

CHARACTERISTICS AND COSTS OF PUBLIC DEBT IN EUROPEAN UNION COUNTRIES

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Abstract:

Prudent and efficient management of government public debt by setting its characteristics in terms of maturity, repayment schedule, currency allocation or exposure to interest rate risk is important both in terms of ensuring budgetary stability and sustainability due to government, and for ensuring a stable macroeconomic framework.

The paper aims to analyze the structure of public debt in European Union countries to create a profile of them but also the analysis of external borrowing costs in order to formulate favorable recommendations for the management of public debt of our country.

Keywords: public debt, external debt

JEL Classification: H62, E62

Introduction

External and domestic government loans give the beneficiary country the opportunity to finance a larger volume of investment than would be possible only with budgetary resources, help to supplement domestic credit and keep demand within certain convenient limits, and to increase standard of living.

External financing provides access to several borrowing instruments, which allows for efficient management of the risk and cost of external borrowing, so that it can sometimes be cheaper than internal financing.

Sovereign debt management has repercussions in many areas of economic policy. But also foreign exchange, trade, monetary and budgetary policies directly influence the volume of external and internal loans that can be contracted.

Those who manage the public debt must know the forecast regarding the evolution of the macroeconomic situation, correlated with the volume of the necessary loan and the level of the debt service.

The difficulties generated by public debt can be avoided if governments accompany their public investment programs with effective measures to capture budgetary resources and mobilize domestic economies.

Debt policy involves the development of debt and macroeconomic policies and strategies, ensuring a sustainable level of sovereign debt. This level is affected by the financial flows that the country can absorb effectively and by the way in which they can generate, through the financed projects, foreign exchange earnings necessary for the payments of the sovereign debt service, without risking difficulties in making payments.

The public debt management policy aims at obtaining maximum benefits from the loans made, avoiding the occurrence of problems regarding macroeconomic stability, the state budget and the balance of external payments. The aim is to determine the most appropriate ways to use loans to achieve high and stable growth rates, to ensure that the use of borrowed funds, coupled with the

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application of appropriate economic policies, will create future flows of sufficient resources to enable timely payment of the sovereign debt service of that country.

In order to achieve the objective of the long-term sovereign debt management policy, its administrators must monitor the debt already contracted, the maturities and the debt service that the country pays at the time of the analysis.

The analysis of the public debt portfolio, carried out in order to establish the impact of the debt service on the economic and financial performance of the country, must take into account the macroeconomic context and the forecasts regarding the evolutions of certain key indicators.

Methodology and Data

In order to come to conduct research on the problem of public debt, the paper analyzes data using comparative, analytical, descriptive method and the use of a set of information sources, collecting financial data in databases, based on annual reports, consolidated statistical data provided by the Eurostat and the International Monetary Fund. The study was completed by formulating conclusions related to this financial phenomenon.

Description of the Problem

In order to observe the public debt profile of the countries of the European Union and implicitly of Romania, we will study comparatively the public debt as a share in GDP, the structure of public debt on financial instruments, debt structure according to debt holders, public debt structure according to maturity, the average cost of public debt, and we will make comparisons between European Union countries in terms of the cost of borrowing, analyzed in terms of macroeconomic indicators and country rating.

In 2020 the pandemic hit the economies of all countries profoundly affected economic sectors negatively in particular tourism and air transport but also in a positive sense (production of IT components and online trade), public spending grew rapidly and focused on the field health to combat the pandemic, social protection, but also to support the economy and get out of the crisis. In order to avoid the major turbulences generated by the pandemic crisis, the data before its onset were used.

1. Public debt as a share of GDP

Between the end of 2018 and the end of 2019, the ratio of public debt to GDP in the European Union decreased from 79.6% of GDP at the end of 2018 to 77.8% of GDP at the end of 2019 (-1.8 percentage points), the public debt / GDP ratio decreasing in 21 of the European Union states.

The largest decreases were in Cyprus (5.1 pp.), Ireland (4.8 pp.), Greece (4.6 pp.), Slovenia and Portugal (4.3 pp.), Hungary (3.9 pp.). In five EU Member States, the debt-to-GDP ratio increased between the end of 2018 and the end of 2019: Lithuania (2.3 pp.), Luxembourg (1.1 pp.), Romania (0.5 pp.), Estonia and France (0.1 pp.).

It is noted at the level of European countries that there is a downward trend in public debt relative to GDP, with the exception of a few countries that have a small share of public debt in GDP have allowed a higher public debt growth than GDP growth.

At the end of 2019, 11 of the 27 EU Member States reported debt / GDP above the 60% benchmark under the Maastricht Treaty; Greece recorded the highest debt rate at 176.6%, followed by Italy (134.8%) and Portugal (117.7%).

Germany and Ireland have reduced debt below the 60% threshold in 2019.

The lowest debt-to-GDP ratio was recorded by Estonia at 8.4% of GDP at the end of 2019, followed by Bulgaria (20.4%), Luxembourg (22.1%), the Czech Republic (30.8%), Denmark (33.2%), Sweden and Romania (35.2%), Lithuania (36.2%), and Latvia (36.9%).

