Multifacets of Tax Evasion in Theory, Surveys, Case Studies, and Economic Experiments

LARISSA-MARGARETA BATRANCEA[1]
Faculty of Business
Babes-Bolyai University
7 Horea Street, 400174 Cluj-Napoca
ROMANIA
larissabatrancea1707@yahoo.com

RAMONA-ANCA NICHITA
Faculty of Economics and Business Administration
Babes-Bolyai University
58-60 Teodor Mihali Street, 400591 Cluj-Napoca
ROMANIA
ancanichita@ymail.com

IOAN BATRANCEA
Faculty of Economics and Business Administration
Babeş-Bolyai University
58-60 Teodor Mihali Street, 400591 Cluj-Napoca
ROMANIA
i_batrancea@yahoo.com

POP RADU
Faculty of Economics
Vasile Goldis West University
26 Mihai Viteazu Street, 440037 Satu-Mare
ROMANIA
radu_v_pop@yahoo.com

Abstract: - Qualified as an illegal act that goes against the letter and the spirit of the law, tax evasion deprives worldwide state budgets of billions of dollars every year. The results regarding the effects of different audit schemes, penalty and income levels, tax rates on tax evasion seem somewhat inconclusive. This study focuses on the phenomenon of tax evasion analyzed through different theoretical approaches, in several surveys, case studies, and economic experiments in the attempt to indicate the most suitable methods of decreasing evasion without negatively affecting compliance level. In the quest for diminishing tax evasion, state officials, practitioners, and academia should try to explain the reasons which drive compliance and recommend efficient methods of deterring non-compliance taking into account the wide range of reported results.

Key-Words: - tax evasion, tax compliance, surveys, economic experiments

1 Introduction

From the apparently insignificant petty acts like fare dodging, paying hired construction workers without requesting a receipt to the billions of Euros worth of VAT fraud, tax evasion comes in all shapes and sizes to the people more or less willing to decrease tax dues. Taxation literature gives a special attention to tax evasion because of its major economic implications. According to the literature, any attempt/act of deliberately breaking the law with the sole purpose of decreasing taxes qualifies for tax evasion (Elffers *et al.*, 1987) [8]. Evasion goes against the letter and the spirit of the law involving acts of commission (e.g., reporting personal expenses as business related) or omission (e.g., not reporting revenues) (Kirchler, 2007: 22) [13]. Following the same line of thought, any attempt/act of decreasing taxes while using the loopholes into the tax law falls into the category of tax avoidance (Webley, 2004) [24]. Despite the fact that many countries acknowledge the difference between the concepts of tax evasion and tax avoidance, one of the things which can be imputed to tax avoidance is that, though legal, it goes against the spirit of the law. Regardless of its value, tax evasion drastically diminishes state budgets every year all around the world. Tax expert and senior advisor for the Tax Justice Network Richard Murphy issued a report in November 2011 stating that the value of tax evasion worldwide exceeds US$3.1 trillion or 5.1% of global GDP. The distribution of tax evasion across continents can be seen in the following table.

Table 1 Tax evasion loss/continent

Continent	GDP (bn$)	Size of shadow economy (%)	Tax evasion (bn$)
Europe	18,947,416	20.5	1,511,714
Africa	1,383,070	34.8	79,235
Asia	19,333,826	17.7	665,930
North America	17,376,075	10.8	452,828
South America	3,632,841	36.8	376,298
Oceania	1,064,690	14.1	46,435

Source: Murphy, R., 2011: 3 [17].

According to this report, the ratio of undeclared to declared dollars at global level is 1:6 and at European level is 1:5.

Going into depth, Murphy singles out the first 10 countries which face the most severe losses due to tax evasion, as can be seen from Table 2.

Table 2 Tax evasion loss/country

Country	GDP (bn$)	Average percentage shadow economy (%)	Tax evasion (bn$)
USA	14,582,400	8.6	337,349
Brazil	2,087,890	39	280,111
Italy	2,051,412	27	238,723
Russia	1,497,819	43.8	221,023
Germany	3,309,669	16	214,996
France	2,560,002	15	171,264
Japan	5,497,813	11	171,147
China	5,878,629	12.7	134,385
UK	2,246,079	12.5	109,216
Spain	1,407,405	22.5	107,350

Source: Murphy, R., 2011: 4 [17].

There are several ways of dealing with tax evasion. Some tax authorities try to fight tax evasion by establishing a good communication with compliant taxpayers. For example, the Australian Taxation Office (ATO) posts a strong statement on its website directly addressing taxpayers. According to it, ATO is “committed to targeting tax evasion and you can help us to make sure everyone pays their fair share of tax” [26]. Certain countries use unconventional methods against tax evasion. In the US, for instance, the Internal Revenue Service (IRS) established the Whistleblower Office which grants the “Informant Award” “to people who blow whistle on persons who fail to pay the tax that they owe. If the IRS uses information provided by the whistleblower, it can award […] up to 30 percent of the additional tax, penalty, and other amounts it collects” [28]. Other authorities are intransigent with taxpayers and give evaders a hard time, even if committed evasion acts lack intention. In United Kingdom, for example, passengers who mistakenly bought a wrong ticket are fined with the same high penalty as those dodging the fare on purpose [27].

