STUDY ON TAX REVENUES IN ROMANIA AS CONTRIBUTOR TO THE EUROPEAN UNION BUDGET

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Abstract: *Romania is a contributor to the EU budget. Some of Romania's tax revenues go to the EU budget. Romania collects adversely the taxes and fees because of tax evasion, which also affects the Community budget. Indicators that track the evolution of tax evasion and tax revenues were calculated: the effective multiplier of tax evasion, the structural homogeneity coefficient and the tax evasion share of the total tax revenues during 2006-2013 to observe the developments since EU accession. Tax evasion occurred most in the VAT then to the social insurance fund. Since joining the European Union VAT evasion increased, VAT revenues are much lower than tax evasion. If Romania's taxes were collected at its maximum rate there would be no financial crisis. So the main effort should be directed at reducing VAT evasion and then the evasion related to the social insurance contributions.*

Keywords: tax revenues; tax evasion; Romania; European Union

Introduction

The revenue sources of the European Union include contributions from Member States, the import duties on products from outside the European Union and fines on companies which do not comply with the European standards. EU countries agree on the size of the budget and how it will be funded in the coming years. The EU budget supports economic growth and job creation, and Romania is a directly contributor. Under the cohesion policy, it finances investments in order to mitigate major economic differences between EU countries and regions. It also contributes to the development of rural areas in Europe (European Commission, 2015). Tax systems of the member countries and the way in which they collect taxes influence the EU budget. The tax system is a component of the financial system and includes taxes imposed in a state which gets an overwhelming part of its public revenues, each tax having a specific contribution and role in the economy of Romania as a member state of the European Union.

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Taxes finance the activity of the state, finance the state budget of Romania and thus the one of the European Union. However taxes are the instruments through which the state redistributes income and wealth and, moreover, they are an integral part of the fiscal policy of the state and of the European Union, being used to stabilize the aggregate demand. We can say that the taxes paid by individuals and legal entities can be considered as remuneration for the services of any nature that ensure the state or its institutions.

In Romania, according to the structure of the state budget, current budget revenues consist of tax revenues (direct taxes, indirect taxes, compulsory social contributions) and non-tax revenues (revenues from autonomous administrations, public institutions, consular fees, etc.) (Constantin, 2011). Direct taxes are nominally charged to individuals and legal entities, depending on their income or wealth, based on tax rates set by law. In general, the subject and the payer are the same person, and thus we can say that this type of tax has a direct bearing on the subject payer. Indirect taxes are related to expenditure, so they are levied during the sale of goods and provision of services. By law, a subject of tax is assigned to another individual or legal entity than its bearer. Depending on their form of manifestation, indirect taxes are grouped into: consumption fees, income related to tax monopolies, customs duties, fiscal charges, stamp duties, consular fees and registration fees. Consumption fees have two forms: consumption fees on product, known as excise and general taxes on sellers, practiced as VAT or tax on gross or net turnover (Iordache *et al.*, 2005).

Compulsory social contributions are paid by individuals who derive income from salaries, income assimilated to salaries and retirement income as well as by persons under protection or in state custody. They consist of social security contributions, health insurance contributions, contributions for holidays and health insurance allowances, unemployment insurance contributions, insurance contribution for work accidents and occupational diseases, contribution to the guarantee fund for payment wage claims (Tax Code, Title IX^2).

1. Fiscal system in Romania in the EU context

In Romania the tax system is characterized by an adverse collection of taxes and fees with an inefficient administration and an excessive bureaucracy, a relatively low tax base with many legal exemptions and deductions and a high tax evasion. This aspect has often attracted criticism of the EU officials since Romania is unable to contribute effectively and sufficiently, through an adverse collection. Tax evasion is theft by any means, in whole or in part, from the declaration and payment of tax obligations to the state budget. Taxation in Romania is undoubtedly pointless for the Romanian taxpayer, no matter how civic he may prove to be. It is, moreover, a burden and the cause of public discontent when public power does not handle properly the money pushing the taxpayer to become an escapist and not pay the taxes and fees he owes.

