KNOWLEDGE IS POWER. IMPROVING TAX COMPLIANCE BY MEANS OF BOOSTING TAX LITERACY

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Abstract: *Because empirical investigations entailing classical tax evasion models often reported consistent deviations from perfect rationality, social scientists interested in tax behavior have extended their area of research by focusing on compliance determinants outside the economic spectrum (i.e., tax rate, audit rate, penalty rate, income). Consequently, a manifold of variables from psychology (attitudes, norms, perceptions), sociology (education, gender) or political science (fiscal policy, tax law complexity, voting) were taken into account as determinants of taxpayers' decisions. In addition, behavioral models like the Australian Taxation Office compliance model, New Zealand Inland Revenue compliance model or the "slippery slope" framework have incorporated such variables. Recent empirical developments have indicated that tax literacy can be counted as a significant determinant of tax compliance. Forasmuch compliance strategies exclusively grounded on coercion are rather costly (high monitoring outlays, large staff employed in the monitoring process, etc.), generally yield short-term outcomes and may attract the resistance of otherwise honest taxpayers, authorities worldwide have begun searching for the adequate combination between cooperation and coercion, in which the emphasis on the former should prevail. State budgets are better off when authorities enact compliance strategies extensively built on cooperation, for they generate long-term results, require fewer outlays and secure the support of most honest taxpayers. The current paper draws on the effects of tax literacy (i.e., the level of tax knowledge) on taxpayers' behavior, highlighting miscellaneous strategies employed by national tax authorities around the world. As a general trend, increasing tax literacy among very young and soon-to-be taxpayers is preferred by several tax authorities, because potential contributors have to be accustomed to the requirements of tax systems before entering the economic market as employees, self-employed or employers. The use of media campaigns, tax lotteries and online filling systems are included as well among widely used strategies.*

Keywords: tax literacy; tax compliance; tax authorities; knowledge.

JEL classification: F30; F62; G18; G28; H26.

1. Introduction

Dating back to the 16th century and embedded in the writings of Sir Francis Bacon, a renowned English statesman and philosopher, the "Knowledge is power" dictum stresses the idea that information camps possess the strength of driving historical changes. In modern-day societies, tax authorities have a powerful instrument at hand to amend taxpayers' behavior, i.e., education in general and tax literacy in particular. The relationship between tax compliance and education is complex, as both variables are intertwined: the former's level mirrors the quality of the latter; conversely, the latter predetermines to a certain degree the amount of tax revenues collected by tax authorities.

In the following, we will give an account on how improving citizens' tax literacy level can augment tax compliance on the long run. While enforcement strategies may prove efficient on short term, enhancing tax compliance via coercion entails high monitoring costs and its effects does not surpass the test of time. Is tax literacy a prominent driver of taxpaying? Do

tax knowledgeable citizens comply more with the tax law? Which are the most adequate strategies tax authorities can use to improve tax literacy among citizens and ultimately secure constant or ascending tax revenues? These are few questions that the present study endeavors to answer.
The reminder of the paper is the following. Section 2 draws on recent developments reported in the literature with regards to taxpayers' behavior. Section 3 brings forward worldwide strategies used to increase tax literacy and ultimately the level of collected tax revenues. Section 4 entails concluding remarks.

2. Main determinants of tax compliance attitudes and behavior

Ever since classical tax evasion models (Allingham and Sandmo, 1972; Srinivasan, 1973; Yitzhaki, 1974) based on the theory of economic crime (Becker, 1068) have been introduced to the literature, the topic of tax behavior has gained ground among social scientists. Investigating the effect of economic variables (tax rate, audit rate, income, penalty rate) on compliance behavior and noticing consistent deviations from perfect rationality, researchers have started looking beyond economic factors. As a result, *psychological* (attitudes, norms, perceptions, etc.), *social* (e.g., education, gender) or *political* (fiscal policy, tax law complexity, voting, etc.) variables have also been considered as prominent compliance drivers (Kirchler, 2007; Pickhardt and Prinz, 2014).
Moreover, taking into account the complexity of human behavior, several of these factors have been included in tax compliance models, such as:

- **Australian Taxation Office** compliance model (Kirchler, 2007: 100), built on the concept of motivational postures (Braithwaite, 2003). As the theory states, taxpayers can be "committed", "capitulated", "resistant", "disengaged" or "game players" when relating to taxation. Following the responsive regulation approach postulated by Ayres and Braithwaite (1992) and Braithwaite (2007), authorities assign a certain tandem of coercive-regulating strategies depending on the motivational posture adopted by a taxpayer. Generally, strategies based on cooperation target compliant citizens, who pay the fair share on a regular basis because they acknowledge the importance of properly financed public goods. On the other hand, strategies exclusively based on coercion target citizens willing to avoid tax payments. The distinctive feature of the responsive regulation approach is that educating taxpayers concerning taxation (i.e., raising their level of tax literacy) is more important than sanctioning them. Nevertheless, harsh sanctions are to be installed when taxpayers clearly and repeatedly avoid the fair share for personal benefits.
- **New Zealand Inland Revenue** compliance model (Morris and Lonsdale, 2004), also grounded on the theory developed by Braithwaite (2003). According to the model, compliance attitudes are influenced by five categories of variables: business, industry, sociological, economic, psychological (i.e., BISEP).
- "**Slippery slope framework**" (Kirchler, Hoelzl and Wahl, 2008), which explains compliance along two dimensions, i.e., trust in authorities and power of authorities. According to the model, citizens' perception about authorities' willingness to work for the common good represents the trust dimension, while their perception about authorities' capacity to clamp down tax evasion represents the power dimension. The distinctive feature of the framework is that it establishes the nature of compliance behavior. That is, voluntary tax compliance emerges when authorities focus on increasing citizens' trust in their administrative capabilities. Otherwise, power-based strategies yield enforced tax compliance.