The two aforementioned issues are perfect examples for approaches displayed by authorities with regards to taxpayers. The first issue captures the “service and client” approach according to which authorities favor transparency, respect, and support towards taxpayers; the second one is representative for the “cops and robbers” attitude according to which authorities distrust taxpayers and treat them as potential wrongdoers (Kirchler, Hoelzl, Wahl, 2008) [14].

Attaining a decrease in tax evasion deals much with the attitude of tax authorities toward taxpayers. Hence, important questions arise related to this goal: Which is the most effective method of mitigating tax evasion? Should tax authorities focus on improving communication with taxpayers and give them the benefit of the doubt? Or should they employ draconian punishments even though the circumstances indicate otherwise?

The present paper focuses on significant results reported by theoretical models, various surveys, case studies, and economic experiments dealing with tax evasion in the attempt to indicate the most suitable methods of decreasing evasion without negatively affecting compliance level.

2 Tax evasion reported in theoretical models

Economic theory is based on Adams Smith’s widely known concept of *homo oeconomicus*, a selfish rational utility maximizer endowed with five perfect features (selfishness, rationality, social skills, freedom, competitiveness). In the field of taxation, Becker (1968) [4] portrays the taxpayer as a *homo oeconomicus* ready to commit evasion and incur the costs of audits and fines if they don't exceed the benefits from evasion.

Allingham and Sandmo's (1972) [1] classical model of tax evasion assumes Becker's theory and takes four variables into consideration: audit probability, tax rate, income, and fines. The basic condition is that the penalty for evasion should be proportional to the amount of undeclared income. Under these assumptions, the model predicts that tax evasion mitigates with the increase of audit probability and fines, but reports inconclusive results concerning the effects of the other two variables. The theoretical proposal of Allingham and Sandmo was not singular. Srinivasan (1973) [21] published almost in the same period a tax evasion model similar to theirs.

The inconclusive results predicted by the classical model were succinctly solved by Yitzhaki (1974) [25] who proposed that penalty should be proportional to the evaded taxes. The result though was counterintuitive: the amount of declared income increased when tax rate increased.

With all their novelty degree, the abovementioned models were invalidated by empirical findings, some of which will be presented in the next section.

3 Tax evasion reported in surveys and case studies

One of the most convenient methods used in gathering tax evasion data is through surveys.

Wallschutzky (1984) [23] compares data obtained from two Australian samples (convicted evaders *vs.* non-evaders) and concludes that tax evasion is influenced when taxpayers perceive an inequity between taxes paid and the benefits of public outlays. The study also highlights the portray of the average tax evader representative for the sample pool; it is featured as being older, self-employed, earning higher incomes, and being born outside Australia.

Using data from 142 US individual taxpayers, Porcano (1988) [19] finds that tax evasion correlates positively with total income, attitudes towards existing evasion, and honesty. It also correlates negatively with tax rate and perceptions of existing evasion.

Pommerehne and Weck-Hannemann (1996) [18] analyze aggregate income tax evasion in Switzerland starting from the assumptions of the classical model (Allingham and Sandmo, 1972) [1]. Their results show that evasion increases when inflation and marginal tax burden boost, but mitigates when audit probability increases. In this case, sanctions have no significant effect on tax evasion, contrary to the predictions of the standard model.

In a study concerning the poll tax in Tanzania, Fjelstad and Semboja (2001) [10] conclude that tax evasion increases with the severity of sanctions and that there is a positive link between tax compliance on one side and ability to pay, probability of prosecution, and number of tax evaders known to the subject on the other side.

Based on Braithwaite's (2003) [5] motivational postures, Kirchler and Wahl (2010) [15] design an inventory for assessing compliance (voluntary/enforced) and non-compliance (avoidance/evasion) intentions. The inventory is tested on self-employed and the four scales obtained (five items each) prove to be highly reliable. Furthermore, the scales are applied to a student subject pool and the results confirm that voluntary and enforced compliance are positively correlated to compliance behavior and negatively correlated to non-compliance behavior.

Feld and Frey (2002) [9] analyze data from a survey administered by the Swiss tax authorities in all 26 cantons and report that tax evasion decreases with the increase of mutual trust between taxpayers and tax authorities. Moreover, authorities in cantons with higher levels of direct democracy (i.e., taxpayers are directly involved in the approval of the budget and tax rates) are more tolerable with minor violations of the tax code. Therefore fines for tax evasion are lower than in cantons with lower levels of direct democracy.

Wahl, Kastlunger and Kirchler (2010) [22] test the main assumptions of the "slippery slope" framework which deals with taxpayers' perceptions on trust in authorities and power of authorities (Kirchler *et al.*, 2008) [14] using four different scenarios (high versus low trust; high versus low power) applied on 127 Austrian self-employed. By running an analysis of variance, the authors report that strategic taxpaying behavior (i.e., a special form of tax evasion) is highest when tax authorities are perceived as untrustworthy but powerful.

