A CRITICAL ANALYSIS OF THE FACTORS LYING BEHIND RECENT PUBLIC DEBT ACCUMULATION IN ROMANIA

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Abstract: Following Romania's accession to the EU, its public debt expressed as a share of GDP has seen a steep upward trend. Although this situation has not been unprecedented, as public debt massively increased in many other European countries once the economic crisis emerged, and the current level of Romania's public debt is still well below the European limit of 60% of GDP, the previous experience of other developing countries tells us that this situation cannot be appreciated as a comfortable one. Against this background, it is important to investigate the factors that led to the recent growth of Romania's public debt, to see if their action is only temporary or, on the contrary, if they persist over time, and to see if, by the promoted public indebtedness policies, prerequisites have been created to foster economic growth, as a rational support of further debt reduction. Thus, the aim of our paper is to identify and critically evaluate the contribution of different factors underlying the growth of Romania's public debt in 2007-2013. Our analysis is supported by data (on public debt, public budgetary revenues, expenditures and budget balance, inflation rate, GDP growth rate, etc.), collected from the reports of the Ministry of Public Finance of Romania or databases of international institutions (European Commission, International Monetary Fund). The main conclusion of our work is that although, like in other European countries, the economic crisis has contributed, through its effects on the GDP growth rate and budget balance, to the increase of Romania's public debt, other specific and more persistent factors have also had an important contribution (as the pro-cyclical fiscal policy, the tax evasion, the large volume of arrears to public budgets, especially of public companies, the relatively low tax base, the high expenses on goods and services, salaries or even the interests payments on public debt).

Keywords: public debt growth, economic crisis, budget deficit, budgetary revenues, budgetary expenditures, public guarantees

JEL Classification: H20, H50, H62, H63, H81

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1. INTRODUCTION

It is well known, and the recent European sovereign debt crisis fully proved it, that a high public debt can have harmful effects on the economy, especially on the economic growth rate. However, the level of debt at which these effects may occur is not similar for all countries, according to some authors developed countries may know public debt to GDP ratios close to 100% without any problem to occur (Checherita and Rother, 2010; Baum et al., 2012) while in

developing countries the maximum debt threshold is much lower, even below 50% of GDP (Patillo et al., 2004).

Since 2007, following Romania's accession to the EU, its public debt expressed as a share of GDP has seen a steep upward trend, quickly exceeding 40% of GDP. In no more than 6 years, public debt more than doubled its existing value at the end of 2007. Although this situation has not been unprecedented, as public debt massively increased in many other European countries once the economic crisis emerged, and the current level of Romania's public debt is still well below the European limit of 60% of GDP, the previous experience of other developing countries tells us that this situation cannot be appreciated as a comfortable one.

Under such circumstances, our paper aims to identify and critically evaluate the contribution of different factors underlying the growth of Romania's public debt in 2007-2013. In subsidiary, we are interested in seeing if their action is only temporary or, on the contrary, if they persist over time, and if, by the promoted public indebtedness policies, prerequisites have been created to foster economic growth, as a rational support of further debt reduction.

Our work is mainly conceived as a theoretical research grounded on statistical data. Quantitative evaluations on Romania's public debt and its determining factors (the budget balance, the budgetary revenues and expenditures, the GDP growth rate, the inflation rate, the exchange rate, etc.) are based on data collected from the reports of the Ministry of Public Finance of Romania or databases of international institutions (the European Commission, the International Monetary Fund).

The remainder of this paper is structured as follows. Section 2 roughly captures the evolution of Romania's public debt after its accession to the EU, by comparison to other EU countries. In section 3 we identify and comparatively assess the contribution of various factors to Romania's direct public debt accumulation over the period of our analysis, while in section 4 we go deeper by further analyzing the specific factors with impact on budgetary revenues and expenditures and therefore on the sign and size of the budget balance, as public debt's main determining factor. In section 5 the guarantees granted by central and local governments are considered, contributing to the accumulation of the so called "guaranteed public debt" (although its "public" nature is sometimes disputed). The final section of our paper concludes and draws some policy recommendations.

