Print ISSN: 2053-2199 (Print),

Online ISSN: 2053-2202(Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development -UK

Determinant of Tax Evasion of Category "A" Taxpayers in East Addis Ababa

Moges Mengstu Kassaw

Department of Development Economics, Ethiopian Civil Service University, Addis Ababa, Ethiopia

doi: https://doi.org/10.37745/ijdes.13/vol11n47486 Published September 22 2023

Kassaw MM (2023) Determinant of Tax Evasion of Category "A" Taxpayers in East Addis Ababa, *International Journal of Development and Economic Sustainability*, Vol.11, No.4, pp.74-86

ABSTRACT: Tax revenues are important income sources for governments in most countries. because of the shortage of full tax compliance, government budgets are unbalanced in most countries, and therefore the gap between revenue and expenditure is increasing. the main question that was trying to answer during this paper was "why do taxpayers evade taxes?" The study was designed to spot the determinants of evasion (focusing on category "A") on government income in East Addis Ababa. A structured questionnaire was accustomed collect data from a sample of 371 taxpayers who were selected by employing a non-random sampling technique. A binary logistic regression model was employed to research the info and therefore the results of the study revealed that there's a statistically significant association between evasion and eight determinant variables (tax education, service quality, tax rate, income level, and fairness of legal system, financial Constraint, audit, and penalty). evasion has positively suffered from the rate, income level, audit, and fairness of the legal system and is negatively influenced by financial Constraints, tax education, service quality, and penalty. supported the finding of the study the subsequent policy recommendations are forwarded. These are the government should reduce the rate, and therefore the tax delivery system should be automated to make sure efficiency and quality delivery among money others.

KEYWORDS: category "a", taxpayers, tax office, tax compliance, tax evasion defaulters, naming and shaming, East Addis Ababa

INTRODUCTION

Tax may be a system of payment that individuals and firms are legally required to form to the government. It is a compulsory transfer of cash from private individuals and groups or institutions to the government. Most people don't wish to pay taxes because, for this reason, it's hard for tax administrators to levy and collect taxes efficiently. In addition, taxing informal sectors may be a major challenge for tax administrations in both developed and developing countries and therefore the "fiscal gap" that arises from the failure to tax this sector can be quite large. (1)

Taxation in developing countries may be a challenging topic and has attracted increasing attention within the last 20 years. During this period, many problems were observed like poor administration, failure to collect sufficient tax revenues, and lack of government and economic stability. (2)

Due to the problem of tax avoidance and evasion inherent in all tax systems tax compliance is a growing international concern for tax authorities and public policymakers as tax evasion seriously threatens the

Vol.11, No.4, pp.74-86, 2023

Print ISSN: 2053-2199 (Print),

Online ISSN: 2053-2202(Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development -UK

capacity of the government to raise public revenue. (3)

In developing countries, income tax evasion could be a serious challenge facing tax administration and obstructive government revenue performance. (4)

Several researchers have been conducted on issues related to tax evasion and tax compliance in Ethiopia (example ⁽²⁾, ⁽⁶⁾, ⁽⁷⁾, ⁽⁹⁾, ⁽¹¹⁾, ⁽¹²⁾, ⁽¹⁶⁾, ¹⁷⁾, ⁽¹⁸⁾ and ⁽¹⁹⁾). They tried to review thoroughly and in most of the literature, most of the variables were addressed; however, factors like marital status, trade sector, duration in business, and quality service of tax office were not addressed. Hence, this study includes these variables to spot the foremost determinant factors of evasion within the Addis Ababa case and to research the controlling mechanisms to curb the matter.

REVIEW OF LITERATURE

Tax is a mandatory payment or donation by the people to the Government for which there's no direct return to the taxpayers. The tax imposes a particular obligation on the people to pay the tax if they're liable to pay it. The main theoretical principle is that the public shall be tested according to their capability to pay, which is considered their fair share. The people in the same financial position should be tested in the same way without any demarcation. ⁽⁵⁾

Ethiopian taxation history has a relationship with the government and Country structures. There's no dependable talkie substantiation to justify the relationship between the administration's emergence and taxation. The Ethiopian ultramodern taxation system was introduced at the "beginning of 1940" when the government made tax reforms. (6)

The history of raising government profit during the post-1941 period goes back to March 1942, to the promulgation of Proclamation 8 of 1942. In the first paragraph of the preamble of that proclamation, the Emperor stated that to barter the establishment of Our Government, the substance of the country and therefore the well-being of Our People, land levies shall be levied. The revolutionary government changed the tax structure in 1976, replacing levies on agrarian income and pastoral land with a pastoral land-use figure and a new taxable on income from agrarian conditioning. The government incompletely soothed the tax collection problem that was during the Homeric period by delegating the responsibility for collecting the figure and tax on husbandry to peasant associations, which entered a small chance of earnings as payment. Whereas total profit increased significantly, to about 24 percent of GDP in 1988/89, tax earnings remained stagnant at around 15 percent of GDP. In 1974/75, total profit and taxable profit had been 13 and 11 percent of GDP, independently. Despite the 1976 changes in the tax structure, the government believed that the agrarian income tax was being underpaid, largely because of assessments by peasant associations.