The decrease of budget revenues is caused by the decrease of the collection of taxes and fees, and by an increase in tax evasion. Given that the level of expenditure is higher than the budget revenues, the budget deficit occurs at EU and

national level. This deficit can be covered primarily from loans that the state has to engage both from the inside and the outside. The level of budgetary revenues is influenced by a number of factors such as: economic growth expressed in the growth of the GDP; monetary factors (interest, inflation); price level; tax rate level; tax efficiency; level of tax collection in relation to the level of expected tax revenues. The increase of tax revenue should exceed the economic growth. In the EU member countries, both tax revenues and economic growth differ from country to country, this aspect further highlights the gap between the member countries.

Settlement strategies of taxes based on the policy objectives of the European Union and the Romanian state in the fiscal area, the influence of fiscal discipline in combating the underground economy and tax evasion, the improving of methods and procedures used by the fiscal system to settle, levy and control taxes, are problems of utmost importance for ensuring the national and community budget supply system with minimum required resources (Constantin, 2009).

To enable the establishment of certain measures to prevent and combat tax evasion and also to increase tax revenues, in this study we calculate some indicators that track the evolution of tax evasion as well as tax revenue: the effective multiplier of tax evasion, the structural homogeneity coefficient both of tax revenues and tax evasion and tax evasion share of total tax revenues between 2006 and 2013. We have also considered necessary a research in the mentioned period in Romania to observe the developments in tax revenues and tax evasion since EU accession.

2. The situation of tax revenues and tax evasion in Romania

In order to calculate the proposed indicators, it is necessary that the evolution of tax revenues and tax evasion in the period of interest should be known and analyzed. The study was based on the situation of tax revenues and tax evasion in Romania, between 2006 and 2013 and under these circumstances the concerned indicators were calculated.

The study on evolution of tax revenues in Romania was conducted for the period of 2006-2013 based on the data obtained from the Ministry of Finance. Tax revenues analysis was made in Romania on types of taxes: income tax, social insurance contribution (SIC), VAT, profit tax, excise and total. Data on tax revenues in Romania, between 2006 and 2013, are presented in Table 1.

Table 1. Evolution of tax revenues in millions of Lei

Types of taxes	2006	2007	2008	2009	2010	2011	2012	2013
Profit tax	7939	10558	13046	11893	10115	10309	10854	10926
Income tax	11166	15761	19875	19937	18811	19797	21928	24001
VAT	27763	31243	40875	34322	39246	47917	50516	51827
Excise	10588	12512	13599	15579	17379	19105	20260	21106
SIC	32981	38843	48420	47872	45697	50637	50637	54379
Total of tax revenue	90438	108917	135815	129604	131248	147766	154197	162239

Source: Ministry of Finance (2014), *State Budget*, available at: www.mfinante.ro

The study on evolution of tax evasion in Romania was conducted for the period between 2006 and 2013 based on the data collected in the 2013 Annual Report of the Fiscal Council. Tax evasion analysis in Romania was made on types of taxes: income tax, social insurance contributions (SIC), VAT, profit tax, excise and total. Data on the level of tax evasion in Romania, between 2006 and 2013, are presented in Table 2.

Table 2. Evolution of tax evasion in millions of Lei

Types of taxes	2006	2007	2008	2009	2010	2011	2012	2013
Profit tax	2555	3126	3993	3237	3512	3126	2624	2794
Income tax	1798	2392	3009	4366	5093	4968	4852	4749
VAT	15067	29982	38085	40156	50347	57476	72399	76747
Excise	1505	3137	2194	2805	3663	2616	2323	2438
SIC	6267	8015	9357	14052	16393	15989	15617	15285
Total of tax evasion	27192	46652	56638	64616	79008	84175	97815	102013

Source: Fiscal Council (2014), *Annual Report 2013,* available at www.consiliulfiscal.ro

Given the situation of tax revenues and the situation of tax evasion between 2006 and 2013 we can proceed to the calculation of the proposed indicators.