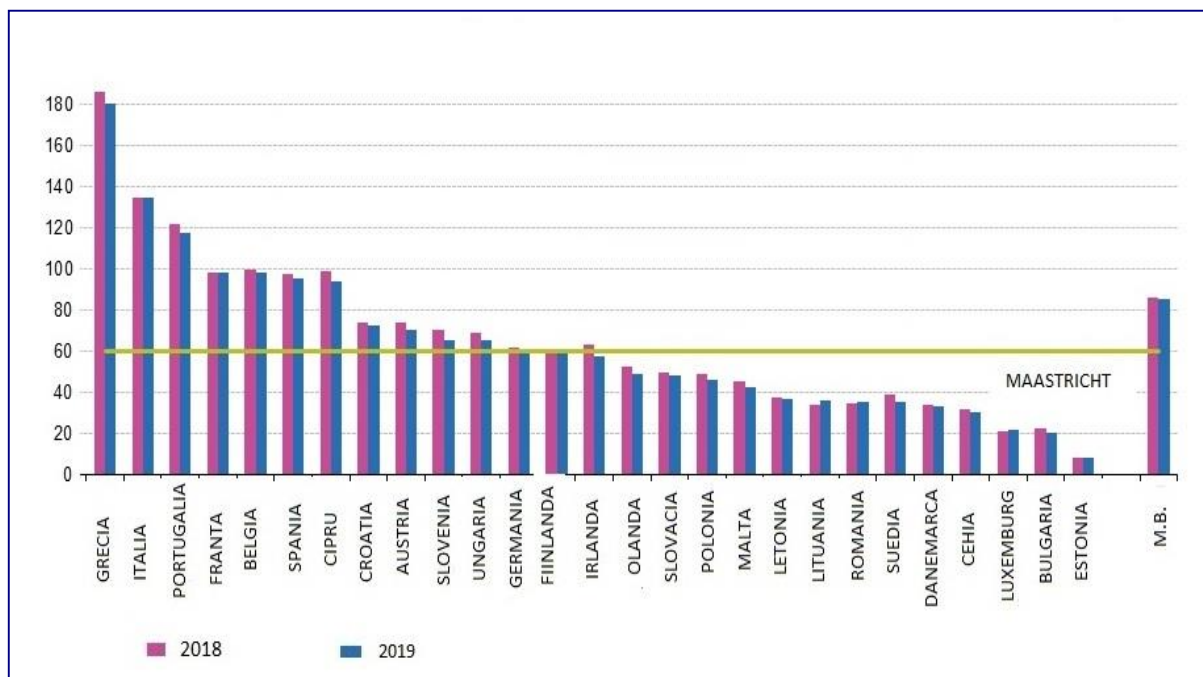


Figure 1: Public debt as a share in GDP, 2018-2019 (%)

Source: <https://ec.europa.eu/eurostat/>

2. The structure of public debt on financial instruments

Debt structure analysis helps us determine if there are risks to its sustainability.

At the level of the European Union, 80.6% of the general public debt consisted of securities, 16.0% of loans and 3.5% of foreign currency and deposits.

For 25 of the 27 EU Member States, the most widely used instrument remained debt securities at the end of 2019, ranging from a share of 10.5% of Estonia's public debt to 91.8% of government debt in Czech Republic.

In Estonia, Greece and Norway, loans account for 87.8%, 80.6% and 59.1% respectively. There are also large loan shares in relation to total debt for Cyprus (41.4%), Luxembourg (28.2%) and Croatia (29.2%). Countries with a higher share of public debt loans are generally those with a relatively low level of gross general government debt (eg Estonia).

At the end of 2019, currency and deposits accounted for less than 5% of total debt for 24 countries. In contrast, currency and deposits accounted for 12.7% of total gross public debt in Portugal (due to savings certificates), 10.9% in Ireland and 9.4% in Italy.

The fact that securities have the largest share (with the exception of Estonia and Greece, Greece being a special case, benefiting from assistance funds received from the EU through the ECB see Annex 1), proves that securities as a financial instrument benefit from certain advantages - the timing of the launch and implicitly of the collection of the funds thus attracted is decided by the government according to the current needs, also the maturity is chosen so as not to overlap with the maturity of other loans, and are not accompanied by different conditions for granting, as are often the case with loans.

