



Addis Ababa University

College of Business and Economics

Department of Accounting and Finance

Determinants of Tax Compliance in Ethiopia: The case of Federal Large Tax Payers.

By

Mahlet G/Egziabher

A Thesis Submitted to the Department of Accounting and Finance in Partial Fulfillment of the Requirements for the Master of Science (MSc) in Accounting and Finance

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Supervisor

Degefa Duressa (PHD)

May, 2020

DECLARATION

I declare that:

- I. This Study is undertaken by me, Mahlet G/Egziabher W/Michael, department of Accounting and finance, school of Business and Economics, Addis Ababa University, Ethiopia
- II. The research work is based on my desire to investigate the determinant of tax compliance in Ethiopia particularly in the federal large taxpayers.
- III. This research is my original work and to the best of my knowledge, it has not been submitted elsewhere for academic achievement (any degree or diploma)
- IV. The ideas and views of other researchers, authors and scholars expressed in the work are duly acknowledged.

Declared by:

Name _____

Sign _____

Date _____

Confirmed by:

Name _____

Sign _____

Date _____

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Abstract

The aim of this thesis was to test the relationship between tax compliance and its determinant factors in the Ethiopian tax payers case. This study used an explanatory research design in which the cause and effect relationship between tax compliance and its determinant factors is tested. In doing so a correctional data was collected from a sample of 269 tax payers through survey. The samples were drawn from a total population of 820 federal large tax payers in Ethiopia using simple random and systematic sampling technique. The data was analyzed using quantitative approach, descriptive study (mean and standard deviation) and inferential statistics (regression analysis). The descriptive analysis result showed that tax payers have more than average level of tax compliance behavior in the seven-point Likert scale. Scoring more than average value, they also think that the tax system is equitable and fair, there is possibility of detection and penalty, have higher motivational posture, believe that the government spends the tax the tax appropriately and the behavior of other tax payer's influence their tax compliance behavior. However, the knowledge and education level they have about tax related issues is less than average in the seven- point Likert scale. The regression analysis showed that tax compliance behavior has significant as well as positive relationship of with perception of equity and fairness towards the tax system, the influence of peer groups in the surrounding environment, the possibility of detection and penalty, motivational posture and perception towards government spending. The relationship between tax compliance behavior and knowledge and education resulted to be significant but negative. Due to the fact that the determinant factors in this study have significant relationship with tax compliance, it is recommended that tax authority should set systems that makes the tax system equitable and fair , positive attitude and moral obligation to pay tax, detect non-compliance behavior and reinforce complying behavior and proper spending of tax avoiding misuse.

Key Words: *Tax compliance. Motivational posture. Tax Avoidance. Tax Evasion. Model-Fit, Multi-collinearity.*

Table of Contents

Contents

Acknowledgments	i
Abstract	ii
Table of Contents	iii
List of Figure and Table	vi
Chapter one: Introduction.....	1
1.1 Background of the study.....	1
1.2 Statement of the Problem.....	3
1.3. Research Questions.....	6
1.4. Research Objective	6
1.4.1 Specific Objectives.....	6
1.5. Hypothesis of the Study.....	7
1.6. Significance and contribution of the study	7
1.7 Scope and Limitation of the study	8
1.8 Organization of the paper	8
Chapter Two: Literature Review.....	10
2.1. Theoretical Review	10
2.2. Empirical Review	15
2.2.1. Summary of Empirical Studies in the Ethiopian Context	23
2.3. Hypothesis of the Study	24
2.3.1. Relationship of Tax compliance Behavior with Tax knowledge and Education... ..	24

2.3.2 Relationship of Tax compliance Behavior with Detection and Penalty	25
2.3.3 Relationship of Tax compliance with Motivational Posture	25
2.3.4 Relationship of Tax compliance Behavior with Tax Payers' Perception on government spending	26
2.3.5 Relationship of Tax compliance Behavior with Equity and Fairness	26
2.4. Proposed Conceptual Model.....	27
Chapter Three: Research Methodology.....	28
3.1. Research Design	28
3.2. Methods Adopted	28
3.2.1. Sampling Design.....	28
3.2.2. Instrument Design	29
3.2.3. Data Analysis	30
Chapter Four: Data Presentation, Analysis and Interpretation.....	33
4.1. Introduction	33
4.2. Response Rate.....	33
4.3. Profile of Respondents.....	33
4.4. Results of Descriptive Statistics	35
4.5. Regression Analysis Results.....	37
4.5.1 Reliability of the Instruments.....	37
4.5.1. Model Fit.....	39
4.5.3 Cross-validation of the Model (The Adjusted R^2).....	40
4.5.2. Multicollinearity Test.....	41
4.5.6 Coefficients of the Multiple Regression Analysis.....	42

Chapter Five: Conclusion and Recommendations 46

 5.1. Conclusion 46

 5.2. Recommendations 47

Reference..... 48

APPENDECIES: I..... 50

APPENDECIES: II 58

List of Figure and Table

Figure 2.1. Proposed Conceptual Model of the Study	27
Table 4.1 Frequency Table of Business Sector	34
Table 4.2 Frequency Table of Legal forms of Business	34
Table 4.3: Frequency of Respondents by Number of Years They Stayed in Business.....	35
Table 4.4. Results of Descriptive Statistics.....	35
Table 4.5: Summary of scales & Cronbach’s alpha values.....	38
Table 4.6: Model Summary.....	39
Table 4.7: ANOVA Table	40
Table.4.8: Multicollinearity Test.....	41
Table 4.9: Coefficients of Dependent and Independent Variables.....	42

Chapter one: Introduction

1.1 Background of the study

Tax is a mandatory payment by the people for which there is no direct return to the taxpayers or tax is a compulsory financial obligation imposed by the government without any expectation of return (Saleemi,2008). Tax imposes a personal obligation on the people who are liable to pay it (Tilahun, 2019).

The act of levying taxes, called taxation, is believed to be central for the economic, social and political development of country. There are three important roles that a strong taxation system can play in national development. These are revenue generation, lessening inequality and promoting good governance (Edward, Christian, Mbekomizel & Ifezue, 2015). The preferences of the government in terms of redistribution of wealth and equity is revealed by the structure of the tax system. It also measures the amount of resources available for social protection and shapes the size of the welfare state. Governments may try to use tax policy to encourage certain types of economic behavior, considering its impact on economic decisions. In the analysis of the relationship between the state and the society, tax policy provides an invaluable point of observation (Lamb, Lymer, Freedman, & James Eds., 2005).

In order to account for social programs and public investments governments need sustainable sources. To achieve the common goal of a prosperous, functional and orderly society it, it is important to have programs that are providing health, education and infrastructure services. Taxation is a key ingredient in the social contract between citizens and the economy. Besides it is used to provide public goods and services. Thus, how taxes are collected or raised and spent can determine a government's very legitimacy. In order to encourages the effective administration of tax revenues and, more widely, good public financial management the governments must be accountable (World Bank, 2018).

However, there has been growing concern for tax authorities and public policy makers with regard to tax compliance as tax evasion seriously threatens the capacity of government to raise public revenue (Chau & Leung, 2009). According to Brown and Mazur (2003), tax Compliance is not a one-sided measure, rather it has many sides to it and theoretically it can be defined by considering three distinct types of compliance such as payment compliance, filing compliance, and reporting compliance of tax. Tax compliance is a true reporting of the tax base, correct computation of the liability (accuracy), timely filing of the return, and timely payment of the amounts due (timeliness) (Tilahun, 2019). On the other hand (Palil & Mustapha, 2011) describes tax compliance as an individual act of filing tax returns, accurately declaring all income for tax purposes and paying tax liabilities on the due dates as stipulated by the authority or applicable tax laws.

Tax compliance is determined by ethics, legal environment and other situational factors (Song and Yarbrough 1978). In accordance with the laws, regulations, and court decisions the scope of tax compliance includes, reporting income and paying all taxes (Sub-group, 2004). Voluntary compliance of the public to the tax laws has been deemed to be the most cost-effective means of collecting taxes. The administration of the tax system will be more expensive whenever we use enforcement activities to collect tax (Alink & van Kommer, 2015).

In order to maximize its revenue and support its public services Ethiopian Ministry of Revenue is operating with 48 branches in the country and have more than 14000 employees in all the branches. The government collects tax to finance its operation and provide public services. But it is facing difficulty in collecting the required amount of tax due to the non-compliance behavior of tax payers (Tilahun, 2019). Consequently, this paper is set to investigate factors affecting tax compliance behavior of tax payers in the Ethiopian context. Tax payers are categorized under small, medium and large tax payers. The current study however collects data from large tax payers at the federal level.

1.2 Statement of the Problem

Mobilizing revenue is a way for governments to create fiscal space, provide essential public services, and reduce foreign aid and single resource dependence. There is an urgent and obvious need for more revenues to enable resource poor states to provide and maintain the most basic public services and ensure economic development. Among others, tax as financial assets of a state play vital role in providing these services and promote country's development (Nurkhinet *al.*, 2018). The reality is however different in that those with political power and economic ability are few and do not want to pay tax. Moreover, those without political power are many and do also resist paying taxes (Fjeldstad & Rakner, 2003). The domestic tax bases in most African countries are undermined by widespread tax avoidance and evasion (Ali, Fjeldstad, Sjursen, & Insitute, 2013).

The Ethiopian tax collection performance is not different and has been below expected level (Tadesse and Hagos, 2015). According to the African Economic Outlook (2015) report, the contribution of tax to the Ethiopian GDP is significantly lower than the amount it should contribute and even lower than Sub-Saharan countries. This is partially due to the fact that tax payers do not pay the amount they are expected to pay (Tadesse & Goitom, 2015). They further claimed that tax non-compliance has been seriously affecting the performance of the country in raising revenue to support its economic development. These facts are indications that tax non-compliance is among the current issues that need more attention as it causes more problems to the economy of the country if it is not addressed.

Tax noncompliance is a burning issue especially in developing country who get most of the finance from external aid. Ethiopia, like any other developing countries, faces difficulty in raising revenue to the level required for the promotion of economic growth through making different tax reforms for improving revenue generation, enhancing the efficiency of tax administration and improving equity in the tax system (Orkaido Deyganto, 2018).