The current government, under the 1995 blessing of the Ethiopian constitution, gave power to the civil and indigenous governments to levy and collect levies. As a result, several changes have been made in the tax and duty policy of the country because of the structural changes.

Most significant changes were made in the tax laws bringing about a reduction in the rate of income tax from 40% to 30% (Income Tax Proclamation No.286/02, 2002), equalization of tax rates for little and enormous scale mining activities (Amended Mining Proclamation No. 23/96, 1996), exemption of homes used for residence from paying capital gains tax. Because of a policy to encourage new investments, tax relief provisions were brought in (Investment Proclamation No.280/2002, 2002). Amendments within the laws followed by other measures like the introduction of Taxpayer number (TIN), the introduction of a tax withholding system, and the replacement of nuisance tax by VAT, which has become the most source of

Vol.11, No.4, pp.74-86, 2023

Print ISSN: 2053-2199 (Print),

Online ISSN: 2053-2202(Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development -UK revenue for the government. Also introduced was a turnover tax, emphasis on taxpayers' education, strong enforcement mechanisms, substantial reforms, and amendments within the tax laws to stay in pace with time and therefore the changing economic environment. This has caused increased efficiency and effectiveness in reducing fraud and smuggling.

Noncompliance with tax laws comes in different forms. It may be intentional non-compliance during which the taxpayer deliberately undermines the tax rules and regulations to possess personal gains. The second is within the sort of unintentional non-compliance which will be a result of ignorance, oversight, or mistake in applying tax laws. Any noncompliance act committed by the taxpayer that results in non-declaration / underreporting/ of taxable income leading to non-payment or underpayment of tax is regarded as tax evasion. (8)

Empirical Review

There are several pieces of research conducted within the sector of determinants of evasion and its relationship. Due to evasion, the collected tax income by the gov't and public goods and services has been reduced year to year in developed and developing countries.

The problem of evasion could also be a serious concern for developing countries like Ethiopia; as economic development is usually significantly hampered by poor tax revenues because of the matter of evasion. (9) (10)

Ethiopia has a rock bottom tax to GDP ratio (10.7%) far below the typical for Sub Saharan African and low-income countries generally, and evasion contributes tons to this poor performance. (11) (12)

An empirical study of evasion as a positive connection between tax rates and evasion. ⁽¹³⁾ This finding is consistent with the discoveries of ⁽¹⁴⁾ who distinguished the causes of evasion. He observed that the upper the speed, the upper are getting to be the probability for the taxpayers to evade, as this expands their income.

Factors associated with evasion behavior in Turkey by using survey data and correlational analysis, and multiple correlation techniques were employed. The result discovered that income level may be a negative effect on evasion. As income increases, taxpayers show tax compliance behavior instead of showing taxevading behavior (15)

Factors that influence tax payer's voluntary compliance behavior in Southern Nation Nationalities and other people s' Regional State (SNNPRS), Ethiopia employing a cross-sectional survey method of research design and Pearson matrix and logistic regression model. The results of this study revealed that tax knowledge, simplicity of tax returns and administration, perception of fairness and equity, perception of state spending, probability of auditing, and therefore the influence of referral group were determinant factors that influence the voluntary compliance behavior of taxpayers. (16)

The connection between major tax compliance variables and thus the attitudes and behavior of both selected individual taxpayers and tax evaders' towards evasion in Ethiopia, the Amhara region. The study employed a mixed-method approach-drawing data from both a survey instrument and taxpayer interviews. The findings revealed that tax morals, tax fairness, and to a lesser degree tax enforcement and tax awareness both directly and indirectly affected taxpayer compliance. (17)

In addition, ⁽¹⁸⁾ examined tax compliance and its determinants in Kaffa, Bench Maji, and Sheka Zones category 'B' business income taxpayers, Ethiopia. The info was examined with the use of an ordered logit model. The results of ordered logistic regression showed that tax compliance was positively affected by the education level of taxpayers, tax knowledge and awareness of taxpayers, simplicity of the legal system, attitude of taxpayers towards tax, perceived role of state expenditure, and rewarding scheme for loyal

Vol.11, No.4, pp.74-86, 2023

Print ISSN: 2053-2199 (Print),

Online ISSN: 2053-2202(Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development -UK

taxpayers. However, the probability of audit is insignificant, which is contrary to the work of ¹⁶.

