

Addis Ababa University

School of Graduate studies

**“Income Tax Fairness and Its Perceived Influence on the
Compliance Behavior of Individual Income Taxpayers”**

By

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Addis Ababa, Ethiopia

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A thesis submitted to the school of graduate studies of Addis Ababa University in partial fulfillment of the requirements for the degree of masters of Science in Accounting and Finance.

June 2011

Addis Ababa, Ethiopia

DECLARATION

I, the undersigned, declare that this study is my original work and has not been presented for a degree in any other university, and that all sources of materials used for the study have been duly acknowledged.

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Abstract

The purpose of the study was to see the effect of income tax fairness on compliance behavior of individual tax payers and to see if the tax fairness dimensions determined by Gerbing (1988) and later tested by Richardson (2006) in Asian jurisdiction can be found in Ethiopian settings. The result found certain different dimensions than either of the above authors found. The factor analysis showed three different dimensions stated as component one, component two and component three. Testing education as demographical variable also yielded a different result than other studies. While the others like age is determined to have no significant influence on compliance behavior of individuals.

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Abbreviations:

- ERCA – Ethiopian revenue and customs authority
- GF - General fairness
- SLF - Self interest
- SPC – Special privilege to the wealthy
- EX- Exchange with government
- TC –Tax compliance
- Tcomp –Tax compliance items
- VIF –variance inflation factor

Chapter one

1. Introduction

1.1 Background of the study

Taxation revenues have been the most important revenues source for any government regardless of the type of leadership the country has democratic or autocratic. None of this leadership will survive unless they insure sufficient amount of revenue to cover their government spending on meeting infrastructural and social needs of their citizens. There is a difference as to how individuals or organizations perceive taxation: some groups think it is the necessary evil which helps the society to function; others as breaching up on the rights and properties of the individual or collective; and many will feel that they pay too much in tax and/ or have insufficient influence over how their taxation monies are spent.

The successful collection of taxatHowever, undeniably taxation plays the leading role in government activity and it is taxation revenue that helps the government to meet its social responsibilities regarding the supply of public goods and services. ion revenues is central to providing the necessary infrastructure that allow for the continuing economic well being of a nation whatever its relative development may be. Tax deviant behavior can sometimes be made in error, but in many instances decisions to be tax deviant are made by rational actors on the basis of their expectation regarding the probabilities of the scale of reward emanating from such behavior and on the other hand of metaphorical ledger, the likely hood that their behavior might be detected, investigated and prosecuted. That many people and entities do avoid and/or evade their taxation obligations, sometimes on a routine basis, is a proposition beyond dispute.

Compliance towards the tax system has been a challenge to any tax system be it developed or developing nation. Compliance is multidimensional issue it is the result of variables like, education, age, gender, norms, self interest, complexity, fairness, audit rate, tax rate, peer reporting and tax administration the culture society held as value that is society belief, attitude and sentiment play a great role in tax consideration. Increasing the perception of tax payers towards compliance is the sum effect of these variables.

This thesis has focused on the ultimate effect of fairness perception towards achieving compliance towards tax system. Fairness is a construct that appears in a variety of literatures and is often not well defined (Sheffrin 1993; Gilligan & Richardson, 2005). For example, in the organizational behavior literature, fairness is synonymous with ‘organizational justice’ (Hauenstein et al, 2001). In the management accounting literature, fairness in a budgetary context is associated with ‘attainability’ (Libby, 2001) and also with distributive and procedural justice (Wentzel 2002). In the economics literature, ‘fair’ refers to an allocation that is simultaneously equitable and economically efficient (Varian 1975). Economic fairness is associated with ‘economic justice’ (Zajac 1995). Fairness is defined in tax literature in variety of ways. It has not been explained in consistent fashion because of the following basic factors (Christensen et al 1994):

- Fairness is a multidimensional issue
- Fairness can be defined at either the individual level or for society at large
- Fairness is intertwined with complexity, and
- Once a tax rule or procedure is perceived or defined as unfair, it may give taxpayers the justification to engage in noncompliance

In tax manner of speaking, the term 'tax equity' is associated with fairness. There are two subsets of tax equity: vertical equity and horizontal equity. Vertical equity is the notion that individuals who have more ability to pay taxes should pay more taxes. Horizontal equity is the notion that similarly situated taxpayers should pay the same amounts in taxes (Musgrave, 1989, p. 223).

Different scholars have stated the importance of tax fairness in achieving tax payer's compliance. Therefore, this paper aimed at looking the fairness perception of individual income tax payers in Ethiopia and its effect on compliance towards the tax system.

1.2 Problem statement

It is true that there is a sizeable gap between the amount of tax that is theoretically to be collected and the amount of tax that is actually collected. Noncompliance by tax payers has been raised as one of the justification for increased tax gap. Noncompliance, on the other hand is affected considerably by the attitude and perception of tax payers towards the fairness of the tax system. Regardless of the measures taken to solve non compliance such imposing heavy penalties and fines up on discovery the issue of underreporting by taxpayers' has been around.

Taxpayers' are required to file a correct and complete return, failing which penalties and fines will be imposed, required to keep records of all transactions and report accordingly failing which penalties and fines will be imposed and finally make payments on the taxes due. However, there is still evidence that tax compliance is not at the expected target rate. This jeopardizes many activities and plans of the government for its citizen's audit activities reveal that taxpayers comply with filing in their forms but incidents of under reporting and over claiming are evident. Tax literature reveals that any system of taxation would likely experience some evasion given the financial and other incentives not to comply.

It is hard to see the benefit one is deriving from the government because these benefits are so far away relative to the amount of tax they pay (Leandra, 2003). In addition, what one feels is that even if one never contributes his share of tax it will not reduce his benefits; he gets to enjoy the benefits thus, as a free ride. It is this perception of the public that resulted in the topic most researchable. The public sentiment about perception of justice and fairness has contributed a lot to the tax compliance behavior of tax payers. Previous researchers also found the importance of equity and fairness as a frequent theme (for example Bordignon, (1993) and Cowell, (1992). Gilligan and Richardson (2005) comparative research revealed perception of tax fairness as a factor in tax compliance behavior among Australia and Hong Kong taxpayers. Based on these facts the study determined to test the following working hypotheses.

1.3 Research questions and Hypothesis

1.3.1 Research questions

The study is intended to find answers for three important research questions:

1. Can tax fairness measured by these dimensions: General Fairness, Tax Rate, and Exchange with the Government, Self Interest and Special privileges for the wealthy in the other jurisdiction can also be found in Ethiopian setting and what is the influence on Tax Compliance behavior?
2. Do age, gender, education level and employment status have impact on tax fairness and indirectly influence tax compliance?
3. Following from research question 2 can there be any significant impact on tax compliance if demographic variables for age and gender are controlled?

1.3.2 Hypothesis

The following four hypotheses are to be used to test each of the above research objectives

Hypothesis 1: There is a positive association between tax fairness and tax compliance behavior in Ethiopia.

Hypothesis 2: There is a positive association between older taxpayers and tax compliance behavior in Ethiopia.

Hypothesis 3: There is a positive association between female taxpayers and tax compliance behavior in Ethiopia.

Hypothesis 4: There is an association between education and taxpayers' compliance behavior in Ethiopia.

Hypothesis 5: There is an association between employment status and taxpayers' compliance behavior in Ethiopia.

Hypothesis 6: In general taxpayers do not perceive Ethiopian income tax as a fair tax

Hypothesis 7: Income tax payers in Ethiopia do not perceive income tax as fair when they compare the income tax amounts that they pay with the benefits they receive from Ethiopian government.

Hypothesis 8: Income tax payers' compliance degree in Ethiopia is not high.

Hypothesis 9: Income tax payer does not perceive his or her income tax burden as fair.

Demographic variables and tax compliance behavior has been considered in the literature (e.g. Jackson & Milliron, 1986; Hanno & Violette, 1996; Mason & Calvin, 1978; Vogel, 1974; and Chan et al., 2000). Studies by Hanno & Violette (1996) found that younger taxpayers are more risk seeking and less compliant. Another demographic variable that is equally important is

gender which was found to have a narrow gap of difference (female vs male) in terms of tax compliance. Then impact of education and lastly the fourth variable employment status is be analyzed. Following from hypothesis H1 – H5, the regression models developed by Richardson (2006) is used to test the 5 hypothesis. Only five dimensions like Roberts (1994) are tested in this study. The middle income earners tax share dimension is dropped because only Richardson has experimented with it and is not dependable.

1.4 Regression models

1. $TC_i = \alpha_0 + \beta_1 GF_i + \beta_2 TR_i + \beta_3 EX_i + \beta_4 SLF_i + \beta_5 SPC_i + E_i$
2. $TC_i = \alpha_0 + \beta_1 GF_i + \beta_2 TR_i + \beta_3 EX_i + \beta_4 SLF_i + \beta_5 SPC_i + \beta_k X_{ki} + E_i$

SOURCE: Richardson (2006)

Abbreviations

- TC - tax compliance
- GF – general fairness
- TR – tax rate/ structure
- SPC - special provision towards wealthy
- E_i – error term
- X_{ki} - demographic variables age, gender, education and Occupation status
- β – beta coefficient of X_j
- EX – exchange with government
- SLF – self interest

1.4.1 Regression model 1

The first model is designed to see the association of the five fairness dimensions and the compliance behavior

1.4.2 Regression model 2

This model adds one more variable to the first regression model which is demographic variables. The model tries to see if there is any significant relationship between fairness perception and demographic variables. For further analysis, two of the demographic variables is controlled by using dummy variable to find out if there is difference created by the dummy variables for age and gender.

Mention only the five hypotheses by enumerating here by good paragraph and take the rest to methodology aspect. Make your methodology broad and beautiful and give specific chapter to it. Especially chapter three has to be devoted to it.

1.5 Objectives of the study

1.5.1 General objectives

This study aims to see the effect of tax fairness in enhancing the tax compliance behavior in Ethiopia. The five tax fairness dimensions identified by Gerbing (1988) are tested to find out its impact on compliance behavior

1.5.2 Specific objectives

- To make an initial important contribution to the literature of income tax fairness and income tax compliance
- To assess to what extent Ethiopian taxpayers' perceive the tax system as fair and equitable?
- To examine if demographic factors i.e. Age, gender, education level and employment status have influence on the tax payers compliance behavior
- To identify the relationship between fairness perception and compliance towards taxation
- To assess if other countries perceptions of tax fairness dimensions be expected in Ethiopian taxpayers' surrounding
- To identify if there is any significant impact on tax compliance if demographic variables for age and gender are controlled
- To determine whether there is an acceptable degree of tax compliance in Ethiopia or noncompliance is prevailing.

1.6 Significance of the study

The research is assumed to have momentous contribution for the tax authority in designing different tax policies and towards increasing the compliance behavior of individual tax payers. It is also assumed to have significant influence on economic development plan, implication to tax rules and regulation, quality audit and control, contribution to social welfare and social security. After successful completion of the thesis mechanisms were forwarded to increase voluntary compliance of income tax payers which may in turn leads to increased taxation revenues.

1.7 Scope of the Study

This study tried to see the compliance behavior of individual tax payers and its influence between tax fairness dimensions in salaried accounting instructors in some selected higher education institutions in department of accounting , selected accounting firms in Addis Ababa and sole proprietor owned businessman (self employed) companies. The study only focused on category 'C' tax payers and salaried tax payers in private and government institutions who have high deeper understanding about tax and tax related issues. It does not include high tax payers such as category A and category B tax payers who submit their tax returns in Ethiopian revenue and customs authority head office.

1.8 Limitation of the study

Every conclusion in this study should be interpreted based on its limitations. As tax is a sensitive issue for every tax payer some tax payers were uncooperative in trying to fill out the questionnaire and in some circumstances they may not reveal their true feeling about their tax reporting behavior. While other refused reasoning that they are in hurry. The time limit given for the thesis has been very short and it influenced the study in selecting very small group of sample. This sample included only category 'C' tax payers located in Addis Ababa. But to make the sample more representatives an attempt has been made to include some groups which are assumed to have high tax related exposure.

1.9 Organization of the Study

- **Chapter 1 - Introduction:** This chapter discussed why tax authorities press for compliance among taxpayers and the crucial importance of taxation to the development of the country.
- **Chapter 2 - Literature Review:** This chapter reviewed literature on tax fairness and tax compliance. The focus will be on the impact of perceptions of fairness as a contributor to tax compliance and tries to put in brief the research results found from Malaysia, Australia and South Africa
- **Chapter 3 – Methodology:** This chapter adopted the methodology used by the previous researcher and applies it to for this study while looking at the literature.
- **Chapter 4 – Research Results:** This Chapter discussed the findings for all the research objectives set.
- **Chapter 5 –Conclusions and Recommendations:** This chapter discussed the conclusion drawn from the findings of the study. Finally, future research directions and some recommendations to ERCA to achieve higher compliance and to attain greater level of efficiency in tax administration.