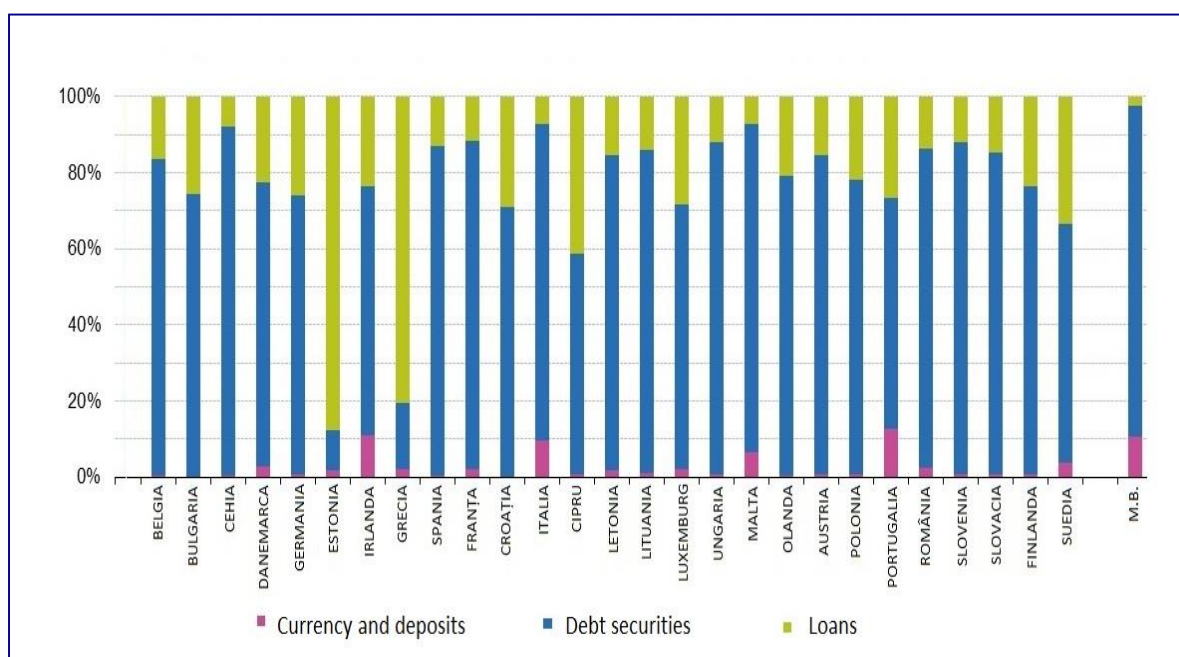


Figure 2: General gross public debt on financial instruments in 2019 (%)

Source: <https://ec.europa.eu/eurostat/>

3. Debt structure according to debt holders

Debt holders' public debt by sector has as sources of loans non-financial residents (non-financial corporations, households and institutions), financial residents (financial corporations) and non-residents.

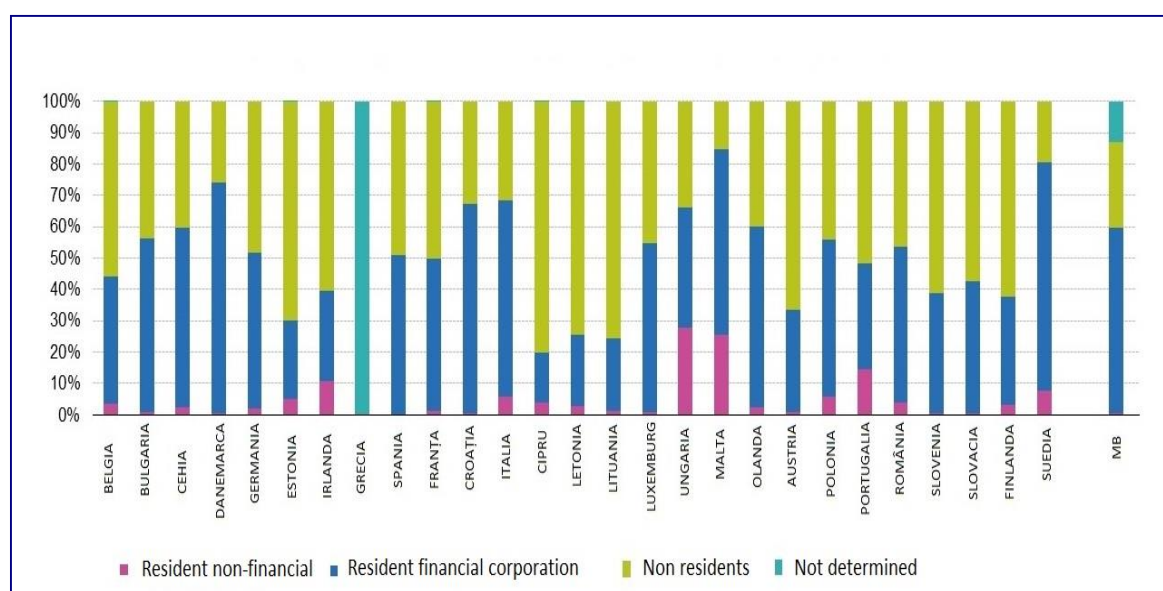


Figure 3: General gross government debt by category of debt holders (%)

Source: <https://ec.europa.eu/eurostat/>

At the end of 2019, public debt was mainly held by the sector of resident financial corporations in fourteen EU Member States. The highest share was in Denmark (73.7%), Sweden (73.1%), Croatia (66.8%) and Italy (62.7%).

At the other end of the scale, the lowest proportion of debt held by resident financial corporations was recorded in Cyprus (16.2%), Latvia (22.8%), Lithuania (23.3%), Estonia (25.2 %) and Ireland (29.1%).

Non-resident companies were the largest debt group in twelve EU countries, as follows: Cyprus (80.1%), Lithuania (75.6%), Latvia (74.3%), Austria (66.5%) , Finland (62.3%), Slovenia (61.1%), Ireland (60.2%), Slovakia (57.5%), Belgium (55.7%), Portugal (51.7%) and France (50.2%). In contrast, this proportion was only 15.2% in Malta and 19.3% in Sweden.

Resident non-financial sectors (non-financial corporations, households and non-profit institutions) have a significant share of debt holders in Hungary (27.7%), Malta (25.6%), Portugal (14.7%) and Ireland (10 , 6%).

4. The structure of public debt according to maturity

Only two types of categories are used: short-term debt with a maturity of less than one year and long-term debt with a maturity of more than one year.

