

## **Analysis of the Level and Structure of the Romanian State Budget Revenues during 2009-2013**

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**Abstract:** The state budget includes the shares of national interest and it establishes the main mobilized financial resources available to the state, which are used to achieve social and cultural actions, defending the country, ensuring public order, the social protection and others alike. The economic relationships that determine the state budget find their widest expression in the macroeconomic correlations which are established in the economy and society. The objective of this paper is to analyze the level and structure of the resulted state budget revenues of Romania in the period 2009 - 2013, due to financial policy promoted in the public financial resources domain. This theme was chosen because of the importance and timeliness of the financial, fiscal - budget policy issues in the current economic environment at the national and international level. The methodology used to analyze the level and structure of state budget revenues was the calculation of level indicators (volume of public revenues, the share of public revenue in GDP and the average per capita of the public revenue), and the indicator on g<sub>i</sub> structure. In conclusion, the public revenues expressed in real prices in the year 2013 were in 84,637.88 million lei. Through the analysis it is confirmed the importance of VAT in the financial resources category of Romania, which increased as the tax rate in 2010 from 19% to 24%. The share of total revenues in GDP was an upward trend except in 2013 which decreased by 0.4 percentage points.

**Keywords:** income; state budget; indicator; share

**JEL Classification:** H20; H21

### **1. Introduction**

The relationships determined by the constitution of public financial resources occur mainly through taxes, mandatory contributions and other payments of public institutions, as well as the loans of internal and external states. Then the social relationships created between the state and its members in the allocation and use of

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public financial resources process take the form of public and semi-public utilities and services, which the state provides to them and to society in general.

The state budget includes the shares of national interest and it establishes the main mobilized financial resources available to the state, which are used to achieve social and cultural actions, defending the country, ensuring public order, the social protection and others alike. The economic relationships that determine the state budget find their widest expression in macroeconomic correlations which are established in the economy and society, particularly in relation to the level, evolution and distribution of gross domestic product, the main source of public financial resources.

State budget tries to reflect an image as close as possible to the real situation of the economy. Therefore, it represents a financial operational plan, at macroeconomic level, established by the competent bodies of the State and under which they are to operate and develop the society from the economic, social and financial point of view, for the period established in the plan. Although the state budget is drawn up in Romania during a fiscal year, by which it often provides the necessary conditions for the continuation of funding in the medium term, by including public expenditures (investments) that cannot be completed during a budgetary exercise.

## 2. Research Methodology

The paper includes the analysis of the state budget revenues of Romania in the period 2009-2013, in terms of its level and structure. In this regard there were taken into account and determined the key indicators of the level and structure, the analysis ending with indicators on the dynamics of public revenues. In order to conduct the study there were used data resulting from the budgetary execution.

In order to analyze the level and structure of the state budget revenues, there were calculated the level indicators and indicators of classical structure, used in such studies.

The indicators on the level of used public revenues are:

- a) the volume of public revenues, expressed in nominal value (in current prices)
- b) the share of public revenue in GDP, using the formula:

$$P_{V/GDP} = \frac{V}{GDP} \times 100 \quad (1)$$

where:  $P_{V/GDP}$  – represents the share of public revenue in GDP

V - represents the volume of public revenue,

GDP – the Gross Domestic Product.

c) the average public revenue per capita (loc), using the formula:

$$V_{loc} = \frac{V}{\text{population}} \quad (2)$$

In order to analyze the structure, we used the shares of each category of public income in total determined income according to formula (3)

$$g_i = \frac{V_i}{V} \times 100 \quad (3)$$

Where:  $g_i$  – represents the share of income  $i$  in total income or in an income group;

$V_i$  – represents income whose share is calculated;

$V$  - represents the total income or an income group.

### 3. Research Results

#### The Volume of Public Revenues

This indicator represents the amount of public revenues. According to the budgetary execution, the public revenue volume of Romania had an upward trend in the period 2009 - 2013, with a significant growth particularly in the first period, as illustrated by the graph in Figure 3.

