

VOLATILITY OF INTERNATIONAL FINANCIAL MARKETS AND PUBLIC DEBT SUSTAINABILITY*

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A*bstract.* Under the circumstances of markets' volatility persistence, the global financial balances deteriorated during the post-crisis period. In the case of advanced countries, the bailout of the private banking system by public or multilateral financial intervention, instead of leading to financial rebalancing has transferred a systemic risk to the sovereign level. Bringing high public debts back to sustainable levels by budgetary constraints of austerity programs has proved to hamper the economic growth that increased, in fact, the risk of sovereign default. Romania witnessed an excessive rise in the public indebtedness during 2007-2013 to unsustainable levels, which needs to be addressed by improving the public debt management and achieving surpluses in the primary balance.

Keywords: *global financial balance, financial crisis, markets volatility, sovereign risk, public debt sustainability, primary balance*

JEL Classification: *F01, F65, G01, G15, H12, H63*

1. Instability of financial markets

The liberalisation of international capital markets accelerated in the years 1990 and 2000, favoured also by the advances of the IT&C sector, and has led to a high degree of financial integration at the global level.

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Because of lack of regulations for financial instruments transactions at the international level, and of the volatility of global capital flows, major imbalances occurred between the monetary and real economy, and between the various regions of the world. Global financial imbalances could not be corrected in a controlled manner by the international financial institutions, which peaked with the outbreak of the financial crisis in 2007-2008 and degenerated into a world recession with effects on sovereign risk, including the public debt sustainability.

The global interconnection of financial markets, especially at the level of developed countries, made possible the propagation of effects from a market from a single area to the world scale. The international financial crisis highlighted the speculative character of human factors (bank top managers, brokers and traders) assumed to be the exponents of the financial elite, who were involved in a greed race to achieve profits as high as possible in the shortest time and at any risk.

In the absence of credible international arbitrage that would sanction unfair behaviour, the financial markets reached a pinnacle disconnecting from the real economy. The self-regulation function of the markets could no longer exercise its responsive capacity, being hampered by the widespread range and the high speed of transactions (including on-line platforms, accessible worldwide) and by exceeding any limits in the exposure to risks by some non typical investors in an attempt to defy time and rationality of capital profitability.

The deterioration of the investment climate and the significant reduction of capital flows at the world level as a result of the crisis outbreak in 2007-2008 generated a series of imbalances on international financial markets with effects on the contraction of the banking system, i.e. crediting both, as result of the more restrictive conditions, and of the increased risk aversion, which affected the financial support of foreign investments and foreign trade, implicitly of the economic growth.

The developing countries, including the ones with emerging market economy proved vulnerable to the disengagement of some banking credit lines, to capital outflows, including relocations in the value added international chains, especially in the case of countries with non-diversified economic structures and lacking a solid industrial tissue.

Even though the global risks map for the financial stability improved compared with the first post-crisis years, consisting in a slight recovery of the markets, financial and investment conditions, as it is pointed out in the last IMF report (2013d) on this issue, if the efforts steered towards adequate management of the

medium-term challenges result in failure, the global financial crisis may have another outbreak marking the entry into a chronic stage.

The persistence of markets' volatility in the current period is caused also by the transmission channels of the vulnerabilities between them, the imbalance of financial markets due to a drastic drop in FDI flows, for instance, causing a rapid contagion on the international markets for goods and services, affecting the production and, the export-import flows respectively, the distortions of which are reflected in the deterioration of the macroeconomic parameters and, finally, maintaining the fragility of the global financial framework.

If on the primary capital market the systemic weaknesses were reflected in the increase in nonperforming assets, on the secondary market the chaotic evolution continued without any apparent link with the development of real economy. The turbulences shown on the stock and commodities exchanges have reached maximum levels, the sell-buy decisions resembling a game where hazard substituted rationality, and this, on a global scale.

In the last period, we are witnessing also massive monetary/foreign currency interventions of the central banks from the main developed countries on the international markets up to the edge of triggering a currency war.

