8. ASSESSING THE SUSTAINABILITY OF PUBLIC FINANCES IN ROMANIA

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Abstract

This paper proposes a simple method to assess the sustainability of public finances in Romania, which uses the twin deficits concept. We conclude that the sustainability of the country has been seriously affected by the recent crisis, but to a larger extent by the inappropriate design of economic policies in the past years. Budget deficits have been recorded even in times of high economic growth, while foreign debt has accumulated at an unjustifiable increasing speed.

Keywords: sustainability, public finances, budget deficit

JEL Classification: E62, F34, H63, H74

I. Introduction

The sustainability of public finances became an issue of particular importance with the global economic crisis. While in late '80s the sustainability was related to large budget deficits and increasing ratios of public debt to GDP, in recent years the term has incorporated demographic elements, as many countries are confronted with ageing population and therefore increasing spending on pensions, long-term care and other related social obligations.

The economic literature offers various instruments to measure sustainability. The IMF, for example, uses the ALM (Asset and Liability Management) model (Chan-Lau and Santos, 2010), based on the pricing model for one-period compound options. Blanchard et al. (1990) introduces an Index of Sustainability calculated as the difference between the sustainable tax rate and the effective rate of taxation in the economy. Similarly, an Index of Fiscal Stance is proposed by Polito and Wickens (2005). Other studies incorporate the social sector in assessing the sustainability (Pinheiro and da Cunha, 2007) or demographic perspectives (FMF, 2009) and population ageing trends (van Ewijk et al, 2006). More importantly, the public finance sustainability is related to the growth potential of the economy, as high public debt ratios hinder high and sustainable growth rates of GDP: Kumar and Woo (2010), for

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example, use an econometric model to estimate the correlation between the sustainability of public debt and economic growth.

Irrespective of which elements are considered when defining the notion, sustainability is about excessive debt accumulation by the government. A sustainable fiscal policy is therefore the one that maintains the debt to GDP ratio at a “safe” level. However, there is no “standard” rate that could be considered as being the limit for sustainability. In some views, public debt is sustainable if its share in GDP is maintained constant; nevertheless, a constant 30% debt to GDP ratio is obviously not the same as a constant 90% ratio (Goldstein, 2003). As a result, some analysts use the ratio of the stock of debt to the volume of exports as an additional indicator of sustainability. This is motivated by the fact that previous debt crises – especially in Latin American countries – were preceded by exceptionally high ratios of debt to exports. Such countries have accumulated external debts, but they were unable to offset the increasing debt by corresponding foreign reserves with the central bank.

Very simply, debt is good (or not so bad) as long as the economic growth is not affected; moreover, if borrowing helps the economy to develop, innovate and increase productivity, which in turn translates into higher exports, the debt remains sustainable even at relatively high rates in GDP. However, if the government uses the borrowed money to pay the pensions and salaries in public administration, the debt is unsustainable even at relatively low shares in GDP.

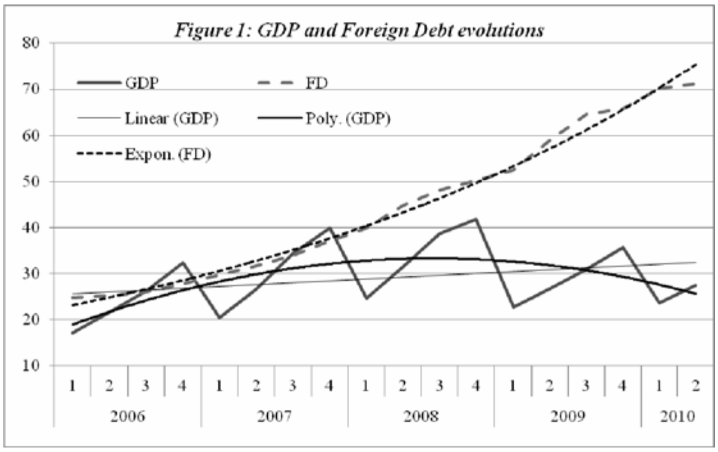
The paper proposes a simple method to assess the sustainability of public finances in Romania, which uses the twin deficits concept. The relation between external and internal deficits gives some indication about the extent to which polices in the field have contributed or not to improve sustainability.

II. Assessing sustainability through foreign debt

As mentioned previously, there are several methods to assess the health of public finances. These methods differ in the scope of the assessment. In general, the sustainability is evaluated from an economic point of view (does the increasing foreign debt help the economic growth and exports?) or from the demographic point of view, which involves the impact of health care, pensions and long-term care policies on the state budget. We limit our analysis only to the economic side.