Chapter two

2. Literature Review

This section provides the literature previously written on tax fairness perception and its relation with the perceived compliance behavior of taxpayers. It starts with defining tax fairness, dimension of tax fairness and demographic factors and its relation with tax compliance.

2.1 Tax fairness perception

As compliance towards the tax system is a challenge for both developing and developed nation different scholars pointed out it as the issue internationally topical, political, in recent years. A good tax system should contain fairness ingredient in it Smith (1796). Torgler (2001a) added fairness perception is an important factor in influencing taxpayers' compliance behavior because it is related to tax burden. Thus unfairness of the tax system may reflect taxpayers' perceptions that they are overpaying taxes in relation to the value of the services provided by government or in relation to what other taxpayers pay. In their study Spicer (1974), Song & Yarbrough (1978), arrived at the conclusion that underreporting of income is highly correlated with unfair tax system. In the other study conducted by Bordignon (1993) Perceived fairness is found as an additional motivation to tax evasion. Anna A. Che Azmi and Kamala A. Perumal (2008) in the study conducted in Malaysia found that taxpayers' perception on the tax system is important because fairness of the tax system will instill compliant behavior among taxpayers.

Understanding taxpayers' motive and developing better tax policies and strategies that can influence compliance will bring more revenue and less administrative cost to the tax authority. Fairness is not an easy concept to define as stated by (Christensen et al., 1994). He pointed out

four important reasons (1) it is multidimensional, (2) it can be defined at the individual level or for society at large, (3) fairness is intertwined with complexity and (4) a lack of fairness may be perceived justification or a cause of noncompliance. Looking fairness only in terms of vertical and horizontal equity would be insufficient and raised the importance of adding distributive justice is recommended to provide stronger framework to.

2.2 Equity Theory

Fairness can be defined in terms of either benefits received or ability to pay principle. According to benefit theory an equitable tax system is one under which each tax payer contributes in line with the benefits which he or she receives from the public service .Under a strict regime of benefit taxation, each taxpayer would be taxed in line with his or her demand for public services. Since preference differs, no general tax formula could be applied to all the people Vertical equity states that taxpayers at different economic situation should be taxed at different rate (Musgrave 2004 p.219-220).Ability to pay describes people with equal capacity to pay the same and those with higher ability to pay more. The former is referred to as horizontal equity and the latter as vertical equity.

People with different ability to pay have varying perception towards the tax system. The findings from the study conducted by Porcano (1984) showed that taxpayers' need and ability to pay are the most significant variables related to perceptions of fairness of the tax system. Other surveys conducted by Scott and Grasmick (1982) and Spicer and Lundstedt (1976) indicated that respondents who believe that the tax system is unfair are more likely to commit tax noncompliance behavior. Based on a quasi-experiment with pre-testing and post-testing of 2 student groups, Eriksen and Fallan (1996) also revealed that an important means of ensuring tax compliance is to provide more tax knowledge so as to improve people's perception of the

fairness of the tax system. The study conducted by Richardson (2006) also indicates that perceived fairness of tax system is significantly related to tax evasion.

2.3 Distributive Justice

Distributive justice concerns the fair, just or equitable distribution of benefits and burdens. These benefits and burdens span all dimensions of social life and assume all forms, including income, economic wealth, political power, taxation, work obligations, education, shelter, health care, military service, community involvement and religious activities. Thus, justice arguments are often invoked in connection with minimum wage legislation, Affirmative Action policies, public education, military recruitment, litigation, as well as with redistributive policies such as welfare, Medicare, aid to the developing world, progressive income taxes and inheritance taxes. As tax is one of the basic variables in measuring redistribution it can be best to see the fairness of the tax system in terms of redistribution justice frame work.

Porcano(1984) argued justice is a multidimensional concept thus, it is appropriate to use distributive theory which uses several justice rules in determining one' deservingness; Another thing is, that it is no longer one's personal or group treatment but the distribution of tax burdens across as a whole e.g., the fairness of progressive tax rate.

2.4 Procedural Justice and Legitimacy

Legitimacy in tax compliance behaviour is defined as a belief/ trust by taxpayer on the tax authority. It is true that fair treatment of taxpayers will help them to obey the laws. Tyler (2004) has analyzed the cooperation the public gave the police was because of the legitimacy the public had on the police. Murphy (2005) states every year significant middles income taxpayers' use



aggressive tax planning to either legally or illegally conceal their actual income. These illegal taxes planning behavior cannot be settled just by using force or threatening strategies, because in the long run the legitimacy of tax authorities will be undermined. People are less inclined to accept an unfavorable outcome and are likely to challenge the situation when they believe that the procedures are unfair. Therefore the authority has to play a fair role that will increase the perception of legitimacy and can create cooperation and get the public to obey tax laws.

In the studies conducted on attitudes and behavior of tax payers, found that the more the taxpayer has good view about the legitimacy the more they will be tax compliant. Gilligan & Richardson (2005) conducted an exploratory cross cultural study in Australia and Hong Kong to evaluate how important is perceptions of tax fairness and its influence on tax compliant behavior.

According to Gilligan & Richardson (2005) moral legitimacy refers to norms that emphasis on motions of consequences, procedures, structures and personality; cognitive legitimacy which emphasis on making decisions and predicting how, why and where these rules and practices are situated on this field of legitimacy. Public's voluntary compliance can be ensured when the tax system is equitable. The concept of legitimacy is found to be the key driver in their decision making process that leads to tax compliance. Then, one needs to think legitimacy as a belief, and evaluation between pragmatic legitimacy and moral legitimacy. Pragmatic legitimacy refers to norms which are self interested calculations which bring in motions and exchange and values.

2.5 Deterrence Theory

Deterrence theory relates to sanctions, threats (fines and penalty structure). It has association with criminal justice. Tax noncompliance is an "illegal" act of not complying with the tax laws. In fact evasion of tax which is an illegal act of evading tax and avoidance of tax refers to a legal

concept of tax evasion and activities related to avoidance are tax planning and tax investment. What made the deterrence theory that crucial? They were needed to deter the noncompliance activities of taxpayer who default to pay the government its rightful source of revenue. Taxpayers are profit seeking by gambling the benefits of evasion against the risk of detection and punishment. Researchers found a negative correlation using sanctions.

However despite this relationship between fear of sanction and crime rate it can lead to a passive behaviour by individual as reported by Cuccia (1994), Jackson & Milliron (1986), and Roth et al. (1989). Grasmick & Scott (1982) studied on the detection probability and the intentions to evade taxes and his findings were consistent with the deterrence theory. But literature that emerge later in late 80's, psychology based variables were tested to understand tax compliance behavior e.g. role of moral obligation, perceptions of fairness, self interest and others. As stated by Torgler (2001), an increase in deterrence on honest taxpayers will disrupt a balance. Taxpayers' who paid fair dues but gets audited and later fined, and even more disturbed when others who violated the law do not get punished.

Therefore taxpayers' cannot be treated harshly, because according to Murphy (2005) it is not to punish but to repair the harm done and secure future compliance. Many tax researchers have questioned the appropriateness of the deterrence theory framework (model) that is used to explain compliance behavior because deterrence can also be counterproductive. Thus, the study suggested attitudes towards the tax system in explaining taxpayer noncompliance. Allingham & Sandmo (1972) investigated whether high tax rate can or will enhance or decrease compliance. What can be deduced is that taxpayer will only pay taxes because of fear of detection and

punishment. Becker (1968) stated crime is an industry where market participants act to optimize their utility. Therefore, a crime will be committed if expected utility is greater than the utility that could be gathered if efforts were devoted elsewhere

2.6 Impact of Perceptions of Tax Fairness towards Tax Compliant Behavior

Research on equity based theory showed less conclusive results between taxpayers' positive attitudes of the tax system and compliance. according to Chan, et al. (2000).Christensen et al. (1994) reported with the increase in tax knowledge on matters of complexity of the tax system, it allow taxpayers' to take advantage of the complexity of the system, and then they don't equate it to an unfair tax system).

The general consensus is that usually when one has developed a frame regarding a specific term or concept then the pattern of behavior and decision making will very much follow according to the mindset. That means when a concept like tax fairness has been perceived in such a way, it will definitely influence the decision making process. Therefore, exposure to tax education, change their perceptions towards certain aspects of tax fairness and enhance compliance. Mason & Calvin (1984) stated perceptions of the tax system have a bearing on public confidence in the tax system which increases tax evasion. However, the dissatisfied but honest taxpayers and the other dissatisfied but dishonest cited deterrence activities, sanction threats and punishments, fear of being caught and possible disclosure of their deviance acts to the public that strongly made them to remain compliant.

The common beliefs by tax administrators and the general public are that dissatisfaction with the tax system is responsible for increased tax evasion. However, Mason & Calvin (1984) also revealed that high taxes are actually the cause for tax evasion. But it will tie back to the belief that unfairness in the tax system (taxes too high) has caused tax fraud (tax evasion or tax noncompliance) The study by Mason which compared the types of tax evasion in 1975 and 1980 highlighted that perceived fairness lost ground during this time frame whereby the percentage of taxpayers' who said that the system was fair dropped from 71 to 56. But eventually those who are dissatisfied but honest agreed too high taxes are reasons for cheating and they say that the tax system is unfair.

According to Schisler (1995), equity or fairness is positively related in some way to tax compliance. Jackson & Milliron (1986) concluded tax fairness refers to two important dimensions; equity of trade and equity of taxpayers' burden. Equity of trade refers to what is received in exchange for the dollars paid towards one's tax liability and equity of taxpayers' burden refers to the equity of distribution of the tax burden whether is it distributed fairly and evenly with the taxpayers within the same group or is it between groups. Distribution of the tax burden within the group refers to horizontal equity i.e. people in the same group sharing the liability equally and distribution between groups that refers to sharing the burden with different people in different groups, thus, is there fair distribution of the tax burden and commitment towards one's obligation to contribute to tax to generate revenue for the country.

In testing the existence of the association between tax fairness and tax compliance, Roberts (1994) used a 30 second television public service advertisement to measure if there was any

impact caused by these 30 second advertisement on taxpayers' perception of fairness which was predicted to ultimately influence their tax compliant behavior. The results proved to be significant in both the testing; confirming that the advertisements had contributed to the influence on the perceptions of tax fairness and when tax noncompliance was the dependent variable again it was significant (fairly high levels of compliance). Falkinger (1995) stated that the amount of tax that a person evades decreases with perceived equity if only the person's absolute risk aversion increases with perceived equity.

Exchange equity refers to the perceived value of tax funded government benefits and services in exchange for one's tax contribution. Vertical equity is about the burden of taxes for certain social groups compared to others. Prior studies have tested empirically the dimensions of tax fairness concept (e.g. Richardson (2006), Gerbing (1988), Christensen et al. (1994), and Christensen and Weihrich (1996). Gerbing (1988) found eight factors; general fairness/distribution, exchange with government, self interest, government spending, attitude towards taxes of the wealthy, progressive versus flat tax rate, complexity and justification of evasion.

However, only five factors were identified to be dimensions of tax fairness namely general fairness/ distribution, exchange with government, tax rate structure and the taxation of the wealthy. However, Wenzel (2002) discussed in Chapter 3 of his article that tax compliance often refers to issues of justice and fairness in a selected manner. Further, researchers have found it very challenging to be able to demonstrate the importance of these variables to tax compliance. Wenzel (2002) found that this model of approach is criticized because it is one sided i.e. ignoring the fact that voluntary tax compliance requires some cooperation between the key participants

i.e. the taxpayers and the tax authority. But again the cooperation is dampen when tax authority are heavy handed with regulatory approach. Therefore, the relevance of knowing the attitudes of the taxpayers' helps to inform why they react that way and to understand what importance tax equity or fairness has in their actions towards tax compliance. Their behavior can be classified as; the rational actor and the profit seeking taxpayer. The next two paragraphs will explain more about it.

2.7 The taxpayer is the rational actor

Achieving tax compliance from the public is a challenge to almost every tax authority. Early research concentrated on model that made taxpayer behave like actors who will decide their action based benefit they can get from their actions, according to Allingham & Sandmo (1972). Several research findings show that taxpayer will not comply if the systems persists to be unfair, unjust and illegitimate (e.g. Alm, Jackson & McKee,1993; Cowell,1992; Roberts & Hite,1994; and Taylor 2001), reports understanding taxpayers' attitudes will give IRS (US) a better position to design strategies to achieve greater compliance.

Researchers have suggested interesting concepts and findings to tax compliance and offered theories. Valerie Braithwaite (2003b) highlighted a position of resistance of protest as a motivation postures that one has against the tax system. These resistances encourage evasion and avoidance. But on the other hand taxpayers are of the view that they are bound by the rules of the tax authority which tries to collect as much as tax as it could while the taxpayer try to get away with paying little tax as they could. However, a study by Wenzel (2002) added to the tax compliance framework a social identity for justice motivation. The law can be perceived as wrong and the type of behavior that follows cannot be blamed because the interpretation of the

law and obeying the law for one may not be the same for another if the other perceive the system to be unfair so he will evade tax or become a non complaint taxpayer, he will underreport, over-claim deduction, not file in his returns and delay payments.

2.8 Maximize Gain/Profit Seeking

The economic self- interest theory by Allingham & Sandmo (1972) only consider the individual outcome i.e. the taxpayer compromise to pay certain amount of tax and hope the detection action will cover the benefit that he already gain through the evasion. The most important point to think is how much the taxpayer evaluates the tax system in respect of self interest favorable to him. If they find the tax system favorable to them than they will be tax complaint i.e. they are looking for justice and fairness in the system.

As mentioned by Murphy (2005), research conducted in many different contexts has shown that people are able to accept unfavorable outcomes provided they feel the procedures used to come to those decisions have been handled in a procedurally fair manner. After understanding tax compliance, definition of tax fairness, the suggested underpinning theories establishing the link between tax fairness and tax compliance the next important aspect would be to know the unique characteristics of tax fairness dimensions which are the variables in this study.

2.9 Dimensions of Tax Fairness

It has been admitted by many researchers (e.g. Porcano, 1984; Richardson & Sawyer, 2001; and Jackson & Milliron, 1986) that tax fairness is a multidimensional concept which was also stated as the reason why it produces inconsistent results. However researchers have added it as an

independent variable to see the correlation with tax compliance behaviour.. Tax Fairness was studied by Gerbing (1988) in her survey questionnaire “an empirical study of taxpayer perceptions of fairness” developed an operational survey instrument to measure taxpayer perceptions of tax fairness in Texas, US.

The study was carried out with 56 items and identified eight factors through Confirmatory Factor Analysis (CFA): (i) general fairness/distribution,(ii) exchange with the government, (iii) self interest, (iv)government spending (v) attitude towards taxes of the wealthy,(vi) progressive versus flat tax rates,(vii) complexity, and (viii) justification of evasion. However, only five could be considered as fairness dimensions: (i) general fairness/distribution, (ii) exchange with government, (iii) attitude towards taxes of the wealthy, (iv) progressive versus flat tax rate and (v) self interest. The study also supports that tax fairness is a multidimensional concept.

The next immediate paragraph will discuss the literature on each of the dimensions. Christensen et al. (1994) refined and modified survey instrument of Gerbing (1988) with the five dimensions and administered it to 296 students studying tax introductory course. The results showed that these dimension were able to measure tax fairness but not all were significant. Factor analysis findings showed the students had better perceptions of tax fairness after being exposed to tax knowledge. Gerbings’ fairness dimension were tested by Christensen et al. (1996) on different role players in the tax systems which include tax auditors, tax educators and tax practitioners who were different in their perceptions towards tax fairness but the dimension were tested using factor analysis and were able to conclude that different perceptions can improve information gathering from the taxpayer and the tax authority should take this into considerations.

Richardson (2006) studied tax fairness as one of the various independent variables in an international cross country investigation. The study showed non economic determinants such as income source, agricultural income, democracy, culture, fairness, religion, legal system, regional developing country, income level (separated into low income level and high income level) and tax rate showed strongest effect on tax evasion. Hite & Roberts (1992) tested the association between tax reforms and public perceptions of tax fairness ultimately testing to see the compliant behavior of the residents of the US. However their reports showed that the tax reforms did not improve their perceptions of fairness or the simplification of the tax system.

In another study by Gilligan & Richardson (2005), Gerbing's fairness dimensions were tested as a comparative study between two jurisdictions i.e. Australia and Hong Kong. Five dimensions of tax fairness were found but the overall conclusion was, there are no universal perceptions of tax fairness prevailing cross culturally. Finally Richardson (2006) tested Gerbing's (1988) dimensions once more in isolation on Hong Kong taxpayers and found able to include one more dimensions i.e. middle income earners share/burden of tax as the sixth dimension and used regression to understand taxpayers perceptions of tax fairness. however not all the dimensions he factored showed significant results. The reasons given for the results were culture and also the study separated the questions on share of burden to cover three categories of taxpayer groups namely; low income earners, middle income earners and high income earners. Next, each of the tax fairness dimensions will be discussed in the following paragraphs.

2.9.1 Dimension 1- General Fairness and Distribution of the Tax burden

Wenzel (2002) who investigated the need to identify taxpayer's role is as a person who seeks justice for all when in a situation like deciding on tax fairness. The role of the taxpayer cannot be looked as an individual's outcome because the taxpayer is looking at justice to decide is the tax system fair to all. The point to reach is that if the taxpayer perceives the tax system not fair, illegitimate then difficult to achieve compliance or in other words evasion increases. According to Schisler (1995), taxpayers' perception on equity was lower than tax preparers. He gave three reasons aggressiveness, equity perception and consensus will decide the compliance behavior and his findings reveal that taxpayers are aggressive in their tax situations.

The general conclusion is that taxpayer felt the system less equitable and they will find a way to evade or escape taxes. To evaluate the feeling of fairness by taxpayers' the mean values of the five questions asking opinion on general fairness of the income system and then the average tax payers' judgment shows the score is past average i.e. reflects a more fair tax system in Malaysia. Studies using distributive justice gave mixed findings because most of the studies select and pick one aspect of these distributive justices and evaluate. Fairness refers to one's tax burden whereby one person's tax burden compared with similar another person or people (horizontal equity) or else it is tax burden of a group compared with that of another group or others (vertical equity) (Wenzel 2002).

If the tax burden is not distributed evenly due to the different categories of people then fairness is questionable. It is to be noted that disadvantageous inequity increase evasion and advantageous equity decreases evasion, as mentioned by Spicer & Becker (1980). Furthermore, the

distribution of tax burden among all in the society is at large. referred as macro justice, that measures whether taxes are paid evenly by all society groups as stated by Brickman, Folger, Goode & Schul (1981) as quoted in Wenzel (2002).

2.9.2 Dimension 2 – Exchange with the Government

As stated by Roberts (1994) that taxation is actually similar to trading with the government. Therefore in return for the tax payment what quality and kind of public services do they get? To understand the relationship between taxpayer and the government research is focused on the perceived tax fairness and the compliant behavior. The degree of satisfaction the public has with the government will enhance tax compliant behavior. Positive actions by the state are expected to bring about positive attitudes and commitment of taxpayers' to the tax system and ultimately tax compliance, as mentioned by Torgler (2001a). Porcano (1992) analyzed the relationship between the criteria used to evaluate a tax system and the perception of fairness about the tax provisions. He compared between two groups i.e. tax preparers and taxpayers and found that taxpayers perceive the system to be unfair and also their exchange with the government not fair. However the tax preparer who is acting as the middle men between the client and the enforcer perceive the system fairer.

To test whether taxpayers' are happy with the benefits they receive in exchange for the taxes they pay, the exchange contract between taxpayer and the government was used as a measure of fairness by Porcano (1988). Using 18 variables that were predicted to affect tax evasion, Porcano, (1988) found that exchange with government was the only variable that correlated with tax evasion. This study also referred to procedural justice (the procedure involved in the formulation of tax laws and enforcement strategies) to be incorporated as a measure of fairness.

Porcano (1992) quoted Gerbing (1988) in his studies that exchange with government to be one dimension of tax fairness.

In this context the equity theory predicts that taxpayer evaluate their contribution of tax for the benefits that they can receive from the government. So if there are the considerations of equity in their decision then if they receive a public transfer (benefits) then they would comply as compared with those who didn't receive. So equity matters to decision making on compliance and how it relates with their perceptions of fairness. However, to say that there is causal relationship between inequity and tax evasion (noncompliance) is not possible because of the uncertainty whether the reason is because of inequity or simply a means of excusing one to illegal behavior, as indicated by Spicer & Becker (1992). There was no significant evidence to say that fairness affects their decision in complying.

However, if taxpayers consider equity is important then it will affect their decision so it is important to explain to them the return that they get from the government for their tax payments, according to Kim (2002). Income declaration increases when individual perceive some form of benefit provided by the government through the tax money that the individual paid. Christensen et al. (1994) tested the five tax fairness dimension used in this study and found an affirmative answer to the research question whether tax fairness can be measured by these five dimensions. Out of these five factors three are framed within distributive theory justifications.

2.9.3 Dimension 3 – Attitude towards taxation of the wealthy

Gerbing (1988) study on perceptions of taxpayers in US has identified one such dimension which refers to the taxation of the wealthy. In US there might be some clear privileges only meant for the wealthy. However in Malaysia there is no clear provision in the Income Tax Act (ITA) 1967 that provides privileges for the wealthy. There are only general deductions and provisions meant for all who really qualify for it. However the wealthy taxpayers may have high claims on medical, even for child insurance policies and so on due to their life style and status. Another deduction that can be related to be special is donations made to approved institutions and deducted at the gross income stage itself. However this dimension is not very close to what was interpreted by Gerbing (1988) as there was specific provision in the IRS of US that meant for this class of taxpayers. In the Malaysian context, it is more of treating every taxpayer fair and equal.

2.9.4 Dimension 4 - Preferred Tax Rate/ Structure

Hite & Roberts (1991) and Roberts & Hite (1994) discussed about the preferred tax rate saying that increase in rate will increase compliance. The results by Kinsey & Grasmick (1993) were different i.e. progressive tax rate was judge unfair and chances of future cases of tax cheating. Factors such as progressive versus proportional tax rates are significant variables to compliance behavior. This implies that there is difference in tax rate. In the Malaysian tax system the high income earners will fall into the higher tax bracket i.e. as the income increases the tax rate will also positively increase. According to Reckers, Sanders, & Roark (1994) have stated that mildly progressive tax rate will promote tax compliance. Their findings used ethical beliefs to test if compliance will react to any marginal tax rate. However, the results showed not significant. The

link between tax rate and compliance as reported by Alm, Jackson, & McKee (1992) is evident from this study that compliance increase with lower tax rate because the 'payoff' benefit is greater when tax rate is larger. One other thing is that unreported income increase when marginal tax rate is highest.

2.9.5 Dimension 5 - Self Interest

Eisenstein (1961) noted that judging from the ideology of equity, fairness is an individualistic concept whereby the individual is the key determinant asking or arguing for equity. McGowan (2000) mentioned many studies have found that self interest (defined as direct personal benefit) significantly affects taxpayers' attitudes. Example, Hite (1990) tax shelters have direct relationship with fairness attitudes. Hite & Roberts (1991) found people with higher income believe progressive tax rate are more fair (vertical equity) or in other words favor a lower tax rate. Hite & Roberts (1992) stated how the Tax Reform Act 1986 of the US showed that self interest separately appeared as a variable in explaining evaluations made by taxpayers' whether a tax system is fair or not. Self interest is not fairness but it affects taxpayer attitudes.

Wartick (1994) found people who were made worse off by a tax law change perceive the system to be less fair compared to those who were not affected. It means the tax liability of one increase because of a new tax law or because in comparison with another individual either in the higher income class or a middle income classes then his attitudes towards fairness is impacted. Only fairness is considered when a tax system is being evaluated. So what explanations can be given about self interest and tax compliance? Self interest is self centered, individualistic and what is given to one cannot be accepted as fair when given to another person. Christensen et al. (1994)

found significance between self interest and tax cheating i.e. noncompliance. If an individual believes that the tax system is not fair then he thinks noncompliance or evasion itself is justified. The taxpayer uses the reasoning that what he found not fair he just do not comply. However, if he has been exposed to the tax system he will then believe the tax system is actually fair. In the study by Hite & Roberts (1992) using 10 specific tax reform changes to understand association between self interest and fairness the findings showed there is association between fairness and self interest in the case of tax reforms and tax changes. Upon examining the relationship between tax compliance and self interest when a new tax law or new tax rule is introduced taxpayer knew that his liability is going to increase. So his compliance behavior will decrease to balance up with the impact the new rule brought in.

Therefore the chances are underreporting will increase and honest tax reporting will decrease. This creates an inverse relationship between self interest and tax compliance. Spicer & Becker (1980) used taxpayer's tax rate and the tax rates of other taxpayers' to operationalize tax fairness. The results were evasion increased (decrease) when the subjects were informed that their tax rate is higher than (less than) the tax rates of the others. These results also were not consistent because other studies by Milliron (1985a) and Kaplan & Reckers (1985) found no relationship between tax rate and evasion.

