TAX EVASION AND TAX AVOIDANCE IN HARARE, ZIMBABWE: EMPIRICAL EVIDENCE FROM A LOGIT MODEL

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Abstract

Tax evasion and tax avoidance have been a serious problem in Zimbabwe, even before the introduction of the Zimbabwe Revenue Authority in the 1990s. The objective of this study was to analyze the causes of tax evasion and tax avoidance in Harare, the largest city of the country. The study used logit model for regression analysis, because the dependent variable was a dummy. The findings revealed that higher level of education and higher levels of income lead to low levels of tax evasion and avoidance while higher tax rates lead to higher levels of tax evasion. The study recommends that in order for the Zimbabwean government to control tax evasion and avoidance, it must increase the people's incomes and educate more people and conduct intensive tax campaigns to educate people on this mandatory national exercise of paying taxes due. Tax rates should be reduced if cases of tax evasion have to be reduced.

Keywords: - Logit model, Tax evasion, Tax avoidance

1.0 Introduction

Tax evasion and avoidance is not a new practice. It has existed for centuries, dating back to two thousand five hundred years ago. During this period (two thousand five hundred years ago), while writing about tax evasion Plato said that the Ducal palace of Venice had a stone with a hole in it through which people would inform the state about those who evade taxes. In India, during the third century B.C., the state craft, arthasastra did advise the Mauryan kings to take good care of state revenues or else they be misappropriated by the people for their own benefit (Fjeldstad, 2006). In this 21st century the existence of tax evasion cannot be refuted too. It is so rampant that it has negatively affected countries particularly those in the developing world. Global Financial Integrity (GFI) has estimated financial losses by the developing countries through illicit financial flows to be between the regions of US \$ 859 billion to US \$ 1.06 trillion per year. Region-wise African countries are estimated to have lost US \$ 854 billion in cumulative capital flight through tax evasion and avoidance between 1970-2008 (Germany Federal Ministry for Economic Cooperation and Development, 2010).

In Africa today, South Africa and Kenya are generally considered the most efficient tax collectors in sub-Saharan Africa (Kumar, 2014). The importance of an efficient tax system cannot be over emphasised to the socio-economic, technological and political well-being of a nation. An efficient tax system in this context is defined as a tax that enables the taxpayer to pay exactly what is due to the state. Overpayment places an unnecessary burden to the taxpayer and underpayment cripples Governments on their ability to provide essential services to the citizens. Tax is the major source of income for many if not all Governments, whether for developed or developing nations. Countries have set dedicated institutions for tax collection purposes. In addition to these institutions, there are various Acts which provides a road map on how to administer tax. All these efforts point to the significance of tax as revenue generation mechanism for a nation. Mobilizing domestic resources as a means to finance development has become an important developmental issue. In the past the emphasis on financing development focused on scaling aid and external borrowing. For a long time mobilizing domestic revenue has been neglected, despite being a better long-term option. The reasons for this included the inherent pessimism about raising revenue, a prevalent "small-state" ideology and a preference for foreign aid-led solutions (AFRODAD report, 2011). In the same report, it is alleged that taxation is a major tenet of any domestic resource mobilization tools at the disposal of developing countries. Taxation has a pivotal role in shaping the distribution of benefits from high income citizens to the low-income ones. Another less discussed importance of taxation is its centrality to good governance, as it allows the government more policy space and capacity to be responsive and accountable to national aims that are not affected by the conditionalities of foreign help and aid. Despite the presence of governing Acts and administrative structures for tax collections purposes, tax avoidance and evasion continue to cripple Governments efforts in gathering enough financial resources for the betterment of their respective nations.

1.1 Tax avoidance defined

Tax avoidance is the legal use of tax laws in order to reduce an individual's tax burden by the deliberate omission of income on a tax returns, non-payment of taxes owed or an individual not filing a tax return overall to dodge having to pay taxes to the Tax man. It takes place inside the legal context of the tax system, where individuals and firms take advantage of the tax code and exploit "loopholes", they then engage in doings that are legal but run counter to the purpose of the tax laws. Usually, tax avoidance incorporates special happenings with the sole purpose to reduce tax liabilities. An example for tax avoidance is strategic tax planning where financial affairs are organized in such an order to diminish tax liabilities by for example using tax deductions and taking advantage of tax credits allocated.