The studies with the Determinants of Tax Compliance Behavior in Presumptive Taxation System within the Case of Dire Dawa Administration. The result discovered that tax compliance behavior is positively influenced by taxpayers' level of information and unfair treatment. (19)

The study that investigated the determinants of tax compliance within the case of category "A" taxpayers within the Jimma zone. The data was collected using structured questionnaires. The results of the analysis were shown that age, sex, punishment, auditing, simplicity, fairness, and perception of the gov't have had an impression on tax compliance. (9)

The overall framework followed for the literature review of determinants of evasion is the one given by (13), and (20).

The researcher takes the evasion perception of taxpayers as a variable to be explained by the varied factors; age, sex, status, education level, business type, duration within the business, Income level, financial constraint, fairness of the tax, the complexity of the system, the probability being audited, penalty, tax knowledge, quality service delivery, tax Rate.

RESEARCH METHODOLOGY

This paper has interested in examining the associations between the dependent variable (tax evasion) and the independent variables (factors), the quantitative research method is typically used. The data for this study were collected from primary and secondary sources. Primary data was collected through structured questionnaires, during which respondents were taxpayers (category "A") of the branch office. Secondary data was drawn from the existing official documents of the tax office, proclamation, regulation, directives, and annual reports from 2010 to 2012 E.C.

Sampling Technique and Sample Size

Taxpayers who were under this investigation have similar characteristics and that they lay in one category by their liabilities nature, they're category "A" and "small taxpayers" supported their annual transaction. The selection of entities was based on a non-random sampling technique due to the difficulty of accessing all the taxpayers and the inconvenience to meet all within a specific time. Thus, a non-random sampling technique was employed to accumulate the needed information through a structured questionnaire from the taxpayers; the info was collected from them once they come to the branch office, at the end of the month for declaring their tax.

The target population for this study incorporated category 'A' taxpayers of the branch office in East Addis Ababa small taxpayer's branch office. The sample size decided supported precision rate and confidence level for all categories of taxpayers as follows:

$$n = 385/(1+(385-1)/10505)$$
 $n = 371$

Data Collection Method

The questionnaire method was used to collect information from taxpayers, considering the large number needed for the study and the limited time available. To collect primary data, the researcher used a structured questionnaire, which was pre-tested on seven taxpayers of the branch office. No direct question about evasion is asked within the questionnaire it's due to the sensitivity of this subject. Instead, simple and indirect questions like "were you penalized or not?" using as a basis for gathering information about evasion since nobody can't be penalized with no intention of tax non-compliance behavior.

Vol.11, No.4, pp.74-86, 2023

Print ISSN: 2053-2199 (Print),

Online ISSN: 2053-2202(Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development -UK

Model Specification

When the variable features a binary outcome (i.e. yes or no, success or fail) the binary logistic regression model is going to be the higher model Gujarati (2004). Studies with an ordered outcome are commonly analyzed with the foremost popular method called the logistic regression proportional odds model Maximum Likelihood (ML) may be a classical technique for estimating the unknown parameters of this model. (21)

An evasion problem is that the two kind's attitudes matter in their nature; taxpayers may comply or evade. Taxpayers are assumed to be evasive in their attitude towards their tax liability and their willingness to comply with regulations of tax. Based on this, taxpayers were categorized into two levels of compliance, the taxpayers were penalized and made to pay their liabilities during the budget year, and therefore the taxpayers were not penalized.

Taxpayers are assumed compliant if they assess themselves by reporting their correct taxable income to the tax office by the tax laws and regulations without any legal enforcement. On contrary, taxpayers may have non-compliant if the tax office on those who are unwilling to pay their taxes liability on time and correct amount, through the application of audit enforced them to pay.

Since, the variable, (i.e., tax evasion) may be a discrete variable and dummy in nature that would measure through binary outcome variable and therefore the researcher assumes zero (0) compliant attitude (not penalized and made to pay), otherwise one (1).

Hence, logistic regression is an appropriate model to live how explanatory variables (factors influencing tax evasion) affect a private taxpayer's likelihood of evading or not. Because the binary result variables violate some assumptions of linear regression models such as (non-normal). The logit function derived from odds-ratio is as follows:

Equation 1 Model function

$$\log(\text{odds ratio}) = \log\left(\frac{penalized}{not}\right) = \log\left(\frac{yi=1}{yi=0}\right) = \beta 0 + \text{Xi'}\beta (1)$$

Equation (1) also can be expressed in terms of probability as follows:

$$\log(\frac{p(yi=1)}{p(yi=0)}) = \log(\frac{p(yi=1)}{1-p(yi=1)}) = \beta_0 + X_i'\beta + \mu_i$$
 (2)

Where p(yi=1) is that the probability of getting a non-compliance attitude (i.e. penalized) and 1- p(yi=1) is the probability of having a compliance attitude (i.e. not penalized by the tax office).