Talking about the "slippery slope" framework (fig.1), a fundamental aspect is represented by its two dimensions, i.e., *trust in authorities* and *power of authorities*. While trust in authorities refers to

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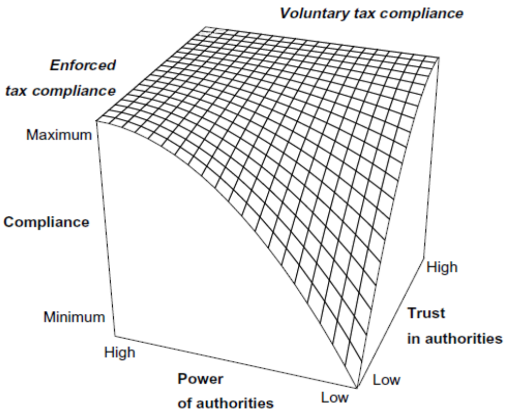
taxpayers' general opinion that authorities are benevolent and act for the wellbeing of the taxpayer, power of authorities stands for taxpayers' perception of the possibilities tax authorities possess in order to identify and fight against tax evasion. The importance of the framework resides in its capacity of distinguishing between two types of compliance behavior: voluntary tax compliance which is fostered by trust in authorities; enforced tax compliance which is enhanced by power of authorities.

Fig.1 The "slippery slope" framework



Source: Kirchler *et al.*, 2008: 212 [14].

4 Tax evasion reported in economic experiments

In our view, one of the most appropriate ways of formulating a solution for mitigating tax evasion is by corroborating attitudes with behavior. Besides highlighting taxpayers' intentions through surveys (i.e., *how they would act in a hypothetical situation*), it is necessary to elicit behavior through experiments (i.e., *how they actually act in a given situation*). Therefore, this section will focus on economic experiments and the influence of several variables on tax evasion.

Based on data obtained from an experiment regarding the effects of fine threats on compliance level, Schwartz and Orleans (1967) [20] identify a negative link between the variable and tax evasion.

Friedland, Maital and Rutenberg (1978) [11] study the influence of fines and audit rates on tax evasion concluding that the former mitigates evasion more than the latter.

Baldry (1986) [3] invalidates taxpayers' perfect rationality feature assumed by Allingham and Sandmo (1972) [1]. He shows that some taxpayers never commit evasion even when opportunities would recommend otherwise.

Collins and Plumlee (1991) [7] assess different audit schemes and conclude that tax evasion mitigates when tax rates decrease.

Following an experiment with subjects earning income from intertemporal allocation tasks, Anderhub *et al.* (2001) [2] report a positive relationship between tax evasion and income, but no significant relationship between tax evasion and tax rate.

Clark, Friesen and Muller (2004) [6] focus on repeated audits (conditional *vs.* random) and find random auditing to be the most effective, therefore generating the lowest tax evasion.

Guala and Mittone (2005) [12] study the influence of audit probability on compliance level highlighting the so-called "bomb-crater effect": tax evasion increases immediately after an audit because taxpayers believe there is small change to be audited again; as time passes, the perceived audit probability increases along with compliance.

Besides reporting data obtained from Austrian self-employed (as shown in Section 3), Wahl, Kastlunger and Kirchler (2010) [22] study the influence of the four scenarios (high versus low trust; high versus low power) on actual tax payments by using a subject pool of 120 students. According to the results obtained after a computer-aided tax experiment, subjects evade the most when confronted with untrustworthy and powerless authorities.

5 Conclusion

Talking about taxpayers' behavior, US Court of Appeals judge Learned Hand affirmed: "Anyone may arrange his affairs so that his taxes shall be as low as possible; he is not bound to choose that pattern which best pays the treasury. There is not even a patriotic duty to increase one's taxes. Over and over again the Courts have said that there is nothing sinister in so arranging affairs as to keep taxes as low as possible. Everyone does it, rich and poor alike and do it right, for nobody owes any public duty to pay more than the law demands" [29]. In the same vein, Supreme Court Justice George Sutherland stated that "the legal right of a taxpayer to decrease the amount of what otherwise would be his taxes, or altogether avoid them, by means which the law permits, cannot be doubted" [29].

As one can infer from the statements above, there is a fine line between tax evasion and tax avoidance given by the legal aspect. While tax avoidance is legal, tax evasion is illegal. Some

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countries are lenient with tax avoidance practices, others are not. One thing is for sure though: when it comes to tax evasion, leniency is replaced by intransigency. As a consequence, taxpayers audited and suspected of tax evasion are liable to prosecution and fines.

Because for many countries mitigating tax evasion is a priority, state officials, practitioners, and academia are or should be committed to attain this goal. From taxation literature one can derive that the assumptions of the classical model of tax evasion are often invalidated. Thus, in order to find explanations for tax compliance levels and to propose efficient methods of deterring tax evasion, policy makers and the general public should also consider the conclusions of different surveys, case studies, and economic experiments. While these latter studies sometimes show contradictory results concerning the effects of economic variables (e.g., audit probability, tax rate, income, fines) on tax evasion, they reveal important links between evasion and other psychological or social factors, i.e. trust in authorities, power of authorities, mutual trust between taxpayers and state officials, inequity perceptions, motivational postures, attitudes towards existing evasion, honesty.

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