SOVEREIGN DEBT CRISIS MANAGEMENT BY THE EUROPEAN CENTRAL BANK

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Abstract

Following the bursting of the real estate crisis of 2007 and the financial crisis of 2008, the European Union faced another difficult situation, namely the sovereign debt crisis, when the euro was put to the test. The sovereign debt crisis is a widely debated and analyzed topic both in Romania and in Europe. Given the effects it generates, amid rising government debt and the instability of the banking system, it is important to know its causes, in order to subsequently identify the most effective measures to improve the economic situation in each affected state.

This paper seeks to discuss the concept of sovereign debt crisis by conducting an analysis of government debt sustainability and the budget deficit in the European Union, as well as a forecast of government debt sustainability in Romania, reflecting the measures implemented by the Central Bank EU. According to the Maastricht criteria, the nominal convergence indicators, including the budget deficit and government debt, must be below the alert level, so that they are in line with European Union requirements. The level of the consolidated budget deficit must be less than 3%, and in terms of government debt, it must be below 60% of GDP.

The rationale for choosing this theme is that the existence of such a crisis at European level can significantly affect the economic context of each Member State of the European Union (EU), in terms of the interconnection of the global financial system. This interconnection refers to the idea that, when a state becomes involved in the claim of sovereign debt, it indisputably endangers part of the external private debt. This concept is also called in the literature and contagion effect. The relevance of this theme lies in the analysis of the evolution of the main indicators that led to the onset of the sovereign debt crisis, as well as in the identification of its causes, in order to prevent enlargement.

Keywords: sovereign debt crisis, euro, financial shocks, macroeconomic shocks

JEL classification: G01, H12

Introduction

The sovereign debt crisis mainly suggests the key problems facing the euro area. At the same time, through this crisis we can identify ways to solve, but also to recover the whole situation, consisting in: much broader supervision of the banking system, increased

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emergency funds, and the implementation of effective measures in terms of public spending. Also, the sovereign debt is highlighted by bonds issued by a country in a foreign currency in order to finance, but also to support the situation in the economy, with the aim of increasing the state concerned. This concept of sovereign debt is mainly an investment that is characterized by a high level of risk, this coming from the developing state. Also an important factor in terms of sovereign debt is the stability of the government issuing bonds, because it assesses the risk of investing in sovereign debt, and in this situation the ratings of sovereign loans provide help to investors to measure, but also assessment of this risk. Equally important are unfavorable and unexpected changes in exchange rates, as well as an optimistic assessment of the results coming from funded projects that can lead to increased debt difficulty. One way to support the lender is to renegotiate the terms of the loan, but which otherwise cannot measure the total assets held by the government.

The main objective of the paper presented is to determine the importance and implications of the sovereign debt crisis at both the euro area and European level as a whole. The above objective can be achieved by conducting research on specific targets, including:

• analysis of the evolution of the budget deficit at the level of the European Union (EU);

• analysis of the evolution of government debt at the level of the European Union (EU);

• sustainability of government debt and budget deficit in Romania from the perspective of financial stability, through a 5-year forecast.

The structure of this article consists of four fundamental chapters, among which are: the review of the literature that highlights various concepts of economists that have been developed over the years on this subject, the second chapter focuses on the role of the Central Bank (ECB) in managing the sovereign debt crisis, the analysis of the main indicators that led to the onset of this phenomenon and last but not least, the realization of a forecast, in Romania, for a period of 5 years, of the budget deficit and government debt, from the perspective financial stability.

Regarding the research methodology, it will focus on performing a quantitative and qualitative analysis. The quantitative analysis aims at the specific formulation, in which both the variables and the relations between them are well specified, more precisely the hypotheses that represent the starting point of the research, in this case the review of the literature. Regarding the qualitative analysis, which consists of the statistical analysis of the main indicators and the performance of an econometric forecast, it aims at the process of collecting and processing data and information so as to reach a level close to the estimated results.

The results estimated in this paper are represented by the idea that government debt and budget deficit are the main factors that have significantly influenced the evolution of this phenomenon. It is also estimated that Romania will align with the criteria set out in the Maastricht Treaty in the coming years.

1. Literature review

The sovereign debt crisis is considered in the economic literature as the forerunner of the global economic crisis launched in 2007, which also has other causes, effects and consequences. Specifically, the global financial crisis has turned into a eurozone sovereign debt crisis. Since 2009, Greece, Ireland, Italy, Portugal and Spain, countries in the PIIGS group, have entered a crisis that can be characterized by a high level of severity, as anxiety over the increased indebtedness of states has made the process of refinancing existing debts is becoming increasingly difficult. This deterioration in the creditworthiness of states stemmed from the financial sector as a result of high sovereign exposures in the banking system. At the same time, it can be stated that the impact of the sovereign debt crisis on the lending of the banking system is much more complex, compared to previous banking crises.

The specialized economic literature on the evolution of the sovereign debt crisis, in a European context, is quite extensive and complex. Sovereign debt is, in essence, the relationship between the debtor and the creditor and is highlighted at market level, through domestic bonds, Eurobonds, as well as foreign bonds. The collapse of the mortgage industry in the United States of America took place in 2007, which later materialized with the onset of the global economic crisis, which had major economic consequences, such as: the fall of stock markets, imbalances in the banking system, the crisis loans, etc. In order to reduce the negative effects, deficit states were named and identified, more precisely those states that had loans that over the years could not honor, thus leading to the onset of the sovereign debt crisis. (Stancu, 2013).

At present, the controversial relationship between government debt and economic growth has gradually begun to return to the market, as the question that has created much controversy has been: "Does government debt restrict economic growth?". It can be said that this question is particularly important in terms of the policy to be adopted. For example, if the answer is yes, it is necessary to apply an expansionary fiscal policy, in which increasing the level of debt will lead to a decrease in long-term levels of economic growth. This approach denies the positive impact of the fiscal stimulus on euro area countries. Otherwise, macroeconomic policy makers will focus on a restrictive fiscal policy. (Haytham, 2017)

The sovereign debt crisis is considered a particularly complex process with major macroeconomic implications, and which significantly affects the economic trajectory of the states involved. From this perspective, the idea can be highlighted that there are three channels through which increased levels of government debt, both internal and external, can impede economic growth. The effects that may result in this are: lower investment, if investors believe that the proceeds of any new project will be taxed to serve the debt, high interest rates that crowd the private system and last but not least, the political uncertainty that leads to the creation of incentives to replace high-yield, long-term projects with short-term, low-return investments.

2. Research methodology

2.1. The role of the European Central Bank in managing the sovereign debt crisis

The European Central Bank (ECB) together with the national central banks form the Eurosystem, more precisely the system of central banks located in the euro area. The fundamental objective of the European Central Bank, abbreviated ECB, is to ensure that price stability is maintained, in particular by protecting the value of the euro. The European Central Bank (ECB) also envisages the prudential supervision of credit institutions located in the euro area as well as in participating non-euro area Member States.

According to a study by the Organization for Economic Co-operation and Development (OECD), in order to improve the economic context at European level and avoid breaking the euro during the sovereign debt crisis, the Member States of the European Union (EU) had to recognize the following fundamentals. :

• that this is first and foremost a banking crisis, which interacts with sovereign debt and inevitably leads to problems related to the sustainability of the financial system. In this situation both crises must be resolved simultaneously, otherwise neither will be resolved;

• that the problems related to the inflationary phenomenon are not the main risk and factor that destabilizes the situation in the economy, on the contrary the major risk is caused by deflation;

• that it is necessary to apply policies that address long-term chronic incompatibilities, including: compact tax rules, reducing the unit cost of labor in non-competitive economies; pension system reforms as well as labor market flexibility;

• that it is important to implement a series of policies that address the critical liquidity and financing issues needed to avoid a major worsening of the crisis.

With regard to the sovereign debt crisis, the European Central Bank (ECB) reacted swiftly and decisively, so that the measures adopted did not affect the overall strategic monetary policy framework. In response to this crisis, the European Central Bank (ECB) has carried out various additional actions to provide liquidity to the system. In this situation, solvent banks have not lost the ability to refinance, although the interbank market has transformed into a dysfunctional market. As a result of the need to reduce the negative impact of the crisis, the European Financial Stability Facility (EFSF) was set up. This institution was set up at the initiative of the euro area Member States, with the fundamental aim of maintaining financial stability by lending to countries. These loans are obtained through the issuance of bonds at the level of capital markets. In accordance with agreements between the International Monetary Fund (IMF), the European Central Bank (ECB) and the European Financial Stability Facility (EFSF), it can issue guaranteed bonds to states facing major financial difficulties, up to € 440 billion.

The European Central Bank (ECB) will continue to finance, in the long term, and make available sovereign bond rates in the affected states or some other form of policy related to the quantitative easing (QE) process in the future. It should be noted that these measures are considered significant because they are intended to maintain confidence, avoid distortions in the yield curve and, unquestionably, promote long-term growth prospects.

At the level of the European Union (EU) Member States, a decrease in labor productivity has been observed during the sovereign debt crisis, resulting from the application of a large number of regulations both in the labor market and in the market for goods, products and of services. Under these conditions, it was necessary to implement a set of policies and measures to encourage the population to create new products and technologies, which will later lead to more jobs and, undoubtedly, to the improvement of the economic growth process.

2.2. Analysis of the budget deficit and government debt at the level of the Member States of the European Union

From an economic point of view, “the budget deficit is a variable of flows, given that government debt is a variable related to inventories.” (Libermann and Hall, 2010, p. 736) According to Figure 1, which shows the evolution of the budget deficit at the level of the member states of the European Union, between 2007-2018 it can be seen that the lowest level was reached by Ireland (-32.1%) in 2010, followed by Greece (-15.1%) in 2009, Portugal -11.4%. and Spain -10.7%.

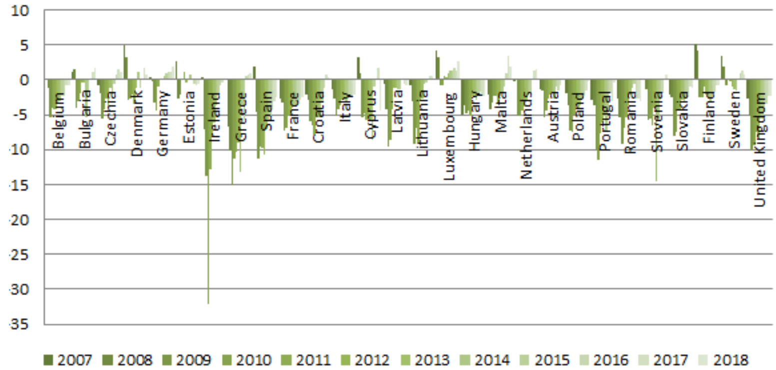

Figure no.1 The evolution of the budget deficit at the level of the European Union in the period 2007-2018

Source: own processing based on data provided by Eurostat,
https://ec.europa.eu/eurostat/tgm/download.do?tab=table&plugin=1&language=en&pcode=tec00127

The importance and need to limit the level of the budget deficit since the beginning of the crisis in 2007 has been a fundamental issue and at the same time a controversial issue. Thus, at EU level during the period under review, major progress has been made in some countries, including (including: Luxembourg which has the largest budget surplus compared to other EU Member States, which is worth 2.7%), Germany, (which managed to reach 1.9% of GDP), and (Bulgaria by 1.8%). However, there are also countries that are not in a similar situation to the countries mentioned above, namely Spain and Portugal, which have generally recorded a high deficit and Greece, which has been characterized by an uncertain situation at the level of economic system.

In the current context, an analysis of potential developments in the level of government debt and the risks that may affect fiscal fiscal sustainability is therefore important for euro area Member States and EU Member States to take appropriate policy measures, to support, over the years, the fiscal-budgetary solvency. In 2017, more than half of EU member states had a level of public debt above the 60% level set out in the Maastricht Treaty. The highest government debt problems were encountered in the "fifteen-year-old" countries belonging to the euro area, namely: Greece, Italy, France, Belgium, Portugal, Ireland and, since 2009, Austria and Germany. Among the new EU Member States that joined after 2004, problems related to public debt have been identified in the case of: Hungary and Malta. A major cause of government debt at the level of each EU Member State was mainly due to the economic and financial crisis, which, after 2008, gradually led to a slowdown in economic growth.

During the period 2000-2019, the level of government debt fluctuated considerably, with the highest value in 2014 in Greece (178.9%) and the lowest in 2007 in Estonia (3.8%). %). In the period 2015-2018, almost all Member States of the European Union (EU) have reduced their debt to GDP ratio, these reductions are projected until 2021. According to data published by Eurostat, Greece has the highest ratio in the current context. of government debt relative to GDP. Thus, at the end of 2018, the level of government debt had registered the value of 181% of the national GDP, having an increase of 5 percentage points compared to the previous year. The justification for the austerity measures adopted in the case of the Greek state is mainly based on the need to achieve the sustainability of government debt. The economic rationale behind the three fiscal adjustment programs that have been adopted is that, in line with the theory of expansive austerity, the fiscal consolidation process and structural reforms will reduce the ratio of government debt to GDP. Over the years, the Greek state's economy has contracted amid the development of the crisis, and the ratio of government debt to GDP has increased considerably, reaching 180% in 2011.

Another country facing a high level of government debt is Italy, ranking second with 132% of GDP, followed by Portugal and Cyprus. In the case of Cyprus, the ratio of government debt to GDP increased to 108.9% in 2015 from 102.5% in 2013, mainly due to public support in the sector. financial and nominal GDP contraction. Taking into account the situation in Ireland, the highest value of the government debt-to-GDP ratio was 120% in 2013. In 2015, the value of this indicator decreased to 93.8% of GDP from 107.5%, the value reached in 2014. This was due to the increase in gross domestic product, as well as the sale of state assets.

At present, the public debt of eight Member States exceeds the averages of the euro area countries as well as the EU Member States.

At the other end of the spectrum is Estonia, which, during the period under review, recorded much lower values compared to the countries mentioned above. Thus, Estonia has a level of government debt of 8% of GDP. The main cause of the government debt reduction was the adoption of austerity measures as a result of overcoming the crisis situation.

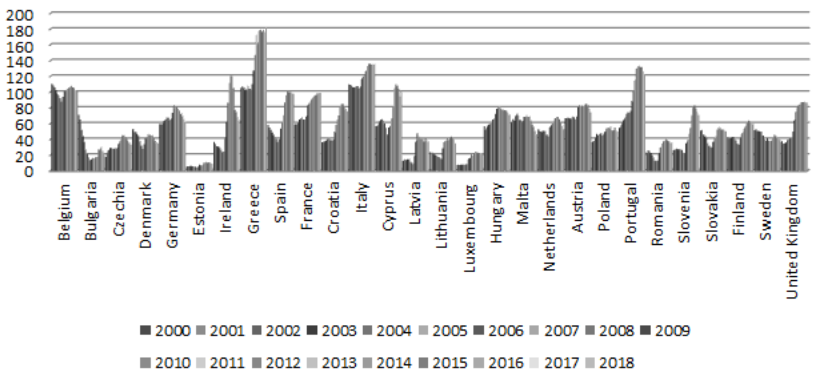

Figure no. 2. The evolution of government debt at the level of the European Union in the period 2000-2019

Source: own processing based on data provided by Eurostat, https://ec.europa.eu/eurostat/tgm/download.do?tab=table&plugin=1&language=en&pcode=sdg_17_40

2.3. Forecast of government debt and budget deficit from the perspective of financial sustainability. The case of Romania

The sustainability of government debt represents in the current context both at the level of Romania and at the level of the European Union (EU) an intensely debated issue, which brings with it a special importance on the public decision-making process. the indicators highlighted are: government debt and budget deficit. To obtain the prediction, the quantitative method Exponential Smoothing was used, abbreviated ETS which is based on an algorithm for identifying and detecting seasonal patterns and confidence intervals, using Excel.

Year	Government debt	Forecast(Government debt)	Lower Confidence Bound(Government debt)	Upper Confidence Bound(Government debt)
1995	6,6			
1996	10,6			
1997	15,1			
1998	16,8			
1999	21,7			
2000	22,5			
2001	25,9			
2002	24,8			
2003	22,1			
2004	18,9			
2005	15,9			
2006	12,4			
2007	11,9			
2008	12,3			
2009	21,8			
2010	29,6			
2011	34			
2012	37			
2013	37,6			
2014	39,2			
2015	37,8			
2016	37,3			
2017	35,1			
2018	35			
2019	35,2	35,20	35,20	35,20
2020		35,33	28,77	41,89
2021		35,47	24,98	45,95
2022		35,60	21,24	49,96
2023		35,73	17,37	54,09
2024		35,87	13,32	58,41

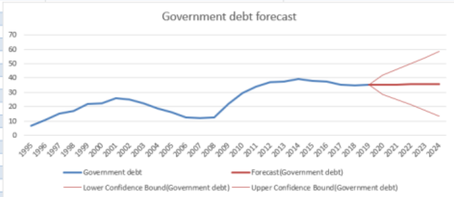

Figure no. 3. Prediction of government debt

Source: own processing based on data provided by Eurostat, https://ec.europa.eu/eurostat/tgm/download.do?tab=table&plugin=1&language=en&pcode=tec0012 7

According to the data from Figure no. 3, the average level of government debt in the coming years will be: 35.33% of GDP in 2020, 35.46% of GDP in 2021, 35.59% of GDP in 2022, 35.73% of GDP in the year 2023, and in 2024 it will be 35.86%. It can be seen that during the forecast period, the level of the indicator was around 35% of. With 95% confidence, the projected result will be between (upper and lower) 28.77% - 41.89% of GDP for 2020, 24.98% -45.95% of GDP for 2021, 21, 24% -49.96% of GDP for 2022, 17.37% -54.09% of GDP for 2023, and in 2024 it will be in the range of 13.32% -58.41%. Taking into account the forecasts made, it can be stated that the level of government debt falls within the conditions set out in the Maastricht Treaty, which supports the existence of a government debt below 60% of GDP. At the time of the onset of the 2007 economic crisis, government debt affected the economies of both highly developed and developing countries, so that by the end of 2009, the euro area was facing the first stage of the sovereign debt crisis. .

Maintaining government debt at an economically sustainable level depends very much on the economic conditions of each state. An important role is also played by the ability of each national economy to generate primary surpluses, namely the interest rate at which the financial markets lend to the state, which thus represents a risk premium function, as well as an economic growth rate. Taking into account the case of Romania, it can be stated that the risks are of medium intensity, firstly due to the fact that the government debt maintains its value at the level set by the European Union (EU) and, secondly, due to the fact that the risks they come mainly from the need to generate primary surplus, in order to stabilize government debt at a level sustainable to their own economy. The sustainability of Romania's government debt, from the point of view of macrostability, is a fundamental element of long-term economic growth, therefore the way of managing the state's financial resources must be considered. Otherwise, it can lead to vulnerabilities in the development model and the onset of a financial crisis.

