

## Comparative Analysis of the Evolution of Public Debt in the European Union

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**Abstract.** *In the context of the difficult economic situation experienced over the past decade, most EU Member States are calling for increased tax rates to cover budget deficits, but also resort to loans. The effect of the loans was the emergence and accentuation of public debt. In this article we aim to analyze the evolution of public debt at the level of the European Union during 2007-2017, both in terms of its structure and its dynamics. The conclusion we reach is that very few Member States have met the conditions imposed by the Maastricht Treaty on public debt.*

**Keywords:** public debt, government securities, the public debt crisis, public loan

**JEL Classification:** H62, H68

### 1. Introduction

According to the definitions in the literature, public debt means the amount of a State's liabilities arising from short, medium or long term loans in national currency and in foreign currency directly committed from the domestic or foreign market and from guaranteeing express repayable internal and external loans borrowed by third parties.

A country's total debt is made up of both public debt and private debt. The public debt source is the public debt generated by the need to cover budget deficits and public expenditure deficits. Depending on the source of the loans, the debt can be divided into domestic debt (in national currency or in foreign currency) and external debt (in national currency or in foreign currency).

Government debt management requires a clear and transparent legal framework in line with the World Bank and the International Monetary Fund guidelines. At European level, this legislative framework is made up of the Maastricht Treaty of 17.02.1992, together with the directives on public debt management which have been in force since 2001 and the Growth and Economic Stability Pact concluded in 1997.

The Maastricht Treaty pays particular attention to public debt, making it an imperative requirement for EU Member States and those in the pre-accession or adherence period to maintain a percentage of public debt in GDP up to 60%.

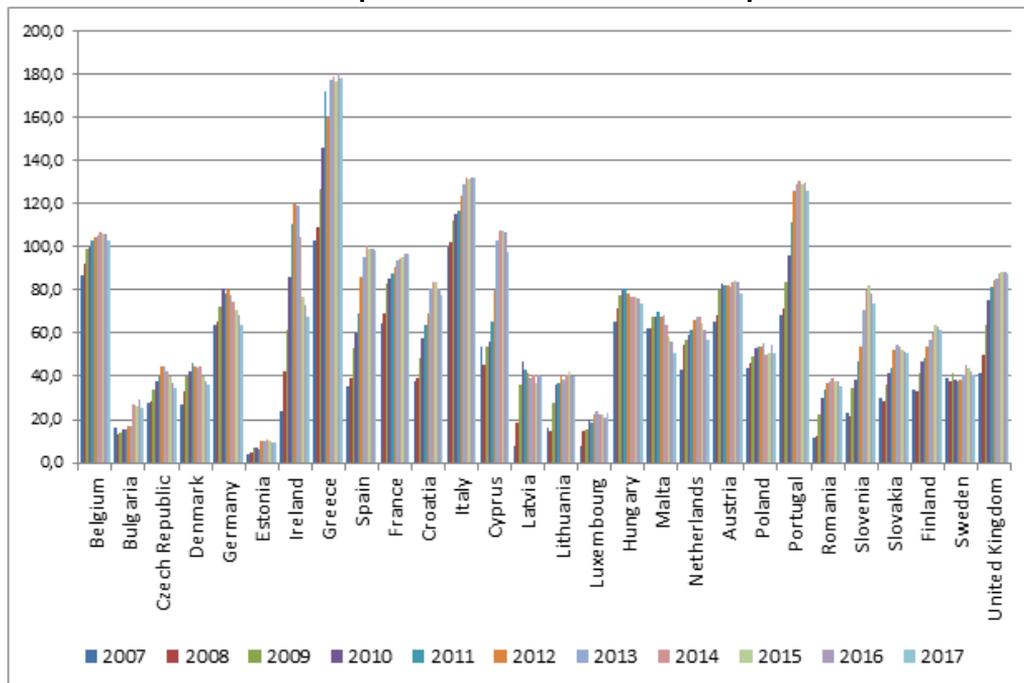
The early 1980s were characterized by a significant increase in public debt that triggered the debt crisis in several states defined by interruption of external debt payments. The periods in which overheating of the industrialized countries' economy results in an accumulation of public debt, due to the abundance of capital available on the market, which is oriented towards the underdeveloped or developing countries. The interest of developed countries in lending to the underdeveloped lies not in their support but rather in strengthening their own control over borrowed countries, the use of cheaper labor in these countries, the creation of new outlets for their own products, etc.

## 2. Evolution of public debt in the EU over 2007-2017

Post-World War II periods were characterized by severe economic crises that led to increased public debt in most developed countries. The factors that have generated this trend are numerous and diversified, starting with a low level of public revenues, rising social aid spending, tax incentives, or government support for banks and state-owned enterprises.