2. SOME CONSIDERATIONS ON THE PATH OF ROMANIAN PUBLIC DEBT OVER THE PERIOD 2007-2013

After a period of relative calm, when the public debt of Romania expressed as a share of GDP has experienced a downward trend, against the background of worsening macroeconomic conditions and high financing needs of public authorities, it resumed its upward trend in 2007-2013. It can be seen from the data in Table 1 that, although the trend reversal occurred in 2007, the growth of public debt became very important only in 2009, when Romania, as other European countries, was hit by the economic crisis. Public debt has increased at a fast pace, with about 8% of GDP per year in 2009 and 2010 (similar increases have been previously registered in Romania only in the first years of transition). Subsequently, although the trend was maintained, as financial and real imbalances faded, the rate of debt accumulation has become a moderate one of 1-3% of GDP per year in 2011-2013.

223268.0

240842.6

266952.8

Year

2012 2013

Table 1. The dynamics of public debt in Romanian (2007-2013) ¹									
Public debt	Public debt	Public debt (% of GDP)							
(million lei)	(million euro)								
82324.3	24344.1	19.8							
109795.1	30412.5	21.3							
147329.0	36961.6	29.4							
194459.2	45383.5	37.1							

51686.0

54382.2

59525.2

40.1

41.0

42.5

Source: author's calculations based on data from the Ministry of Public Finance (2014a)

Overall, the dynamics of Romania's public debt over the period of our analysis can be considered as quite unfavorable. In just six years public debt has tripled its value expressed in national currency and more than doubled its share of GDP. However, this pattern is not unusual given the economic conditions of crisis, in Figure 1 we can see that similar situations have been registered in other EU Member States from Central and Eastern Europe such as Lithuania, Slovenia and Latvia. Significant increases in public debt, although associated with high public debt ratios prior to the emergence of the economic crisis, have also been recorded in Greece, Spain, Italy, Portugal and United Kingdom.

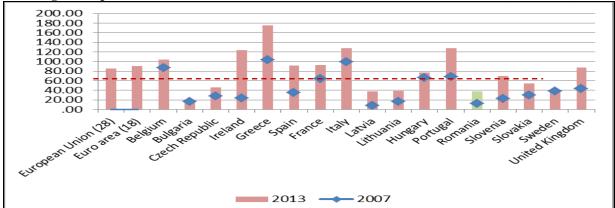


Fig.1. The public debt of Romania and other EU Member States in 2007 and 2013 (% of GDP)¹

1. Data refer to general government gross debt, according to the Maastricht definition; for Romania, the figures differ from those reported by the Ministry of Public Finance as a result of differences in methodology, the public debt under the Treaty of Maastricht does not include, for example, the publicly guaranteed debt component, but includes the debt of some agents classified within the government sector

Source: the author, based on data from the European Commission (2014a)

However, a public debt of 42.5% of GDP, as Romania's public debt was at the end of 2013, although comparable to that of other developing countries and far below the 60% of GDP limit set by the Treaty of Maastricht (Figure 1), is not beyond risk. The experience of 1999 when, at a public debt level of only 33.2% of GDP (much lower, therefore, than the current one)

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^{1.} Data refer to total (central and local government) public debt, according to national methodology; the amounts expressed in euro were calculated by converting those expressed in lei using the EUR/RON exchange rate at the end of each year

Romania was just one step away from default ensures, from our point of view, a rationale support for our assessment. It is significant that in a global ranking of countries according to the risk of sovereign default made in 2012 (S&P Capital IQ, 2012), Romania ranked 24 out of 69 countries taken into consideration, its situation being considered to be less favorable than the one of other Central and Eastern European countries such as Latvia, Lithuania, Bulgaria, Slovakia, Czech Republic and Estonia, some of them with similar public debt levels.

Maintaining public debt at acceptable levels and ensuring its sustainability must therefore represent a key concern of Romanian public authorities, reflected within the promoted public indebtedness policy. The most rational path of action involves creating, through the destinations given to borrowed resources, the prerequisites for producing a positive impact on economic growth and maintaining, in this way, public debt (expressed as a share of GDP) in acceptable limits. The detailed analysis of the factors laying behind the recent public debt growth in Romania will show to what extent this rational way of action was taken into account what are the subsisting vulnerabilities.