A simple way of assessing the extent to which increasing foreign debt is helping or not the Romanian economy is to compare the evolution of GDP and the amount of foreign debt (FD). For comparability reasons, both indicators are expressed in billions of euros. We used quarterly data for the period 2006–2010 in order to analyse the trends of these variables. The reason for starting with the year 2006 is to observe the evolution prior and after the EU integration of the country: as a member state, Romania is a beneficiary of transfers from the EU budget and consequently one could expect that the foreign debt will decline after integration or – at least – will record lower rates of growth. Nevertheless, this is not the case – as Figure 1 shows: while the GDP growth shows a declining tendency in the last period (evidently because of the world crisis), the external debt increases following an exponential path. The Romanian government has therefore accelerated the speed of borrowing from abroad, but the inflow of foreign money has not been of any help to real economy.

Figure 1



The private debt has grown at exceptionally high rates, doubling between 2006 and 2008 and being 3 times higher in 2010 than in 2006. For comparison, the public debt increased 2.3 times over the same period, 2006–2010. A faster increase in private debt as compared to the public one is the consequence of stimulating the population consumption through a wide range of – rather populist – measures adopted by the government during that period. Targeting high and rapid growth rates in the economy, the Romanian authorities favoured the domestic consumption at any price. The crediting being the easiest way to boost consumption, the non-governmental credit doubled in two years (2006 – 2008), which fuelled the import of consumption goods and in turn led to a rise in the Current Account Deficit. Not surprisingly, at the beginning of 2009, when the crisis was officially admitted by authorities, the population insolvency rate exploded.

It follows that the increasing borrowing has essentially received non-economic destinations – the payment of pensions and salaries in the state sector being the main beneficiary of this money. In fact, the coefficient of correlation between GDP and foreign debt has a value (0.22) that shows a very modest significance of the second indicator for the growth of GDP. This is confirmed econometrically by regressing the GDP over FD (both variables seasonally adjusted): not only the coefficient of foreign debt is insignificant, but it is even negative.

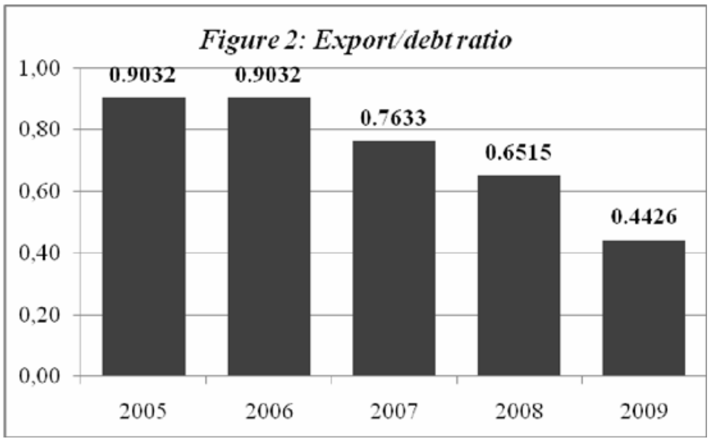
Dependent Variable: GDPSA
Method: Least Squares
Date: 11/29/10 Time: 10:48
Sample(adjusted): 2006:2 2010:2
Included observations: 17 after adjusting endpoints
Convergence achieved after 16 iterations
Backcast: 2005:2 2006:1

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	34.22565	4.264046	8.026567	0.0000

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FDSA	-0.056830	0.069871	-0.813357	0.4307
AR(1)	0.637498	0.186653	3.415429	0.0046
MA(4)	-0.894948	0.048662	-18.39093	0.0000
R-squared	0.910897	Mean dependent var		29.33053
Adjusted R-squared	0.890335	S.D. dependent var		3.358756
S.E. of regression	1.112274	Akaike info criterion		3.253015
Sum squared resid	16.08300	Schwarz criterion		3.449065
Log likelihood	-23.65063	F-statistic		44.29978
Durbin-Watson stat	1.822638	Prob(F-statistic)		0.000000
Inverted AR Roots	.64			
Inverted MA Roots	.97	-.00+.97i	-.00 -.97i	-.97

Since the economic growth has not been stimulated in any respect by the external debt, it goes without saying that the Romanian exports have experienced the same insignificant influence from the increasing inflow of borrowing. Figure 2 shows that the export/debt ratio has decreased for most of the time, from 0.9 in 2005 to 0.44 in 2009 (less than half, therefore). We used annual data for calculating the ratio because quarterly data would not be relevant for analysis, since the debt is a stock variable.