3. The effective multiplier of tax evasion

The effective multiplier ('M' coefficient) of tax evasion (Vacarel *et al.*, 2006, p. 461) expresses the number of monetary units of income taxes and fees to the state budget (Tax Revenues) collected for a monetary unit of tax evasion. In other words, it shows to what extent one monetary unit of tax evasion of tax revenues is covered.

$$M = \frac{\text{Tax Revenue}}{\text{Tax Evasion}}$$

In Table 3 we calculated the effective multiplier on tax evasion on profit tax, income tax, VAT, excise and social insurance contributions 2006 and 2013 based on the data in Tables 1 and 2.

Table 3. The effective multiplier (coefficient) of tax evasion

Types of taxes	2006	2007	2008	2009	2010	2011	2012	2013
Profit tax	3.1072	3.3776	3.2672	3.6741	2.8802	3.2979	4.1366	3.9104
Income tax	6.2103	6.5889	6.6052	4.5664	3.6935	3.9850	4.5195	5.0539
VAT	1.8426	1.0421	1.0733	0.8547	0.7795	0.8337	0.6977	0.6753
Excise	7.0353	3.9885	6.1985	5.5541	4.7444	7.3031	8.7217	8.6571
SIC	5.2627	4.8463	5.1747	3.4068	2.7876	3.1670	3.2424	3.5577
Total	23.4582	19.8433	22.3188	18.0561	14.8852	18.5866	21.3179	21.8544

Source: author's calculations

We believe that this coefficient shows existing reservations on financing the budget deficit during the budget execution of the analyzed years 2006-2013. Regarding the VAT there are no reserves on financing the deficit since 2009.

Starting with 2009 the number of monetary units of income tax for one unit of tax evasion is smaller than one which means that the VAT evasion is higher than the tax revenues from VAT. The number of monetary units collected to the budget of VAT for one unit of VAT evasion has been decreasing since 2006 (1.8426) until 2013 (0.6753) which means that increasingly less money from VAT is charged to the budget. In other assessed taxes and also on the total report there were reservations on the line regarding the financing of the budget deficit, the situation is stable and does not register major fluctuations.

4. The structural homogeneity coefficient of tax revenues and tax evasion

It is also important to know the structure of tax revenues and tax evasion phenomenon to determine what types of taxes have the largest share in the state budget and in which the tax evasion most manifests. The structural homogeneity coefficient of tax revenue and tax evasion can be calculated only after establishing their percentage structure. To see the mutations produced in the structure of tax revenues and tax evasion, we can call on the structural homogeneity coefficient, known as Onicescu informational coefficient ('K') (Vacarel *et al.*, 2006, p. 462).

With this coefficient it is measured the degree of homogeneity or heterogeneity of relative structures that characterize a phenomenon, in this case, the tax evasion and tax revenues phenomenon.

$$K = \sqrt{\sum_{i=1}^{n} x_i^2}$$

In which:

K = structural homogeneity coefficient or Onicescu informational coefficient;

X_i = share (as coefficient) of the 'i' element in the total of the analyzed phenomenon.

The structure of tax revenues by type of taxes and fees between 2006 and 2013 is presented in Table 4. According to the data in Table 1 it was calculated how much it represents the percentage of the profit tax, income tax, VAT, excise duty and the social insurance contributions (SIC) of the total tax revenue and then it was applied the structural homogeneity coefficient 'K'.

Table 4. The structure of tax revenues

Types of taxes	2006	2007	2008	2009	2010	2011	2012	2013
Profit tax	8.78%	9.69%	9.61%	9.18%	7.71%	6.98%	7.04%	6.73%
Income tax	12.35%	14.47%	14.63%	15.38%	14.33%	13.40%	14.22%	14.79%
VAT	30.70%	28.69%	30.10%	26.48%	29.90%	32.43%	32.76%	31.94%
Excise	11.71%	11.49%	10.01%	12.02%	13.24%	12.93%	13.14%	13.01%
SIC	36.47%	35.66%	35.65%	36.94%	34.82%	34.27%	32.84%	33.52%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
K	51.37%	50.30%	50.83%	50.31%	50.46%	51.20%	50.76%	50.76%

