Sovereign risk and debt sustainability: warning levels for Romania

Zaman, Gheorghe and Georgescu, George

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SOVEREIGN RISK AND DEBT SUSTAINABILITY - WARNING LEVELS FOR ROMANIA[1]

Gheorghe ZAMAN
Corresponding member of the Romanian Academy
Director of the Institute of National Economy

George GEORGESCU
Senior Researcher
Institute of National Economy

1. The global crisis and changes in sovereign debt patterns

Globalization and liberalization of trade and free capital movement have proved to be factors, although we can not say that they have caused, but at least favoured the uncontrolled spread of financial derivatives, including bad mortgages-backed securities, which became "toxic" assets. The turbulences on the international financial markets arising from the US housing market crisis which emerged in July 2007 have turned drastic in the second half of 2008. Despite expectations of an intervention by the Federal Reserves and / or the U.S. government for its rescue, only one week after the nationalization of Fannie Mae and Freddy Mac, two giants of the financial world, at mid-September 2008 the investment bank Lehman Brothers, a reference name on capital markets, has been left to fall into bankruptcy, which has degenerated into the slump of the stock exchanges capitalization indices all over the world. The secondary capital markets, respectively, their indexes of market capitalization, have suffered a fall down up to 20 percent in only a few weeks (end of September and the first half of October in 2008).

Investors' confidence in the capability of markets to automatically adjust its dysfunctions has drastically fallen and the risk of unemployment and poverty as consequences of the global crisis could severely damage the political and social framework, particularly in the less developed countries.

In the absence of adequate financial transactions control and supervision of global risk monitoring and warning, the protection systems at the national level have failed one after the other, opposing a low resistance to the crisis force of expansion and contagion. It is worth mentioning that, during the years leading up to

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the crisis, the monetary axe of the planet dangerously slipped from the West to the East, under the pressures of global financial imbalance deepening due to the accumulation, one the one hand, of huge international reserves in Asia (mainly China and Japan) and, on the other hand, of huge debt in the USA, which generated uncontrolled capital flows movements.

Looking in the recent past, this phenomenon, becoming more visible since 2005, raised serious concerns in the years 2006 and 2007, when numerous multilateral consultations between representatives of China, the Euro Zone, Japan, Saudi Arabia and the USA took place under the IMF umbrella. But the attempts of coordination of major countries economic and monetary policies in order to restore the global imbalances have not led to concrete results, primarily due to divergent positions of China and the USA.

Commenting on the BIS Annual Report 2005, Wermuth (2005) showed that this important financial institution, otherwise highly aware of the factors that led to global financial imbalances, admitted that foreseeing the ways for their addressing proved almost impossible as no one fully understand the interactions between the real economy and the financial sector, especially the complex processes triggered by a financial bubble, as happen following the housing bubble bust in the USA.

As observed by Mussa (2005) the cumulative effect of the USA current account deficits exceeded on average 3% of GDP over the past 30 years, transforming the USA since 2004 from the largest creditor in the world's largest debtor. Thus, if in the mid-1970s, the net foreign assets exceeded 25% of the USA GDP in the mid-2000s the situation was reversed to a position in which net foreign liabilities exceeded 25% of GDP. He estimated that if current account deficits continue to be around 5% of GDP the external debtor position of the USA will reach 50% of GDP in a period of 10 years and will exceed 100% of GDP in a period of 25 years. Given the lack of sustainability of this perspective, Mussa concluded that, sooner or later, in one way or other, a downward correction of these imbalances should occur. The biggest challenge was therefore avoiding a disorderly and uncontrolled correction of the US external balance, which would disrupt the financial markets triggering a contraction of the global economic activity. This risk materialized only a few years later because of the excessive accumulation of budget and current account imbalances in the USA.

In the years that preceded the global crisis, it became evident that threats to the international monetary system functionality came, paradoxically, from the North American continent, just from where it was designed and monitored. Thus, it was recognized that the main vulnerability of the world financial balance had the root in the deterioration of the USA current account balance, Rodrigo de Rato (2006), the IMF Managing Director at the time, pointing out that the huge deficits recorded by the United States are not sustainable.

Surprisingly, it was found that the United States current account deficits were financed mainly by private investors which are targeting, as first priority, the return on investment, sometimes speculative, being not guided by any strategic state reason, which explains also the unpredictable movements of the financial flows. As shown by Rajan (2005) as the period of adjusting the USA current account deficit is longer, the more financial assets would have to be bought by foreign investors, which increased the risks of global imbalances widening.

In 2006, just one year before the outbreak of the financial crisis, Timothy Geithner, the current United States Secretary of the Treasury, then head of the New York FED, stated that the USA financial system was stronger than ever and that the appropriate management of key institutions made them less vulnerable to shocks they had suffered in recent decades. However, he warned that improving the USA fiscal position is proved absolutely necessary, given the high volatility of assets prices. Geithner pointed out that, under these circumstances, identifying the drivers of international capital flows and the related gap in saving-investment ratio in countries which led to the deepening of global financial imbalance became of crucial importance for economic policy makers in their attempt to assess its impact on the growth prospects.

Before the crisis started, among others, Cline (2007) drew attention as concerns the lack of sustainability of persistent United States budget and current account deficits, including of the rising public debt, at least for three reasons: first, the risk of the USA recession and possible, of the global economy, under the impact of falling dollar and implicitly of investor confidence; second, the effects of consumption contraction through the correction of the current account deficit and third, the increased protectionism under the trade deficit pressure, penalizing in fact the low competitiveness of the American manufacturing sector. As shown by Ferrero (2007) the rise in the USA external imbalance in the last three decades was due also to the link, less visible, between fiscal deficits and the long term trend of the trade balance.

In order to restore the world financial stability and to avoid the collapse of global economy, a number of leading banks and financial institutions in difficulty have been saved, at least temporarily, by the state intervention in USA, UK, Germany, France, Belgium, Netherlands and other countries, through bailout rescue packages amounting to almost USD 5,000 billion. These huge public costs suggested the need for a systemic plan in order to strengthen financial institutions, taking into account the fact that certain actions fragmentized at the national level may prove ineffective. Thus, a more intensive cooperation of the stakeholders in the stabilization and consolidation of financial markets seem appropriate, particularly for the implementation of reforms on regulation and supervision of financial markets. Any postponement of the implementation of reforms in this area may prove counterproductive in the medium and long run.

The turbulences in international financial markets and their negative effects triggered a contraction of the world economy in 2009, estimated at 0.6 percent (IMF, 2010), more sharp in the USA (2.4 percent), Euro area (4.1 percent) and Japan (5.2 percent). Influent international institutions or organizations (including UN, World Bank, IMF, EU, etc.), during various high level meetings of the Member States have discussed and agreed on a series of measures for counteracting the effects of the crisis and restoring the confidence in financial markets. Although we can not say that there is a miracle solution ("one-size-fits all"), some of the experts have envisaged the consistent, clear and coordinated approach of the issues of security bank liabilities, separation of bad assets and recapitalization of the institutions concerned. The idea of systemic plans for safeguarding the financial markets by increasing the prudence, the supervision and the institutional regulation is more and more accredited. From this viewpoint clearly emerges the role of public - private partnerships in the financial sector, reducing the rate of exclusiveness of regulation solely by the market forces.

To understand and motivate better possible responses, the effects of the crisis according to their action on short and respectively on long term should be considered apart, this issue depending on the duration of the crisis on the one hand and its economic and social consequences on the other hand. In analyzing the effects of the crisis in the context of coherent anti-crisis programs and measures, not only their negative side but also the opportunities created by the process of "creative destruction" should be highlighted.

Putting in place emergency measures such as the limitation of the borrowing through specific means is meant more to overcome the financial crisis in the short term. Instead, the implementation of structural reforms of the global financial system on long-term aims at the prevention of recurrence of such crisis phenomena in the future and requires special measures. A better regulatory and monitoring framework should be designed to help the speeding up of financial innovation for the benefit of everybody and not for speculative purposes, by favouring a social minority.

On the agenda of the governments, as challenges for debates and exchange of experiences, pointing to a long run horizon are, to varying degrees, financial issues related to competition, incentives for prudent behaviour, consumers' protection, the improvement of financial education and of corporate governance.

At the global level, on the occasion of the high level Summit of G-20 (Washington, November 2008), the Member Countries committed to an Action Plan which was reviewed at G-20 London Summit in April 2009. The Action Plan set recommendations in order to strengthen transparency and accountability, enhance sound regulation, promote integrity in financial markets, reinforce international cooperation and reform international financial institutions.