3. THE ANALYSIS OF FACTORS LYING BEHIND DIRECT PUBLIC DEBT ACCUMULATION

Excluding the guaranteed public debt (which, in our opinion, is not a "true" debt of the public authorities, but one of the direct borrowers, usually private agents), the increase of Romania's public debt expressed as a share of GDP, over the period 2007-2013, can largely be explained by the significant budget deficits registered during this period of time. The data in Figure 2 confirm the contribution of negative budget balances to the accumulation of public debt over the entire period of our analysis. In fact, the increase of public debt by 6.8% of GDP in 2010 compared to 2009 (according to ESA 95) can be fully attributed to the contribution of the consolidated budget deficit, as the opposite influences produced on the account of other factors compensated one another.

In the opposite direction, the developments in the monetary and real economic activity have most often contributed to the reduction of Romania's level of public debt. With the exception of 2009, the growth in nominal GDP has determined a corresponding decrease of the public debt to GDP ratio, as can be seen from the data in Figure 2 and Table 2. The contribution of nominal GDP was more consistent in 2007-2008 and 2011-2013, when the real GDP growth added to the effects of inflation, although the proportions were significantly different from one year to another, and lower in 2010 when, although there has been a high inflation rate, its positive impact on public debt was diminished due to the reduction of real GDP, by 1.1% compared to the previous year. The negative value of the nominal GDP growth rate, on the background of a sharp fall in its real value, has led in 2009, year of full crisis for Romania, to an increase in the public debt by 0.4% of GDP.

Other factors contributing to the change in Romania's public debt have cumulatively exercised significantly different contributions, as sign and proportions, from one year to another. If in 2007 and 2008 these factors' contribution was towards the reduction of public debt, afterwards the situation was reversed, causing an increase of public debt in 2009-2013 by 0.5% to 2.1% of GDP per year. For the time framework of our analysis, the most representative factors may be considered: exchange rate fluctuations; the raising of revenues from privatization operations or valorization of state assets; public borrowing and sub-borrowing resulting funds to

economic agents (which have to ensure the repayment of debt and interest payments from their own incomes); discounts/premiums on bonds issuance or redemption; the establishment of foreign currency reserves to be managed by the State Treasury, etc.

15 10.2 10 6.8 6.8 5.7 3.3 3 2.1 5 2.9 2.3 1.1 0.40.8 0.7 0.6 0.4 0.5 0.4 0 20070.3 2008 2009 201ρ 2012 2013 2011 -1.7 -1.8-2.1 -2.5 -2.5 -2.6 -5 Overall change in (direct) public debt (% of GDP) Contribution of budget balance (% of GDP) Contribution of nominal GDP growth (% of GDP) Contribution of other factors (stock-flow adjustment) (% of GDP)

Fig. 2. The comparative contribution of various factors to the change in Romania's (direct) public debt (2007-2013)

Source: the author, based on data from the European Commission (2014b)

Table 2. The dynamics of macroeconomic indicators with impact on public debt in Romania (2007-2013)

Indicators	2007	2008	2009	2010	2011	2012	2013
Annual growth rate of GDP	6.3	7.3	-6.6	-1.1	2.2	0.7	3.5
expressed in constant prices (%)							
Annual growth rate of GDP	20.7	23.7	-2.6	4.5	6.4	5.3	7.6
expressed in current prices (%)							
EUR/RON exchange rate	3.34	3.68	4.24	4.21	4.24	4.46	4.42
Annual inflation rate (%)	4.8	7.8	5.6	6.1	5.8	3.3	4.0

Source: author's calculations based on data from the International Monetary Fund (2014) and European Commission (2014a)

As a result of the significant proportions held by the euro denominated public debt in overall foreign currency public (central and local government) debt, exchange rate fluctuations of the national currency versus the euro were translated into corresponding changes in the level of public debt, expressed in national currency, at the end of each year. From this point of view, the data in Table 2 indicate, most often, a depreciation of RON against the euro. The depreciation was more important in 2008 and 2009 when, on this way, there was a significant negative effect on the size of public debt, expressed as a percentage of GDP.

Although less consistent than previous to 2007, the revenues raised from the privatization and selling of state assets have allowed, by their contribution to budget deficit financing, for Romania's public debt to grow at a less alert pace. In 2007, the revenues from privatization and the amounts recovered by the Authority for State Assets Valuation (now called the Authority for State Assets Administration) amounted to 636 million lei, contributing to the financing of

general government consolidated budget deficit in proportion of 6.7%. In the coming years, their contribution declined from 1.5% of the overall budget deficit in 2008 to 0.9% in 2010, while in 2011-2013 the resulting contribution became practically insignificant.