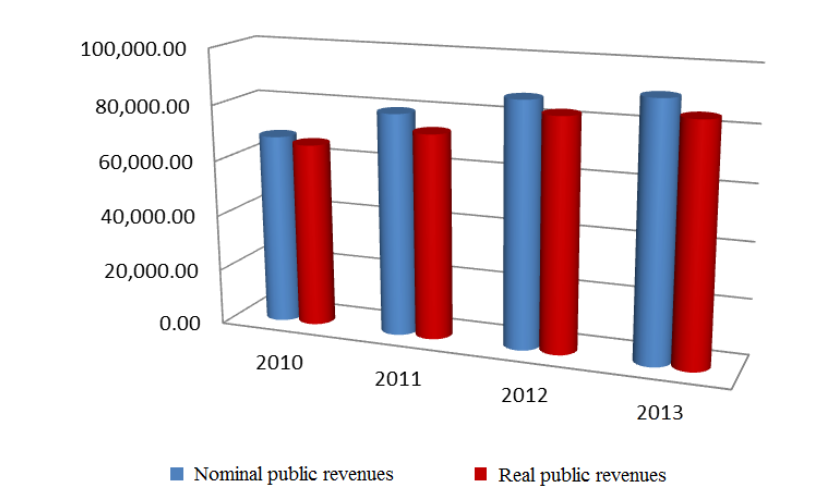


Figure 3. The volume of public revenues in Romania in the period 2009-2013

The indicator can be expressed also in constant prices. In order to obtain the evolution of the volume of public revenues in constant prices, we resorted to GDP

deflator. In Table 1 there are summarized all values on public revenue from Romania, in current and constant prices. In both cases there is an increase in public revenues.

**Table 1. The volume of public revenues in Romania**

	2009	2010	2011	2012	2013
Nominal public revenues	54678.30	68050.70	79371.20	87171.50	90561.40
GDP	498007.50	513640.80	556708.40	587466.20	628581.00
Ip	-	1.03	1.08	1.06	1.07
Public revenues in real size	-	65979.49	73230.95	82607.49	84637.88

We may evidently observe the difference in value between the public revenue in nominal value and the actual, real value. In the case of nominal public revenues, thus expressed in current prices, the value recorded in 2009 was only of 54678.30 million lei in 2013, it increased to 90,561.40 million lei, in the case of public revenues expressed in real prices, thus calculated, taking into account the price index in the year 2013 it was of 84,637,88 million lei.

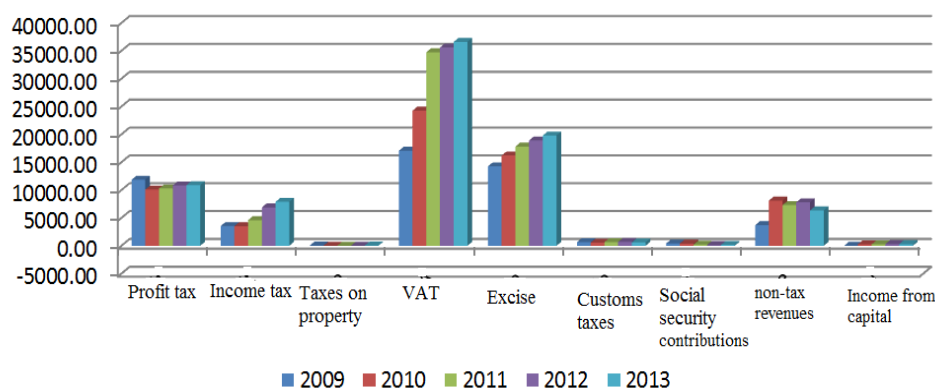
The evolution of value of each component of public financial resources can be seen easily by analyzing the data in the following table (Table 2).

**Table 2. The evolution of main budget revenue in the period 2009-2013**

	2009	2010	2011	2012	2013
<b>TOTAL REVENUE</b>	54678.30	68050.70	79371.20	87171.50	90561.40
<b>Current income</b>	53530.00	64825.10	77058.30	83577.10	86694.00
<b>Fiscal income</b>	49405.00	56305.10	69527.70	75615.80	80175.20
<b>Profit taxes, wages, income and capital gains</b>	16796.70	14460.10	15604.10	18685.90	20040.90
Profit Taxes	11869.20	10090.90	10289.20	10824.70	10893.20
Payroll and income tax	3558.20	3531.00	4607.40	6901.50	7894.60
Other taxes on income, profits and capital gains	1369.40	838.30	707.50	959.70	1253.10
<b>Taxes on property</b>	54.00	4.50	-0.50	0.40	51.00
<b>Taxes on goods and services</b>	31789.80	41222.40	53227.90	56202.20	59432.20
VAT	17073.50	24263.60	34742.00	35586.30	36610.30
Excise	14272.10	16212.30	17805.90	18910.80	19798.00
Other taxes on goods and services	0.10	16.40	10.30	16.90	419.10