During the G-20 Summit which was held in 24-25th September at Pittsburgh (USA) the world leaders recognized that the process of world recovery and repair was incomplete, in many countries unemployment remaining unacceptably high and the private demand being still weak. As a consequence, they agreed further actions to assure a sound recovery from the global economic and financial crisis, between them: launching a Framework for Strong, Sustainable and Balanced Growth, setting timetables for the reform of global financial system, mainly by raising capital standards and ending practices that lead to excessive risk-taking, establishing the Financial Stability Board at the G-20 level, in order to coordinate and monitor progress in strengthening financial regulation. European leaders discussed also the idea of an EU institution charged with the coordinated financial supervision of capital markets in Europe (watchdog) getting some politicians express their concern about the functioning of the market economy, in terms of intervention measures and protectionist constraints, including the banking system. The powers of a new European Systemic Risk Board (ESRB) and European System of Financial Supervisors (ESFS) still have to be agreed upon and defined in detail. Despite the unity of action displayed by the European leaders, there is an impression that, in fact, each one is trying to minimize the negative effects on their own account, within their national space.

Considering the effects of the international crisis and viewing the persistence of the global financial imbalance, ECOFIN (2009) warned United States as concerns the need to increase the saving rate, fostering a gradual but major change in the global demand from regions which are recording current account deficits toward those with surpluses. In the context of debates on the re-industrialization of the United States and on returning to an export-oriented economic model, it is important to reveal that, in order to reduce the current account deficits, a key objective of the Obama administration is doubling exports of goods and services by 2015. Thus, under the National Export Initiative, an export council near the White House (which includes also top-managers of the largest United States companies) has been established, aimed at enhancing the trade missions, improving the access to financing (also by supplementing the Eximbank funds), removing the trade barriers and promoting the exports in emergent markets, with particular emphasis on China and Russia.

The anti-crisis programs launched by most countries have focused mainly on the injection of public funds in the banking and financial sector, bailing out entities with big liquidity problems (including the temporary takeover of their toxic assets) and, on policies for supporting the domestic demand (investment and / or consumption), as major driver of GDP, given the general compression of external demand. The massive intervention of the state in implementing these programs, which required a substantial increase in public spending, combined with lower budget incomes because of the economic downturn led to fiscal deficit widening and to public debt increase. It is estimated that, in advanced countries, where this state intervention came about into a larger extent, the public debt will reach 120% of GDP in 2015, compared to around 80% as recorded in the pre-crisis years.

Moreover, if in early 2010, the economic recovery appeared to have a high degree of certainty, the discussions focusing on the optimal timing of exit policies, at the middle of this year its sustainability was being questioned, the G-20 leaders meeting in Toronto in late June 2010 highlighting the confrontation between two diametrically opposed approaches: on the one hand, United States and some other countries which promoted further support for the economic growth, despite public debt increase and on the other hand, Germany (the EU flagship) which sustained austerity policies and fiscal consolidation, despite negative effects on the economic recovery. Failing to agree on a consistent formula for a new global financial regulatory framework, the world leaders, recognizing the priority of strengthening the recovery process and of creating the foundations for achieving a strong, sustainable and balanced growth, have reached, at least declaratively, a compromise solution as concerns implementing fiscal measures in order to ensure the public debt reduction by 2015 and to stabilize or reduce the public debt to GDP ratio by 2016.

As shown in recent IMF report on the world economy prospects (IMF, 2010) the success of fiscal consolidation is difficult to be expected without achieving a strong economic growth, so that advanced countries facing hard budgetary constraints and high level of the public debt are advised to undertake a tax reform, in the sense of policy responses aimed to encourage investments, increase the growth potential and improve the competitiveness.

In our opinion, without a radical reform of the global financial system, involving hard regulations (especially on international transactions and on financial derivative circuit) that eliminate the causes that triggered the crisis in 2007, the outbreak of a new crisis is anytime possible, with devastating effects at the planetary level, much more under the circumstances of the inability of full absorption of the current recession and instability costs, including unemployment and social problems.

It should be mentioned that in July 2010, after long debates in the Congress and Senate, a law quoted as being of historic importance, which brings the most profound changes in the United States financial system from the 1930s New Deal was approved. This complex law (more than 2300 pages) also known as "Dodd-Frank Wall Street Reform" aims to avoid triggering another financial crisis by strengthening of systemic risk supervision and monitoring, including the consolidation or creation of authorities/institutions/bodies in this respect, new regulations on companies too-big-to-fail (which will have to assume the costs of a possible bankruptcy), the introduction of more severe prudential standards and imposing limits on market concentration.

Other regulations, particularly on retail banking operations, consist in strengthening the financial products consumer protection, especially in terms of costs (fees and commissions) of these products which are to be standardized. An important segment of financial markets, derivatives, largely unregulated, which favoured the outbreak and spread of the international crisis, will be subject to strict supervision and transparency of transactions. Of course, as shown also by Lester and Bovenzi (2010), given the amendments of the law over the approval procedures, many of the regulations could prove unsustainable facing the financial markets realities and others, in the absence of their verification, may have unpredictable side effects.

The reality is that the economy of developed countries has been kept alive artificially, by its intubation to the future resources of the states (public debt), in many cases without recovering the health of the financial system and addressing the competitiveness deficit against emerging economies (especially China). Moreover, in addition to the risks of adverse developments in international markets of goods and services, there are new threats related to the excessive size of public debt in advanced countries, leading to the deterioration of sovereign risk.

As recently stated M. Portugal (2010), deputy director of IMF, unresolved issues related to fiscal and debt sustainability in the advanced countries, especially in Europe, can undermine their economic recovery and even threaten the global financial stability. The fiscal vulnerabilities of these countries fall under the incidence of sovereign risk assessment, firstly by their rating downgraded which lead to the increase in governmental bonds volatility and secondly by higher yield spread of these bonds which increased the costs of debt financing/refinancing. The deterioration of sovereign risk in some European countries has occurred as the direct effect of the crisis, because of worsened economic and social parameters, and as a result of increased public exposure to private risks by the state taking over of the debt of private companies or financial institutions.

Also, Das and others (2010), mentioning that the economic literature does not pay enough attention to examining the impact of sovereign risk on capital flows and on corporate market access, highlighted the finding that the situation of a country payment default lead to the exclusion of that country from the international private financial markets for an average of 5 years, the deviations from this average depending on changes in sovereign risk and in budgetary balance.

A retrospective overview of the financial crisis undertaken by Reinhart and Rogoff (2009) has revealed that from 1800 to 2006 there have been many historical periods characterized by sovereign debt crises, the most dramatic and extended effects being generated on account of the global conflagrations. They found that, however, other factors (the price of several goods and/or the interest rates in major countries) have played a role in crisis occurrence at sovereign level. In modern times, a factor constantly found in generating crisis is related to the precedence of large capital inflows, both at a country and regional or global scale. Thus, as shown by the cited authors, in periods of high capital mobility have repeatedly emerged international banking crises, as happened in the 1990s (in Latin America, Russia, Asia). Also, empirical tests for a number of 66 countries led to the conclusion that other factors related to sovereign debt crisis are the domestic public debt (with a major risk in case of exceeding 30% of GDP), high inflation (over 20% annually) in conjunction with currency crisis.

Manasse and others (2003) showed that the occurrence of sovereign debt crises can be predictable if the evolution of macroeconomic factors is closely examined, for example, a high level of external debt to GDP increasing the likelihood of entry into the payments default. However, even under the circumstances of a low level of debt, a country may have an increased risk of entering into the financial crisis if is facing liquidity problems or if the external environment is unfavourable. In the view of cited authors, other macroeconomic variables important for the predictability of crisis, are a slow GDP growth rate, current account deficits, a low degree of trade openness, inappropriate fiscal and monetary management and also political uncertainties (particularly in years the presidential elections are held).

As seen in a recent report issued by the international rating agency Fitch (2010), the most severe deterioration in public finances in the EU Member States has been in countries characterized by highly leveraged private sector, with the notable exception of Greece, where the main cause of the crisis was the bad management of the public finances and the loss of credibility in front of foreign investors. According to Fitch experts, the public debt to GDP ratio in EU-27 countries will increase from 70% in pre-crisis period to more than 100% in 2011, about one third of this increase being caused by the so-called fiscal stabilizers (including crisis responses) enabled during the recession.

Given that public finances are a key element of sovereign risk, on the other hand it was found that often the banking crisis occurs at the same time with sovereign debt crisis, both as its cause and / or effect.

The global crisis of 2008-2009 brought a major change from the perspective of a sovereign debt crisis, which was evaluated by now possible only in underdeveloped or emerging countries. The persistence of domestic debt, exacerbated following the impact of the global crisis has proved that advanced countries are not spared the risk of entering into a situation of payment default.

2. Theory and practice in assessing debt sustainability

In the economic literature, but also in the international practice there is some consensus on the idea that, in developing countries, depending on the efficiency of external loans / credits, reasonable levels of external indebtedness may help the economic growth by the accumulation of capital and by the productivity growth. On the other hand, the over-indebtedness, that is a high level of external debt on medium and long term, potentially unsustainable, can be a brake on technological progress of that country, having adverse effects on growth, the transmission channel being visible upon the public investment and the physical capital accumulation. An excessive burden of the external debt is acting in a vicious circle, i.e. the higher the degree of indebtedness the more complicated the process of economy financing becomes, including supplementary costs of debt refinancing, which finally could even lead to blocking the economic growth of that country and to slip into default.

