THE PUBLIC DEBT OF COUNTRIES FROM EURO ZONE. THE SNOWBALL EFFECT

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Abstract

Five years after the start of the worst financial and economic crisis since the end of the World War II the euro area countries are confronted with the persistence of the public debt crisis. The recent literature on macro-financial topics identifies the main factors that determined the launch of the sovereign debt crisis in Europe.

One of the consequences of this crisis consists in the public debt effect. Several European countries pay an interest rate higher than the nominal GDP rate, leading to a snowball effect for the public debt.

This short article reviews the main factors that determined the launch of the sovereign debt crisis and computes the public debt effect for the Euro Zone (12) member countries.

Rezumat

La cinci ani de la declanşarea celei mai severe crize economico-financiare mondiale din ultimele decenii economiile europene continuă să se confrunte cu criza datoriilor suverane. Literatura recentă pe teme macro-financiare identifică factorii principali care au condus la declanşarea crizei datoriilor suverane în Europa.

Una dintre consecințele acestei crize constă în efectul de „bulgăre de zăpadă" observat la nivelul datoriei publice. O serie de state europene se finanțează la costuri care depăşesc ritmul de evoluție a PIB nominal, determinând o rostogolire a datoriei publice.

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Acest articol trece în revistă factorii fundamentali care au determinat criza datoriilor suverane în Europa şi estimează efectul de bulgăre de zăpadă pentru 12 economii din Zona Euro.

Keywords: public debt crisis, snowball effect, Euro Zone, interest rate spread

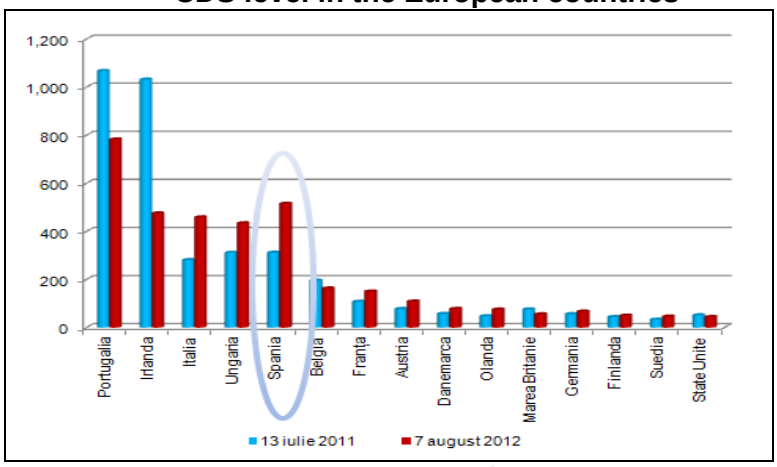
JEL Classification: G12, E43, E62

Five years after the start of the worst world economic-financial crisis of the past decades, the European economies are still confronted with the crisis of the sovereign debts. Started in Greece, more than two years ago, this disease started to spread among the European economies (particularly the southern side), as well as from the public finances towards the banking sector (*run-on-the-bank* phenomenon).

The financial markets keep on testing the solidity of the Euro zone. As it may be noticed from the chart below (Figure 1), the current risk premiums of the European states are higher than those from the summer of 2011 (as reference period for the crisis of the sovereign debts from the developed economies, through the prism of USA losing its AAA rating and of the attacks on the Italian financial markets).

Figure no.1

CDS level in the European countries



Source: CNBC, www.cnbc.com

The evolution of the risk premiums is reflected in the cost of state financing. The differential of financing cost (the interest spread) between Germany and most of the Euro zone countries peaked during the recent period (cases of Spain and Italy).

Noticeable, from the launch of the Euro (1999) and until the start of the world financial crisis, the interest spread between Germany and the other states from the Euro zone was very low. Practically, the financial markets didn't grant importance to the differences existing between the European countries in terms of macroeconomic situation (foreign equilibrium, domestic equilibrium).

The macro-financial literature of the recent years presented several factors which influence the evolution of the interest spread: the perception on the investment risk worldwide (attitude towards risk of the international investors), the situation of the public finances/the default risk, the risk of liquidity, the size of the banking sector, etc.

It is generally accepted that the global risk factor (which incorporates the expectations on the evolution of the world economy and of the financial markets) is the determining element for the evolution of

the interest spread. During the final years of the "Great Moderation"[1] the perception on the global risk was very low; the international investors were paying little attention to the macroeconomic risks specific to each economy (such as the foreign or domestic imbalances).