The dynamics of globalisation marked an increase in the volatility of economic phenomena, particularly of those of financial substance, visible in the persistent display of some vulnerabilities before external shocks and felt as high fluctuations of the prices and exchange rates, and having also a regional/world reverse of a nature to put tensions into the evolution of various parameters of the global financial-banking market.

The volatile character of the markets seemed in the past to be linked more to the cycles of development or running businesses but the situation returned to normal after a certain period of stabilisation, the world economy proving its capacity to absorb shocks and maintain a sustainable growth trajectory.

The international crisis seems to have imprinted a permanent volatility to the markets, so that stakeholders on the world economic scene (public authorities, state-owned and private companies, including multi-nationals, investors, etc.) can no longer wait a possible stabilisation for gaining direction in decision-making, but have to adjust to this new economic environment and to take advantage precisely from its fluctuating character under the conditions of attempting to minimise associated risks (Yoshikami, 2012).

In other words, markets' volatility displayed by unpredictable and sudden variations in quotations/prices refers no longer to the fluctuating evolution noticeable in relation to past events, but it is implicit in the expectations regarding future evolutions.

The set up of volatility on all markets, globally interconnected, both horizontally and vertically, reflects the uncertainty state floating around the evolution perspectives of economic phenomena, which partially explains imposing some new criteria of evaluation based on surveys which express subjective perceptions (consumers'/investors' confidence, the risk appetite, market sentiment, inflation expectations, a.s.o.) to the damage of quantifiable estimation parameters (macro/microeconomic indicators, risk assessment or econometric models).

Among the factors generating imbalances on international financial markets we also find the speculative capital flows searching for the interest differential (or in internal/external prices, foreign exchange rates), illegal practices on the stock and commodities' exchanges (quotations/prices manipulation, insider trading, fictitious transactions, concerted foreign exchange attacks, etc.), Libor manipulation (interest rate influencing the entire world market of credits and derivatives), Ponzi schemes for tricking investors, money laundering, on-line banking frauds, a.s.o.

In search of competitive gains, many multinational companies have resorted to developing operations in host countries by companies registered in fiscal havens (Palan, Murphy, Chavagneux, 2010). It was estimated that, at the level of the year 2003, the 70 fiscal havens (off-shore financial centres with a low taxation level, close to zero) with only 1.2% of the world population concentrating assets equivalent to 1/3 of the global GDP (36,200 US bn, in the respective year).

By a policy of transfer pricing which eluded taxation in the countries where they operate by means of intra-company transactions (the one locally held concluding balances with minimum profit, zero or fictitious losses), it was appreciated that over 30% of the assets of the American multi-national corporations could be retrieved in fiscal havens (Komisar, 2005).

Economic-financial criminality (mainly tax evasion) reached such a high level that it turned into an issue of national and global security, including depriving public finances and deepening budgetary deficits, increasing the efficiency of instruments for fighting this scourge, making necessary a consensus on unifying criminal law on a world scale.

2. Sovereign risk – global extension

It should be mentioned that, if during the two-three decades from the pre-crisis, the public debt and the corresponding sovereign risk were regarded by researchers, international financial organizations, rating agencies, etc., as being intrinsic to developing countries, the state bonds issued by the authorities of developed countries being rated as having zero or negligible default risk, the international financial crisis which began in 2007 generated a double shock on the global economy.

Besides the effects on the developed countries' economy and their entering into recession, bailing out the private banking system from public funds did not lead to re-establishing the financial balances, but on the contrary, the transfer of a systemic risk (from the banking sector) to the sovereign level created a vicious circle, public finances being involved in a downwards peaking spiral: the banks were in debt to the states (effective public debt), and the states to the banks (engaged public debt by state bonds with different maturities). Part of the private (nonperforming) debt of the banking sector turned into public debt, and part of the public (potentially nonperforming) deficit was financed by the banking sector.