This model shows that an odd ratio does not only depend on variables incorporated in the model but also on other factors which are not included in the equation. By taking the antilogarithm on each side of equation (2) and rearranging it we have got a logistic function as follows:

$$\frac{p(yi=1)}{1-p(yi=1)} = e^{\beta 0 + Xi'\beta + \mu i}$$
(3)

$$p(yi = 1) = \frac{e^{\beta 0 + Xi'\beta + \mu i}}{1 + e^{\beta 0 + Xi'\beta + \mu i}}$$
(4)

Equation (4) describes that the probability of being evasive depends on observed exogenous variables. The predicted probability of evasion attitude of taxpayers, therefore, is often expressed as:

Print ISSN: 2053-2199 (Print),

Online ISSN: 2053-2202(Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development -UK

$$p(yi = 1) = \frac{e^{\beta 0 + Xi'\beta}}{1 + e^{\beta 0 + Xi'\beta}} \tag{5}$$

The predicted probability of tax compliant attitude of taxpayers can be expressed as:

$$p(yi = 0) = \frac{e^{\beta 0 + Xi'\beta}}{1 + e^{\beta 0 + Xi'\beta}}$$
 (6)

Therefore, the study used the following binary logistic regression model to examine the association between the determinant factors and taxpayers' tax evasion perception in the East Addis Ababa Small Taxpayers branch office. The model is as follows:

$$TE = \beta 0 + \beta j Xi' \tag{7}$$

In this equation, TE is that the variable, called evasion (evade or not), and Xi represents the independent variables.

RESULTS AND DISCUSSION

It became very important to determine whether the model improves the predicting ability of the outcome before evaluating the effect of each explanatory variable in the model. The statistically significant chi-square statistic (p<0.05) indicates that the final model gives a significant improvement over the baseline intercept-only model.

Thus, as the model summary indicates above, the likelihood ratio of chi-square statistics (116.72) is high and statistically significant at a 5% level of significance that indicating that parameters included in the model give better predictions as compared to the null model with no predictors.

As per $^{(22)}$ criterion for the best-fit model (values of Pseudo R² between 0.2 and 0.4 are considered to be extremely good fits), the overall fit of the logit model was found to be worthy. Since the regression result model shows that Pseudo R² (0.26) performs the above assertion.

Multicollinearity test of the model

Table 1. Multicollinearity

Variable	VIF	1/VIF	
SQ	2.20	0.454253	
CTS	2.17	0.461503	
TS	2.16	0.462141	
Teduc	2.11	0.474329	
TR	1.92	0.520032	
FAIR	1.75	0.569875	
AGE	1.71	0.583202	
EDUC	1.64	0.608957	
IL	1.60	0.623635	
SEX	1.33	0.749455	
DUR	1.32	0.759607	
MART	1.29	0.773143	
TAU	1.14	0.874348	
FC	1.11	0.898077	
PEN	1.08	0.927530	
Mean VIF	1.64		

One of the important steps in a logistic regression model is determining whether there exists multicollinearity among independent variables. Multicollinearity occurs when two or more explanatory

Vol.11, No.4, pp.74-86, 2023

Print ISSN: 2053-2199 (Print),

Online ISSN: 2053-2202(Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development -UK variables are highly correlated to each other. Therefore, the variance inflation factor (VIF) can be customized to detect the multicollinearity diagnostic for independent variables.

VIF (variance inflation factor) is an indicator of how much of the inflation of the standard error could be caused by collinearity. As stated by ⁽²³⁾, if the value of VIF is less than 10, then no multicollinearity problem exists.

As reflected in the table above, the result confirms that the VIF for SQ, CTS, TS, Teduc, TR, FAIR, AGE, EDUC, IL, SEX, DUR, MART, TAU, FC, and PEN are 2.2, 2.17, 2.16, 2.11, 1.92, 1.75, 1.71, 1.64, 1.60, 1.33, 1.32, 1.29, 1.14, 1.11 and 1.08 respectively. Since the variance inflation factor is less than the cutoff point (table 4), this indicates that all variables are relevant and multicollinearity is not there since the variance inflation factor (VIF) for each variable is less than the cutoff point 10.