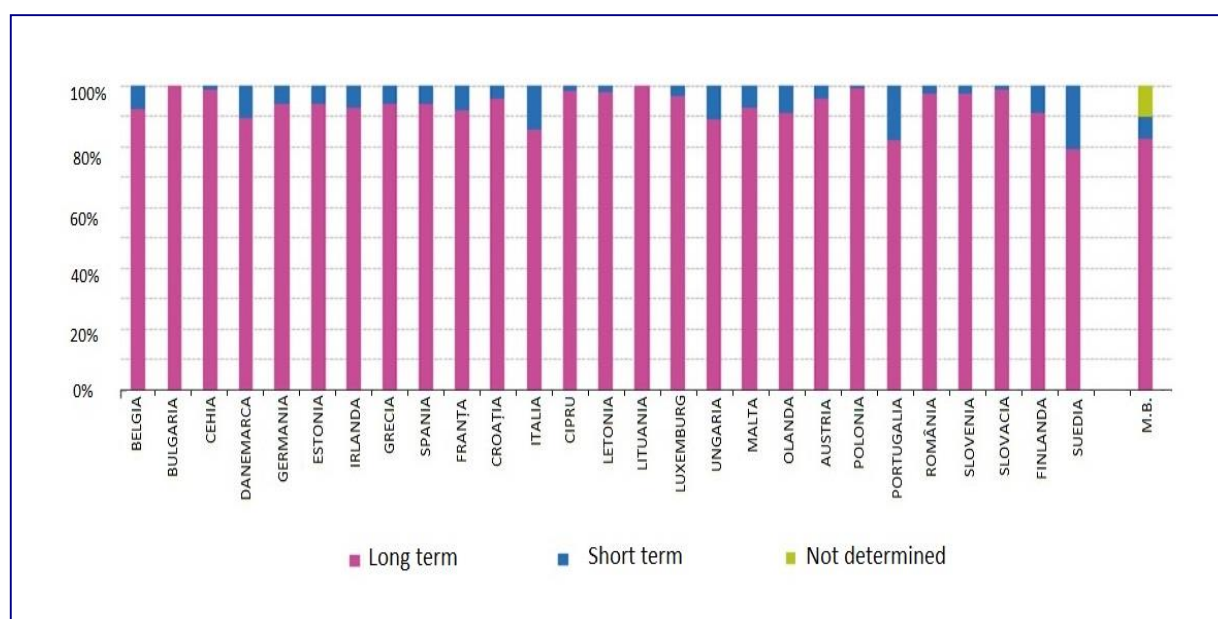


Figure 4: Gross public debt by maturity (%)

Source: <https://ec.europa.eu/eurostat/>

Norway and Sweden had a significant short-term debt ratio (24.6% and 20.7%, respectively), while the share of short-term debt exceeded 10% in Denmark, Italy, Hungary and Portugal.

Short-term debt levels less than or equal to 1% were recorded in Lithuania (0.0%) and Bulgaria (0.1%), with the other countries having short-term debt in the range of 1-10% of total public debt.

5. The average cost of public debt

The average cost of gross government debt ranged from 0.6% in Estonia, 1.1% in Germany, 1.2% in Finland and 3.5% in Croatia and 3.8% in Romania (in 2019).

Comparing the data from 2019 to 2018, there are decreases for all reporting countries, except Romania, where there is an increase of about 0.5 pp.

The largest decreases were observed for Denmark (3.6% in 2018 compared to 2.4% in 2019), as well as for Ireland (2.6% in 2018 compared to 2.2% in 2019), Sweden (1 , 7% in 2018 and 1.3% in 2019), Slovenia (2.9% in 2018 and 2.6% in 2019) and France (1.9% in 2018 and 1.6% in 2019).

In general, the cost of debt depends on the interest rates set at the time of signing the agreement for that loan, and less on current market trends, especially for long-term loans.