Source: author's calculations

From Table 4 it is observed that the SIC and the VAT have the largest share of tax revenue, and they are the most important. The structure of VAT in total of tax revenues has slightly increased, but not significantly, even if the VAT rate increased by 5 percentage points in 2010. In 2010 the structure of VAT increased by 3.42 percentage points compared to 2009, but it is 0.8 percentage points lower than the VAT structure from 2006. Of course that comparing the structure of VAT of 2010 to the one of 2006 we must keep in mind the fact that between these years there has been an event that affected adversely the economy, namely the financial crisis. Thus, in this period many companies did not resist the financial crisis and disappeared from the market, reducing this way the market activity, and thus the tax revenues fell.

The value of the structural homogeneity coefficient remains approximately constant from one period to another, which means that the structure of tax revenues by category of taxes is relatively constant, meaning that the importance of analyzed taxes of the total tax revenues does not change significantly.

The structure of tax evasion on types of taxes between 2006 and 2013 is presented in Table 5. According to the data in Table 2 it was calculated the percentage of the profit tax, income tax, VAT, excise and SIC of the total tax evasion and then the structural homogeneity coefficient 'K' was applied.

Table 5. The structure of tax evasion

Types of taxes	2006	2007	2008	2009	2010	2011	2012	2013
Profit tax	9.40%	6.70%	7.05%	5.01%	4.45%	3.71%	2.68%	2.74%
Income tax	6.61%	5.13%	5.31%	6.76%	6.45%	5.90%	4.96%	4.66%
VAT	55.41%	64.27%	67.24%	62.15%	63.72%	68.28%	74.02%	75.23%
Excise	5.53%	6.72%	3.87%	4.34%	4.64%	3.11%	2.37%	2.39%
SIC	23.05%	17.18%	16.52%	21.75%	20.75%	18.99%	15.97%	14.98%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
K	61.35%	67.40%	69.91%	66.52%	67.63%	71.28%	75.97%	76.93%

Source: author's calculations

As shown in Table 5, the identified tax evasion occurred mostly at the VAT, over 50% throughout the analyzed period. So, VAT has the largest structure of total tax evasion and has an increasing evolution from 55.41% in 2006 to 75.23% in 2013. After VAT, the social insurance contribution (SIC) follow it in the share of the total of tax evasion but has a slight decrease from 23.05% in 2006 to 14.98% in 2013.

The structure of VAT in the total of tax evasion had fluctuations during 2006 and 2009 increasing by 8.86 percentage points in 2007 (the year of accession to the European Union) compared to 2006 and decreasing by 5.09 percentage points in 2009 compared to 2008. In the analyzed developments one can observe that the structure of VAT in tax revenues decreased in 2009 compared to 2008 by 3.26 percentage points, and 2009 was the year that reflected the financial crisis effects installed in 2008. It can be noticed that after Romania joined the EU in 2007, VAT evasion has an increased growth rate. So starting with the accession to the European Union, the VAT evasion phenomenon has increased.

Since 2010, when the VAT rate increased by 5 percentage points from 19% to 24%, the total structure of VAT evasion increased progressively, reaching 75.23%. In our opinion, the increase of the VAT rate influenced the increase of VAT structure in the tax evasion total.

As shown in Table 5, the value of structural homogeneity coefficient increases from one period to another, which means that the structure of tax evasion on categories of taxes records a process of heterogeneity, meaning that escapists focused on VAT or, in other words, increased VAT evasion. Therefore, the main effort should be directed at reducing VAT evasion and then at the SIC.

5. Share of tax evasion from tax revenues

Following the evolution of tax evasion based on the share of revenue tax evasion (P %) allows to determine how large tax evasion is in relation to total tax revenue and profit tax, income tax, VAT, excise and SIC. Table 6 shows the share of tax evasion from tax revenues between 2006 and 2013. The calculations in Table 6 were made based on the data in Tables 1 and 2, applying the formula below.

