance.
- ✓ Penalties and fines have a negative and insignificant impact to determine voluntary tax compliance in the proposed study at a 5% level of significance.
- ✓ Equity and fairness has a positive and insignificant impact to determine voluntary tax compliance in the proposed study at a 5% level of significance.

c. Conclusion

Based on the presiding analysis the study finally drawn the following findings:

- ✓ The research measures voluntary tax compliance attitudes by raising questions like; paying correct amount and timely, declaring tax returns and evading taxes. As a result majority of them ($\bar{x}=3.65$, $\sigma = 1.38$) had a positive attitude toward those issues. Taking this as dependent variable, factors affecting voluntary tax compliance have been modeled using different independent variables.
- ✓ Most taxpayers were influenced by fairness of government spending and they are extreme to know where their tax contribution will be spent. The analysis also finds evidence that those who are more satisfied with public service provision are more likely to comply with tax rule.
- ✓ The result shows that the probability of being fraud detection by the tax authority has an impact on voluntary tax compliance, and also Taxpayers believe that tax audit have an impact on voluntary compliance. This shows taxpayers are voluntarily compliant due to fair and on time auditing service.
- ✓ Most of the tax payers are influenced by Family or a friends' experience of compliance act. The study also found that referent groups play a significant role in having good relation and recognition from the government although, it was not clearly discussed which was stronger(family members or friends).
- ✓ The study finding also suggested that Personal financial constraints have an impact on voluntary tax compliance behavior of tax payers as financial distress faced by an individual may encourage him to priorities basic survival needs.
- ✓ The last but not the list, this study also found that; Knowledge and education about tax, service delivery of tax office, penalties and fines, and equity and fairness of tax offices has insignificant impact at 5% significance level according to the regression model to explain the dependent variable (voluntary tax compliance) in this study during this research has done. However, many studies suggested contradictory findings regarding those independent variables(Michael and Agnar, 1972; Singh and Bhupalan, 2001; Richardson, 2006).

d. Recommendations

Based on the findings of this study, the researcher came up with the following recommendations to enhance voluntary tax compliance of category A and B tax payers in Addis Ababa city tax administration office.

- ✓ This study shown that if the government is wisely spending the national revenue, for example for basic facilities like education, health and safety and public transportation, it is likely that voluntary compliance will increase. In contrast, if taxpayers observe that the government is spending too much on something considered unnecessary or unbeneficial to them then taxpayers will feel betrayed and attempt to evade. Therefore to avoid inefficiency of tax collection, the government officials and policy makers have to think about the reasonableness of government spending.
- ✓ Tax authority should improve thoroughness of audit. It is also important is that a continuous, timely and consistent auditing program must be adopted to increase voluntary tax compliance.
- ✓ Personal circumstantial factors like personal financial constraints, awareness on penalties and offences and tax knowledge are likely to have a significant impact on taxpayer compliance behavior. Since Personal financial constraint was identified as the most significant determinant factor of voluntary compliance in Ethiopian revenue and custom authority and policy makers has to regulate the economy to enable tax payers fulfill their obligation.
- ✓ Finally the thesis suggests further studies and investigations on this and related topic will help to analyze significant factors from different perspectives and increases compliance level by exploring the factors that make people to comply.

