
Development of Critical Perspectives on Romania's Evolution Public Debt in the Current Economic Crisis

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The economic crisis has wiped out years of economic and social progress and highlighted the structural weaknesses of Europe's economy. The European Commission and European Council have evaluated the PNR and the implementing national reports and will adopt the final recommendations on fiscal and financial policies, and structural reforms, following that Member States will consider the recommendations and implement them in the fiscal-budgetary policies, and in, those relating to domestic structural reforms.

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Introduction

EU national governments presented in late April 2011 the National Reform Programmes, in which they explained how to implement the "Europe 2020" strategy nationwide. A strict coordination between EU supervision of macroeconomic and fiscal policies and policies for structural problems is the central axis of the European semester, the new approach adopted by the EU for the economic policy coordination.

In this context, the Romanian government adopted GD no. 132/2011 amending the Methodological Norms for the application of Government Emergency Ordinance no. 64/2007 on public debt, approved by Government Decision no. 1.470/2007 and the Methodological Norms for the application of art.14 of Government Emergency Ordinance no. 64/2007 on public debt, approved by Government Decision no. 683/2008.

Public debt represents the total burden on government and local government debt, which can be expressed in national currency and foreign currency. State loans can be contracted through the Ministry of Finance, in its own name or guaranteed by it. In order to assess Romania's public debt, liabilities denominated in currencies other than the national currency are calculated using the official exchange rate of the National Bank of Romania. Also, the total public debt of a country can be expressed in absolute values (to know the task that the country's economy is subject to), in relative values as a percentage of GDP (to allow comparison over time and between countries) and the average size per capita debt (to allow comparisons and analysis in time and space).

The total public debt is calculated and managed separately for its two forms, namely the domestic public debt and the external debt. The Ministry of Finance annually prepares and submits to the Government and the Parliament the report on government debt, which contains information on government debt portfolio, debt service, public debt indicators and information about primary and secondary market for state titles, and how to implement medium-term strategy for managing government debt for the previous year.

1. Methodology employed in the research

The technique employed in this research was document analysis, encompassing both quantitative and qualitative data. The choice of this method was mainly guided by the research questions and the objective of the study.

According to Sarantakos (2005) and Bryman (2008) some of the advantages of doing document analysis include: quick and easy access; convenience – since one can do research at any time and for as long as he or she wishes; low cost; less time consuming – since this method requires less time for data collection, one will have more time available for the analysis process. Moreover, the fact that one does not deal directly with people limits the possibility of encountering rejection, non-response or bias.

However, as any other research method, document analysis also employs some disadvantages. Some of the most common ones were identified by Sarantakos (2005) as being: lack of accessibility – one might not be able to access all the documents he or she needs; incomplete data – some documents might not be complete or up to date; reliability – one has to always question whether the documents used are reliable sources.

The documents used in this research as sources include: published books, articles and Ministry of Finance documents. One has also consulted Internet websites but only to a limited degree, due to issues concerning reliability. Since a good research has to be based on high quality materials, one has concentrated mainly on publications of well-known publishers and important academic journals.

In order to answer the research questions one has looked at publications and other studies which have dealt with the subject of conditionality, as well as Ministry of Finance official reports.

2. Romania's public debt between 2000 - 2009

For the period analyzed pooled data on the dynamics and structure of domestic debt are shown in the table below:

Table 1: Dynamics and structure of domestic debt between 2004-2009

Year	2004	2005	2006	2007	2008	2009
Indicator						
I.1 Domestic government debt (mil. lei)	14.411,4	16.127,9	25.827,3	41.827,5	61.523,1	85.400,8
I.2 Domestic government debt (mil. €)	3.633,5	4.386,0	7.637,4	11.585,9	15.434,8	20.191,2
I.3 Foreign government debt (mil. €)	10.270,0	10.947,2	10.066,3	9.507,0	9.792,6	12.343,6
I.4 Total Government Debt (%PIB)	22,4	19,5	17,4	18,4	19,95	28,01
II.1 Local domestic Debt (mil. lei)	341,0	671,7	1.542,7	3.296,6	5.673,5	6.370,7
II.2 Local public external debt	16,1	532,3	570,6	797,2	894,4	983,5
II.3 Total local govern	0,16	0,91	1,01	1,5	1,8	1,98
Total debt (mil. lei)	55.550,0	59.010,8	63.340,8	82.324,3	109.795,1	147.329,1
Total debt (% PIB)	22,5	20,4	18,4	19,9	21,8	29,99

Source: Public Finance Ministry

The data presented allow us multiple tests and comparisons, which we will further develop. Thus, first, we observe the absolute indicator of debt (DP), which represents its value volume in each of the years presented.

Secondly, the dynamic of nominal debt in million, is shown in the chart below:

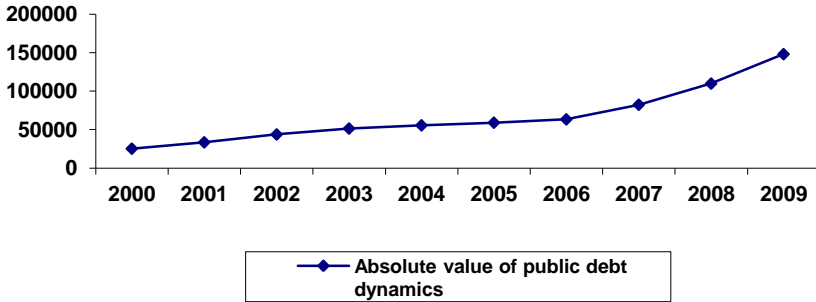


Figure 1: The dynamic of nominal debt in million

As a first conclusion emerges the continuous trend of increasing indebtedness of our country throughout the period under review. Thus, the absolute dynamic of public debt (ΔDP) in the period under review is as follows:

- $\Delta DP_{2001/2000} = DP_{2001} - DP_{2000} = 33\,506,9 \text{ million} - 25\,235,1 \text{ million} = +8\,271,8 \text{ million}$
- $\Delta DP_{2002/2001} = DP_{2002} - DP_{2001} = 43\,706,3 \text{ million} - 33\,506,9 \text{ million} = +10\,199,4 \text{ million}$
- $\Delta DP_{2003/2002} = DP_{2003} - DP_{2002} = 51\,363,7 \text{ million} - 43\,706,3 \text{ million} = +7\,657,4 \text{ million}$
- $\Delta DP_{2004/2003} = DP_{2004} - DP_{2003} = 55\,550 \text{ million} - 51\,363,7 \text{ million} = +4\,186,3 \text{ million}$
- $\Delta DP_{2005/2004} = DP_{2005} - DP_{2004} = 59\,010,8 \text{ million} - 55\,550 \text{ million} = +3\,460,8 \text{ million}$
- $\Delta DP_{2006/2005} = DP_{2006} - DP_{2005} = 63\,340,8 \text{ million} - 59\,010,8 \text{ million} = +4\,330 \text{ million}$
- $\Delta DP_{2007/2006} = DP_{2007} - DP_{2006} = 82\,324,3 \text{ million} - 63\,340,8 \text{ million} = +18\,983,5 \text{ million}$
- $\Delta DP_{2008/2007} = DP_{2008} - DP_{2007} = (109\,795,1 - 82\,324,3) \text{ million} = +27\,470,8 \text{ million}$
- $\Delta DP_{2009/2008} = DP_{2009} - DP_{2008} = 147\,329,1 \text{ million} - 109\,795,1 \text{ million} = +37\,534 \text{ million}$

A detailed analysis based on previously calculated results, shows an increase in Romania's debt Romania after 2006, from then onwards its dynamics recording a major growth, reaching its pick in 2009, with an increase from the previous year of + 37 534 million so about +9.2 billion euro.

The relative dynamics of Romania's public debt (% Cr DP) from 2000 to 2009 is determined as follows:

- $\%CrDP_{2001/2000} = \frac{\Delta DP_{2001/2000}}{DP_{2000}} \times 100 = \frac{8271,8}{25235,1} \times 100 = +32,78\%$
- $\%CrDP_{2002/2001} = \frac{\Delta DP_{2002/2001}}{DP_{2001}} \times 100 = \frac{10199,4}{33506,9} \times 100 = +30,44\%$
- $\%CrDP_{2003/2002} = \frac{\Delta DP_{2003/2002}}{DP_{2002}} \times 100 = \frac{7657,4}{43706,3} \times 100 = +17,52\%$
- $\%CrDP_{2004/2003} = \frac{\Delta DP_{2004/2003}}{DP_{2003}} \times 100 = \frac{4186,3}{51363,7} \times 100 = +8,15\%$
- $\%CrDP_{2005/2004} = \frac{\Delta DP_{2005/2004}}{DP_{2004}} \times 100 = \frac{3460,8}{55550} \times 100 = +6,23\%$
- $\%CrDP_{2006/2005} = \frac{\Delta DP_{2006/2005}}{DP_{2005}} \times 100 = \frac{4330}{59010,8} \times 100 = +7,34\%$
- $\%CrDP_{2007/2006} = \frac{\Delta DP_{2007/2006}}{DP_{2006}} \times 100 = \frac{18983,5}{63340,8} \times 100 = +29,97\%$
- $\%CrDP_{2008/2007} = \frac{\Delta DP_{2008/2007}}{DP_{2007}} \times 100 = \frac{27470,8}{82324,3} \times 100 = +33,36\%$
- $\%CrDP_{2009/2008} = \frac{\Delta DP_{2009/2008}}{DP_{2008}} \times 100 = \frac{37534}{109795,1} \times 100 = +34,18\%$

In relative terms, we see that the largest increase in public debt was recorded in 2009 when compared to 2008, the indicator increased by +34.18%. The relative indicator of debt (share in GDP) for our country is also shown in the table above. We found that the highest value was recorded in

2000, when the debt represented 31.4% of GDP. The lowest is the indicator for the year 2006, namely 18.4%. Thus, the difference between maximum and minimum value of the considered indicator is of 13 percentage points. The dynamics of the public debt relative indicator is presented graphically as follows:

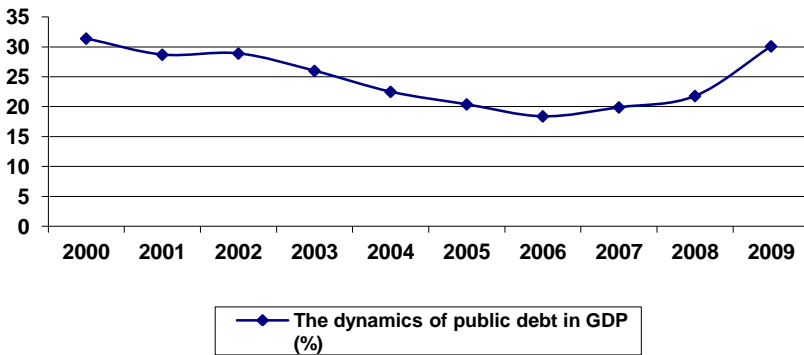


Figure 2: The dynamics of the public debt relative indicator

According to the indicators which characterize public debt and using the data we have obtained and which we presented in the previous table, we can also determine the medium per capita debt (\overline{DP}_{loc}), which was recorded in Romania between 2000 and 2009. Therefore, considering that the population number was constant in this interval (22 millions), the medium indicator per capita is calculated as follows:

- $\overline{DP}_{loc}_{2000} = \frac{DP_{2000}}{\text{no. population}} = \frac{25235,1}{22} = 1\,147,05 \text{ lei/inhabitant}$
- $\overline{DP}_{loc}_{2001} = \frac{DP_{2001}}{\text{no. population}} = \frac{33506,9}{22} = 1\,523,04 \text{ lei/inhabitant}$
- $\overline{DP}_{loc}_{2002} = \frac{DP_{2002}}{\text{no. population}} = \frac{43706,3}{22} = 1\,986,65 \text{ lei/inhabitant}$
- $\overline{DP}_{loc}_{2003} = \frac{DP_{2003}}{\text{no. population}} = \frac{51363,7}{22} = 2\,334,71 \text{ lei/inhabitant}$

