Hidden economy and tax evasion in Bulgaria - a study of public opinion

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Abstract. Hidden economy and tax evasion are major issues for most emerging economies, including for countries in Eastern and Southeastern Europe. The resulting lack of tax income could lead to growing public debt, inadequate public services and respectively to problems with future growth prospects. Our study tries to shed more light on the public perception of the issue in Bulgaria. We explore the existing opinions with a survey, and base our conclusions on 1398 valid responses of people between the age of 18 and 60, mostly from Northeastern and Eastern Bulgaria. We have found that perceptions of existing tax fraud, tax evasion and the scope of hidden economy are rather high. There are only few significant differences between the answers from the two years studied - 2017 and 2018, as well as among different types of respondents (sex, education, employment etc.). We consider the existing situation as relatively stable, our respondents' opinion about tax evasion and hidden economy can be assessed as consistent.

Key words: fiscal policy, tax administration, tax evasion, informal sectors, tax avoidance.

1. Introduction

In many countries around the globe, and especially for those which are not among the most developed, tax evasion and the hidden economy are key problems, able to negatively influence the economic development of the country, and to hamper growth. The problem is especially severe for the so called “emerging markets”, to which adhere also the Eastern and Southeastern European countries, including Bulgaria. Hidden economy and undercollection of tax income leads to chronic problems in the budgets, especially in their pensions and social security part. All this indicates that the problem is extremely serious, because it is able to provoke severe social conflicts. Because of the existence of budgetary problems, the countries can be tempted to enter in a debt spiral, and to further aggravate the difficulties of collecting taxes, in eliminating the opportunities for future economic growth. There are many examples of such occurrences - practically all countries from the region are increasing their public debts.

Notwithstanding the importance of the problem of tax evasion and the hidden economy, there are multiple practical difficulties for its research, mainly due to its delicate nature. The related activities are illicit, they are not accounted for, and cannot be accounted officially, thus for measuring the effects the researcher relies only to different types of assessments, and not to some exact measures.

Certainly, attempts for the study of the problem in Bulgaria do exist - (Zahariev, 2000) treats the issues in question from the theoretical point of view and suggests several possible organisational solutions for counteracting. Newer studies - (Dimitrova, 2012) and (Nonchev, 2013) also treat the problem through the prism of public policies.

Our study aims to shed some additional light on the problem, by approaching it “sideways”, through a survey made with the “general public”. We aim to obtain an assessment of the existing views in the Bulgarian society and to draw guidelines for interpreting some other existing assessments, and also to track down, as much as possible, the existence of change over time.
2. Literature review

Hidden economy is perceived as an important problem, therefore there is plenty of literature on the topic. (Rangelova, 2006) makes an historical overview of the economic growth in Bulgaria, discussing also some issues of the hidden economy. There is research on particular branches of the economy in Bulgaria - (Ivanov, 2003, 2005), (Todorov et al., 2004), as well as general overviews of the economy of Bulgaria, like the series published by the Centre for study of democracy (CSD, 2013), or separate publications of the same institution (Gancheva et al., 2004) and of other researchers (Chengelova, 2015), (Beleva, 2017). All the studies emphasize that there are potential problems with the level of hidden economy.

In Bulgaria, the level of hidden economy is continuously assessed as relatively high. According to (EC, 2012), where undeclared economic activity for EU as a whole is assessed as 19.2 %, for Bulgaria the number is 32.3 % of GDP, far above the EU average. Other studies have similar results - (Dimitrova, 2012) represents data that the global hidden economy is ca. 10-12 % of GDP, and for Bulgaria different assessments it is 10-37 %, depending on the methodology used. According to (Schneider, 2011) the EU hidden economy is 8-32 %, with Bulgaria gravitating to the upper number.

During the crisis additional problems emerge. (Stefanov, 2017), in studying several EU countries, underlines that in periods of recession the causal link between growth among the countries becomes significantly stronger. (Popova, 2015) discovers an existing trap of unemployment for Central and Eastern European Countries, which worsens the taxation of labour. (Stateva, 2011) underlines that the debt crisis in EU (mainly in Greece) increased the regional risk, led to increased differences in payments for labour, lowering the competitiveness of periphery countries. Similar views about the debt in EU countries have also (Zahariev and Mlinov, 2015). Growing public debt requires suitable counteracting, and research is directed towards possible solutions. (Andreev, 2017) emphasizes the role of fiscal consolidation to overcome the negative effects of the crisis. (Gerunov, 2016) explores 1998-2014 fiscal aggregates in Bulgaria and finds that budget revenue is connected to economic fluctuations. (Tanchev, 2016) finds for Bulgaria, 2010-2013, that during the times of crisis the taxes on consumption demonstrates drop in collection rates and fails to generate the needed fiscal effect, similar findings have (Vladimirova, Atanasova and Tomev, 2010). Proposals of the Commission (EC, 2012) - presume that a binding framework for administrative cooperation in the field of VAT is absolutely required.