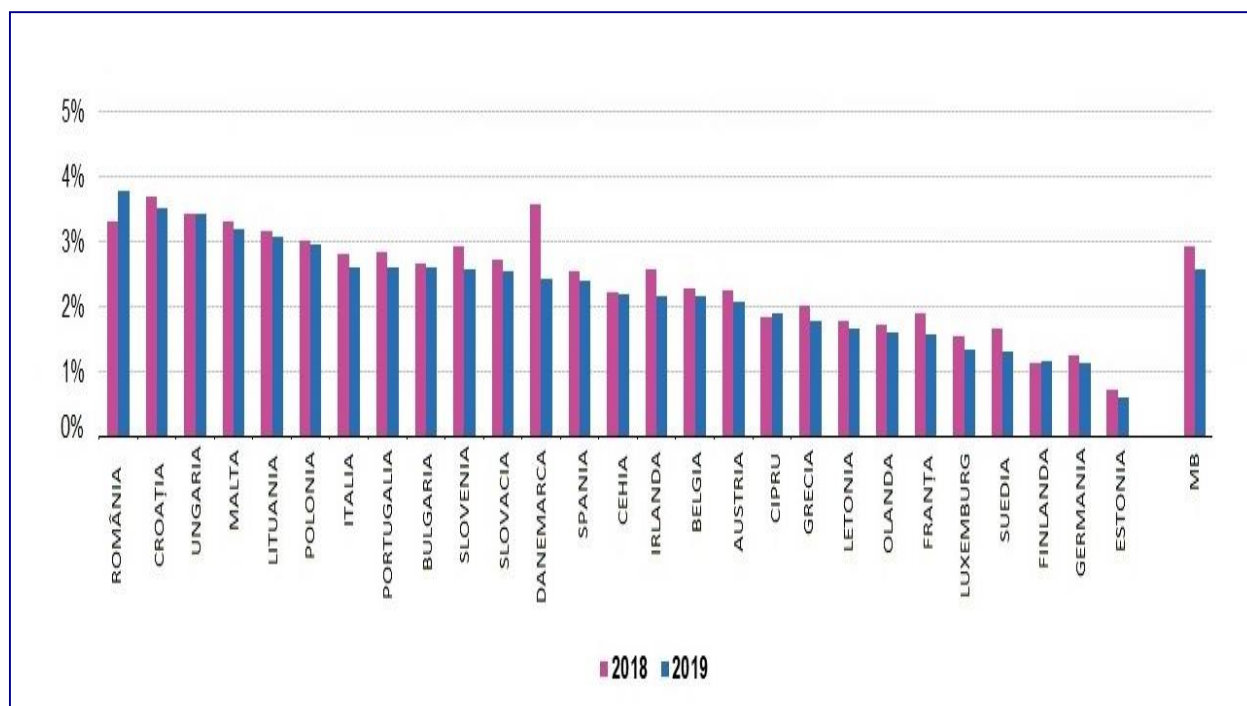


Figure 6: Average cost of gross debt of central government (%)

Source: <https://ec.europa.eu/eurostat/>

6. Comparisons between European Union countries regarding the cost of borrowing

How much of the public debt consists of external loans is important to establish and how the cost of these loans internationally is influenced by the country rating given by major rating agencies (Fitch, Moody's and Standard & Poors). The rating is the risk of non-payment of a loan and obviously the higher this risk, the harder it is to obtain the loan and the higher the cost of the loan represented by the interest.

We will try to see to what extent the variation of the gross domestic product, the external debt, the public debt and the current account balance are found in the quotations granted by the rating agencies to the European states.

The link between the country rating and the external debt relative to GDP: The "AAA" rating ("prime" - the best country rating, minimum *default* risks) is surprisingly received by countries with very high external debts such as Luxembourg, the Netherlands, Switzerland, but also by a group of countries with average values of external debt in GDP: Denmark, Sweden, Germany. At the same time, countries with a low share of external debt in GDP have BBB or "BBB-" quotations (ie medium risk, the lowest area of acceptable risk for investors, from this level below they are "junk" - ie not recommended investors) Bulgaria 57.4%, Croatia 75.7%, Romania 49.2%. It is not possible to make a direct correlation between the country rating and the external debt indicator in GDP, instead it is easy to notice that the higher the GDP of a country and especially the higher the GDP per capita. the country rating is better, and vice versa, the lower the GDP and GDP per capita and the lower the country rating.

It is known that when granting a country rating other factors are taken into account such as: the degree of political, social and economic stability, the fence of democratization of society, access to material, human and financial resources, openness and relations economic and political relations with other countries, etc., which may thus explain the differences between the ratings given to different countries.

Table 1

Country ratings and economic indicators on indebtedness for EU countries in 2019

COUNTRY	Pub D./GDP	Ext. Pub. D. /GDP	Δ GDP/GD P (%)	Current Account Balance /GDP (%)	S&P	Moody' s	Fitch
Estonia	8.4	73.8	5.00	2.64	AA-	A1	AA-
Bulgaria	18.6	57.4	3.37	4.04	BBB	Baa1	BBB
Luxembourg	22.1	5,633.2	2.30	4.48	AAA	Aaa	AAA
Denmark	29.4	143.4	2.35	7.81	AAA	Aaa	AAA
Czech Republic	30.2	76.2	2.34	-0.37	AA-	Aa3	AA-
Sweden	34.8	164.3	1.26	4.20	AAA	Aaa	AAA
Latvia	36.8	122.6	2.20	-0.54	A+	A3	A-
Romania	36.8	49.2	4.08	-4.56	BBB-	Baa3	BBB-
Iceland	37	78.1	1.94	6.18	A	A2	A
Lithuania	37.7	67.7	3.93	4.27	A+	A3	A
Norway	41.3	162.9	1.16	4.10	AAA	Aaa	AAA
Switzerland	42.1	259.2	1.25	11.52	AAA	Aaa	AAA
Malta	42.6	654.2	4.92	9.61	A-	A2	A+
Poland	46	58.8	4.15	0.41	A-	A2	A-
Slovakia	48	112.4	2.40	-2.87	A+	A2	A
Netherlands	48.4	473.6	1.68	9.95	AAA	Aaa	AAA
Ireland	57.3	724.8	5.88	-11.35	AA-	A2	A+
Finland	59	222.5	1.15	-0.46	AA+	Aa1	AA+
Germany	59.5	144.2	0.56	7.07	AAA	Aaa	AAA
Slovenia	66.1	90.5	2.44	5.67	AA-	A3	A
Hungary	66.3	91.4	4.93	-0.85	BBB	Baa3	BBB
Austria	70.3	153.7	1.60	2.62	AA+	Aa1	AA+
Croatia	73.2	75.7	2.94	2.78	BBB-	Ba1	BBB-
MB	85.4	301.8	1.46	-4.01	AA	Aa3	AA-
Cyprus	95.5	849.0	3.23	-6.72	BBB-	Ba2	BBB-
Spain	95.5	169.6	1.98	1.97	A	Baa1	A-
France	98.1	230.0	1.51	-0.67	AA	Aa2	AA
Belgium	98.7	242.7	1.40	-1.23	AA	Aa3	AA-
Portugal	117.7	192.1	2.17	-0.09	BBB	Baa3	BBB
Italy	134.8	124.6	0.30	2.96	BBB	Baa3	BBB-
Greece	180.9	242.8	1.87	-2.10	BB-	Ba3	BB

Source: <https://www.imf.org> and <https://countryeconomy.com/ratings>

In terms of GDP growth compared to the previous year, Romania is in the leading group with an increase of 4.08% along with Ireland 5.88%, Hungary 4.93%, Malta 4.92%, Poland 4.15%, Lithuania 3.93% high values compared to those of developed EU countries: Germany 0.56%,

France 1.51%, Italy 0.30%, Austria 1.6%, Netherlands 1.7%, MB 1.46 %. There are countries with high GDP growth and high debt relative to GDP (Ireland, Malta), but also countries with high GDP growth and low debt relative to GDP (Romania, Hungary, Poland), so there is no link between the pace of GDP growth and the degree of external indebtedness of countries.

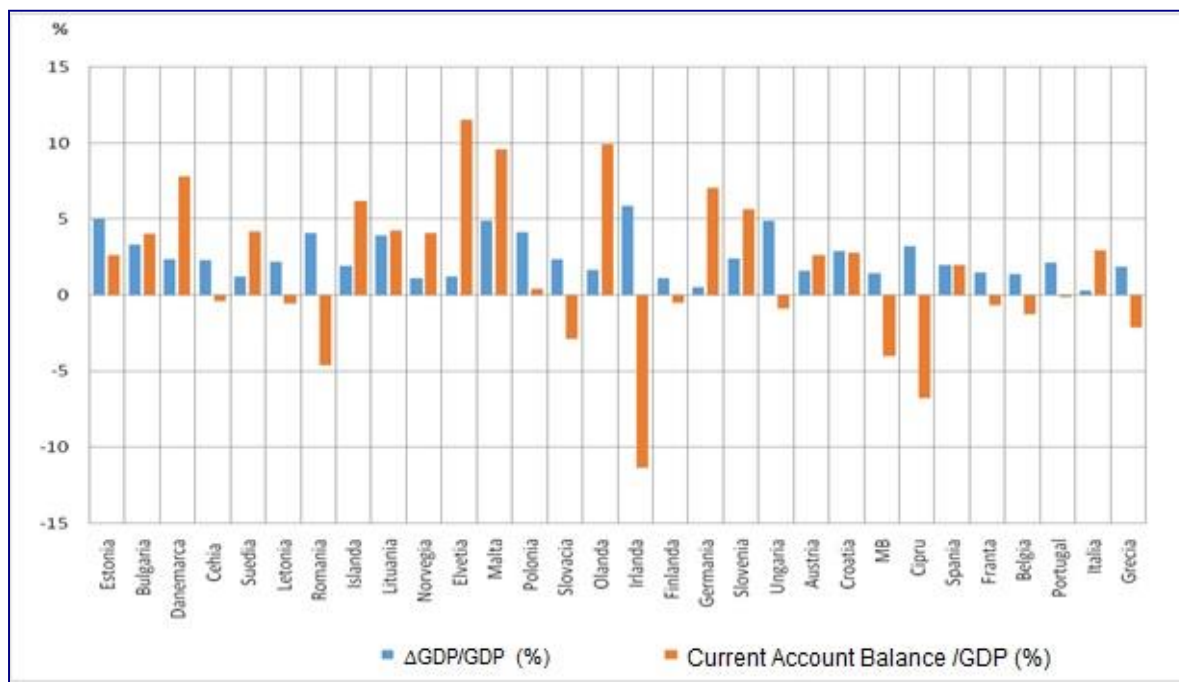


Figure 7: GDP growth rate and current account balance in GDP for EU countries (2019) (%)

Source: <https://www.imf.org> and <https://countrystateconomy.com/ratings>

Romania has a large current account deficit as a share of GDP of -4.56%, the third in the EU after Ireland -11.35% and Cyprus -6.72, while many other countries have recorded current account surpluses: The Netherlands 9.95%, Malta 9.61%, Denmark 7.81%, Germany 7.07%. There are countries with a high degree of indebtedness that have a current account surplus (ex Netherlands, Malta) but also countries with a current account deficit with a high degree of indebtedness (Ireland, Cyprus). current (Bulgaria, Croatia, Iceland, Lithuania), but also countries with a low degree of indebtedness and current account deficit (Romania, Czech Republic).

Romania's public debt to GDP ratio in 2019 is one of the lowest in Europe (36.8%) being next to other Eastern European countries (Bulgaria, Czech Republic, Estonia, Latvia, Lithuania) or a group of Nordic countries (Iceland, Sweden, Denmark, Norway).

For 2019, Romania's total gross external debt as a share of GDP is the lowest of the EU countries of only 49.3%. In general, Eastern European countries have low levels of indebtedness compared to Western European ones. Thus the same indicator is for Bulgaria 57.4%, Czech Republic 76.2%, Poland 58.8%, Hungary 91.4%, Estonia 73.8%, while Western European countries have a high degree of external debt Luxembourg 5600%, Malta 654.2%, Ireland 724.8%, Cyprus 849%, the Netherlands 473%, MB 301.8%.