Figure 2



The sustainability of foreign debt in Romania is therefore very fragile. The external debt of the country reached 56% of GDP at the end of 2009 – an already high level that may pose serious problems of solvability to future governments. It is advisable that Romania proceeds to drastic restrictions in contracting the debt, as other countries from the region already did. For example, Poland included in the constitution the obligation to limit the external debt to maximum 60% of GDP (see Box 1), while Serbia drafted recently a fiscal responsibility law that limits the foreign debt to 45% of GDP. Preventive measures are therefore much more efficient, as the rapid accumulation of debt may be out of control and therefore governmental policies to reduce it to affordable levels will have no effect in such a situation.

Box 1: Debt management features in Poland

Poland is the only country in the world where the constitution stipulates conditions for limiting the debt. This limit is fixed at maximum 60% of GDP, but the Ministry of Finance is legally obliged to undertake preventive measures before this threshold is reached. When the debt approaches 50% of GDP, a first package of (light) precautionary measures must be put in place. Harder restrictions are adopted if the debt reaches 55% of GDP, including the balanced budget, no financing from the Central Bank of the deficit, no guarantees issued by the government, etc.

In order to comply with these rules, the debt management strategy of the country is drawn up for at least four years and revised accordingly each year. Both quantitative and qualitative targets are contained in the strategy, which is designed to cover the debt management itself, but equally a strategy for managing the overall public finances of the country.

Over the period 2006 – 2009, the Romanian foreign debt shifted from 28.62 to 65.71 billion euro, therefore an increase by 230% in only three years. To an important extent, this increase was stimulated by the depreciation of the national currency, from 3.5245 to 4.2373 RON per euro over the same period. However, this 20.22% devaluation represents only a relatively modest factor of influence on the amount of accumulated debt. Another possible excuse for such a high – and therefore likely unsustainable foreign debt – could be the devastating impact of the global crisis on the Romanian economy. Although the consequences of the crisis were harder than the Romanian authorities expected, this element is only partially responsible for the debt increase. It should be emphasized that the country recorded budget deficits during periods of high economic growth; vigilant governments would have used this opportunity of growth to make budget surpluses and reduce the overall debt.[1]

III. Assessing sustainability through the method of twin deficits

A more comprehensive way to assess the sustainability of public finances is to link the twin deficits (internal and external), discounted by the interest rate, with the growth rate of GDP. The economic literature[2] uses the following relation between these variables:

$$(g-i)FD = (1+g)BD$$

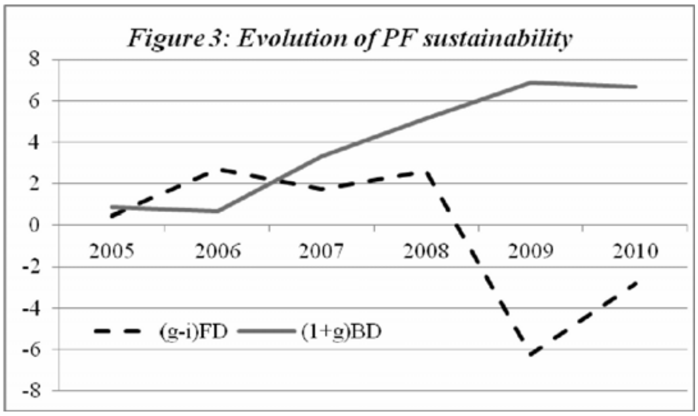
where FD is the foreign debt as a share of GDP, BD the budget deficit as a proportion of GDP, g the real rate of GDP growth, and i the real interest rate. This expression shows that the interest at which foreign borrowing takes place cannot be higher that the growth rate of GDP. However, if this is the case, the budget should record a surplus in order to compensate for the expensive borrowing.

[1] *The data provided in this section come from the website of the National Bank of Romania (http://www.bnro.ro/).*

[2] *See, for example, Goldstein (2003).*

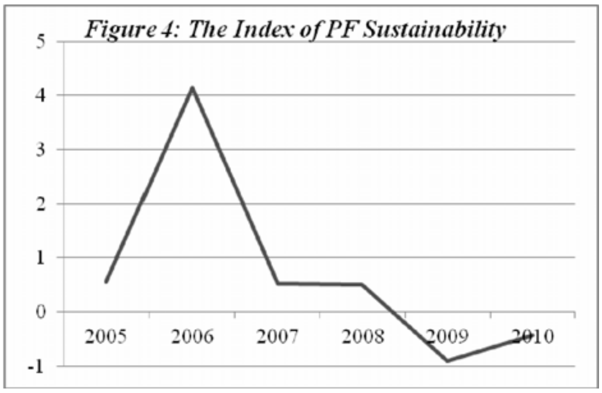
The two sides of the equation are represented in Figure 3 for the period 2005–2010[3]. High sustainability corresponds to the situation when the two curves are superposed or very close to each other. As we can see, the highest sustainability was recorded in 2005, while the lowest corresponds to the year 2009, with some minor improvement expected in 2010.