On the recommendations of the IMF, starting with 2010 the Romanian Ministry of Public Finance decided to constitute a foreign currency reserve (buffer) to cover, for a period of about four months, the necessary resources to ensure budget deficit financing and public debt refinancing, and to avoid the problems which may arise as a result of possible worsening conditions in the financial markets. However, the variations in the size of this reserves may cause variations in the same direction of public debt, if the increase of foreign currency reserves is achieved by means of borrowing and their reduction occurs when such resources are used either for budget deficit financing or public debt refinancing. At the end of 2012, existing foreign currency reserves already exceeded EUR 5 billion.

4. BUDGET DEFICIT FINANCING AND DETERMINING FACTORS

The dynamics of Romania's direct public debt over the period 2007-2013 can largely be explained on the account of the deficits of various public budgets reflected within the consolidated general government budget.

Table 3. The dynamics of public debt, consolidated general government balance and its main components in Romania (2007-2013)

	Romana (2007-2013)										
Year	Public	Consolidated	State	Local	Social security	Unemployment	External				
	debt	general	budget	governments	budget balance	fund balance	loans to				
	(% of	government	balance	budget balance	$(\% \ of \ GDP)^{I}$	$(\% \ of \ GDP)^{I}$	ministries (%				
	GDP)	balance	(% of	(% of GDP) ¹			of $GDP)^{I}$				
		(% of GDP) ¹	$GDP)^I$				-				
2007	19.8	-2.4	-3.9	0.7	0.4	0.3	-0.7				
2008	21.3	-4.8	-3.9	-0.7	-0.005	0.1	-0.4				
2009	29.4	-7.3	-6.6	-0.5	-0.2	-0.2	-0.07				
2010	37.1	-6.4	-6.8	-0.1	0.05	-0.5	-0.06				
2011	40.1	-4.3	-4.9	-0.2	0.03	0.04	-0.1				
2012	41.0	-2.5	-2.3	-0.5	0.04	0.03	-0.05				
2013	42.5	-2.5	-3.1	-0.2	0.03	-0.001	-0.02				

1. (-) for budget deficit and (+) for budget surplus

Source: author's calculations based on data from the Ministry of Public Finance (2014a, 2014b)

It can be seen, from the data in Table 3, that the consolidated general government budget continuously recorded deficits during 2007-2013, thus reflecting for all its components the existence of some expenses not covered by regular budgetary revenues, and therefore financed on the account of extraordinary financial resources, as the amounts resulting from state companies privatization or from selling of public assets or, more often, as those borrowed from domestic and foreign creditors. Although the consolidated general government budget recorded a deficit each year, its size considerably varied over time, increasing from 2.4% of GDP in 2007 to 7.4% in 2009 and then, on the background of budgetary consolidation measures, returning to a level close to that in 2007, 2.5% of GDP, in 2012 and 2013. During 2008-2011, the size of the budget deficit exceeded even 3% of GDP, the top deficit threshold allowed for according to the European requirements for euro adoption (in May 2009, the excessive deficit procedure was triggered for Romania; however, it was suspended in June 2013 as a result of Romania's

progresses on reducing the budget deficit below 3% of GDP). Corresponding to these substantial budget deficits, Romania's public debt expressed as a percentage of GDP has also grown continuously, although in varying proportions from one year to another, at a high pace in 2009-2011 and a more moderate one in 2007-2008 and 2012-2013.

Apparently, the most important contribution to the deficit of the consolidated general government budget, and thus to the accumulation of public debt, came from the negative balance of the state budget, varying between 6.8% of GDP in 2010 and 2.3% in 2012. Although other components of the public budgetary system have equally been concluded with deficits, these were relatively small in size. The deficit of the centralized budget of administrative-territorial units, including public investment expenditures made by local authorities and financed by means of foreign and domestic borrowing, did not exceed 1% of GDP. Also, the budget of external loans granted to ministries, reflecting public expenditures for projects/programs of national interest financed from external loans, although by its nature with negative balance, did not record deficits greater than 1% of GDP. Low deficits or even budget surpluses were recorded at the level of some other components such as the social security budget or the unemployment insurance budget.