As recent empirical studies have indicated (Cvrlje, 2015; Eriksen and Fallan, 1996; OECD, 2013; Park and Hyun, 2003), *tax literacy* or the level of tax knowledge can be considered a significant determinant of tax compliance behavior. When taxpayers possess basic

knowledge regarding the importance of public goods for the functioning of nowadays societies, the financing mechanism for public goods systems (i.e., taxation), the main categories of taxes, the role of fiscal policies, the use of tax money, they are more willing to follow the tax law and declare all revenues.

3. Miscellanea of worldwide tax compliance strategies

For a consistent period of time, compliance strategies based solely on coercion have been regarded as effective in generating higher compliance levels among taxpayers. Therefore, countless audits, extensive auditing periods performed by an "army" of tax officers and harsh penalties have been favored by many national tax authorities. But, giving the constant/even increasing shadow economy and corruption levels, researchers have inferred that coercion alone might not entail the expected results. The reason is threefold: coercion translates into high monitoring costs, is effective on short-term and it can drive many honest taxpayers into the shadow economy.

According to the literature, there is a need for an adequate mixture of cooperation and coercion, with emphasis on the former, simply because national budgets are better off when authorities enact compliance strategies extensively built on cooperation. Namely, they generate long-term results, require fewer outlays and secure the support of most honest taxpayers. In my opinion, the most suitable phrase for describing such an adequate combination is that authorities should "hide an iron fist in a velvet glove" (Kirchler, 2007: 168) and use coercion only when imperative.

With respect to enforcement, in an attempt of mitigating tax evasion on cash transaction, authorities from various countries have capped cash payments and enacted mandatory bank transfers for purchases exceeding a certain threshold. For example, taxpayers in Bulgaria can spend a maximum of 7,600 euros in cash on a single purchase, in Italy 1,000 euros, in Lithuania 5,000 LTL (approx. 1,500 euros) or Spain 2,500 euros.

Through an extensive report (OECD, 2013) covering 28 developing countries from Africa, Asia, North and South America or Europe, the Organisation of Economic Cooperation and Development details several compliance strategies meant to increase voluntary revenue disclosure on the long run by education taxpayers. In other words, the OECD emphasizes the importance of "building tax culture" as a permanent catalysts for supporting public systems.

As a general trend, raising tax literacy levels among very young and soon-to-be taxpayers is favored by many tax authorities, because potential contributors have to be accustomed to the requirements of tax systems before entering the economic market as employees, self-employed or employers (e.g., Brazil, Costa Rica, Mexico, Rwanda, Peru).

Several tax authorities have also invested in increasing tax literacy among actual taxpayers through courses, workshops and seminars. It is, for example, the case of Bhutan, where the concept of taxation was introduced to the public only in 2001. Prior to that year, the Bhutanese citizens have not been taxed on their income (either corporate or personal). In order to properly register profits and facilitate income tax collection, small and micro business owners take part in bookkeeping workshops.

The use of media campaigns and online filling systems are included among widely used strategies. For instance, current and potential Turkish taxpayers are taught and encouraged to declare rental income via an e-tax return. In Singapore, the Inland Revenue Authority educates taxpayers via TV advertising, printed press, official webpage and social media.

Similarly to the majority of countries around the world (excepting international financial centers and oil-based economies), the Romanian state budget is overwhelmingly financed via taxation. Consequently, as can be seen from table 1, fiscal obligations (i.e., social security, VAT, income taxes, excise) represent about 25% of GDP.

Table 1: Tax Revenues Share in GDP

Budgetary revenues	% of GDP 2012	% of GDP 2013	% of GDP 2014
Social security	8.8	8.7	8.8
VAT	8.6	8.4	8.3
Income tax	3.6	3.7	3.6
Excise	3.5	3.4	3.7

Source: Own design based on the Romanian Government and the Ministry of Public Finance (2014: 40).

Taxation is the lifeline of the public goods system, therefore the mitigation of tax evasion acts or attempts is essential for the quality of these goods and services publicly provided. In terms of coercive strategies, the government enacted the Law no. 70/2015 to amend financial discipline by capping individual cash payments at 10,000 lei. In terms of cooperative strategies, state authorities have favored the tax lottery principle. Because tax authorities are not omnipresent and cannot secure "a tax agent under the bed of each taxpayer", buyers are instructed to request an invoice from the seller after any cash/credit transaction and keep it (Torgler and Schaltegger, 2005: 2). The invoice is then used as a lottery ticket and may entail a prize (i.e., cash payments) if declared winning during the periodic official drawing. Through this strategy, taxpayers are practically educated to remind business owners that any economic transaction occurring within the country is subject to taxation, according to the national tax law. Of course, lottery participants must not disregard paying taxes on lottery winnings, otherwise they fall in the noncompliant category. Until now, the state tax lottery has generated a lot of interest among Romanian taxpayers.

4. Conclusions

Modern-day tax authorities take into account that state budgets are better off when compliance strategies are grounded more on cooperation rather than coercion. The rationale behind this reality is the following: *cooperation* strengthens mutual trust between authorities and taxpayers, it ensures support for the ruling parties, decreases significantly monitoring expenses and, most importantly, it engenders long-term compliance among taxpayers; *coercion* puts high pressure on state budgets, because it might deepen the social distance (Bogardus, 1928) between contributors and regulators, it demands increased monitoring expenses and generates only short-term results. The current article sheds light on how tax literacy influences tax behavior. It compiles a manifold of strategies employed by authorities worldwide in order to boost tax compliance levels via increased knowledge on taxation. Moreover, it brings forward some of the strategies employed by Romanian authorities in their quest to raise compliance level nationwide.

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