Total revenue from taxes and social contributions, EU-28 and EA-19, % of GDP, 1995-2018

Source: Eurostat (gov_10a_taxag)

For recently updated ESA table 9, please see hereafter the tables on National tax list data. Current cut-off date for National tax list data is 29 October 2019.

National Tax Lists - individual taxes, updated 29 October 2019

This article presents recent data on tax revenue and its relationship to gross domestic product (GDP) in the European Union (EU) and the euro area (EA-19). The latest year for which detailed tax revenue statistics are available for all Member States is 2018.

General overview

As a ratio of GDP, in 2018 tax revenue (including net social contributions) accounted for 40.3 % of GDP in the European Union (EU-28) and 41.7 % of GDP in the euro area (EA-19). Compared with 2017, increases in the ratio are observed for the EU-28 and the euro area.

In absolute terms, tax revenue in 2018 continued the growth from its low-point of 2009. From 2017 to 2018, EU-28 tax revenue increased by EUR 224 billion and euro area tax revenue increased by EUR 174 billion.

As a percentage of GDP, EU-28 and EA-19 tax revenue decreased every year from its 2007 peak (almost unchanged compared with 2006), until it started to increase in 2011 (in 2010, the EA-19 tax-to-GDP declined...
slightly compared with 2009, although in absolute terms an increase was noted - this is due to a decrease in nominal GDP). Between 2014 and 2015, decreases in the tax-to-GDP ratio were observed in the EU and the euro area in 2015.

In 2018, tax revenue made up 89.4 % of total general government revenue in the European Union.

In 2018 in the EU-28, taxes on production and imports accounted for 13.6 % of GDP and current taxes on income, wealth, etc. stood at 13.2 % of GDP. Current taxes on income, wealth, etc. as a % of GDP decreased from 2007 to 2010, but increases were seen in the period from 2011 to 2013. While the ratio of current taxes on income, wealth, etc. to GDP remained stable between 2013 and 2015, before increasing slightly between 2016 and 2018. From 2014 to 2015, the share of (net) social contributions decreased by 0.3 p.p. to 13.0 % of GDP before picking up to 13.2 % of GDP in 2016, increasing slightly in 2017 and staying stable in 2018.

**Tax revenue-to-GDP ratio: France, Belgium and Denmark show the highest ratios**

In 2018, tax revenue (including social contributions) in the EU-28 stood at 40.3 % of GDP, and accounted for 89.4 % of total government revenue. The ratio of tax revenue to GDP in the euro area (EA-19) was higher than in the EU-28, at 41.7 %.

As figure 1 shows, the ratio of 2018 tax revenue to GDP was highest in France (48.4 % of GDP), Belgium (47.2 % of GDP) and Denmark (45.9 % of GDP), followed by Sweden (44.4 % of GDP), Austria (42.8% of GDP), Finland (42.4% of GDP) and Italy (42.0 % of GDP); the lowest shares were recorded in Ireland (23.0 % of GDP), Romania (27.1 %), Bulgaria (29.9 %), Lithuania (30.5 % ) and Latvia (31.4 %).

![Figure 1: Total tax revenue by Member States and EFTA countries, 2017 and 2018, % of GDP](source: Eurostat (gov_10a_taxag))

**In 2018, tax revenue in absolute terms increased in 28 EU Member States**

Between 2017 and 2018, increases in the tax-to-GDP ratios were observed in sixteen Member States as well as Norway. In percentage points, the highest increases in % of GDP from 2017 to 2018 were recorded by Luxembourg (from 39.1% in 2017 to 40.7% in 2018), ahead of Romania (from 25.8% to 27.1%) and Poland (from 35.0% to 36.1%).

Decreases or in the tax-to-GDP ratio or stable ratios were observed in twelve EU Member States (Denmark, Hungary, Finland, Sweden, Latvia, Malta, Ireland, Italy, Greece, Slovakia, the Netherlands and France). The largest decreases in the tax-to-GDP ratio were observed in Denmark (from 46.8% in 2017 to 45.9% in 2018), Hungary (from 38.4% to 37.6%) and Finland (from 43.1% to 42.4%).