The real situation appears, however, to be deeply distorted by the volume of transfers from the state budget to other components of the consolidated general government budget, such as the local budgets, the social security budget, the unemployment insurance budget or the national health insurance fund. For example, on the background of unsustainable budgetary expenditures with pensions in relation to the revenues raised from social contributions, even despite some measures undertaken to correct this situation, the social security budget was permanently imbalanced in recent years, its deficits being covered by subsidies from the state budget. A simple calculation shows that, by eliminating revenues from subsidies, the social insurance budget recorded a real deficit of 2.2% of GDP in 2012 (quite close to the size of the state budget's deficit) and 1.9% of GDP in 2013.

The incidence and the size of the consolidated general government budget deficits (and therefore the corresponding increase in public debt) can be attributed, at their turn, to the combined action of several factors, two of them being most relevant for the period 2007-2013, namely the dynamics of the real economy and the fiscal and budgetary policy decisions adopted by public authorities, with impact on the size of public revenues and expenditures. In relation to these factors' specific action, two different time frameworks can be defined.

Although the financial crisis has its roots on the US market in 2007, and the following year its effects have already been expanded internationally, Romania felt its impact only at the end of 2008. The period from 2007 to 2008 therefore is as an extremely favorable period for Romania, of sustained economic growth, with GDP increasing in real terms by more than 6% per year. On such a background, lower budget deficits or even budget surpluses would have been expected to occur. However, the recorded budget deficits have been not only important, but also increasing from one year to another, as a result of the pro-cyclical fiscal policies promoted by public authorities, based on overestimating revenues and successive increases of public expenditures. It can be noted in this respect from the data summarized in Table 4 that, although the consolidated general government budgetary revenues have increased in absolute value during 2007-2008, this increase was more than offset by the increase in budgetary expenditures, at a rate

even higher than the GDP growth rate. On this background, public debt also increased in absolute value, quite consistently given the developments in the real economy.

Table 4. The dynamics of consolidated general government balance, revenues and expenditures, public debt and GDP growth rate in Romania (2007-2013)

Year	Con	solidated ge	eneral	Consolidat	ed general g	government	Consolidated	Real	Public
	gove	ernment rev	enues	6	expenditures	ï	general	GDP	debt
	million	% of GDP	annual	million lei	% of GDP	annual	government	growth	growth
	lei		growth			growth	balance (%	rate (%)	(billion
			rate (%)			rate (%)	of $GDP)^{I}$		lei)
2007	127108.2	32.5	18.8	136556.5	34.9	21.2	-2.4	6.3	19.0
2008	164466.8	32.0	29.4	189121.7	36.9	38.5	-4.8	7.3	27.5
2009	157243.9	31.6	-4.4	193679.3	38.9	2.4	-7.3	-6.6	37.5
2010	168674.0	32.3	7.3	202282.0	38.7	4.4	-6.4	-1.1	47.1
2011	181919.9	32.7	7.9	205818.5	37.0	1.7	-4.3	2.2	28.8
2012	193148.2	32.9	6.2	207922.1	35.4	1.0	-2.5	0.7	17.8
2013	200045.7	32.0	3.6	215816.9	34.5	3.8	-2.5	3.5	26.1

1. (-) for deficit (+) for surplus

Source: author's calculations based on data from the Ministry of Public Finance (2014a, 2014b) and International Monetary Fund (2014)

Starting with late 2008, the effects of the economic crisis have been quite strongly felt in Romania, materializing in severe real GDP contraction, by 6.6% in 2009 and 1.1% in 2010. These effects were transposed on budget balances, as fiscal revenues diminished and certain types of public expenditures, more sensitive to economic conditions (such as social benefits), increased. These developments became more clear in 2009, when overall budgetary revenues decreased by 4.4% compared to the previous year, mainly due to the decline in fiscal revenues from corporate income tax (by 8.8%), VAT (by 16%), customs duties (by 31.9%) and social security contributions (by 1.1%). Although overall budgetary expenditures increased by 2.4% in 2009 compared to 2008, the ones with social security rose at a much higher pace, of 19.3%. The negative budget balance registered this year was also a significant one, of more than 7% of GDP.

