# An Empirical Study on Public Debit in Romania

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***Abstract:*** *This paper states that public debt can be defined as an amount that a country owes to creditors outside themselves, but also to individuals, businesses and even other governments. The term "public debt" is used interchangeably with the term sovereign debt. The study presents a brief analysis of the evolution of public debt in Romania for the past years. The issue of public debt sustainability is an important factor in the development of policies aimed at reducing the volatility of volatile capital markets, the economic policy of Romania should be focused on the gross GDP growth. Public debt is sustainable when state authorities have the ability to repay public debt service to creditors without having to make future adjustments to budget revenues and expenditures. The public debt has a negative effect on economic growth, heavily indebted countries being exposed to the risk of capital outflows or of the rapidly deteriorating position of public finances in the context of an economic and financial crisis. Emerging economies cannot sustain the same debt level as a share of GDP, that countries with advanced economies can manage, but a much lower one, mainly because of the limited access to capital markets of the countries from the former category.*

***Keywords:*** *public debt, budget deficit, public debt sustainability, economic growth, external debt*

## 1. Introduction

The public debt is defined as how much a country owes to lenders outside of itself. These can include individuals, businesses, and even other governments. The term "public debt" is used interchangeably with the term sovereign debt.

Public debt usually only refers to national debt, but some countries also include the debt owed by states, provinces, and municipalities. Therefore, be careful when comparing public. Zaman G. argues that national and international financial institutions adopt a number of criteria by which countries can be categorized according to the size and dynamics of the existing debt.

The issue of public debt sustainability is an important factor in developing policies aimed at reducing the volatility of volatile capital markets. Public debt is sustainable when state authorities have the ability to repay the public debt service to creditors without having to make future adjustments to revenue and budget expenditures.

## 2. Public Debt vs. External Debt

Don't confuse public debt with external debt. That's the amount owed to foreign investors by both the government and the private sector. Public debt affects external debt, because if interest rates go up on the public debt, they will also rise for all private debt. That's one reason businesses pressure their governments to keep public debt within a reasonable range.

Economists consider that "the internal public debt represents the totality of the state's liabilities, coming from loans contracted directly or guaranteed by the state, from individuals or legal entities, in lei or foreign currency, on the domestic market, including the amounts temporarily received
from the Treasury's sources" and "external public debt represents the total liabilities of the state, coming from loans on the foreign market, contracted directly or guaranteed by the state".

Moşteanu T, Postole M. A, Gherghina R., remarked that the link between the two types of debt can be influenced by political factors such as: large public investment projects involving the import of advanced technology. (Popa, 2010) appreciates that a country's external debt is made up of lending and borrowing operations received by a country or by private economic agents in that country in the international relations it carries out.

Pattillo argues that in the second half of the 1990s, decision-makers around the world have begun to admit that the high level of external debt contributes to curbing the development of a large number of low-income countries.

In the short run, public debt is a good way for countries to get extra funds to invest in their economic growth. Public debt is a safe way for foreigners to invest in a country's growth by buying government bonds. This is much safer than foreign direct investment. That's when foreigners purchase at least a 10 percent interest in the country's companies, businesses or real estate.

It's also less risky than investing in the country's public companies via its stock market. Public debt is attractive to risk-averse investors since it is backed by the government itself. When used correctly, public debt improves the standard of living in a country. That's because it allows the government to build new roads and bridges, improve education and job training, and provide pensions. This spurs citizens to spend more now, instead of saving for retirement, further boosting economic growth.

Governments tend to take on too much debt because the benefits make them popular with voters. Therefore, investors usually measure the level of risk by comparing debt to a country's total economic output, known as gross domestic product.

The debt-to-GDP ratio gives an indication of how likely the country can pay off its debt. Investors usually don't become concerned until the debt-to-GDP ratio reaches a critical level.

When it appears the debt is approaching a critical level, investors usually start demanding a higher interest rate. They want more return for the higher risk. If the country keeps spending, then its bonds may receive a lower S&P rating. This indicates how likely it is the country will default on its debt.

As interest rates rise, it becomes more expensive for a country to refinance its existing debt. In time, more income has to go toward debt repayment, and less toward government services. For more on how this occurred in Europe, see Sovereign Debt Crisis.