- $\overline{DP}_{loc}_{2004} = \frac{DP_{2004}}{\text{no. population}} = \frac{55550}{22} = 2\,525 \text{ lei/inhabitant}$
- $\overline{DP}_{loc}_{2005} = \frac{DP_{2005}}{\text{no. population}} = \frac{59010,8}{22} = 2\,682,3 \text{ lei/inhabitant}$
- $\overline{DP}_{loc}_{2006} = \frac{DP_{2006}}{\text{no. population}} = \frac{63340,8}{22} = 2\,879,13 \text{ lei/inhabitant}$
- $\overline{DP}_{loc}_{2007} = \frac{DP_{2007}}{\text{no. population}} = \frac{82324,3}{22} = 3\,742 \text{ lei/inhabitant}$
- $\overline{DP}_{loc}_{2008} = \frac{DP_{2008}}{\text{no. population}} = \frac{109795,1}{22} = 4\,990,68 \text{ lei/inhabitant}$
- $\overline{DP}_{loc}_{2009} = \frac{DP_{2009}}{\text{no. population}} = \frac{147329,1}{22} = 6\,696,77 \text{ lei/inhabitant}$

If we wish to use a graph, the situation would be represented as follows:

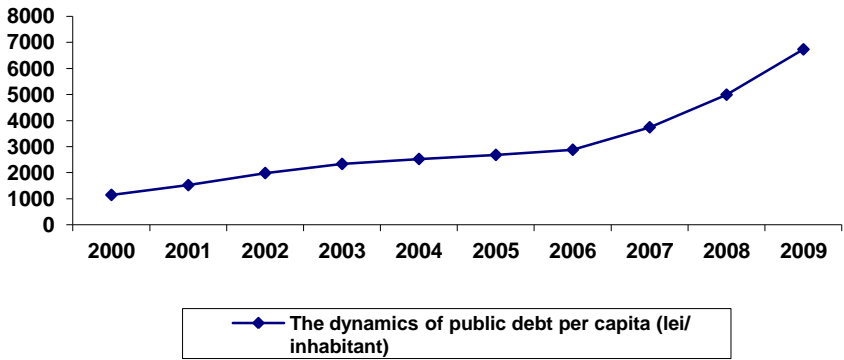


Figure 3: The situation of the dynamics of public debt per capita

There is a continuous annual increase in public debt per capita in nominal expression, with a peak in 2009, when the amount of 6 696.77 Euro

/capita was equivalent to about 1633 euro /capita. So, in terms of simplistic, non-academic terms, this is the degree of public indebtedness for each Romanian citizen.

Following our analysis we can address the various categories of the total public debt. Thus, we see from the data in the table that can analyze the government public debt which can be studied on two levels, namely internal and external. Absolute indicators of domestic (DPGI) and external government debt (DPGE), expressed in millions of euro, are presented in the table above. Their dynamics in the period 2000 - 2009 is shown graphically below:

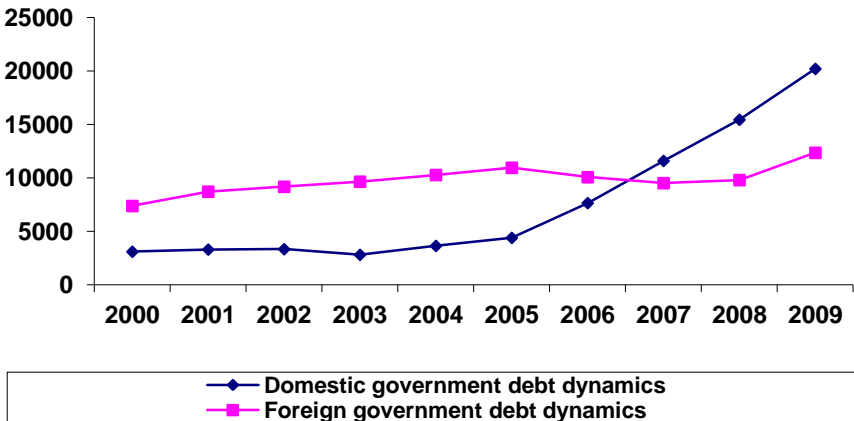


Figure 4: Their dynamics Absolute indicators of domestic (DPGI) and external government debt (DPGE)

The evolutionary trends are somewhat contrary for the two indicators. Thus, if the internal dynamics of government debt has increased continuously, but at different rates (a slight increase from year to year in the first interval, followed by a sharp increase from 2006 to present), external government debt developed sinuously, with slight increases between 2000 and 2006, followed by a decrease in 2007 and 2008 and a return to a positive even increased rate in 2009. Also, one can observe the strengthening of the Romanian financial market in time, marked by the fact that after 2006 the

main share of total public debt is held by the domestic component, a trend that has grown steadily.

The absolute increase of domestic public debt ($\Delta DPGI$) is determined as follows:

- $\Delta DPGI_{2001/2000} = DPGI_{2001} - DPGI_{2000} = 3294,5 \text{ million euro} - 3090,1 \text{ million euro} = +204,4 \text{ million euro}$
- $\Delta DPGI_{2002/2001} = DPGI_{2002} - DPGI_{2001} = 3327,9 \text{ million euro} - 3294,5 \text{ million euro} = +33,4 \text{ million euro}$
- $\Delta DPGI_{2003/2002} = DPGI_{2003} - DPGI_{2002} = 2799,3 \text{ million euro} - 3327,9 \text{ million euro} = -528,6 \text{ million euro}$
- $\Delta DPGI_{2004/2003} = DPGI_{2004} - DPGI_{2003} = 3633,5 \text{ million euro} - 2799,3 \text{ million euro} = +834,2 \text{ million euro}$
- $\Delta DPGI_{2005/2004} = DPGI_{2005} - DPGI_{2004} = 4386 \text{ million euro} - 3633,5 \text{ million euro} = +752,5 \text{ million euro}$
- $\Delta DPGI_{2006/2005} = DPGI_{2006} - DPGI_{2005} = 7637,4 \text{ million euro} - 4386 \text{ million euro} = +3251,4 \text{ million euro}$
- $\Delta DPGI_{2007/2006} = DPGI_{2007} - DPGI_{2006} = 11585,9 \text{ million euro} - 7637,4 \text{ million euro} = +3948,5 \text{ million euro}$
- $\Delta DPGI_{2008/2007} = DPGI_{2008} - DPGI_{2007} = 15434,8 \text{ million euro} - 11585,9 \text{ million euro} = +3848,9 \text{ million euro}$
- $\Delta DPGI_{2009/2008} = DPGI_{2009} - DPGI_{2008} = 20191,2 \text{ million euro} - 15434,8 \text{ million euro} = +4756,4 \text{ million euro}$