Tax noncompliance is a growing concern for Ethiopia tax authorities and public policy makers since it seriously threatens the capacity of governments to raise required public revenue (ERCA, 2015). Tax seriously slackening tax administration and tax revenue performance in Ethiopia, as it does in some other developing countries. Ethiopia has experienced a reliable surplus expenditure over revenue for a sufficiently long period of time (Tadesse & Goitom, 2014). The actual tax revenue as a share of GDP (approximately, 13 %) is low compared to that of the average for Sub-Saharan African and low-income countries which is about 15.1% (World Bank Group, 2016, IMF 2018). The share of tax revenue in GDP hardly changed, suggesting that tax revenue has failed to grow as much as expected (World Bank Group, 2015).

Currently the government of Ethiopia is not collecting enough tax (Kaberuka, Gurría, Clark, 2015) due to non-compliance behavior of tax payers (Tadesse & Goitom, 2015; IMF, 2015). There has been series of studies conducted to analyze and identify the determinants of tax compliance behavior in different category of tax payers in Ethiopia (Tadesse and Goitom, 2014; Geletaw, 2015; Redae and Sekhon, 2015; Niway & Wondwossen, 2015), but the results show inconsistency as to which factor determines tax compliance behavior. For example, Tadesse and Goitom (2014) identified factors such as the probability of being audited, perception of government spending, perception of equity and fairness, penalty and tax knowledge and concluded that tax knowledge has not significant effect. Geletaw (2015) six tax compliance determinants such as tax knowledge; feeling of fairness; the influence of peer groups; income level of taxpayers; detection & punishments and conclude that perception on government spending has not significantly related. Redae and Sekhon (2015) found tax knowledge to have significant relationship. Niway & Wondwossen (2015) identified tax knowledge, simplicity of tax returns and administration, perception on fairness and equity, perception on government spending, probability of auditing, and the influence of referral group as determinant factors that influence voluntary compliance behavior. Habtamu (2016) also identified four factors including trust and power of tax authority, tax knowledge and education, fines and penalties and perceived fairness of tax system. Akalu (2016) identified business size, business age and tax psychological cost, tax liability, compliance cost and tax rate structure are significant determinants in at least one type of non-compliance behavior. Business sector, tax complexity, fairness in the tax rate/ tax system and tax deterrence sanctions have an

insignificant relationship with the non-compliance behavior. Kanbiro (2018) found gender, age, lack of tax knowledge, simplicity of tax system, awareness on penalty, probability of being audit, and perception on tax rate were found to be key factors influencing taxpayers' voluntary compliance attitude.

Variables such as education level, tax authority efficiency, peer influence, occupation, income level of taxpayers, perception on government speeding, and perception on fairness and equity have no significant influence on tax voluntary compliance attitude. According to Ezana (2018) fairness/equity, fines & penalties, compliance cost, liquidity, the strength of the tax authority, knowledge/ awareness level of tax payers, socio- cultural factors and gender of taxpayers were found to be the determinant factors that affect taxpayers' compliance. Finally, Abdu & Wondimu (2019) showed that tax compliance was positively affected by education level of tax payers, tax knowledge and awareness of tax payers, simplicity of the tax system, attitude of tax payers towards tax, perceived role of government expenditure, and rewarding scheme for loyal tax payers.

Though these researchers in the Ethiopian context identified factors affecting tax compliance behavior, the results are not similar implying the existence of a gap as to which factors are significant in affecting tax compliance behavior. This led the current study to make further study to identify significant factors affecting tax compliance behavior in the Ethiopian context. Consequently, six factors such as knowledge and education of tax payers, equity and fairness of the tax system, motivational posture of tax payers, detection and penalty, peer group influence and perception on government spending have been included in this study as relevant factors in the Ethiopian tax compliance case. These factors are selected based on previous findings, personal experience and/or observation and preliminary interviews with experts in the area and the tax payers.

1.3. Research Questions

This study aimed at testing the relationship between tax compliance and determinant factors in Ethiopia tax payers. In order to address the research problem stated in the previous discussions and identify the factors that determine tax compliance issues in the Ethiopian tax payers the following research questions are forwarded. These questions are related to the possible determinants of tax compliance. However, only determinants which have been revealed as highly relevant in the literatures are included here. This study tried to answer more questions in its finding through the questions raised here.

- 1.3.1. Do the tax knowledge and education of tax payers affect tax compliance behaviors?
- 1.3.2. Do equity and fairness in the tax system of the country affect tax compliance behavior?
- 1.3.3. Do peer group behaviors relate to tax payment affects tax compliance behaviors?
- 1.3.4. Do the detection and penalty/administration and criminal/ affect tax compliance behaviors?
- 1.3.5. Does motivational posture used by the tax authority affects tax compliance behaviors?
- 1.3.6. Do the perception of tax payers on government spending impacts tax compliance behavior?

1.4. Research Objective

The general objective of this study is to examine the determinant of tax compliance behaviors in the Ethiopian tax system. In doing so, six factors are identified from the tax literature and empirical evidences in the Ethiopian tax system.

1.4.1 Specific Objectives

This study specially aimed at

- 1.4.1. Testing the relationship between knowledge and education and tax compliance
- 1.4.2. Examining relationship between equity and fairness and tax compliance behavior?
- 1.4.3. Testing the relationship between peer group behaviors and tax compliance behaviors?
- 1.4.4. Testing the relationship between detection and penalty and tax compliance

behaviors?

1.4.5. Testing the relationship between motivational posture and tax compliance behaviors?

1.4.6. Testing the relationship between the perception of tax payers on government spending and tax compliance behavior?

1.5. Hypothesis of the Study

The following section forwards hypothesis for the relationship between tax compliance and variables affecting it. Issues of how each hypothesis are evolved from background theories are discussed in detail in chapter two.

1.5.1. Hypothesis 1: Tax knowledge and education of tax payers have positive and significant effect on tax compliance behaviors of tax payers

1.5.2. Hypothesis 2: Detection and penalty of tax non-compliance behaviors have positive and significant effect on tax compliance behavior of tax payers

1.5.3. Hypothesis 3: Motivational posture of tax payers has positive and significant effect on tax compliance behavior of tax payers

1.5.4. Hypothesis 4: Peer group behaviors related to tax payment have positive and significant effect on tax compliance behaviors of tax payers

1.5.5. Hypothesis 5: Perception of tax payers on government spending has positive and significant effect on tax compliance behavior of tax payers

- *Hypothesis 6: Equity and fairness in the tax system of the country have positive and significant effect on tax compliance behavior of tax payers*

1.6. Significance and contribution of the study

There are evidences that tax non-compliance is among the current issues that needs more attention as it causes more problem to the economy of the country if it is not addressed by the concerned parties. Past studies as to what creates tax compliance behavior in the Ethiopian tax payers case have been inconsistent. Different studies showed different results in defining factors which affect tax compliance behavior in the Ethiopian context. Consequently, this study draws six relevant factors expected to affect tax compliance behavior from past studies in both the Ethiopian and others tax literatures. In doing so the current study have both practical and academic

contributions. That means, identifying factors that determine tax compliance helps both the tax administrators and researchers on the subject matter to develop effective tax systems incorporating these factors in the tax compliance models.

In its contribution to the practice, it helps tax policy makers and tax administrators to get an opportunity to pinpoint specific factors which affect tax compliance behavior of Ethiopian tax payers and make appropriate policy and decision to bring the desired behavior. This consequently improves the tax collection performance of the respective authority and raise tax revenue to support the economic development of the country.

The findings of this study also contribute to the literature in that it helps the literature to identify the factors that determine the tax compliance behavior of tax payers in the developing countries context with the assumption that the contexts are similar. Such studies help the literature to be more comprehensive and exhaustive studying tax compliance behavior and its determinant factors in different contexts. The findings as to which factor determines tax compliance behavior in the Ethiopian tax payers' may work for other developing countries context too.

1.7 Scope and Limitation of the study

The current study addresses only Federal large tax payers and does not include medium and small tax payers due to the fact that significant amount of tax is collected from these group and convenient to get the data easily. Moreover, this study covers only federal tax payers located at Addis Ababa; regional tax payers are not included. As a result, the generalizability of the findings of this study are limited to the tax payers included here. It may not be applied to small and medium tax payers due to the fact that they may have their own characteristics related to their size that makes them different in their tax compliance behavior.

1.8 Organization of the paper

The paper contains five chapters. Chapter one cover introduction part which include background of the study, statement of the problem, research Questions, research objective, hypothesis of the study, significant of the study and scope and limitation of the study. The second chapter contains Literature review. The third chapter covers methodology. The fourth

chapter covers data analysis and discussions and the last chapter addresses Summary of major finding, conclusions and recommendation of the study.

Chapter Two: Literature Review

2.1. Theoretical Review

Everywhere in the world, whether rich or poor, people cannot run away from the reality of sharing the use of public goods and services; this in turn imposes on individuals the need to be putting some percentage of income into a government fund account. Examples of the public goods that people use are roads, municipal services, power, and other public infrastructures which have favorable results for many families, industries, business enterprises and the general public. The supply of such public good is mainly done by government or public agencies this is because of their non-rivalry and non-excludability nature. The goodness of using public goods is that as one person uses there is no reduction in terms usage for others. It also has to be noted that the usage or consumption of public goods government or public officials does not exclude others from doing same as the term suggests it is for the public and not meant for only one person. However, there are public goods or services whose nature then makes it impossible for private suppliers to benefit from due to the market prices like other commodities. As (Jira, Fantahun, Dieter, Gerhard, 2005:7) Rightly puts it “Government involvement in the supply of public goods is inevitable and can only be done if the public pays taxes for the production and supply of such goods”.

Throughout history, Taxes have been recognized as the basis of the country’s development. consequently, the issue of tax calculation, tax debts and other related tax administration will give a huge problem for the government and revenue authority offices (Redae, Redae, & Sekhon, 2015). The Dominant idea as far as tax is concerned in the 19th century was that taxes should serve mainly to finance the government , nevertheless today governments have utilized taxation in other than merely fiscal purposes also according to American economist Richard A. Musgrave the purpose of taxation is, attributable to the objectives of resource allocation, income redistribution and economic stability than just fiscal purposes (Charles et’al., 2019).

Reporting of all incomes and payment of all taxes by fulfilling the provisions of laws, regulations and court judgments is what is normally regarded as tax compliance (Alm, Bloomquist, & Mckee, 2013). The in-depth definition of tax compliance as put by (Song and Yarbrough 1978) is the 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. There are three distinct types that lead to the consideration of tax payers compliance namely: payment compliance; filing compliance; and reporting compliance. Together these three mutually exclusive and exhaustive measures provide a comprehensive look at overall taxpayer's compliance, which would feed into estimates of the Tax Gap (Brown and Mazur, 2003).