Dictated by the important budget deficits and public debt, as well as by the commitments made under the agreements with the international financial institutions, the reaction of Romanian public authorities to the crisis was an atypical one. In the absence of adequate fiscal space, authorities could not initiate large programs to support the real economy, but they had to adopt severe austerity measures since 2010, even if the economic crisis was not ended yet. Although less consistent on the line of budgetary revenues, such measures aimed at broadening the tax base for some direct taxes or increasing the tax rate of some indirect taxes (VAT rate was increased from 19% to 24%). As for budgetary expenditures, measures were mainly aimed at reducing current expenditures by means of cutting down public sector salaries by 25% (although, in subsequent years, this measure was gradually reversed), eliminating some bonuses, premiums or other employee wage rights, reducing the number of positions in the public system, restricting the volume of purchases of goods and services, recalculating some public pensions, etc. The effects of these measures, together with the positive, although quite low GDP growth rates in 2011 and 2012, have resulted in a substantial budget deficit reduction, by almost 5% of GDP in just 3 years.

However, the situation in 2013 shows that, once the crisis is overcome, there is high risk for budget consolidation efforts to be relaxed and for "old habits" to reappear. Despite more favorable economic conditions, the budget deficit was not reduced compared to 2012, as public expenditures expressed in nominal value grew at a higher pace than in previous years, while the growth rate of budgetary revenues decreased.

Along with these factors, some other factors have also contributed in varying proportions to budget deficits and, in this way, to the growth of public debt over the period of our analysis. The data in Table 4 show that, making exception of the not very significant variations from one year to another in size of budgetary revenues, they overall value was quite low. According to European Commission data (2014a), with overall budgetary revenues of 32.8% of GDP (12.5% below the European average), Romania ranked last among European Union member states in 2013, tied with Lithuania.

This situation is primarily resulting from the low efficiency of tax collecting, due to the significant volume of arrears to public budgets, especially at the level of public companies, to tax evasion, to the inefficient public management, the excessive bureaucracy and the relative low tax base, as the result of many exceptions and legal deductions (Fiscal Council, 2012). For example, the tax efficiency rate, determined as the ratio between the implicit and the statutory tax rate, was in 2011 in Romania among the lowest of the countries of Central and Eastern Europe, of 54% for VAT (compared to 82% in Estonia and 71% in Bulgaria) and 61% for social security contributions (compared to 77% in Bulgaria and 94% in Estonia) (Fiscal Council, 2012). From this point of view, speeding up measures to fight against tax evasion should represent a central pillar of budgetary strategies, allowing for budgetary expenditures to be covered to a greater extent by ordinary income and, thereby, to maintain budget deficits and public debt at sustainable levels, without adversely affecting the real economy, as it happens, for example, when tax rates are increased.

Table 5. The composition of consolidated general government expenditures in Romania (2007-2013)

	Table 5.		Poz		01 0011	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<u>6</u> .		go , v.		0:-p 0:-					
Year	Current expenditures												Capi	ital	Oth	er
	Compens	sation	Goods	and	Intere	sts	Subsia	lies	Trans	fers	Expendit	ures	expend	itures	expenditures	
	of emplo	yees	servi	ces							from gro	ınts			(finan	cial
															operatio	
															etc.)
	billion	%	billion	%	billion	%	billion	%	billion	%	billion	%	billion	%	billion	%
	lei		lei		lei		lei		lei		lei		lei		lei	
2007	25.6	18.7	25.8	18.9	2.7	2.0	6.9	5.0	61.1	44.7	-	-	14.4	10.6	0.02	0.01
2008	43.3	22.9	33.2	17.6	3.9	2.1	7.8	4.1	78.1	41.3	-	-	23.2	12.3	-0.5	-0.2
2009	46.7	24.2	28.8	14.6	6.1	3.1	7.2	3.7	81.4	43.2	2.1	1.1	23.2	11.3	-2.5	-1.3
2010	42.8	21.2	29.8	14.6	7.3	3.6	6.7	3.3	94.6	47.0	1.8	0.9	19.4	9.6	-0.5	-0.2
2011	38.5	18.7	31.8	15.4	8.9	4.3	6.4	3.1	95.2	46.7	2.1	1.0	23.1	11.0	-0.5	-0.2
2012	40.8	19.6	34.4	16.6	10.7	5.2	6.1	2.9	95.6	46.0	1.6	0.8	19.3	9.3	-0.7	-0.3
2013	46.3	21.5	38.6	13.2	10.8	5.0	5.2	2.4	97.3	45.1	0.9	0.4	17.9	8.3	-1.0	-0.5