Heteroskedasticity Test

To test the Heteroskedasticity of variables of the research, the researcher used the Breusch-pagan test. This test tells us that the variance remains constant for all variables. The output result is reflected as follows:

```
Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
    Ho: Constant variance
    Variables: fitted values of TE

    chi2(1) = 1.58
    Prob > chi2 = 0.2090
```

Figure 1. Heteroskedasticity test

The above test shows that the absence of Heteroskedasticity since chi-2 is greater than 0.05.

Regression Results

To test the hypothesized relationships between the independent variables (age, gender, marital status, education, income, business type, duration in the business, tax knowledge, tax fairness, complexity of tax system, tax rate, financial constraint, service delivery, penalties, audit) and the dependent variable (taxpayers' tax evasion perception), the binary logistic regression analysis was conducted.

The output from this analysis, a beta coefficient, provides an assessment of the significance, the impact of the explanatory variables on the dependent variable, level of likelihood, and the pseudo R squared which indicates the model fitness. In the regression result, the independent variables may have a positive or negative coefficient, which describes the nature of the effect that they exerted on the dependent variable.

The independent variable with negative coefficients implies that it hurts the dependent variable and vice versa.

```
Iteration 0:
               log\ likelihood = -223.75777
Iteration 1:
               log likelihood = -166.60002
               log likelihood = -165.40347
Iteration 2:
               log\ likelihood = -165.39752
Iteration 3:
               log\ likelihood = -165.39752
Iteration 4:
Logistic regression
                                                 Number of obs
                                                                             329
                                                 LR chi2(15)
                                                                         116.72
                                                                          0.0000
                                                 Prob > chi2
Log likelihood = -165.39752
                                                 Pseudo R2
                                                                          0.2608
```

Print ISSN: 2053-2199 (Print),

Online ISSN: 2053-2202(Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development -UK *Figure 2.* Coefficient of determination.

The first iteration (called iteration 0) is the log-likelihood of the "null" or "empty" model; that is, a model with no predictors. At the next iteration, the predictor(s) are included in the model. At each iteration, the log-likelihood increases because the goal is to maximize the log-likelihood.

Prob > chi2 is the probability of obtaining the chi-square statistic given that the null hypothesis is true. This is, of course, the p-value, which is compared to a critical value to determine if the overall model is statistically significant. The likelihood ratio chi-square of 116.72 with a p-value of 0.0000 tells us that the model as a whole is statistically significant.

TE	Coef.	Marginal effect	Std. Err.	Z	P> z
SEX	3807322	0899275	.3152445	-1.21	0.227
AGE	2095392	0494923	.1479765	-1.42	0.157
MART	.2343165	.0553446	.1812703	1.29	0.196
EDUC	.2566447	.0606185	.1336001	1.92	0.055
FAIR	.427364	.1009417	.1521802	2.81	0.005
DUR	2260923	0534021	.1544366	-1.46	0.143
SQ	5091038	1202483	.1665873	-3.06	0.002
Teduc	4738096	111912	.2023156	-2.34	0.019
FC	6958697	1643617	.1424733	-4.88	0.000
CTS	.0047239	.0011158	.1654089	0.03	0.977
TR	.6524214	.1540994	.1627031	4.01	0.000
IL	.4139863	.0977819	.1270285	3.26	0.001
TS	0218883	0051699	$.1\overline{472003}$	-0.15	0.882
TAU	.500048	.1181094	.15956	3.13	$0.00\bar{2}$
PEN	280243	0661923	.1440523	-1.95	0.048

Table 2.Regression Result.

The regression result shows that there are eight independent variables including the fairness of the tax system, income level, tax rate, tax education, financial constraint, audit, penalty, and service quality in the models that have a significant influence on tax evasion at a significance level of 5%.

The results show that sex, age, marital, education, complexity, business sector, and duration are not important factors in determining tax evasion at a 5% significance level. Accordingly, financial Constraint, tax education, service quality, and penalty are negatively associated with tax evasion, while the fairness of the tax system, income level, audit, and the tax rate are positively associated with tax evasion. That means, that tax knowledge, improved service delivery and absence of liquidity (financial constraint) will reduce tax evasion; meanwhile, better income levels, high tax rates, unfair tax, and poor audit regime will increase tax evasion.