Some studies have estimated that, for countries with an average degree of indebtedness, doubling the debt is reducing the annual growth by 1 percentage point in the long term (Pattillo and others, 2004).

The analysis of non-linearity in the relationship external debt-economic growth has pointed out that, at low levels of debt / GDP ratio, there is a positive influence on growth but at high levels of this ratio a negative impact has been revealed. The analysis of the data for a group of countries during 1968-1998, showed that the average impact of debt on GDP per capita growth becomes negative at levels of 160-170 percent of debt to exports ratio and of 35-40 percent of debt to GDP ratio. According to other studies (B. Clements and others, 2003), the negative marginal effects on growth start to occur at levels even lower of public and publicly guaranteed external debt, i.e. at 20-25 percent of GDP.

The over-dimensioning of debt is producing "overhang effects" on economic growth by discouraging investment (as level and structure) due to a possible threat of increasing taxes in the future, under the constraints of debt repayment obligations, which would affect the ex-ante efficiency parameters related to those investments (see Hennessy, 2004). The same effects can affect the macroeconomic stability because of the currency depreciation, of the fiscal deficit increase, of inflation and of uncertainties induced by the high level of indebtedness (Arnone and others, 2005).

Stopping or slowing debt growth as a form of external debt relief should be taken into consideration by the decision makers for the next years. This approach is totally in contrast with non-altruistic politicians and groups of interest concerned rather with their narrow and short-term objectives than with improving wellbeing.

The politicians are inclined to finance their short-term particular interest of re-election by booming the consumption or meeting the pressure of short-term requirements of the economy salvation.

The 200-year-old concept in economics of "Ricardian equivalence"[2] supported by a reduced but outstanding number of economists holds under certain conditions:

- the presence of the so-called altruist intergenerational decision makers who consider that a debt redistributes resources from future to current generation;
- the intergenerational transfer have not to be detrimental to future generation ;
- the existence of perfect capital markets which is not the case in our times of rapid changes;
- the presence of non-distortionary (lump sum) taxation (a distortionary taxation reduces incentives to invest or work, the level of distortions growing with the higher tax increase).

When most debt is denominated in foreign currency, higher levels of debt are generating constrains on the conduct of an independent monetary policy. The public debt management has to design policies aiming at reducing vulnerability of volatile capital markets, costly debt and financial crisis.

Although rising indebtedness is directly linked to the increase of default risk, some studies show that the debt level is not the crucial factor of sovereign debt risk (Manasse, Roubini and Schimmelphenning, 2003). The quality of national economy, of political and institutional bodies and of the governance is among the most important debt factors.

High debt levels are not associated with robust long-term growth in case high-return investment projects are not guaranteed. The complex interaction between economic growth and foreign debt has to be evaluated through the potential rate of investment returns. A higher investment return will generate a country's better off and the necessary means to repay the debt obligations.

The defining elements of a sovereign debt crisis scenario manifested as the situation of non-payment of due amounts at a given maturity are the downgrading of the country rating, the currency crisis, the calling for loans from the IMF, the foreign capital flight. Typically, this crisis is followed (sometimes preceded) by a restructuring or rescheduling of the external debt. The problems of external payments overheating is affecting also the private sector, limiting its access to the capital markets and raising the borrowing costs. On the other hand, neither of the pressures related to external payments could be without impact on economic growth on different time horizons.

[2] According to Ricardo a government's debt-financed tax cut is leading to higher taxes in the future meaning only a postponement and not a reduction in the overall tax volume

After 1990, when many emerging countries received access to the international capital markets, the risk that a sovereign debt crisis of a particular country to cause chain reactions has increased considerably, as happened in the case of Asian financial crisis in 1997-1998, when the effect of payment difficulties arising in Thailand have spread in almost all region. Wrongful government actions have reputation effects on confidence, affecting not only the sovereign debt, but also the international trade and investments, an entry in payment crisis inducing catastrophic effects on that country, as shown in the model of Cole and Kehoe (1998).

So, the main issue to prevent and avoid a payment crisis situation at sovereign level is to accurately assess **the risk of default**, respectively the debt sustainability. By sustainability, in this case, is understood an external financial situation of a country where foreign exchange resources are beyond the external debt service payments obligations. The longer the time horizon of the evaluation is which corresponds better to the purpose of analysis is, the more difficult it becomes, due to the multiplication factors of uncertainty.

Under the common framework of the IMF and World Bank methodology (IMF, 2008), the debt sustainability analysis, applicable for the public and highly indebted countries, is built on 3 pillars:

I. Analysis of debt dynamics and prospects of debt service in the context of a baseline scenario, the alternative scenarios and stress tests standardized. Alternative scenarios have in view the assessment of country's vulnerabilities to deviations from the baseline scenario and to various plausible shocks. Methodologically, the external debt covers only the long-term, is defined on the basis of residence and may include the domestic debt denominated in foreign currency (especially in the case of countries where its level is very high).

II. Debt sustainability assessment based on debt service in relation with measuring the ability to pay. Debt stock indicators provide a measure of the total future debt burden, estimated by measuring its present value at a certain discount rate and the ability to pay is measured by GDP, exports of goods and services and / or budget revenues. Debt service indicators (at present value, discounted at a constant rate) relative to exports, respectively budget revenues, is reflecting the burden of future payment obligations of a country, highlighting the risks of insolvency in the long term and providing an indication of the likelihood of locating in time of the liquidity problems. The perspective considered takes into account the debt maturity, which is of 10-20 years.

III. Recommendations on the borrowing strategy in order to limit the risk of payment problems, risk rated according to how the external debt present and future indicators are related to the thresholds of the base scenario, alternative scenarios and stress tests, thus:

- **Low risk**: all the indicators are well below the thresholds. If one indicator is above a certain threshold should be checked if it is a problem of sustainability;

- **Moderate risk**: when the base scenario indicates an exceeding of the thresholds and the alternative scenarios or stress tests show a significant increase in the level of debt service indicators on the projected period;

- **High risk**: base scenario indicates an exceeding of thresholds of debt and / or debt service, and alternative scenarios or stress tests also show an exacerbation of level indicators;

- **Statement of payment problems**: debt and debt service ratio are significantly above the thresholds; the existence of payments delays suggests that the country is in default, except when there are other reasons than the burden of debt service for which payments are not made.

Starting from the fact that sustainable levels of external debt are influenced by the quality of policies and institutions, to assess their performance the World Bank calculates CPIA (Country Policy and Institutional Assessment) Index on the 3 categories of countries (with strong, medium and weak policy), the final classification in the various categories of risk depending also on the score obtained on this index.

According to some opinions (D. Gray and others, 2008), traditional analysis of external debt sustainability, has a number of weaknesses due to the fact that a growth of the debt / GDP ratio does not necessarily mean an unsustainable debt dynamics. Moreover, the stabilization of the debt / GDP ratio is not sufficient if, for example, the level at which it stabilizes is too high (possibly unsustainable). Some studies have shown that the threshold of sustainability of external debt for the emerging countries ranges from 15-20 percent to 50-60 percent of GDP, whereas for the developed countries it can rise up to 350 percent of GDP, with an average of 85 percent (Reinhart and others, 2003).

The traditional approach does not take into account the level and the changes in public sector assets and liabilities that affect the sustainability of debt and does not consider also the international reserves level. In defining the macroeconomic parameters that determine the debt sustainability, it does not take into account the volatile nature of markets, and it is based on assumptions regarding the evolution of the economic growth, the real interest rates and the exchange rates. The markets volatility may increase both on account of political shocks and the exogenous shocks and a higher volatility in emerging countries compared with the advanced countries may be due to their limited ability to increase taxes and to their uncertain tax base. As Catao and Kapur (2006) pointed out, the external volatility of international trade has also a significant impact on the likelihood of payments default.

The experiences of many countries concerning the external debt sustainability suggests that, for monitoring the vulnerability to insolvency, currency and liquidity risks, analysing the debt structure depending on interest rates and currency composition is extremely important. It was noted that, for example, economies that have a higher share of debt with variable interest rate in the total debt are more vulnerable to sudden increases in interest rates. In recent years, fluctuations in exchange rates, especially of the U.S. dollar (in the sense of its depreciation) have created relevance problems concerning the level of the overall external debt denominated in a particular currency. Consequently, it considers that information on the composition by currency and interest rates are absolutely necessary for a correct assessment of debt sustainability, through an appropriate currency conversion, respectively by calculating a weighted average of interest due on that debt, respectively.

An appropriate public debt management requires consistent management of risks associated with debt portfolio, respectively refinancing risk (the inability to refinance debt or excessive increase its costs), currency risk (increase in foreign debt due to currency depreciation), interest rate risk (rise in interest on domestic or international capital markets), credit risk (bankruptcy of counterparts), the payment risk (errors in the payment system), operational risk (error of debt management system or human error, lack of appropriate procedures, lack of staff) and legislative risk (interpretation of the law).