Compliance can be voluntary or enforced compliance. Voluntary compliance comes in when there is trust and cooperation between the tax authority and taxpayer and it also largely depends on the willingness of the taxpayer to comply with tax authority's directives and regulations. On the other hand, enforced compliance is normally used where there is a presence of distrust and lack of cooperation between authority and taxpayer, this in turn creates tax hostile climate, which eventually allows authorities to enforce compliance through threats and application of audit and fine (Kirchler, 2007).

Tax compliance has also been divided into two perspectives, namely compliance in terms of administration and compliance in terms of completing (accuracy) the tax returns. Compliance in pure administrative 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. In contrast, the wider perspective of tax compliance requires a 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 (Geletaw, 2015).

McBarnet (1998) also suggested that tax compliance should be perceived in three ways, namely;

- a) Committed compliance - taxpayers' willingness to pay taxes without complaint;
- b) Capitulative compliance - unwillingly giving in and paying taxes and
- c) Creative compliance - engagement to reduce taxes by taking advantage of possibilities to redefine income and deduct expenditures within the bracket of tax laws.

To achieve compliance level of tax, it is imperative to identify the most important determinant factors of tax compliance. In theory, there are different models that show factors affecting tax compliance. In the current study theoretical foundations/models for explaining tax compliance behavior are reviewed. The different models also put across different factors which facilitating in explaining the tax compliance behavior of tax payers. However, there is no ‘one model fits all’ to enlighten more on the tax compliance behavior. There can never be one universal’ model for studying compliance behavior, as several factors usually influence individuals’ decision to comply (or not) with tax payments. These factors typically vary from country to country and from one situation to another. The current models that help in the study of tax compliance have (individually and collectively) given more insights into understanding taxpayer compliance, hence tax compliance researchers can choose on whether to combine the models that best suit their setting and situations facing them.

Different theories/models have been used to explain tax compliance. However, there are only five models/theories of tax compliance which have been mostly adopted in the tax compliance research (OECD Forum of Tax Administration, 2010) and these are Deterrence; Social Psychology, Fiscal Exchange, Comparative Treatment, Political Legitimacy and Trust in Government. These models present arguments as to how tax compliance is explained and which factors are logically related to it. The following section discusses each models/theory briefly.

i. The (Economic) Deterrent Model

Behavior is influenced by factors such as, tax rate (which determine the benefit of tax evasion) and penalties for fraud and probability of detection (which determine costs) is the theory of the economic or deterrent model. The economic deterrent model believes and views that the individual taxpayer as a rational economic agent, who measures the costs (determined by probability of detection and penalties for fraud) and benefits (determined by tax rate) of evading taxes. And the choice to pay or not to pay depend on respectively on the cost of noncompliance higher than paying or the benefit of non-compliance outweighs the costs (Walsh, 2012). However, with this assumption the down-side is that the tendency for evasion will be higher when there are low audit probabilities and low penalties and if there is a high

tendency for detection and penalties are severe, fewer people will evade taxes (Fjeldstad, Schulz-Herzenberg and Sjursen, 2012).

ii. Social-psychology Models

This is the theory of reasoned action and it states and suggests that individuals form their behavioral intentions on the bases of two basic determinants which is personal factors and social influences (McKercher and Evans, 2009). The two determinants are commonly referred to as personal norms and social norms respectively and they have become the focus of studies based on social psychology theories explaining taxpayer behavior.

Personal norms defined as the actual rooted beliefs or thinking about what one should do or not to do (OECD, 2010). According to (Franzoni, 1999) “They are in most cases difficult to change and often beyond the reach of public policy”, since they take a long time of socialization processes to be developed (OECD, 2010). Personal norms show the taxpayers values, tax ethics, tax mentality, and tax morale in the context of taxpayer behavior which influences attitudes towards tax compliance. According to Sour (2004) contended that whenever involved in the acts of evasion might bring feelings of anxiety, guilt or negative self-image in taxpayers.

Social norm, according to Alm (1999) is “a pattern of behavior that is judged in a similar way by others and therefore sustained in part by social approval or disapproval”. So, for people which is commonly discuss their tax issue with friends, family members, and work collages are affects tax compliance (Sour, 2004). Therefor the taxpayers choice laid on two fold as it is based on the fact that an individual is most likely to comply with tax requirements if he believes members of his reference groups also comply or just as he is also likely not to comply if he believes that members of his referent group do not comply (Bello, 2014).

iii. Fiscal Exchange

The fiscal exchange theory is developed from the economic deterrence and the social psychology models (McKerchar and Evans, 2009), and the government and the taxpayers contract built upon on the existence of social, relational or psychological contract (Bello,2014). In this model the public service that government present is viewed as a motivating factor for taxpayer compliance, especially when the taxpayers value the goods and services they are receiving from the government (Bello, 2014). According to Fjeldstad, et al. (2012) the taxpayers may give up some of its purchasing power in return for government services with the exchange being largely conditional and varying as the government vary in its performance. From the taxpayer's point of view even in the absence of detection and punishment their willingness to comply comes from satisfaction that is brought by the way of provision of services from the government, (Torgler, 2003). Conversely, terms of trade are likely to be adjusted by means of reducing compliance when they are dissatisfied with services provision from the government, or even when they dislike the way their taxes are spent (Bello, 2014).

iv. Comparative Treatment

It is believed that tax payers will comply with the law if they perceive the process leading to the law as generally fair (Bello,2014). The comparative treatment model main focus is essentially based on the equity theory (Ali, et al., 2013). Which proposes that individuals are more likely to exhibit higher tax compliance when they perceive that the entire tax system are fair and lower tax compliance when they perceive tax system are unfair (Bello,2014). The compliance result on the influence of perceived fairness of the tax system is not restricted to the treatment of the individual taxpayer only, but also relays to the tax burdens of other individuals, as well as their observed compliance behavior (Sour 2004; Walsh, 2012). In order to increased Compliance rate an individual must perceives his tax burdens to be of about the same magnitude as that of comparable others (Feld and Frey, 2006), When people believe that their tax burdens are greater than those of others in the same group then the observed evasion will be increased(Spicer and Becker, 1980).

v. Political Legitimacy and Trust in Government

According to Bello (2014) political legitimacy is define as the “belief or trust in the authorities, institutions, and social arrangements to be appropriate, just and work for the common good”. whenever citizens trust their government and social institutions, the more likely they will voluntarily stand by the decisions and rules set by such government and institutions, so this impacts tax compliance decisions (Bello, 2014). Richardson (2008) proposes that governments need to increase their reputation and credibility, as a means of gaining the taxpayers trust and compliance level of tax payers.

2.2. Empirical Review

Taxation is the only real alternative than any other thing to pay for the high levels of public expenditure that modern economies demand. Its objective is maximizing tax compliance, regardless of other considerations (James S. & Alley C., 2008). One proposal is that the degree of noncompliance may be measured in terms of the tax gap. The tax gup is the difference between the actual revenue collected and the amount that would be collected if there were 100 per cent compliance (James, Alley, & Alley, 2010). According to the C- Sub-group (2004), the broad categories of taxpayer obligation listed as registration in the system, timely filing or lodgment of requisite taxation information, reporting of complete and accurate information (incorporating good record keeping); and payment of taxation obligations on time.

Towards the end of the 20th century government have realized that, in order to increase the amount of taxes collected a change is required or needed. Instead of strictly applying laws and regulations using adequate strategies based on understanding the reasons which drive compliance decisions is of greater help. (Ph, Babe, Babe, & Babe, 2012). Based on the reviews discussed in the previous sections the following factors are selected as determinants. These factors are discussed in the following sections.

i. Knowledge and Education of TaxPayers

Tax knowledge is a level of awareness of tax legislation and other important tax-related information. And it is also the level of sensitivity of the tax payer towards the tax system and tax legislation. The formal general level of education received by taxpayers is an important factor that contributes on the understanding of tax requirements particularly on registration and filling requirements (Oladipupo & Obazee, 2016). Educated taxpayers may be aware of the consequence of non-compliance and the available opportunities, and their better understanding of the tax system and higher level of moral development potentially promote them a more favorable taxpayer attitude and greater compliance (Tadesse & Goitom, 2014).

According to Adam (2012), tax knowledge plays an important role in increasing tax compliance and it is an important element in a voluntary compliance particularly in determining an accurate tax liability. Tax knowledge might possibly encourage tax payers to be more practical in completing their tax returns (Oladipupo & Obazee, 2016). Studies undertaken in Malaysia (Loo &McKercher, 2014) raised that tax knowledge is the most influential and important factor in determining taxpayers' compliance behavior towards the tax system.

Most citizens do not have a clear understanding of what tax laws mean and why the tax system is structured and administered as it is ,so high awareness by the society would encourage people to fulfill their obligations to register as taxpayer reporting and paying taxes properly and also reminding them that tax paying is national and civic responsibility, (Oladipupo & Obazee, 2016). The tax systems are usually not elaborated after proper consultation with the business community. Therefor business owners do not have simplified access to and clarification on information of the tax laws, they lack awareness on tax rules and regulations and this has an impact on the practicability of the regulations. (Jira et al., 2005).

The influence of tax knowledge on compliance behavior has been described in various researches. Most of the studies on tax compliance are concerned on an intentional non-compliance but there is still considerable scope for unintentional non-compliance. From all

positive actions required to a full compliance on the part of the taxpayer to discharge his or her legal duties in full. Sometimes the tax payers innocently fail to meet their tax obligations because they fail to complete their tax return correctly or unaware of, or misunderstand the various provisions of the tax system. Consequently, attempts by different tax authorities in assisting taxpayers to improve tax administration in this respect have often found to be more difficult than might at first appear (James et al., 2010). In general, the past studies have consensus that tax knowledge and education improve tax compliance behavior of tax payers.

ii. Impact of Equity and Fairness

The total tax burden will be distributed among individuals according to their capacity to bear it and taking into account all of the relevant personal characteristics is the requirement of “The ability-to-pay” principle (Newman, W., Charity, M., & Ongayi, W., 2018). Most of the tax payers complain about the tax assessment method they believed that it is based on subjective estimation as a result of they are frequently subject to over-taxation (Jira et al., 2005). Therefore the importance of public perception has been the motivation for numerous studies that attempted to identify the determinants of the public perception of tax and to measure the level of perceived fairness. It is vital for government to have a fair, transparent, accurate and effective tax system in order to administer, collect, change and manage tax within a country or state” (MCHarmonious, 2016, as cited in Habtamu, 2019).