For the appreciation of a country's external debt, various indicators are used, reflecting the degree of indebtedness to the foreign currency and the currency effort it claims.

The indebtedness of a country vis-à-vis foreign countries is expressed by means of the indicators: absolute size of external debt, average external debt per capita, and ratio of external debt to gross domestic product.

The absolute size and average per capita external debt ratio is the amount owed to external creditors at any given moment, with no relation to the financial and currency potential of the debtor country and the timing of its reimbursement. The ratio between external debt and gross domestic product shows how much of the gross domestic product of the year considered would be needed to repay that debt. In Romania, the value of this indicator has evolved as follows:

The foreign exchange effort of a country's external debt is highlighted by the absolute magnitude of the external debt service, which is the annual payments made to the maturity of the contracted external borrowing plus the corresponding interest paid in convertible currency. In this respect, indicators are also used:

a) The external debt ratio, which expresses the share of external debt service (Sde) in the annual external income (VE) of the debtor country; R=(Sde/VE)x100;

This indicator shows the payment capacity of the debtor country and has several advantages as follows: highlights the role of exports in obtaining convertible currency; it is easy to compute and analyze; Highlights for a relatively short period (at most one year) the country's ability to honor the external debt service.

The evolution of this indicator in Romania is as follows:

b) Another indicator expresses the ratio between external debt service and debtors' income (Vd), ie government and public revenue, as well as government-guaranteed debtor income (Sde/Vd) x 100;

c) The ratio between the external debt service and the state budget revenue (VB), (Sde/VE) x 100.

This indicator shows the share of external public debt service in the budget revenues, so this indicator compares external debt with budget revenues during the period considered. It presents the disadvantage for countries with the non-convertible currency because external debt cannot be directly compared to internal income, but must be converted into a third-party currency, usually in the currency in which the external debt is expressed;

d) The ratio between the external debt service and the value of the official monetary gold reserves and the free currency of the debtor country. This indicator shows to what extent the external debt service can be covered by foreign exchange reserves and by other monetary values [Sde / (Rz Au+Valute)] x 100;

e) The ratio of external debt service to gross domestic product (Sde / PIB) x 100. It shows us the capacity of a state to bear its external debt;

f) Because the external debt affects the part of the gross domestic product for accumulation, then the ratio between the external debt service and the part of the gross domestic product for accumulation (Sde /A) x 100;

g) The remaining external debt (non-reimbursed amounts) can also be compared with the gross national product. This report shows the degree of indebtedness of the country. These comparisons are extremely useful to the decision-makers of debtor or creditor countries.

Romania has been classified by the World Bank in international statistics as a "less indebted" country, together with Poland, Croatia, the Slovak Republic, the Czech Republic, Estonia, etc. (while Hungary is classified as a "moderate indebtedness") One of the most important arguments was the worsening of sustainability indicators in correlation with other negative events, such as diminishing accumulation resources, decreasing domestic savings and investment rates, and increasing The fact that more than 90% of the country's gross debt is externally funded demonstrates the fragility of the national economy and the highest degree of dependence on external financing conditions for the collection of new resources.