Figure 3



For a better representation, we can construct an Index of Sustainability that is the ratio of the left to right sides of the equation. Obviously, the optimal value of this index is 1; for higher than unit values, the index shows that foreign debt has the most significant impact on sustainability – making in fact the public finances unsustainable – while an index below 1 indicates that the internal deficit presents a major problem to the public finances. As it can be seen in Figure 4, starting in 2007 the budgetary deficit played a major role in the decline of sustainability.

Figure 4



3 *Data from the National Bank of Romania and the IMF country reports on Romania under Article IV. For 2010, data are provisional, as provided by IMF reports. The interest rate considered for 2010 is 2.1% in real terms.*

Continuously increasing deficits have altered the healthiness of Romanian public finances, but larger deficits mean, to a large extent, the implication of rapidly accumulating foreign debt. In fact, the foreign debt contracted at one point in time influences the budget deficit of the next periods, when the borrowed money has to be reimbursed.

On medium term, given the forecasts of NCP[4] and IMF[5], the sustainability will be ensured if the Romanian government will be able to borrow (or to renegotiate the interest for past debt, which is practically impossible) at very low rates of interest in real terms. Table 1 presents in the first three columns the projections according to NCP and IMF of economic indicators used for assessing sustainability. The last columns contain the real and nominal rates of interest at which the government should contract or reimburse the debt in order to maintain sustainability. The nominal rate is calculated by taking into account the (NCP) projected CPI.

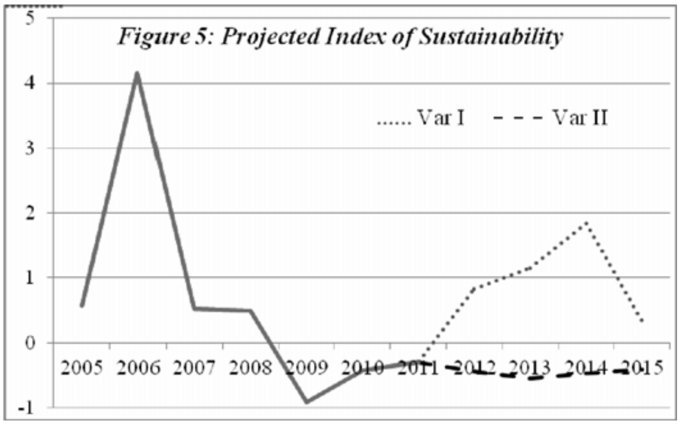
Table 1

Projected economic indicators for Romania

	Real GDP growth (%)	Budget Deficit (% GDP)	Foreign Debt (% GDP)	Real interest rate (%)	Nominal interest rate (%)
2011	1.5	1.3	64.3	- 0.55	4.75
2012	3.9	1.2	57.2	1.72	5.22
2013	4.5	1.0	50.2	2.42	5.62
2014	4.7	0.6	44.3	3.28	6.08
2015	4.0	2.3	40.2	-1.95	1.05

However, it is hard to expect even negative real rates in the future. In a cautious scenario, we can assume that the interest rate will remain at least at its level recorded in 2010. Under this assumption, the index of sustainability will gradually improve in the coming years, recording its best levels in 2012 and 2013 (Figure 5, Var I).

Figure 5



[4] National Commission for Prognosis (http://www.cnp.ro/user/repository/prognoza_2010-2014_varianta_de_toamna_2010.pdf).