The interconnection by financial channels of national states and multi-national banks sustained also by the monetary authorities increased the exposure to risk by overlapping vulnerabilities, the resultant of which generates rapid contagious effects, i.e. shock spread out.

The countries of the Euro Area had most to suffer under the impact of the financial crisis, experiencing a severe deterioration of the fiscal framework. Cleaning the banking sector of toxic assets in 2008-2009 took place by budgetary allocations of the order of 4,000 billion Euro. It should be mentioned that, for the whole developed countries, the level of the public debt reached 40,000 USD bn in 2013 that is double as compared with 2004.

Financing budgetary deficits rapidly and significantly burdened the public indebtedness, sometimes even to unsustainable levels, especially in the case of Greece, Ireland and Portugal, countries that had asked the financial support of IMF-EU. Large countries like Spain and Italy are in a razor-edge situation, and France, and, in extreme circumstances, even Germany are threatened by a crisis of the sovereign debt (See Table 1).

In order to strengthen the fiscal framework, according to the commitments, the Euro Area countries adopted since 2010-2011 austerity programmes that, by severe fiscal constraints, hampered the post-crisis re-launch of their economies.

**Table 1 - The public debt* for several European Union countries
(% of GDP)**

Country/Years	2007	2010	2011	2012
EU 27	58.9	80.0	82.4	85.2
Euro Area	66.3	85.4	87.3	90.7
Germany	65.2	82.4	80.0	81.0
France	64.2	82.4	85.8	90.2
Italy	103.3	119.3	120.7	127.0
Spain	36.3	61.5	70.5	86.0
Portugal	68.4	94.0	108.2	124.1
Ireland	25.1	92.1	104.1	117.4
Greece	10.4	14.3	170.3	156.9
ROMANIA**	12.8	30.5	34.7	37.9

* General government gross debt (as defined in The Maastricht Treaty), not including state guarantees.

** Comments on Romania in the 4th paragraph.

Source: Eurostat.

At the same time, the austerity programmes generated economic and social tensions, feeding also controversies around the ways of recovering the global economic growth, with striking nuances even at the level of the leaders of some important European states. These programmes have not contributed significantly, at least up to now, to the recovery of the fiscal framework, i.e. to the stability of financial markets, maintaining the so-called spectre of “sovereign debts crisis” and the risk of fracturing the European Union, i.e. the collapse of the Euro currency.

During the last years the issues of public debt sustainability is intensely debated at all levels: institutional, international, academic. Synthesising the opinions about the possible solutions for sanitising public finances, and which are extremely diverse, to three thinking trends, they would mean the following: imposing budgetary restrictions (fiscal austerity), increasing public expenditures with the purpose of stimulating economic growth (fiscal incentives) and, respectively, forcibly directing funds to the state mainly by maintaining low levels of the reference interest rates (“financial repression”) (Reinhart, Sbrancia, 2011).

By an approach supporting the necessity of mixing budgetary and fiscal policies with the ones for supporting economic growth, Primorac (2012) uses the IMF databank starting with the year 1875. Discovering 26 cases where the public debt exceeded 100% of the GDP, the analysis of the mitigation policies of the respective states (considered as more representative: United Kingdom - 1918,

USA - 1946, Belgium - 1983, Canada - 1995, Italy - 1992, Japan - 1997) allowed the author to sort out three types of historical lessons: that the policies of supporting growth precede the complementariness of fiscal consolidation, that the adjustment of the public level debt is more sustainable if fiscal measures are not of a temporary character and, respectively, that fiscal recovery and diminishing debt requires a long period of time.

Within the yearly reunion of the American Economic Association held in January 2013 in San Diego which had, as core topic of debate, the ways of recovering the global economy, the idea that the recent financial crisis as an originating source of the current world recession was an non-typical one was shaped, finding that it was not followed by an upturn, as we should have been expected. Faced with this new type of crisis, one cannot resort to the solutions resulting from historical lessons, and economists consider that they are on an unexplored 'green' territory which is complicated by the problems created by the rapid increase of debts and unemployment, as well. Referring to the sovereign debts of the Euro Area, Professor Kenneth Rogoff, emphasising that the increase of the public debt post-crisis is caused also by the so-called "hidden debt" (in particular commitments to future budgetary payments, related, for instance, to financing the pension system which is subject to the pressure of demographic ageing) was of the opinion that irrespective of the solutions, the decision of any of them came to be of a political nature, and that the European Union is lacking a Constitution and/or common governance (IMF, 2013a).