One of the main principles of the taxation system design as highlighted by (Orkaido Deyganto, 2018) is equity or fairness. Equity can be understood through three dimensional views namely horizontal equity (people who are in 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 or taxable income) and Exchange Equity (expectation the same share of public service from government for paying tax).

Spicer & Becker (1980) argued that a higher record of tax evasion and non-compliance is recorded when taxpayers are aware that their tax rate is higher than average tax rate paid by other in the same category. Etzioni (1986) also highlighted on the same saying if the public feels that taxes are being unfairly imposed, it will likely be involved in tax non-compliance behavior

and consequently evade taxes. There has been a firm belief by the tax administrators and the taxpayers that the growing dissatisfaction with the fairness of tax system is the major cause for the increase in tax noncompliance (Richardson, 2006). Mutual trust and cooperation between tax bodies and the taxpayers with regard to tax matters is well built by equity and fairness which subsequently enhances voluntary compliance (Bello,2014).

iii. Peer Group Influence

When it comes to taxation issues the term peers generally refers to a taxpayer's associates such as relatives, friends, co-workers and colleagues (Jackson& Milliron, 1986). peer groups normally tend to have influence one's preferences, behavior and personal values towards tax compliance. (Puspitasari&Meiranto2014). Compliance of individuals is affected by the behavior of their "neighbors", or those about whom they may have information, whom they may know, or with whom they may interact on a regular basis. There seems to be an influence relationship when it comes to individuals filing and reporting their taxes, they are willing and very keen to oblige when they believe that other individuals are also filing and reporting their taxes; conversely, when individuals believe that others are cheating on their taxes, they may well become cheaters themselves. Understanding compliance behavior requires understanding how information about one's neighbors affects two aspects of individual behavior: the reporting decision and also the logically prior filing decision (Alm et al., 2013).

iv. Detection and Penalty/ Administration and Criminal

The reporting standards set by Generally Accepted Auditing Standards stating whether the tax declarations and financial statements submitted for tax offices are must prepared in accordance with tax proclamations, regulations and directives. Some circulations and identify circumstances show that such tax rules and principles have not been consistently applied. In order to check and assure the application of those standard audit is an important part. The audit objective is:

- Reducing the tax gap
- Promote the self-assessment system
- feeling the presence of tax administration amongst the taxpayers

- Improving the relationship between the tax administration and the taxpayers

The aim of conducting audit is, to check the reporting is in accordance with the standard and to identify the gap of the compliance level.

According to Tan & Braithwaite, (2018), Perception of the probability of being caught and sanctioned have its own impact on the tax payer behavior. Whenever there is a potential penalty and potential audit system the greater the discouragement for potential tax evasion. therefore, taxpayers are aware of the consciousness and offences they are committing when evading tax and being non-compliant therefore, they might reduce their tendency to evade tax (Tadesse & Goitom, 2014).

Both the tax payers and tax office who has not discharged his/her duties must accuse by the tax authority. Whenever there is un willing taxpayers to comply with the procedures and provisions of the tax system shall result in imposition of interest, civil or administrative penalties and criminal offence penalty (Fischer, 1992). If there is a low probability of detection and small expected penalty, the tax payer are likely to be involved in noncompliance behavior (Andreoni, Erard, Feinstein, Andreoni, & Feinstein, 2013).

v. **Motivational Posture**

compliance whether can be voluntary or obligatory behavior. If taxpayers obey only because of dire threats or punishment even though 100 per cent of the tax were paid in line with the tax gap concept of noncompliance, this would not seem to be proper compliance. They argued that when taxpayers comply willingly, without the need for enquiries, obtrusive investigations, reminders or the threat or application of legal or administrative sanctions can be a requirement for a successful tax administration. Therefor appropriate definition in the degree of compliance with tax law and administration, can be achieved without the actual application of enforcement (Tadesse & Goitom, 2014).

Motivation Posture define as a mental attitude (stance) that taxpayers willingly express in their relationship with the tax authority. These postures describe the way in which tax payers controlled the amount of social distance they placed between themselves and the tax office were identified in earlier regulatory work. In Motivational posture the relationship that is exist between the taxpayer and the tax authority varies according to the circumstances (Braithwaite,2003). It is also an attitudes and beliefs that how individuals feel about and wish to position themselves towards the tax authority. These postures adopted by taxpayer's show how their willingness to adhere to the tax rules, regulation and process of the authority signal and how much they work with the tax authority. Therefore, Motivational posture is playing an important role in the overall compliance level of the tax system (Tan and Braithwaite, 2017).

There are five motivational postures identified as important in the context of tax compliance like commitment, capitulation, resistance, disengagement, and game playing. Commitment and capitulation postures are reflecting an overall positive orientation and accommodating to the authority than resistance, disengagement, and game playing. Resistance, disengagement, and game playing Posture are described taxpayers' defiance-oriented mechanism or involved to fight against the policies regulated by the tax authorities (Puspitasari & Meiranto,2014).

Commitment postures believes, it is the right thing to do that taxpayers endorse the tax code and accept personal responsibility to pay tax and also it involves internalizing of the code (Tan and Braithwaite,2017). It reflects about the necessity of tax systems and a good will to pay one's tax and also feelings of moral obligation to act in the interest of the collective. (Puspitasari & Meiranto,2014).

The posture of capitulation recognizes the tax authority's power and agreed to do what was being asked. They are driven by willingness to please and a desire to avoid trouble without stopping to think about ultimate goals (Tan and Braithwaite ,2017). It also reflects the feeling towards the tax office is a kind power as long as one acts properly and defers to its authority and it acceptance the tax office as the legitimate authority (Puspitasari & Meiranto,2014).

In the other part resistance posture rejects regulatory authority that they perceive as being oppressive, unhelpful and unforgiving. Taxpayers with the resistance see regulators as untrustworthy and are likely to question about their competence. They fight for their right and to curb tax office power because they doubt about the intentions of the tax office to behave cooperatively and benignly towards those it dominates and provides the rhetoric for calling on taxpayers to be watchful. (Puspitasari & Meiranto,2014).

Disengagement reflects a state of not caring, deliberately denying the regulators and they also questions on satisfaction of believing that regulatory action matters. The authority rules and norms are perceived as pointless and also not observed. taxpayers with disengaged posture not only trust the authority but also, they will not defer to authority. In general, they are unwilling to cooperate with the authority (Tan and Braithwaite ,2017). The tax office and the tax system are beyond redemption for the disengaged citizen, the main objective being to keep both socially distant and blocked from view (Puspitasari & Meiranto,2014).

A posture of game playing involves dismissing, sidestepping and challenging authority. Taxpayers who have the game playing posture are very fond of and tend to enjoy tax minimization games with tax authorities. The name of the game played is called creative compliance and little respect is shown for the spirit of the law (Tan and Braithwaite ,2017). Game playing behavior is using every advantage and seek the opportunities(loopholes) in order to find the weakness of the regulation and the tax rule relates to the taxpayer's point of view. (Puspitasari & Meiranto,2014).

These different postures are not mutually exclusive but they are relatively stable which means holding one posture does not prevent or regulates from holding another. Change in circumstance s make the postures vary in salience. This different posture is displayed according to the circumstance Whenever a taxpayer comes under attack, their posture of resistance is likely to come to the fore, while capitulation and commitment will fade into the background. And also, cooperation is displayed in the circumstance that postures of commitment or capitulation dominate, but the postures of resistance, disengagement or game playing dominate, defiance drives out more cooperative responses (Tan and Braithwaite,2017).

Studies by Wahl, Kastlunger, & Kirchler, (2010) the motivational postures generally show predictive of compliance outcomes but the Postures of commitment and capitulation are more likely to be associated with compliance, while disengagement and resistance are linked with non- compliance.

vi. Perception of Tax Payers on Government Spending

According to (Oladipupo & Obazee, 2016) not sharing full information in terms of governments true expenditures and the cost of public services provided by the government has made citizens have very limited knowledge .which according to the approach of Cuccia (2013), leads taxpayers to perceive their relationship with the state not only as a relationship of coercion, but also as one of exchange. Ndekwa (2013) argues in order to make taxpayers understand the connection between tax revenue and expenditure that government should show some degree of accountability.

There is high motivation on the taxpayer's end to comply to the law if and when they notice that the exchange between the paid tax and the services rendered by government are found to be equitable. Taxpayers who pay high amount are more sensitive as to where the government spends their money on. voluntary compliance is likely to increase, if the government is prudently spending the national revenue, for example, for basic facilities like education, health and safety and public transportation. In contrast, if the government spending too much money on unnecessary or unbeneficial to the public, then taxpayers will feel betrayed and attempt to evade tax (Tadesse & Goitom, 2014).

In order to have a positive impact on public trust the tax administration must be a transparent, accountable and service-oriented leader. If the tax collected form taxpayers are properly spent in terms of the need and the budget which the taxpayers find necessary, compliance would be increase (Geletaw, 2015).

However, the above discussion shows that these factors are also related to the behavior of tax compliance and different researcher try to identified the real determinant. The prior studies about the factors affecting tax compliance behavior of tax payers in the Ethiopian context have not been consistent. Different studies have showed different results. Factors which were found to have significant relationship with tax compliance behavior in some studies were found to be not significant in other studies. Consequently, this study is set to get confirmation of which factors significantly affect tax compliance behavior of Ethiopian tax payer. In doing so, this study has drawn different factors along with the corresponding instruments from prior studies and set to test their relationship with tax compliance behavior. The results were reviewed in the table below in the appendix.

2.2.1. Summary of Empirical Studies in the Ethiopian Context

In order to examine factors affecting tax compliance behavior of tax payers, past studies conducted in the Ethiopian context over the past six years are presented in the following table

Insert table 2.1...

The results presented in the table demonstrated that prior studies about the factors affecting tax compliance behavior of tax payers in the Ethiopian context have not been consistent. Different studies have showed different results. Factors which were found to have significant relationship with tax compliance behavior in some studies were found to be not significant in other studies. Consequently, this study is set to get confirmation of which factors significantly affect tax compliance behavior of Ethiopian tax payer. In doing so, this study has drawn different factors along with the corresponding instruments from prior studies and set to test their relationship with tax compliance behavior.

2.3. Hypothesis of the Study

Based on the relationships between variables presented in the theoretical and empirical evidences, it is possible to set an intellectual guess that perception on government spending, motivational posture, detection and penalty, peer group behaviors, equity and fairness and tax knowledge and education affect the tax compliance behavior in the Ethiopian tax payers case. The following section forwards hypothesis for the relationship between tax compliance and variables affecting it. Moreover, issues of how each hypothesis are evolved from background theories are discussed.