The countries' responses to the crisis (including measures to increase public investments, tax relieve, financial packages supporting companies and / or financial and banking institutions with liquidity problems etc.) allowed, to a large extent, the absorption of the global crisis effects and the economic recovery starting with the last part of 2009. But the costs of these programs have a deep impact on the public debt, which, for example, in EU countries has increased, as a proportion of GDP, from 61.5 percent in 2008 to 73 percent in 2009, for 2010 being estimated to reach almost 80 percent. The case of Greece, which accumulated almost EUR 300 billion public debt (117 percent of GDP) at the end of 2009, became dramatic during the first months of 2010, without the financial assistance from EU and IMF, risking an exit from Euro-zone and even a sovereign debt default.

In the Euro Area is raising the concern about the contagion effects of the sovereign risk increase, due to similarity of fiscal vulnerabilities between different countries. The international rating agency Moody's, after successive downgrades of Greece sovereign rating in 2009 and early 2010, at the middle of this year, Moody's downgraded also the rating of Portugal and Ireland. On the account of linkages between the public sector and the banking system, considering the problems emerged recently in Spain, one could expect an increase in sovereign risk also in this case. In this context, it should be mentioned that EU decided to create its own rating agency as expression of its angry against the degrading of Greece rating into junk status by S&P, Fitch and Moody's, which led to the worsening of the debt crisis of this Member state, with reverberations throughout the Euro Area, threatening also the future of euro.

In order to prevent the occurrence of sovereign debt crisis, the Euro Area countries agreed in June 2010 on creating the European Financial Stability Facility (EFSF), a special purpose vehicle which may borrow up to EUR 440 billion to Member States in difficulty, becoming operational in September 2010 and contributing to the financial rescue package for Greece (EUR 110 billion over a period of three years).

3. Romania's vulnerabilities and the increase in financing requirements

The global crisis has severely affected the real economy, in 2009 the gross domestic product of Romania falling by 7.1 percent compared with 2008. The exports fell by almost 14 percent and the imports by 32 percent. The manufacturing sector, whose main branches are under the majority control of foreign capital and subsidiaries of multinational corporations, being more exposed to international markets, witnessed a 6.5 percent contraction. Constructions and retail trade registered also a sharp decline (more than 15 percent and respectively 10 percent) in comparison with their "boom" in previous periods. The financial sector recorded a significant fall (more than 5 percent). Even bankruptcies of banks did not emerge the lending activity entered a deadlock.

The financial framework of Romania, both internal and external, deteriorate under the pressure of the state budget widening due to diminishing revenues and rising public sector expenditure and of the decline of foreign exchange incomes due to the falling exports.

The biggest challenge for the prospects of Romania's development is related, in our view, to the sustainability of the external financial situation revealed by the evolution of external debt both on short term and medium and long term (see Table 1).

Under the circumstances of falling contribution of the autonomous flows (foreign direct investments) for covering the current account deficit and the increase of compensatory flows (external loans), the medium and long term external debt of Romania has risen more than three times over the last six years, exceeding EUR 51.7 billion at the end of 2008. The short-term external debt has increased even faster, almost seven times in six years, mainly due to the boom in imports and consumption credit. But an excessive rise of the short-term external debt put great pressure on the currency market, risking a crash of the national currency in 2009.

Table 1

The short, medium and long term external debt of Romania in the period 2003-2009

- EUR billion -

External debt	2003	2004	2005	2006	2007	2008	2009
TOTAL	**18.4**	**21.5**	**30.9**	**41.2**	**58.3**	**72.4**	**80.1**
- short term	2.7	3.2	6.3	12.6	19.8	20.6	14.6
- medium and long term	15.7	18.3	24.6	28.6	38.5	51.8	65.5

Source: National Bank of Romania, Interactive Databank.

On the other hand, the accumulation of a large foreign debt in the medium and long run, accompanied by high levels of annual services, weakened the international position of Romania, undermining its sustainable development. The medium and long term external debt of Romania continued to grow in 2009, mainly due to the loan from IMF and other international organizations, reaching EUR 65.5 billion at the end of December.

To deal with the financial difficulties in 2009, stressed by the consequences of the global crisis, Romania has concluded a financing agreement for a two-year loan of EUR 20 billion with IMF, EU, EBRD and World Bank, under the conditions of reducing the budget deficit and freezing wages in the public sector. Regarded as a "safety belt", the loan was intended to support the budget deficit and economic activity, to maintain the euro-lei exchange rates at sustainable levels for the economy and population and to boost the recovery of lending activity. The financial assistance and the economic policies are supposed to cope with liquidity pressures in the short term, to improve competitiveness and to redress the macroeconomic and financial imbalances.

The real causes of the accelerated increase in Romania’s external financing requirements are related to growing vulnerabilities of the financial situation which resulted from macroeconomic imbalances deepening, particularly the savings-investments balance, from pressures on external balance of payments emerged in recent years due to the deterioration of the current account and to the widening of trade deficit. The excessive increase in domestic private credit for consumption has fuelled the massive increase of imports, mainly in 2007 and 2008. At the same time, reducing the relative contribution of foreign direct investment to financing the current account deficit has lead to the increase in the short-term and medium-long term external debt, mostly in the private sector (including banks).

The deterioration of the current account during the last years is also explained by the slowing of current transfers from the Romanians working abroad and the increase in the income balance deficit, especially due to growing profits repatriation and/or reinvested by the foreign companies and also to increased interests related to the external debt. All these were accompanied by a modest rate of EU funds absorption in the first years of accession (about 10 percent), despite its relatively low level of development, Romania being a net contributor to the EU budget, for several years.

The gross financing requirements for 2009 estimated by the IMF and the National Bank of Romania, stood for EUR 44 billion, from which a financial gap of around EUR 12 billion has resulted to be covered by an external loan, was not adequately sustained in our view, at least according to published - sometimes contradictory or confusing - information.

For example, the estimation for foreign direct investments, respectively EUR 3.5 billion in 2009, has proved to be under-sized, compared with the previous year (EUR 9 billion) and also with the real amount of FDI registered at the end of 2009 (EUR 4.9 billion).

In our opinion, under the circumstances of many uncertainties in the international environment, which could have assumed also the rebound of the world economy since 2010, a financing agreement over a shorter period would have been more appropriate. In case the pessimistic assumptions on the Romanian economy would have been confirmed, an extension of this agreement could have been negotiated. However, a much more advantageous financing solution for Romania, as an EU member state, would have been the qualification for obtaining a credit line on 6 months or one year from FCL ("Flexible Credit Line"), a funding modality initiated by the IMF in the month of March 2009 replacing SLF ("Short Term Liquidity Facility"). This new credit line is released for the prevention of crises in countries with very strong fundamentals, policies, and track records of policy implementation, which is not totally the case of Romania.

In fact, in our view, the logic of the agreement with the IMF was based on monetary coordinates designed inside the National Bank of Romania perimeter. Starting with the top priority of Romania's accession to the Euro aria in 2014 and thus of its entry into the ERM II (Exchange Rate Mechanism) in 2012, the strict conformity to convergence criteria (in particular those on inflation, nominal interest rates on long term and exchange rate) has become the fundamental objective in the medium and long run.

The threat of a possible collapse of the national currency in the spring of 2009, due to internal and external pressures accumulation doubled by the lack of immediate liquidity of assets in which the international reserves of Romania have been invested and also by the reduction of the minimum reserve requirements on foreign currency liabilities of the commercial banks could have triggered an uncontrolled inflation, missing the target of joining the Euro area.

The inconsistency of tax and fiscal policies and of high budgetary expenditures level in 2008 has worried the monetary authorities of Romania, but also the European Commission. Under these circumstances, the central bank has been forced to resort to international arbitration for imposing the national fiscal discipline under a multilateral financing agreement: IMF, EU, EBRD and World Bank.

The Stand-By Arrangement with the IMF brought a number of positive expectations for Romania, implementing the necessary fiscal and monetary policies, including the fiscal discipline, ensuring the macroeconomic stability in the context of conditionality and performance criteria, improving the perception of foreign investors, stabilizing the foreign exchange market, ameliorating the predictability, sustainability and coherence of economic policies, supporting the banking sector and its strengthening, including the recovery of the lending activity, both for businesses and population.

Beyond these expectations, there are also several risks arising from the agreement with the IMF, such as creating a negative image regarding the financial situation of Romania, which would make a "bailout" necessary, limiting the government room of manoeuvre in the implementation of various economic policies, including the predictable reduction of the budget allocation in accordance with national priorities, such as infrastructure development, export promotion and environment protection. The loan of about EUR 20 billion will push the external debt towards excessive levels, with annual services potentially unsustainable in the medium and long run. The social effects generated by the loss of jobs, accompanied by the non-indexation of wages and pensions, can have adverse economic costs that are difficult to estimate. Any non-conformation of Romania to the conditions and performance criteria specified in the agreement, which involves postponements or worse, cancellation of the next instalments, could lead to adverse effects on the economy, including on the prospects of sovereign risk.