2.9.6 Demographic Factors and Tax Fairness

The taxation literature has statements that demographic dimensions have impact on tax compliance e.g. Andreoni et al. (1998) stating types of income affects compliance rate. The study also reported noncompliance was higher among taxpayer over 65 years old. Another by Feinstein

(1991) stating the rate and degree of noncompliance is less with households who are over 65 years old. Data from Taxpayer Compliance Measurement Program (TCMP) used by IRS of the US shows types of income affects compliance rates (US GAO, 1990). Dubin & Widle (1998) based the study on data from TCMP and census stated noncompliance is greatest where a non-white population is high. Baldry (1987) based data from TCMP and census and found age and gender affect compliance rate.

According to Chan et al. (2000) demographic variables indirectly affect tax compliance on three aspects; attitudes, perceptions and noncompliance opportunity. Jackson & Milliron (1986) found that gender has an influence on tax compliance; younger, single males are more likely to evade. Other previous studies that showed significant differences between male and female as indicated in the literature are (Kinsey & Grasmick, 1993; Mason & Calvin, 1978; Porcano, 1988; Vogel, 1974; and Wenzel, 2002). Age is another demographic factor found to have a positive link with tax compliance. Researchers of tax compliance studies like (Vogel, 1974 and Mason et al, 1975) have stated that older taxpayers' are more compliant. However, as mentioned by McGowan (2000), generally studies do not show clear systematic patterns of how demographic factors affect taxpayers' perception on fairness. Richardson (2006) has used demographic factor as a control variable also. Researchers felt that demographic variables affect tax compliance through indirect means such as the attitudes and noncompliance opportunity.

For the purpose of this study demographic data was collected to consider the impact on tax compliance behavior directly and also indirectly (age and gender). Prior studies mostly have tested the direct association between demographic factor with tax compliance and as compared

with those that have tested the association of the impact of tax fairness on demographic factors that ultimately affects tax compliance behavior. Jackson & Milliron (1986) were the first to consider the impact of demographic factor on tax compliance by looking at the direct impact of demographic factors such as age, gender, education, income level, income source, marginal tax rate, fairness, complexity, and revenue authority and tax morale. Richardson (2006) reported that older taxpayers are more compliant than younger taxpayers. The younger are risk seeking, less sensitive to penalties. In the present study, respondents were asked to complete demographic questions about age, gender, and education and employment status and were tested.

2.9.6.1 Age

Older taxpayers' are more compliant than younger taxpayers'. However, according to Devos, (2001) there have been significant number of studies that have found no relationship between age and compliance. In relation to this Richardson & Sawyer (2001) proposed four possible explanations for this inconsistency; first the significance of age does not extend to all taxpayers'. Second, there is inconsistent definition of taxpayer noncompliance being used throughout the research. Third, when age is considered with other variables its impact on taxpayers' compliance is diluted, and finally the interaction of age with other variables is disturbed. Wenzel (2002) stated that the impact of age depends on the specific form of taxpaying behavior and this could be one reason for having inconsistent results. Age has been related to different opportunities to avoid tax e.g. older taxpayer would have acquired sufficient assets or wealthy therefore their tax noncompliance will be lower compared to younger taxpayers' who are still active in acquiring wealth and plan strategies such as underreporting and exaggerate deductions.

2.9.6.2 Gender

Torgler (1993) investigated the role of gender difference towards tax compliance. Hasseldine (1999) stated there exist voluminous literature on gender differences but in tax compliance studies little emphasis has been focused on gender and the reasons for the differences. Therefore the findings are inconsistent. An interesting study by Gërkhani (2007) used institutional theory to explain gender differences. However, the study did not find statistically significant support that men evade taxes more than women. The question was whether woman are the fairer sex who are more tax compliant than their male counterparts. And is man less complaint and has lower tax morale than woman. As a course of the effect of gender influencing the perception of tax fairness the need to control the demographic variable was necessary to get the true findings of tax fairness as a standalone.

Gender of respondents contribute to predict the types of tax compliance e.g. in income reporting and deduction. This is found to be consistent with previous findings of Mason & Calvin (1978), Porcano (1988), Vogel (1974) and Kinsey & Grasmick (1993). Research by Fallan (1999) which was designed to test how gender can impact tax fairness by conducting pre and post test for the subjects showed there were no significant difference in attitude towards the fairness of the tax system between male and female tax students be it law students or marketing students. The result was that gender do not take claim to show significance on changes in attitudes of tax fairness. However, in this study first, gender will be treated as a general variable and then only tested as a dummy variable i.e. differentiating it from the male to know its impact on taxpayers' perceptions of tax fairness and then their tax reporting attitudes.

2.9.6.3 Education

Education has always been an independent variable to examine the impact of general education like many other constructs that ultimately effect tax compliance behavior. Basically it is viewed as tax knowledge and there has been increased in ethical reasoning with education. Distributive justice by Levanthal (1976) stated that individual knowledge on the concept of justice is learned through education. Findings by Christensen et al. (1994) showed that tax education has proven significant to taxpayers that information and clarification on tax matters will help to judge the system as fair. According to Roberts (1994) and Wartick (1994) educating taxpayers' the tax system or presenting justification for certain tax provision enhances fairness perceptions which will ultimately influence tax compliance levels.

There are only a few studies that used education to mediate the compliance rate of taxpayers. But one interesting point discovered by Jackson & Milliron (1986) is that the impact can be in two ways; one education will help the people to become more knowledgeable about the tax system that will make them understand their obligations towards their country and government and appreciate the benefits received from the government but the other one would be they misuse the knowledge to become more aware of the tax loopholes and engage in tax evasion activities. Song and Yarbrough (1978) studied on tax ethics that played a key role in influencing taxpayers' complaint behavior. The results on level of education showed a strong correlation with R^2 is 26%. A point to note here, in taxation research since there are too many determinants to tax compliance when only variables coming from the numerous factors are put together for test, then a bigger part of the variance can be explained. According to Fallan (1999), the pre and post test on male and female students from different areas of study has shown that exposure to better tax

knowledge has a significant influence towards the fairness of the tax system. Therefore, tax knowledge helps to develop a fairer attitude towards tax system and that will enhance compliance. But in this study education which is a noncompliance opportunity variable is tested with tax fairness to understand the indirect association on tax compliance. Therefore the attitude will definitely have an impact on the compliance behavior.

2.9.6.4 Employment /Occupational status

Generally research use income as a factor that has influence on tax compliance. The income will be divided into middle income and high income levels. However, occupation status or employment status which refers to respondents' nature of job and the institutions that he is employed can be tested to understand the impact of tax compliance.

CHAPTER THREE

3. Research Methodology

3.1 Research Design

This is a descriptive study used to measure the tax fairness dimensions in Ethiopian setting and the study tried to see the extent the fairness perception played in ensuring tax compliance. It is a quantitative research which generates statistics through the use of large-scale survey research.

3.2 Instruments of data collection

The study used both primary and secondary data sources of data to see fairness perception of tax payers and their relation with compliance. The primary data will be collected through self administered survey questionnaire. The survey instrument used in this study is found from Richardson (2006) and the most mentioned Gerbing (1988) questionnaire that was done to empirically measure taxpayers' perceptions of tax fairness in US in 1988. Among the 21 questions that Richardson (2006) used to see fairness perception in Hong Kong and Australia only 18 questions were included in the questionnaire. Those questions which are vague in nature and items related to middle income earners have been excluded because level of income is not included in the study scope.

Thus, finally tax fairness to be used in this study has five dimensions with 18 items only. The present questionnaire is divided into three sections containing total of 37 items. Section 1 covers four demographic items, section 2 covers five tax fairness dimensions and has 18 questions in total and each dimension has specific number of items which is presented in a Likert type-scale with a 5- point scale from 1 – “Strongly Disagree” to 5 - “Strongly Agree”. The items of tax

fairness were used to measure the perceptions of tax fairness dimensions among respondents. The questionnaire identified how taxpayers' perceive the tax system in Ethiopia judging from the level of taxpayers' perception on tax fairness. The dimensions of tax fairness being measured are; General Fairness, Self Interest, Special Provision for the wealthy, Exchange with the Government, and Tax Rate. As for the first three questions on General Fairness using Likert scale-type; 1 denoting "Very Fair" and 5 – "Very Unfair", thus these questions are recoded to be consistent with the rest of the questions in the survey.

Section 3 covers questions on the dependent variable which is the noncompliance behavior which has 15 items, also with 5 - point Likert type-scale from 1 – "Strongly disagree" to 5 - "Strongly agree". The scale value for 1 is Strongly Disagree which is the similar to the value assigned to 1 which is Strongly Disagree of the scale for tax fairness. This is because the items used by Richardson (2006) to measure tax compliance behavior are on noncompliance attitudes such as underreporting and tax cheating. Thus with 15 questions on tax noncompliant behavior the lowest score is 15 which indicates high noncompliance, to 75, indicating the highest compliance. The followings are the 15 none compliant items stated by Richardson (2006) model.

Table 1: Tax Noncompliance Items

Item No.	Measuring
TComp 1	Bartering goods and services
TComp 2	Outside income
TComp 3	Cash income
TComp 4	Investment income
TComp 5	Business Expenses
TComp 6	Medical Expenses
TComp 7	Rich people
TComp 8	High tax rates
TComp 9	Chance
TComp 10	Ends meet
TComp 11	Government spending
TComp 12	Deserve
TComp 13	Doesn't hurt
TComp 14	Getting caught
TComp 15	Occasional

The main aim of the research was just to see the non compliance behavior in general and has no intention of determining the type of non compliance. The respondents merely had to tick the appropriate columns. All the questions were close ended.

3.3 Sampling Design

This study has applied cluster sampling in selecting four of the ten sub cities in Addis Ababa. It is a sampling technique that involves dividing the population in to subgroups and then draws the sample from each group. Since the population under study is widely distributed, it was appropriate to cluster them in to sub cities. This four sub cities (Yeka, Bole, Kirkos and Arada) are selected based on purposive sampling assuming the relative density of tax payers located in those areas. The other participants in this study include full time accounting department instructors in different private and government higher institutions in Addis Ababa. Only four private and three governments higher institutions are selected based on their geographical convenience.

Taking their geographical convenience in to consideration, the study also addressed the auditors in five of the forty registered auditing firms in Addis Ababa. Because of their exposure to different tax payers and tax related issues, their response can be vital to the reliability of the data and the conclusion to be drawn. A total of 200 individual tax payers including accounting instructors, auditors in accounting firms, employees of Ethiopian revenue and customs authority and self employed business owners located in Addis Ababa are included in the survey study. Except employees of ERCA, the individual tax payers in the selected sample area and institutions are addressed through availability sampling. But for the case of ERCA, employees

are selected based on purposive sampling considering their exposure to the tax system such as tax audit, tax assessment and collection and law enforcement offices

3.4 Procedures of data collection

The data collection for the study is effected through the use of the questionnaire designed by Richardson (2006) after the modification of some items which are beyond the scope of the study. The questionnaire has been distributed to the individual tax payers when they showed to submit their tax return at the end of the month. These individuals have been engaged in self owned business or they are employed in self owned businesses. Since the questionnaire is self administered they have given privacy in filling the questions. A total of 100 questionnaires have been distributed to four sub cities under study 25 questionnaires in each sub cities. The remaining 100 questionnaires have been distributed to ERCA (20), accounting firms (30), private colleges (24) government universities (26).

3.5 Data Analysis

The collected data is analyzed with SPSS version 16.0. After the raw data is fed in to it, descriptive analysis is conducted. Mean analysis, followed by principal component of factor analysis. Then correlation test, t- test and finally regression results are displayed. In order to find answers to the hypothesis developed above, correlations and multiple regression analysis is used: first to find out if there exist direct association between tax fairness construct as the independent variable with tax compliant behavior, second to find out how much demographic variables (age, gender, education and employment status) have impact on tax compliance (in conjunction with tax fairness). The third purpose is to go a step further from the second test, to find out if specific groups in demographic variables (in conjunction with the tax fairness perceptions dimensions) show differences on tax compliance. This is done by controlling two of the demographic

variables age (older and younger) and gender (male and female). All the regression analysis is done using the models developed by the previous researcher

CHAPTER FOUR

4. Research Results

Chapter overview

This chapter discusses the result of data analysis. It begins by stating the statistical description of the respondents. Then the mean score of the dependent and independent variables is taken to see the respondents' judgment of the system and their compliance behavior. Then to test the internal reliability Cronbach's alpha is used and factor loading for the tax fairness items and tax compliance items is conducted. Followed by, the correlation between tax fairness and tax compliance is analyzed with and without the consideration of the demographic variables. Finally regression analysis is conducted to see the statistically significant dimensions and its impact on the taxpayers' perception with and without demographic variables.

4.1 Characteristics of the Respondents

At the start it was expected to reach at least 200 individual income tax payers. The tax payers under category 'c' who report their tax returns to their respective sub city. Of which only 180 usable questionnaires were returned, which constitutes 90% percent of the total sample. The respondents are comprised of individual taxpayers in the four sub cities under study, YEKA, BOLE, ARADA and KIRKOSE sub cities. Also in the sample, accounting instructors and lecturers in three government universities and four private colleges were involved. To make use of their exposure to different tax and tax related issues employees of ERCA who are assumed to have influence on the study result and auditors of five auditing firms are included. The total of 200 individual income tax payers has been addressed of the target 200. This is around 90% of the expected number of the targeted 200 taxpayers. For further deepening of the research, 20 tax

officials in ERCA have been addressed. The remaining part of the sample is shown on the tables below:

Table 2: Sample component: Higher Institutions

Institutions	Number of full time accounting department instructors	Sample Addressed	Percentage
Addis Ababa university	20	4	20
Commerce	15	7	47
Civil service college	10	6	60
Admas university college	10	8	80
Alfa university college	10	5	50
St Mary university college	10	6	30
Unity university	8	4	40
Total	83	40	45%

Table 3: Sample component: Audit Firms

Firms	Numbers of auditors in the sample frame
Bromhead company	6
Thomas and company	6
Degefa lemessa and company	6
Getetachew and company	6
HST	6
Total	30

4.2 Profile of the respondents

Initially it was intended to reach 200 individual tax payers but after careful assessment of the respondents 180 useable questionnaires are returned. This resulted in 90% response rate. Of the total sample male have higher number than females comprising of 73.2 % of the total sample and female participants were only 26.8%. The age group under study consisted of 73.8% younger tax payers and 23.2% older tax payers. And it shows most of the participants are younger. The five age groups were further broken down in to two classes to make two main groups as younger and older taxpayers to be used for advance analysis. Therefore those under the age of below 40 were categorized as younger tax payers and those 40 and above are categorized as older tax payers.

This classification is used to see whether age has any contribution towards compliance towards the tax system. Most of the participants of the study has earned bachelor's degree and higher. It showed 48.1% for bachelors and 23.25% earned masters and above. The remaining part of the population has diploma and high school certificates. The employment status of the employees consisted of 50% self employed, 29.4% those employed in private companies and the remaining 20.6 % of the population are government employees. Compared to previous studies, this study is much well distributed and the literacy level of the respondents is also high with education mean of 3.61 signifying most of the respondents having bachelors and above.

Table 4: profile of respondents

	Frequency	%
<u>Gender</u>		
Male	132	73.2
Female	48	26.8
Total	180	100
<u>Age</u>		
Below 20 years	1	6
20 – 29 years	81	45.6
30 – 39 years	50	27.8
40 – 49 years	40	22.2
50 – 59 years	8	4.4
Total	180	100
<u>Education</u>		
High school complete	24	13.1
Certificate	11	6.2
Diploma	20	9.4
Bachelors Degree	88	48.1
Masters/ Doctorate	37	23.15
Total	180	100
<u>Employment</u>		
Government	37	20.6
Private	53	29.4
Self employed	90	50.0
Total	180	100

4.3 Perception on Tax Fairness and Tax Compliance – Mean Analysis

The study tried to compare the mean score of the tax fairness dimensions and the tax compliance items to see the fairness level of the tax system and the degree of compliance. The questionnaires were previously used by Richardson (2006) to see the fairness and compliance behavior of Australia and Hong Kong. But attempts have been made to make the questionnaire understandable and because the income level is not the issue of this study items related to middle income earners have been dropped out. To see the outcome of the study mean scores of both the tax fairness dimension items and tax compliance items were analyzed.

The table below explains the mean of the fairness items for all the variables used as tax fairness dimensions. Except for the general fairness whose average is greater than 3 shows moderate fairness, the other dimensions such as special provision to the wealthy, tax rate and exchange with the government are all below the average value 3. This shows moderate unfairness in the tax structure. Also the analysis of the mean of the overall fairness items yielded 2.96 which supports our statement above and it can be said the participants of the study has seen the income tax as moderately unfair. The mean scores are different from what is seen in other studies. For instance studies conducted on Malaysia had mean score of 3.40 for all the fairness dimensions which resulted in moderately fair tax system.

The next part deals with tax noncompliant items as designed by Richardson (2006). As the variables were all important to see the compliance behavior of tax payers no modification is made and all the questions were distributed to the research participants. And the values on the table below shows the mean score for all the variables is greater than the average 3.0 which shows the participants are moderately compliant to the tax laws as the mean score showed 3.29.

The likert scale for this study ranges from 1 as strongly disagree that the items stated is noncompliant item and 5 as strongly agree that the item stated is a noncompliant. Therefore, the total score for the honest tax payers amount to 75 and the dishonest taxpayers score have the value of 15. Previous studies have dropped the first noncompliance item because of its low score but this study has found higher mean score for the first compliant item which is bartering or trading with relatives. Therefore, it is included in the study for further analysis.

Table 5: Mean and standard deviation of tax fairness Items

Items	Mean	Standard deviation
General Fairness		
For an average tax payer, I think that the tax system is:	3.21	1.242
For me personally, I believe that the income tax system	3.06	1.276
Generally, I believe that the manner in which the income-tax burden is distributed across tax payers is	3.01	1.320
Generally, I feel that the income tax is a fair tax:	3.07	1.180
On the whole, the burden of income tax is fairly distributed	2.82	1.279
Self Interest		
Current tax laws require me to pay more than my fair share of income tax.	3.19	1.349
Compared to other tax payers, I pay less than my fair share of income taxes:	2.11	1.250
Compared to the amount paid by more wealthy taxpayers, I pay more than my fair share income taxes	2.96	1.388
Special provision		
People whose income is about the same as mine should pay the same amount of income tax regardless of what kind of investments they make, how many dependents they have or what their other financial obligations are	2.71	1.417
Special provisions in the income tax law that apply to only a few people are unfair	2.99	1.356
Some perfectly legal tax deductions are not fair because only the wealthy are in a positions to use them	3.18	1.399
Tax rate		
High – income earners have a greater ability to pay income tax , so it is fair that they should pay a higher rate of tax than low income earners	3.34	1.404
It is fair that high-income earners pay proportionately more tax than low-income earners. For example, if someone earning birr100, 000 pays 20 percent in taxes(birr 20000), then someone earning birr 20000 should pay less than 20 percent in taxes (less than birr 4000)	3.00	1.303
A fair tax rate should be the same for everyone, regardless of their income: for example if one pays a 14 percent tax rate , everyone should pay a 14 percent tax rate, whether they are wealthy or poor	2.54	1.451
The share of the total income taxes paid by high income earners is much too high	2.96	1.412
Exchange with government		
I get fair value for my income tax birr in terms of benefits received from the government for example education, medical, infrastructure	2.93	1.505
The income tax that I have to pay are unreasonably high considering the benefits provided by the governments	3.07	1.430
The benefits I receive from the government in exchange for my income-tax birr are reasonable	2.92	1.546

Note: N=180

Table 6: Mean and standard deviation for tax non compliance items

	Items	Mean	Standard deviation
1.	Trading or exchanging goods or services with a friend or neighbor and not reporting it in your tax return	3.41	1.524
2.	Reporting your income fully, but not including a small amount of extra outside income	3.44	1.477
3.	Being paid cash for a job and then not reporting it in your tax return:	3.51	1.489
4.	Not reporting some earnings from interest or investment that the government would not be able to find out about	3.52	1.504
5.	Adding a little bit more than you actually spend when reporting your business expense:	3.59	1.471
6.	Stretching self-education deductions to include some expenses that are not really self-educations	3.49	1.482
7.	Since a lot of rich people pay no taxes at all, if someone like me underpays a little, it's not a big deal	3.27	1.591
8.	Tax rates are just too high, so it is not really cheating when you find ways to pay less tax than you are supposed to	3.21	1.538
9.	When you are not really sure whether or not you deserve a tax deduction, it makes sense to take a chance and take deduction anyway	3.25	1.557
10	With what things cost these days , it is ok to cut a few corners on your tax return just to help pay bills	3.23	1.635
11	It is not wrong to hold back a little bit on taxes since the government spends too much anyway	3.20	1.608
12	When you know you deserve a deduction that the government will not let you take, it makes sense to tale it some other place where they will not catch you on it	3.18	1.560
13	It is not so wrong to under report certain income since it does not really hurt anyone	3.32	1.647
14	The chance of getting caught are so low that it is worthwhile trying to cut corners a little on your taxes	3.26	1.604
15	It is all right to occasionally under report certain income or claim an undeserved deduction if you are generally a loyal and law- abiding citizen	3.12	1.690

Note: N=180

4.4 Factor Analysis

Factor analysis is the statistical method used to discover patterns among the variables to determine if the underlying combination of the original variables can summarize the original set (Cooper, 2006). In factor analysis it is possible to see the variables having significant influence on the dependent variable. But it also necessitates having sufficient sample size before taking on factor analysis.

4.4.1 Factor Analysis for Dimensions of Tax Fairness

Principal component analysis is a method of factor analysis that transforms a set of variables into a new set of composite variables is used for this study. And the components are extracted using varimax rotation. Before going in to the factor analysis the data is tested for sample adequacy using Kaiser-Meyer-Olkin (KMO) as a minimum value of 0.6 is required and the Bartlett's test of sphericity between 0 and 1 is required. And the variables under study showed KMO of 0.743 for sample adequacy and Bartlett's sphericity value at significant p value of 0.000 with chi square of 1086 is determined and found to be above average to conduct factor analysis. After the factor analysis for this data is taken three components have been discovered and these components were used for further analysis.

The table below shows the three components. Component one contains ten statements consisting of four dimensions. Component two contains four statements comprising of two dimensions and component three consists of four statements consisting of three dimensions. Component one consists of five general fairness statements two self interest statements, two exchange statements, and one item from tax rate structure. Component two includes four items of dimensions for

special provision and one item from tax rate structure. The third component includes four items from three dimensions one item from exchange with the government, two items from tax rate structure and the last item from self interest. Component one explains 74.49% component two explains 14.09 % and 11.43 % is explained by component three.

Table 7: Factor analysis for tax fairness items

Tax fairness Items:	Components		
	1	2	3
For an average tax payer, I think that the tax system is:	.792		
For me personally, I believe that the income tax system	.775		
Generally, I believe that the manner in which the income-tax burden is distributed across tax payers is	.728		
On the whole, the burden of income tax is fairly distributed	.710		
Generally, I feel that the income tax is a fair tax:	.659		
The income tax that I have to pay are unreasonably high considering the benefits provided by the governments	.619		
I get fair value for my income tax birr in terms of benefits received from the government for example education, medical, infrastructure	.585		
Compared to the amount paid by more wealthy taxpayers, I pay more than my fair share income taxes	.542		
Current tax laws require me to pay more than my fair share of income tax.	.446		
The share of the total income taxes paid by high income earners is much too high	.426		
Special provisions in the income tax law that apply to only a few people are unfair		.756	
Some perfectly legal tax deductions are not fair because only the wealthy are in a positions to use them		.724	
People whose income is about the same as mine should pay the same amount of income tax regardless of what kind of investments they make, how many dependents they have or what their other financial obligations are		.561	
It is fair that high-income earners pay proportionately more tax than low-income earners. For example, if someone earning birr 100, 000 pays 20 percent in taxes (birr 20000), then someone earning birr 20000 should pay less than 20 percent in taxes (less than birr 4000)		.459	
The benefits I receive from the government in exchange for my income-tax birr are reasonable			.703
A fair tax rate should be the same for everyone, regardless of their income: for example if one pays a 14 percent tax rate , everyone should pay a 14 percent tax rate, whether they are wealthy or poor			.610
High – income earners have a greater ability to pay income tax , so it is fair that they should pay a higher rate of tax than low income earners			.591
Compared to other tax payers, I pay less than my fair share of income taxes:			.471
KMO measure of sampling adequacy= 0.743			
Bartlett's Test of Sphericity (p<0.0000)			
Cumulative percentage	74.49	14.09	11.41

Unlike other studies tax fairness dimensions in Ethiopia has only three dimensions but this dimensions determined to component one, component two and component three have different

variables from different categories. Component one or dimension one has ten items comprising of items from four different dimensions such as, general fairness, special provision exchange with the government and self interest. Component two or dimension two consisted of four items from two dimensions three items representing special provision and one item representing tax rate. The last component consisted of four items from three different dimensions one item from dimension one two from tax rate structure and one item from self interest.

