Long-Run Implications of Public Debt on Economic Growth

Senior Lecturer Ion Lucian Catrina, PhD in progress
Academy of Economic Studies, Bucharest
Postdoctoral Program[1] Performance and excellence in postdoctoral research in Romanian economic science domain
cionlucian@gmail.com

Abstract: Many European countries faced with large fiscal deficits have adopted great plans of austerity to limit their public debt. In Romania, despite many measures to reduce public sector wages and some social allowances, in the 2009 and 2010 has been recorded only a small contraction of governmental expenditure *but a fast growing public debt. However, the main effects of the* austerity measures have materialized in a significant reduction in domestic demand and an important reduction of gross domestic product. Also, despite a substantial reduction of supply, the unemployment rate has not exceeded 8% in Romania. This paper aims to analyze how much the policies restricting budget deficit and public debt in Romania delayed the resumption of economic growth. Even the euro adoption perspective impose a stricter management of Romanian budgetary policies and other nominal convergence criteria, the hard core of economic policies must be the reinventing a new path to sustainable growth. It is necessary to conclude a new financing agreement with IMF for the next two years? We also intend to test the tolerance degree of the Romanian economy to public debt expansion (according to Reinhart&Rogoff model, 2010*)* as reflected in the growth rate of real gross domestic product.

Keywords: Convergence; budget deficit; public debt; GDP; monetary union

JEL Classification: E61; H61; H63

Brief Review of Classical Economic Theory

Fiscal deficit and public debt were certainly the most affected nominal convergence criteria by current economic crisis. The influence of excessive deficits and debt on macroeconomic stability and the ability to resume economic growth has been a constant concern since the Second World War.

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Since the ‘50s, James Buchanan and Richard Wagner have proposed to define the burden of public debt from its analogy with the tax burden and paying attention to the following issues: who pays, how much and when? For Buchanan and Wagner (1958: 29)the burden of public debt is nothing but “the opportunity cost of public goods, which are financed through debt”. In the standard sense, the opportunity cost is measured by the value of sacrificed alternatives. With public debt, opportunity cost is the value of private goods that are given up in exchange for the public goods that debt issue makes possible.

With the same objectives, James Meade and Franco Modigliani have analyzed long-term implications of public debt on economic growth and the consequences in the field of intergenerational equity.

James Meade (1958: 163-183) believes that a clear distinction must be made between external debt and domestic debt. While external debt is a burden for the community, because it produces real goods and services transfers between debtor and creditor, domestic debt is a transfer from citizens, as taxpayers, to citizens as property owners and so nothing is lost.

Franco Modigliani (1961: 82) argued that despite the fact that government action to expand the deficit could involve a future cost for society this does not mean that action should be taken. In terms of intergenerational income gains Modigliani sees much more significant the present than the sacrifices in the future, and if government spending for projects that produce a yield in the future, gross debt burden could be offset by the expense and the gross yield net result would be quite positive.

Robert Barro (1979: 940-971) has demonstrated that the public debt will be, sooner or later, moved into taxation field, leading to a higher taxation and reducing the production potential. Barro approved that there are also alternative like the limitation of government spending, which will have as well contractions effect on production. Debt maturity structure is also important to note that as Robert Barro is an obvious link between inflation and real cost of debt as long-term government debt is extremely vulnerable to inflation.

In the 1988, Paul Krugman has introduced the new concept of “debt overhang” (1988: 2) referring to inheritance or accumulate a large volume of governmental debt, leading to mistrust the ability of creditors for early repayment. In other words, Krugman believes that a country has a real problem with debt if the expected present value of future potential resources transfers is less than the debt.

Reinhart and Rogoff (2010, p. 22) have shown that a higher public debt is generally associated with lower rates of long term growth (at a debt level over 90%). According to Reinhart and Rogoff, the EU public debt (about 88.5% in 2010) is still below the threshold at which growth is adversely affected. They suggest that the debt of many developing countries already may have a negative impact on GDP growth.

In the latest work of Iron and Bivens (2010, p. 6) we find the argument that a lower economic growth than the expectation of decision makers will strongly increase the deficits in developing countries. Large annual deficits, leading to a higher public debt will cause higher interest rates, lower levels of private investment and lower growth opportunity in the future.