For instance, the paper of Barbosa and Costa (2010) shows econometrically that before the Lehman Brothers bankruptcy, the global risk factor was determining 70% of the evolution of the interest spread among the countries from the Euro zone. The paper of Gerlach et al. (2010) also proves that the global risk factor determines 90% of the evolution of this interest differential.

We must mention, however, that after the Lehman Brothers bankruptcy, other factors such as the default risk (sovereign bankruptcy) and the risk of liquidity gained in importance in determining the interest spread.

During the recent period of increased risk aversion we witnessed the phenomenon of *flight-to-quality*, the German bonds being the favourites of the international financial flows (during the recent period too, the interest for the German state bonds on 10 years reached record minimal values, while the interest for the short-term bonds was even negative).

At the same time, within the context of the first wave of the crisis, most governments intervened with expansionist budget policies, which deteriorated the situation of the public finances. Overall, at the level of the Euro zone, the proportion of the public debt within the GDP increased from 66% in 2007 to over 88% in the first quarter of 2012.

Within such context, the European governments are confronted with a discipline imposed by the financial markets, as also noticed by the paper of Sgherri and Zoli (2009).

In other words, after the start of the global financial crisis, particularly after the Lehman Brothers bankruptcy (the peak of the worldwide liquidity crisis), the financial markets started to take into consideration the differences between states in terms of

[1] *The Great Moderation is the period which started in mid 1980s, characterised by a low volatility of the economic activity.*

(internal/external) macroeconomic equilibrium: the countries whose public financers deteriorated severely or which had other macro-financial imbalances paid higher interests.

For instance, the paper of Schuknecht et al. (2010) proves that the impact of the budget deficit and of the public debt on the size of the interest spread increased 3-4 times and even 7-8 times after the Lehman Brothers bankruptcy.

The paper of Barbosa and Costa (2010) also proves that the default risk and the liquidity risk contributed with about 50% to the interest spread of the European economies in September 2008-December 2009. The contribution of the liquidity risk was higher particularly during the Lehman Brothers bankruptcy, while the contribution of the default risk was higher in the second half of 2009, with the start of the Greek crisis.

The paper of Gerlach et al. (2010) shows that a 1 p.b. increase of the bid/ask spread for the state bonds quotations determined a 0.43 p.b. increase of the interest spread. The article also shows the importance of the banking sector dimension to the determination of the interest rate spread (contribution of about 1 p.b. at its evolution during the periods of volatility of the "Great Recession").

The paper of Barrios et al. (2009) shows the importance of the budget deficit evolution to the determination of spread (1 p.p. budget deficit over the German level determined a 2.4 p.b spread from the interest rate of the German state bonds).

Theoretically, the best explanation for the evolution of the interest rates spreads within the Euro zone states was given by De Grauwe (2011). In a monetary union the member states have no control on the currency which they borrow. The markets know this and the sanction the economies having important macroeconomic imbalances (budgetary included) and which depend on external funds (such as the economies from southern Europe). From developed states they became mere

emerging economies within the European Monetary Union after the "Great Recession"[2] started.

The high level of the interest rate spread noticed currently in the economies having important macroeconomic imbalances within the Euro zone may be, on the medium term, a factor of real economic divergence. Practically, these economies are confronted with the so-called "snowball" effect of the public debt: the cost of financing the state exceeds the rate of the nominal GDP growth.

The most obvious case is represented by Italy, country in which this effect of the public debt has been manifesting relentlessly for the past 11 years. At the same time, most economies from the region were confronted with this snowball phenomenon immediately after the first wave of the "Great Recession" (as of 2008). While countries such as Germany, Belgium, Luxemburg, Austria and Finland managed to recover in 2010, this phenomenon is still active in Greece, Portugal, Ireland, Italy, Spain, Netherlands and France.