1.2 Tax evasion defined

Tax evasion encompasses illegal practices to escape from paying taxes and/or taxation. Examples include situations where, taxable income, profits liable to tax or other taxable activities are concealed, the amount and/or the source of income are misrepresented, or tax reducing factors such as deductions, exemptions and credits which tend to be deliberately overstated (Alm and Vazquez, 2001; Chiumya, 2006). Tax evasion can occur as an out-of-the-way incident within activities that are in other aspects deemed legal. It occurs in the informal economy where the whole activity takes place in an informal manner thus the business is not only evading tax payments but is also not registered as formal entity at all.

Tax evasion and avoidance both have negative implications on the economy as they hamper governmental efficiency engaging in beneficial programs and result in an eroded tax base which in turn widens the national budget deficit.

In Zimbabwe studies have shown that tax evasion is very widespread that it has negatively affected almost all sectors of the economy (Wadhawan, 1998). This comprises of the informal sector where tax evasion was in the range of 35-55 percent of the total revenue collected by the year 2010 (ESRF, 2010). Apart from the informal sector in Zimbabwe, the customs of the nation (ZIMRA) is another area where tax evasion is common. This is done by under-invoicing and under-valuing the custom duties at the port of entries. Reasons advanced for such a scenario include high scheduled tax rates, low salaries for the ZIMRA officers and lack of incentives offered to customs staff, especially those that work in remote border posts away from their families (, 2013).

Section 98 of the Zimbabwe's Income Tax Act (Chapter 23:06) refers to tax avoidance in general as a transaction, procedure or scheme that has the effect of avoiding, postponing tax, was entered into by anomalous means or manner or created abnormal rights and/or obligations. If the Revenue entity Commissioner believes avoidance or delay was the sole or main purpose of the transaction, operation or scheme, he may set the scheme aside immediately. What intensifies the problem in the Zimbabwean scenario is that avoidance and evasion both have a disadvantageous impact of lowering the amount of revenue collected by the country. Zimbabwe has for the past couple of years experienced drastic financial constrictions to sustain its economic activities as well as reimbursing employment costs resulting in the country recently failing to pay bonuses to its employees, in December 2017.

Additionally, given the economic sanctions imposed by the European Union and dwindling Foreign Aid, the importance of an effective tax system free from the twin devils namely avoidance and evasion cannot be overemphasised to the development of the country. The twin devils can be practiced by individuals and/or corporations. They can be for the various forms of tax for example avoiding and evading VAT, PAYE, Customs duty, and any other form of tax is at risk of being avoided and evaded. Although tax evasion and avoidance are problems that face every tax system, the Zimbabwean situation seems unique when viewed against the scale of corrupt practices currently prevalent in the country. Despite the closure of several companies in the capital Harare due to harsh economic downturn, there are still a number of SMEs and vibrant large-scale corporations currently operating therein. If tax collection can be instituted effectively from these companies, a good contribution to Government revenue can be realised. In view of the introduced background, the researchers intend to focus on tax avoidance and evasion by all business player categories in the City of Harare to gain a clear picture of how much the Government of Zimbabwe might be losing due to tax noncompliance, mainly focus in this study will be on both SMEs and large scale corporations that the Zimbabwe Revenue Authority lacks capacity to fully administer its tax management systems.

2.0 Literature Review

There is a clear cut difference between tax avoidance and tax evasion (Adebis and Gbegi, 2013). One is legally accepted and the other is an offence (James and Nobes, 2008). Jayeola (2010) pointed out that tax evasion is an attempt to escape tax liability (wholly or partially) by breaking the tax law and it is a criminal act since it is realized primarily by the creation of false declarations such as under-reporting income or even over reporting relieves and allowances. Tax

avoidance is an attempt to escape tax liability by circumventing the law. Thus, even though the tax evader and tax avoider have a similar end (that is, reduce tax liability) their means to that end differ (Ayua, 1996). The evader is a criminal while the avoider is just smart taxpayer who exploits loopholes in the tax laws (and related laws) to reduce tax liability.

It is important to realise that all these researchers agree to the fact that tax avoidance and evasion can be clearly distinguished in terms of legality. The definition propounded by (Ayua, 1996) is more informative as it stresses both contrasting and similarities in the two acts. "Both result in reduced tax liability," which is actually a similarity in the two acts, and thus the difference lies in how that reduction is achieved. Interestingly, (Joel and Shlomo, 2002) in one of their chapter of the handbook of public economics, distinguished tax avoidance and evasion by making reference to what they termed "the classical distinction" by (Holmes, 1916) who wrote (as cited by them): "When the law draws a line, a case is on one side of it or the other and if on the harmless side is none the worse legitimately that a party has availed himself to the full of what the law permits. When an act is designed as evasion, what is meant is that it is on the wrong side of the line and/or law", that is, breaking the law.