What Kind of Convergence We Want to Reach?

The strong need to establish some nominal criteria was primarily determined by the particular structure of European economy, which requests a harmonious economic development of their members that have chosen or wish to participate to European Monetary Union (EMU). These nominal conditions are intended to remove any tensions between members, caused especially by the spread of negative effects of economic imbalances.

The nominal convergence criteria laid down in the Maastricht Treaty of the European Union, in the February 1992, were related to the introduction of common monetary policy, based on a single currency, managed by an independent central bank. Four years later, the Stability and Growth Pact aimed toward the coordination of national fiscal policies to ensure stability and prudence for budgetary climate, essential conditions for the success of EMU.

For the new member states of European Union (EU), one of the targets sets in Copenhagen, in the 1993, was the adoption of European single currency within the shortest possible time. This objective has been misunderstood by the new member states, because the adoption of the Euro currency in not the end of the complex process of convergence but rather its beginning. Entry into the Euro area does not mean removing the need to solve macroeconomic imbalances existing in the Member State wishing to join (Popa, 2009, p. 2).

Another illusion of emergent economies from Central and Eastern Europe has been linked to the false idea that macroeconomic imbalances are a natural component of the convergence process, than the result of a bad management.

Moreover, the most of new members have been misunderstood that the achievement of real convergence will be easily accomplished and that is a short time process. The harsh lessons learned from previous accession processes, such as Greece, Ireland, Spain or Portugal, have shown that the catching up process takes a very long time and continue also a long time after accession, did not end with accession. For example, despite the fact that these four countries have had more solid economies than the new members from Eastern Europe, it is important to note that for the Greece the revenues fell soon after accession, for Ireland the revenues growth came much later than would be expected and Portugal has needed over 10 years to gain 17% GDP per capita growth.

Analyzing the evolution of the most used indicator for measuring the real convergence into EU, the GDP per capita (PPS), we can see that the catching up process of new member states was strongly influenced by the negative effects of economic crisis, turning into a *stop and go* process after the 2008.

Table 1. GDP per capita in Purchasing Power Standard (PPS)

Countries	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
EU 27	100	100	100	100	100	100	100	100	100	100	100	100	100
Bulgaria	26	27	27	28	30	32	34	35	37	38	40	**44**	**44**
Estonia	42	42	42	45	46	50	54	57	62	66	69	**68**	**64**
Latvia	35	36	36	37	39	41	43	46	49	52	56	**56**	**52**
Lithuania	39	40	39	39	41	44	49	50	53	55	59	61	55
Poland	47	48	49	48	48	48	49	51	51	52	54	**56**	**61**
Portugal	78	79	81	81	80	80	79	77	79	79	79	78	80
Romania	29	27	26	26	28	29	31	34	35	38	42	**47**	**46**
Slovenia	78	79	81	80	80	82	83	86	87	88	88	**91**	**88**
Slovakia	51	52	50	50	52	54	55	57	60	63	68	72	73

Source: Eurostat April 2011

It is also important to note that countries such as Romania has received a massive support of the population to join the European Union, over the 85% of population in the 2005 Barometer, support led by the expectations that after accession the revenues and standard of living will instantly increase. In this context, Romanian policy makers have tried to respond to the huge population pressure by increasing public wages and pensions over the national budget capacity.

Many times it was considered that the process of nominal convergence has been privileged in relation to the real convergence, nominal fulfillment efforts influencing negatively the real economic variables. In fact, the two processes cannot be seen but complementary. Even if nominal convergence produce a slowing of real economic performance, fulfilling all the Maastricht criteria ensure a greater economic stability and a solid economic growth.

For example, reducing inflation rate will lead to higher economic performances and an increase of real convergence of wages. Lower interest rates will also stimulate the growth of investments and the growth of real GDP.

Why the Real Convergence has slowed down?