A weak point of the procedures backing the agreement with the IMF stood for the lack of an alternative, for example compared with a loan from another country and/or with a launch of Romanian government bonds on national and international capital markets, considered too restrictive a priori. In this context, the comparative terms of loans could have been made known, so that one can be sure that the most advantageous borrowing alternative has been chosen. In this way, speculations around the conditionalities imposed by IMF and the confidentiality of certain clauses of the agreement could have been avoided, more under the circumstances of increasing the financial system transparency, considered as a primary remedy for its recovery.

According to the first review of Stand-By Arrangement, the report of IMF staff team, following discussions with the Romanian authorities ended at mid-August 2009, underlined the contraction of economic activities sharper than projected, due to the combination of an unfavourable external environment and faster retrenchment of domestic demand during the first half of 2009. The IMF experts brought many significant corrections to the macroeconomic framework projected 6 months before, confirming our doubts previously mentioned regarding their adequacy. For instance, the new figure for the gross financing requirements stood for EUR 41.5 billion (instead of EUR 44 billion) for 2009, respectively EUR 2.5 billion less, following the corrections of current account deficit (down from EUR 9 billion to EUR 6.5 billion).

The total financing resources were revised from EUR 32.2 billion up to EUR 34.5 billion, mainly due to the corrections of net foreign direct investments estimation from EUR 3.5 billion to EUR 5 billion. The most significant change suffered the estimates for the increase of gross international reserves - rather an adjustment parameter - respectively from 0 to EUR 4.5 billion, which made the external financial gap (EUR 11.5 billion instead of EUR 11.8 billion) to remain almost the same, justifying in this way the amount of the loan from the IMF and other international organizations.

4. The assessment of Romania's public and MLT external debt sustainability

For Romania, the issue of appropriate management of debt, both internal and external, has become of acute importance in recent years, which witnessed a sharp growth of indebtedness on the one hand, on the account of considerable budget deficits accumulation and on the other hand, due to the direct effects of the global crisis, which reduced foreign exchange earnings from exports and caused a decrease in FDI inflows, making difficult the financing of the economy and imposing a massive sovereign borrowing.

First, we will examine the evolution of the public debt main indicators, trying to assess its sustainability. According to a report of the Ministry of Finance, in the period 2000-2009, the total public debt (government and local authorities, internal and external, including state guarantees) rose more than three times in real terms, reaching about 30 percent of GDP at the end of 2009 (see Table 2).

Even if this parameter is below the limit set by the Maastricht Treaty (i.e. 60 percent of GDP), the fact that in just 4 years this share has almost doubled in the case of Romania, is a warning signal to the authorities, considering also an unfavourable internal economic context, which would rather suggest a further increase of the sovereign debt. It is worth mentioning that another indicator of public debt is deteriorating, the ratio between the debt and the exports of goods and services exceeding 100 percent in 2009 and falling already, according to international standards, in the area of a moderate risk of sustainability problems.

Table 2

Indicators of Romania's public debt sustainability in the period 2001-2009

Indicators/Years	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**
Public debt (as percentage)									
- in **GDP**	28.7	28.9	26.0	22.5	20.5	18.4	20.3	21.8	30.1
- in **Exports of G&S***	80.0	73.1	68.7	64.2	60.6	59.6	61.9	64.9	102.5

*For 2009, own estimation

Source: For 2001-2008, *Public Debt Report* (in Romanian Language: *Raport privind Datoria Publică)*, Ministry of Finance, June 2009; for 2009, data from *Public Debt Bulletin*, Ministry of Finance, December 2009.

As we previously noted, in order to relieve the public debt sustainability, of crucial importance proves to be the examination of debt portfolio structure, from data on Romania resulting that **the main tendencies reflect a deterioration of its prospects**. Thus, in terms of currency composition, it is noteworthy that, since 2007, when the public debt denominated in lei, with a total share of 53.2 percent, has exceeded for the first time the public debt denominated in foreign currencies, especially on the account of increased needs for budget deficit financing, which happened also in 2008 and 2009. Although, in principle, this could be interpreted as a positive trend due to containing the currency risk, paradoxically, the financing costs in national currency were extremely high, especially due to rising inflation expectations. The government bonds were issued with a 10 percent annual interest, this high level being fuelled also by the volatility on international capital markets.

On the other hand, changes in the structure of public debt by type of financial instruments reveals the effects of the application by the Ministry of Finance of a strategy aimed at **extending the issue of government bonds and of their maturity** (on 10, 12 and even 15 years), which intends also to relax the timetable for repayment. In the structure of debt by type of interest rate, there was a **downward trend of the share of debt with fixed interest rate** (to about 30 percent in 2009) and the corresponding increase of the share of debt with **variable interest rate**, which may affect in perspective the public debt sustainability, especially in the case of an unfavourable evolution of financing costs.

If the evolution of debt structure on categories of creditors is considered, it is worth mentioning that the main and growing share (reaching over 80 percent in

2009) is held by private banks and other private creditors, this tendency being sustained also by the structural changes in debt public on type of financial instruments which we have been previously noted. As some studies pointed out (Flassbeck and Panizza, 2008) this category of creditors have also the highest risk in terms of the MLT debt sustainability (i.e. the likelihood of payment problems occurrence at sovereign level).

In conclusion, it can be said that in recent years**, there has been a rapid deterioration of the public debt sustainability parameters in Romania, including of the loan portfolio structure**. The main factor leading to the increase in the domestic debt was the budget deficit accumulation, and respectively, of the foreign debt rise, due to the borrowing from international organizations (IMF, EU, World Bank). It is worth mentioning that the external credit was partially used to finance the deficit budget, but also in order to support the currency market and the national currency exchange rate. If the measures agreed in the Stand-by agreement will bring the expected results, turning back under control the consolidated budget deficit, we think that there are not major risks in the short term as concerns Romania's public debt sustainability.

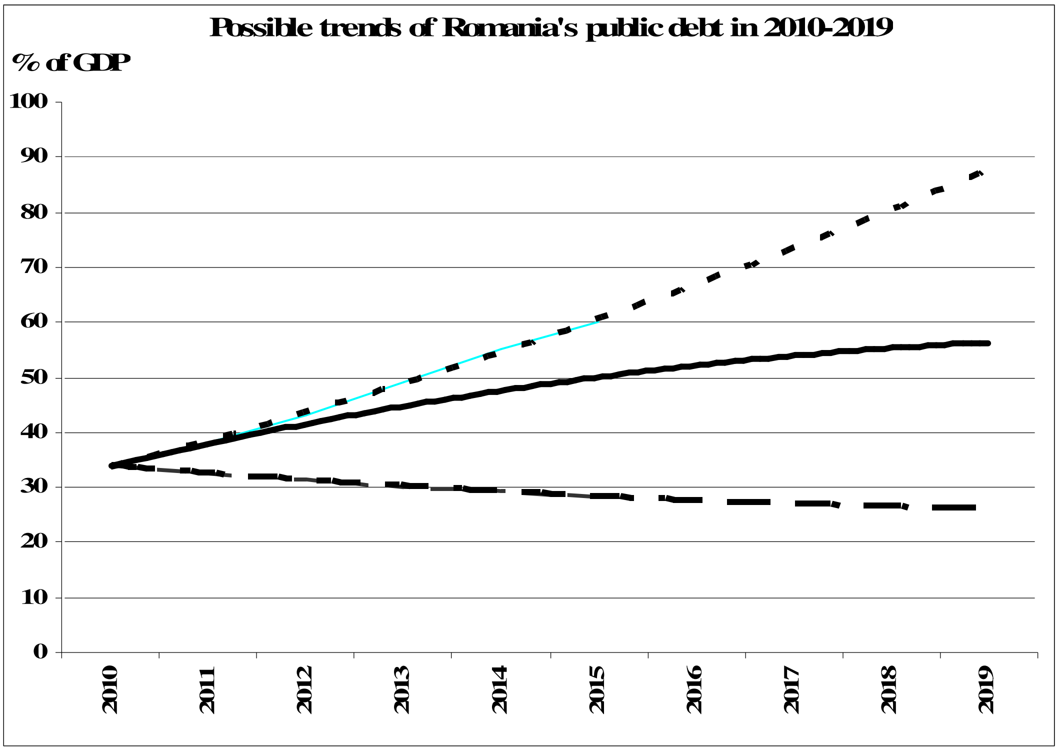
On medium and long run, as estimated by the IMF (2010b, p. 34) in the scenario with key variables (including real GDP growth, real interest rate and primary balance in percent of GDP) at their historical averages, the gross public debt (excluding state guarantees) is foreseen to decrease to 28.3 percent of GDP in 2015, while in the scenario with no policy change (constant primary balance) an increase to 50.1 percent, both alternatives remaining on sustainable path (bellow the Maastricht threshold of 60 percent, even on 2020 time horizon, *caeteris paribus*).