It is worth mentioning the consistence in the differences between the terms adopted by all the above writers. Holmes, 1916 also draws a clear cut line as (Adebis and Gbegi, 2013) later on suggested. Joel and Shlomo (2002), in as much as they partially agreed also to such a definition in its simplicity, they allude that in practice, there are many grey areas where the distinction is not clear. According to them thus, the resultant of this unclearness is that, tax authorities may wrongly characterize particular cases. What it vehemently means is that a tax authority may call an evader an avoider and thus will go unpunished. Contrary, an avoider may be wrongly classified as an evader thus will be punished undeservedly. One can pull a further distinction in the class of legal reactions to taxation. In most cases we will refer to real substitution responses, as those responses which come about because the tax law changes the relative price of different happenings, and that prompt taxpayers to respond by choosing a different consumption basket. Conceptually distinct from real substitution responses are efforts to reduce one's tax liability actions taken in response to the tax system that do not involve shifts along a given budget set (Joel and Shlomo 2002)

2.1 The Level of Education and Tax Evasion

Research has demonstrated that when people are educated about the importance of paying tax, education re-awakens them and they become more mindful and responsible in paying their taxes promptly than the unschooled ones (Stamatopoulos, et al., 2015). These results corroborate those of Ibadin and Eiya who carried out a study in Nigeria and found that there is a significant relationship (at 5% level) between the level of education attained and tax compliance. The higher the education, the more tax compliant people become (Ibadin and Eiya, 2013). Low level of education makes people not to understand the importance of paying taxes. Such was the revelation of a research conducted among the self-employed people in Nigeria who were found to evade paying taxes partly because of lack of education (Oremadu and Ndulue, 2011). The Estonian case reinforces this point that many of the people with higher education levels were found to evade taxes.

2.2 High Tax Rates and Tax Evasion and Avoidance

Numerous studies have shown that tax evasion and avoidance is partly caused by higher levels of tax rates. When governments levy higher levels of taxes it becomes oppressive for tax payers to pay prompting them to evade paying. That is in a bid to bring reforms in the tax system, the Tanzanian government embarked on reducing taxes (which were perceived to be high by tax payers) as a giving tax payers incentives to pay their taxes promptly (Fjeldstad, 2006). A study reviewing the causes of tax evasion and avoidance in developing countries concurs with those of other researchers that high tax rates reduce people's disposable income thereby making them to evade paying taxes (Federal Germany Ministry for Economic Cooperation and Development, 2010). In Pakistan for instance, a study carried out by Khan and Ahmad demonstrates that progressive taxation should be espoused in order to overcome cases of tax evasion. Among the respondents who were interviewed, 75% of them were for the introduction and enforcement of progressive taxation as a way of curbing tax evasion (Khan and Ahmad, 2014). A study which was carried out in Temeke municipality in Dar es salaam found the same results. 34% (highest) of the respondents who were interviewed attributed tax evasion to high tax rates (Stephen, 2014).

While a relatively extensive literature has investigated causes and effect of corruption, few studies have attempted to address the interaction between tax evasion and corruption. In broad, the level of tax evasion in the economy depends on several organizational and institutional factors such as degree of risk aversion, wealth of taxpayers, overall tax burden of a nation, and efficiency of the tax enforcing or revenue collecting authority. The implementation strength in turn depends on the extent of corruption entrenched in tax administration, which in turn depends on wages of public-revenue officials and/or degree of monitoring. Nwokah (2009) states that tax evasion and avoidance have an adversative effect on government revenue, whereby tax avoidance generates investment distortion in the form of the purchase of resources exempted from tax or under-valued for tax purposes. As observed by Toby (1983) the taxpayer humours in evasion by resorting to various practices. These tendencies erode moral principles and build up inflationary pressures

3.0 Methodology

3.1 Types of research

The researchers employed both quantitative and qualitative approaches.

3.2 Sources of data

The researchers employed both primary and secondary methods in collecting information. A convenience sampling method was used for this study and bestowing to Cozby (1997) convenience sampling makes use of the 'take them where you find them' method, thus, it makes use of those individuals who are readily accessible until a chosen number of individuals are achieved. Thus clients at ZIMRA, Harare Kurima House and Harare Port were considered for sample elements

3.3 Area of the study

The area of study was Zimra Kurima house and Harare Port where tax evasion and avoidance by the tax payer was found to be a serious problem.

3.4 Sample size

Questionnaires were used to collect information from 45 clients whilst interviews were used to collect information from supervisors and senior revenue specialist officers in October 2018. All clients from various walks of life were part of the target population for this study. The target population included tax payers in the community who were 40 in number. Given that the number of the target population was less than one hundred, all the forty were taken as the sample size.