The most frequently asked question that European governments have tried to respond in the last three years has been related to the optimal fiscal behavior over the business cycle and especially in the economic downturn. If we analyze the European economic recovery measures we can observe that they did not followed Keynesian model which recommend that fiscal policy should be countercyclical: in bad times the government should increase government spending and should reduce the taxes for helping production. European decisions have not be framed nor neoclassical pattern of *tax-smoothing* (Barro, 1979, p. 940-971) which suggest that fiscal policy should remain essentially neutral over the business cycle and respond only to unanticipated changes that may affect the government's budget constraint.

Empirical research has shown that opposite to developed countries, the emergent markets tend to promote pro-cyclical policies even in times of recession or before to entry into recession (Gavin & Perotti, 1997, p. 11-72). In addition, the international credit markets do not trust the developing countries and so become more difficult for government to finance the budget deficits.

In most cases pro-cyclical temptation is due to "distortions" coming from political arena, which may engage projects and government spending over the national ability to finance them (Talvi & Vegh, 2005, p. 156-190).

If we look at Romanian's fiscal behavior in the last three years, the Talvi and Vegh hypothesis is verified, especially due to accelerated growth of public wages and public pensions. This action overlapped the parliamentary and local election and may repeat in 2012 and 2014, when elections will be held again in Romania.

The new Romanian agreement with International Monetary Fund will aim to give not only a psychological signal to international markets, but also to impregnate continuity for fiscal reforms, without delaying or altering them by the electoral events.

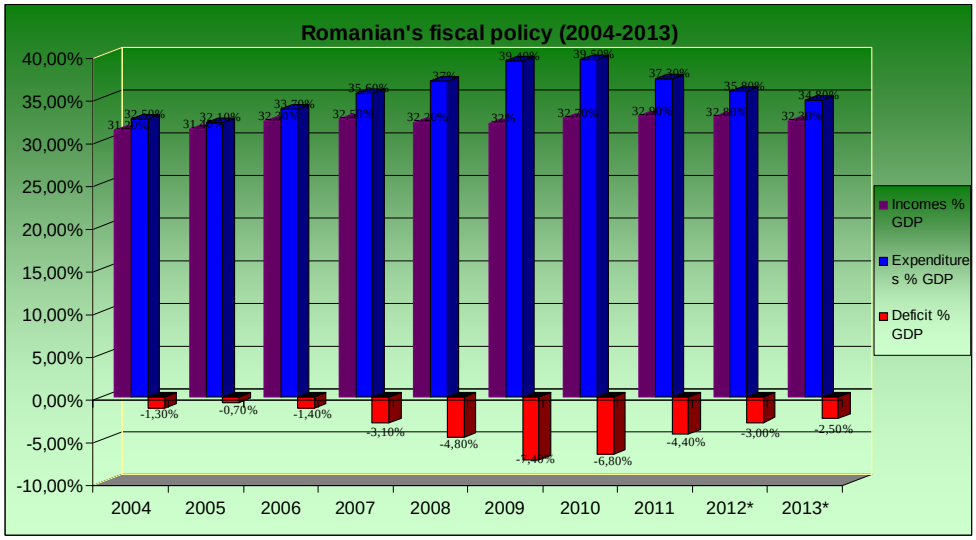

Figure 1. Romanian fiscal policy

Source: Romanian Ministry of Public Finance

In Romania, the *catching up* process was based on an economic growth rate higher than the European average, but this growth has halted abruptly in the last quarter of 2008. Also, the process of real convergence has a strong partner in the productivity growth, more than 10% annually, led by very low initial levels, the progressive reduction of the rate of employment in agriculture and especially by the growth of foreign direct investments. This substantial increase in labor productivity has been brought forward by the accelerated growth of wages, leading to a worsening of external deficit and a further inflationary pressure.

The effects of economic crisis were felt in the most macroeconomic indicators since the beginning of 2009, on the one hand as a result of relatively low flexibility of the Romanian economy and on the other hand because of the inability of Romanian government to immediately adapt its macroeconomics policies to a radically changed economic environment.