In absolute terms from 2017 to 2018, there was no country for which overall decreases in revenue from taxes and social contributions were recorded. Tax revenue increased in absolute terms in all 28 Member States as well as Norway and Switzerland. Among EU countries, the strong increases in absolute tax and social contribution revenue from 2017 to 2018 were observed by Romania (+15.7 %), Estonia and Luxembourg (both +10.0 %), Lithuania and Poland (both +9.6 %) and Bulgaria (+9.1 %). Norway also recorded an increase in 2018 (+10.0 %).
At the level of the EU-28, tax revenue increased by 3.6% from 2017 to 2018 or by around 224 billion EUR (see Tables 2 and 4).

The effects of the economic and financial crisis on tax revenue from 2007 onwards are apparent. From its last spike in 2007, the ratio of tax revenue to GDP in the EU-28 decreased by 0.8 percentage points to 38.4 and 38.5% in 2009 and 2010, while the ratio for the EA-19 also decreased by 0.8 percentage points from its peak of 40.1% in 2007 to 39.3% in 2010. Tax revenue was decreasing more than GDP at that time. From 2011 to 2013, tax revenue in terms of GDP increased substantially, which was due to absolute tax revenue increasing along the same path as in the previous years and GDP growth being lower. This reflects pro-active tax measures taken by Member States during recent years to correct their government deficits, such as VAT rate increases and new taxes, for example bank levies and taxes on property. EA-19 tax revenue as a percentage of GDP remains at a higher level than EU-28 tax revenue. From 2014 to 2015, tax revenue in the terms of GDP slightly decreased in both EU-28 and the euro area, before increases from 2016 to 2018 (see Figure 2).

Figure 2: Total revenue from taxes and social contributions, EU-28 and EA-19, % of GDP, 1995-2018 Source: Eurostat (gov_10a_taxag)

There are many reasons why government tax revenue varies from year to year. It would take a more in-depth analysis in order to explain the causes of such variations in particular countries. However, in general, the main reasons are changes in economic activity (affecting levels of employment, sales of goods and services, etc.) and in tax legislation (affecting tax rates, the tax base, thresholds, exemptions, etc.) affecting revenue as well as changes in the level of GDP. The crisis – together with measures of fiscal policy to stimulate the economy adopted in the countries – had a strong impact on the level and composition of tax revenue in 2009-2016, although the first effects had already become visible from the third quarter of 2008. It should be noted, that even when using accrual methods of recording, the effects of changes in legislation or economic activity tends to have a delayed impact on tax revenue. Even in absolute terms, tax revenue fell in the EU and the euro area between 2008 and 2009 - for the first time in the period from 1995 onwards (see Figure 3), before steadily rising again to surpass pre-crisis levels in 2011 in both areas. The proportional increase in tax revenue was higher than the proportional increase in GDP, which resulted in an increase in the tax-revenue-to-GDP ratio in both the EU and the euro area. This recovery in tax revenue in most EU Member States can at least partly be attributed to active revenue-raising measures in some Member States, for example increases in the VAT rate, and the introduction of new taxes, such as bank and property taxes.
Direct taxes increased in 2018, while indirect taxes and social contributions remained stable

Revenue from taxes and social contributions can be grouped into three main categories or types: first, indirect taxes defined as taxes linked to production and imports (such as value added taxes - VAT), second, direct taxes consisting of current taxes on income and wealth, and third, net social contributions. The difference between direct taxes and indirect taxes is that for direct taxes, the burden of paying them cannot be shifted to other parties easily. For indirect taxes, such as VAT, who ends up paying the taxes depends de facto on the price elasticities of supply and demand.

In the ESA 2010 classification, these categories correspond to several transactions. Taxes on production and imports (D.2), current taxes on income, wealth, etc. (D.5), capital taxes (D.91), net social contributions (D.61) composed of actual social contributions (D.611 + D.613) as well as the imputations described above. Figure 4 shows the recent historical trend of taxes on production and imports (D.2), current taxes on income, wealth, etc. (D.5), and net social contributions (D.61) for the EU-28 relative to GDP.

Net social contributions include actual social contributions (for paying into social security funds or other social insurance schemes) as well as imputed social contributions, imputed contributions relating to the property income of certain social insurance schemes deemed as being an additional contribution to the scheme (D.614 households’ social contribution supplements) and imputed output of certain social insurance schemes (D.61sc social insurance scheme service charges). In 2018, tax revenue in the EU-28 remained relatively equally distributed between net social contributions (13.3 % of GDP), taxes on production and imports (13.6 %), and current taxes on income, wealth, etc. (13.2 %) (see Figure 4).

Because of differing national tax structures, indirect taxes, direct taxes and net social contributions vary considerably in importance from country to country in terms of the tax revenue they generate.

For the EU-28, the share of current taxes on income, wealth, etc. has decreased from 13.2 % in 2007 to
12.1% of GDP in 2010, but showed an increase of 0.7 pp of GDP in between 2010 and 2013, stagnated between 2013 and 2015, before increasing slightly to 13.2% of GDP in 2018. This could be primarily due to an increase in taxes on profits of corporations as well as increased employment (personal income taxes), rather than tax-raising measures such as the introduction of property taxes – the increase in this component of D.5 is stronger than the one in income taxes on individual or household income. From 2008 to 2009 the share of direct taxes decreased more than GDP and the fall in direct taxes was more pronounced than the fall in indirect taxes. Direct taxes have also taken longer to recover. The main components of direct taxes are taxes on the income of individuals and corporations. In the crisis, taxes on the income or profits of corporations experienced a decline in 2008 and further decreased in 2009. Despite their lower relative weight in the tax burden, the decrease in 2009 was stronger than the decrease in taxes on individual or household income (which are affected by unemployment). This reflects the higher sensitivity of corporate income taxes as automatic stabilisers. The longer lag in recovery could also be partly due to taxation policies in many Member States allowing losses to be carried forward and offset against profits.

Taxes on production and imports have slightly increased their share of total taxation from 2010 to 2018. This is at least partly due to increases in the VAT rates in many countries and the introduction of new taxes. Indirect taxes are expected to have a shorter lag in reaction to the renewed growth in output. Between 2014 and 2018, taxes on production and imports grew in line with nominal GDP, meaning that as a ratio to GDP they remained stable at 13.6%.

Taxes on production and imports (D.2) are divided into taxes on products (D.21), which are payable per unit of some good or service produced or transacted, and other taxes on production (D.29). Taxes on products are further split into value added type taxes (VAT; D.211), taxes and duties on imports excluding VAT (D.212) and taxes on products except VAT and import taxes (D.214). The most important type of taxes on production and imports is VAT. In 2018 in the EU-28, revenue from taxes on products accounted for about 82.9% and VAT for around 52.4% of the total taxes on production and imports.

The highest ratios of taxes on production and imports relative to GDP were recorded in Sweden (22.4%), Croatia (20.1%) and Hungary (18.6%), in line with the relatively high overall level of taxation in Sweden. The lowest ratios of these indirect taxes were recorded for Ireland (8.0%), Romania (10.7%), Germany (10.8%), Lithuania (11.8%) and Spain (11.9%) as well as Switzerland (5.9%), with Ireland and Switzerland having a low overall level of taxation (see Table 5).

Current taxes on income, wealth, etc. (D.5) include taxes on income (D.51) and other current taxes (D.59). Taxes on income cover both taxes on individual or household income and the income or profits of corporations, and include taxes on holding gains. At the level of the EU-28 in 2018, current taxes on income, wealth, etc. as a ratio to GDP amounted to 13.2%, while taxes on individual or household income made up the largest share of this (9.5% of GDP).

By far the highest importance of current taxes on income, wealth, etc. is noted for Denmark, which raised the equivalent of 28.9% of GDP from these taxes in 2018. The comparatively high ratio for Denmark is due to most social benefits being financed via taxes on income and, consequently, the figures for net social contributions are very low relative to other countries. The next-highest figures are recorded by Sweden, Belgium and Luxembourg, which raise 18.6%, 16.8% and 16.4% of GDP respectively from current taxes on income, wealth, etc. At the other end of the scale, Romania (4.9% of GDP in 2018), Lithuania (5.7% of GDP), Bulgaria (5.8% of GDP) and Croatia (6.5% of GDP) had relatively small revenue from these taxes and also show a generally low tax-to-GDP ratio.

Actual social contributions (D.611 and D.613, representing respectively employers’ and households’ actual social contributions) are the main component of net social contributions. This source of government revenue covers the compulsory and voluntary contributions payable to government by employees, employers and self- and non-employed persons. It includes any amounts payable by government as an employer. Actual social contributions accounted for the highest ratios in GDP terms in France (16.2%), Germany (16.0%), Czechia (15.6%) and for the lowest ratios in Denmark (0.7%) and Sweden (3.2%). In Denmark, social transfers are mainly funded through tax receivables.

In National Accounts, imputed social contributions (D.612) represent the counterpart of unfunded social benefits provided by government as an employer. In 2018, in terms of GDP, they accounted for 2.6% in Greece, 2.4% in Belgium, 2.3% in Portugal and 1.9% in France, but for 0.1% of GDP or less in many other EU and EFTA countries.
More detailed breakdowns of D.2, D.5 and actual social contributions (D.611 and D.613) by country for 2018 are shown in tables 5, 6 and 7 (Excel file).

Besides the main tax revenue categories, Figure 5 also shows two minor components that are included in the definition of tax revenue: capital taxes (D.91) and capital transfers from general government to relevant sectors, representing taxes and social contributions assessed but unlikely to be collected (D.995).

**Figure 5: Breakdown of tax revenue by country and by main tax categories in 2018 (percentage of GDP)** Source: Eurostat (gov_10a_taxag)

Capital taxes (D.91) are taxes levied at irregular and infrequent intervals on the net worth or value of assets owned, or transferred in the form of legacies or gifts. These taxes accounted for 0.3 % of GDP in the EU-28 in 2018. They range from 0.8 % of GDP in Belgium, 0.6 % and 0.5 % in France and Spain respectively, to being very small or non-existent (Czechia, Croatia, Cyprus, Latvia, Lithuania, Hungary, Austria, Portugal, Poland, Romania, and Slovakia) in several countries.

For the countries that (partially) use the assessment method of accrual recording (see methodological notes), a capital transfer can be recorded from general government to other sectors of the economy. This represents taxes and social contributions assessed but unlikely to be collected (D.995), which have to be deducted from tax revenue in order to produce consistent data with countries that use the time-adjusted cash method or that combine a method based on assessments and declarations with coefficients. In 2018, for the EU-28, this adjustment amounted to 0.1 % of GDP, with the highest ratios being registered for Denmark (0.4 %) as well as for France (0.3 %). High amounts recorded in this category cannot be interpreted as a country having a less efficient tax collection system, since countries adopting the different method will not have any amounts recorded in this category.

**Taxes and social contributions by subsector**

Taxes and social contributions imposed at state and local government level made up 16.4 % of total tax and social contribution revenue in 2018 in the EU-28.

At the level of the EU-28 in 2018, tax revenue (incl. social contributions) of central government made up 52.8 % of total tax and social contribution revenue, while state government (existing only in Belgium, Germany, Spain and Austria as well as Switzerland among EFTA countries) recorded a share of 6.8 % of total tax revenue, local governments recorded 9.6 % of the total and social security funds recorded 30.3 % of the total (see Figure 6). The remainder (0.5 % of the total) was recorded by the EU institutions - these are mainly agricultural levies and import duties; which are the first and second own resources of the EU as well as levies imposed in the context of the Single Resolution Mechanism.
Ireland, Malta, the United Kingdom and Norway do not report a distinct social security funds subsector. In those countries reporting a distinct social security funds subsector, the vast majority of revenue is made up of social contributions.

The social security funds subsector was relatively important in terms of tax revenue in France (50.1 % of the total), followed by Lithuania and Slovakia (both 41.7 %), Slovenia (40.4 %), Germany (38.7 %), Romania (37.7 %), Poland (36.4 %) and the Netherlands (35.6 %). On the other end of the scale, Denmark reported the lowest share (1.4 % of the total) commensurate with the low importance of social contributions (see above), with the social security fund’s subsector in Sweden also only receiving 6.2 % of revenue from taxes and social contributions.

In Sweden (30.0 % of the total), Iceland (27.6 %), Denmark (26.5 %) and Finland (22.6 %), the local government subsector recorded over a fifth of total tax revenue in 2018. On the other hand, in Malta, all general government tax revenue is recorded by central government and the local government’s share made up less than 5 % of total tax revenue in Bulgaria, Estonia, Ireland, Greece, Cyprus, Lithuania, Luxembourg, the Netherlands, Austria, Romania, Slovakia and the United Kingdom.

In federal countries reporting a state government, the importance of state government tax revenue in 2018 ranged from 25.0 % recorded by cantons in Switzerland, 24.4 % recorded by Laender in Germany to 2.3 % recorded by Laender in Austria.

Finally, in Malta (99.5 %), Ireland (97.2 %) and the United Kingdom (94.5 %), the central government subsector was the most important in 2018. All three countries do not recognise a separate social security funds subsector. The lowest share of central government tax and social contribution revenue was recorded by Germany (28.3 %).

Tax receipts are recorded in the government subsector having the power to impose a tax and to set and vary the rate of the tax. Block transfers of tax revenue from one subsector to another frequently take place and are commonly enshrined in legislation. These are recorded as ‘other current transfers’ and may form an important part of revenue of the receiving subsector. Thus the distribution of tax revenue across subsectors is not on its own an indication of the importance of a subsector in terms of function and share of expenditure.

Source data for tables and graphs
- Tax revenue statistics - tables for Statistics Explained

Data sources
Reporting of data to Eurostat

Data are collected by Eurostat on the basis of the European system of national and regional accounts (ESA).
2010) transmission programme: table 9, 'Detailed tax and social contributions receipts by type and receiving subsector'. The legal requirement for transmission of data by EU Member States is 9 months after the end of the calendar year. The data in this publication corresponds to transmissions for the end-September 2019 deadline and updates during October.

In all cases, the data are consistent with the ESA table 2 'main aggregates of general government' data released on 21 October 2019. The GDP used corresponds to the GDP delivered in the context of EDP notifications coincident with the transmissions of ESA table 2 and 9.

Data were extracted on 29 October 2019.

This data is published in the Eurostat online database Eurobase. In addition, Eurostat publishes revenue and economic function data for individual taxes (the National Tax Lists or NTL) delivered by Member States as well as Iceland, Norway and Serbia alongside the aggregated tax revenue data under the ESA2010 transmission programme.

**Definition of government**

The data relate to the general government sector of the economy, as defined in ESA2010, comprising the sub-sectors central government, state government (where applicable), local government, and social security funds (where applicable). Data for taxes collected on behalf of the EU institutions is also included in the analysis.

Thus revenue data for taxes and social contributions represent all tax and social contributions revenues collected at the EU level.

**Definition of tax revenue**

The definition used in this article is 'total taxes and social contributions payable to general government, including voluntary contributions'. This corresponds to 'Indicator 4', the broadest of four indicators defined by the Eurostat National Accounts Working Group in June 2001. This indicator covers fully the series reported under table 9 of the ESA2010 transmission programme. In particular it encompasses the wide diversity of social security systems in the EU.

The four indicators are defined as follows (the codes in brackets refer to ESA2010 codes):

- taxes on production and imports (D.2)
  - + current taxes on income, wealth, etc. (D.5)
  - + capital taxes (D.91)
  - - capital transfers from general government to relevant sectors representing taxes and social contributions assessed but unlikely to be collected (D.995)
  - + compulsory actual social contributions (D.611c+D.613c) payable to the social security funds (S.1314)

= **Indicator 1** (total taxes and compulsory social security contributions);

- + compulsory actual social contributions (D.611c+D.613c) payable to central government (S.1311), state government (S.1312), and local government (S.1313) subsectors as employers

= **Indicator 2** (total taxes and compulsory actual social contributions payable to general government, including those for government as an employer);

- + voluntary actual social contributions payable to the general government sector

= **Indicator 3** (total taxes and compulsory social contributions payable to general government, including those for government as an employer);

- + imputed social contributions (D.612) payable to general government as an employer
  - + households’ social contribution supplements (D.614)
  - - social insurance scheme service charges (D.61sc)

= **Indicator 4** (total taxes and social contributions payable to general government, including voluntary contributions*).
It has been found that, when comparing the four indicators, the trend in tax revenue is very similar. In terms of level of tax revenue, Indicator 4 is roughly one percentage point of GDP higher than the Indicator 2 measure, although this difference varies across countries.

**Time of recording**

According to ESA 2010, taxes and social contributions should be recorded on an accrual basis. ESA2010 details the rules to be followed on the *time of recording* and the amounts to be recorded. Two methods can be used:

- ‘time-adjusted’ cash – the cash is attributed when the activity took place to generate the tax liability or when the amount of taxes was determined in the case of some income taxes. This adjustment may be based on the average time difference between the activity and cash receipt;

- a method based on declarations and assessments. In this case, an adjustment needs to be made for amounts assessed or declared but unlikely to be collected. These amounts have to be eliminated from government revenue, either by using a tax-specific coefficient based on past experience and future expectations or by recording a capital transfer for the same adjustment (ESA 2010 code D.995) to the relevant sectors.

**ESA2010 classifications and codes**

- D.2: TAXES ON PRODUCTION AND IMPORTS
- D.21: Taxes on products
- D.211: Value added type taxes (VAT)
- D.212: Taxes and duties on imports excluding VAT
- D.214: Taxes on products, except VAT and import taxes
- D.29: Other taxes on production
- D.5: CURRENT TAXES ON INCOME, WEALTH, ETC.
- D.51: Taxes on income
- D.59: Other current taxes
- D.91: Capital Taxes
- D.61: NET SOCIAL CONTRIBUTIONS
- D.611: Employers’ social contributions
- D.612: Imputed social contributions
- D.613: Households’ social contributions
- D.614: Households’ social contribution supplements
- D.61sc Social insurance scheme service charges
- D.995: Capital transfers from general government to relevant sectors representing taxes and social contributions assessed but unlikely to be collected;

TOTAL (D.2 _D.5 _D.91 _D.61 _M _D.995): total receipts from taxes and social contributions (including imputed social contributions) after deduction of amounts assessed but unlikely to be collected;

Total general government revenue (TR) includes total taxes and social contributions as well as market output (P.11), output for final use (P.12), payments for other non-market output (P.131), other subsidies on production, receivable (D.39rec), property income, receivable (D.4rec), other current transfers, receivable (D.7rec) and capital transfers, receivable (D.9rec);

GDP at current prices (nominal GDP) is used throughout. For EU Member States, the GDP transmitted in the context of the September 2019 EDP notification is used.
Symbols:

"." not available "p.p." percentage points

Context

As a ratio of GDP, in 2018 tax revenue (including net social contributions) accounted for 40.3% of GDP in the European Union (EU-28) and 41.7% of GDP in the euro area (EA-19). Compared with 2017, increases in the ratio are observed for the EU and the euro area.

In 2018, tax revenue made up 89.4% of total general government revenue in the European Union.

Other articles

- Government finance statistics
- Government finance statistics - quarterly data
- Integrated government finance statistics presentation
- Government expenditure by function – COFOG
- Structure of government debt

Tables

- Government statistics (t_gov), see:
  Annual government finance statistics (t_gov_a)
    Total general government revenue (tec00021)
    Total general government expenditure (tec00023)
    Taxes on production and imports (tec00020)
    Current taxes on income, wealth, etc. (tec00018)
    Net social contributions (tec00019)

Database

- Government statistics (gov), see:
  Annual government finance statistics (gov_10a)
    Main national accounts tax aggregates (gov_10a_taxag)

Dedicated section

- Government finance statistics

Publications

- National Tax Lists - Excel publications
  National Tax Lists - individual taxes, updated 29 October 2019
- Statistical book and Statistics in Focus series
Methodology

- Government revenue, expenditure and main aggregates (ESMS metadata file — gov_10a_main_esms)
- Main national accounts tax aggregates (ESMS metadata file — gov_10a_taxag_esms)

External links

- European Commission - DG Taxation and Customs Union:
  - Database of main taxes in Europe
    - Website dedicated to the Taxation trends report, including the full methodological annex to the Taxation trends report and the National Tax Lists for the 2019 edition of the Taxation trends report (based on data delivered in 2018).