There is therefore a positive trend for the indicator, with one exception, the year 2003, when the domestic government debt decreased from the previous year by about 529 million euro. The rest of the interval recorded only positive values with a maximum point in 2009, when we have an increase of about 4.76 billion euro, compared to 2008.

The relative increase in the domestic government debt (% CrDPGI), in millions is calculated as follows:

- $\%CrDPGI_{2001/2000} = \frac{\Delta DPGI_{2001/2000}}{DP_{2000}} \times 100 = \frac{204,4}{3090,1} \times 100 = +6,61\%$
- $\%CrDPGI_{2002/2001} = \frac{\Delta DPGI_{2002/2001}}{DP_{2001}} \times 100 = \frac{33,4}{3294,5} \times 100 = +1,01\%$

- $$\bullet \quad \%CrDPGI_{2003/2002} = \frac{\Delta DPGI_{2003/2002}}{DP_{2002}} \times 100 = \frac{-528,6}{3327,9} \times 100 = -15,88\%$$
- $$\bullet \quad \%CrDPGI_{2004/2003} = \frac{\Delta DPGI_{2004/2003}}{DP_{2003}} \times 100 = \frac{834,2}{2799,3} \times 100 = +29,8\%$$
- $$\bullet \quad \%CrDPGI_{2005/2004} = \frac{\Delta DPGI_{2005/2004}}{DP_{2004}} \times 100 = \frac{752,5}{3633,5} \times 100 = +20,71\%$$
- $$\bullet \quad \%CrDPGI_{2006/2005} = \frac{\Delta DPGI_{2006/2005}}{DP_{2005}} \times 100 = \frac{3251,4}{4386} \times 100 = +74,13\%$$
- $$\bullet \quad \%CrDPGI_{2007/2006} = \frac{\Delta DPGI_{2007/2006}}{DP_{2006}} \times 100 = \frac{3948,5}{7637,4} \times 100 = +51,7\%$$
- $$\bullet \quad \%CrDPGI_{2008/2007} = \frac{\Delta DPGI_{2008/2007}}{DP_{2007}} \times 100 = \frac{3848,9}{11585,9} \times 100 = +33,22\%$$
- $$\bullet \quad \%CrDPGI_{2009/2008} = \frac{\Delta DPGI_{2009/2008}}{DP_{2008}} \times 100 = \frac{4756,4}{15434,8} \times 100 = +30,82\%$$

Calculations allow us to see that the largest increase in the relative domestic government debt is carried out in 2006 compared with 2005, when the indicator increased by 74.13%. The share that the domestic government debt holds from GDP is also presented in the table with data from the Ministry of Finance. Its dynamics between 2000 and 2009 is, however, presented by us in the following chart:

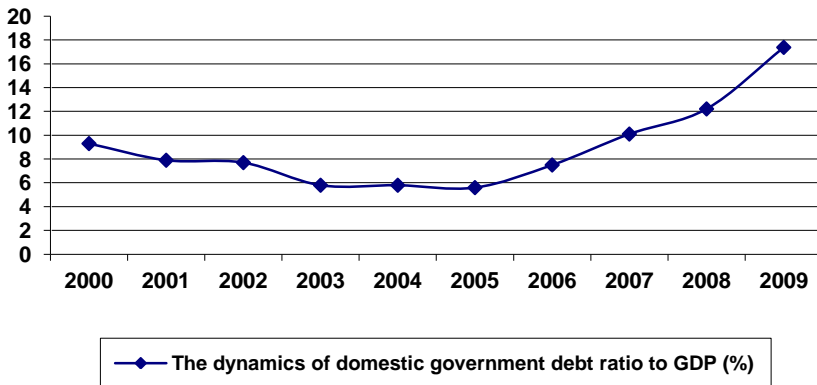


Figure 5: The dynamic of the domestic government debt holds from GDP

The internal governmental public debt per capita (\overline{DPGI}_{loc}), in euro, is determined as follows:

- $\overline{DPGI}_{loc}_{2000} = \frac{DPGI_{2000}}{no.inhabitant} = \frac{3090,1}{22} = 140,45$ euro/inhabitant
- $\overline{DPGI}_{loc}_{2001} = \frac{DPGI_{2001}}{no.inhabitant} = \frac{3294,5}{22} = 149,75$ euro/inhabitant
- $\overline{DPGI}_{loc}_{2002} = \frac{DPGI_{2002}}{no.inhabitant} = \frac{3327,9}{22} = 151,26$ euro/inhabitant
- $\overline{DPGI}_{loc}_{2003} = \frac{DPGI_{2003}}{no.inhabitant} = \frac{2799,3}{22} = 127,24$ euro/inhabitant
- $\overline{DPGI}_{loc}_{2004} = \frac{DPGI_{2004}}{no.inhabitant} = \frac{3633,5}{22} = 165,16$ euro/inhabitant
- $\overline{DPGI}_{loc}_{2005} = \frac{DPGI_{2005}}{no.inhabitant} = \frac{4386}{22} = 199,36$ euro/inhabitant
- $\overline{DPGI}_{loc}_{2006} = \frac{DPGI_{2006}}{no.inhabitant} = \frac{7637,4}{22} = 347,15$ euro/inhabitant