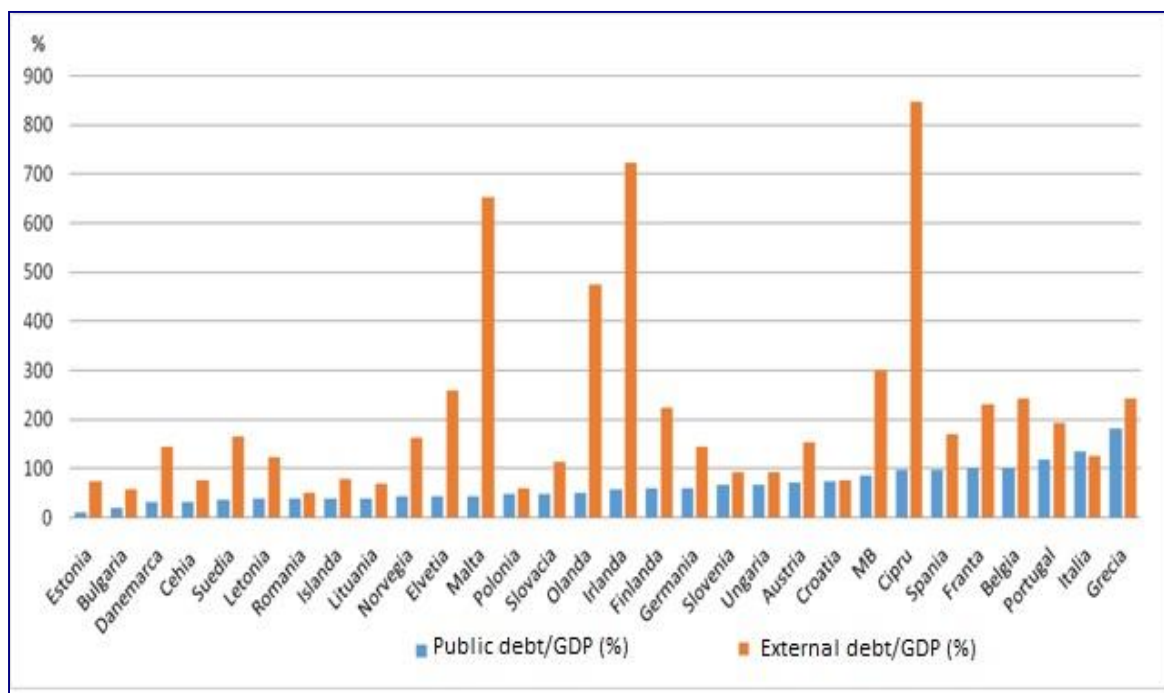


Figure 8: Public debt in GDP and External public debt in GDP for EU countries in 2019 (%)

Source: <https://www.imf.org> and <https://countryeconomy.com/ratings>

If we divide the analyzed states according to the level of the public debt-to-GDP ratio in three groups: low values of the indicator, medium values, and high values, we can observe some interesting correlations:

- For the low value group of the Dat indicator. publ / GDP (top 10 countries in table 1) correspond to lower values of the external debt-to-GDP ratio than the high-value group (last 10 countries in the table) which correspond to higher values of external debt to GDP. The proportionality relationship is obvious, when the external public debt relative to GDP is high, the total public debt (which includes external debt) relative to GDP is high.

- For the group with low values of the Dat.publ / PIB indicator, there are higher percentage increases (from year to year) of the GDP compared to the last group, which corresponds to lower percentage increases.

- The countries in the first group (the first 10 countries in table 1) correspond to current account surpluses compared to the group with high public debt in GDP, (the last 10 countries in the table), which correspond to current account deficits or current account surpluses with values small relative to GDP.

- In the first group (the first 10 countries in table 1) only Romania and Bulgaria have a “BBB” country rating (*lower grade investment*), compared to the group with a high ratio of public debt to GDP where they have a “BBB” country rating, Portugal , Italy, Greece, Cyprus and Croatia.

It is easy to notice that out of a number of 32 countries in table 2, only 7 countries register an increase in public debt in GDP, including Romania, 23 countries decrease the value of this indicator and in the case of two countries (France and Italy) is kept constant. Between the EU countries only Romania, Luxembourg and the Baltic countries register an increase of this indicator. It should be noted that 7 countries that have an increase in public debt in GDP are at the top of the table, ie among the countries with a low share of public debt in GDP. Among the countries with high values of this indicator are notable only the performances of Italy and France that managed to keep at the same value for the given in public debt in GDP.