Table 8: Factor analysis for tax non compliance Items

Items	Component
Trading or exchanging goods or services with a friend or neighbor and not reporting it in your tax return	0.812
Reporting your income fully, but not including a small amount of extra outside income	0.781
Being paid cash for a job and then not reporting it in your tax return:	0.787
Not reporting some earnings from interest or investment that the government would not be able to find out about	0.853
Adding a little bit more than you actually spend when reporting your business expense:	0.858
Stretching self-education deductions to include some expenses that are not really self-educations	0.858
Since a lot of rich people pay no taxes at all, if someone like me underpays a little, it's not a big deal	0.825
Tax rates are just too high, so it is not really cheating when you find ways to pay less tax than you are supposed to	0.775
When you are not really sure whether or not you deserve a tax deduction, it makes sense to take a chance and take deduction anyway	0.788
With what things cost these days , it is ok to cut a few corners on your tax return just to help pay bills	0.779
It is not wrong to hold back a little bit on taxes since the government spends too much anyway	0.862
When you know you deserve a deduction that the government will not let you take, it makes sense to take it some other place where they will not catch you on it	0.858
It is not so wrong to under report certain income since it does not really hurt anyone	0.862
The chance of getting caught are so low that it is worthwhile trying to cut corners a little on your taxes	0.853
It is all right to occasionally under report certain income or claim an undeserved deduction if you are generally a loyal and law- abiding citizen	0.758
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.947
Bartlett's Test of Sphericity Significance (p value)	0.000

The above table shows the factor analysis for tax non compliance items. The factors are factor loaded at the conventional 0.4 level.

4.5 Reliability test for internal consistency

The reliability of the internal consistency of the data is tested for all items of both the tax fairness dimensions and tax compliance and found to be in the acceptable range. The Cronbach’s alpha of coefficient of 0.7 is assumed to be acceptable according to Robert Ho (2006). For this study Cronbach’s alpha of 0.703 and 0.952 is computed for tax fairness dimensions and tax compliance respectively which shows the dimensions used are reliable.

Table 9: Cronbach’s Alpha for Tax Fairness and Tax compliance Variables

Variables	Cronbach’s Alpha	No. of Items
Tax fairness	0.703	18
Tax compliance	0.952	15

4.6 Pearson Product-Moment Correlations between Tax Fairness and Tax Compliance

Correlation refers to the relationship by which two or more variables change together, such that systematic changes in one accompany systematic changes in the other (cooper, 2006 p.712). It shows the relationship between the dependant variable and independent variable. It also shows the strength of the correlation, the Pearson correlation(r) if it is close to 1 we can say it has high positive correlation, if it is zero it has no correlation at all. If the r value is negative it has inverse correlation. In this study the dependent variables is tax compliance behavior of individual tax payers and the independent variables are the tax fairness dimensions.

Table 10: Pearson Product-Moment Correlations between Tax Fairness and Tax Compliance

	TC	Compont1	Compont2	Compont3
Tax noncompliance	1			
Component 1	0.075	1		
Component 2	0.227**	-0.064	1	
Component 3	0.007	0.241**	-0.058	1

** Correlation is significant at the 0.01 level (two tailed)

Component two which includes three special provision and one tax rate structure statement has relatively higher correlation than the other two components.

The correlation is significant at 0.01significance level. Which is interpreted as ones perception about the amount of tax paid by other wealthy tax payers and the perception of the provision given to these individuals affects the compliance behavior of an individual. In addition, what one thinks of the fair tax rate could be one of the significant factors that could enhance the noncompliance by tax payers. The other two components have very weak correlation at the stated significance level. The findings here are not consistent with those of other researchers that have conducted their study on similar title. The findings on other studies show that general fairness and exchange with the government have higher correlation. Meaning the perception of the unfair tax systems and the perception towards the benefits received and the amount paid are found to be the determinant factors for the under reporting of tax payers. Also it is found that the individuals self interest in assuming his own tax share is also the other factor which is found significant (Hite & Roberts1992).

4.7 Correlation between Tax Fairness, Demographic factors and

compliance

The table below shows the correlation between different demographic variables and their result as Richardson (2006) which is at 0.05 significance level gender has influenced compliance towards the tax system. Which is there is the difference between the degree of compliance between male tax payers and female tax payers. Also similar results have been found regarding education. Unlike previous studies, age has no significant correlation with tax compliance. Which is there is no significant difference between younger tax payers and older tax payers.

The result as Richardson (2006) which is at 0.05 significance level gender has influenced compliance towards the tax system. Which is there is the difference between the degree of compliance between male tax payers and female tax payers. Also similar results have been found regarding education. Unlike previous studies, age has no significant correlation with tax compliance. Which is there is no significant difference between younger tax payers and older tax payers.

Table 11: Correlation between Tax Fairness, Demographic factors and

Compliance

	TC	Compnt1	Compnt2	Compnt3	Gender
TC	1				
Compnt1	0.075	1			
Compnt2	0.227**	-0.064	1		
Compnt3	0.007	0.241**	-0.058	1	
Gender	0.171*	-0.026	0.258**	-0.088	1
Age	-0.011	0.204**	-0.094	0.252**	0.020
Education	-0.269**	0.049	-0.046	-0.195*	-0.164*
Employment	0.110	0.325**	-0.045	0.187*	0.202*

	Education	Employment
Education	1	
Employment	-0.466**	1

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

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

4.8 Multiple Regression Analysis

In an attempt to see the effect of tax fairness on tax compliance the regression model is used. This shows the predictive power of the independent variables on dependent variable which is tax compliance. As stated above on chapter one, the two model used in this study are applied by Richardson (2006) as he used the model to test the predictability of the fairness dimension towards the compliance behavior in two jurisdictions Australia and Hong Kong. The models, model one, which shows the effect of tax fairness on compliance at

regression model is used. This shows the predictive power of the independent variables on dependent variable which is tax compliance. As stated above on chapter one, the two model used in this study are applied by Richardson (2006) as he used the model to test the predictability of the fairness dimension towards the compliance behavior in two jurisdictions Australia and Hong Kong. The models, model two which adds

demographic variables to the equation were used in this study. Model two is also broken in two: model 2a and model 2b. To ensure the predictive power of the models, multicollinearity diagnosis tests have been conducted and found that the models are free of multicollinearity problems as their variance inflation factor (VIF) and tolerance values for all the models were tested and the value of VIF is greater than 0.1 and tolerance values for all dimensions are less than 10.

The models used by Richardson (2006) as stated above are:

$$3. TC_i = \alpha_0 + \beta_1 GF_i + \beta_2 TR_i + \beta_3 EX_i + \beta_4 SLF_i + \beta_5 SPC_i + E_i$$

$$4. TC_i = \alpha_0 + \beta_1 GF_i + \beta_2 TR_i + \beta_3 EX_i + \beta_4 SLF_i + \beta_5 SPC_i + \beta_k X_{ki} + E_i$$

The first hypothesis is tested using all the tax fairness dimensions (independent variables) tried to see their effect on tax compliance (dependent variable)

4.9 Hypothesis Testing

4.9.1 Testing hypothesis one: There is a positive association between tax fairness and tax compliance behavior in category C tax payers in Addis Ababa. Below is the regression result for model one. The values entered in the regression model are based on the factor analysis conducted above and based on their factor loading.

Table 12: Hypothesis one

Variables	R square	Adj. R square	F	Sig. F	Beta	VIF	Tol.	t-value	Sig.
Model one	0.069	0.051	3.880	0.010					
Constant					1.464				0.036
Compnt1					0.104	0.925	1.081	.881	0.380
Compnt2					0.535	0.989	1.011	3.314	0.001
Compnt3					0.042	0.922	1.084	-.316	0.753

*significant at 0.01(two tailed)

The model is significant at F statistics of 3.880 and significance of 0.010. The adjusted R square for the model has the value of 0.051 which shows 5.1 percent of the variance is explained is explained by the model. Compared to the previous findings in Malaysia (11 percent) the result is very weak which implies that there are other independent variables which are not included in the model for the study only focused on fairness. Of the 5.1% adjusted R square most of the variance is explained by compont2 which comprises of special provision to the wealthy and tax rate structure. Unlike other researches which found general fairness and exchange with the government s more significant, this study has found special provision and progressive tax structure as the causes of none compliance. Compont2 has more significant influence on the model than the other two components.

The findings are quite different from what Richardson (2006) found in his research taken in Australia and Hong Kong on tax fairness. General fairness and exchange with government were the most significant factors that are discovered by Richardson, but the findings in Ethiopian jurisdiction are different and they have no significant influence on the model. Except for the second component which included the special provision to the wealthy and the progressive tax rate structure the other components were statistically not significant and unable to predict the model. Generally, as stated above fairness is a multi dimensional issue and it can be affected by various factors fairness being one of them. Therefore, even though the model has weak prediction power, it results in partial support for the first hypothesis that tax fairness dimensions have their own contribution in achieving compliance towards taxation.

Table 13: regression Model two demographic variables

Variables	R square	Adj. R square	F	Sig. F	Beta	VIF	Tol.	t-value	Sig.
Model one	15.5	11.6	4.003	0.000					
Constant									
Compnt1					0.202	1.313	0.761	1.608	0.110
Compnt2					0.433	1.095	0.913	2.661	0.009
Compnt3					-0.118	1.209	0.827	-0.863	0.390
Gender					0.282	1.153	0.867	1.203	0.231
Age					-0.048	1.137	0.879	-0.436	0.664
Education					-0.312	1.413	0.707	-3.457	0.001
Employment					-0.163	1.593	0.628	-0.994	0.322

*significant at 0.05(two tailed)

Model two, table 13 adds demographic variables to the model and tried to see the predictive power of the model. As can be observed from the statistics it resulted in higher adjusted R square of 0.116. Interpreted as, 11.6 percent of the variance is explained by the model. This is much higher than the first model without demographic variable in it. The model is significant at F statistics of 4.003 with significance level of 0.000. Demographic variables such as age gender employment status and education have contributed a lot to the prediction power of the model together with the tax fairness dimensions.

As can be observed from the t-value significance column the only demographic factor which contributes to the model prediction power together with fairness dimensions is education. The other demographic variables were not significant. This is the supportive evidence for the second objective of the study that demographic variables have influence on the compliance behavior of taxpayers. The finding is similar to the fact that education has a significant contribution in other

jurisdictions as studied by other researchers. On the contrary, Song & Yarbrough (1978) found negative relationship between education and compliance behavior. Stating that increased knowledge on tax matters can result in tax noncompliance and evasion.

Other researchers such as Kassipillai (1996) found that increasing the taxpayers knowledge about tax can improve their compliance behavior. And in most compliance researches education has been a linking variable between fairness and tax compliance. There for the regression results shows hypothesis 4 should be accepted.

4.9.2 Testing the second Hypothesis: There is a positive association between older taxpayers and tax compliance behavior for individual income tax payers in Addis Ababa

The table below depicts the t-value for the older and younger taxpayers and their corresponding significance level. Based on the analysis the p-value is higher than the expected 0.05 level therefore it supported the acceptance of the null hypothesis that there is no association between the older tax payers and the tax compliance behavior in Addis Ababa for the population under study. Or it means there is no significant difference between younger tax payers and older tax payers in Addis Ababa. Therefore, age is not a significant factor.

Table 14: **Hypothesis two**

t-value	Sig. 2-tailed	95% Confidence Interval of the Difference		
		Mean Difference	Lower	Upper
.485	0.628	0.11118	- 0.34174	0.56410

significant at 0.05(two tailed)

4.9.3 Testing the Third hypothesis: There is a positive association between female taxpayers and tax compliance behavior in Ethiopia

Looking at the t value in the table below for the third hypothesis, it resulted in the p- value of 0.031 which is less than the excepted 0.05. There for it indicates the acceptance of the alternate hypothesis that there exists a significant relation between female tax payers and male tax payers. And it can be said female tax payers are more compliant than male tax payers.

Table 15: Hypothesis three

t-value	Sig. 2-tailed	95% Confidence Interval of the Difference		
		Mean Difference	Lower	Upper
-2.175	0.031	-0.49192	-0.93854	- 0.04530

*significant at 0.05(two tailed)

4.9.4 Testing Hypothesis Five: There is an association between employment status and taxpayers' compliance behavior in Addis Ababa.

Other studies have found that there is no significant association between employment status and tax payers compliance behavior. The results found were similar to what Richardson (2006) found in his study conducted on Australia and Hong Kong. This study involved employees in private and government institutions and individual income tax payers from category C tax payers and reached at the same conclusion that employment status has no significance influence on tax compliance behavior in Addis Ababa as their p- value all yield greater than 0.05.

4.9.5 Testing hypothesis six: In general taxpayers perceive Ethiopian income tax as a fair tax

Looking at the t-values in the table below and considering their respective p values all the values are close to zero. At 5% significance level, all the values related to the general fairness are significant.