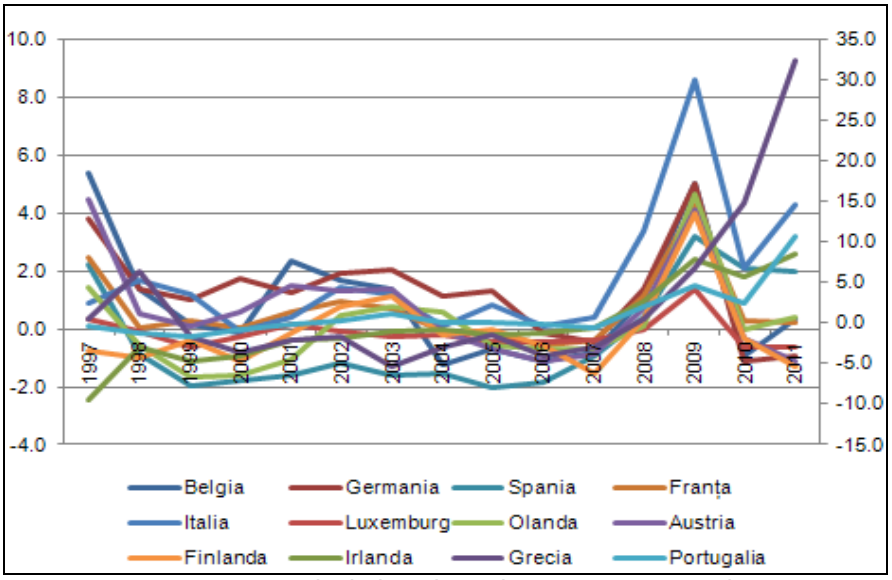
The first economy of the region – Germany – was confronted with this phenomenon for over a decade (until 2006), evolution determined by the macro-financial efforts to reintegrate the Eastern Germany. This effect of the public debt was among the factors which determined the Berlin administration to implement several structural reforms in the early 2000 years, before the start of the "Great Recession". The efficiency and necessity of these measures could be observed during the period of the world crisis, the German economy consolidating its position of European leader.

On the other hand, Spain recorded a process of reducing the public debt for about one decade (1998-2007), the cost of financing being below the growth rate of the nominal GDP (within the general low level of the interest rates during the "Great Moderation", and also due to the convergence of the Spanish economy towards the average of the Euro zone).

[2] *The denomination of "great recession" refers to the period after the start of the global recession (2007), whose effects produced the strongest recession of the world economy after the World War Two.*

Figure no.2

Public Debt (% GDP) in the Euro Zone countries. The snowball effect

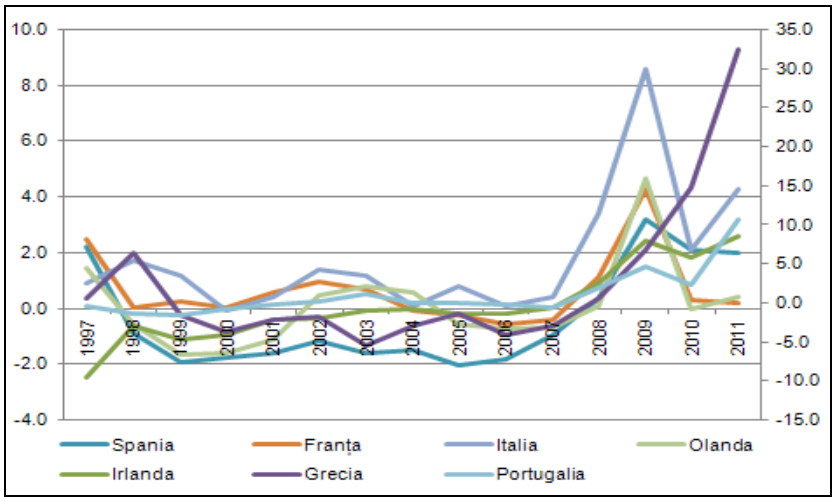


Source: Own calculations based on Eurostat, IMF data

The phenomenon of the public debt rolling risks becoming permanent. The financial markets are aware of the difficulty of the processes of macroeconomic adjustment of these economies, reason why they are penalised through the interest rate. But, if the reduction of the public debt was not possible before 2007 when the markets didn't pay attention to the macroeconomic imbalances, it is obvious that this is impossible under the present macro-financial conditions.

Figure no.3

Public Debt (% PIB). The snowball effect



Source: Own calculations based on Eurostat, IMF data

At the same time, the signal given by the financial markets to the authorities responsible for the implementation of the macroeconomic policies in these states is clear: measures have to be adopted which to curb the increase of the public debt and to restore partially the trust. The cost of financing could be reduced below the growth rate of the nominal GDP only by restarting the investments, by setting priorities for the public expenditure, by reducing the proportion of the informal economy, by structural reforms of the labour market and of the services sector, by selling state assets etc.

The authorities responsible with the implementation of the macroeconomic policies in the European Union must correct this problem (which contributes to a higher divergence between the member states) by concrete measures aimed to stimulate the investments in these economies and by decreasing the cost of financing these states.

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