- $\overline{DPGI}_{loc}^{2007} = \frac{DPGI_{2007}}{no.inhabitant} = \frac{11585,9}{22} = 526,63$
euro/inhabitant
- $\overline{DPGI}_{loc}^{2008} = \frac{DPGI_{2008}}{no.inhabitant} = \frac{15434,8}{22} = 701,58$
euro/inhabitant
- $\overline{DPGI}_{loc}^{2009} = \frac{DPGI_{2009}}{no.inhabitant} = \frac{20191,2}{22} = 917,78$
euro/inhabitant

Using a graph, the dynamic of the indicator is the following:

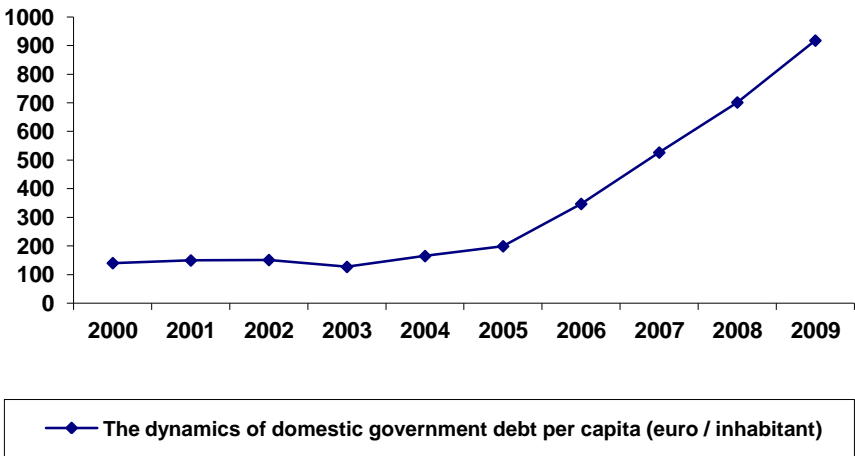


Figure 6: The dynamic of the domestic government debt per capita

The increase in the external governmental public debt ($\Delta DPGE$) is determined as follows:

- $\Delta DPGE_{2001/2000} = DPGE_{2001} - DPGE_{2000} = 8\,708,5$ million euro - $7\,371,7$ million euro = $+1\,336,8$ million euro
- $\Delta DPGE_{2002/2001} = DPGE_{2002} - DPGE_{2001} = 9\,167,5$ million euro - $8\,708,5$ million euro = $+459$ million euro

- $\Delta DPGE_{2003/2002} = DPGE_{2003} - DPGE_{2002} = 9\ 637,6$ million euro - 9 167,5 million euro = + 470,1 million euro
- $\Delta DPGE_{2004/2003} = DPGE_{2004} - DPGE_{2003} = 10\ 270$ million euro - 9 637,6 million euro = + 632,4 million euro
- $\Delta DPGE_{2005/2004} = DPGE_{2005} - DPGE_{2004} = 10\ 947,2$ million euro - 10 270 million euro = + 677,2 million euro
- $\Delta DPGE_{2006/2005} = DPGE_{2006} - DPGE_{2005} = 10\ 066,3$ million euro - 10 947,2 million euro = - 880,9 million euro
- $\Delta DPGE_{2007/2006} = DPGE_{2007} - DPGE_{2006} = 9\ 507$ million euro - 10 066,3 million euro = - 559,3 million euro
- $\Delta DPGE_{2008/2007} = DPGE_{2008} - DPGE_{2007} = 9\ 792,6$ million euro - 9 507 million euro = + 285,6 million euro
- $\Delta DPGE_{2009/2008} = DPGE_{2009} - DPGE_{2008} = 12\ 343,6$ million euro - 9 792,6 million euro = + 2 551 mil. euro

One can observe the positive trend of the indicator, with two exceptions, in 2006 and 2007, when external government debt decreased from the previous year by about 881 million euro and 560 million euro. The rest of the interval recorded only positive values with a maximum point in 2009, when we have an increase of about 2.55 billion euro, compared to 2008.

The relative increase in the external governmental public debt (% CrDPGE), in millions is calculated as follows:

$$\%CrDPGE_{2001/2000} = \frac{\Delta DPGE_{2001/2000}}{DP_{2000}} \times 100 = \frac{1336,8}{7371,7} \times 100 = +18,13\%$$

$$\%CrDPGE_{2002/2001} = \frac{\Delta DPGE_{2002/2001}}{DP_{2001}} \times 100 = \frac{459}{8708,5} \times 100 = +5,27\%$$

$$\%CrDPGE_{2003/2002} = \frac{\Delta DPGE_{2003/2002}}{DP_{2002}} \times 100 = \frac{470,1}{9167,5} \times 100 = +5,12\%$$

$$\%CrDPGE_{2004/2003} = \frac{\Delta DPGE_{2004/2003}}{DP_{2003}} \times 100 = \frac{632,4}{9637,6} \times 100 = +6,56\%$$

$$\%CrDPGE_{2005/2004} = \frac{\Delta DPGE_{2005/2004}}{DP_{2004}} \times 100 = \frac{677,2}{10270} \times 100 = +6,59\%$$

$$\begin{aligned} \%CrDPGE_{2006/2005} &= \frac{\Delta DPGE_{2006/2005}}{DP_{2005}} \times 100 = \frac{-880,9}{10947,2} \times 100 = -8,05\% \\ \%CrDPGE_{2007/2006} &= \frac{\Delta DPGE_{2007/2006}}{DP_{2006}} \times 100 = \frac{-559,3}{10066,3} \times 100 = -5,55\% \\ \%CrDPGE_{2008/2007} &= \frac{\Delta DPGE_{2008/2007}}{DP_{2007}} \times 100 = \frac{285,6}{9507} \times 100 = +3,01\% \\ \%CrDPGE_{2009/2008} &= \frac{\Delta DPGE_{2009/2008}}{DP_{2008}} \times 100 = \frac{2551}{9792,6} \times 100 = +26,05\% \end{aligned}$$