Table 16: Hypothesis six

Item	t-value	Sig. 2-tailed	95% Confidence Interval of the Difference		
			Mean Difference	Lower	Upper
For an average tax payer, I think that the tax system is:	33.661	0.000	3.262	3.07	3.45
For me personally, I believe that the income tax system	31.110	0.000	3.094	2.90	3.29
Generally, I believe that the manner in which the income-tax burden is distributed across tax payers is	28.920	0.000	2.981	2.78	3.18
Generally, I feel that the income tax is a fair tax:	33.149	0.000	3.094	2.91	3.28
On the whole, the burden of income tax is fairly distributed	27.470	0.000	2.769	2.57	2.97

*significant at 0.05(two tailed)

Grouping all the values in one category of general fairness yielded the following result.

t-value	Sig. 2-tailed	95% Confidence Interval of the Difference		
		Mean Difference	Lower	Upper
38.277	0.000	3.04000	2.8831	3.1969

*significant at 0.05

The t-value for general fairness on the above table shows the value of 38.277 and significance level of 0.000 which is close to zero. The result suggests the rejection of the null hypothesis and acceptance of the alternative hypothesis. Meaning the taxpayers perceive the Ethiopian income tax as fair.

4.9.6 Testing Hypothesis seven: Income tax payers in Addis Ababa do not perceive income tax as fair when they compare the income tax amounts that they pay with the benefits they receive from Ethiopian government.

The t-value indicates the value of 23.404 and significance level close to zero or 0.000 which in turn resulted in the acceptance of the hypothesis that the benefit received and the amount paid in terms of income tax is not comparable as the view of the tax payers in Addis Ababa shows.

Table 17: Hypothesis seven

		95% Confidence Interval of the Difference		
t-value	Sig. 2-tailed	Mean Difference	Lower	Upper
23.404	0.000	2.869	2.63	3.11

*significant at 0.05(two tailed)

4.9.7 Testing Hypothesis eight: Income tax payers' compliance degree in Ethiopia is high.

The table below shows the t-values related to tax non compliance items as stated by Richardson (2006). The highest value is seen on item 5 and the lowest item which the item with the t-value of 24.856 is placed on item 12. For all the non compliance items the significance value is zero or very close to zero resulting in the rejection of the null hypothesis and acceptance of the alternate. And concluded as, there is high degree of tax compliance in Addis Ababa in category C tax payers and other individual income taxpayers.

Table 18: Hypothesis eight

Item	t-value	Sig. 2-tailed	95% Confidence Interval of the Difference		
			Mean Difference	Lower	Upper
Trading or exchanging goods or services with a friend or neighbor and not reporting it in your tax return	27.473	0.000	3.365	3.12	3.61
Reporting your income fully, but not including a small amount of extra outside income	28.958	0.000	3.411	3.12	3.64
Being paid cash for a job and then not reporting it in your tax return:	29.116	0.000	3.462	3.23	3.70
Not reporting some earnings from interest or investment that the government would not be able to find out about	28.897	0.000	3.475	3.24	3.71
Adding a little bit more than you actually spend when reporting your business expense:	30.458	0.000	3.550	3.32	3.78
Stretching self-education deductions to include some expenses that are not really self-educations	28.791	0.000	3.421	3.19	3.66
Since a lot of rich people pay no taxes at all, if someone like me underpays a little, it's not a big deal	25.500	0.000	3.219	2.97	3.47
Tax rates are just too high, so it is not really cheating when you find ways to pay less tax than you are supposed to	25.886	0.000	3.131	2.89	3.37
When you are not really sure whether or not you deserve a tax deduction, it makes sense to take a chance and take deduction anyway	26.576	0.000	3.264	3.02	3.51
With what things cost these days , it is ok to cut a few corners on your tax return just to help pay bills	25.090	0.000	3.252	3.00	3.51
It is not wrong to hold back a little bit on taxes since the government spends too much anyway	24.856	0.000	3.175	2.92	3.43
When you know you deserve a deduction that the government will not let you take, it makes sense to tale it some other place where they will not catch you on it	25.333	0.000	3.164	2.92	3.41
It is not so wrong to under report certain income since it does not really hurt anyone	24.893	0.000	3.262	3.00	3.52
The chance of getting caught are so low that it is worthwhile trying to cut corners a little on your taxes	25.182	0.000	3.206	2.95	3.46
It is all right to occasionally under report certain income or claim an undeserved deduction if you are generally a loyal and law- abiding citizen	22.611	0.000	3.013	2.75	3.28

*significant at 0.05 (two tailed)

4.9.8 Testing Hypothesis nine: Income tax payer does not perceive his or her income tax burden as fair.

Table 19: Hypothesis nine

	t-value	Sig. 2-tailed	95% Confidence Interval of the Difference		
			Mean Difference	Lower	Upper
Generally, I believe that the manner in which the income-tax burden is distributed across tax payers is	28.920	0.000	2.981	2.78	3.18
On the whole, the burden of income tax is fairly distributed	27.470	0.000	2.769	2.57	2.97

*Significant at 0.05 (two tailed)

The table above depicts that the t values for both items has significance level of 0.000 with t values of 28.92 and 27.470 this urges us to conclude the null hypothesis should be rejected and the alternate hypothesis should be accepted. Therefore, it left the statement that the income tax in Ethiopia for the population under study is not perceived to provide fair distribution of the income tax burden.



Chapter five

5. Conclusions and Recommendations

This chapter tried to put the conclusion derived from the main findings of the study, it also tried to put some comments on future research direction made some recommendation and suggestion to ERCA in achieving tax compliance behavior for the population under study and finally looks at the implication of the study.

5.1 Overview of the chapter

It is important to recognize that large scale tax compliance does not occur in vacuum or sterile environment. It occurs in human system, organizations which have beliefs, assumptions, and expectations, norms and values both idiosyncratic to individual taxpayers and shared beliefs. Fairness is a multi dimensional issue it can be defined at individual level or at the society at large. Therefore, it is difficult to put a single formula to measure the fairness perception of an individual. This study does not attempt to see whether the items specified as measurement scales for tax fairness dimensions are relevant or not. It only applied the measurement scales as used in other studies and tried observe their influence on compliance behavior of individual income tax payers. As detailed above, the study has tried to see the effect of each of the tax fairness dimensions and their effect on compliance behavior of individual income tax payers both self employed and salaried income taxpayers.

5.2 A look in to Ethiopian income tax

According to the income tax proclamation no 286/2002 every person having income as defined herein shall pay income tax in accordance with this Proclamation. The study focuses on Employment income tax and business profit tax. According to the current federal income tax Proclamation no.286/2002 taxpayers are categorized into three categories, namely category “A”, “B”, and “C” based on their volume of sales and form of business. Subsequently, the Tax Authority will determine whether the taxpayer shall continue in the same category or should be shifted from one category to the other.

Category “A” includes any company incorporated under the tax law of Ethiopia or in or a foreign country and other entities having annual turnover of Birr 500,000 and more. Those who are categorized under “A” have to maintain all records and accounts which will enable them to submit a balance sheet and profit and loss account disclosing the gross profit, general and administrative expenses, depreciation, and provisions and reserves together with supporting vouchers (Council of Ministers Regulation no. 78/2002: Article 18, Sub Article 2).

Category ‘B’ includes those enterprises having annual turnover of more than Birr 100,000 and less than Birr 500,000. This category of taxpayers must submit profit and loss statement at the end of the year. The law requires all entries in the records and accounts to be supported by appropriate vouchers (Council of Ministers Regulation no. 78/2002: Article 18, Sub Article 2).

Category ‘C’ unless already classified in categories ‘A’ and ‘B’ include those taxpayers whose annual turnover is estimated by the Tax Authority at Birr 100,000 or less. On the other hand,

standard assessment is used to determine the income tax liability of Category 'C' taxpayers. This type of assessment is a fixed amount of tax determined in accordance with the Council of Ministers Regulation established Schedules. This category of taxpayers is the most problematic category of taxpayers and it is considered as hard to tax group. This is due to the fact that these taxpayers pay taxes at fixed rate on the income estimated by the income tax authority rather than declaring their income by themselves. Their daily income is estimated by assessment committee and the taxpayers have little room to address their view so that frequent friction is observed in this area.

These categories of tax payers have the responsibility of submitting their tax returns to their respective sub cities. Whereas the other two categories have to submit their tax returns to the Ethiopian revenue and customs authority head office. Category 'C' tax payers have not been much of the concern for the research and this research focused to fill the gap by looking at how these categories see the tax system as in terms of fairness and its effect in explaining their compliance behavior. To do so the questionnaire has been adopted from Richardson (2006) and modified to make it understandable.

5.2 Discussion and Conclusions

The study mainly focused on looking at the tax fairness dimensions which have been tested in other jurisdictions to predict the compliance behavior of tax payers, can have the same predictive power in achieving compliance toward s the tax system in Ethiopia. In trying to do this, answers for the research question are found and ultimately the nine hypotheses are tested.

5.2.1 Hypothesis one and research question one

Component one, component two, and component three are items extracted using factor analysis. Component one consists of ten statements comprising of general fairness statements, exchange fairness statements self interest and tax rate structure. Component two comprised of special provision to the wealthy and one statement from tax rate structure and component three consists of four statements from three dimensions exchange with government, tax rate structure and self interest. Based on the findings from the regression result and the correlation matrix only component two was found to have a significant influence on the compliance behavior of the tax payers.

Therefore, the answer to research question one and the test for hypothesis one resulted in the conclusion that fairness dimensions found using factor analysis have weak prediction power therefore, it can only be accepted partially. The study arrived at different result than the previous studies who found most of the non significant items on this study as significant. The multi dimensionality problem of tax fairness could be the reason for the difference in the findings. Ethiopian is culturally much diversified which could contribute to the varied perception of individuals. As taxation is a political in nature, it can be viewed from various angles. As the more diversified the country's population is the more varied their political view will be. This

intern creates a multiple view towards the tax system. The level of understanding of the tax payers towards the tax system can affect the perception of fairness. Sheffrin (1993) gave reasons that some issues about tax fairness are complex for the average taxpayer to understand.

In previous studies conducted by Richardson (2006) the sample was not well dispersed as it only focused on MBA students in Hong Kong. But this study tried to involve every individual who are assumed to have direct association with the tax law. Those self employed tax payers, accounting instructors in higher institutions, tax officials and auditors in accounting firms. According to James (2007), taxes can bring the citizens and the government together and the implementation of the tax laws depends on the ability of the government to exercise that power. In fact in Addis Ababa, they still want attention given to some specific aspects of fairness dimensions because they are still under the opinion that only a fair system can lead to positive tax compliance behavior. As a conclusion, based on the present findings and discussion, Hypothesis one, which is only partially supported is therefore partially accepted.

5.2.2 Research question 2 and 3 and hypothesis 2 through 9

Regression model two shows the effect of the different demographic variables on the tax compliance behavior of individual tax payers. In addition to the linear regression, the correlation coefficient (r) also showed the relationship between the demographic variables and their effect on the compliance behavior of tax payers. In regression model two because of the inclusion of the demographic variables the adjusted R square increased from 5.1% to 11.6%. These showed demographic variables have increased the prediction power of the model more than two times its previous value of 5.1%. Among the demographic factors age and employment status has no

significance influence on the tax compliance behavior of tax payers. Hypothesis two, three, five are tested using independent sample t-test and the result found are explained as follows. As shown on the t- test there is no significance difference between the compliance behavior of younger tax payers and older tax payers. Also the compliance behavior of tax payers is not dependent on their employment status.

On the other hand, there is a significant difference between the compliance behavior of female tax payers and male tax payers which is consistent with the findings in other studies. But regarding education, the beta coefficient in the regression model two has negative value which supports the report that education has an indirect positive link with taxpayer compliance via moral developments. People with more education are likely to have high level of moral development Chan et al. (2000). This can be explained whereby increased knowledge on tax matters in particular can lead to tax noncompliance and evasion.

Hypothesis six through nine all resulted in rejection of the null hypothesis. Individual income tax payers in Addis Ababa generally perceive the income tax as fair. One of the significant factors which contribute to higher tax evasion is perception of tax payers towards the amount they are paying in terms of the income tax birr and the benefit they get from the government in terms of education health etc. the analysis of the one sample t-test for exchange dimension shows tax payers do not perceive the benefit they get from the government and the amount they pay in terms of income tax birr as fair. This creates a big challenge for the tax authority in enhancing voluntary compliance. Hypothesis nine deals with fair distribution of income tax burden. The t-test value shows the null hypothesis should be rejected. Stating that there is no fair distribution of

income tax burden in the population under study. Looking at the t-value for hypothesis eight it shows that the level of income tax compliance in Ethiopia for the population under study is high.