In the crisis countries are lowering the tax burden, and lowering the tax burden can lead to inverse effects on budgets. Accentuated is (Mitev, 2017) the emergence of new populism - the populism of numbers, as well as of weak state and the worsening of political culture in the Bulgarian public intercourse, the political culture is lower than at the beginning of the transition. And lower political culture leads to less transparency, more adverse actions of the administration, and ultimately to decline in public confidence on fiscal policy.

3. Methodology and data

We conduct a survey of the Bulgarian public, in order to explore the perceptions of society about the hidden economy and tax evasion. We use an online survey, the full questionnaire consists of 24 questions, related to the type of respondents, their perceptions about the hidden economy, tax evasion and the ability of the tax administration to react, as well as questions concerning the interrelation between tax administration and the public. Here we present the results of the group of questions targeting the first problem - hidden economy, tax evasion and ability of the tax administration to react.

Following the common practice for similar surveys, the questions which target the most delicate topics (i.e. tax evasion) are asked indirectly, in the form of “Do you know people from your closest contacts, who...”, so that we can count on an adequate answer from the respondent.

Our target group consists of Bulgarian citizens, between the age of 18 and 60, because our idea is to explore the views of the economically active population about the state and the activity of the tax administration. The survey was conducted two times - in the spring (March-April) of 2017 and in the same period of 2018, with the help of students of University of Economics - Varna, to whom we cordially thank for their assistance.

The overall number of received answers is 1398, of which 818 are from 2017 and 580 from 2018. Given that the type of the sample is “convenience sample”, the received answers are mostly from Northeastern and Eastern Bulgaria, mainly from the districts of Varna, Ruse, Razgrad, Dobrich, Burgas, from over 100 towns and villages, including some from the rest of the country.

The answers come from 833 women and 565 men, with the following educational level: 567 respondents with an university degree, 809 with high school and 21 with middle school education. By type of occupation our respondents are: “student” - 425, “office worker” - 130, “government officer” - 136, “worker in a private company (but not office worker)” - 398, “company owner” - 118, “accountant” - 75, “other” - 116. We separated
the accountants and the company owners in categories of their own, because these people are obliged to interact most often and most intensively with the tax administration, naturally they would be most familiar with the reality.

The age structure of our respondents to a greater extent corresponds to their occupation (see Figure 1). On the one hand we have a big group of respondents, born in the 1990s, mainly the participating students, and on the other hand another local maximum of people born in the first half of the 1970s, and these are the people most intensively involved in the economy nowadays.

![Figure 1. Number of respondents by year of birth](source: Own calculations)

The main problem we aim to identify is the approximate extent of the “grey” income and the illicit taxation practices in the Bulgarian economy.

To the question “Do you know people from your closest contacts, who received a salary bigger than the one pointed in their working contract?” 1113 (79.6 %) give an affirmative answer. There are practically no differences for both years - for 2017 the “yes/no” ratio is 80.9/19.1 %, for 2018 - 77.8/22.2 %.

And respectively - tax frauds do exist and remain unpunished - the affirmative answers of students to the question “Are there people from your closest contacts who committed tax fraud, but were not punished by the tax administration?” are 40.1 %, whereby among the non-students the percentage is slightly higher - 41.7 %. This share of the affirmative answers (over 40%) has to be interpreted as very high, since the frauds are expected to be rather an exemption from the rules. Therefore for “acceptable” levels it is suitable to suppose levels below 5 %. Eight times higher levels are naturally to be interpreted as strongly alarming, for what concerns the functioning of the administration and the relations public-administration in Bulgaria.

Another aspect of utmost importance is the existence of a change, therefore we explore the existence of sustainability of the answers through the years. We checked, whether the answers differ between the years by comparing the 2017 answers with the 2018 answers.

We can divide the questions by their answers in three groups - closed binary type (“yes/no”), closed “scale” type (5-degree Likert scale, or with different degree of affirmation/negation) and open questions. The open questions concern mainly the perception of the time used for interaction with the tax administration. The other two types of answers allow for comparison between the years, and between types of respondents.