For 2010, while initially a slight economic recovery was foreseen, at mid-year, taking in account the results in the first months, the forecast was revised downwards, a fall in GDP of around 2 percent being expected in this year.

It should be noted that, in Romania, not the financing of anti-crisis measures - in fact, almost nonexistent - has caused the fiscal deficit widening, but rather the covering of the financing needs of an overstaffed public sector and of supporting the social security budget. Moreover, the poor management of the public finances has led to partially blocking the economy through the arrears increasing, respectively payments delays to the companies, which generated a chain reaction.

Under these unfavourable circumstances, instead of maintaining the public debt on a sustainable path as IMF projects (between 30 percent and 60 percent of GDP), the trend of debt sustainability could take another course in Romania, as seen in Figure 1. Thus, we think that delays in economic recovery and budget consolidation could lead, while maintaining the current pace of the public debt deterioration, to exceeding the critical threshold of 60 percent of GDP in only 4-5 years, i.e. just in a period in which Romania is preparing to join the Euro area.

Figure 1.



_ _ _ _ **IMF Scenario** (key variables at their historical averages)
______ **IMF Scenario** (no policy change)
- - - - - **Possible alternative trend** (under unfavourable circumstances)

In terms of country risk analysis, the debt sustainability assessment should be consistent also with that of the total foreign debt, which, in the case of Romania, experienced a dramatic evolution over the past decade.

According to its structural configuration, the Romanian economy development is dependent on imports, implying the deterioration in the trade and current account balances, more pronounced with the growth rate is higher.

As mentioned before, the external debt on medium and long term increased from a level below EUR 10 billion in 2000 to EUR 65 billion at the end of 2009. At the same time, the short-term external debt increased from a level below EUR 2 billion in 2000 to over 20 billion EUR in 2008, followed by a decline to about EUR 15 billion at the end of 2009.

In this study we are focusing on the long term sustainability of the external financial framework, which does not mean that the short term external debt sustainability is less important.

Our main reasons are that, on the one hand, methodologically, one could not analyse the merger of medium and long term debt with the short term debt, because of their different nature, and on the other hand, if a short term external balance could be, more or less, easily adjusted, on long run the correction becomes much more difficult, which is requiring another approach.

Starting from the fact that the short-term external debt is predominantly related to the trade receivables, with limited influence on overall long term financial situation of a country, bearing however in mind that Romania has felt acutely the short term debt pressures on the currency market in the spring of 2009 - which partially motivated the external multilateral financial assistance - we will continue our analysis focusing on MLT external debt, seeking an assessment of its sustainability.

As it can be noticed in the data presented in the Table 3 and 4, **the main parameters for assessing the sustainability of the MLT external debt recorded an unfavourable trend in the period 2000-2009,** being currently at the limit or beyond the threshold of sustainability.

Table 3

Indicators of external financial framework of Romania in the period 2000-2009

Indicators/Years	2000	2004	2005	2006	2007	2008	2009
MLT External Debt (EUR bn)	9.6	18.3	24.6	28.6	38.5	51.8	65.5
MLT External Debt Service (EUR bn)	2.2	3.8	4.8	6.1	7.5	12.1	11.4
Gross Domestic Product* (EUR bn)	40.2	60.7	79.7	97.8	123.6	136.8	117.0
GDP real growth (percent)	2.1	8.4	4.1	7.9	6.2	7.1	-7.1
Exports of Goods &Services (EUR bn)	13.2	21.8	26.4	31.4	36.5	42.4	36.0
Forex Earnings (EUR bn)	14.7	25.5	31.7	38.7	46.1	53.4	43.8
Forex Reserves (EUR bn)	5.2	13.1	18.3	22.9	27.2	28.3	30.9

* For 2009, estimation of the National Commission for Prognosis

Source: National Bank of Romania, National Commission for Prognosis.

The thresholds proposed by us are indicative, their setting having in view the vulnerabilities of Romania in conditions of crisis, considering only partially the international standards (mainly, of the rating agencies). Also, we specify that they represent more a zone delimitation (in the sense of warning levels under the circumstances of maximum caution) and less a qualification assessment scale.

The MLT external debt to GDP ratio increased from 23.9 percent to 37.6 percent in 2008, making a sharper leap in 2009 when this ratio reached 54.9 percent, it is true that under the circumstances of a GDP contraction by more than 7 percent this last year.

Table 4

Indicators of Romania's MLT external debt sustainability in the period 2000-2009

- percent -

Indicators/Years	2000	2006	2007	2008	2009	Threshold
External Debt /GDP	23.9	29.2	31.1	37.9	56.0	**50.0**
External Debt/Exports G&S	72.7	91.2	105.5	122.2	181.9	**150.0**
External Debt/ Forex Earnings	65.3	73.9	83.5	97.0	149.5	**100.0**
Forex Reserves/External Debt	54.2	80.0	70.6	54.6	47.2	**50.0***
External Debt Service/Forex Earnings	15.0	15.8	16.3	22.7	26.0	**20.0**
External Debt Service/Exports G&S	16.7	19.4	20.5	28.5	31.7	**30.0**
External Debt Service/Forex Reserves	42.3	26.6	27.6	42.8	36.9	**40.0**
Forex Reserves/GDP	12.9	23.4	22.0	20.7	26.4	**25.0***

*Minimum threshold

Source: Calculations based on Table 3 data

Compared with the foreign exchange earnings, in our opinion, the most important indicator as sustainability prerequisite, the ratio of MLT external debt rose above the threshold of 100 percent in 2009 and compared with the exports of goods and services the ratio stood well above the threshold of 150 percent. In this context, it should be noted that the export sector in Romania was one of the most affected by the global crisis in 2009, which had a direct impact on the decrease of foreign exchange earnings in this year.

Even the proportion of international foreign exchange reserves in GDP increased from 12.9 percent to over 25 percent in the period under review, compared with the external debt, they felled for the first time below 50 percent in 2009.

Regarding the international reserves it should outlined, however, that their lack of immediate liquidity, in the case of Romania, implies a certain deficit of their relevance in the analysis of external debt sustainability. These reserves are largely invested in government bonds issued by developed countries (including the Treasury of USA), with an uncertain market value under the circumstances of international financial crisis and the volatility of capital markets.

The ratio between the external debt service and the foreign exchange earnings reached 26 percent in 2009 (compared with 15 percent in 2000) and in relation to exports of goods and services it increased continuously during the considered period, reaching more than 31 percent in 2009. It is also noteworthy that the external debt per capita increased from only EUR 427 in 2000 to more than EUR 3000 in 2009, which represents already a significant debt burden upon the population of Romania and of its future generations.

The analysis of the indicators in terms of average annual growth rate during 2001-2008, respectively 2001-2009, revealed that **the degradation of the MLT external debt sustainability** parameters has been caused by the exceeding of the external debt rate (23 percent annually), compared with the GDP real growth rate, respectively by about 17-18 percentage points, and the export of goods and services and forex earnings, by about 8-10 percentage points respectively (see Table 5). The comparison between the two periods of analysis has revealed that, although the year 2009 did not change the trends, it produced a shock upon the data series, especially concerning exports and forex earnings, with a differential of about 4 percentage points between the two average annual growth rates.

Table 5

Average annual growth rate of some indicators of MTL External Debt Sustainability

- percent -

Average annual growth	2001-2008	2001-2009
MLT External Debt	23.4	23.8
GDP real growth	6.2	4.6
Exports of Goods & Services	15.7	11.8
Forex Earnings	17.5	12.9

Source: Calculations based on Table 3 data

The external debt of Romania was by far the indicator that has registered the highest growth rate during 2001-2009, compared with other outcome indicators such as GDP, exports and foreign exchange earnings. The ratio between the average growth rate of external debt and the average growth rate of GDP, exports and forex earnings was much higher during 2005-2009 than during 2001-2004, which relieve an unfavourable trend taking into account also the circumstances of international crisis (see Table 6).

If this trend is going further it can bring growing difficulties and pressures generated by Romania's external debt repayment upon economic growth, investments and welfare.

Table 6

The ratio between the average annual growth rate of MLT external debt and those of GDP, exports of G&S and forex earnings of Romania in 2001-2009

Indicators	2001-2009	2001-2004	2005-2009
MLT external debt /GDP	5.17	2.87	8.35
MLT external debt /Exports of G&S	2.02	1.31	2.75
MLT external debt /Forex earnings	1.84	1.18	2.54

Source: Calculation based on Table 3 data.

Such gaps on the horizon of one decade reveals that the external financing attracted on medium and long term have not generated major technological changes to ensure sound economic structures and a healthy growth, these vulnerabilities of Romania becoming obvious in 2009 by the lack of resistance to the global crisis impact. In this context, it should be noted that the main component of MLT external debt was the private sector, whose share within total debt increased from about one third in 2000 to over two thirds in 2008. In 2009, under the circumstances of the foreign debt increase mainly due to the IMF loan (EUR 6.6 billion), plus the increase of non-resident deposits to over EUR 7 billion, this share has declined somewhat, below 60 percent.