Year	Budget deficit	Forecast(Budget deficit)	Lower Confidence Bound(Budget deficit)	Upper Confidence Bound(Budget deficit)
1995	-2			
1996	-3,6			
1997	-4,4			
1998	-3,2			
1999	-4,4			
2000	-4,6			
2001	-3,5			
2002	-1,9			
2003	-1,4			
2004	-1,1			
2005	-0,8			
2006	-2,1			
2007	-2,7			
2008	-5,4			
2009	-9,1			
2010	-6,9			
2011	-5,4			
2012	-3,7			
2013	-2,1			
2014	-1,2			
2015	-0,6			
2016	-2,6			
2017	-2,6			
2018	-3			
2019	-4,3	-4,3	-4,30	-4,30
2020		-3,34	-5,48	-1,20
2021		-2,11	-4,79	0,57
2022		-0,45	-3,58	2,68
2023		0,62	-2,89	4,14
2024		1,03	-2,84	4,90

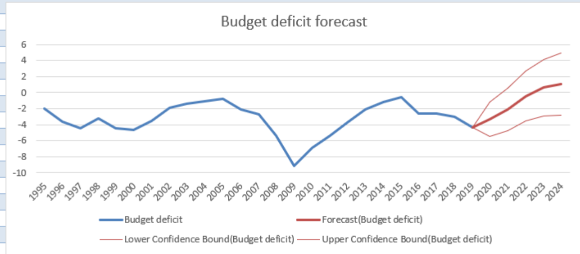

Figure no. 4. Prediction of the budget deficit

Source: own processing based on data provided by Eurostat, https://ec.europa.eu/eurostat/tgm/download.do?tab=table&plugin=1&language=en&pcode=tec00127

The problem with the sustainability of the budget deficit is this: the budget deficit determines the increase of the government debt, which will have to be honored in the future. When the interest rate on government debt obviously exceeds the pace of economic growth, government debt will increase faster than GDP. In this situation, the dynamics will determine the emergence of unsustainable deficits, which will need to take corrective action. Under the conditions set out in the Maastricht Treaty, the level of the budget deficit should not exceed 3% of GDP.

Following the forecast made on the level of government debt, but also of the budget deficit in Romania, it can be stated that both indicators will meet the criteria established in Maastricht, of 60% of GDP, respectively 3% of GDP.

Conclusions

The interconnection between markets is acutely revealed in times of crisis, especially when shocks are transmitted from one market to another. Consistent with the research conducted in this paper, the main causes that led to the onset and evolution of the sovereign debt crisis were: the existence of high pre-crisis structural debt and the recession that accentuated the widening of the budget deficit in euro area countries. Another cause is the economies of southern Europe which are characterized as uncompetitive, thus leading to lower growth, but also much lower tax revenues in these countries. Last but not least, the aging of the population in several European countries is a catalyst for the evolution of the crisis. At the same time, there has been a growing skepticism about investors in the euro area, as they have gradually begun to question European finances. Since the onset of the global economic crisis in 2007, this has led to the discovery of such an interconnection, as the US subprime mortgage market has led to the 2008 banking crisis, which subsequently turned into a global crisis. Thus, a series of bailouts related to the financial sector have caused a total sovereign debt crisis in Europe. The sovereign debt crisis, considered a controversial issue at European level, broke out in Greece at the end of 2009 and later spread to the periphery of the euro area. The fiscal consolidation associated with austerity measures has led eurozone economies to form a deflationary spiral and to seek financial assistance from the European Union (EU). Fiscal consolidation can be seen economically as a predominantly qualitative adjustment, which is achieved through good management of public financial resources, so that during the sovereign debt crisis, most affected states have engaged in austerity programs. tax. The Greek state reduced its budget deficit from 10.4% of GDP in 2010 to 9.6% in 2011. The aim of economic consolidation is to influence the long-term development of the European social model. Subsequently, financial fragility amplified the shock of encouragement, which was reflected in the "Minsky moment" and the "balance sheet recession". The sovereign debt crisis was at its peak during 2010-2012.

Following the forecast made on the level of government debt, but also of the budget deficit in Romania, it can be stated that these indicators will meet the criteria established in Maastricht, of 60% of GDP, respectively 3% of GDP.

The measures implemented by the European Central Bank (ECB) have led to a reduction in the structural debt, a reduction in the budget deficit through the economic growth plan, and a strengthening of the banking system's oversight process, which has focused mainly on more complex standards. and adapted to reality.

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