**Table 1. Indicators of appreciation of the external debt level**

| **Country** | **2007** | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** |
|---|---|---|---|---|---|---|---|---|---|---|
| **Euro area (19 countries)** | 64.9 | 68.6 | 78.4 | 83.8 | 86.1 | 89.4 | 91.3 | 91.8 | 89.9 | 88.9 |
| **Euro area (18 countries)** | 65.1 | 68.8 | 78.5 | 84.0 | 86.2 | 89.6 | 91.5 | 92.0 | 90.1 | 89.1 |
| **EU (28 countries)** | 57.5 | 60.7 | 72.7 | 78.3 | 81.0 | 83.7 | 85.6 | 86.5 | 84.5 | 83.2 |
| **EU (27 countries)** | 57.6 | 60.8 | 72.8 | 78.4 | 81.1 | 83.8 | 85.6 | 86.5 | 84.5 | 83.2 |
| **Belgium** | 87.0 | 92.5 | 99.5 | 99.7 | 102.6 | 104.3 | 105.5 | 106.8 | 106.0 | 105.7 |
| **Bulgaria** | 16.3 | 13.0 | 13.7 | 15.3 | 15.2 | 16.7 | 17.0 | 27.0 | 26.0 | 29.0 |
| **Czech Republic** | 27.5 | 28.3 | 33.6 | 37.4 | 39.8 | 44.5 | 44.9 | 42.2 | 40.0 | 36.8 |
| **Denmark** | 27.3 | 33.3 | 40.2 | 42.6 | 46.1 | 44.9 | 44.0 | 44.0 | 39.5 | 37.7 |
| **Germany** | 63.7 | 65.1 | 72.6 | 80.9 | 78.6 | 79.8 | 77.4 | 74.6 | 70.9 | 68.1 |
| **Estonia** | 3.7 | 4.5 | 7.0 | 6.6 | 6.1 | 9.7 | 10.2 | 10.7 | 10.0 | 9.4 |
| **Ireland** | 23.9 | 42.4 | 61.5 | 86.1 | 110.3 | 119.6 | 119.4 | 104.5 | 76.9 | 72.8 |
| **Greece** | 103.1 | 109.4 | 126.7 | 146.2 | 172.1 | 159.6 | 177.4 | 179.0 | 176.8 | 180.8 |
| **Spain** | 35.6 | 39.5 | 52.8 | 60.1 | 69.5 | 85.7 | 95.5 | 100.4 | 99.4 | 99.0 |
| **France** | 64.3 | 68.0 | 78.9 | 81.6 | 85.2 | 89.6 | 92.4 | 95.0 | 95.8 | 96.5 |
| **Croatia** | 37.7 | 39.6 | 49.0 | 58.2 | 65.0 | 70.6 | 81.7 | 85.8 | 85.4 | 82.9 |
| **Italy** | 99.8 | 102.4 | 112.5 | 115.4 | 116.5 | 123.4 | 129.0 | 131.8 | 131.5 | 132.0 |
| **Cyprus** | 53.5 | 45.1 | 53.8 | 56.3 | 65.7 | 79.7 | 102.6 | 107.5 | 107.5 | 107.1 |
| **Latvia** | 8.0 | 18.2 | 35.8 | 46.8 | 42.7 | 41.2 | 39.0 | 40.9 | 36.9 | 40.6 |
| **Lithuania** | 15.9 | 14.6 | 28.0 | 36.2 | 37.2 | 39.8 | 38.8 | 40.5 | 42.6 | 40.1 |
| **Luxembourg** | 7.7 | 14.9 | 15.7 | 19.8 | 18.7 | 22.0 | 23.7 | 22.7 | 22.0 | 20.8 |
| **Hungary** | 65.0 | 71.0 | 77.2 | 79.7 | 79.9 | 77.6 | 76.0 | 75.2 | 74.7 | 73.9 |
| **Malta** | 62.3 | 62.6 | 67.6 | 67.5 | 70.1 | 67.8 | 68.4 | 63.8 | 60.3 | 57.6 |
| **Netherlands** | 42.7 | 54.7 | 56.8 | 59.3 | 61.6 | 66.3 | 67.8 | 68.0 | 64.6 | 61.8 |
| **Austria** | 64.7 | 68.4 | 79.6 | 82.4 | 82.2 | 81.7 | 81.0 | 83.8 | 84.3 | 83.6 |
| **Poland** | 44.2 | 46.3 | 49.4 | 53.1 | 54.1 | 53.7 | 55.7 | 50.2 | 51.1 | 54.1 |
| **Portugal** | 68.4 | 71.7 | 83.6 | 96.2 | 111.4 | 126.2 | 129.0 | 130.6 | 128.8 | 130.1 |
| **Romania** | **12.7** | **13.2** | **23.2** | **30.2** | **34.4** | **37.3** | **37.8** | **39.4** | **37.9** | **37.6** |
| **Slovenia** | 22.8 | 21.8 | 34.6 | 38.4 | 46.6 | 53.8 | 70.4 | 80.3 | 82.6 | 78.5 |
| **Slovakia** | 30.1 | 28.5 | 36.3 | 41.2 | 43.7 | 52.2 | 54.7 | 53.5 | 52.3 | 51.8 |
| **Finland** | 34.0 | 32.7 | 41.7 | 47.1 | 48.5 | 53.9 | 56.5 | 60.2 | 63.6 | 63.1 |
| **Sweden** | 39.3 | 37.8 | 41.4 | 38.6 | 37.9 | 38.1 | 40.8 | 45.5 | 44.2 | 42.2 |
| **United Kingdom** | 41.9 | 49.9 | 64.1 | 75.6 | 81.3 | 84.5 | 85.6 | 87.4 | 88.2 | 88.3 |