We must redraw the Main Criteria for Public Finances Stability

Main arguments to prevent the excessive budget deficits and high public debts into EMU were related to the transfers between generation and to the public investments with a large social return. Following Blanchard and Giavazzi (2003, p. 2) the present condition of the European fiscal stability has been based on the estimation of nominal growth rate of potential output of 5%, without taking into account potential external shocks, but merely the cyclical economic fluctuations. For example, a deficit *d*% would lead to an increase of public debt as ratio to GDP as *d*=*g*, where *g* is the nominal potential output. Thus, if *g* will be *g* = 3% (real growth) + 2% (inflation) = 5% and *d* proposed by SGP d = 3%, the ratio of debt to GDP will be estimated as:

$$d=g$$

(*d* =3%) =[*g* = 3% (real growth) + 2% (inflation)] lead to a 60% debt ratio to GDP, level of EU Treaty.

If we will estimate this level for an emerging country like Romania, we will find out that 60% ratio is overvalued:

Table 2. Estimation of public debt ratio

Year	SGP deficit	Real deficit	Real growth	Inflation	Debt ratio by SGP deficit	Debt ratio by real deficit
2007	3%	3,10%	6,30%	4,90%	26,79%	27,68%
2008	3%	4,80%	7,30%	7,90%	19,74%	31,58%
2009	3%	7,40%	**7,10%**	5,60%	15,15%	37,37%
2010	3%	6,80%	**1,30%**	6,10%	34,48%	78,16%
2011	3%	4,40%	1,50%	**7,00%**	**35**,29%	51,76%

Data source: Eurostat April 2011

The Reinhart and Rogoff(2010: 7) estimation of debt threshold cannot be tested on Eastern European countries due to lack of data for long time, especially in the communist regime. In addition, countries like Romania have not ever faced with higher rate of debt of 40%.

It seems to be too clearly that a public debt threshold of 35% of GDP for Romania is the highest limit of confidence, especially for foreign investors and credit markets too. This debt threshold is lower than the IMF estimation, 40% of GDP

(Cottarelli, 2010, p. 7), which took into consideration the negative perspectives of aging population.

Unfortunately, Romania is not the only new Members State to which the accepted level of public debt on GDP in terms of nominal convergence should be revised. Countries with similar position are Bulgaria, Hungary, Latvia or Lithuania.

Then, it is really difficult to predict when the economies of new Members States will be able to fit into the central bank inflation targets. For Romania, the failure to target inflation was mainly driven by the requirement to adjust the minimum European duty level, by increasing the value added tax, from 19% to 24% as a result of government failure to find alternative solutions to restrict the huge governmental expenditures and the dynamics of imported food prices and the increase of international fuel prices.

It must be said that the nominal condition of 3% of GDP sets by SGP for fiscal deficit may affects the real convergence of those economies in which the investment volume is really weak. For this reason, the governments may choose higher deficits than 3%, in order to stimulate the public investments.

The public investments have been the strong argument used by the new Members States of EU in order to justify their excessive deficits. Unfortunately, we cannot say exactly if there is a strong relationship between a higher fiscal deficit and public investment levels in the new Member States, an unconfirmed hypothesis even by the IMF research (Graeme Justice and Anca Paliu, 2006, p. 10).

Moreover, this kind of financial stability evaluation, used by European Commission, do not respond to other critical conditions of macroeconomic stability like structural imbalances of developing economies, exchange rate, interest rates and a huge demand for finance in the international shocks circumstance. Recent history has shown us that there were emerging countries, especially in Latin America, that have entered into *default* at a lower level of debt ratio than 40%. For example, Romania faces the following situation: a steady decline in young people which can be involved in the labor market accompanied by a fast growing number of pensioners, the dependence degree in pay as you go system is already of 0.79 employees to one pensioner. The structural budgetary deficit created only by such negative demographic situation has already reached 2.64% of GDP and is expected to increase until 2050.Other structural difficulties are related to low capacity to collect the revenue from economy, corruption and tax evasion affecting over 11% of GDP from revenues potential.

We also have to specify that there are more ways to count the fiscal deficits and public debt too. Eastern economies still holding huge enterprises and companies whose losses are not quantified neither into so-called quasi-fiscal deficit. It is also important to mention what kind of public debt we are talking about. Because there is a debt contracted directly by governments and a debt contracted by other public authorities but guaranteed by same governments.

We believe that for a more accurate assessment of fiscal sustainability will have take into account the debt of state-owned companies when we estimate the fiscal deficit and must to include the debt guaranteed into total public debt.

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