3.5 Data collection instruments

The study used a structured questionnaire as an instrument for data collection. The researchers distributed 40 questionnaires to the respondents at Kurima house who filled and returned the same after a number of reminders. Some filled questionnaires were also sent through email, especially to supervisors one could not contact during office hours.

3.6 The Logit Model

Let Pi stands for probability of tax evasion and 1-Pi the probability of not evading tax.

 $Ln{Pi/(1-Pi)}=Li=\beta_0+\beta_1X$

3.7 The Model Specification

Ln [Pi/(1-Pi)] = $\beta_0 + \beta_1$ Edec + β_2 Tr + β_3 Income + β_4 Trt + ε

Where B's are coefficients to be estimated and *\vec{\vec{e}}* is the error term.

3.8 Variables

3.8.1 Dependent variables

The dependent variable is a dummy; it takes 1 if the individual does not evade paying tax and 0 if he/she evades paying tax.

3.8.2 Independent variables

a) Education (Edec)

It was assumed that tax evasion tends to decrease with increasing level of education. The level of education is measured by years trained.

b) Tax rate (Tr)

It was assumed that as tax rate increases tax evasion increases too. It was measured by amount of income tax rate.

c) Income

It was assumed that as income increases tax evasion tends to decrease. It was measured by the amount of income of the business person per month.

d) Trust in tax administration(Trt)

75% of the large scale respondents believe that their attitude towards tax administration is unfavourable, whilst the remaining 25% expressed their attitude as favourable. On the other hand, SMEs respondents have mixed opinion over the way tax is administered. 45.9% of the

SMEs respondents do not favour the tax administration, 14.1% are undecided and 40.1% favours the tax administration

3.9 Estimation Techniques

The study used the logit model where the dependent variable is dichotomous. The regression assumes the value of 1 if an individual is not evading tax and 0 if he/she evades tax. Due to non-linear functional nature of the model, the maximum likelihood method was used to estimate the model using Z statistics. In estimating the model, this study used SPSS Package, excel and Stata Package.

4.0 Empirical Results and Their Interpretation

4.1 Descriptive Analysis

The descriptive analysis in this study was concerned with establishing descriptive statistic of variables. The analysis gives an overview of the variables and provides their behavioural patterns. Table 4.1 presents the results of the summary statistics of descriptive analysis. The analysis shows that total number of males was 21 which is 67.74% and females was 10 which was 32.26%, among the respondents 20 people had education which was 64.52% and 11 respondents were not educated that was 35.48%. Also the analysis shows that about 14 respondents were evading tax which was 45.16% and 17 were not evading that was 54.84%.

Variables	Observation	Mean	Std dev	Min	Max
In	31	1446671	.2780847	1000	1.20e=07
Edec	31	.6451613	.4863735	0	1
Taxev	31	.5483871	.5058794	0	1
Income	31	176954.8	438733.4	1800	2 400000
Trt	31	.6338389	.426789	0	1

 Table 4.1 Characteristics of the Variables in Summary

Table 4.2: Results of the Estimated Logit Model	
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Taxev	Coeff	Z	p-value
Income	9000113	-1.75	0.084
Edec	163124	17	0.066
Tr	9.10e-07	1.76	0.008
Trt	138789	18	0.055
-cons	.5243983	0.61	0.545

Observation 31 LRch2 (3) 12.36 p- value 0.0062 pseudo R2 0.2895

On the basis of count R2, the goodness of fit of the logit model confirmed the dependent variable is explained by independent variable by 75.5%. The independent variables used in the logit regression includes tax rate (tr), income, trust in the administration (trt) and education (edec). For estimating magnitude of coefficients, marginal effect for variables which are significant were calculated to show how additional unit for each variable result to tax evasion and avoidance. The marginal effects for each independent variable which are significant in all significance level give some detail on the causes of dependent variables, tax evasion.

4.2 Tax rate

The coefficient and marginal effect of tax rate is positive and significant. The study shows that the higher tax rate, increases the likelihood of tax evasion by 2.24. The positive effect of tax rate implies that the higher the tax rate the more the likelihood of tax evasion and avoidance. Higher tax rates tempted people to evade and avoid tax because of the pinch associated with the higher tax rate. This led us to reject the null hypothesis which says that tax rate has no impact on tax evasion and avoidance.