2.3.1. Relationship of Tax compliance Behavior with Tax knowledge and Education

Tax knowledge is a level of awareness of tax legislation and other important tax-related information. And it is also the level of sensitivity of the tax payer towards the tax system and tax legislation. The formal general level of education received by taxpayers is an important factor that contributes on the understanding of tax requirements particularly on registration and filling requirements (Oladipupo & Obazee, 2016). Educated taxpayers may be aware of the consequence of non-compliance and the available opportunities, and their better understanding of the tax system and higher level of moral development potentially promote them a more favorable taxpayer attitude and greater compliance (Tadesse & Goitom, 2014). Tax compliance needs adequate tax knowledge and capability to use this knowledge in order to complete the tax returns and associated tax documentation (Geletaw, 2015).

Hypothesis 1: Tax knowledge and education of tax payers have positive and significant effect on tax compliance behaviors of tax payers

2.3.2 Relationship of Tax compliance Behavior with Detection and Penalty

According to the economic and deterrence model, behavior of tax payers is influenced by the benefit they get from tax evasion and the cost they pay due to penalties of fraud and probabilities of detection. That means, the decision to have tax compliance behavior is determined by the benefits and costs of non-compliance behavior. More probability of getting audited and higher cost of penalty lead tax payers to have tax compliance behavior (Walsh, 2012).

Hypothesis 2: Detection and penalty of tax non-compliance behaviors have positive and significant effects on tax compliance behavior of tax payers

2.3.3 Relationship of Tax compliance with Motivational Posture

The theory of reasoned action, a subset of social-psychology models, posits behavior of individuals is determined by personal and social norms (Kerchar and Evans, 2009). Personal norms are explained by what one should or shouldn't do (OCED, 2010). Personal norms influence tax payers' behavior in that their values, tax ethics, tax morality and tax mentality influence attitudes towards tax.

Hypothesis 3: Motivational posture of tax payers have positive and significant effects on tax compliance behavior of tax payers

On the other hand, social norm as a pattern of behavior influences the behavior of individuals in that individual's behavior is dictated by the approval or disapproval of others (Alm,1999). The influence of others in influencing individual's behavior can also be applied in tax compliance behavior. The behavior of others to comply or not to comply to the tax requirements may influence an individual to have tax compliance or non-compliance behavior. This argument leads to the following hypothesis.

Hypothesis 4: Peer group behaviors related to tax payment have positive and significant effects on tax compliance behaviors of tax payers

2.3.4 Relationship of Tax compliance Behavior with Tax Payers' Perception on government spending

According to the fiscal exchange theory, there is a psychological and relational contract between the government and the tax payers (Fjeldstad, et al., 2012). Tax payers pay tax expecting goods and services in exchange from the government. The way the government spends the tax collected from tax payers may influence the tax compliance behavior of tax payers. That means the tax compliance or non-compliance behavior is conditioned by the perception that the government is providing the necessary services in return to the tax paid by tax payers. Consequently, this study forwarded the following hypothesis:

Hypothesis 5: Perception of tax payers on government spending have positive and significant effects on tax compliance behavior of tax payers

2.3.5 Relationship of Tax compliance Behavior with Equity and Fairness

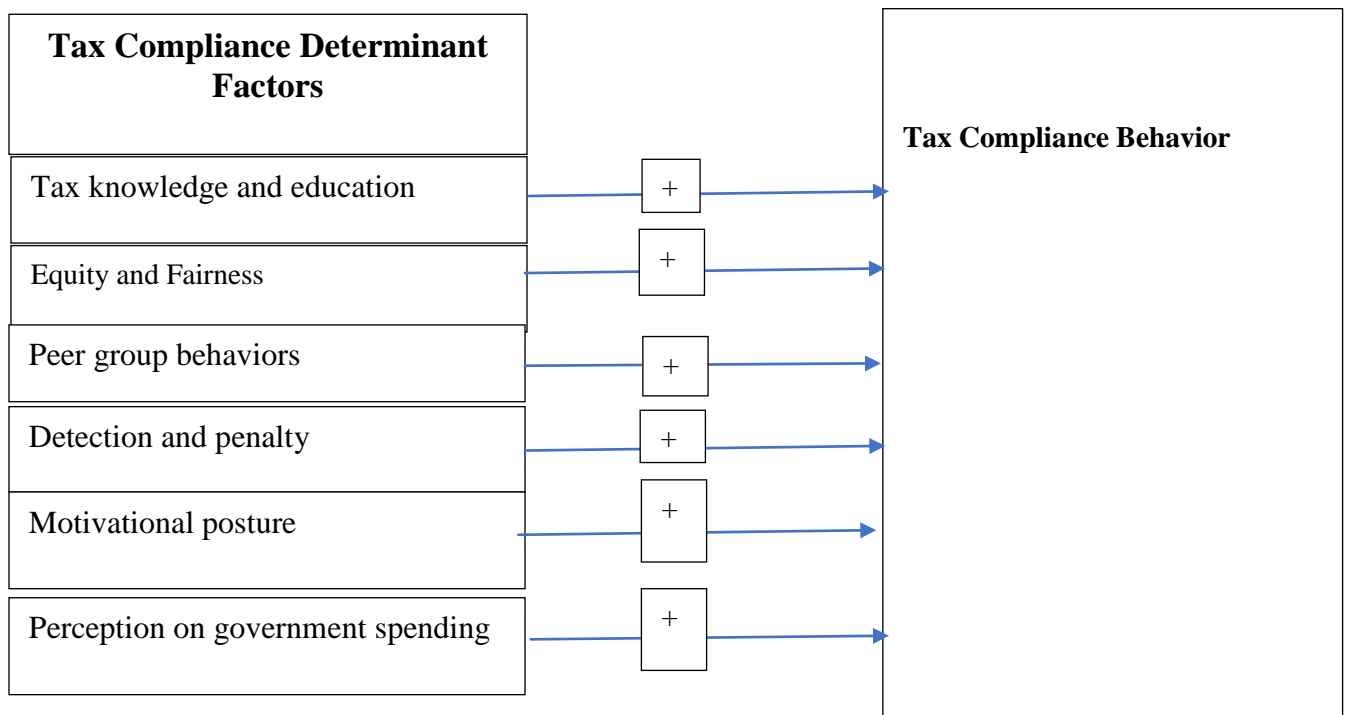
The comparative treatment model bases its explanation of tax compliance with equity theory (Ali, et al., 2013). According to equity theory, the motivation of a person to behave in some way depends on the perception of equity or inequity feeling of that person. Equity or inequity feeling is based on the comparative treatment one gets relative to others. Similarly, the comparative treatment model in tax posits that the existence of perceived fairness of the tax system is a function of how an individual tax payer is treated relative to others. It can be distributive (fair distribution benefits and burdens), procedural (fairly applying the procedures to all tax payers) and interactional (fair treatment of tax payers in their interaction as customer). The more an individual perceives that the tax system is fair and equitable, the more he/she will have tax compliance decision. This argument leads to the following hypothesis.

Hypothesis 6: Equity and fairness in the tax system of the country have positive and significant effects on tax compliance behavior of tax payers

2.4. Proposed Conceptual Model

Based on the arguments presented in the theoretical and empirical evidences discussed in the preceding sections, the following conceptual model is proposed. The conceptual model depicts the relationship between tax compliance behavior (the dependent variable) and its determinant factors (the independent variables).

Figure 2.1. Proposed Conceptual Model of the Study



Source: Adapted from Akalu Kibret (2016), Habtamu Lashetew (2019) and Geletaw Tsegaw (2015)

Chapter Three: Research Methodology

3.1. Research Design

This study is explanatory research in its design in which the cause and effect relationship between tax compliance and determinant factors are to be tested. It is a cross-sectional quantitative explanatory study in which data is collected using a survey research method. It used both descriptive and inferential statistics in the addressing the issues at hand. In its descriptive analysis this study assesses the background of tax payers, perceived level of tax compliance of tax payers and their perceived position related to factors affecting tax-compliance behavior. In its inferential analysis it investigates the cause and effect relationship between the dependent variables (tax-compliance behavior) and independent variables (Determinant factors of tax compliance behavior). Moreover, this study is a deductive approach in which the existing theories and hypotheses are to be tested with a data obtained from tax payers through closed-ended questions in a seven-point Likert scale. This approach views human behavior as regular and predictable so that the data collected from a sample can be used to predict behavior. Similarly, the current study draws sample from the population to predict the tax compliance behavior of tax payers through factors related to tax compliance.

3.2. Methods Adopted

3.2.1. Sampling Design

3.2.2.1 Population

The target populations of the study are taxpayers of federal large taxpayer's branch office of the ministry of revenue. The number of tax payers that found in the branch were 820 (large taxpayer branch office report, 2018).

3.2.2.2 Sampling Technique

Respondents from large tax payers at federal level were drawn using simple random sampling and systematic sampling technique. Federal large tax payers included in this study for convenience purpose. In the selection process the list if large tax payer are generated

and the first respondent was selected randomly and the other participants were selected using a systematic sampling technique from the list of taxpayers.

3.2.2.3 Sample Size

The current study used the Yamane (1968) formula sample size determination formula in defining its sample size.

$$n = N / [1 + N (e^2)]$$

where,

n= sample size

N= target population

E= allowable error of 5% (95% level of confidence)

Sample size $n = 820 / [1 + 820(0.05^2)] = 820 / 3.05 = 268.85$ thus, the researcher selected approximately 269 taxpayers from the total population as a sample.

3.2.2. Instrument Design

This study used questionnaires as an instrument to collect data from tax payers. Closed ended questionnaire is appropriate for a quantitative approach in the current study to meet its objective. This study uses a seven-point Likert scale questionnaire to get data relevant to the purpose of the study. This helps respondents to have ranges of response options to choose. Moreover, a seven- point Likert scale is assumed to result in a response option which approximate the ordinal data in the five-point scale to an interval data, which is appropriate to run a linear regression to test the proposed hypotheses. This study uses standard questionnaire adopted from previous similar studies but conducting reliability tests in the context of the current study.

3.2.3. Data Analysis

3.2.3.1 Measurements of Variables

Taxpayer Compliance Behavior- Taxpayer compliance behavior, treated as the dependent variable in this study, is a multi-dimensional construct (Brown and Mazur, 2003). Most commonly it is measured through three distinct types of compliance: payment compliance; filing compliance; and reporting compliance. The three measurements are mutually exclusive and provide a comprehensive measure of the overall taxpayer compliance (Brown and Mazur, 2003). Accordingly, this study uses the three constructs that measure the tax compliance behavior of an individual tax payer. These include: payment compliance; filing compliance; and reporting compliance.