Therefore, in the case of Romania, the accumulation of external debt mostly by the private sector has failed, at least for now, to generate effects ensuring a sustainable economic growth. Perhaps, this was due to the fact that, to a significant extent, the investments in this sector had a speculative component, focusing on the real estate, the secondary capital market, the banking sector, including non-resident deposits searching for the valuing the interest rate differential on the primary capital market.

In assessing debt sustainability, several methodological issues have to be considered, including the ones that show an undervaluation of the debt size comparing with the official data. The world economy globalization, which favoured the liberalization and acceleration of goods and capital international flows, has been accompanied by the creation of significant statistical discrepancies, including external debt figures. In fact, **Romania's foreign debt is greater than appears in the records of the National Bank of Romania (NBR),** one of the explanation relying on the financing of Romanian companies (many with foreign capital majority) directly from foreign banks located abroad, which are beyond the international financial flows registered by the NBR. Although some of this financing are short-term loans (up to one year) others, more difficult to assess, but anyway amounting to several billion of euro annually, have a maturity of more than one year, belonging then to the Romania's total foreign debt.

Moreover, as specified in NBR statistics, the MLT external debt represents its stock in a given moment, not including all payments related to the debt repayments (interests, fees, penalties, etc.). Under the circumstances of missing information on foreign debt repayment schedule, if we add also the cross-border loans directly to Romanian companies that we have been mentioned before, it become obvious that, in reality, the payments related to the external debt are significantly higher than results from the official data. As a consequence, Romania's international financial position appears to be extremely fragile, remaining vulnerable to a rapid deterioration of the sustainability parameters under the spectrum of possible future shocks, the sovereign risk topping rather the speculative area, as anyway our country is qualified by the major rating agencies.

Assuming a desirable good governance by implementing of appropriate economic, fiscal and monetary policies, supported by restoring the confidence of business environment, including substantial investments inflows, re-launching sectors with foreign exchange earnings potential (ITC, tourism and agriculture) able to help boosting the economic growth in a manner that would limit the MLT external debt increase, Romania could ensure the financing requirements mostly through its own sources, as an essential precondition for achieving the external debt sustainability. To the extent to which other indicators recover up to sustainable levels, one may hope that Romania is getting out of the significant risk of external payments problems in the time horizon of Euro Area accession. The external debt perspective under these circumstances based on IMF projection (2010b, p. 34) was estimated according to the regression equation (Figure 2):

$$Y = -0.2763\, x^2 + 9.107x - 10.135 \qquad (1)$$

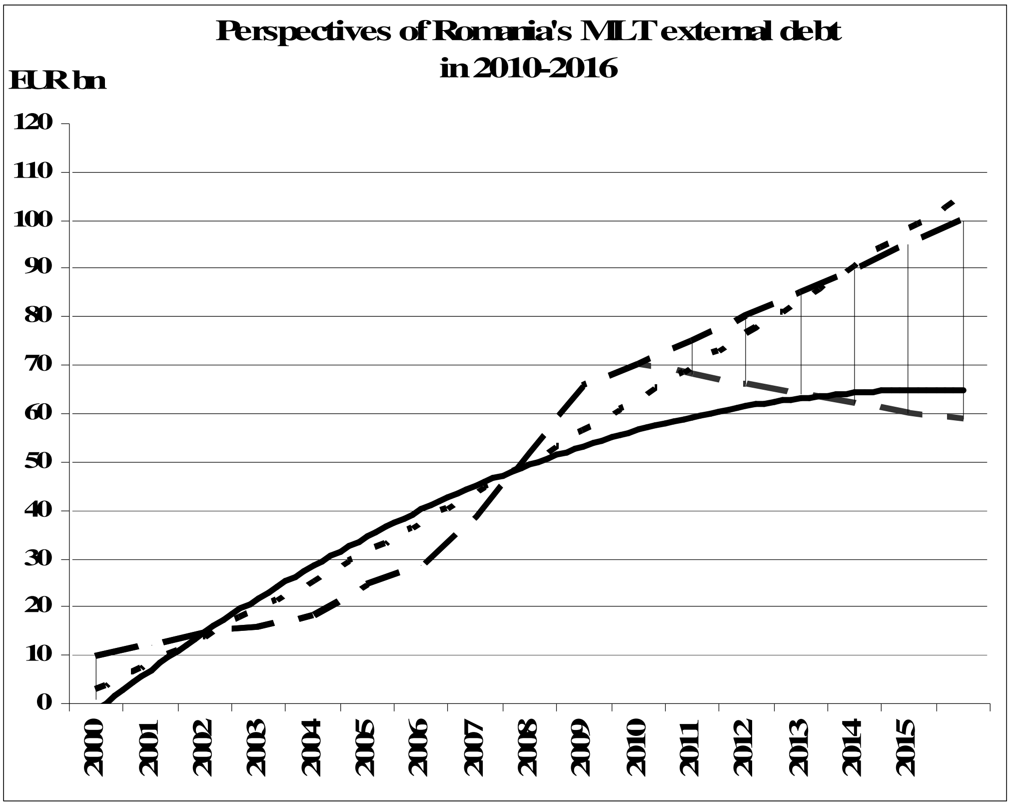
where Y represents the MLT external debt and x represents the time (years 1, 2…16).

In the case when for various reasons a correction of the MLT external debt trend is does not happen, Romania’s external payments sustainability could significantly deviate from the IMF scenario. This alternative is more likely if pressures of the domestic debt accumulation due to the delay in the public sector adjustment are added and the international context remains adverse. Under these unfavourable circumstances, a possible alternative trend of the MLT external debt was estimated according to the regression equation:

$$Y = 0.0677\, x^2 + 5.1824x - 2.3324 \qquad (2)$$

As seen in the Figure 2, the MLT external debt sustainability would remain in the significant risk zone, i.e. of payment problems occurrence and of slippage in a financial crisis.

Figure 2.



______ **IMF Scenario**

\- - - - - **Possible alternative trend** (under unfavourable circumstances)

_ _ _ _ **Series of MLT external debt** (from 2010, the interval variation between IMF Scenario and the alternative possible trend)

Considering that most of external debt belongs to the private sector and this is relieving the government and the central bank decision makers of any obligation in the appropriate management of sovereign debt risk would be a fatal error for Romania. Due to ST and MLT external debt inter-connections (which became obvious during the Spring of 2009, when the government had to borrow from international organizations in order to cover a huge demand, mostly private, on the foreign exchange market managed by the central bank) and to the financial links between private and public sectors (bailouts of strategic private companies by the government, arrears in public works payments, accumulation of nonperforming loans in retail/corporate lending) huge debt services without foreseeable own sources of gap financing if the economy is not recovering to the extent of expectations create a heavy perspective of debt rollovers under more and more unfavourable conditions and implicitly on Romania's external debt sustainability and sovereign risk increase.

6. EU structural funds, a pillar of debt sustainability?

The structural funds (including of cohesion) allocated to Romania from the EU budget for the programming period 2007-2013 are amounting to EUR 19.2 billion, plus national co-financing (state budget, local budgets and private sector), amounting to around EUR 9 billion. The EU structural funds are implemented through five Sector Operational Programs (i.e. SOP, for: Transportation EUR 4.5 billion; Human Resources Development EUR 3.4 billion; Increasing Economic Competitiveness EUR 2.5 billion; Administrative Capacity Development EUR 208 million; Environment EUR 4.5 billion), Regional Operational Program (ROP, amounting to EUR 3.7 billion) and Operational Program for Technical Assistance (amounting to EUR 170 million).

Out of the total structural and cohesion funds allocated to Romania for the period 2007-2009, Romania's allocation stood for EUR 5.64 billion (representing about 24.14 billion lei). According to the official data of the Authority for Coordination of Structural Instruments (see Table 7), by the end of December 2009, payments made to beneficiaries (reimbursements) amounted to 2.5 billion lei (around EUR 600 million), which means an EU funds absorption rate of 10.3 percent, respectively a very low level.

It should be noted that during nearly 3 years, in which Romania has contributed with more than EUR 3 billion to the Community budget, our country has managed to absorb only EUR 0.6 billion from EU structural funds, the status of net contributor (in a very unfavourable rate, i.e. of 6 / 1) is paradoxical for a country that has to catch up a significant development gap, whose time horizon seems to be removed.

Within the operational programs structure, whether SOP Increasing Economic Competitiveness has registered an absorption rate of more than 16 percent, in the case of SOP Human Resources Development the absorption rate stood for only about 6.5 percent. The SOP Transportation, which in terms of funds allocated is the most important, was not able to absorb more than 2.4 percent. Out of the 14,890 total projects submitted were approved only 3,888, i.e. only 1 out of 4, which is far from the expectations. Out of the 7 operational programs, the OP Regional, SOP Increasing Economic Competitiveness and SOP Human Resources

Development concentrate about 94 percent of total approved projects, while compared to submitted projects for these programs the ratio is still 1 / 4.