Tax on the use of goods, authorizing the use of goods or conducting activities	444.00	730.10	669.80	1688.10	2604.80
<b>Tax on foreign trade (customs duties)</b>	655.50	574.00	673.70	707.30	620.00
<b>Other taxes and fiscal charges</b>	108.90	44.10	22.50	20.10	31.10
<b>Insurance contributions</b>	414.70	395.00	215.40	155.20	160.50
<b>Non-tax revenues</b>	3710.30	8125.00	7315.20	7806.00	6358.40
<b>Subsidies</b>					
<b>Income from capital</b>	39.30	282.60	275.60	306.40	299.80
<b>Financial operations</b>	1.90	6.30	1.10	4.70	6.60

The current revenues represent the main public financial resource and we can observe the importance of the amounts from income tax. Moreover, tax revenues are those that record the largest increase, from 49.405 million lei in 2009 to 80,175.20 million in 2013. An important role in this growth had the taxes and duties on goods and services, especially VAT, which increased as the tax rate in 2010 from 19% to 24%. There were recorded increases also in the payroll tax and income from 3558.20 in 2009 to 7894.60 in 2013. There are also tax revenues that have remained relatively around the same values, the profit tax for example (11869.20 million in 2009, 10,893.20 in 2013) and foreign trade taxes, customs duties 655.50 million lei in 2009 and 620 million in 2013. In terms of insurance contributions, they declined from 414.70 million in 2009 to 160,500,000 in 2013. The non-tax revenues have also increased, almost doubling (from 3,710 million lei in 2009 to 6,358 million in 2013), but the most significant increase was recorded in the income from capital.



**Figure 4. Main budget revenue in the period 2009-2013**

The graph shown in Figure 4 confirms the importance of VAT in Romania in the

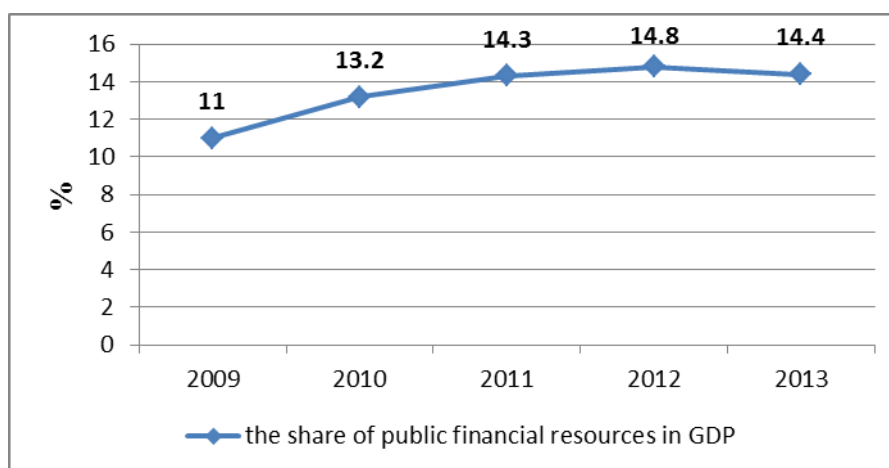
category of financial resources throughout the analyzed period.

### The Share of Public Revenue in GDP

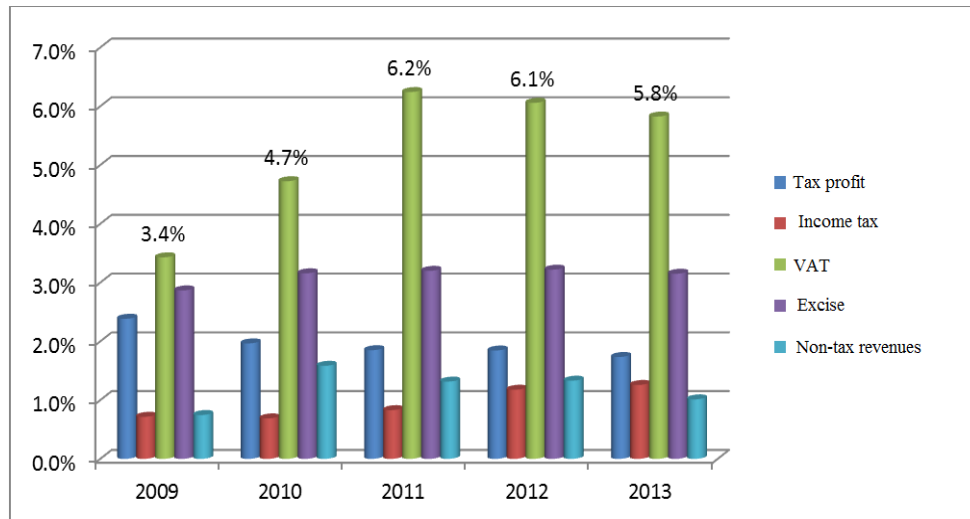
According to the budgetary execution data in the last five years, the share of total revenues in GDP for the analyzed period had an upward trend until the end of 2012, a decrease of 0.4 percentage points was registered in the last analyzed year (see Table 3 and Figure 5).

