

## Tax revenue in the European Union

### EU-27 tax revenue-to-GDP ratio remained stable at 40.9% in 2007

EU-27 tax revenue (including social contributions) of general government<sup>1</sup> stabilised in 2007 at 40.9% of GDP, accounting for over 90% of total government revenue. In the euro area (EA-16), on the other hand, tax revenue increased slightly, reaching 41.6% of GDP in 2007.

Denmark and Sweden registered the highest levels of tax revenue, amounting to around half of their GDP in 2007, while generally lower levels were observed in the new EU Member States (those that have joined the EU since 2004).

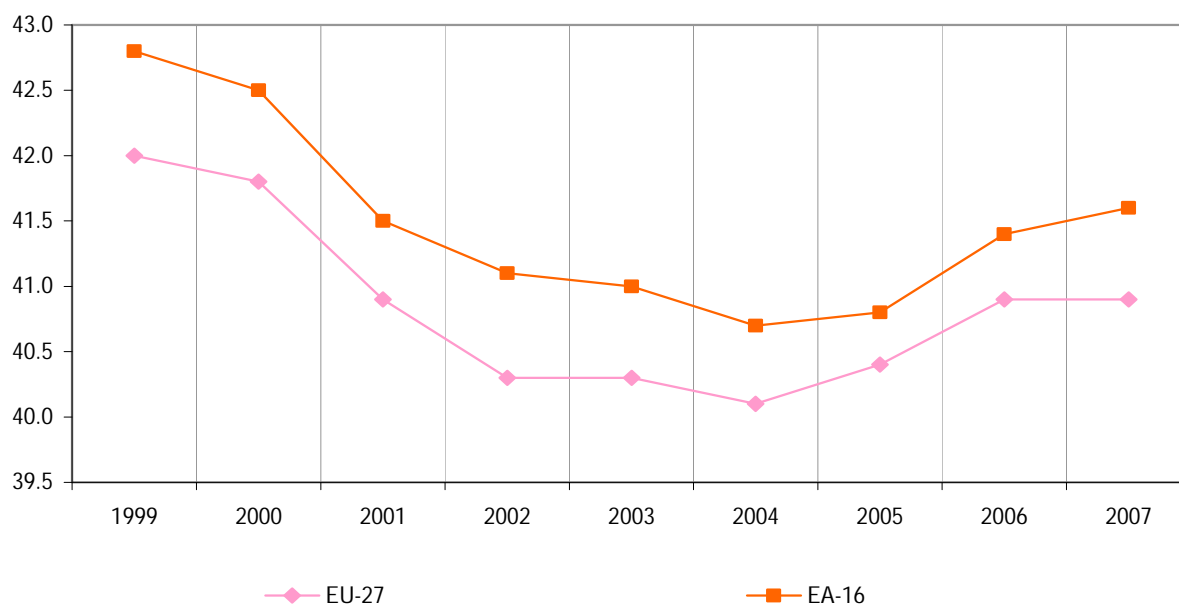
The ratio of tax revenue to GDP in the EU-27 in 2007 was 0.8 percentage points higher than its low of 40.1% in 2004. The increase recorded in recent years was not strong enough to restore the ratio to its 1999 level (see Figure 1). During the past nine years, Member States experienced different movements in

the level of tax revenue. The largest increases were observed in Cyprus (from 28.0% in 1999 to 41.6% in 2007) and Malta (from 28.7% to 36.1%), while the biggest reduction was recorded in Slovakia (from 35.5% to 29.7%).

EU-27 tax revenue in 2007 was almost equally split between taxes on production and imports (33.8%), social contributions (33.1%) and current taxes on income, wealth, etc. (32.7%). In the new EU Member States there is generally less reliance on direct taxes as a form of government revenue than in the EU-27 as a whole.

<sup>1</sup> For detailed information on the definitions of tax revenue and government see the methodological notes at the end of this document.

Figure 1: Total tax revenue in the EU-27 and euro area as a percentage of GDP, 1999-2007