Source: EUROSTAT

## 3. Evolution of governmental public debt in EU

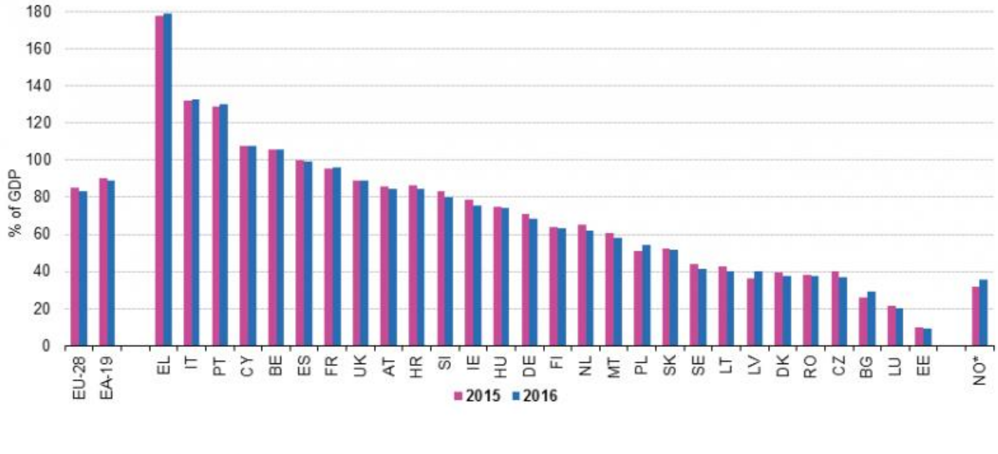
Evolution of governmental public debt in Romania, between 2005- 2016 As regards public debt in Romania, one must also take notice of the level of growth. In 2008 government public debt was 13.2 per cent of the GDP, and at the end of the year 2009 was 23.2 % of the GDP. On December 31, 2010, Romania recorded a government debt of 30.5 per cent of the GDP.

In 2011 public debt increased by 4.2 percentage, amounting to 34.7 percentage of the gross domestic product (GDP) as a result of the increase in economic growth of 2.5 per cent and the reduction in interest paid meant to attract loans, and a deflate greater than the forecast amount. At the end of the year 2012 government public debt was 51bn Euros, the payable debts being 14.4 bn. Euros, out of which 1.2 bn. Euros for the debt to the International Monetary Fund and the European Union. This was determined by the necessity to cover budget deficit and public debt buying into government. In 2012, according to Eurostat data, at the EU level, Romania was the fourth, only three member States recording a smaller debt: Estonia - 10.1 per cent of GDP, Bulgaria - 18.5 per cent of the GDP and Luxembourg - 20.8 per cent of the GDP.

In 2012, the government debt per every citizen was in 2012 of 2.500 euros, approximately double compared to 2008 when it represented only 1.400 euros. At the end of the first quarter of 2013, Romania's public debt increased by 0.9 percentage points compared to the same period of 2012, reaching the 38.6 per cent of the GDP and 0.8 percentages in the last quarter of the year 2012.

At the end of the first quarter of 2013 at the European Union level the situation is as follows: among the countries with the lowest public debt, there are: Estonia - 10% of GDP, Bulgaria - 18% of GDP, Luxembourg - 22.4 per cent of GDP, Latvia – 39.1% of GDP, Sweden - 40.4 per cent of GDP. While large public debt is recorded in: Greece – 160.3 per cent of the gross domestic product GDP, Italy – 130.3 per cent of the gross domestic product GDP, Portugal – 127.2.

**Figure 1. Maastricht debt as a percentage of GDP, 2015–2016**




* Source for NO: quarterly general government gross debt

*Source: Eurostat*

In the long run, public debt that's too large can act like driving with the emergency brake on. Investors drive up interest rates in return for greater risk of default. That makes the components of economic expansion, such as housing, business growth, and auto loans, more expensive. To avoid this burden, governments must be careful to find that sweet spot of public debt. It must be large enough to drive economic growth but small enough to keep interest rates low.