For the binary answers (“yes/no”) we conducted series of two-sided Mann-Whitney U-tests, following (Hollander, Wolfe and Chicken, 2014). We prefer nonparametric tests, because they do not demand that the data follows the normal distribution. The null hypothesis is that it is equally likely a randomly selected value from the first group to be less or more than a randomly selected value from the second group. In fact the tests show whether there are differences between the answers in the two groups. The results are in Table 1. For rejection of the null hypothesis, we use the 0.05 significance level.
Table 1.

Mann-Whitney U-tests on the questions of “yes/no” type (p-values)

<table>
<thead>
<tr>
<th>Question</th>
<th>2017/2018</th>
<th>women/men</th>
<th>students/non-students</th>
<th>university/non-university</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you know people from your closest contacts, who received a salary bigger than the one pointed in their working contract?</td>
<td>0.147</td>
<td>0.400</td>
<td>0.125</td>
<td>0.256</td>
</tr>
<tr>
<td>Are there people from your closest contacts who committed tax fraud, but were not punished by the tax administration?</td>
<td>0.183</td>
<td>0.00</td>
<td>0.238</td>
<td>0.362</td>
</tr>
<tr>
<td>Do you know people from your closest contacts who participated in bribery of tax officers?</td>
<td>0.093</td>
<td>0.00</td>
<td>0.038</td>
<td>0.005</td>
</tr>
<tr>
<td>Did you buy goods or services from a trading point without receiving a fiscal receipt?</td>
<td>0.002</td>
<td>0.264</td>
<td>0.013</td>
<td>0.438</td>
</tr>
</tbody>
</table>

Source: Own calculations

Results for the two years are practically identical, with very few exceptions (the values below 0.05). Respondents perceive the existing reality in the same way. No change is observed over the period.

And despite the existence of statistically significant difference in the structure of the answers to the question “Did you buy goods or services from a trading point without receiving a fiscal receipt?”, the “yes” answers prevail, so the process of tax evasion continues to exist (see Table 2).

Table 2.

Share of positive answers to “yes/no” questions

<table>
<thead>
<tr>
<th>Question</th>
<th>Do you know people from your closest contacts, who received a salary bigger than the one pointed in their working contract?</th>
<th>Are there people from your closest contacts who committed tax fraud, but were not punished by the tax administration?</th>
<th>Do you know people from your closest contacts who participated in bribery of tax officers?</th>
<th>Did you buy goods or services from a trading point without receiving a fiscal receipt?</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>0.80</td>
<td>0.41</td>
<td>0.19</td>
<td>0.84</td>
</tr>
<tr>
<td>2017</td>
<td>0.81</td>
<td>0.42</td>
<td>0.20</td>
<td>0.87</td>
</tr>
<tr>
<td>2018</td>
<td>0.78</td>
<td>0.39</td>
<td>0.17</td>
<td>0.81</td>
</tr>
<tr>
<td>Women</td>
<td>0.79</td>
<td>0.35</td>
<td>0.15</td>
<td>0.83</td>
</tr>
<tr>
<td>Man</td>
<td>0.81</td>
<td>0.48</td>
<td>0.24</td>
<td>0.86</td>
</tr>
<tr>
<td>Students</td>
<td>0.82</td>
<td>0.38</td>
<td>0.16</td>
<td>0.88</td>
</tr>
<tr>
<td>Non-students</td>
<td>0.79</td>
<td>0.42</td>
<td>0.20</td>
<td>0.83</td>
</tr>
<tr>
<td>Univ. degree</td>
<td>0.78</td>
<td>0.42</td>
<td>0.22</td>
<td>0.83</td>
</tr>
<tr>
<td>High school</td>
<td>0.81</td>
<td>0.39</td>
<td>0.16</td>
<td>0.85</td>
</tr>
<tr>
<td>Middle school</td>
<td>0.81</td>
<td>0.52</td>
<td>0.29</td>
<td>0.76</td>
</tr>
</tbody>
</table>

Source: Own calculations

Results show very clearly that the practice not to issue a fiscal receipt, which respectively is closely related to the tax evasion of indirect taxes, is widely spread in Bulgaria - the ratio of affirmative to negative answers is in the range of 80 to 20, among the different types of respondents.