REFERENCES

- Akalu, K. (2016). *Determinants of tax compliance behavior of large corporate taxpayers in Ethiopia*. Msc Research Paper, Addis Ababa University, Addis Ababa, Ethiopia .
- Ali, M. M., Cecil, H. W., & Knoblett, J. A. (2001). The effects of tax rates and enforcement policies on taxpayer compliance. *Atlantic Economic Journal*, 29(2), 186–202.
- Ali, Merima, Fjeldstad, O. H., & Sjursen, I. H. (2014). To pay or not to pay? Citizens' attitudes toward taxation in Kenya, Tanzania, Uganda, and South Africa. *World Development*, 64, 828–842. <https://doi.org/10.1016/j.worlddev.2014.07.006>
- Ali, Murad, Al-Zaqeba, A., Ab, S., Hamid, D., & Muhammad, I. (2018). Tax Compliance of Individual Taxpayers: a Systematic Literature Review. *International Journal of Management and Applied Science*, 4(6), 2394–7926. Retrieved from <http://iraj.in>
- Alkhatib, A. A., Hamad, M. Z., & Hermas, M. D. (2020). The Impact of Tax Ethics and Knowledge on Tax Compliance among Palestinian Taxpayers. *International Journal of Academic Research in Business and Social Sciences*, 10(6), 346–352. <https://doi.org/10.6007/ijarbss/v10-i6/7305>
- Alm, J., Bahl, R., & Murray, M. N. (1990). Tax Structure and Tax Compliance. *The MIT Press*, 72(4), 603–613.
- Alm, J., Jackson, B. R., & Mckee, M. (1992). Estimating The Determinants of Taxpayers Compliance With Experimental Data. *National Tax Journal*, 45(1), 107–114.
- Amina, A., & Saniya, K. (2015). Tax compliance and its determinants: the case of Jimma zone, Ethiopia. *International Journal of Research in Social Sciences*, 62, 1–15.
- Ann, W., & Diane, W. (1985). The Effect of Tax Laws and Tax Administration on Tax Compliance: The Case of The U.S. Individual Income Tax. *National Tax Journal*, 38(1), 1–13.
- Asamnew, G. (2011). Tax assessment and collection problems of Category “A” tax payers: A case of Addis Ababa Yeka Sub City.
- Atawodi, O. W., & Ojeka, S. A. (2012). Factors That Affect Tax Compliance among Small and Medium Enterprises (SMEs) in North Central Nigeria. *International Journal of Business and Management*, 7(12), 87–96.

- Brown, R., & Mazur, M. (2003). IRS's comprehensive approach to compliance measurement. *National Tax Journal*, 56(3), 689–700.
- Chan, C. W., Troutman, C. S., & O'Bryan, D. (2000). An expanded model of taxpayer compliance: Empirical evidence from the United States and Hong Kong. *Journal of International Accounting, Auditing and Taxation*, 9(2), 83–103. [https://doi.org/10.1016/S1061-9518\(00\)00027-6](https://doi.org/10.1016/S1061-9518(00)00027-6)
- Charles, C. (1983). Tax Evasion and Tax Rates: An Analysis of Individual Returns. *The Review of Economics and Statistics*, 85(2), 298–306.
- Chau, G., & Leung, P. (2009). A critical review of Fischer tax compliance model: A research synthesis. *Journal of Accounting and Taxation*, 1(2), 34–40.
- Coricelli, G., Rusconi, E., & Villeval, M. C. (2014). Tax evasion and emotions: An empirical test of re-integrative shaming theory. *Journal of Economic Psychology*, 40, 49–61. <https://doi.org/10.1016/j.joep.2012.12.002>
- Cowell, F. A. (1992). Tax evasion and inequity. *Journal of Economic Psychology*, 13(4), 521–543. [https://doi.org/10.1016/0167-4870\(92\)90010-5](https://doi.org/10.1016/0167-4870(92)90010-5)
- Cullis, J., & Lewis, A. (1985). Some hypotheses and evidence on tax knowledge and preferences. *Journal of Economic Psychology*, 6(3), 271–287. [https://doi.org/10.1016/0167-4870\(85\)90013-3](https://doi.org/10.1016/0167-4870(85)90013-3)
- Devos, K. (2014). Factors influencing individual taxpayer compliance behaviour. In *Tax compliance Theory and the Literature* (Vol. 2, pp. 13–65). <https://doi.org/10.1007/978-94-007-7476-6>
- Dubin, J. A. (2007). Criminal investigation enforcement activities and taxpayer noncompliance. *Public Finance Review*, 35(4), 500–529. <https://doi.org/10.1177/1091142106295757>
- Eric, P. (2000). Law and Social Norms: The Case of Tax Compliance. *The Legal Construction of Norms*, 86(8), 1781–1819.
- Eriksen, K., & Fallan, L. (1999). Gender, exposure to tax knowledge, and attitudes towards taxation; an experimental approach. *Journal of Business Ethics*, 18(2), 387–402. Retrieved from <http://proquest.umi.com/pqdweb?did=39712230&Fmt=7&clientId=25620&RQT=30>