Different factors affecting tax compliance behavior have been identified in different studies (Tadesse and Goitom, 2014; Geletaw, 2015; Redae and Sekhon, 2015; Niway & Wondwossen, 2015). Accordingly, different authors developed different measurements for each of these factors. This study set six factors as determinants of tax compliance behavior of tax payers.

Knowledge and education - knowledge and education in the current study refers to the level of awareness or sensitivity of the taxpayers to tax legislation. Measurements for knowledge and education are drawn from Habtamu (2019) and Geletaw (2015). This factor is measured through five elements like knowledge of how to announce income, how records are kept, the extent to which they got education about tax related issues from the respected office, their perception about the role of tax knowledge in improving their tax compliance and the involvement of the tax authority in building their tax knowledge.

Equity and Fairness- Equity and fairness in tax refer to the extent to which the tax system treats the tax payers in setting the amount of tax relative to their wealth or income. Measurements for this factor, equity and fairness are also drawn from Habtamu (2019) and Geletaw (2015). It is composed of four elements measuring tax payer's perception towards the tax obligations, the tax system, tax information provided by tax authorities and the tax rate relative to ability to pay.

Peer Group Behaviors- Peer group behaviors refer to the taxpayer's associates such as relatives, friends, co-workers and colleagues (Jackson & Milliron, 1986). It measures the influence of such groups in shaping the tax compliance behavior of a tax payer. It is composed of three elements (Geletaw, 2015) such as positive peer attitude, others' tax evasion practice, feeling of obligation to pay tax regardless of others action.

Detection and Penalty- This factor measures the perception of tax payers about their possibility to be detected by tax authorities and be penalized for non-compliance behaviors. It is composed five elements (Habtamu, 2019; Geletaw, 2015; Akalu, 2016) including, chances of being audited, fear of being caught and penalized, penalty rates and other tax enforcements.

Motivational Posture- Motivational Posture refers to the degree of compliance with tax law and administration without the actual application of enforcement (Tadesse & Goitom, 2014). It is measured through five items (Tan and Braithwaite, 2017) that focus on willingness to accept tax as a moral obligation responsibility of every tax payer.

Perception of Tax Payers on Government Spending- It is about the perception of tax payers as to where and how the government spends the tax collected from tax payers. It is measured through three measurement elements (Geletaw, 2015) such as how the government spends the tax, benefit of the tax payers and the society from the tax, involvement of tax assessors in frauds. Therefore, these items are adopted to be used in the current study as measurement instruments. The detail measurement items are presented in the appendix.

3.2.3.2 Model Specification

This study uses multiple regression model in which the cause and effect relationship between the tax compliance and its determinant factors is determined. In the regression analysis, both the existence of significant relationship and the direction of relationship between these variables is to be tested. In the decision to accept or not to accept the hypothesis a 95% confidence (rule of thumb), the probability that the result of the study would be 95% same if repeated 100 times with a 5% percent error. The direction and strength of relationship was also tested looking at beta coefficients in the result. The current study used the SPSS as a tool to

produce the outputs from the row data.

Based on the hypothesized relationship, the following regression model is developed and variable's relationships in the model are specified.

$$TC = B_0 + x_1 KE + x_2 EF + x_3 PG + x_4 DP + x_4 MP + x_5 GS + e$$

Where,

TC is tax compliance

B₀ is a constant

x₁, x₂, x₃, x₄, x₄, x₅ and x₆ are coefficients of the independent variables KE... is Knowledge and education

EF... is Equity and Fairness

PG... is Peer Group Behaviors

DP... is detection and penalty

MP... is motivational posture

GS... is Perception of Tax Payers on Government Spending

e... is the error level

Chapter Four: Data Presentation, Analysis and Interpretation

4.1. Introduction

This section is basically divided into two main sections. The first section is to present the results of descriptive analyses and the second section presents the inferential analysis results. The presentation of the results is followed by discussions of the information gathered from the respondents and making use of evidence from literature to support them. Generally, this section is organized in the following manner: First, profile of respondents was presented and analyzed. Second, data collected through questionnaires were analyzed. Finally, summary of the findings and suggestions for further study have been presented.

4.2. Response Rate

This study was designed to critically assess the determinants of tax compliance in the Ethiopian federal large Tax Payers. Data were collected from the Ethiopian federal large tax payers. To this effect 300 questionnaires were distributed and 275 were returned which has a response rate of 91%. However, the questionnaires collected ahead are included in the analysis dropping six questionnaires which are in excess of the sample size. According to (Mugenda, 1999) a 50% response rate is adequate, 60% good and above 70% is rated very well so a 91 percent rate of response is very good.

4.3. Profile of Respondents

The necessary information for this study was obtained from federal large tax payers of Ethiopia who have the annual turnover of more than 40 million. Respondents' business sector, legal forms, and number of years they stayed in the business are described as a background information.

Table 4.1 Frequency Table of Business Sector

		Manufacturing	Building & Construction	Import & Export	Domestic Trade &	Other
N	Valid	80	50	60	50	29
Percentile	100	29.7	18.6	22.3	18.6	10.8

Source: Field Survey, 2019

From the above table it is possible to see that 30 percent of the respondents were from manufacturing and about 22 percent of the respondents engaged in import/export and 19 percent of respondent engaged in domestic trade and service, 18 percent of the respondents are involved in building and construction and the rest 11 percent are engaged other kind of business. This implies that majority of the respondents in this study are from manufacturing and import/export business sectors. Therefore, this study included participants from different business sectors to get the relevant data.

Table 4.2 Frequency Table of Legal forms of Business

		Sole Proprietorship	Private Limited Co	Partnership	Share Company	Other
N	Valid	70	69	25	105	0
Percentile	100	26	25.7	9.3	39	0

Source: Field Survey, 2019

The result showed that respondents from sole proprietorship, private limited company are equally represented in this study which accounts about 26 percent. The remaining participants are from share Company (39%) and partnership (9.3). This study involved different legal forms of businesses to have representative data.

Table 4.3: Frequency of Respondents by Number of Years They Stayed in Business

		0-5 Year	6-10 Year	11-20 Year	>21Year
N	Valid	45	109	55	60
Percentile	100	16.7	40.5	20.4	22.3

Source: Field Survey, 2019

With regard to number of years they stayed in the business, 40.5 percent of respondents stayed between 6-10 years and 22.3% percent greater than 21 years. The other 16.7% stayed 0-5 years and 20.4 percent have experience of 11-20 years. Over all, majority of the respondents have sufficient experience to be involved and provide tax related data for this study.

4.4. Results of Descriptive Statistics

	Tax Compliance	Knowledge and Education	Equity and Fairness	Peer Group Influence	Detection and Penalty	Motivational Posture	Government Spending
N Valid	269	269	269	269	269	269	267
Missing	0	0	0	0	0	0	2
Mean	5.351	1.914	4.728	4.461	4.464	4.675	4.536
Std. Deviation	.987	.762	1.176	1.295	1.313	1.123	1.318

Table 4.4. Results of Descriptive Statistics

Source: Field Survey, 2019

From the above table the tax compliance behavior of respondents has a score of 5.351 with a

standard deviation of .987, which is more than the average value of 3.5 in a seven-point Likert scale measurement. From this it is possible to see that tax payers have more than average value in their tax compliance behavior. That means, more than average tax payers comply to the tax system of the country.

Participants of this study have also greater than the average value in their score towards equity and fairness (mean value of 4.728), peer groups' influence (mean value of 4.461), detection and penalty (mean value of 4.464), motivational posture (mean value of 4.675), and government spending mean value of 4.536). The exception to this result is knowledge and education with a less than average value of 1.914 with a standard deviation of .762.

This implies that on average more tax payers have perceptions that the tax system is equitable and fair, they are influenced peer groups' attitudes and perceptions in shaping their attitudes towards tax payment while others have a belief that the tax system detects noncompliance behavior and the respective penalty will follow. Moreover tax payers believe that paying tax is their responsibility as citizen and have the moral responsibility to pay tax. They also think that the government spends the tax collected from tax payers improving the life of the society and growth of the country.

However, the result in knowledge and education of tax payers is below the average value of 3.5 in the seven-point Likert scale implying that tax payers in the Ethiopian tax system have no sufficient knowledge and education about the tax system. The effect of these results on tax compliance behavior of tax payers is analyzed in the following sections through regression analysis.

4.5. Regression Analysis Results

This study used multiple regression model in which the cause and effect relationship between the tax compliance and its determinant factors is to be tested. In the regression analysis, both the existence of significant relationship and the direction of relationship between these variables are to be tested.

4.5.1 Reliability of the Instruments

Reliability is the overall consistency of a measure. These measures are said to have reliability if it produces similar results under consistent conditions. It is the characteristic of a set of test scores that relates to the amount of random error from the measurement process that might be embedded in the score. For this study the widely used Cronbach Alpha was used to measure internal reliability for tests with multiple possible answers. Cronbach's alpha is the most common measure of internal consistency (reliability). Higher values of alpha are more desirable. A reliability of 0.70 or higher with 0.60 as the lowest acceptable threshold (obtained from substantial sample). The lowest threshold is acceptable when measurement items are few (Field, 2005).

Table 4.5: Summary of scales & Cronbach's alpha values

Variables	Cronbach's Alpha	Number of Items
Tax Compliance	.603	3
Knowledge and Education	.871	5
Equity and Fairness	.874	4
Peer Group Influence	.802	3
Detection and Penalty	.911	5
Motivational Posture	.954	7
Government Spending	.824	3
a. Dependent Variable: Tax Compliance Behavior		
b. Predictors: (Constant), Knowledge and Education, Equity and Fairness, Peer Groups' influence, Detection and Penalty, Motivational Posture and Government Spending.		

The result in the above table shows that all the measurements of independent variables have a Cronbach's alpha value of greater than .7 and the dependent variable has a Cronbach's alpha value of .603 which is at the lower acceptable threshold due to the fact that it has few items of measurements. Therefore, all the measurements are reliable with the acceptable Cronbach's alpha value.

4.5.1. Model Fit

The model fit (The model's ability to predict the outcome variable) in the current study is assessed through R^2 , cross-validity (the adjusted R^2) and the ANOVA. The R^2 is used to assess the variance in the tax compliance (dependent variable) accounted to the independent variables, whereas, the adjusted R^2 measures the cross-validity of the model. The results of the model-fit are presented in the model summary and ANOVA tables below.