Calculations allow us to see that the largest increase in the relative external governmental debt is carried out in 2009 when, compared to 2008, the indicator increased by 26.05%. The share that the external public debt holds in the gross domestic product is also presented in the table with data from the Ministry of Finance. Its dynamics, between 2000 and 2009 is, however, represented by us in the following chart:

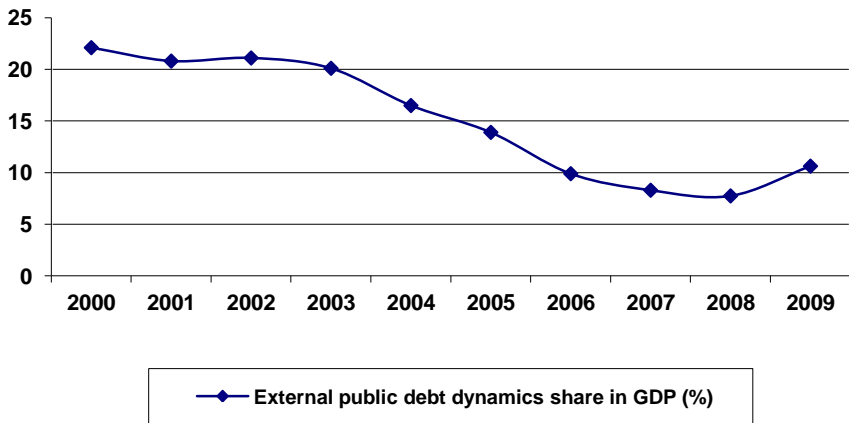


Figure 7: External public debt dynamics share in GDP

We observe a tendency of a sinuous evolution for the indicator, combining periods of growth and decline. At the end of the analysed

interval (the year 2009) the share of external public governmental debt from the GDP represents less than a half compared to the beginning of the interval. The medium external public governmental debt per capita (

\overline{DPGE}_{loc}), in euro, is determined as follows:

- $\overline{DPGE}_{loc\ 2000} = \frac{DPGE_{2000}}{no.inhabitant} = \frac{7371,7}{22} = 335,07$ euro/inhabitant
- $\overline{DPGE}_{loc\ 2001} = \frac{DPGE_{2001}}{no.inhabitant} = \frac{8708,5}{22} = 395,84$ euro/inhabitant
- $\overline{DPGE}_{loc\ 2002} = \frac{DPGE_{2002}}{no.inhabitant} = \frac{9167,5}{22} = 430,34$ euro/inhabitant
- $\overline{DPGE}_{loc\ 2003} = \frac{DPGE_{2003}}{no.inhabitant} = \frac{9637,6}{22} = 438,07$ euro/inhabitant
- $\overline{DPGE}_{loc\ 2004} = \frac{DPGE_{2004}}{no.inhabitant} = \frac{10270}{22} = 466,82$ euro/inhabitant
- $\overline{DPGE}_{loc\ 2005} = \frac{DPGE_{2005}}{no.inhabitant} = \frac{10947,2}{22} = 497,6$ euro/inhabitant
- $\overline{DPGE}_{loc\ 2006} = \frac{DPGE_{2006}}{no.inhabitant} = \frac{10066,3}{22} = 457,56$ euro/inhabitant
- $\overline{DPGE}_{loc\ 2007} = \frac{DPGE_{2007}}{no.inhabitant} = \frac{9507}{22} = 432,13$ euro/inhabitant
- $\overline{DPGE}_{loc\ 2008} = \frac{DPGE_{2008}}{no.inhabitant} = \frac{9792,6}{22} = 445,12$ euro/inhabitant

$$\bullet \quad \overline{DPGE}_{loc\ 2009} = \frac{DPGE_{2009}}{no.inhabitant} = \frac{12343,6}{22} = 561,07 \text{ euro/inhabitant}$$

Represented graphically, the dynamic is the following:

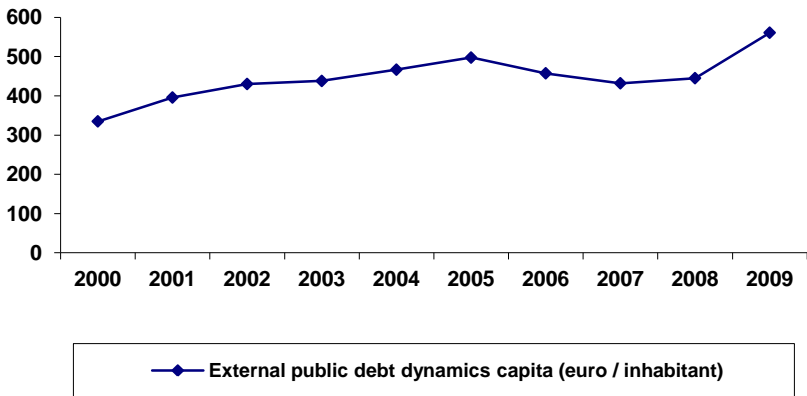


Figure 8: External public debt dynamics capita

3. The comparative analysis of Romania's public debt between 2009 and 2010

On 31st of December, 2010 our country's public debt can be characterised by the data presented in the table below:

At a first analysis one can observe the increasing tendency of the public debt, both in absolute and relative values. Thus, compared to 31st of Dec. 2009, on 31st of Dec. 2010, the absolute value for public debt is with + 46 565,3 millions lei bigger, which amounts to approximately 11,5 billions of euro. In relative terms, one can observe an increase of + 7,91% from GDP. In connection with the portfolio of currencies in the basket of public debt, we notice a close ratio between national currency and the euro, but a higher share in total foreign currency than in lei.