9&VName=PQD

- Falkinger, J. (1995). Tax evasion, consumption of public goods and fairness. *Journal of Economic Psychology*, 16(1), 63–72. [https://doi.org/10.1016/0167-4870\(94\)00038-C](https://doi.org/10.1016/0167-4870(94)00038-C)
- Gebrewahid, M. (2015). *Factors Affecting the Growth of Life Insurance in Ethiopia*. College of Business and Economics Department of Management Executive MBA Program.
- Geletaw, T. T. (2017). *Taxpayers ' tax compliance Behavior- Business profit taxpayers ' of Addis Ababa city Administration* (Vol. 5). Addis Ababa University, School of Business and Economics, Department of Accounting and Finance.
- Hamid, S. A. (2015). Understanding Culture in Tax Compliance: Applying Hofstede's National Cultural Dimensions on Tax Professionals in New Zealand. *PhD Proposal*, 1, 1–32.
- Hasseldine, J., & Li, Z. (1999). More tax evasion research required in new millennium. *Crime, Law and Social Change*, 31(2), 91–104. <https://doi.org/10.1023/A:1008324726125>
- Henk, E., Russel, W., & Dick, H. (1987). The Consequences of Different Strategies for Measuring Tax Evasion Behavior. *Journal of Economic Psychology*, 8, 311–337.
- Hite, P., & Hasseldine, J. (2001). A primer on tax education in the United States of America. *Accounting Education*, 10(1), 3–13. <https://doi.org/10.1080/09639280110034734>
- Jackson, B., & Milliron, V. (1986). Tax Compliance Research: Finding, Problems, and Prospects. *Journal of Accountinf Literature*, 5(1), 125–165.
- James, A., Brian, E., & Feinstein, J. (2006). Tax Compliance. *Journal of Economic Litrature*, 31(2), 386–408.
- James, A., Brian, E., & Jonathan, F. (2006). Tax Compliance. *Academy of Management Review*, 31(2), 386–408.
- James, S., Hasseldine, J., Hite, P., & Toumi, M. (2001). *Developing a tax compliance strategy for revenue services*. *Bulletin for International Fiscal Documentation*. 55(4), 158–164.
- James, Simon, & Alley, C. (2009). Tax Compliance , Self-Assessment and Tax

- Administration School of Business and Economics , University of Exeter. *Journal of Finance and Management in Public Services*, 2(2), 27–42.
- James, Simon, & Edwards, A. (2008). Developing tax policy in a complex and changing world. *Economic Analysis and Policy*, 38(1), 35–53. [https://doi.org/10.1016/S0313-5926\(08\)50005-1](https://doi.org/10.1016/S0313-5926(08)50005-1)
- Juahir, M., Norsiah, A., & Norman, M. S. (2014). Fraudulent Financial Reporting and Company Characteristics: Tax Audit Evidence. *Managerial Auditing Journal*, 28(2), 129–141.
- Kasipillai, J., & Abdul Jabbar, H. (2003). Tax compliance attitude and behaviour: Gender & ethnicity differences of Malaysian taxpayers. *The Malaysian Accountant*, (1), 1–7.
- Kidist, M. (2013). *Tax assessment Problems and Collection Procedure in Category C tax payers of Addis Ababa Nifas Silk sub-city* . Diss. Department of Accounting and Finance, Addis Ababa University, Ethiopia.
- Kirchler, E., Hoelzl, E., & Wahl, I. (2008). Enforced versus voluntary tax compliance: The “slippery slope” framework. *Journal of Economic Psychology*, 29(2), 210–225. <https://doi.org/10.1016/j.joep.2007.05.004>
- Kirchler, E., Muehlbacher, S., Kastlunger, B., & Wahl, I. (2010). Why pay taxes?: A review of tax compliance decisions. In *Developing Alternative Frameworks for Explaining Tax Compliance* (Vol. 7). <https://doi.org/10.4324/9780203851616>
- Lemessa, B. (2007). *Federal Income Tax Administration in Ethiopia: The Case of Employment and Business Income Taxes*. Msc. Thesis, Addis Ababa University.
- Loo, B. P. Y., & Chow, S. Y. (2006). China’s 1994 tax-sharing reforms: One system, differential impact. *Asian Survey*, 46(2), 215–237. <https://doi.org/10.1525/as.2006.46.2.215>
- Loo, E. C. (1968). *The influence of the introduction of self assesment on compliance behaviour of individual tax payers in Malaysia*. A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philososophy, The University of Sydney.
- Maciejovsky, B., Kirchler, E., & Schwarzenberger, H. (2007). Misperception of chance and loss repair: On the dynamics of tax compliance. *Journal of Economic Psychology*, 28(6), 678–691.

- Manaye, M. K. (2018). *Determinants of Taxpayers' Voluntary Compliance with Taxation: The Case of Wolaita Sodo and Tercha Town in Dawuro Zone*. 18(3).
- Marandu, E. E., Mbekomize, C. J., & Ifezue, A. N. (2015). Determinants of Tax Compliance: A Review of Factors and Conceptualizations. *International Journal of Economics and Finance*, 7(9), 207–218. <https://doi.org/10.5539/ijef.v7n9p207>
- Meaza, W. (2018). *Factors Affecting Tax Payers Compliance With the Tax System Category "A" Tax Payers in Addis Ababa* (Vol. 2).
- Michael, A., & Agnar, S. (1972). Income Tax Evasion: A theoretical Analysis. *Journal of Public Economics*, 1, 323–338. <https://doi.org/10.4324/9781315185194>
- Michael, R., Peggy, H., & Cassie, B. (1994). Understanding Attitudes Toward Progressive Taxation. *Oxford Journals*, 58(2), 165–190.
- Michael, W. (2002). Tax compliance and the psychology of justice: mapping the field. In *Taxing Democracy* (pp. 41–66). Retrieved from <http://www.ashgate.com/isbn/9780754622437>
- Modugu, K. P., & Anyaduba, J. O. (2014). Impact of tax audit on tax compliance in Nigeria. *International Journal of Business and Social Science*, 5(9), 207–215.
- Moges, A. (2020). *Determinants of Tax Compliance: In The Case of Value Added Tax Registered Individual Tax Payers in Debre Birhan A Thesis Submitted To The Department Of Accounting And Finance Debre Birhan University College Of Business And Economics In Partial Fulfilment*.
- Muluadam, A. (2015). Introduction to SPSS for windows, Version 20. In *raining Manual (PPT)*.
- Mumford, A. (2001). Marketing working mothers: Contextualizing earned income tax credits within feminist cultural theory. *Journal of Social Welfare and Family Law*, 23(4), 411–426. <https://doi.org/10.1080/09649060110081294>
- Nkwe, N. (2012). Tax Payers' Attitude and Compliance Behavior among Small Medium Enterprises (SMEs) in Botswana. *Business and Management Horizons*, 1(1), 113. <https://doi.org/10.5296/bmh.v1i1.3486>
- Nsubuga, L. F., Sai, F. T., & Naatu, F. (2017). Public Awareness of Tax Reforms in Ghana: Implication for Tax Evasion in the Wa Municipality. *International Journal of*