It is essential to assess the goodness of fit of the model, which measuring how well the observed data fits the model. A good measure of goodness-of-fit is the R^2 which represents the amount of variance in the outcome explained by the model. That means, it measures the percentage of the variation in the outcome that can be explained by the model.

Table 4.6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.820 ^a	.673	.665	.57144
a. Predictors: (Constant), Knowledge and Education, Detection and Penalty, Motivational posture, Equity and Fairness, Peer groups influence, Government Spending				

As the study results in table 4.6 revealed, the correlation between the observed value of 'Tax compliance' and the optimal linear combination of the independent variables (knowledge and education, detection and penalty, motivational posture, equity and fairness, peer groups influence, government spending) is .820, as indicated by multiple R. Besides, given the R^2 value of 0.673, it may be realized that 67.3% of the variation in 'Tax compliance' can be explained by the six independent variables (knowledge and education, detection and penalty, motivational posture, equity and fairness, peer groups influence, government spending). The remaining 32.7% of the variance is explained by other variables not included in this study.

This percentage of R^2 is an indication of a good measure of the model due to the fact that the variables large percentage of variance of the dependent variable.

4.5.3 Cross-validation of the Model (The Adjusted R^2)

It is difficult to be confident that the model derived from our sample accurately represents the entire population. However, there are ways one can assess how well the model can predict the outcome in a different sample. One way to do this is through cross validation. Cross-validation is assessing the accuracy of the model across different samples. Cross-validation is assessed using the adjusted R^2 from the regression analysis. The adjusted R^2 indicates the loss of predictive power or shrinkage. It tells us how much variance in the tax compliance would be accounted for if the model had been derived from the population from which the sample was taken. A result which is same or closer to the value of R^2 indicates a good model to generalize. The results in the current study revealed R^2 of 0.673 and the adjusted R^2 of 0.665 with a difference of .008 (about 0.8%). This shrinkage means that if the model were derived from the population rather than the sample it would account for approximately 0.8% less variance in the outcome. This value is very similar to the observed value of R^2 (0.673) indicating that the cross-validity of the model in the current study is very good.

Table 4.7: ANOVA Table

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	6.758	5	1.352	129.102	.000 ^b
	Residual	1.623	155	.010		
	Total	8.381	160			
a. Dependent Variable: Tax compliance						
b. Predictors: (Constant), Knowledge and Education, Detection and Penalty, Motivational posture, Equity and Fairness, Peer groups influence, Government Spending						

The F value 129.102 of the ANOVA section of the table above was also significant (0.000), implying that the impact of the joint of the six factors is significant at 99% significance level. This indicates that the model is best fitted at all the conventional levels of significance.

4.5.2. Multicollinearity Test

Multicollinearity refers to a situation in which two or more explanatory variables in a multiple regression model are highly linearly related. Multicollinearity can be scanned through running variance inflation factor (VIF) and tolerance static (1/VIF) among others. The following table shows the collinearity Statistics composed of tolerance levels and the variance inflation factors (VIF).

Table.4.8: Multicollinearity Test

M		Collinearity Statistics	
		Tolerance	VIF
	(Constant)		
	Knowledge and Education	.777	1.287
	Equity and Fairness	.532	1.881
	Peer Group Influence	.480	2.084
	Detection and Penalty	.369	2.709
	Motivational Posture	.607	1.647
	Government Spending	.412	2.422
a. Dependent Variable: Tax Compliance Behavior			
b. Predictors: (Constant), Knowledge and Education, Equity and Fairness, Peer Groups' influence,			

According to Field (2005), there is a concern for multicollinearity problem if the largest VIF is greater than 10 or a tolerance level below .2. The collinearity statistics in the current model shows the VIF values are all below 10 and the tolerance statistics are all well above .2. Therefore, it is safe to conclude that there is no collinearity within the current data.

4.5.6 Coefficients of the Multiple Regression Analysis

The current study employed linear regression models in examining the relationships between tax compliance and factors assumed to be determinants of compliance. To this end, the equation used in the study was;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + e$$

Where,

Y is the dependent variable tax compliance, β_0 is the constant and $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5,$ and β_6 are parameters to be estimated or regression line coefficients or slopes; X_1, X_2, X_3, X_4, X_5 and X_6 are independent variables (such as knowledge and education, equity and fairness, peer groups' influence, detection and penalty, motivational posture and government spending) and e is the error term.

Table 4.9: Coefficients of Dependent and Independent Variables

C							
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error				Beta	Tolerance
(Constant)	2.172	.258		8.412	.000		
Knowledge and Education	-.194	.052	-.150	-3.731	.000	.777	1.287
Equity and Fairness	.084	.041	.100	2.048	.042	.532	1.881
Peer Group Influence	.091	.039	.119	2.320	.021	.480	2.084
Detection and Penalty	.090	.044	.120	2.058	.041	.369	2.709
Motivational Posture	.384	.040	.436	9.573	.000	.607	1.647
Government Spending	.122	.041	.162	2.941	.004	.412	2.422
a. Dependent Variable: Tax Compliance Behavior							
b. Predictors: (Constant), Knowledge and Education, Equity and Fairness, Peer Groups' influence, Detection and Penalty, Motivational Posture and Government Spending.							

Source: Field Survey, 2019

The standardized beta coefficient column shows the contribution that an individual variable makes to the model. The beta weight is the average amount the dependent variable increases when the independent variable increases by one standard deviation (all other independent variables are held constant). As these are standardized, we can compare them. Based on the standardized coefficients (Beta) of the independent variables in the regression equation the following model is specified.

$$\begin{aligned} \text{Tax compliance Behavior} = & 2.172 - 0.150(\text{Knowledge \& Education}) \\ & +.100(\text{Equity \& Fairness}) + .119(\text{peer group influence}) + .120 (\text{detection \&} \\ & \text{Penalty}) + .436 (\text{Motivational Posture}) +.162 (\text{Government Spending}) + e \end{aligned}$$

As Table 4.9 confirms, in the regression equation above all the independent variables have a significant impact on tax compliance at different levels of significance and with different strengths. In the following discussions both the significance levels and the direction of influence each variable have on the dependent variable are discussed.

i. Tax Compliance and Knowledge and Education

The relationship between tax compliance with knowledge and education is significant at 99% with a sig value of .000. Therefore, the alternative hypothesis that stated the two variables have significant relationship is supported. The standardized coefficient (Beta = -.15) showed knowledge and education affect tax compliance negatively. That means, the more tax payers are educated and have the knowledge related to tax, the lesser they comply to tax and vice versa, assuming other things are constant. This result may be against the previous empirical evidences. Past studies showed that level of formal general education received by taxpayers is an important factor that contributes to the understanding of tax requirements, especially regarding registration and filling requirements (Oladipupo & Obazee, 2016). Educated taxpayers may be aware of non-compliance opportunities, but their better understanding of the tax system potentially promotes a more favorable taxpayer attitude (Tadesse & Goitom, 2014). The result in the current study may happened to exist because when tax payers are educated and have the tax knowledge, they tend to be involved in the tax avoidance behavior, not tax

evasion. Whereas, tax payers without tax knowledge and education tend to have tax compliance because they do not have the technical knowledge to avoid tax.

ii. Tax Compliance and Equity and Fairness

The relationship of tax compliance with Equity and Fairness is significant at 95% with a sig value of .042. Therefore, the alternative hypothesis that stated there is statistically significant relationship between the two variables is supported. The standardized coefficient (Beta = .10) showed Equity and Fairness affect tax compliance positively. That means, the more the tax payers have a perception that the tax system is fair and equitable, the more the tax payer will have tax compliance behavior and vice versa, assuming other things are constant.

iii. Tax Compliance and Peer Group influence

The relationship between tax compliance and peer group influence is significant at 95% with a sig value of .021. Therefore, the alternative hypothesis that stated there is statistically significant relationship between the two variables is supported. The standardized coefficient (Beta = .119) showed peer group influence affect tax compliance positively. That means, the more the tax payers perceive that other tax payers have no tax compliance behavior, the lesser they will have tax compliance behavior, assuming other things are constant. This is because they develop a feeling that the tax system is not equitable and fair equally to all the tax payers, favors some and disfavors others. On the other hand, the perception that other tax payers have compliance behavior helps them to have tax compliance behavior.

iv. Tax Compliance and Detection and Penalty

The relationship of tax compliance with detection and penalty is significant at 95% with a sig value of .041. Therefore, the alternative hypothesis that stated there is statistically significant relationship between the two variables is supported. The standardized coefficient (Beta = .120) showed that detection and penalty affect tax compliance positively. That means, the higher the possibility of detection by the tax authority for non-compliance behavior and the subsequent serious penalty by the authority, the more the tax payers will have tax compliance behavior and vice versa, assuming other things are constant.

v. Tax Compliance and Motivational Posture

The relationship between tax compliance and motivational posture is significant at 99% with a sig value of .000. Therefore, the alternative hypothesis that stated there is statistically significant relationship between the two variables is supported. The standardized coefficient (Beta = .436) showed motivational posture affect tax compliance positively. That means, the more the tax payer think that paying tax is their responsibility and moral obligation the higher the tax compliance behavior they demonstrate and vice versa, assuming other things are constant.

vi. Tax Compliance and Government Spending

The relationship between tax compliance and government spending is significant at 99% with a sig value of .004. Therefore, the alternative hypothesis that stated there is statistically significant relationship between the two variables is supported. The standardized coefficient (Beta = .162) showed government spending affects tax compliance behavior positively. That means, the higher the tax payer have confidence on the way the government spends the tax they paid, the more they comply to the tax system. The thought that the tax collected from tax payers will be spent to the benefit of the society/country to whom they belong, the better their tax compliance behavior will be, assuming other things are constant. On the other hand, tax payers fail to comply if they perceive that the government manipulates the system and involved in fraud.

Looking at the relative effect of the independent variables on the dependent variables, all have different strengths. The closer the absolute value of 1 the coefficient is, the stronger the effect of that independent variable on the dependent variable and the closer the coefficient is to 0, the weaker the effect of that independent variable (Field, 2005). Among the variables investigated in this study, motivational posture has the largest positive influence on tax compliance behavior with a beta value of .436, followed by government spending with a beta value of .162 and least effect comes from equity and fairness with a beta value of .100.

Chapter Five: Conclusion and Recommendations

5.1. Conclusion

This study starts with the description of tax payers profile, followed by description of the tax compliance behavior of tax payers, the knowledge and education level of tax payers, perception of equity and fairness towards the tax system, the influence of peer groups in the surrounding environment, the possibility of detection and penalty, motivational posture of tax payers and perception towards government spending. Finally, the relationship between tax compliance behavior and tax compliance factors in the Ethiopian tax payers' context is examined. Moreover, the effect of these variables on tax compliance is tested.