**Table 3. The share of total public revenue in GDP**

	2009	2010	2011	2012	2013
<b>Total public revenue (mil. Lei)</b>	54678.3 0	68050.70	79371.2 0	87171.5 0	90561.4 0
<b>GDP (- mil. Lei)</b>	498007. 5	513640.8	556708. 4	587466, 2	628581, 3
<b>Share of total revenues in GDP (%)</b>	11.0	13.2	14.3	14.8	14.4



**Figure 5. The share of public financial resources in GDP during 2009 - 2013**



**Figure 6. The share of main financial resources in GDP in the period 2009-2013**

A detailed analysis can be achieved using the share in GDP on public financial resources categories. Figure 6 contains the shares in GDP by financial resources categories for every analyzed year expressed graphically. As a share of GDP, the tax revenues are the most important financial resources for the entire period, their share rising from 9.9%, as it was at the beginning of the period, to 12.8% in 2013. From this income, the VAT and excise shares are in turn the most important and they experienced a continuous growth, especially in the case of VAT. The following, as importance of the value of the tax share in GDP, is the profit and the payroll tax and income. All these values do nothing but to confirm the evolution of the previous indicator, namely the evolution of public revenue volume on component structures. The graph in Figure 6 reflects once again the significant share in the GDP share of financial resources from VAT receipts, on the entire analyzed period.

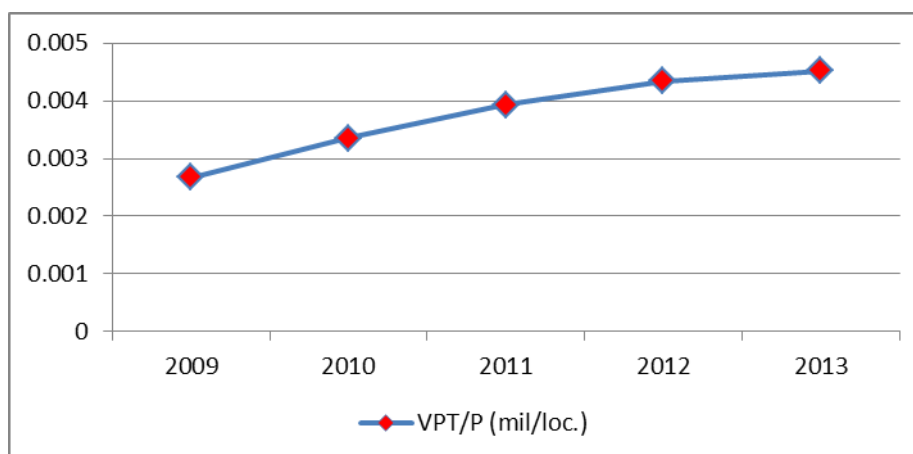
**The Average Public Revenue per Capita**

The third analyzed level indicator is the average public revenues per capita. Calculated as the ratio between total public revenue and population of Romania during the five analyzed years, the indicator gives us an insight into public financial resources corresponding to each inhabitant of Romania.

**Table 5. Evolution of the average per capita public revenue**

	2009	2010	2011	2012	2013
Total public revenue (mil).	54678.3	68050.7	79371.2	87171.5	90561.4
P (per capita)	20439959	20291298	20224396	20106420	20027458
TPR / P (mill. / per capita)	0.002675	0.003354	0.003925	0.004336	0.004522

The analysis of the indicator shows a continuous increase of budget revenues per capita in Romania, during the entire analyzed period, the growth is seen graphically in the following figure.