The variable that influence tax evasion perception of taxpayers are education level of taxpayers, which is positive and (p= 0.05) significant at 1% level of significance, this indicates that a one year increase in education will leads to 0.25 units increase in tax evasive holding all other variables constant. The other variable that influence tax evasion is taxpayer's knowledge of tax rules and regulations (β = -.47380, p= 0.019). This means that, when the taxpayers' know how and understandings of tax rules are relatively high then the tax evasion perception of the taxpayers decrease by 0.47 units, other factors held constant. Financial constraint is the other significant factor (β = -.69, p= 0.000, and marginal effect = -.1643617), for every financial constraint that happens, the probability of tax evasion perception of taxpayers decreases by 16.4 %, other factors being at their margin; when every financial constraint will go on, the taxpayer flight from evading tax. Tax fairness was found to have a significant impact on tax evasion. The result indicates that when the tax system is not fair, the probability of tax evasion perception of taxpayers increases by about 10.1%.

Vol.11, No.4, pp.74-86, 2023

Print ISSN: 2053-2199 (Print),

Online ISSN: 2053-2202(Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development -UK

Another significant factor is quality service; when quality service is delivered to taxpayers, the Probability of the taxpayers being evasive is decreased by 12.0%, holding all other factors constant. The tax rate is one of the factors that determine tax evasion. A regression table shows that a one percent increase in marginal tax rate will encourage tax evasion by 15.4%, other factors being constant. Income level was found to be significantly determining tax evasion at a 5% level of significance with a marginal effect of.0977819. The result of the regression table tells us when an increase in the income level of taxpayers, the probability of taxpayers' tax evasion perception also increases by about 9.8%. The result of the tax audit was found to be positive and significantly determined tax evasion. Other factors remain the same when the probability of being audited is high the probability of tax evasion perception of taxpayers increases by 11.8 %. The penalty of a taxpayer was also found that hurts the tax evasion behavior of taxpayers at a 5% level of significance.

Fairness of tax system

The logistic regression result shows that the relationships of tax evasion regarding attitudes toward the fairness of the tax system (β 4=0.42) with marginal effect (0.10094) are positive and significant, holding other explanatory variables constant when an increase in the perception of the tax system is unfair, the probability of tax evasion perception increase by about 10.1%. This means that when taxpayers feel the tax system is fair their willingness to pay taxes is also increased. The result is consistent with the study ⁽⁹⁾, ⁽¹⁷⁾, and ⁽¹⁹⁾.

Tax rate

Tax rate ($\beta = .65242$) and marginal effect (.1540994) has positive and significant association with tax evasion perception. This result suggests that a one percent increase in marginal tax rate will encourage tax evasion by 15.4%. This implies that if the government increases the tax rate, the probability of being at a higher tax evasion level is realized. This result is consistent with (24).

Income level

The coefficient of income level is.41398 and its marginal effect is (.0977819). This means that there is a positive significant relationship between the income level of taxpayers and tax evasion. This implies that holding other explanatory variables constant when the income level of taxpayers increases the probability of taxpayers' tax evasion perception also increases by about 9.8%. The result is contrary the work of ⁽¹⁵⁾.

Tax office quality service delivery

The tax office's good quality service delivery has a statistically negative (β = -0.51) with a marginal effect of (-.1202483), the P-value is 0.002, which is less than 0.05 significant levels. This implies that improved service delivery decreases the probability of tax evasive behavior of individual taxpayers by 12.0%. This result is consistent with the finding of ⁽¹⁹⁾.

Tax knowledge (Tax Education)

The binary logistic result is shown in Table (above) revealed that tax evasion was influenced by taxpayers' knowledge (β =-.47380, P <0.05) with a marginal effect of (-.111912). It was found to have a negative and significant effect on the tax evasion behavior of taxpayers at a 5% level of significance. This implies that as the individual's tax awareness improves, the tax evasive behavior of the individual decrease by 11.2 %, other factors being constant. This result is also consistent with $^{(17)}$ and $^{(19)}$.

Personal financial constraints

As shown in the regression table, the explanatory variable financial constraint was found to be a negative and statistically significant relationship with tax evasion at a 5 % significance level. The ordered regression result (β = -.6958697) with marginal effect (-.1643617) indicates that an increase in financial constraint causes tax evasion behavior of the taxpayer to decrease by 16.4 %, other factors being constant. The result is at odds with the study of (25) (26) and (27), people who face personal financial problems are likely to be more prone to evade tax.

Vol.11, No.4, pp.74-86, 2023

Print ISSN: 2053-2199 (Print),

Online ISSN: 2053-2202(Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development -UK

Audit coverage

The regression analysis states that lower audit regimes have a positive (β = .5000) and very strong significant relationship with tax evasion perception of taxpayers at a 5% significance level. The marginal effect (.11810) indicates that other factors remain the same when the probability of being not audited increases by one unit the probability of tax evasion perception of taxpayer increases by 11.8 %. This result is consistent with that of ⁽¹³⁾, ⁽²⁸⁾, and ⁽²⁹⁾ the probability of being audited, the more positive compliance attitude of taxpayers, and higher audit regime reduces tax evasion significantly.

Penalties

Regarding penalty (β =-.2802), it has a negative and significant association with tax evasion at 5% significance. This implies that an increase in the penalty of tax non-compliant taxpayers and the likelihood of taxpayers' tax evasion perception decreases by about 6.6%. This result is consistent with that of ⁽¹³⁾, ⁽⁹⁾, and ⁽¹⁷⁾.

CONCLUSION AND RECOMMENDATIONS

For attaining what is aimed, primary data was collected using close-ended and Likert scale questionnaires and analyzed using an econometric model, the logistic regression model was used. A result of the Binary logistic regression analysis suggested that likelihood of tax evasion is significantly influenced by the tax rate, audit, penalty, tax knowledge, financial constraint, quality service, fairness of tax, and income level. This study similarly evidenced that, other variables such as duration, complexity, trade sector; age, sex, and marital status of taxpayers were not significant factors of tax evasion.

The findings of the study showed that tax evasion has positively affected by the tax rate, income level, audit, and fairness of the tax system and is negatively influenced by financial Constraints, tax education (knowledge), penalty, and service quality of the tax office. The results of this study are in line with the finding of the previous researchers like ⁽⁶⁾, ⁽¹³⁾, ⁽²⁵⁾, ⁽³⁰⁾ and ⁽³¹⁾.

To minimize tax evasion the government should focus on four issues, tax education, service delivery, law enforcement, and tax policies amendment. The tax office should provide training and arrange continuous face-to-face awareness creation programs to taxpayers about the consequence of the tax non-compliance activity using different means like using TV, magazine, radio, and other deliverance way. Besides, the tax office should educate taxpayers on how to keep revenue and expenditure records.

The tendency to evade tax by taxpayers because of the perception, that the branch office has not had good service to their customers. Therefore, the branch office should improve the efficiency and effectiveness of the provision of services to taxpayers. The tax office needs to analyze the current tax rate and must reduce the existing tax rates to improve and increase revenue generation, thereby increasing tax-net in capturing many taxpayers into the tax system and complying with taxes. The reduction in tax rates helps in shifting the burden of taxpayers from a few taxpayers who perceive tax payment as an obligation to the mass.

It is recommendable that the tax office shall practice tough audit detection methods and detection of non-compliance behavior in the tax office; also the tax office has to ensure penalties, there should be moderate and appropriate levels of penalties to be an employee to tax defaulter and made official to the public through TV, radio, and magazine. This helps to make awareness about the consequence of evasion and it'll encourage voluntary compliance.

Print ISSN: 2053-2199 (Print),

Online ISSN: 2053-2202(Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development -UK

REFERENCES

- [1] Alm, James & Martinez-Vazquez, Jorge. (2007). Tax Morale and Tax Evasion in Latin America. International Studies Program, Andrew Young School of Policy Studies, Georgia State University, International Studies Program Working Paper Series, at AYSPS, GSU.
- Vadde, S., & Gundarapu, S. (2012). Factors That Influence Rental Tax Payers' Compliance with Tax System: An Empirical Study of Mekelle City, Ethiopia. *Researchers World*, 3, 41.
- [3] Chau G., Leung P. (2009). A critical review of Fischer tax compliance model: A research synthesis; Journal of Accounting and Taxation Vol.1 (2), pp. 034-040.
- [4] Wodjin, C. (2018). A study on gender, tax agent, age, income level, tax return and business sectors towards tax evasion (Doctoral dissertation, Universiti Utara Malaysia).
- [5] Parameswaran, R. (2005). Public finance and taxation. Departments of Accounting and finance, Addis Ababa University, Addis Ababa, Ethiopia.
- [6] Tadesse, G. and Goitom, A. (2014). Factors Influencing Taxpayers' Compliance With The Tax System: An empirical study in Mekelle City, Ethiopia.eJournal of Tax Research (2014) vol 12, no. 2, pp. 433 452
- [7] Worku, Y., Mammaw, A., Fisseha, A., & Zeleke, G. TAX PAYERS'PERCEPTION TOWARDS THE EXISTING TAX SYSTEM IN ETHIOPIA: THE CASE OF NORTH SHEWA ZONE, ETHIOPIA. ORISSA JOURNAL OF COMMERCE.
- [8] Aldahiyat, M., Dahiyat, A., Sarayreh, A., Al Abed, S., & Tkryty, I. (2021). PERCEPTIONS AND VIEWS OF FINANCIAL MANAGERS AND AUDITORS ON CREATIVE ACCOUNTING PRACTICES, MOTIVES, AND IMPACT ON FINANCIAL REPORTING QUALITY: EVIDENCE FROM JORDAN. Academy of Strategic Management Journal, 20, 1-15.
- [9] Amina, A., &Saniya, K. (2015). Tax compliance and its determinants: the case of Jimma zone, Ethiopia. International journal of research in social sciences, 62, 1-15.
- [10] Gupta, R. (2017). Goods and Service Tax-A positive reform in Indian taxation system. International Journal of Management Research and Reviews, 7(6), 674.
- [11] Yesegat, W. A., & Fieldstad, O. H. (2016). Business People's Views of Paying Taxes in Ethiopia.
- [12] Bayu, T. (2015). Analysis of tax buoyancy and its determinants in Ethiopia (cointegration approach). Journal of Economics and Sustainable Development, 6(3).
- [13] Allingham, M. G., &Sandmo, A. (1972). Income tax evasion: A theoretical analysis. Journal of public economics, 1(3-4), 323-338.
- [14] Soyede L. and Kujola S. O (2006) Taxation Principle and Practice in Nigeria; 1st Edition Silicon: Ibadan.