4.3 Education

The coefficient and marginal effect of education variable is negative and significant. The study found that the more the education on the part of the tax payers the higher the likelihood of reducing tax evasion and avoidance, which was 4%. The negative effect of education implies that the higher the education on the part of the tax payers the higher the chances of reducing tax evasion and avoidance.

5.0 Conclusion and Recommendations

The study decided to verify the relationship between tax evasion and avoidance with tax rate, income and education. As income increases tax evasion and avoidance decreases. In terms of education, the higher the education on the part of the tax payers the higher the chances of reducing the likelihood of tax evasion and avoidance among the tax payers. In terms of the tax rate, it was found that the higher the rate of tax payment the higher the likelihood of evading and avoiding tax

The different morale attitude results reflected that SMEs are more unmoral in attitude as compared to the large scale corporations. Taken in another way, such an attitude implies that SMEs are most likely to be less compliant as compared to large scale companies. The result agrees with findings by Nyamwanza et al 2013 in the City of Gweru who revealed that most SMEs were found not to comply with income tax and PAYE as most of them do not accept as true in the tax system and viewed them as too far above the ground; thus they greatly affect their businesses. Despite that the research by Nyamanza et al (2013) did not make a comparison between SMEs and large scale companies, its findings and the findings in the current study are perfectly the same. A glance on the results on the causes of tax avoidance and evasion will provide an answer as to why SMEs do not comply as compared to large scale corporations. The factors identified seem to be more detriment to SMEs than the large scale counterparts. For example most of these SMEs are making very low profits in their business so much that if high tax rate is the cause of evading and avoiding then, it will most likely affect SMEs than large scale companies as they may literally be left with nothing if they do pay. However, the results differ considerable with the findings by Munnich (2007), who revealed that compliance by SMEs is 6 times higher than that of large scale companies. Mohani (2003) alluded that compliance is a function of the level of education in a direct positive correlation manner.

Factors identified in the study as contributing to tax evasion and avoidance have been identified in literature on various studies. A study by Hove et al. (2012) at the Beitbridge border post identified corruption as the one of the causes. Atawodi and Ojeka (2012) conducted a study in Central North of Nigeria to determine factors affecting tax compliance by SMEs. The primary factor they established was the high tax rates being charged by tax authorities, which agrees with the results found in this study. One of the measures to increase voluntary compliance is by assuring that taxpayers have a certain level of qualifications, ability and confidence to exercise their tax responsibility (Mohani, 2003). However the results in this study seems to contradict this finding in the sense, most of the respondents seem to have above primary education but the level of compliance with tax payment is low. The primary findings are that, SMEs tend to evade and avoid taxes more than the large scale companies even though both company categories are involved in the act. Moreover a couple of factors have been identified as contributing to tax evasion and avoidance. Among the factors identified are: High tax rates; Long distances to tax payment office; General apathy towards tax collection and so on.

The study recommends the following strategies to bring sanity in the fiscal environment:

- i. Government to review the tax percentage across various tax categories on the premise that better lower than never.
- ii. Government to try and make it easy for the people to pay their tax, for example people can submit their tax remittances online and pay online to avoid walking long distances which demoralises and will result in avoidance and evasion.
- iii. ZIMRA to intensify tax education and public campaigns to bring tolerant and acceptance that taxation is a national duty and obligation of all rather than taxpayers to view it as a burdensome exercise that intend to take away their hard earned cash.
- iv. ZIMRA to use the discriminant model to stratify their campaign so as to intensify operations to those who are declared high evaders and avoiders by the model.

References

- [1] African Forum and Network on Debt Development (AFRODAD) Report 2011, A critical look at Zimbabwe's Tax System.
- [2] Survey. Chr. Michelsen Institute Working Paper, 1995, 4.
- [3] Fjeldstad OH. Tax Evasion and Fiscal Corruption: Essays on Compliance and Tax Administrative Practices in East and South Africa. A Dissertation Submitted to the Norwegian School of Economics and Business Administration for the Award of the degree of Doctor of Philosophy. 2006.
- [4] Gujarati DN. *Basic econometrics*, 4th edition. Printed by the McGraw-Hill Companies. 2004.
- [5] Germany Federal Ministry for Economic Cooperation and Development Addressing Tax Evasion and Avoidance in Developing Countries. International Tax Compact. 2010.
- [6] Ibadin PO, Eiya O. Tax Evasion and Avoidance Behaviour of the Self-Employed. European Journal of Business Management. 2013; 5(6):1-16.
- [7] Kriz KA, Merikull J, Paulus A, Staehr K. Why Do Individuals Evade Payroll and Income Taxation in Estonia? Tartu University. Order, 2007, 6.