If at moderate levels the debt can improve welfare and support growth, at excessive levels it can cause severe damages to the economy. It is obvious that the high levels of debt are associated with weaker economic growth, and that they can perpetuate recession and worsen the perspectives for debt reimbursement possibilities.

For a given structure of debt, the high level of the corresponding yearly service can impose debt rollover which increases the sovereign risk and maximises the impact of a possible shock on the level of debt of a rise in the interest rate. A stabilisation of the debt level, possibly followed by an absolute decrease requires high surpluses of the primary balance, which can become extremely difficult on a longer period.

Some authors (Cecchetti, Mohanty, Zampolli, 2011) attempted to estimate the debt thresholds for which the effects change from positive to negative by using a databank referring to 18 OECD member countries for the period 1980-2010. They show that in the case of public debt this maximum threshold is around 85%

of the GDP on long term, the states having to maintain themselves much under this level and to constitute fiscal buffers that would counteract the effects of possible shocks. In case of such a shock, even if of medium intensity, the countries with a higher level of indebtedness are more exposed to default risks, to credit-fuelled booms and default-driven busts that can end in a collapse of the entire financial system and, together with it, of the real economy.

Referring to the recent financial crisis, and observing that decision makers have turned their attention to diminishing systemic risk by deleveraging the financial system, they show that the challenges are actually a lot more dramatic, considering that the high level of public debt (about 85% in average for all OECD countries) had repercussions on economic growth.

The long-term and very long-term perspective of the sovereign debt issue becomes even worse if we consider the cost of ageing on budgetary deficits (the social insurance side), implicitly on economic growth as fiscal risks are expected to increase, also for the sustainability of the public debt in the following 15 to 20 years, at least at the European Union level (EC, 2012).

It should be mentioned that indebtedness, as a measure of economic instability, and the level, estimated as safe, of financial intermediation change in time. Eggertsson and Krugman (2012) have attempted to formalise the short-term deleveraging crisis notion in which a sudden downward revision occurs for the level, regarded as safe, of indebtedness and which forces highly indebted agents to severely cut their expenditures. Such a sudden change can create major problems for the macroeconomic management. In order to avoid a price decrease, someone must spend more in order to compensate for the fact that debtors spend less; still, even a nominal zero interest rate cannot be sufficiently low for stimulating enough expenditures (*Minsky moment*¹).

The quoted authors reach the conclusion that the expansionist fiscal policy should be efficient, partially due to the fact that the macroeconomic effects of the deleveraging shock are inherently temporary, so that the fiscal mitigation should also be temporary; thus, it is concluded that a temporary increase in

¹ A *Minsky moment* (inspired by Hyman Minsky) is defined as the moment when the over-indebted unable to pay their debts are obliged to sell assets triggering a collapse in their value. A decrease in indebtedness from D_{high} to D_{low} corresponds to suddenly acknowledging the fact that the assets were overevaluated and that collateral restrictions were much too lax. In such a case, the downward revision of indebtedness leads to a temporary diminution in the real interest rate, which can shift to negative.

governmental expenditures leads to an increase in expenditures, even in the case of debtors with liquidity constraints.

In the case of identifying an unsustainable level of sovereign debt and of a major risk of default, an immediate and orderly restructuring of the debt is preferable, that is an option not always easy on behalf of the monetary and governmental authorities from the respective country.

