THE SUSTAINABILITY OF PUBLIC FINANCE IN NEW MEMBERS STATES OF EUROPEAN UNION

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Abstract
The issue of public finance sustainability is very important for all EU member states in the actual context after the economic crisis. This article makes an analysis of the sustainability of public finances for the new member states (which joined EU in 2004 and 2007). Firstly, we try to analyze the impact of the economic crisis on public finances sustainability. The sustainability of public finances can be reflected through the level of public debt and budget deficit for a country. For this reason the article presents the evolution of budget deficits for NMS 12 before and after the recent economic crisis. Based on the econometric regression the correlation between economic growth rate (indicator used for measuring the economic evolution) and the budget deficit is revealed. Results for Romania and NMS 12 are quite similar; fact that tells us that the status of public finances is following the same trend in Romania as in the NMS 12.

Keywords: sustainability, economic crisis, EU member states, public finances, public debt, public deficit.
1. Introduction

The fiscal policy is used as an important instrument for stimulating the economic growth and for accomplishing other economic or social objectives. This can lead in some cases to an increase in public expenditures which are higher than public revenues. In this case, the state budget has deficit. But this deficit has to be covered somehow. One possible way is through taxation increase, but this is a long term solution. Another way is through public debt, when the state chooses to borrow money for covering the budget deficit. These loans imply an interest and for the next year, the government has to pay back this money. The sources will be the public revenues, and the tax receipts.

It is not recommended for a country to increase continuously the public debt because this increase can lead to insolvency as was the recent case with Greece. The economic crisis determined a decrease of the public revenues and an increase of budget expenditures and public debt. The decrease of public revenues has many causes like decreasing the corporate tax receipts (many companies have registered losses) or decreasing the consumption tax receipts. On the other hand, the public expenditures continue to increase, for instance unemployment allowances paid from the state budget. Other cause for the decrease in the tax receipts – some fiscal stimulus packages like decreasing some taxes.

Fiscal stimulus packages that contributed to this rise in government debt and deficit are regarded by some as a necessary means for stimulating the economy in order to bring these countries out of recession. However, stimuli, even when there are well designed, entail substantial costs and risks to fiscal sustainability, without one being certain about how they will boost the economy. It is sometimes hard for governments to find worthwhile projects to put money into, and it is nearly impossible to take back the spending if these programs are not performing well. Spending tends to create a spiral of spending, which is hard to control (Zaidi and Rejniak, 2010).

Sustainability concerns the specification of a set of actions to be taken by present persons that will not diminish the prospects of future persons to enjoy levels of consumption, wealth, utility, or welfare comparable to those enjoyed by present persons (Bromley, 2008).

Sustainability is defined by Perotti et al. (1997) as a forward-looking concept, requiring that current and expected future government revenues and expenditures match in a present value sense. Although there is no clear definition for sustainability of public finance, most authors adopt the interpretation given by the Maastricht Treaty: the countries that respect the two standards of the deficit (3% of GDP) and the debt (60% of GDP) are considered to have sustainable policies.

The concept of sustainability of public finances refers to certain budget constraints. These constraints appear as a result of the necessity of efficiency and of intergenerational equity: as long as a tax is efficient, it would not be necessary to increase it over time and, if there is intergenerational equity, fiscal burden will not be shifted from one year to another and from one generation to another (van Ewijk et al., 2006).
The concept of sustainability of public finance is approached by economic literature with issues like solvency, efficiency and population ageing.

Collignon and Mundschenk (1998) observe in their study that European countries have not changed their policy behavior since the Stability and Growth Pact (SGP) was implemented, although the fiscal positions of these countries have been more stable over time. This stability is not the result of the directives of the SGP, but the result of the directives of the monetary policy framework (the European countries have allowed both the reduction of the interest rate, and inflation volatility).

José Marín (2002) observes the impact of the national government management upon the sustainability and stabilization role. He believes that all policy rules are sufficient to maintain the sustainability of public finances. He considers that the problems appear in the case of differentials between the growth rate of the economy and the rate of interest. In his analysis he uses variables such as: saving and domestic demand for public debt, and the openness of the economy. His findings sustain the idea that the sustainability of public finance can be guaranteed by a higher primary balance sheet.

Zaidi and Rejniak (2010) analyze the aspects that have a significant importance in the evolution of the economic and financial crisis from 2007: GDP growth, budgetary deficit, public debt, the influence of the ageing population upon the sustainability of public finances. In terms of GDP growth, the most affected countries were Lithuania, Latvia, and Estonia and the least affected was Poland, due to its reliance on the well-developed domestic market. The policy makers must face the challenges of a future increase in expenditures on health, on public pensions etc.

As a concluding remark the sustainability of public finance can be defined as a pattern of fiscal measures adopted and implemented by the government for maintaining equilibrium between public expenditures and public revenues, taking into account fiscal, economic and social purposes that need to be financed from the budget.