Table 7
Structural fund absorption rate in Romania at the end of December 2009

Operational Program	EU Allocations 2007-2009 (Lei mil.)	Reimbursed EU Contribution (Lei mil.)	Absorption Rate (percent)	Number of projects*		
				Submitted	Rejected	Approved
Regional	5029.4	790.0	15.3	3110	916	715
Environment	5511.9	777.7	14.0	141	48	64
Transportation	5595.1	134.5	2.4	41	6	20
Increasing Economic Competitiveness	3124.7	513.7	16.4	5386	2069	1264
Human Resources	4260.4	286.2	6.5	5250	3329	1691
Development of Administrative Capacity	381.5	6.1	1.6	931	152	111
Technical Assistance	241.1	3.0	1.2	31	8	23
TOTAL	**24144.1**	**2511.3**	**10.3**	**14890**	**6528**	**3888**

*The difference between the projects submitted and rejected/approved is represented by the projects under assessment procedures.
Source: Press release regarding the *Situation at 31st December 2009 of projects submitted and approved, of contracts signed and payments reimbursed to beneficiaries,* ACIS, January 19, 2010.

The causes of this situation are multiple, starting from the endemic inability of potential beneficiaries to develop viable projects, the excessive bureaucracy of management authorities, the excess of zeal following the procedures, the long time and delays throughout evaluation - approval - signing financing contract - tendering - reimbursement - implementation, the lack of performance criteria for consulting firms, the deficiencies in contractual relations between different institutions at the central and local level, between them and the consulting firms, respectively the project beneficiaries etc.

During the year of crisis 2009, when the absorption of structural funds was supposed to be the priority no. 1, as included in the new government program, the absorption rate remained as low.

Although an inter-ministry committee for the management of EU funds was set up in the beginning of 2009 under the Prime Minister coordination, with a weekly periodicity of meetings, in time, they became more rarely, until their complete disappearance during the summer.

We can say that government authorities, including the line ministries with responsibilities in managing the structural funds did not meet their commitments and obligations, the weak measures taken or declared failing to attract and absorb these funds.

Furthermore, instead of having the structural funds support the development projects that contribute to mitigating the effects of economic crisis, it was their low absorption rate that blocked the development of many projects, due to the financial deterioration of eligible parameters of economic agents.

Also, the insufficient co-financing from the state budget (central and / or local) was caused by growing deficits. The large uncertainty degree of obtaining projects pre-financing from the banking system, which restricted credit conditions and increased its costs, changing the ex-ante financial parameters projects (calculated in lei) on the account of sharp domestic currency depreciation, led to the increased costs of implementation. All these were overlapped by the political crisis triggered in the autumn of 2009, which caused an institutional deadlock at the central and local government levels, including the Managing Authorities of European funds.

We believe that, in the prospective of the years 2010-2013 the absorption of EU structural funds, including the recovery of allocations from previous years, is one of the pillars of the strategy to exit from the crisis. Regardless of the government political colour, the Romanian authorities have to make operational this key priority by decisive actions in order to remove blocking factors, many of whom are mentioned above.

As far as our country will succeed to attract structural funds, in addition to project implementation effects on the real economy, they may contribute also to the recovery of Romania's external balance, directly by reducing the financial gap, but also indirectly by increasing the financial resources (of state and private sector), implicitly to the payment of outstanding debt.

Under the circumstances of public deficit worsening and of budgetary constraints following the global crisis impact, both at EU and national levels, a review of operational programs is expected, which could add supplementary difficulties in increasing the structural funds absorption rate in the case of Romania.

7. Concluding remarks

The factors of debt sustainability are multiple, involving an adjustment of the economy not only by eliminating the weaknesses demonstrated by the inability to absorb the global crisis adverse effects, but especially those that have remained for long.

In our opinion, Romania would have entered anyway a financial crisis, given the rapid widening of external imbalances as a result of the accumulation trade and current account deficits, simultaneously with the increase of the needs to cover the financing gap through compensatory flows (foreign loans), as an effect of reducing the autonomous flows (FDI), to the extent of the depletion of privatizing assets. Paradoxically, the fall of the economy in 2009 under the global crisis effects has caused a sudden and abrupt adjustment of the current account deficit (fully covered by foreign investments in 2009, even if it was reduced by almost half compared with the previous year), but rushed the call to the IMF financial assistance in order to avoid Romania's entry into a currency market crisis, which would have degenerated into a resuscitation of inflation and undermining the timetable for joining the Euro Area.

As mentioned, these threats had existed before the surge of the global crisis, which only accelerated and accentuated the effects suffered by Romania, transformed into a real economic and financial shock: falling the industrial production, construction sector and exports, paralysing the primary capital market and high volatility on secondary capital market, freezing the real estate market, reducing the household consumption and rising the unemployment, etc. One of the few anchors who saved Romania from a financial wreck was the exchange rate, supported, as pointed out before, by the IMF loan.

If the maintenance of the exchange rate is sustainable in the medium and long run there will still be a big dilemma regarding the Romanian economy. Through monetary and financial instruments as we saw in the previous national and international experiences, without substantial support in the real economy, we can live delusions of short term macro-stabilization and major disappointments on the medium and long run.

Even if the delimitation of the causes that generated the economy sharp decline (i.e.: particular to Romania / of foreign origin) became impossible their overlapping being in fact frequent and extensive, it is obvious that, despite some performance criteria and indicative targets set by the agreement with the IMF, the hesitations and the lack of prompt and appropriate reactions of authorities to the challenges of the global crisis is the main factor in prolonging the serious situation of Romania and the uncertainties that hang over the immediate future.

The immobility of the Romanian economy management seems more clearly in evidence if it considers that at global and European levels, countries have adopted anti-crisis programs and measures, which essentially consisted of: stimulating the domestic demand; supporting the public investments; temporary introduction of financial incentives by fiscal relaxing on the entire capital-salary-consumption axis, sometimes accompanied by postponement or tax exemption; implementation of monetary incentives, primarily by reducing the benchmark interest rates by the central banks; harmonization of monetary policies for the purposes of the interest rate differential shrinkage, reducing the speculative cross-border capital flows; financial state intervention for temporary acquisition of unconventional non-performing assets and massive injections of public capital to save important financial and banking institutions; protection of public deposits; additional social assistance programs for poor and unemployed people; voluntary restraint of government bonds sales; better regulation and supervision of the financial system through new capital adequacy standards, particularly for financial institutions with international ramifications.

Finding that the economies of these countries have responded positively to these measures, in 2010 being recorded clear signals of recovery, the discussions between the world leaders of the G20, were focusing on the most appropriate "exit policy", i.e. the timing and procedures for withdrawing programs that support their economies, specific to crisis conditions (IMF, November 2009). Thus, there is a consensus on the fact that the "exit policy" should be correlated with the improvement of production in all these countries, without which adverse effects may occur, and that the coordination of these policies does not necessarily mean synchronizing their time. It was recommended that financial assistance should be withdrawn if and when economic fundamentals are restored, financial markets are stabilized, market mechanisms resume the functioning and market competition - somehow disturbed by the public interventions in financial and banking institutions - is restored.

Besides their positive impact, most of anti-crisis measures implied state funds allocations which have significantly worsened the fiscal balance of many advanced countries, increasing the public debt levels and the related sovereign risk. In Romania many debt sustainability indicators currently exceed the warning levels.

Given its features, Romania, which has to go through two stages in order to turn back on the economic growth path (recovery + rebound), respectively the nominal and real convergence with EU countries, must undertake actions aimed to support economic sectors in decline and the development of public works projects, sustaining the exports, as the main driver of foreign earnings growth, through appropriate trade, financial and banking tools, implementing measures of institutional structural reform, effective restructuring of the economy, increasing the absorption rate of EU structural funds. The improvement in governance and debt management are expected to be essential in order to restore the financial balance of the country, the fiscal consolidation being a top priority action. The monetary policy could be of much help by reducing the benchmark interest rate of the central bank, reforming the forex reserves management, resuming the lending activity for businesses financing by the commercial banks, setting up a neutral authority for the supervision of primary capital market.

Any positive results of these measures depend on the internal effort in order to achieve a sustainable economic growth but also on the external context recover - i.e. the sustainability of the global economic recovery, returning to the normal functioning of international capital markets - on the international oil and natural gas quotations and on the price of raw materials.

Romania has a relatively high degree of international openness of the economy that has to be coupled with the efforts to sustained increase production and underdeveloped domestic market. For this reason, a program to end the crisis effects on Romania and to re-launch the sustainable growth should be aimed at short and medium term measures that contribute to strengthening the national sector of the Romanian economy by effectively using the opportunities arising from the global crisis itself through required restructuring that could limit the increase in the sovereign debt risk.

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