Source: author's calculations based on data from the Ministry of Public Finance (2014b)

On the side of budgetary expenditures, an important contribution to budget deficits came from interest spending on public debt and other similar expenditures, whose increase acted, over the period of our analysis, towards limiting the effects of the adopted fiscal adjustment measures. It can be noticed from the data in Table 5 that, on the background of growing public debt and higher interest rates, as a result of worsening domestic and international financing conditions, the

interest expenses on public debt have grown exponentially from 2007 to 2012, they increased almost 4 times in absolute value and expanded their share in overall budgetary expenditures from 2% to 5.2%.

The high expenditures with compensation of employees recorded during 2007-2009, fueled by the repeated and unrelated to labor productivity wage increases and also by the oversized number of public sector employees, represented at its turn one of the causes of the significant budget deficits recorded during this time framework. Although, in 2010-2011, these expenditures were reduced, due to the inconsistency of measures (for example, some wage rights cut down in 2010 have further been regained by their beneficiaries in the court of law, so the measure of cutting down public salaries by 25% proved to be only temporary, followed by further increases of the same proportions) their level did not fell below the one recorded in 2007, on the contrary, the upward trend was resumed in 2012-2013. Similarly, although the need to rationalize and cut down expenditures with goods and services has been frequently invoked, such expenditures diminished in absolute figures no sooner than in 2009, afterwards returning to a level higher than the one in 2008.

In the light of their more direct relationship with economic growth and development, the capital expenditures, representing an important share of the overall budgetary expenditures, could be considered to be a more "acceptable" determining factor of budget deficits and public debt. However, the efficiency of these expenditures is estimated to be quite low in Romania. Despite the substantial volume of resources that have taken this destination over the last decade, the effective results, for example in terms of infrastructure improvement, were quite modest ones (Fiscal Council, 2012). From this point of view, the negative impact of high public capital expenditures on budget deficits and public debt did not result from the large volume, but mostly from the low efficiency of this spending. Therefore, it is necessary to prioritize these expenses on the basis of their efficiency and to eliminate or at least reduce public investment allocations with low economic and financial potential.

5. PUBLIC GUARANTEES AND THEIR CONTRIBUTION TO THE ACCUMULATION OF GUARANTEED PUBLIC DEBT

Given the favorable domestic environment, of high economic growth, the number of guarantees granted in 2007-2008 by central and local governments was quite limited. In 2007, the Romanian Ministry of Public Finance granted only one guarantee, for the loan contracted from the internal market by Electrocentrale Bucharest to finance fuel imports, worth 396.9 million lei (guaranteed for 80% of its value) (Ministry of Economy and Finance, 2008), while in 2008 no such guarantees were granted. Therefore, the contribution of this factor to the accumulation of public debt (namely of the guaranteed public debt) was only a small one. One could even see from the data summarized in Table 6 that the guaranteed public debt has decreased in 2007-2008, both in absolute figures and as a share of overall public debt.

Table 6. The guaranteed public debt of Romania (2007-2013)

Year	Central gove	rnment guaranteed debt	U	overnments nteed debt	Total guaranteed public debt		
	million lei	% of central government debt	million lei	% of local governments debt	million lei	% of public debt	

2007	9008.7	11.8	568.6	9.2	9577.3	11.6
2008	8614.4	8.6	707.9	7.7	9322.3	8.5
2009	9922.1	7.3	745.0	6.9	10667.1	7.2
2010	14877.8	8.2	883.1	7.4	15760.9	8.1
2011	11104.0	5.3	679.8	5.3	11783.8	5.3
2012	13110.9	5.8	697.9	5.0	13785.5	5.7
2013	14203.6	5.6	530.1	3.6	14733.7	5.5

Source: author's calculations based on data from the Ministry of Public Finance (2014a)