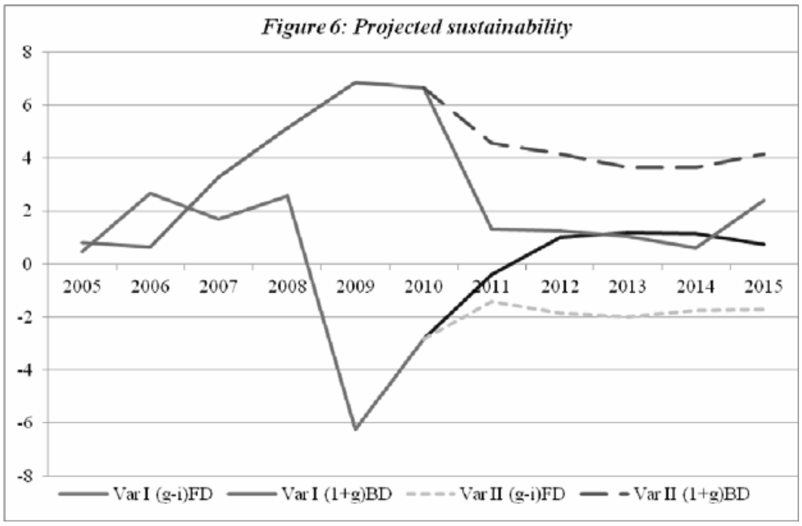
[5] Article IV – Country Report 10/227, July 2010.

A slight deterioration is expected in the last two years of the period for which forecasts are made.

However, according to our estimations the budget deficit will be higher than the official projections and the real interest rate slightly above the one recorded in 2010. On the other hand, the foreign debt will not decline as rapidly as expected, although we do not expect an increase in the debt stock in the coming years.

Consequently, we believe that the Index of Sustainability will not change significantly over the period 2011–2015, remaining close to the level – 0.5 (Var II). This means that reducing the budget deficit will still represent a challenge for the Romanian government.

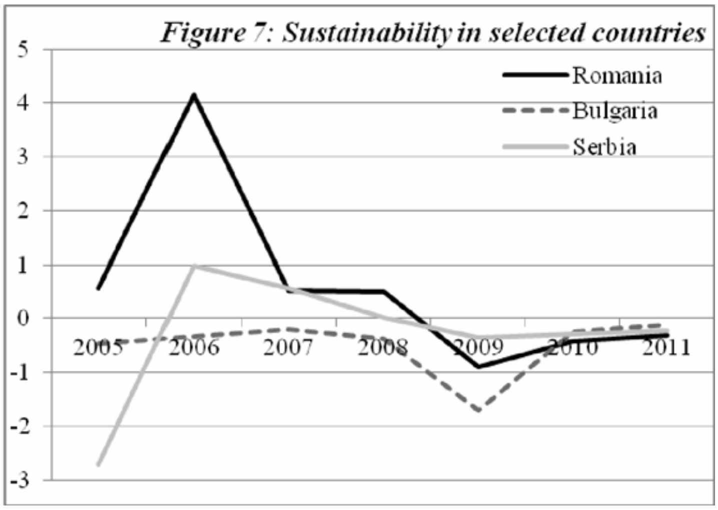
Figure 6



The difference between official projections and our own forecasts is more visible when representing graphically the two sides of the equation presented above. Figure 6 presents the official variant (Var I) and our projections (Var II). If official forecasts are considered, then the sustainability of Romanian public finances will rapidly improve and will practically record optimal levels starting with 2012. In our opinion, this will not be possible so soon; moreover, the distance between the two curves corresponding to the two sides of the equation (dashed lines) will remain relatively high – although lower than in 2009 and 2010. Perfect sustainability cannot be achieved so rapidly, knowing the situation of Romanian public finances, the budgetary challenges the government will face in the future because of the pension system and the enormous spending needs in vital sectors such as education, health care, long-term care, poverty reduction, etc.

In a regional context, the situation of sustainability has not been very different in Romania as compared to two of its neighbours (Bulgaria and Serbia). If the Index of Sustainability is considered (Figure 7), the future looks are also similar at present and in the coming year. However, during the crisis period the most stable country remained Serbia, while the most affected Bulgaria. It follows that the public finance policies in the region are not very divergent, in spite of a better potential that Bulgaria and Romania may have thanks to their EU membership.

Figure 7



In conclusion, the sustainability of public finances in Romania has been seriously challenged by the economic crisis, but to a larger extent by the inefficient design of economic policies in the past years. Budget deficits have been recorded even in times of high economic growth, while foreign debt has accumulated at an increasing speed. The EU integration has not helped significantly the public finances; beside an insufficient capacity of absorption of EU funds, the Romanian governments used the foreign debt as an instrument to cover exaggeratedly high and economically unproductive public spending. In the past, the authorities have been unjustifiably optimistic about the capacity of the public finance sector to remain sustainable. Nevertheless, the future is equally approached with excessive optimism, which counts to a rapid return to a perfectly sustainable equilibrium of public finances.

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