The case of Greece is significant for illustrating the difficulty of a decision to impose the restructuring of public debt in due time. Despite payment difficulties of the Greek public debt service, which became obvious already in 2009 (and then, in May 2010, a financial package from IMF-EU of 110 bn EUR was received), and even facing the risk of losing access to the international capital markets, the debt restructuring was delayed because of the authorities' commitment to adopt fiscal adjustment programmes, which hindered the correct estimation of the default probability. Finally, only in February 2012 when the government programme proved to be non-viable (the first Stand-by Agreement was also cancelled) the debt restructuring (rescheduling) was carried out (IMF, 2013b).

The prolongation of a state characterised by a level appreciated as unsustainable of the debt generates long-term effects, worsening the economic situation by deteriorating the investment climate (*overhang effects*) and leading to an increase in the uncertainties regarding the upturn perspectives, i.e. for recovering the sovereign payments capacity (Zaman, Georgescu, 2011).

3. Sustainability of public debt – A new approach of assessment

The sustainability of public debt for various countries depends, sometimes decisively, on the assessments of the rating agencies which, by the given quotations, affect, decisively in fact, the re-financing debt costs on the international capital markets.

It is worth mentioning that these agencies have changed significantly their post-crisis methodologies of assessing the sovereign risk, considering to a much larger extent the parameters reflecting the strengths of the fiscal framework, as well as the link between the sovereign credit risk and the one of the banking system.

Thus, in the assessment based on scoring of the sovereign debt burden, Standard & Poor's (2013) embeds various countries by risk categories using a

double scale with 6 levels depending on the governmental debt (% of GDP) and on the debt costs (the expenditures on the public debt interests as percentage of governmental revenues) starting from the best (under 30% and under 5%, respectively for the two mentioned indicators) up to the weakest (over 100% and over 15%, respectively) by using some negative sense adjustments in the following situations: if more than 40% of the debt is denominated in foreign currency, if the exposure of the banking sector to the government is higher than 20% of the total banking assets, and the profile of the yearly debt service varies significantly.

The evaluation data refer to estimates for the current year and the trends for the following 3 years. The experts of the agency complete the evaluation of the sovereign debt sustainability with other relevant indicators, among which the ratio of public debt to budgetary revenues.

As shown in Table 2, according to Standard & Poor's calculations, in reality, the developed countries appear to incur much less indebted than it results from analysing only the ratio of public debt to GDP.

Table 2 - Top 10 most indebted countries in 2012

Public debt / GDP			Public debt / Budgetary revenues			Public debt interests/ Budgetary revenues		
Rank	Country	%	Rank	Country	%	Rank	Country	%
1	Japan	235	1	Japan	745	1	Lebanon	47
2	Greece	179	2	Lebanon	603	2	Sri Lanka	42
3	Lebanon	145	3	Sri Lanka	571	3	Jamaica	39
4	Ireland	131	4	Pakistan	475	4	Pakistan	35
5	Italy	124	5	Jamaica	455	5	Egypt	30
6	Jamaica	119	6	Greece	413	6	India	25
7	Portugal	119	7	Grenada	405	7	Bangladesh	15
8	Singapore	108	8	Egypt	392	8	Dominican R.	15
9	Iceland	104	9	Ireland	381	9	Ghana	15
10	Belgium	99	10	India	352	10	Iceland	14

Source: Standard & Poor's, 2013.

Also, it can be noticed that, in 2012, no state of the Euro Area was found in top 10 countries by weight of the debt interests in budgetary revenues.

The International Monetary Fund (IMF, 2013d), which supported financially several developed countries in the post-crisis period (some emerging countries like China, India and Brazil being even contributors to the increase of the NAB

funds in 2009), was forced to revise the way of assessing the public debt sustainability.

Table 3 - Indicators for assessing the public debt sustainability risk of countries with a lower scrutiny level

Debt burden benchmarks	AE	EM	Romania***
Gross public debt (% of GDP)	80	70	41.0
External financing requirements* (% of GDP)	25	15	23.7
Primary balance, cumulative for 3 years (% of GDP)	2	2	-0.7
Annual average increase of public debt to GDP (pp)	1	1	0.9
Debt profile benchmarks	AE	EM	
Bond yields spread** (basic points)	600	600	416
Public debt held by non-residents (% of total)	45	45	45.5
Public debt denominated in foreign currency (% of total)	n.a.	60	56.2
Annual change in the share of ST public debt at original maturity (pp)	1.5	1.0	-13.1

* Defined as current account deficit + short time debt at remained maturity.