5.3 Conclusion

Based on the results in the previous section, and on the process of testing the hypothesis of this research, the following important conclusions are made:

- Based on the regression analysis the prediction power of the tax fairness dimensions in is very low as compared to Malaysia and Hong Kong
- The relative change in the prediction power of the model after the inclusion of the demographic variables is high
- Based on the regression model two the beta value for education is found to be negative which means as the level of education increases the level of tax evasion behavior by individual income tax payers also increases. Therefore, this will require the government to enhance ethical education to different tax payers. This intern can create a positive attitude towards tax and tax related laws.
- As age has no significant effect on the compliance behavior of taxpayers, tax laws should be designed for the general population disregarding the tax payers in age classes.
- Income tax payers believe that they are paying higher than what the government is providing them in terms of the service like education, health and other activities. And to compensate their tax liability they might be engage in excessive tax under reporting activities.
- Income tax payers perceive the dimension of special provisions that related to the income tax as unfair. They believe the wealthy are being provided more support and benefit

from the government. This is another challenge for the government in enhancing voluntary compliance

- Income tax payers have preferred a progressive tax structure, the mean results in the fourth dimension showed that high income earners have greater ability to pay therefore they should pay higher than low income earners.
- As a whole the income tax system is perceived by the tax payers as fair.
- The degree of taxpayers' compliance is considered high. This result means that most income taxpayers are paying their income tax burden within the permitted period. This result means also, that most of them follow the regulations of the Ethiopian income tax authority
- Even though the extent of its effect is low, income tax fairness affects the degree of tax compliance behavior in Ethiopia. Yet it is not the only factor affecting compliance behavior and this part of the study is left for future researchers.
- The study found out that female tax payers are more compliant than male tax payers therefore the tax authority has to work towards increasing the perception of male tax payers.

5.4 Recommendations

For any government to function properly, sufficient amount of revenue must be provided. And one of the basic components of ensuring sufficient revenue for the government to discharge its activities properly is tax revenue. For proper generation of tax revenues, it is important to augment voluntary compliance by tax payers. Voluntary compliance by tax payers is a function of different variables as equity in distribution of tax burden being one. Consistent with prior research on taxpayers' attitudes and the compliance behavior evidence is found that fairness is

relevant and prevalent in tax compliant behavior. As implied by Christensen, et al. (1994) the implications of these results are that tax authority or tax policy makers can change some perceptions on tax fairness but not all. Building the positive attitude towards the tax system increases voluntary compliance by tax payers which in turn brings the government less administrative cost and more revenue. In promoting voluntary compliance the following recommendations should be noted

- As education is negatively related to the compliance behavior of tax payers, the government has to provide ethical education to tax payers in the form of short term training.
- Expand tax education to different tax payers through mass media more than what is currently being applied in television, radio, and news paper
- As male tax payers are less compliant, increasing their awareness towards the tax system and disseminating tax education can yield a better result in achieving voluntary compliance
- As special provisions to the wealthy people are creating misunderstanding between the government and tax payers, sufficient information should be provided to taxpayers at different levels as to the kinds of deductions given and the reason.

5.5 Direction for Future Research

In both the regression models it is observed that the prediction power of the model is very low, which indicates that there are other dimensions which are not included in this model but can bring significant change in the adjusted R square. This is because tax fairness is a multi-dimensional issue and it will be a driving force for future researchers to find out these factors which will increase the prediction power of the model.

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APPENDIXES



Addis Ababa University
School of graduate studies
Department of accounting and finance

This questionnaire is prepared for the thesis to be completed for the degree of masters in accounting and finance. The information you are providing will only be used for academic purpose. Thank you in advance

1. Your gender
 - 1) Male
 - 2) Female
2. Your age
 - 1) Below 20 years
 - 2) 20 – 29 years
 - 3) 30 – 39 years
 - 4) 40 – 59 years
 - 5) Above 60 years
3. Your educational level
 - 1) Grade 10 complete
 - 2) Grade 12 complete
 - 3) Certificate
 - 4) Diploma
 - 5) Bachelors
 - 6) Masters/doctorate
4. Your employment status
 - 1) Government
 - 2) Private
 - 3) Self Employed/Own Business
 - 4) others

The following 21 questions are used to access personal attitudes towards income taxes and the income tax system.

1. For an average tax payer, I think that the tax system is:
 - 1) Very fair
 - 2) Fair
 - 3) Neither fair nor unfair
 - 4) Unfair
 - 5) Very unfair
2. For me personally, I believe that the income tax system is
 - 1) Very fair
 - 2) Fair
 - 3) Neither fair nor unfair
 - 4) Unfair
 - 5) Very unfair
3. Generally, I believe that the manner in which the income-tax burden is distributed across tax payers is:
 - 1) Very fair
 - 2) Fair
 - 3) Neither fair nor unfair
 - 4) Unfair
 - 5) Very unfair
4. Generally, I feel that the income tax is a fair tax:
 - 1) Strongly disagree
 - 2) Disagree
 - 3) Neutral
 - 4) Agree
 - 5) Strongly agree
5. On the whole, the burden of income tax is fairly distributed:
 - 1) Strongly disagree
 - 2) Disagree
 - 3) Neutral
 - 4) Agree
 - 5) Strongly agree

6. I believe that the income tax system is the fairest kinds of system that the government could use to collect revenue:
- | | |
|----------------------|-------------------|
| 1) Strongly disagree | 4) Agree |
| 2) Disagree | 5) Strongly agree |
| 3) Neutral | |
7. Current tax laws require me to pay more than my fair share of income tax
- | | |
|----------------------|-------------------|
| 1) Strongly disagree | 4) Agree |
| 2) Disagree | 5) Strongly agree |
| 3) Neutral | |
8. Compared to other tax payers, I pay less than my fair share of income taxes:
- | | |
|----------------------|-------------------|
| 1) Strongly disagree | 4) Agree |
| 2) Disagree | 5) Strongly agree |
| 3) Neutral | |
9. People whose income is about the same as mine should pay the same amount of income tax regardless of what kind of investments they make, how many dependents they have or what their other financial obligations are
- | | |
|----------------------|-------------------|
| 1) Strongly disagree | 4) Agree |
| 2) Disagree | 5) Strongly agree |
| 3) Neutral | |
10. Special provisions in the income tax law that apply to only a few people are unfair
- | | |
|----------------------|-------------------|
| 1) Strongly disagree | 4) Agree |
| 2) Disagree | 5) Strongly agree |
| 3) Neutral | |
11. Some perfectly legal tax deductions are not fair because only the wealthy are in a positions to use them
- | | |
|----------------------|-------------------|
| 1) Strongly disagree | 4) Agree |
| 2) Disagree | 5) Strongly agree |
| 3) Neutral | |
12. High – income earners have a greater ability to pay income tax , so it is fair that they should pay a higher rate of tax than low income earners
- | | |
|----------------------|-------------------|
| 1) Strongly disagree | 4) Agree |
| 2) Disagree | 5) Strongly agree |
| 3) Neutral | |
13. It is fair that high-income earners pay proportionately more tax than low-income earners. For example, if someone earning birr100, 000 pays 20 percent in taxes(birr 20000), then someone earning birr 20000 should pay less than 20 percent in taxes (less than birr 4000)
- | | |
|----------------------|-------------------|
| 1) Strongly disagree | 4) Agree |
| 2) Disagree | 5) Strongly agree |
| 3) Neutral | |

14. A fair tax rate should be the same for everyone, regardless of their income: for example if one pays a 14 percent tax rate , everyone should pay a 14 percent tax rate, whether they are wealthy or poor:
- | | |
|----------------------|-------------------|
| 1) Strongly disagree | 4) Agree |
| 2) Disagree | 5) Strongly agree |
| 3) Neutral | |
15. The share of the total income taxes paid by high income earners is much too high
- | | |
|----------------------|-------------------|
| 1) Strongly disagree | 4) Agree |
| 2) Disagree | 5) Strongly agree |
| 3) Neutral | |
16. Middle income earners pay more than a fair share of the income-tax burden
- | | |
|----------------------|-------------------|
| 1) Strongly disagree | 4) Agree |
| 2) Disagree | 5) Strongly agree |
| 3) Neutral | |
17. The share of total income taxes paid by middle income earners is much too high
- | | |
|----------------------|-------------------|
| 1) Strongly disagree | 4) Agree |
| 2) Disagree | 5) Strongly agree |
| 3) Neutral | |
18. Compared to the amount paid by more wealthy taxpayers, I pay more than my fair share income taxes
- | | |
|----------------------|--|
| 1) Strongly disagree | |
| 2) Disagree | |
| 3) Neutral | |
| 4) Agree | |
| 5) Strongly agree | |
19. I get fair value for my income tax birr in terms of benefits received from the government for example education, medical, infrastructure
- | | |
|----------------------|-------------------|
| 1) Strongly disagree | 4) Agree |
| 2) Disagree | 5) Strongly agree |
| 3) Neutral | |
20. The income tax that I have to pay are unreasonably high considering the benefits provided by the governments:
- | | |
|----------------------|-------------------|
| 1) Strongly disagree | 4) Agree |
| 2) Disagree | 5) Strongly agree |
| 3) Neutral | |
21. The benefits I receive from the government in exchange for my income-tax birr are reasonable:
- | | |
|----------------------|-------------------|
| 1) Strongly disagree | 4) Agree |
| 2) Disagree | 5) Strongly agree |
| 3) Neutral | |

The 15 items below refer to tax non compliance scales. It is what some people think about certain aspects of taxation, especially income taxes. Please circle one answer in each line

1. Trading or exchanging goods or services with a friend or neighbor and not reporting it in your tax return:
 - 1) Strongly agree
 - 2) Disagree
 - 3) Neutral
 - 4) Agree
 - 5) Strongly disagree
2. Reporting your income fully, but not including a small amount of extra outside income
 - 1) Strongly agree
 - 2) Disagree
 - 3) Neutral
 - 4) Agree
 - 5) Strongly disagree
3. Being paid cash for a job and then not reporting it in your tax return:
 - 1) Strongly agree
 - 2) Disagree
 - 3) Neutral
 - 4) Agree
 - 5) Strongly disagree
4. Not reporting some earnings from interest or investment that the government would not be able to find out about:
 - 1) Strongly agree
 - 2) Disagree
 - 3) Neutral
 - 4) Agree
 - 5) Strongly disagree
5. Adding a little bit more than you actually spend when reporting your business expense:
 - 1) Strongly agree
 - 2) Disagree
 - 3) Neutral
 - 4) Agree
 - 5) Strongly disagree
6. Stretching self-education deductions to include some expenses that are not really self-educations:
 - 1) Strongly agree
 - 2) Disagree
 - 3) Neutral
 - 4) Agree
 - 5) Strongly disagree
7. Since a lot of rich people pay no taxes at all, if someone like me underpays a little, it's not a big deal:
 - 1) Strongly agree
 - 2) Disagree
 - 3) Neutral
 - 4) Agree
 - 5) Strongly disagree
8. Tax rates are just too high, so it is not really cheating when you find ways to pay less tax than you are supposed to:
 - 1) Strongly agree
 - 2) Disagree
 - 3) Neutral
 - 4) Agree
 - 5) Strongly disagree
9. When you are not really sure whether or not you deserve a tax deduction, it makes sense to take a chance and take deduction anyway:
 - 1) Strongly agree
 - 2) Disagree
 - 3) Neutral
 - 4) Agree
 - 5) Strongly disagree

10. With what things cost these days , it is ok to cut a few corners on your tax return just to help pay bills
- | | |
|-------------------|----------------------|
| 1) Strongly agree | 4) Agree |
| 2) Disagree | 5) Strongly disagree |
| 3) Neutral | |
11. It is not wrong to hold back a little bit on taxes since the government spends too much anyway:
- | | |
|----------------------|------------|
| 1) Strongly agree | 3) Neutral |
| 2) Disagree | 4) Agree |
| 5) Strongly disagree | |
12. When you know you deserve a deduction that the government will not let you take, it makes sense to take it some other place where they will not catch you on it:
- | | |
|-------------------|----------------------|
| 1) Strongly agree | 4) Agree |
| 2) Disagree | 5) Strongly disagree |
| 3) Neutral | |
13. It is not so wrong to under report certain income since it does not really hurt anyone
- | | |
|-------------------|----------------------|
| 1) Strongly agree | 4) Agree |
| 2) Disagree | 5) Strongly disagree |
| 3) Neutral | |
14. The chance of getting caught are so low that it is worthwhile trying to cut corners a little on your taxes:
- | | |
|-------------------|----------------------|
| 1) Strongly agree | 4) Agree |
| 2) Disagree | 5) Strongly disagree |
| 3) Neutral | |
15. It is all right to occasionally under report certain income or claim an undeserved deduction if you are generally a loyal and law-abiding citizen:
- | | |
|-------------------|----------------------|
| 1) Strongly agree | 4) Agree |
| 2) Disagree | 5) Strongly disagree |
| 3) Neutral | |