**Figure 7. The evolution of the average public revenues per capita in Romania in 2009-2013**

**Note:** VPT - represents total public revenue; loc. – per capita

In order *to analyze the structure of public revenues*, it was used the calculation of the share of each category of public revenue in total revenues, but also the calculation of the share of each category of income group to which it belongs, based on the above formula, namely:

$$g_i = \frac{V_i}{V} \times 100$$

where:  $g_i$  – represents the income share  $i$  in total income or in an income group;

$V_i$  – represents income whose share is calculated;

$V$  - is the total income or an income group.



We determined, therefore, the following indicators:

- 1) The share of fiscal revenue in total revenue;
- 2) The share of insurance contributions in total revenues;
- 3) The share of non-tax revenues in total revenues;
- 4) The share of capital income in total revenues;
- 5) The share of profit tax in tax revenues;
- 6) The share of payroll tax and income in fiscal revenues;
- 7) The share of VAT in tax revenues;
- 8) The share of excise tax in tax revenues;
- 9) The share of customs duties in tax revenues.

The values obtained from the calculations are summarized in Tables 6 (share in total public revenues) and 7 (the shares in total tax revenues).

**Table 6. The share of public revenue categories in total revenues (%)**

	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
The share of tax revenue in total revenues	90.36	82.74	87.60	86.74	88.53
The share of insurance contributions in total revenues	0.76	0.58	0.27	0.18	0.18
The share of non-tax revenues in total revenues	6.79	11.94	9.22	8.95	7.02
The share of capital income in total revenues	0.07	0.42	0.35	0.35	0.33

**Table 7. The share of total tax revenue (%)**

	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Income Taxes	24.02	17.92	14.80	14.32	13.59
Payroll and income tax	7.20	6.27	6.63	9.13	9.85
Other taxes on income, profits and capital gains	2.77	1.49	1.02	1.27	1.56
Taxes on property	0.11	0.01	0.00	0.00	0.06
VAT	34.56	43.09	49.97	47.06	45.66
Excise	28.89	28.79	25.61	25.01	24.69
Other taxes on goods and services	0.00	0.03	0.01	0.02	0.52
Tax on use of goods, authorizing the use of goods or the performance of activities	0.90	1.30	0.96	2.23	3.25
Tax on foreign trade (customs duties)	1.33	1.02	0.97	0.94	0.77
Other taxes and fiscal charges	0.22	0.08	0.03	0.03	0.04

#### 4. Conclusion

The relationships determined by the constitution of public financial resources occur mainly through taxes, mandatory contributions and other payments of public institutions, as well as the loans of internal and external states. The state budget includes the shares of national interest and it establishes the main mobilized financial resources available to the state, which are used to achieve social and cultural actions, defending the country, ensuring public order, the social protection and others alike.

The paper includes the analysis of state budget revenues of Romania in the period 2009-2013, in terms of its level and structure. In this regard there were taken into account and determined the key indicators of level and structure, the analysis concluded with indicators on the dynamics of public revenues. In order to conduct the study there were used data resulting from the budgetary execution. After analyzing the level and structure of the Romanian state budget revenues in the period 2009 - 2013 we have concluded that: the volume of public revenues represent the amount of public revenues. According to the budgetary execution, the public revenue volume of Romania had an upward trend in the period 2009 - 2013, with a significant growth particularly in the first period. In the case of nominal public revenues, thus expressed in current prices, the value recorded in 2009 was only of 54678.30 million lei in 2013, it increased to 90,561.40 million lei, in the case of public revenues expressed in real prices, thus calculated, taking into account the price index in the year 2013 it was of 84,637,88 million lei. The current revenues represent the main public financial resource and we can observe the importance of the amounts from income tax. Moreover, tax revenues are those that record the largest increase, from 49.405 million lei in 2009 to 80,175.20 million in 2013. An important role in this growth had the taxes and duties on goods and services, especially VAT, which increased as tax rate in 2010 from 19% to 24%. Increases were also recorded in the payroll tax and income from 3558,20 in 2009 to 7894,60 in 2013.

According to the budgetary execution data in the last five years, the share of total revenues in GDP for the analyzed period had an upward trend until the end of 2012, a decrease of 0.4 percentage points was registered in the last analyzed year. As a share of GDP, the tax revenues are the most important financial resources for the entire period, their share rising from 9.9%, as it was at the beginning of the period, to 12.8% in 2013.

The share of public revenue in GDP indicator has provided an overview on public financial resources accruing to each inhabitant of Romania. The indicator analysis showed a continuous increase in budget revenues per capita in Romania, during the entire analyzed period.

## 5. Acknowledgment

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