Chart no. 1

The evolution of total public debt in the EU over the period 2007-2017



Source: own processing based on Eurostat data

(<https://ec.europa.eu/eurostat/web/government-finance-statistics/data/main-tables>)

Chart no. 1 shows the evolution of total public debt as a percentage of GDP in the 28 EU Member States in 2007-2017. From the graphical representation it can be seen that very few Member States (11) managed to maintain the public debt below the maximum of 60%, as stipulated in the Maastricht Treaty. Thus, Estonia is the country with the lowest public debt followed by Luxembourg and Bulgaria. On the opposite side, out of the 17 Member States with a total public debt of more than 60% of GDP, we are meeting Greece with a total public debt of around 180% of GDP, followed by Italy and Portugal with a debt level of around 130 % of GDP.

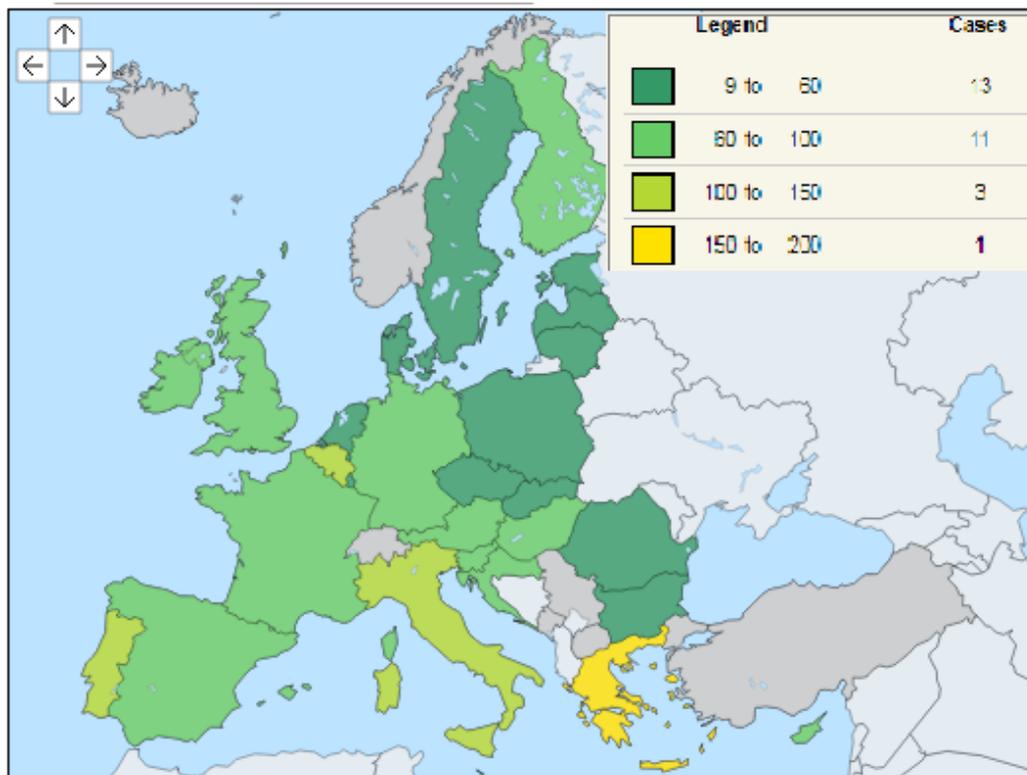
As far as Romania is concerned, we can observe that over the analyzed period the total public debt does not exceed 40% of GDP, the highest value being registered in 2014 (39.1% of GDP), and the lowest in 2007 11.9% of GDP).

It can also easily be noticed that the highest total public debt was recorded in 2012, 2013 and 2014, this being explained by the impact of the economic crisis triggered in early 2008.

Taking into account the convergence criteria for the Economic and Monetary Union, up to now, and the fact that the 17 Member States have recorded a total public debt level of over 60% of GDP over a minimum of 5 consecutive years, they have been

declared in public debt crisis, although some of them are economically developed countries.

The figure below shows the total public debt situation in the EU Member States at the level of 2017. We find that out of 28 Member States, only 13 states have a government debt below 60% of GDP, 11 have a debt which is between 61% and 100% of GDP, and 4 states exceed the 100% of GDP threshold.



**Figure no.1. The evolution of public debt in the EU in 2017**

Source: own processing based on Eurostat data

(<https://ec.europa.eu/eurostat/web/government-finance-statistics/data/main-tables>)

The four EU Member States that exceed the government debt threshold of 100% of GDP are Greece (178.6%), Italy (131.8%), Portugal (125.7%) and Belgium (103.1%). It is worrying that countries forming the economic core of the European space are in a state of crisis of public debt, namely France (which has a public debt of 97% of GDP), Spain (with a debt level of 98.3 % of GDP) and the United Kingdom (87.7% of GDP).

It is also worth noting that EU Member States with a weaker economy have managed to maintain a level of public debt within the limits set by the Maastricht Treaty throughout the analyzed period, as is the case for Bulgaria (which has the highest of total public debt in the year 2016 - 29% of GDP) and Romania (the highest public debt - 39.1% of GDP in 2014).

### 3. Analysis of the public debt structure in the EU

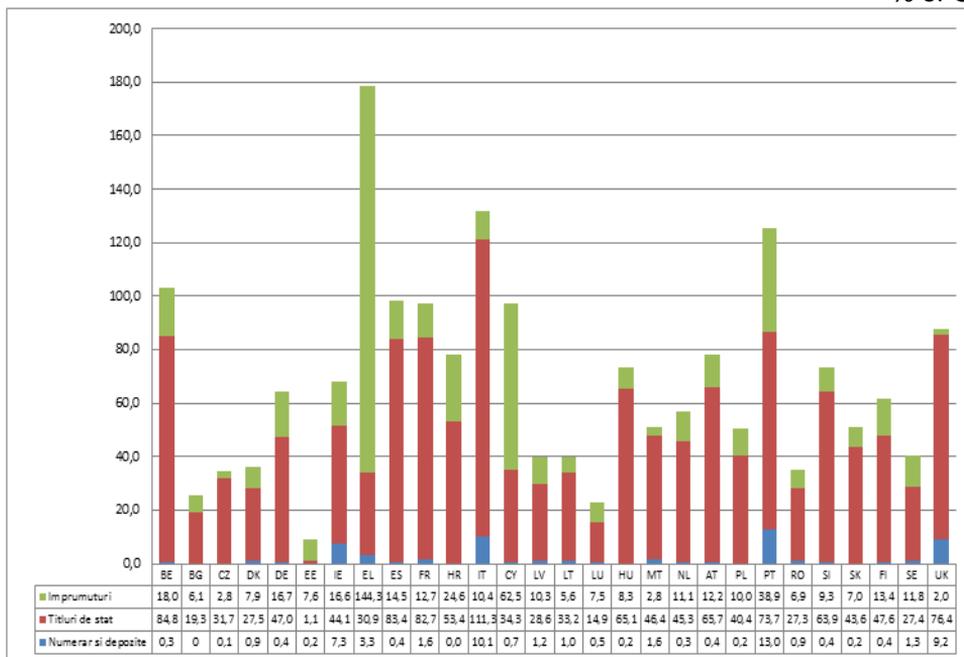
The structure of public debt can be analyzed from several points of view, such as: the source of the loans, depending on the financing instruments, depending on the currency of the loan or the maturity.

In the following, we proposed to analyze the structure of public debt in terms of financing instruments, namely cash and deposits, government securities and loans. The three components of government debt are expressed as percentages of GDP.

**Chart no. 2**

#### The structure of public debt in the EU in 2017

% of GDP



Source: own processing based on Eurostat data

(<https://ec.europa.eu/eurostat/web/government-finance-statistics/data/main-tables>)

The analysis of the public debt structure from the perspective of the instruments it forms at the level of the 28 EU Member States indicates that most states finance mainly through government bonds, followed by loans.

Exceptions to this trend are recorded in Greece where borrowings account for 144.3% of GDP, while state bonds coupled with cash and deposits only 34.2% of GDP, followed by Cyprus with a public debt of 62.5% of GDP and 34.3% of GDP of the state, while the third component is almost non-existent (0.7% of GDP). The only exception is Estonia, which, although it has the lowest public debt among the EU Member States, consists of loans of 7.6% of GDP, government bonds of 1.1% of GDP and cash and deposits - 0.2% of GDP.

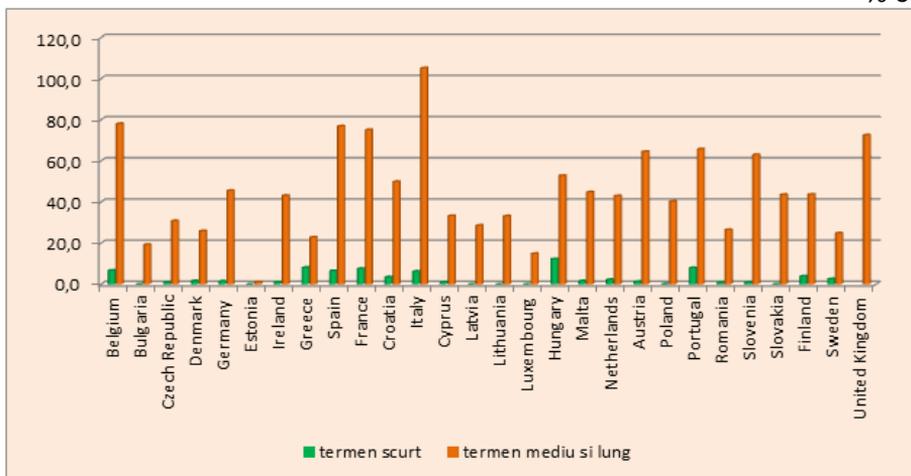
In terms of public debt in Romania, it is mainly formed of government securities (27.3% of GDP), followed by debt (6.9% of GDP) and cash and deposits (0.9% of GDP).

We can see a significantly lower amount of public debt on the cash and deposits side compared to the other two components in all 28 Member States. The only significant values of this component are recorded in Portugal (13% of GDP), Italy

(10.1% of GDP), the United Kingdom (9.2%), Ireland (7.3% ), while in most of these countries it is below 1% of GDP.

It is also interesting to analyze the structure of government debt by maturity. In the graphs below, we represented the structure of the short- and medium-term and long-term debt stemming from state borrowings and loans.

**Chart no. 3**  
**Government Debt Structure of Government Securities in the EU in 2017**  
 % of GDP



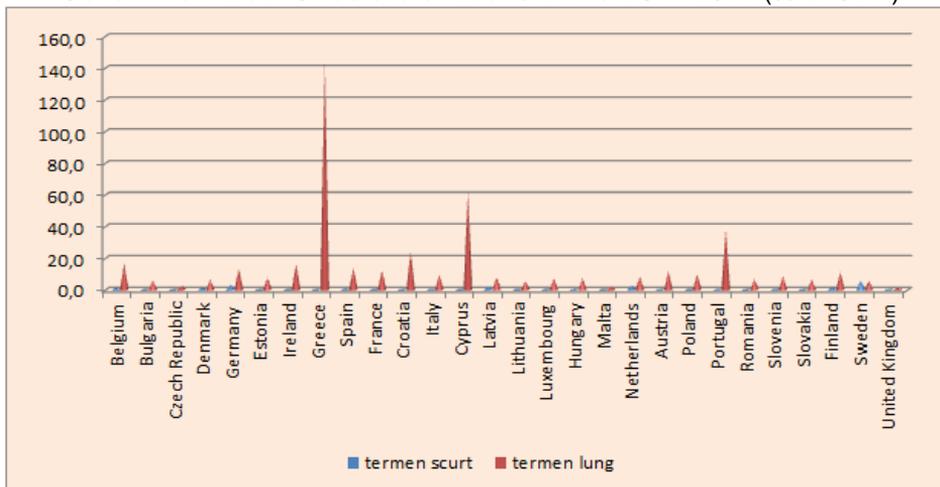
Source: own processing based on Eurostat data

(<https://ec.europa.eu/eurostat/web/government-finance-statistics/data/main-tables>)

Depending on the maturity, public debt is divided into short-term public debt and long-term public debt. As shown in graphs no. 3 and 4, all EU Member States opt for medium and long-term funding.

The European debt crisis has degenerated from the financial crisis as a result of supporting the banking sector and the gaps in the collection of taxes and duties. Within the European Union, this has increased mainly due to the lack of consistent EU and national government interventions.

**Chart no. 4**  
**Government Debt Structure of Loans in the EU in 2017 (% of GDP)**



Source: own processing based on Eurostat data

(<https://ec.europa.eu/eurostat/web/government-finance-statistics/data/main-tables>)

Moreover, the European Commission has ignored for almost a decade rising government deficits and rising public debt as well as private sector debt, especially in the case of Greece.

At the same time, the European Central Bank preferred to redeem state titles from banks without a rigorous analysis of the creditworthiness of issuers of securities. Banks in their turn started to lend without a stable analysis of the risk of non-collection.

#### 4. Conclusions

The stability rules imposed by the Maastricht Treaty have not only been respected by many EU Member States, but sanctions have not been applied to them.

In support of countries facing public debt problems and in order to avoid imbalances in the international financial system, agreements have been concluded with various international financial institutions. In order to resolve the public debt crisis, the European Financial Stability Facility, the European Financial Stability Facility and the European Stability Mechanism have been set up to ensure stability in the Eurozone and to avoid the negative effects of over-indebtedness on the European Monetary Union.

States that are not part of the Eurozone and are in a state debt crisis are obliged to solve this situation on their own by implementing programs to save, restructure and consolidate public spending.

In order to avoid the emergence of the debt crisis in the European area, the Stability and Growth Pact and the Stability, Coordination and Governance Treaty concluded in 2011 were imposed and introduced new sanctions in the event of non-compliance with the budget deficit and public debt conditions.

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