- Business, Humanities and Technology*, 7(2), 63–71.
- Nur, T., & Kanybek, D. (2008). Determinants of business tax compliance. *B.E. Journal of Economic Analysis and Policy*, 8(1). <https://doi.org/10.2202/1935-1682.1683>
- Osebe, R. (2013). An Analysis of Factors Affecting Tax Compliance in the Real Estate Sector in Kenya: A Case Study of Real Estate Owners in Nakuru Town. *Journal of Emerging Issues in Economics, Finance and Banking (JEIEFB)*, 1(4), 7–9.
- Palil, M. R. (2010). *Tax Knowledge and Tax Compliance Determinants in Self Assessment System in Malaysia*. A thesis submitted to The University of Birmingham for the degree of Doctor of Philosophy, UK.
- Palil, M. R., & Rusyidi, M. A. (2013). The Perception of Tax Payers on Tax Knowledge and Tax Education with Level of Tax Compliance: A Study the Influences of Religiosity. *ASEAN Journal of Economics, Management and Accounting*, 1(1), 118–129.
- Puspitasari, E., & Meiranto, W. (2014). Motivational postures in tax compliance decisions: an experimental studies. *International Journal of Business, Economics and Law*, 5(1), 100–110.
- Richardson, G. (2006). Determinants of tax evasion: A cross-country investigation. *Journal of International Accounting, Auditing and Taxation*, 15(2), 150–169. <https://doi.org/10.1016/j.intaccaudtax.2006.08.005>
- Roth, J., Scholz, J., & Witte, A. (1989). *Taxpayer Compliance, Volume 1: An Agenda for Research (Vol. 1)*. (Vol. 1). University of Pennsylvania Press.
- Sandmo, A. (2005). The theory of tax evasion: A retrospective view. *National Tax Journal*, 58(4), 643–663.
- Sarker, T. (2003). Improving Tax Compliance in Developing Countries via Self-Assessment Systems - What Could Bangladesh Learn from Japan? *Asia-Pacific Tax Bulletin*, 9(6), 1–34.
- Selamawit, W. (2012). *Category “C” Tax assessment and Collection Problems; The case of Kebele 01/18 of Lideta Sub-city*. Thesis submitted to department of Accounting and finance, St. Mary University, Ethiopia.
- Shafi, A. (2019). Determinants of Tax Compliance in the Case of Value-Added Tax

Registered Individual Tax Payers in Addis Ketema Sub-city.

- Shiferaw, N., & Tesfaye, B. (2020). Determinants of Voluntary Tax Compliance (The Case Category A and B Taxpayers in Dire Dawa Administration). *International Journal of Scientific and Research Publications (IJSRP)*, 10(06), 982–996. <https://doi.org/10.29322/ijsrp.10.06.2020.p102119>
- Singh, K. D., Barnes, G. R., & Hillebrand, A. (2003). Group imaging of task-related changes in cortical synchronisation using nonparametric permutation testing. *NeuroImage*, 19(4), 1589–1601.
- Singh, V., & Bhupalan, R. (2001). The Malaysian self-assessment system of taxation. *Tax National*, 3(1), 12–17.
- Siqueira, M. L., & Ramos, F. S. (2005). The Economics of Tax Evasion: Theories and Empirical Evidences. *The Revision of Contemporary Economics*, 9(3), 555–581. <https://doi.org/10.1590/s1415-98482005000300004>
- Snow, A., & Warren, R. (2005). Ambiguity about audit probability, tax compliance, and taxpayer welfare. *Economic Inquiry*, 43(4), 865–871.
- Song, Y., & Yarbrough, T. (1978). Tax Ethics and Taxpayer Attitudes: A Survey. *American Society for Public Administration*, 38(5), 442–452.
- Spicer, M. W., & Beckler, L. A. (1980). Fiscal Inequity and Tax Evasion: an Experimental Approach. *National Tax Journal*, 33(2), 171–175. <https://doi.org/10.1086/ntj41862299>
- Tilahun, A., & Yidersal, D. (2014). Determinants of Tax Compliance Behavior in Ethiopia: The Case of Bahir Dar City Taxpayers. *Journal of Economics and Sustainable Development*, 5(15), 2222–1700.
- Tittle, C., & Michael, W. (2017). Religiosity and Deviance: Toward a Contingency Theory of Constraining Effects. *Social Forces*, 61(3), 653–682.
- Torgler, B., Demir, I. C., Macintyre, A., & Schaffner, M. (2008). Causes and Consequences of Tax Morale: An Empirical Investigation. *Economic Analysis and Policy*, 38(2), 313–339. [https://doi.org/10.1016/S0313-5926\(08\)50023-3](https://doi.org/10.1016/S0313-5926(08)50023-3)
- Torgler, B., & Friedrich, S. (2004). *Attitudes Towards Paying Taxes in Austrai: An Emperical Analysis*.

- Trivedi, V. U. and, & Chung, J. (2003). Tax Compliance Behavior Viswanath Umashanker Trivedi Persuasion and Gender on] mm chung. *Journal of Business Ethics*, 47(2), 133–145.
- Trivedi, V. U., Shehata, M., & Lynn, B. (2003). Impact of Personal and Situational Factors on Taxpayer Compliance: An Experimental Analysis. *Journal of Business Ethics*, 47(3), 175–197. <https://doi.org/10.1023/A:1026294332606>
- Vadde, S., & Gundarapu, S. (2012). Factors that influence rental tax payers' compliance with tax system: an empirical study of Mekelle city, Ethiopia. *Journal of Arts, Science & Commerce*, 4(2), 41–52.
- Wärneryd, K. E., & Walerud, B. (1982). Taxes and economic behavior: Some interview data on tax evasion in Sweden. *Journal of Economic Psychology*, 2(3), 187–211. [https://doi.org/10.1016/0167-4870\(82\)90003-4](https://doi.org/10.1016/0167-4870(82)90003-4)
- Yemane, T. (1973). *Experimental study on package instruction and traditional instructional method in teaching introduction to diesel engines*,. (Doctoral dissertation, University of Wisconsin--Stout).
- Yesegat, W. A., & Fjeldstad, O. (2016). *Business people ' s views of paying taxes in Ethiopia*.
- Yohannes, M., & Zerihun, T. (2013). *Assessment of Challenges by business community tax payers of Dire Dawa Administration*. Research Project by Dire Dawa Custom and Revenue Authority.

ANNEXE I: QUESTIONNAIRE



ST. MARY'S UNIVERSITY
MASTER OF BUSINESS ADMINISTRATION (MBA)
RESEARCH QUESTIONNAIRES TO BE FILLED BY TAX PAYERS

Dear Respected Respondents

This questionnaire is designed to collect data for a research on: Determinants of Voluntary Tax Compliance Practices: a case of Addis Ababa City Government Tax Office. The information is going to be used as a primary data for this research. Therefore, your frank response and participation in responding to the questions will be extremely valuable for the success of this study. Hence, I request you to fill the questionnaire carefully and at your own best knowledge in all regard. Please note that confidentiality of your response is secured and used only for the purpose of this study.

If you need to know the final results of the study, you may contact me.

Thank you in advance for your voluntary participation.

Kind Regards

Kassu Felmi Merera

Address

For any clarification please contact me by the following Addresses:

Cell phone: 09 11 35 84 57 or E-mail: makeme3584@gmail.com

General Instructions for respondents

- ✓ No need of writing your name or your business name.
- ✓ Answer options are available please tick (✓) in the appropriate box.
- ✓ The questionnaire should have to be filled only by those who have ≥ 2 years experiences in the business.
- ✓ Use the back sheet if you have more idea and need to explain broadly.

Nature of the Questionnaire

The questionnaire has three parts. Part I addresses general background of information about the respondents, while part II indicates dependent variables, which are voluntary tax compliances. Part III contains questions about feeling of the respondents on the independent variables. Generally, all the questions are closed ended.