**Against USA/Germany bonds for AE and, respectively EMBI global spreads for EM. For Romania, mid-year 2012 (Bloomberg).

*** Year 2012. The primary balance deficit cumulative for years 2013-2015 (IMF projections).

Source: IMF *Staff Guidance Note for Public Debt Sustainability Analysis in Market-Access Countries*, Washington, 2013, p. 7. For Romania: IMF *Country Report* no 13/307 (October 2013, pp. 33-43).

The DSA (*debt sustainability analysis*) approach is used also for MAC (*market-access countries*) countries, separated into two categories: emerging countries with market economy (EM) and, respectively developed economy (AE). It starts from the fact that the analytical assessment of public debt sustainability is revealed both by its burden and by the vulnerability of its financial profile, as well as by its structural features: maturity, foreign currency basket, structure by types of creditors, etc.

It should also be mentioned that the additional approach in view of identifying the sustainability risks of the public debt is done at two monitoring levels of risks corresponding to different countries, i.e. with lower and higher scrutiny. Regarding the countries with a lower scrutiny level, a relatively simple set of high risk benchmarks was set up, as shown in Table 3. For Romania, as an emerging market, many indicators of debt sustainability (on both burden and profile sides)

are already at risk levels (the external financing requirements, the public debt held by non-residents and the public debt denominated in foreign currency).

4. The increase of Romania's public debt. Possible turning back to sustainable levels?

The growing public indebtedness of Romania during the last decade has been caused mainly by increased internal and external imbalances due to sizeable deficits in the BoP current account and central government budget, which led to a rise in the financing gap of the country, offset also by sovereign loans.

According to the new approach to sovereign risk at international level, experts concerned with assessment of public debt sustainability have to pay more attention to the national specific issues.

In real terms (expressed in EUR), the central government debt increased over 6 times in 2012 as compared to 2000 and, per capita, almost 7 times (see Table 4).

Despite the low level of financial market development, because of accumulated economic vulnerabilities, Romania has severely suffered the external shock of the international crisis and of the world recession.

Table 4 - Central government debt* during 2000 - 2012

Years	2000	2007	2008	2009	2010	2011	2012
Total (EUR bn)	8.1	22.8	27.2	31.5	43.3	49.7	51.0
Per capita (EUR)	368	1080	1320	1544	2133	2460	2537

* According to National Methodology, including state guarantees.

Source: based on data from the Ministry of Public Finance and the National Commission of Prognosis.

The GDP has fallen by 6.6 percent in 2009 and the fiscal balance deficit increased to 7.3 percent of GDP while the inflows of private capital drop and the foreign banks (more than 80 percent of the Romanian banking system) are threatened with country exposure deleveraging. In order to avoid a sovereign default, a joint financial package worth of EUR 20 bn provided by the IMF, EU and the World Bank has been agreed with Romania in April 2009.

Following the Stand-by Arrangement with the IMF, the Romanian government has committed to implement structural reforms aimed to reverse the deteriorating internal and external financial framework, including austerity fiscal measures

(mainly by cutting wages in the budgetary sector on the expenditure side and by VAT increase to 24 percent on the revenues side).

Besides its positive impact on rebalancing the financial stability of Romania in the spring of 2009, such a large amount of sovereign borrowing sharply increased the central government debt. Under the circumstances of delaying the economic recovery (the GDP growth rate of 2.2 percent in 2011 and 0.7 percent in 2012) and of decreasing FDI inflows, new sovereign loans (mainly by issuing government bonds) for covering fiscal deficits and for debt refinancing have proved to be needed.