2. The impact of economic crisis

This paper approaches the sustainability of public finance, in crisis conditions, due to enormous growth of public debt and public deficit in the European Union. The Stability and Growth Pact requires two conditions that must be respected by all member states: they must have a public deficit lower than 3% of GDP and a public debt lower than 60% of GDP. Even before the economic crisis many countries have not respected these limits. The economic crisis has brought a powerful drop of the tax receipts in the EU member states budgets, in the context of continuous growth of the public spending. The problem of the public debt and of the public deficit is highly debated and all member states will have to face it. This paper makes an analysis of the evolution of the public deficit and public debt in the EU member states starting with 2001 until present time. Also, we highlight the importance of public spending in the growth of public debt.

The economic crisis has affected all the countries of the world and has made them vulnerable due to the inter-reliance between them. There are many factors that had
caused this crisis: there was an uncontrolled credit boom, a rapid price growth in the real-estate sector, there was also a wide spread of the “originate-and-distribute model” in financial markets, global imbalances, excessive appetite for profits that fueled demand for assets with high risk, and, finally, there was inadequate corporate governance and inadequate managerial incentives (Zaman and Georgescu, 2009).

The consequences are numerous according to the European Commission. A major impact was registered on the actual and potential economic growth. The credit supply, loans and the asset valuation were affected. The impact of the economic crisis is not identical in all states due to the size of the financial sector, the export dependency and due to the real value of the evaluation of the real-estate sold and bought.

Labor market and employment were also affected. The unemployment rate has grown with almost 3.5% in EU 27, from 7.7% in the last quarter of 2007 to 11.4% in the third quarter of 2010. Spain and Ireland have had the biggest unemployment rates: 26.4% and 18.4% in the third quarter of 2010. Luxemburg, Austria and Netherlands have managed to control and even decrease the unemployment rate in the period after the economic crisis from 2007. According to the European Commission the unemployment rate will increase even more.

The economic and financial crisis is thought to be extremely expensive and has already altered the budgetary position. In many member states, both gross public debt and fiscal deficit have exceeded the limits established by the Maastricht Treaty.

If, at the beginning of the economic and financial crisis, the member states had chosen to use mainly monetary policy to stabilize the situation, after September 2008, they adopted a more aggressive strategy: spending cuts and tax increases.

Emergency solutions promoted by some authors (Zaman and Georgescu, 2009) include: the separation of bad assets, measures met to control the increasing poverty (creating new jobs; public investments in infrastructure), and fusions and takeovers of bank assets in case of bankruptcy. In the long term, the member states must reform the European financial supervision, must create stricter credit regulations and reform the Credit Rating Agencies and obtain a better risk assessment and remuneration in the financial and banking system.

3. Methodology and results

Our analysis is based on descriptive and econometric analysis. The article reveals the evolution of the budget deficit in the European Union space starting with 2001 until 2010. The budget deficit regards the amount by which the government’s spending exceed the incomes in a certain period of time. For EU 27, EU 25 and NMS 12 there are similar fluctuant evolutions of the budget deficit in the analyzed period.

If, in 2001 there were differences of 2.1% between NMS 12 and EU 27, after 2004 these differences were reduced. In 2010 NMS 12 registered a budget deficit of 5.3% of GDP, with 1.1% smaller than de average of all member states.
In the chart above we can observe the evolution of the budget deficit as percentage of GDP in the New Member States. Although they all joined EU after 2004, we can notice a big difference in the budget deficit evolution. Latvia and Malta have registered the highest deficit in the analyzed period. Malta reached a budget deficit in 2003 of 9.9% of GDP and Latvia reached 10.2% of GDP in 2009.

In 2010 Estonia is the only new member state which could have had more revenues than expenditures for the public budget. For 2009 there were a few countries which managed to reduce their budget imbalance such as Hungary, Estonia and Malta. As we can see from the figure above this trend of reducing the budget deficit is followed by all countries in 2010. The solution for decreasing the budget deficit should be based on long term fiscal measures, like stimuli for private and public investment, accessing the EU funds for public and private projects, maintaining a limited rate of unemployment and inflation (Mara et al., 2010).

In 2010, the highest budget deficit from new member states was registered in Slovakia and Poland – 7.9%. But we can underline the improving of the stance of the public finance in 2010 for all NMS 12 because of the measures of increasing VAT which have led to more receipts for the budget.
Concerning the old member states, the level of budget deficit in 2009 is higher in comparison to the new member states, the maximum value is in Greece, almost 15% followed by Ireland with 14%, UK and Spain. In 2009, compared with 2008, we can observe an important increase in the budget deficit. If in 2008, Denmark, Luxembourg, Finland and Sweden managed to register surplus, in 2009 none of the countries mentioned above have succeeded to obtain this performance. Spain, Greece and Ireland have registered the biggest increase in the budget deficit from 2008 to 2009.