Print ISSN: 2053-2199 (Print),

Online ISSN: 2053-2202(Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development -UK

- [15] Gamze Oz Yalama, Erdal Gumus (2013). Determinants of Tax Evasion Behavior: Empirical Evidence from Survey Data. International Business and Management, 6(2), 15-23.
- [16] Adimassu, N.A., & Jerene, W. (2016). Determinants of Voluntary Tax Compliance Behavior in Self-Assessment System: Evidence from SNNPRS, Ethiopia.
- [17] Asmamaw, Y. (2014). Comparative study of compliant and non-compliant individual taxpayers in Ethiopia from Amhara Region. Iournal of Economics and Sustainable Development. Vol.5, no.24, pp 10-16
- [18] Assfaw, A. M., & Sebhat, W. (2019). Analysis of tax compliance and its determinants: evidence from Kaffa, Bench Maji, and Sheka zones category B taxpayers, SNNPR, Ethiopia.
- [19] MULUGETA, S. Determinants of Tax Compliance Behavior in Presumptive Taxation System. The Case of Dire Dawa Administration.
- [20] Marshal, M. (2014). The impact of tax evasion on revenue collection Performance in Tanzania A case study of Tanga tax region (Doctoral dissertation, Mzumbe University.
- [21] Murad, H., Fleischman, A., Sadetzki, S., Geyer, O., & Freedman, L. S. (2003). Statistical Practice. The American Statistician, 57(3), 155.
- [22] Veall, M. R., & Zimmermann, K. F. (1992). Pseudo-R 2's in the ordinal probit model. Journal of mathematical sociology, 16(4), 333-342.
- [23] Pallant, J. (2007). SPSS Survival Manual: A step by step guide to data analysis using SPSS for windows-version 15 (3rd Ed.) Crows Nest: Open University Press.
- [24] Sandmo, A. (2012). An evasive topic: theorizing about the hidden economy. International tax and public finance, 19(1), 5-24.
- [25] Mohani, A. (2001). Personal income tax non-compliance in Malaysia. Ph.D. thesis. Victoria University: Melbourne, Australia.
- [26] Mohani, A., and Sheehan, P. (2004). Estimating the extent of income tax non-compliance in Malaysia and Australia using the gap approach (part II). Tax Nasional, 1st quarter. 20- 24.
- [27] Shiferaw, N., & Tesfaye, B. (2020). Determinants of Voluntary Tax Compliance (The Case Category A and B Taxpayers in Dire Dawa Administration). International Journal of Scientific and Research Publications, 10(6), 982-996.
- [28] Alamirew, A., & Leykun, F. (2020). Determinant of Tax Revenue Effort in Sub-Saharan African Countries: A Stochastic Frontier Analysis. Policy, 9 (1), 47-71.
- [29] Tilahun, A. and Yidersal, D. (2014). Determinants of Tax Compliance Behavior in Ethiopia: The Case of Bahir Dar City Taxpayers. Journal of Economics and Sustainable Development Vol. 5, No. 15 2014.
- [30] Desta, K. (2010). Assessment Of Taxpayers' Voluntary Compliance With Taxation: A Case Of Mekelle City, Tigray, Ethiopia. Master Thesis, 1–87.

Vol.11, No.4, pp.74-86, 2023

Print ISSN: 2053-2199 (Print),

Online ISSN: 2053-2202(Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development -UK

[31] Zelalem, B. (2011). 'The Influence of Tax Education on Tax Compliance Attitude', Accounting and Finance department at Addis Ababa University, a Thesis paper.