Table 5 - The central government indebtedness indicators

- percent -

Years	2007	2008	2009	2010	2011	2012
CGD (of GDP)	18.8	19.5	27.2	34.8	37.8	38.6
CGD service (of GDP), of which:	2.6	2.8	11.4	8.8	10.7	10.9
- principal repayments	2.0	2.1	10.2	7.4	9.2	9.1
- interests and commissions	0.6	0.7	1.2	1.4	1.5	1.8
CGD/budgetary revenues	56.7	60.8	86.8	108.1	115.6	117.5
CGD service/ budgetary revenues	7.2	8.6	36.2	27.7	32.7	33.3
Interests and commissions / budgetary revenues	1.8	1.8	3.6	4.2	4.7	5.5

CGD - Central Government Debt. We mention that, for analytical purposes and data availability, we have focused only on the CGD (the local debt represents around 5 percent of the public debt).

Source: based on data from the Ministry of Public Finance.

Along with indicators previously mentioned, the figures presented in Table 5 show the same path toward unsustainable levels of the public debt in the case of Romania.

At the end of 2012 the central government debt to GDP arose to almost 39 percent as compared to 19.5 percent in 2008. At the same time, the related annual service increased to 10.9 percent of GDP compared with 2.8 percent, only the interests and commissions representing almost 2% of GDP in 2012. When it comes to comparing the central government debt to the budgetary revenues, the rise also turns out to be significant, from 56.7 percent in 2008 to more than 117 percent in 2012. The CGD service, as percentage in the

budgetary revenues, increased from 7.2 in 2008 to one third in 2012, becoming a big burden for the public debt of Romania.

It is obvious that the differential between the growth rate of the public debt and that of the GDP, respectively has increased. In other words, due to their inappropriate allocation, the borrowed funds did not succeed to finance public investment projects that contribute to the economic growth in terms of productivity gains or generate higher value added. Moreover, the annual average of the GDP real growth rate during 2007-2012 (below 1 percent) stood much lower than the average nominal interest rate on public debt (over 5 percent).

The growing gap between the public debt indebtedness and the economic growth significantly weakened Romania's capacity to repay the public debt. In fact, the rollover rate for amortizing the public debt was over 100% in 2012, both on short and medium and long term (IMF, 2013e, p. 3).

Looking at the future, despite the decline in government indebtedness expected under IMF (2013e, pp 43-44) scenario for the next years, unpredictable internal or international events may invalidate its assumptions and hamper the progresses of Romania, hindering macroeconomic rebalancing and missing financial stability targets. The fiscal regime stability and the business environment predictability are under the threat of hangover effects, higher taxes in the government attempting to increase the budgetary revenues being expected (see Romania's budget project for 2014). The outlook of a sluggish global economy recovery and the persistence of capital flows volatility are supposed to have an adverse impact on the Romanian economy.

Challenged by high levels of debt service (both sovereign and private, internal and external), low absorption of European structural funds, economic weakness persistence, lack of export diversification, high exposure to interest rates and the exchange rates variations, the increase in Romania's sovereign risk could lead to a borrowing cost rise on international capital markets, which would make financing deficits and debt repayments extremely difficult.

In our opinion, for Romania, filling the development gap with the EU countries and consolidating the financial stability need to achieve a GDP growth rate of 3-4 percent annually that would also help us recover the payment capacity. As concerns the public debt decline in terms of GDP percentage, the essential prerequisite consists in achieving primary balance surpluses, i.e. net positive fiscal balances (excluding debt interests and commissions).

5. Conclusions

The analysis of the public debt sustainability based on a system of indicators requires its completion with a particular one for each country, considering the increasing higher influence of specific factors, such as: the ability to generate primary surpluses of the budgetary balance, the capacity of compliance with the debt service, the prospects for economic growth and for the taxation level, the costs of deficit financing on international capital markets (including the perception of the markets about the future payment capacity, the history of debt payment, and the vulnerability to external shocks).