As the crisis emerged, the reduced access to finance of agents implementing, at national or local level, projects/programs of strategic importance, requested for increased central and local authorities support by means of granting public guarantees for the loans contracted by such agents. Therefore, the guaranteeing activity was resumed, and guaranteed public debt increased significantly in 2009-2010, with about 6.4 billion lei in just two years. This evolution was characteristic to both central and local governments guaranteed debt, both significantly increasing compared to the previous period. In 2010, the growth rate of guaranteed public debt was even higher than that of the direct public debt, so that the share of the guaranteed public debt in overall public debt increased this year. At the level of central government, the guarantees granted especially aimed, as can be seen from Table 7, to support the acquisition or construction of new housing through the "First House" program and to support the economic operators or the beneficiaries of projects co-financed from EU funds.

Table 7. The value and destination of the guarantees granted by the central government in Romania (2009-2012)¹ - million euro –

Guarantees granted	2009	2010	20112	20122
Within the "First house" governmental program	486.4	927.6	386.8	501.2
For loans of economic operators	-	320.0	4.0	196.4
Within the Support program for beneficiaries of projects financed from	-	4.9	12.4	12.4
EU structural funds allocated to Romania (Government Emergency				
Ordinance no. 9/2010)				
Within the Thermal rehabilitation program (Government Emergency	-	0.007	0.9	0.5
Ordinance no. 69/2010)				
Total	486.4	1252.5	404.1	710.5

^{1.} The guarantees granted to local governments are not included

Source: author's calculations based on data from the Ministry of Public Finance (2011, 2012b) and the Romanian Government (2011)

In 2011, on the background of changing the terms of the guarantees provided under some governmental programs (under the "First House" program, for example, the value of guarantees granted by public authorities to participating banks was cut down by half, with the aim to ensure the sharing of risks between state and financial institutions) and of a tighter fiscal space negotiated with international financial institutions (Ministry of Public Finance, 2012a), the guaranteed public debt once again diminished in absolute figures, although in 2012-2013 it resumed its upward trend. In 2012, some major central government guarantees were granted under the "First House" program, the "Mihail Kogalniceanu" program for SMEs, as well as the

^{2.} As the amounts for 2011 and 2012 were expressed in lei, we have converted them in euro using the NBR's RON/EUR exchange rate at the end of each year

for the loan contracted from EBRD by CFR SA in order to support for the financial restructuring process of the company, amounting 175 million Euros.

In general, the support granted to public and private agents through public guarantees, especially at the level of local communities, may be appreciated as an insufficient one, given that it represents an important engine of economic growth, at both national and local level. Although more guarantees could also mean assuming higher risks, materialized in additional payments from public funds, we consider that a sufficiently rigorous selection of the projects to be supported would ensure maintaining these risks at acceptable levels.

6. CONCLUSIONS

The analysis conducted on Romania's public debt and its determinants following Romania's accession to the European Union (2007-2013) revealed that, although public debt's dynamics was not really particular to Romania, as other European Union member states have seen their public debts rapidly growing on the background of the crisis, the factors contributing to such dynamics were, to a great extent, specific to Romania.

Just like in other European countries, the economic crisis contributed, through its effects on the GDP growth rate, budgetary revenues, expenditures and budget balance, to the increase of Romania's public debt. However, such a factor has only temporary effects, when steady economic growth will be resumed its effects are expected to be reversed. Moreover, public indebtedness may represent, by itself, a mean of achieving such aim of higher economic growth rates, if it results that borrowed resources were used to finance growth friendly public expenditures, or that debt increased largely as a result of the guarantees granted to economic agents, to finance private (or public companies) investment expenditures.

More problematic proves to be, however, the contribution of other, more persistent factors, reflecting the existence of longstanding vulnerabilities that should immediately be addressed. Among such factors, our analysis emphasized as more significant the pro-cyclical stance of fiscal policy, the high tax evasion, the large volume of arrears to public budgets, especially of public companies, the relatively low tax base, the high expenses on goods and services, salaries or the large interest payments on public debt. Also, given the generally unproductive nature of such expenditures, as well as the low efficiency of public capital expenditures (although quite large in size in Romania compared to other European Union countries) and small number of public guarantees, we appreciate that the public indebtedness policy was not sufficiently enough oriented towards promoting growth, as a sound path towards future debt reduction.

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