Similarly is the case of paying “non-accounted”, “grey” parts of the salaries, despite the fact that the ratio of the answers is closer to three to one. Anyway, these types of cases are seen by our respondents more often, unlike the situation with the other two questions, related to the direct interaction of citizens with the tax administration. For what concerns revealing frauds and not punishing infringements negative answers prevail, whereby the ratio varies between 1:1 and 1:2. The cases of bribery remain to a greater extent hidden from the respondents, to the respective question also negative answers prevail, but even more, from 1:4 to 1:5. In fact, despite the seemingly low values, the observed cases of corruption, known by our respondents are not a small
number at all, and a similar ratio demonstrates the existence of rigidity in the corruption in Bulgaria, and can be interpreted also as an indicator for its potential perception by the public as something normal.

Table 3.
Kruskal-Wallis-tests (p-values, 1 degree of freedom) on questions of “scale” type (1 - “strongly agree”, 5 - “strongly disagree”)

<table>
<thead>
<tr>
<th>Question</th>
<th>2017/2018</th>
<th>women / men</th>
<th>students/ non-students</th>
<th>university/ non-university</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you think the tax administration succeeds to find all tax infringements?</td>
<td>0.00</td>
<td>0.018</td>
<td>0.596</td>
<td>0.649</td>
</tr>
<tr>
<td>Do you think it is prestigious to work for the tax administration?</td>
<td>0.178</td>
<td>0.026</td>
<td>0.153</td>
<td>0.279</td>
</tr>
<tr>
<td>Do you think there is corruption among the tax officers?</td>
<td>0.00</td>
<td>0.01</td>
<td>0.793</td>
<td>0.886</td>
</tr>
</tbody>
</table>

Source: Own calculations

The results for the question “Did you use services - house repairs, windowing, personal car repairs, other small repairs of privately owned goods, haircut, manicure, fitness, where you pay cash, but you do not receive a fiscal receipt?” (With possible answers: I receive a fiscal receipt for such services always, very rarely, never) are similar.

Differences between the years are observed in two of the questions - in the question about whether the tax administration manages to find all tax infringements, and whether there is a corruption among its officers. To both questions, the public’s opinion is that the problem aggravates (for the numerical results see Table 4) - values for 2018 are lower, they approach the “strongly agree”. Differences in the opinions are observed also between men and women: women perceive the problems more emotionally, their answers have lower values.

Table 4.
Summary results from the “scale” questions (1 - “strongly agree”, 5 - “strongly disagree”) – median scores

<table>
<thead>
<tr>
<th></th>
<th>Do you think the tax administration succeeds to find all tax infringements?</th>
<th>Do you think it is prestigious to work for the tax administration?</th>
<th>Do you think there is corruption among the tax officers?</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>2017</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>2018</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Women</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Men</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Students</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Nonstudents</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Univ. degree</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>High school</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Mid school</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Own calculations

Naturally, the easier to observe phenomena - like not issuing of fiscal receipts, are judged as more widespread - the values of the assessments are very close to the “strongly agree”. At the same time the more obscure activities - corruption practices, tax infringements, are assessed to a lesser extent as “agree”. Nevertheless also in this area the assessments are alarming for the state of things in Bulgaria - assessments are in the “agree” and “rather agree” area.

The public in Bulgaria perceives the work for the tax administration as a prestigious one - it is possible that also here there is an influence of the general economic climate and the occurring delay in the growth and income, especially in the private sector.

4. Conclusion

Results from our study show in general, that there is a perception for existence of corruption in Bulgarian society, and also of a big amount of tax infringements. Our respondents give consistent answers in the two
studied years, and also along other dimensions - by sex, age, occupation, education. We have some evidence that the perceptions related to tax evasion and hidden economy do not change over the period of the study.

Global practice demonstrates that more transparency can relieve the problems. In Bulgaria, there are already steps in this direction, with the introduction of electronic services. The use of electronic services in the interaction of the public with the tax administration becomes obligatory for the general public after 1.1.2020. Therefore there is a crucial need for further simplification and improvement of the electronic services. This is especially true for services directed to natural persons, because the ordinary, non-professional user does not have a special training. One additional hint for improvement is to educate the public with the help of short videos. The footages could include demonstrations of how to use the electronic services by the non-experienced user. These video clips have to be easily accessible on the website of the tax administration, preferably with links on the main page. Up until now there are only written instructions. Furthermore, the existing instructions are composed in a very formal language style, what makes them hard to read and understand, even for the professional user.

**Literature**


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