Public debt is a direct result of the budget deficit and implicit of the fiscal policy conducted by the government for a period of time even if we talk about the crises like the one in the last few years or about economic boom. After a large increase of the public debt during the recent financial crisis, this trend will be continuing in the next few years. In Romania the economic crisis generated a real boom in public debt starting with the beginning of 2009, and the dramatic fact is that it would increase in 2011 by more than 30% compared to 2010.
In the figure above, we can observe the evolution of public debt in Romania as percentage of GDP, from the first quarter of 2001, until the third quarter of 2010. We can observe a tendency toward a decrease from 2001 until 2008, when the public debt in Romania was more than 15%. After 2008 Romania witnessed a rapid growth, until 2010 when the values reached 29% of GDP, exceeding the values from 2001.

In the figure above we can observe the evolution of the public debt as percentage of GDP, from 2008 until the third quarter of 2010, in EU 27, EU 15 and NMS 12. We can observe significant differences between NMS 12 and EU 15. If in the new member states, the public debt increased from 29.9% of GDP in 2008, to 42.9% of GDP in the third quarter of 2010, in the old member states the increase was more intense. In the analyzed period NMS 12 registered a public debt two times smaller than in the EU 15 countries. In the last two years public debt increased rapidly; in 2010 it reached a level of 80.1% of GDP for EU 15.

In the third quarter of 2010, in EU 27 public debt was 77.7% of GDP and in EU 15 public debt was 80.1%. This situation was the same in the entire analyzed period. We can see the strong influence of the EU 15 upon the average of the public debt in EU 27.
There are indeed enormous differences between the new and the old member states. But there are also many differences between the states that joined EU after 2004. If, from the first quarter of 2008 until the third quarter of 2010, Estonia and Bulgaria managed to maintain their public debt under 10%, Hungary, Malta and Cyprus have reached a public debt of 60% of GDP, and even 80% of GDP in Hungary’s case. Romania registered a growing public debt in the analyzed period, from 11% of GDP in the first quarter of 2008 until almost 30% in the third quarter of 2010.

The impact of the economic growth rate on the budget deficit is very important. The correlation between economic growth and budget deficit in Romania has an increasing tendency; a decrease in the economic growth rate means an increase of the budget deficit as well. As it can be seen from Figure 8 the correlation between these two variables is almost 50%, more precisely 48.1% of the variation of the budget deficit can be explain by the economic growth rate.

The next part of the analysis represents an econometric study using the SPSS program; we verify the hypothesis that the decrease of the economic growth rate is a cause of the budget deficit increase for the new member states.
We chose the budget deficit as a dependent variable and the economic growth rate as an independent variable. The analysis is based on a cross section regression starting with 1995 until 2010 with annual data. The data are computed as averages for the NMS 12. From the Model Summary table we can observe the correlation between the economic growth rate and budget deficit in NMS 12, which is a quite high correlation of more than 50% and it means that 50% of the variation of the dependent variable budget deficit in NMS 12 can be explained by the independent variable economic growth rate.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.509(a)</td>
<td>.260</td>
<td>.203</td>
<td>1.24213</td>
</tr>
</tbody>
</table>

**Table 1:** Model Summary

Predictors: (Constant), EcGrowthRateNMS12

As we see in the table below, the correlation is significant. There are 94.8% chances to obtain a significant correlation.

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7.032</td>
<td>1</td>
<td>7.032</td>
<td>4.558</td>
<td>.052(a)</td>
</tr>
<tr>
<td>Residual</td>
<td>20.057</td>
<td>13</td>
<td>1.543</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>27.089</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 2:** ANOVA(b)

Predictors: (Constant), EcGrowthRateNMS12

**Dependent Variable:** BugDeficitNMS12

The regression equation can be written as follows: \( y = 0.347X - 4.144 \). That means that there is a direct correlation: if the economic growth rate will increase the budget deficit will decrease because in the model the budget deficit is considered with the sign (-). If the economic growth rate will increase with one unit as average in the NMS 12 than the budget deficit will decrease with 0.34 units as average.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>-4.144</td>
<td>.465</td>
<td>-8.921</td>
</tr>
<tr>
<td></td>
<td>EcGrowthRateNMS12</td>
<td>.347</td>
<td>.163</td>
<td>.509</td>
</tr>
</tbody>
</table>

**Table 3:** Coefficients(a)

Dependent Variable: BugDeficitNMS12

4. Conclusions

The problem of public finance sustainability at the EU level is not easy to solve by the EU leaders. In this direction there are some proposals such as the creation of the European Financial Stability Facility or the establishing of a single authority responsible for tax policy oversight and government spending coordination within the EU member countries, temporarily called the European Treasury. But it is not
a straightforward solution in this direction without a direct violation of the state sovereignty.

Between the EU countries there is substantial debate about the appropriate fiscal policy measures; they have to decide whether to provide yet more fiscal stimulus to the economies or to start curbing government debt and deficit through cuts in public expenditures.

The economic crisis has given us a valuable lesson: even if we are individuals or companies or governments we have to spend very carefully our money because otherwise we have to pay a price in the future and maybe we cannot afford to pay it.

References: