This article presents recent statistics on the structure of general government debt and its relationship to gross domestic product (GDP) in the European Union (EU). In the context of the Stability and Growth Pact’s Excessive deficit procedure notification process, Eurostat publishes government debt data twice a year, in April and October, as well as quarterly government debt data transmitted to it in line with Regulation (EU) No 549/2013 (ESA2010 transmission programme).

In order to analyse the debt structure in European countries, Eurostat also collects additionally results from an annual survey containing Member States’ information on government gross debt by sector of debt holder, by instrument, by initial and remaining maturity and by currency of issuance. The survey also contains information on (one-off) guarantees granted by the general government to non-government units as well as the market value of the Maastricht debt instruments and the apparent cost of government debt. One-off guarantees are contingent liabilities which are not included in general government gross debt.

This article examines the main results of the latest questionnaire, fully or partly completed by the EU-28 and one EFTA country.

**Maastricht debt as a percentage of GDP**

In general, Maastricht government debt has followed an upward trend following the financial crisis. However, from a high point at the end of 2014 (86.6% of GDP), a decrease in the debt to GDP ratio have been noted up to the end of 2018 (80.0% of GDP). Between the end of 2017 and the end of 2018, the general government gross debt to GDP ratio decreased in the EU-28 (from 81.7% of GDP at the end of 2017 to 80.0% of GDP at the end of 2018 corresponding to -1.7 percentage points) and the euro area (from 87.1% of GDP at the end of 2017 to 85.1% of GDP at the end of 2018 or by -2.0 percentage points).
Between the end of 2017 and the end of 2018, the debt to GDP ratio decreased in 24 EU Member States. The largest decreases were recorded in Lithuania (-5.2 pp.), the Netherlands (-4.6 pp.), Austria (-4.4 pp.), Malta (-4.2 pp.), Latvia (-4.1 pp.), Slovenia (-4.0 pp.) and Ireland (-3.7 pp.). In three EU Member States, the debt to GDP ratio increased between the end of 2017 and the end of 2018. Increases were noted for Cyprus (+6.7 pp.), Greece (+4.9 pp.) and Italy (+0.8 pp.).

At the end of 2018, 14 out of 28 EU Member States reported debt to GDP ratios higher than the reference value of 60 %; Greece recorded the highest debt ratio at 181.1 %, followed by Italy (132.2 %), Portugal (121.5 %) and Cyprus (102.5 %). Finland reduced its debt below the 60 % threshold in 2018.

The lowest debt to GDP ratio was registered by Estonia at 8.4 % of GDP at the end of 2018, followed by Luxembourg (21.4 %), Bulgaria (22.6 %), Czechia (32.7 %), Denmark (34.1 %), Lithuania (34.2 %) as well as Romania (35.0 %).

**Breakdown by subsector of general government**

According to **ESA 2010**, the **general government sector** (S.13) is divided into four subsectors:

- **Central government** (S.1311);
- **State government** (S.1312);
- **Local government** (S.1313);
- **Social security funds** (S.1314).

Figure 2 gives an overview of the subsector breakdown, as a percentage of total debt for all subsectors, i.e. not **consolidated** between different levels of government.
For 25 of the 28 EU Member States, the central government represented more than 75% of the general government debt (not consolidated between subsectors) at the end of 2018. By contrast, the share of local government in all (non-consolidated) subsectors was at 39.3% in Norway. In Sweden, the share of local government debt was 28.3%. Local government debt also played an important role in Estonia (23.1%, largely due to a relatively low level of central government debt).

In Germany (28.6%) and Spain (20.8%), state governments accounted for a significant share in the total gross debt (not consolidated between subsectors). State government as a subsector of general government exists only in four Member States, namely Belgium, Germany, Spain and Austria. The debt share of state government was 12.7% in Belgium and 7.1% in Austria.

The impact of social security funds on the general government debt continues to be relatively small: contributions of less than 5% were recorded in 27 countries. Only two countries had higher ratios of debt for social security funds: France (8.7%) and the Netherlands (6.2%).

**Impact of consolidation**

The general government debt has to be consolidated within each subsector and between subsectors at the level of general government. This implies that the debt issued by one subsector and held by another one should be excluded from the general government debt. When debt of one subsector of general government is held by another subsector, general government gross debt is then lower than the sum of subsector gross debt. Table 1 illustrates this effect in percentage of total non-consolidated debt (consolidated within subsectors but not between).
The majority of countries show a limited consolidation impact, where the general government debt was reduced to be less than 5% in 17 of the 28 EU Member States as well as Norway. A significant consolidation effect was observed in Estonia (47.7%), Cyprus (40.8%), Latvia (20.2%), Spain (20.0%) and the Netherlands (15.6%). Significant consolidation effects are often due to central government liabilities in deposits held by social security funds, for example in Estonia and Cyprus. The level of consolidation tends to be influenced by the growing prevalence of cash pooling arrangements.

On the other hand, eight countries showed no consolidating amounts between subsectors of general government or consolidating amounts below 1%: Denmark, Germany, Croatia, Lithuania, Malta, Slovenia and Norway.

**Breakdown by financial instrument**

The Maastricht debt is divided into the following categories according to the ESA 2010 classification:

- currency and deposits (AF.2);
- debt securities (AF.3); and
- loans (AF.4).

The breakdown of debt by financial instrument is presented in Figure 3.
For the EU-28, 81.6 % of the general government debt was made up by debt securities, 14.2 % was made up by loans and 4.1 % by currency and deposits. For the EA-19, 80.9 % of the general government debt was made up by debt securities, 16.0 % was made up by loans and 3.1 % by currency and deposits.

For 25 of the 28 EU Member States, the most used debt instrument remained debt securities at the end of 2016; ranging from a share of 9.0 % of Maastricht debt in Estonia to 89.6 % of the general government debt in Czechia. Estonia, Greece and Norway registered a different breakdown, with loans making up a share of 88.4 %, 82.4 % and 59.9% respectively. Significant loan to total debt ratios were also recorded for Cyprus (48.5 %), Luxembourg (32.1 %) and Croatia (31.2 %). The countries reporting a higher share of loans tended to be those either having a relatively low level of general government gross debt (e.g. Estonia), a relatively high share of debt of subcentral sectors of government or having benefitted in recent years from loans of EFSF, ESM and other international assistance (e.g. Greece and Cyprus). At the end of 2017, currency and deposits represented less than 5 % of total debt for 25 countries. In contrast, currency and deposits accounted for 10.8 % of total general government gross debt in Portugal (due to saving certificates), 10.5 % in Ireland (due to defeasance structures) and 7.7 % in Italy (due to saving certificates).

Breakdown by sector of debt holder

Figure 4 presents general government gross debt by sector of the debt holder: non-financial residents (non-financial corporations, households and non-profit institutions serving households), financial residents (financial corporations) and non-residents (rest of the world).
At the end of 2018, the debt share held by non-residents (rest of the world sector) was significant for most of the countries but highly variable between the 28 EU and EFTA countries for which data is available: It ranged between 13.0 % of the general government gross debt in Malta and 76.5 % in Cyprus. 'Rest of the world' - non-residents were the largest debt holders for twelve countries, with percentages starting from 50.2 % and higher: Cyprus (76.5 %), Latvia (74.0 %), Lithuania (72.5 %), Austria (66.5 %), Finland (63.3%), Slovenia (62.3 %), Ireland (59.7 %), Slovakia (57.5 %), Estonia (57.2 %), Belgium (52.7 %), Portugal (52.1 %) and Poland (50.2 %). In contrast, this proportion was only 13.0 % in Malta and 22.7% in Sweden.

(Resident) financial corporations held between 19.8 % of general government gross debt in Cyprus and 69.8 % in Sweden and 72.3% in Denmark.

The resident non-financial sectors (non-financial corporations, households and non-profit institutions serving households) played a major role as debt holder in Malta (25.4 %), Hungary (21.7 %), Portugal (13.3%) and Ireland (10.6 %).

**Breakdown by initial maturity**

The debt questionnaire aims to provide detailed information on the time structure of government debt based on its initial maturity. The maturity is subdivided into several maturity brackets: less than one year, one to five years, five to seven years, seven to ten years, ten to fifteen years, fifteen to thirty, and more than thirty years, as well as the summary category of more than one year. For some countries, which did not provide the complete breakdown, only two categories are shown: less than one year (short-term) and more than one year (long-term). For the other sixteen countries, a detailed debt maturity breakdown is available. The ratio of long-term and short-term debt to total debt is illustrated in Figure 5.
General government gross debt classified by maturity reveals a common pattern: between 74.6 % (in Norway) and nearly 100 % (in Bulgaria) of the outstanding debt was issued on a long-term basis. Short-term debt levels of less than or equal to 1 % were recorded in Bulgaria (0.0 %), Lithuania (0.7 %) and Poland (1.0 %). Norway and Sweden had a significant short-term debt ratio (25.4 % and 20.5 % respectively), while the short-term debt ratio also exceeded 10 % in Hungary, Portugal, Italy and Denmark.

The countries providing a detailed long-term debt breakdown showed very different structures.

**Breakdown by currency of issuance**

As shown in Figure 6, of the 26 countries for which 2018 data is available, 14 Member States issued all or almost all (>99 %) of their central government gross debt in national currency, 15 of those with a rate higher than 99 % of the stock of central government stock debt. In particular, Belgium, Estonia, Spain, France, Latvia, Lithuania, Luxembourg, Malta, Portugal and Finland issued 100 % of their debt in national currency (all in euro), while this ratio was above 99 % in Denmark, Italy, the Netherlands and Slovenia. (Please see the notes below.)

Only two countries issued more than 50 % of their debt in foreign currency: Bulgaria (80.1 %, note that Bulgaria has a currency board arrangement vis a vis the euro) and Croatia (75.5 %). Romania (48.0 %) and Poland (31.1 %) also had significant shares of foreign currency debt. All four countries are not part of the euro area and the major share of their foreign currency issuances are denominated in euro.
Figure 6: Central government gross debt by currency of issuance, % of total, 2018 - Source: Eurostat (gov_10dd_cur)

Figure 7 presents the share of outstanding central government debt issued in euro at the end of 2017. The debt denominated in euro is equal to the debt issued in national currency for the 19 euro area member countries. 100 % of the stock of government debt was denominated in euro for Belgium, Estonia, Spain, France, Latvia, Lithuania, Luxembourg, Malta, Portugal and Finland. A share higher than 99 % of total central government gross debt was denominated in euro in Austria, Italy, the Netherlands and Slovenia. Ireland, Cyprus, Greece, Germany and Slovakia reported shares exceeding 95% (in descending order).

In contrast, the major issuing currency in the non-euro countries Denmark (100.0 %), Sweden (89.9 %), Czechia (88.8%) and Poland (74.8 %) was their respective national currency.

Figure 7: Central government gross debt with euro as issuing currency, % of total, 2018 - Source: Eurostat (gov_10dd_cur)

**Apparent average cost of government debt**

The apparent average cost of central government debt (accrued interest payable over the period as a percentage of the average outstanding debt) shows the differences between countries in terms of their cumulated past conditions for accessing financial markets. Based on 26 replies from EU Member States, the analysis of apparent average cost of central government debt is shown in Figure 8.
The apparent average cost of central government gross debt varied between 0.8 % in Estonia, 1.0 % in Sweden, 1.2 % in Latvia and Finland and 4.1 % in Croatia and 4.0 % in Romania in 2018.

Comparing the 2018 data with 2017, decreases or stable implicit rates were observed for all reporting countries with the exception of the United Kingdom, where an increase of around 0.3 pp. was observed. The largest decreases were observed for Denmark (4.1% in 2016 versus 3.4% in 2018), as well as Croatia (4.5% in 2016 versus 4.1% in 2018), Lithuania (4.1% in 2016 versus 3.6% in 2018), Hungary (4.0% in 2016 versus 3.5% in 2018) and Slovenia (3.9% in 2016 and 3.4% in 2018). As this measure of the cost of debt depends on interest rates prevailing at the moment of issuance in the past, it is not very sensitive to the most recent market trends, provided that the composition of debt is mainly long-term.

**Government guarantees as a percentage of GDP**

Countries were additionally asked about the amount of government guarantees. These guarantees are not part of government gross debt, as they are contingent liabilities, being contingent on the actual call of the guarantee. They should not be added to the Maastricht debt.

Based on 28 replies from EU Member States, the ratio of government guarantees provided by central government on debt of non-government units, as a percentage of GDP, is shown in figure 9. At the end of 2017, the amount of government guarantees as a percentage of GDP did only exceed 10 % for two countries (Luxembourg and Finland).

For the year 2018, data is available for 23 of the 28 EU Member States.

At the end of 2018, a ratio to GDP of less than 5 % was recorded in Ireland (0.0 %), Slovakia (0.0 %), Czechia (0.1 %), Bulgaria (0.2 %), Lithuania (0.8 %), Poland (1.1 %), Latvia (1.2 %), Estonia (1.2 %), Croatia (1.5 %), Romania (2.1 %), Italy (4.1 %), Greece (4.2 %), Sweden (4.7 %) and France (4.7 %). The highest ratios to GDP were registered in Finland (20.7 %), Luxembourg (11. 4 %) and Malta (8.7 %).
Figure 9: Central government guarantees as a percentage of GDP, 2017-2018 - Source: Eurostat (gov_10dd_guar)

Data sources

Market vs. face value

The market value is the price as determined dynamically by buyers and sellers in an open market.

In Council Regulation (EC) No 479/2009, as amended, the face value is used. This is equal to the undiscounted amount of the principal that the government will have to pay to creditors at maturity.

General government

Debt statistics cover data for general government as well as its subsectors: central government (S.1311), when applicable state government (S.1312), local government (S.1313) and when applicable social security funds (S.1314).

Instruments

Maastricht debt comprises only the following instruments:

- AF.2: The category ‘currency and deposits’ consists of currency in circulation and all types of deposits in national and in foreign currency.
- AF.3: The category ‘debt securities’ consists of negotiable financial instruments that are bearer instruments and are usually traded on secondary markets or can be offset on the market, and do not grant the holder any ownership rights in the institutional unit issuing them.
- AF.4: The category 'loans' consists of financial instruments created when creditors lend funds to debtors, either directly or through brokers, which are either evidenced by non-negotiable documents or not evidenced by documents.

Consolidation

Debt figures on general government statistics and each of its subsectors are reported consolidated.

Consolidation is a method of presenting statistics for a grouping of units, such as institutional sectors or sub-sectors, as if it constituted a single unit. Consolidation thus involves a special kind of cancelling out of flows and stocks: eliminating those transactions or debtor/creditor relationships that occur between two transactors belonging to the same grouping. Usually the sum of subsectors should exceed the value of the general government sector. Subsector data should be consolidated within each subsector, but not between them. ESA 2010 recommends compiling both consolidated and non-consolidated financial accounts. For macro-financial analysis, the focus is on consolidated figures. The Maastricht debt is also consolidated.
The Eurostat 2018 government debt structure survey

The survey launched by Eurostat on government debt structure contains eleven tables: a set of five tables (central government debt, state government, local government debt, social security funds debt and general government debt) for 2017, and the same set of tables for 2018 detailing gross debt by financial instrument, sector of debt holder and initial maturity, plus a table with additional classifications of government debt (remaining maturity, currency of issuance, apparent cost of debt, market value of gross debt and guarantees (contingent liabilities)).

The survey presents breakdowns for the general government and its subsectors for the two previous calendar years, categorising the debt by sector of the debt holder, by instrument, by detailed initial and remaining maturity, by currency of issuance, as well as guarantees granted by the government to non-government units. The latter are contingent liabilities. In addition, the survey contains information on the market value of Maastricht debt instruments as well as on the apparent cost of government debt.

Some countries return the questionnaire for more than two calendar years.

Notes

For the EU-28 and EA-19, data from ESA table 28 (quarterly government debt) supplied in April 2019 is used to complement the analysis. For all countries, the data reported in the structure of government debt survey corresponds to the general government gross debt totals submitted in the context of the April 2019 Excessive Deficit Procedure notification.

For all 28 EU Member States and Norway, the data used in this article was reported in the structure of government debt survey. The survey is not fully completed by all countries. Hence the number of countries shown for each breakdown of gross debt as well as guarantees varies.

The analysis on breakdown by currency, apparent cost of the debt and state guarantees is based on central government data.

GDP supplied in the context of the EDP April 2019 notification is used in the graphs and analysis.

Foreign currency breakdown: The reporting is not currently fully harmonised between reporting countries. Countries are encouraged to report hedged foreign currency amounts under domestic currency. A small number of countries may report the stock of foreign currency debt at nominal value, implying a small distortion in the shares of domestic and foreign currency.

The coverage of guarantees may still vary across countries and have an expanding coverage over time.

Country notes

Some breakdowns of gross debt by debt holder by detailed maturity, by sector of debt holder and by currency may not sum to the total debt instrument/ gross debt, in case detailed information was not available for some items.

Portugal: Information on the detailed split of long-term loans by initial maturity is partially available. For this reason, total long-term loans exceed the detailed breakdown.

Greece: The coverage of data relating to the remaining maturity of debt, currency of issuance, apparent cost of debt and guarantees excludes extra-budgetary units of central government. Thus the coverage of central government data for these indicators is limited to S.1311.1, the budgetary central government.

The United Kingdom: Shares for sector of debt holder at the level of general government gross debt do not add up to 100% due to amounts where the counterpart sector could not be determined. The initial maturity of a share of currency and deposits could not be determined. For this reason, shares shown do not add up to 100%.

Ireland: For long-term debt securities by original maturity, remaining maturity is currently used when integrating data on buy-backs. This explains any negative numbers.
Poland: The guarantees provided by government units on non-government borrowing in 2016 were revised downwards to exclude the guarantees which already had resulted in an increase of government debt.

Denmark: The coverage of data relating to the remaining maturity of central government gross debt is limited to debt securities.

**Context**

Monitoring and keeping government debt in check is a crucial part of maintaining budgetary discipline which is essential as Europe undergoes dramatic demographic changes. Its ageing population, in particular, is expected to pose major economic, budgetary and social challenges.

**Maastricht debt**

The Protocol on the excessive deficit procedure (EDP) annexed to the Maastricht Treaty specifies that the ratio of gross government debt to GDP must not exceed 60 % at the end of the preceding fiscal year. The application of the Protocol is made operational by Council Regulation (EC) No 479/2009, as amended.

**ESA2010**

Fiscal data are compiled in accordance with national accounts rules, as laid down in the European System of Accounts (ESA 2010) adopted in the form of a Regulation (EU) No 549/2013 of the European Parliament and of the Council of 21 May 2013. The full text of compilation of General government debt data complies with ESA 2010 rules concerning the sector classification of institutional units, the consolidation rules, the classification of financial transactions and of financial assets and liabilities and the time of recording. The valuation is however different. Debt liabilities in ESA 2010 are valued at market value, whereas Maastricht debt is valued at nominal (face) value. Most data in the publication on the structure of government debt refer to general government gross debt (and various breakdowns) expressed at face value.

**Other articles**

- Government finance statistics
- Government finance statistics - quarterly data
- Integrated government finance statistics presentation

**Publications**


**Main tables**

- Government statistics (t_gov), see:
  - Annual government finance statistics (t_gov_10a)
  - Government deficit and debt (t_gov_10dd)
  - Quarterly government finance statistics (t_gov_10q)
Database

- Government statistics (gov)

Dedicated section

- Government finance statistics

Methodology

- Structure of government debt (ESMS metadata file — gov_10dd_sgd_esms)
- Government deficit and debt (ESMS metadata file — gov_10dd_esms)
- Quarterly financial accounts for general government (ESMS metadata file — gov_10q_ggfa_esms)
- Quarterly government debt (ESMS metadata file — gov_10q_ggdebt_esms)

External links

- European Commission: stability and growth
- European Commission: sustainability of public finances