Note: SD-Strongly Disagree, D-Disagree, N-Neutral, A-Agree, and SA-Strongly Agree

Part I: General Information about respondents

1. Your Gender: Male Female
2. your Age:

Years	Tick (✓)
< 30	
31-45	
46-60	
Above 60	

3. Your educational status:

Ed. Level	Tick (✓)
PhD	
MA/MSc	
BA/BSC	
College Diploma	
Others	

4. How long have you been on your business?

Years	Tick (√)
2-4	
5-10	
10-15	
Over 15	

Part II: Voluntary Tax compliance response

S.N	Statement	SD	D	N	A	SA
1	Taxpayers not evade taxes most of the time					
2	I pay my tax on time					
3	I pay my correct amount of tax					
4	I believe that I declare my tax return on time					

Part III: Determinants of Voluntary tax compliance

1. Economic Factors

1.1 Government expenditure (Spending)

S.N	Statement	SD	D	N	A	SA
1	I believe that the government's spending is reasonable.					
2	I believe that the taxpayers have a good impression of government spending.					
3	I believe that public investment by the government is transparent.					
4	I believe that the tax revenue collected by the tax administration office is distributed fairly.					
5	I believe that the government does not waste too much money.					

1.2 Tax audit

S.N	Statement	SD	D	N	A	SA
1	I don't believe that tax audit increases tax revenue.					
2	I believe that the tax authority has been investigating all tax reports fairly.					
3	I believe that auditing services are conducted on time.					

2. Institutional Factors

2.1 Service delivery of tax office

S.N	Statement	SD	D	N	A	SA
1	I believe that the existing modernized taxpayer registration system provide good services.					
2	I believe that employees of tax office can quickly adapt to new technology developments in order to provide better service.					

3	I believe that there is positive relationship between tax officials and taxpayers that helps us to get good services.					
4	I believe that tax officials have sufficient skills to provide quality services.					

2.2 Penalties and fines of tax office

S.N	Statement	SD	DA	N	A	SA
1	I believe the penalty rates are very high and I cannot afford to pay the penalty.					
2	I believe that the tax enforcement is very strong.					
3	I believe that the tax authority is not tolerant.					

3. Social Factors

3.1 Referral group

S.N	Statement	SD	D	N	A	SA
1	My friends do comply; as a result they have got recognition from government.					
2	My parents comply with their tax, so they don't worry about penalty.					
3	My friends comply with their tax and they have good relationship with the tax offices.					

3.2. Perception of equity and fairness of taxes

S.N	Statement	SD	DA	N	A	SA
1	I believe that higher income earners are paying more taxes than lower income earners.					
2	I believe that I am paying about the same amount of taxes as others making the same income.					
3	By paying right amount of tax, I believe that other people especially the poor will get the benefit.					

4 Individual Factors

4.1 Knowledge about tax

S.N	Statement	SD	D	N	A	SA
1	I know all tax laws with regard to my business.					
2	I took part in several tax-related training sessions provided by					

	the tax administration.					
3	Tax authority-created awareness regarding taxation that helps us improving our tax knowledge.					
4	I have enough information about tax system					
5	I understand that I should pay taxes within the prescribed period					
6	I know penalties and fines related to not declaring and paying taxes timely.					

4.2 Personal financial Status

S.N	Statement	SD	D	N	A	SA
1	My income always exceeds my expenditure.					
2	I am paying my tax before non-business related expenditures.					
3	Despite increase in basic needs, I am paying my tax timely.					
4	Even though my cash level is low I prefer to declare my taxes to safely run my business.					

Customers of AACATO

No	Sub-City	Customers Category-A	Customers Category –B
1	Arada	5262	6805
2	Addis Ketema	1575	2279
3	Lideta	3015	1723
4	Kolfe	4435	5536
5	Akaki	4855	4212
6	Kirkos	5964	4453
7	Bole	6605	4629
8	Yeka	5032	3219
9	N/Silk Lafto	6098	8114
10	Gullele	5627	1581
11	Merkato-1	5056	1639
12	Merkato-2	7020	1009
13	A.A 1	3691	-
14	A.A-2	3659	-
15	LTO	745	-
Total		68,639	40,203
Grand Total		68,639 + 40,203 = 108,842	

Source: (AACATO Management Report, 2019)