Table 6. Evolution of tax evasion share from tax revenues

Types of taxes	2006	2007	2008	2009	2010	2011	2012	2013
Profit tax	32.18%	29.61%	30.61%	27.22%	34.72%	30.32%	24.17%	25.57%
Income tax	16.10%	15.18%	15.14%	21.90%	27.07%	25.09%	22.13%	19.79%
VAT	54.27%	95.96%	93.17%	117.00%	128.29%	119.95%	143.32%	148.08%
Excise	14.21%	25.07%	16.13%	18.00%	21.08%	13.69%	11.47%	11.55%
SIC	19.00%	20.63%	19.32%	29.35%	35.87%	31.58%	30.84%	28.11%
Total	30.07%	42.83%	41.70%	49.86%	60.20%	56.97%	63.44%	62.88%

Source: author's calculations

If tax evasion meant tax revenues during the analyzed period then they would have increased considerably with the proportions in Table 6. So Table 6 shows how high the tax revenues would have been between 2006 and 2013 if there had been no tax evasion.

According to Table 6 share of tax evasion in relation to tax revenue is increasing the total for the analyzed period, from 30.07% in 2006 to 62.88% in 2013, the most significant role being the VAT evasion. Basically the share of VAT evasion in relation to VAT revenue is the highest, is increasing. Since 2009 the share of VAT evasion in relation to VAT revenues exceed 100% which means that since 2009 tax evasion is higher than tax revenues, by far exceeding them. From 117%, in 2009, it reached to 148.08% in 2013. As an overview, from 2006 to 2013 the share increased three times.

Conclusions

Tax evasion is very high in Romania and it is growing, VAT has the highest share of total GDP and tax evasion, as it has been shown in other works (Constantin, 2014). In the case of indirect taxes it is an economic constraint.

During the periods when the economy recorded an ascending course, indirect taxes can have high tax efficiency; in return, during the periods of crisis and depression, when production and consumption recorded a rebound, revenues from indirect taxes followed the same evolution, jeopardizing the achievement of budget balance or leading to widening the budget deficit. Thus, indirect taxes show a heightened sensitivity to the economic situation.

If all money owed on taxes were collected, then tax revenues would increase considerably and there would be no major problems with the state budget and with the covering of the budgetary expenditure. VAT has the highest share of tax evasion and possibly a full collection at the state budget, thus this tax would have the largest share of tax revenues, the greatest contribution to the state budget. This would mean that the share of indirect taxes would overtake that of direct taxes in the total of tax revenues to the state budget. Resorting to a more widely scale as regarding indirect taxes, it should be viewed in close connection with the income and wealth level made (owned) by different categories of individuals and companies. Given that the Romanian economy has a lower performance compared to that of developed countries and the contribution and efficiency of income tax as well as of wealth tax is lower. If to all these we add the convenience and the relatively low cost of collecting consumption taxes and other indirect taxes, we find the explanation for indirect taxes (Vacarel *et al.*, 2006, p. 428). In developed countries, as a rule, the contribution of indirect taxes to the state's tax revenue is lower than that of direct taxes.

Very high evasion of VAT in Romania directly influences the EU budget as a percentage of the harmonized VAT receipts of each Member State (around 0.3) is generally transferred to its budget. A thorough reform of the administration of taxes in Romania targeted towards increasing tax collection is essential, being capable of creating the fiscal space needed to reduce the tax burden on employment, which is at a very high level today.

So the evolution of tax revenues in the budget of a state depends on the evolution of the economy of that country, of its economic situation and also of the keeping under control of the evolution of tax evasion. The avoidance of running out of control of tax evasion during the evolution of our society in the role of European country requires strong further actions seeking preventive measures and also the improvement of the control system of economic subjects regarding the compliance with tax laws.

As said before in other researches, the position of a member state of the European Union requires further institutional pressure on specific internal factors which determine the development of the analyzed phenomenon, and in particular by fighting corruption – as a driver of tax evasion, action that will lead to diminishing the underground economy and also obstructing its power sources while limiting access to entities in conflict with the law in decision making in key sectors of the economy (Constantin, 2014).

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