Table 2: The country public debt on 31st of December, 2010

Indicator	31.12.2010
Total public debt* (millions lei)	193 894,4
Total public debt (% GDP)	37,9
Public governmental debt (% GDP)	94,03
Local public debt (% GDP)	5,97
Direct public debt (% GDP)	91,92
Guaranteed public debt (% GDP)	8,08
Negotiable (% GDP)	4133
Non-Negotiable (% GDP)	58,67
RON (% GDP)	46,21
Euro (% GDP)	42,58
Other currency (% GDP)	11,21

Note: Includes the debt guaranteed by the state and local public administration authorities according to OUG 64/2007

Among the specialized analysis tools, spreadsheet applications are the most accessible. In addition, techniques and tools for organizing, processing and presentation of basic data, such as strengthening multiple lists, filtering, running sum, pivot tables they offer, largely satisfy the needs of organization and data analysis activities in the field of economics. For this reason we conducted a study in which we highlighted the facilities offered by these software applications for the economic field. (Tarca & all, 2010: 1)

To analyse these data, we can use Excel, creating models for data analysis, while making a presentation of data in several types of

professional-looking diagrams (Vățuiu, 2008: 120). Thus, by types of instruments, on 31st December 2010, the structure of public debt is rendered meaningful by using Excel application.

Consequently, on types of instruments, on 31st December 2010, the structure of public governmental debt can be represented with the help of the Excel application:

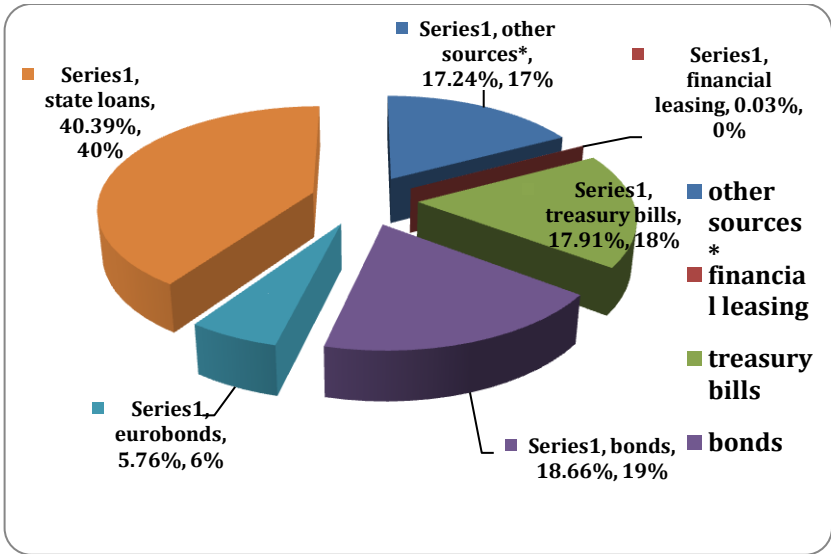


Figure 9: Public debt structure of Romania on December 31, 2010, by type of instruments

Note: Loans from the General Current Account of State Treasury, used for financing the state budgetary deficit

One can notice the prevalence of state loans which represent 40,39% from total, followed by bonds (18,66%) and treasury bills (17,91%).

If we take as criterion the currency type, at the same date, the structure of Romania's public governmental debt was the following:

If we take into account the type of holders, the structure of the public governmental debt, in millions of lei, would look as follows:

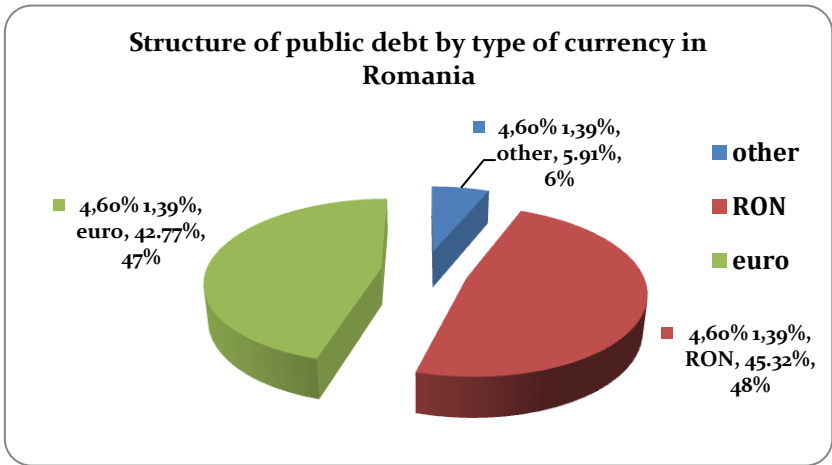


Figure 10: The structure of Romania's public governmental debt

Source: Public Finance Ministry

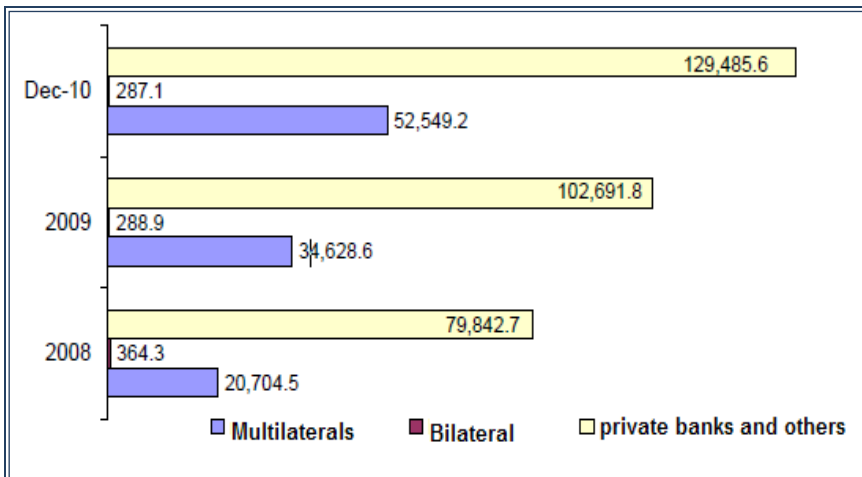


Figure 11: The structure of the public governmental debt, in millions of lei

Source: Public Finance Ministry

The structure of new public loans, made during 1st of January 2010 and 31st of December 2010, in millions of lei, is presented in the table below:

Table 3: The structure of public loans on 2010

Issue domestic bonds	51 912,4
Cash Management Tools	3 050
State loans, of which:	11 347
- contracted directly	5 977,3
- guaranteed by the state	5 369,8
Total	66 309,5

Source: Public Finance Ministry

State securities issued during 1st of January and 31st of December 2010 are presented below:

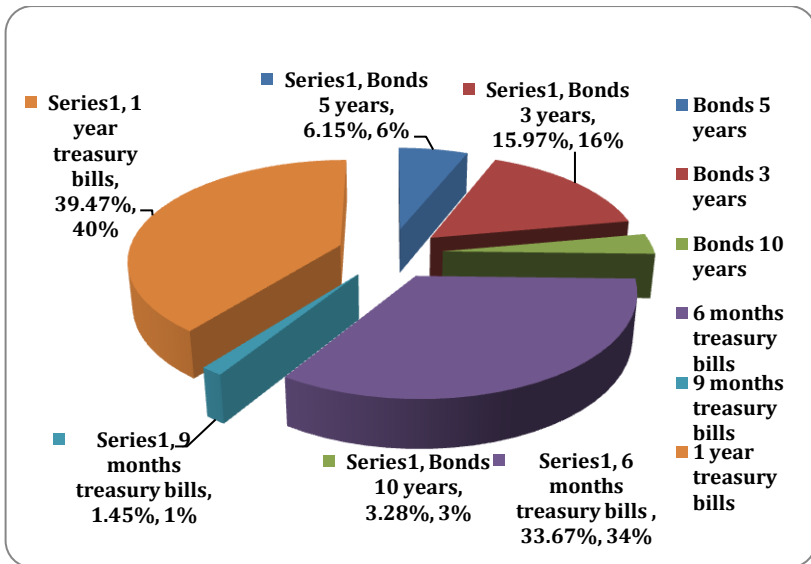


Figure 12: State securities issued during 1st of January and 31st of December 2010

Source: Public Finance Ministry

One can notice that Romania has piled up most of its new public debt on a short term (almost 34% in 6 months and almost 40% in one year),

and this will significantly increase the annual public financial effort caused by this debt in the current budgetary exercise (2011). On the primary market, in the first semester of 2010, the issues of public credit instruments (in millions lei) looked as follows:

Remaining maturity* of state securities, in millions of lei, is presented in the table below:

Table 4: Remaining maturity of state securities

	31dec. 2009	% of total	31 dec.2010	% of total
The total amount of which:	46 134	100	66 290	100
Short term	25 350	54,95	35 421	53,43
Medium term	19 489	42,24	28 142	42,45
Long term	1 295	2,81	2 727	4,11

Note: does not include Eurobonds and deposit certificates for the population and includes state emissions denominated in euro nu include

As far as the structure of securities' holders on the internal market is concerned, on 31st of December 2010, the situation was the following:

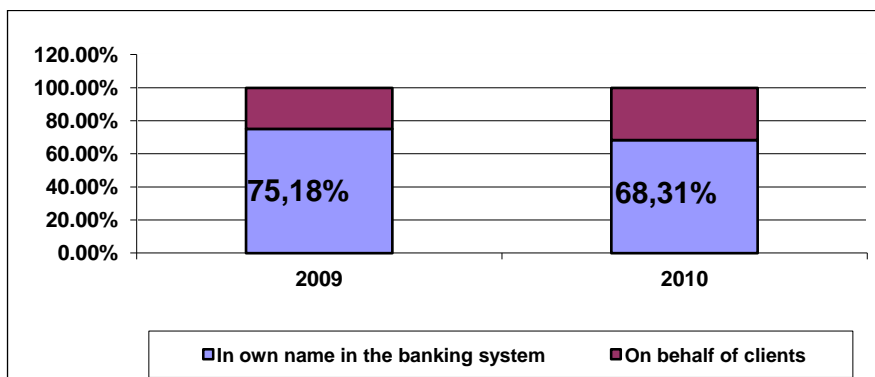


Figure 13: the structure of securities' holders on the internal market

Conclusions

In comparison to the end of 2009, when it was 147.33 billion lei, which represented 30% from GDP, public debt rose by almost 8% of GDP in 2010 (46.6 billion), given that the deficit budget shrank by almost 1% of GDP. This means that public debt has been pressured by loans due in 2010, many of which are rolled in 2011. During 2010, the Romanian government has piled up debt, impoverished under the pressure of a crisis budget and the need to pay pensions and salaries. Public debt over the past two years has been doubled by loans from the IMF, the European Commission and banks on the local market, the government borrowing 1.3 billion per month to cover current expenses.

Thus, from a public debt of 109.1 billion lei, equivalent to 21.6% of GDP at the end of 2008, Romania came to record at the end of 2009, debts of 147.3 billion lei, equivalent to 29.99% of GDP, and on Dec. 31, 2010, the public debt reached 193.89 billion lei (37.9% of GDP). If we compare this to the end of October 2010, when public debt was 182.4 billion lei, accounting for 35.55% of GDP, we conclude that the public debt increased by 2% in just two months, without us entering any tranche of loan from the EU. In late 2010, government debt represented 94% of public debt, respectively 182.3 billion lei, up by nearly one third (45.8 billion) over the previous end of year.

On January 31, 2011, Romania's total public debt decreased by 1.8% compared to the end of 2010, reaching 190.381 billion lei, which is equivalent to 34.9% of gross domestic product (GDP) estimated at 544, 4 billion. On the same date, 41.9% of total public debt was in RON, 40.8% in euro and the rest in other currencies. Compared to the end of 2010, on January 31 the share of government public debt in total debt had decreased with 1.89 percentage points from 95.76% to 93.87%, while local public debt represented 6.11% of the total debt.

In 2011, the Ministry of Finance expects the government debt service to amount to 62.7 billion, of which 8.7 billion lei (€ 2 billion) only interest.

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