The descriptive part of this study showed that tax payers have a score of more than the average value (greater than 3.5 in a seven point Likert scale) in their tax compliance behavior, perception of equity and fairness towards the tax system, the influence of peer groups in the surrounding environment, the possibility of detection and penalty, motivational posture and perception towards government spending. However, the knowledge and education level they have about tax related issues is less than the average value of 3.5 in a seven-point Likert scale.

The regression analysis showed a significant relationship of tax compliance behavior (The dependent variable) with its determinant factors such as knowledge and education level, perception of equity and fairness towards the tax system, the influence of peer groups in the surrounding environment, the possibility of detection and penalty, motivational posture and perception towards government spending. Moreover, the relationship between tax compliance and these factors have been found to be positive in that positive perception of equitable and fair tax system, positive peer group influence, feeling of moral obligation to pay tax and the perception that the government spends the tax collected for the betterment of the country/society improves tax compliance behavior. The exception to this result is knowledge and education of tax payers with a negative relationship with tax compliance behavior.

5.2. Recommendations

This study implied that tax compliance behavior of tax payers is impacted by the knowledge and education level of tax payers, perception of equity and fairness towards the tax system, the influence of peer groups in the surrounding environment, the possibility of detection and penalty, motivational posture of tax payers and perception towards government spending. These variables explained 67.3% percent of the variability of tax compliance implying that the tax authority needs more attention on these variables to improve tax compliance behavior of tax payers.

Based on the results in this study the following specific recommendations are forwarded.

- The tax authority should set equitable and faire tax system to improve the tax compliance behavior of tax payers
- There should be emphasis to the other tax payers' influence in the surrounding since the compliance or non-compliance behavior of one tax payers influences the other.
- The authority should have an effective tax system that detects non-compliance behaviors easily and reinforce complying behavior through proper penalty for non-compliance
- The authority should develop an attitude that tax paying is the responsibility and moral obligation of every citizen
- The government should spend the tax collected in improving the living conditions of its citizens avoiding fraud and corruption

However, the issue of why tax compliance is negatively related to tax knowledge and education needs further investigation. The unexplained variance of tax compliance in the current study which accounts 32.7% also need further study to include other variable which explain tax compliance behavior of tax payers.

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APPENDECIES: I
Addis Ababa University

School of Business and Economics facility
Department of Accounting & Finance

Dear Respondents,

This study is entitled “**Determinants of Tax Compliance Behavior of Federal Large Taxpayers information in Ethiopia**” and conducted in partial fulfilment of the requirements for the master’s degree in Accounting & Finance at Addis Ababa University. Its main objective is to identify and understand the determinants of tax compliance behavior of Federal large taxpayers in Ethiopia. The research is going to be carried out on your responses and other relevant data that could support it. The purpose of this questionnaire is to obtain your perceptions and views regarding various aspects of taxation. The findings of the research will be submitted to the concerned government bodies so that they can make use of the recommendations made. Hence, the information you will give enable me to critically analyze why large taxpayers comply and/or why not they comply with reporting requirements.

Your cooperation to respond is very important to this study because it represents a number of others who are not included in the sample. The information provided is purely for academic purpose and I would promise that all you provide would be strictly confidential. In order to accomplish this study, you are kindly request to answer every question; your kind cooperation is highly appreciated.

I thank you very much in advance for your cooperation

Researcher’s Name: Mahlet G/Egziabher

Position: MSC student at Addis Ababa University

Phone number 0911 56 61 46

E- mail address: mahieldu@g-mail.com

Section I- General Information

Please tick (√) on your choice

1. In which type of business sector did you engage?

Manufacturing

Import and Export

Building and Construction

Domestic Trade and services

Other

2) What is your legal form of business operations?

A sole proprietorship

A partnership

A private limited Co

A share company Others

3). How long have you been stayed in the business?

0-5-year

6-10

11-20 year

>21

The tax authority education helped me to keep documents properly and protected the business from interest and penalty that could occur because of lack of knowledge							
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Equity and fairness

Please tick one box on a 5-point scale for each statement	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree
I believe that my tax obligation is fair relative to others.							
I believe that the overall tax system is equitable							
I believe that tax authorities provide sufficient and equitable information to all taxpayers.							
A fair tax rate which consider all the taxpayer's ability are implemented in the Ethiopian tax system							

Peer group behaviors

<p>Please tick one box on a 5-point scale for each statement</p>	<p>Strongly Disagree</p>	<p>Disagree</p>	<p>Somewhat Disagree</p>	<p>Neither Agree or Disagree</p>	<p>Somewhat Agree</p>	<p>Agree</p>	<p>Strongly Agree</p>
<p>Positive peer attitude i.e. a belief that my neighbors are reporting and paying tax honestly encourages me to report and pay the correct amount of taxes.</p>							
<p>I believe that my neighbors are evading taxes and don't report the true fair picture of their tax liability.</p>							
<p>Paying taxes are my obligation and I didn't see any reference groups from my neighbors</p>							

Detection and penalty/administration and criminal/

Please tick one box on a 5-point scale for each statement	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or	Somewhat Agree	Agree	Strongly
The chances of being audited (tax audit) are so low that it is worthwhile trying to economize a little on taxes for various reasons.							
Tax assessors make continuous audits as a result there is no room to non-compliance							
I will pay my tax obligations because of fear of being caught and penalized.							
The penalty rates are minimal and I can pay the penalty without any complain							
Serious enforcement and penalty by the tax authority makes me more conscious to declare all my duties on time and properly							

Motivational posture

Please tick one box on a 5-point scale for each statement	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree
Tax is the responsibility that should be willingly accepted by all Ethiopian							
I think of taxpaying as helping the government do worthwhile things for the citizens							
I feel a moral obligation to pay tax							
I accept responsibility for paying my fair share of tax.							
Even if the tax authority finds that I am doing something wrong, they will respect me in the long run as long as I admit my mistakes.							
If you cooperate with the tax authority, they are likely to be cooperative with you.							
The tax system may not be perfect, but it works well enough for most of us.							

Perception of tax payers on government spending

Please tick one box on a 5-point scale for each statement	Strongly Disagree	Disagree	Somewhat Disagree	Neither	Somewhat Agree	Agree	Strongly Agree
I believe that the government spends the collected taxes wisely.							
I believe that my business has benefiting from basic government spending like education, health, safety and etc.							
I believe that tax assessors are not involved in negative acts (i.e. corruption and fraud)							

APPENDECIES: II

Table 2.1 Summary of Empirical Study in Ethiopia

Topic	Description	Author	Year	Result
Factors Influencing taxpayers' compliance with the tax system	probability of being audited; perception of government equity and penalty, financial constraint; to current government referral group; the role of the authority; and tax knowledge.	Tadesse &Goitom	2014	Tax compliance was influenced by the probability of being audited, financial constraints, and changes in government Policy, Perception of government spending, perception of equity and fairness, penalties, roles of the tax authority and tax knowledge was not significantly correlated with tax compliance.
Taxpayers' Knowledge and Tax Compliance Behavior	Tax knowledge was identified factor affecting tax behavior	Redae and Shailinder Sekhon	2015	Tax compliance behavior of tax payers are influenced by tax payers' tax knowledge
Determinants of Voluntary Tax Compliance Behavior in Assessment System	Tax knowledge, simplicity of returns and administration, perception on fairness and perception on government probability of auditing, and influence of referral group identified as determinant	Niway& Wondwos sen	2015	Tax knowledge, simplicity of tax returns and administration, perception on fairness and equity, perception on government spending, probability of auditing, and the influence of referral group were determinant factors that influence voluntary compliance behavior.

Taxpayers' tax compliance Behavior	Six tax compliance determinants were examined such as tax knowledge; feeling of fairness; the influence of peer groups; income level of taxpayers; detection &	Geletaw	2015	All the factors except confidence in government spending significantly affect tax compliance behavior of tax payers.
Factors affecting tax compliance behavior	Effect of trust and power of tax authority, Tax Knowledge and Education, Fines and Penalties, Perceived fairness of tax system was identified as	Habtamu	2019	All the factors outlined in the study significantly affect tax compliance behavior of tax payers.
Determinants of tax compliance behavior	It examined business size, business age and tax psychological cost, business sector, tax complexity, fairness in the tax rate/ tax system and tax deterrence sanctions, tax liability, compliance cost and tax rate structure as factors to be examined.	Akalu	2016	Business size, business age and tax psychological cost, tax liability, compliance cost and tax rate structure are significant determinants in at least one type of non-compliance behavior. Business sector, tax complexity, fairness in the tax rate/ tax system and tax deterrence sanctions have an insignificant relationship with the non-compliance behavior.

<p>Factors Influencing Taxpayers' Voluntary Compliance Attitude with Tax System</p>	<p>Factors include gender, age, tax knowledge, simplicity of system, awareness on probability of being perception on tax rate, level, tax authority efficiency, influence, occupation, income of taxpayers, perception government speeding, and on fairness and equity</p>	<p>Kanbiro</p>	<p>2018</p>	<p>Gender, age, lack of tax knowledge, simplicity of tax system, awareness on penalty, probability of being audit, and perception on tax rate were found to be key factors influencing taxpayers' voluntary compliance attitude. Variables such as education level, tax authority efficiency, peer influence, occupation, income level of taxpayers, perception on government speeding, and perception on fairness and equity have no significant influence on tax voluntary compliance attitude.</p>
<p>Determinants of tax compliance</p>	<p>Factors include fairness & penalties, compliance liquidity, the strength of authority, knowledge/ level of tax payers, socio-factors and gender of taxpayers</p>	<p>Ezana</p>	<p>2018</p>	<p>Factors such as fairness/equity, fines & penalties, compliance cost, liquidity, the strength of the tax authority, knowledge/ awareness level of tax payers, socio-cultural factors and gender of taxpayers were found to be the determinant factors that affect taxpayers' compliance.</p>

Analysis of Tax Compliance and Its Determinants	Factors include education level of tax payers, tax knowledge and awareness of tax payers, simplicity of the tax system, attitude of tax payers towards tax, perceived role of expenditure, and rewarding scheme for loyal tax payers.	Abdu & Wondimu	2019	Tax compliance was positively affected by education level of payers, tax knowledge and awareness of tax simplicity of the tax system, attitude of tax payers towards perceived role of government expenditure, and rewarding scheme for loyal tax payers.
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