Romania was among the EU countries with the lowest government debt in the GDP in the first quarter of the year. The rate slightly went down compared to the previous quarter, reaching 37.1%, according to EU's statistical office Eurostat.

The highest rate of government debt in the GDP in 2017, recorded at Greece the end of March, with 176.2%, followed by Italy, with 134.7% and Portugal, with 130.5%. At the opposite pole the lowest rates were seen in Estonia (9.2%), Luxembourg (23%) and Bulgaria (28.6%), followed by Denmark (36.7%) and Romania (37.1%).

Compared to the fourth quarter of 2016, the highest increase in the government debt ratio was reported in the Czech Republic, with 3.1 percentage points, followed by Luxembourg with 3 percentage points, and Croatia with 2.6 percentage points. Romania was among the countries that reported a slight decrease.

The baseline debt trajectory is higher relative to last year's DSA. 2 Despite a slightly lower-than-expected debt outturn in 2016 and a higher projection for GDP growth in 2017, gross public debt (including guarantees) is 0.2 percentage points higher in 2017 relative to the previous forecast (40.3 versus 40.5 percent to GDP) and 0.7 percentage points higher by the end of the projection period (44.2 versus 44.8 percent of GDP). This outcome is mainly driven by the higher expected budget deficits relative to last year's DSA. Under the baseline, which incorporates the most recent procyclical fiscal measures, the budget deficit is expected to exceed 3 percent every year until 2021, thus violating the 3 percent rule under the Stability and Growth Pact. The budget deficit does however gradually decline after 2018, reaching 2.9 percent of GDP by 2022 as absorption of EU funds improves and replaces capital spending financed directly out of the budget.

# 4. Conclusions

In the period taken into account, the level of national debt was found not to exceed the limit of 60% of GDP established by the Maastricht Treaty. Representing only 13.4 per cent of the GDP in 2008, at the end of the year 2016 the level of gross government debt is estimated at 38.4 per cent of the GDP, net government debt of 31.5 per cent of the GDP. At an estimated level of the estimated budget deficit of 2% of the GDP for t 2014, gross government debt level will reach 38.5 per cent of the GDP, while net government debt will be 32% of the gross domestic product GDP. For 2016, Fitch Ratings awarded BBB rating- for long term foreign currency debts and for long term national currency debts. At the same time, the agency makes a series of remarks regarding the macroeconomic situation of the country, such as reaching a structural deficit f 1% of GDP in 2017; curbing the gross public debt under 40% of GDP between 2016-2017; owning sufficient currency reserves and capital in the banking field; GDP growth in 2016 up to 2%, with a mild upward trend between 2015- 2016, which will cover the imbalance of the EU incomes.

The agency shall also makes a series of observations relating to macroeconomic situation of the country: a structural deficit of 1 percent of the GDP in 2016; maintaining gross government debt below 40% of the GDP in the period 2015-2016; possession of hard currency reserves and a capital in the banking sector sufficient; GDP growth in 2015 to 2 %, with a slight acceleration in the period 2015-2016, that he will be able to reduce the delay of the revenues from the EU.

There are also comments with respect to: low efficient activities within the state companies in the strategic areas such as transport and energy, as well as the lack of efficiency health and public administration sectors; increasing rate of non-performing credits at 20.9 %; possibility of a political instability degree as a result of Euro parliamentary and presidential elections in the year 2014. Moody's Rating Agency is the only one that has granted rating Baa3, keeping Romania in the category of countries with rating recommended for investors, while S&P granted Romania a BB+ both in lei and in hard currency.

For the period 2017-2018, we are expecting an increase in investments, decrease of budgetary expenditures, and a balance between the fiscal consolidation and the economic rebound, between economic and social.

To stimulate the economic growth in Romania, there were prepared an array of measures, such as: diminishing the overdue debts of the state budget, local budget and SOE's budgets; implementing the programmed "grants for youth" to decrease the unemployment rate; applying fiscal measure that should stimulate the activity of research, innovation and development; increasing the capacity of absorption of EU funds; supporting the economical investments.

Romania will have to take measures for sustainable development and reforming its economic and monetary policies, maintaining external balance, prioritizing export recovery and attracting foreign direct investment.

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