Table 2

Dynamics of public debt at the level of European countries in 2018-2019 (%)

COUNTRY	Pub D/GDP 2018	Pub D/GDP 2019	Δ (Pub D/GDP)
Estonia	8.3	8.4	0.1
Bulgaria	20.1	18.6	-1.5
Luxembourg	21	22.1	1.1
Denmark	34.2	29.4	-4.8
Czech Republic	32.1	30.2	-1.9
Sweden	38.8	34.8	-4
Latvia	36.5	36.8	0.3
Romania	36.4	36.8	0.4
Iceland	37.4	37	-0.4
Lithuania	34.1	37.7	3.6
Norway	39.9	41.3	1.4
Switzerland	41	42.1	1.1
Malta	45.2	42.6	-2.6
Poland	48.8	46	-2.8
Slovakia	49.5	48	-1.5
Netherlands	52.4	48.4	-4
bondage	54.5	52.8	-1.7
Ireland	62.9	57.3	-5.6
Finland	59.6	59	-0.6
Germany	61.6	59.5	-2.1
Slovenia	70.4	66.1	-4.3
Hungary	70.2	66.3	-3.9
Austria	74	70.3	-3.7
Croatia	74.7	73.2	-1.5
UK	85.7	85.4	-0.3
Cyprus	100.6	95.5	-5.1
Spain	97.6	95.5	-2.1
France	98.1	98.1	0
Belgium	99.9	98.7	-1.2
Portugal	122	117.7	-4.3
Italy	134.8	134.8	0
Greece	184.8	180.9	-3.9

Source: <https://tradingeconomics.com/>

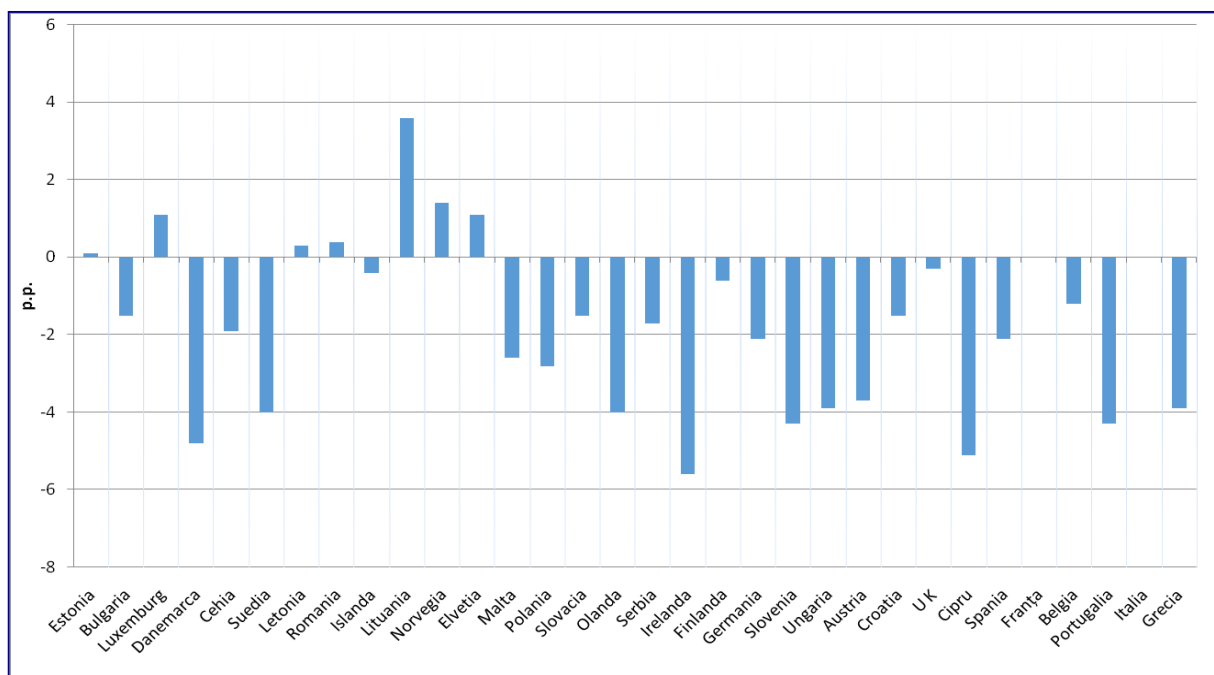


Figure 9 - Evolution of public debt to GDP in EU countries (2018-2019) (pp)

Source: <https://tradingeconomics.com/>

Conclusion

The characteristics of Romania's public debt in 2019 compared to the public debts of the other countries of the European Union:

- The public debt as a share in GDP, in 2018-2019 registered a slight increase, unlike the European trend of decreasing public debts. However, Romania is among the countries with a low public debt to GDP ratio, 35.3%, well below the 60% of GDP threshold imposed by the Maastricht Treaty,
- The public debt broken down by financial instruments in the case of Romania has as specific small shares of loans (13.5%) and cash and deposits (2.5%), most of the debts being made up of securities (84%).
- Romania's creditors are equally financial and non-financial residents and non-residents, at European level the other countries having as main creditors financial residents.
- Regarding the public debt according to maturity, the largest share of Romania's debts are long-term (97%), very few European countries having more than 10% of short-term public debt.
- Romania's government debt depending on the issuance currency is characterized by the approximately equal ratio between the national currency and foreign currencies, unlike most European states that have debts (total or almost total) in euro. So, Romania is subject to more foreign exchange risk compared to other countries in the European Union.
- The average cost of Romania's public loans in 2019 (3.8%) is the highest in the European Union, increasing compared to 2018 when Romania's loan interest rates were still lower than those of Hungary or Croatia and Denmark.

Although it is sustainable (high share of long-term debt, share of debt in GDP well below the 60% threshold of EMU), we can say that our country's sovereign debt has less favorable conditions for the sustainable development of the economy compared to other Member States. of the European Union.

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