The world experience has shown that, irrespective of the results of calculations, there is not a unique level at which public debt would be perceived, absolutely, as unsustainable. Thus, some countries have entered default at relatively low levels of public debt to GDP (for instance, Argentina, at 60%), and others have been capable to sustain high levels of debt (for instance, Japan, at over 200%). The transition from a sustainability situation of the public debt to one of unsustainability can occur rapidly in the context of a high volatility of the financial markets' and sudden perception changes.

A higher share of short-term debt may reflect the inability of the government to issue long-term bonds, which increases vulnerabilities, i.e. the risk of debt rollover, the foreign currency risk, and the interest risk. In many cases, sovereign default was preceded by an increase in short-term debt, and in external financing requirements.

In general, at the level of developed countries, it is considered that distress situations are characterised by sovereign default, the restructuring and rescheduling of debt, and the resort to IMF financial support in a share of over 100% against the DST quota held, or the spread of state bonds above 1000 bp (IMF, 2013d).

The sustainability of the sovereign debt depends eventually on the financial stability and the monetary conditions of the country (such as the union it belongs to), very often subject to international interferences (Fisher, 2011). Therefore, diminishing financial-banking tensions and mitigating the risk of triggering a new global crisis is possible, on medium and long term, only by adopting a set of regulations for the international financial markets that would increase the public debt sustainability.

In this context, we mention the efforts coordinated by the IMF (in collaboration with other international institutions, including ECB and IBS) towards reforming

the global financial system and laying the background for some international standards monitored by FSB (*Financial Stability Board*) and of some agreements regarding the accounting and risk assessment, the capital and liquidity regimes, as well as of the banking discipline and supervision. One of the most important changes, at least in principle, refers to the consensus concerning the moral hazard, meaning that big banks regarded as *too big to fail* will no longer benefit from public subsidies in case of bankruptcy, their salvation being left at the mercy of the shareholders, and of their deponents, respectively (see the recent example of some banks from Cyprus).

At European level, with respect to ensuring the sustainability of sovereign debts the *European Stability Mechanism* was created in 2012, by which the situation of public finance in member countries is monitored and which imposes fiscal measures for preventing crises. In case a crisis emerges in a member country, the facility for financial stability can be activated, i.e. issuing bonds on international capital markets, guaranteed by the EU budget. As regards the fiscal framework strengthening, including the sustainability of public debt, the fiscal integration of member countries is pursued along with the objective of creating a fiscal union, as in 2012 an agreement was signed (*the European Fiscal Compact*), the ratification of which would impose strict ceilings for budgetary expenditures and governmental loans, providing for severe sanctions against countries infringing the Compact rules.

Nevertheless, all in all, we find that progress in implementing the measures is slow both at global and European level, at least in relation to the amplitude and severity of the crisis effects. The international crisis diminished the capacity of perception and reaction to the actual size of financial imbalances, either due to the lack of instrument effectiveness, or to their inadequacy to the complexity of the effects in the recent period, the speed of events with significant impact on global scale requiring immediate mitigation counter-reactions.

International organisations, the main forces of the global economy, but also the opinion leaders - by a rational approach, beyond elitist ambitions, political nationalism and electoral constraints, based on a realistic assessment of positive/adverse effects on short and long term of the anti-crisis responses - can agree on strategies, policies and measures at global/regional/national level as last resort solutions, focusing on the correction of financial imbalances, including the fiscal framework, in order to make global development sustainable.

As regards Romania, actually, on short and medium term, the creditworthiness of the country, including public debt rollover, is supported by the IMF-EU financial

assistance programs (the last one has been agreed this October, i.e. a SBA for the next 2 years, treated as precautionary by the Romanian authorities). On long term, the failure in complying with the program conditionality (critical structural reforms, fiscal consolidation, investment planning and privatization) or changes in political stability could cause the withdrawing of this support. Considering the economic weaknesses and the uncertain future, Romania should implement its own vision regarding the fiscal consolidation and the public debt management, in order to recover the financial stability and public debt sustainability, the achievement of primary balance surpluses being of crucial importance.

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