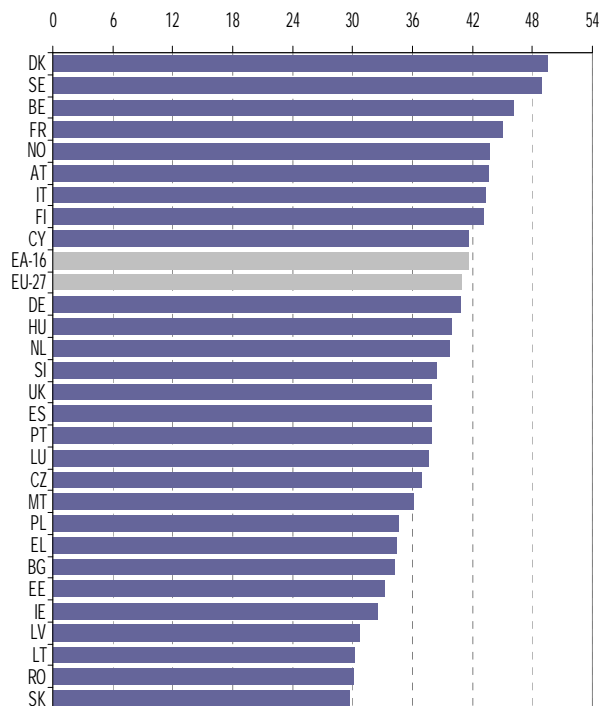
## Levels of tax revenue in 2007: Denmark and Sweden on top

In 2007, tax revenue in the EU-27 stood at 40.9% of GDP, accounting for over 90% of total government revenue. The level of tax revenue in the euro area (EA-16) was slightly higher than in the EU-27, at 41.6% of GDP.

As Figure 2 shows, the level of tax revenue in GDP terms was highest in Denmark and Sweden (49.5% and 48.9% respectively in 2007), whereas it was generally lower in the new EU Member States; the lowest share was in Slovakia, with 29.7% (almost 20 percentage points of GDP lower than Denmark in 2007). The most notable exception is Ireland, with relatively low levels of tax revenue amounting to 32.5% of GDP (the fifth lowest ratio in the Member States).

After Denmark and Sweden, Belgium had a level of tax revenue well above the EU-27 average at 46.1% of GDP, while for half of the EU-27 countries plus Norway, the tax revenue-to-GDP ratio was within +/- 4 percentage points of the EU-27 average. Among the new EU Member States, Cyprus posted the highest level of tax revenue, reaching 41.6% of GDP (slightly higher than the EU average). It is interesting to note that the arithmetical average of the 27 countries is somewhat lower (38.3%) than the GDP-weighted EU average, because of the relatively low levels of GDP (and therefore low weight) for the countries which tend to have the lower tax revenue.

**Figure 2: Ranking of total tax revenue by Member States and Norway in 2007 as a percentage of GDP**



## Trends in tax revenue over the period 1999-2007

EU-27 tax revenue in terms of GDP remained constant between 2006 and 2007 at the level of 2001 (but below the peak of 1999). The 2007 level was 0.8 percentage points higher than in 2004 (the year during the period 1999-2007 for which the lowest value was recorded). Euro area tax revenue followed a roughly similar pattern, at a slightly higher level. From 1999 to 2004 it followed a downward trend, turning upwards during the last three years ultimately increasing in 2007 by 0.2 percentage points in terms of GDP relative to 2006 (see Figure 1).

There are many reasons why government tax revenue varies from year to year as a percentage of GDP. It would take a more in-depth analysis than the one presented here 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, thresholds, exemptions, etc.). It should be noted that, even when using accrual methods of recording, the effects of changes in legislation or economic activity tend to have a delayed impact on tax revenue.

Over the period 1999-2007, countries experienced different movements in the tax revenue-to-GDP ratio. As shown in Table 1, Cyprus and Malta recorded upward

trends (except in 2003 and 2006 for Malta, where the ratio was marginally lower than the previous year) with the highest increases in the EU-27, at 13.6 and 7.4 percentage points respectively over the 9-year period. Slovakia, on the other hand, generally observed a downward trend, with a drop in the tax revenue-to-GDP ratio from 35.5% in 1999 to 29.7% in 2007. For countries like Belgium, France, Italy, Hungary (excluding 2007), Slovenia, the United Kingdom and Norway, the ratio has been quite stable during the period. In the other EU Member States the trend in the tax revenue-to-GDP ratio followed a more variable pattern, recording ups and downs during the period. This was the case for Bulgaria, where the ratio rose from 30.6% in 1999 to 32.5% in 2000. In the two subsequent years it fell to its lowest value of 29.6% in 2002, before turning up again by 4.6 percentage points during the period 2002-2007.

Between 2006 and 2007, tax revenue in terms of GDP rose in 17 of the 27 EU Member States, fell in 9 and remained stable in one. Norway recorded a decrease in the ratio. The largest increases of tax revenue-to-GDP ratios were seen in Cyprus, Hungary and Estonia (+5.1, +2.6 and +1.8 percentage points respectively compared to 2006), whereas the biggest reductions of the ratios were recorded in Denmark and Sweden (equal to or more than 0.8 percentage points).

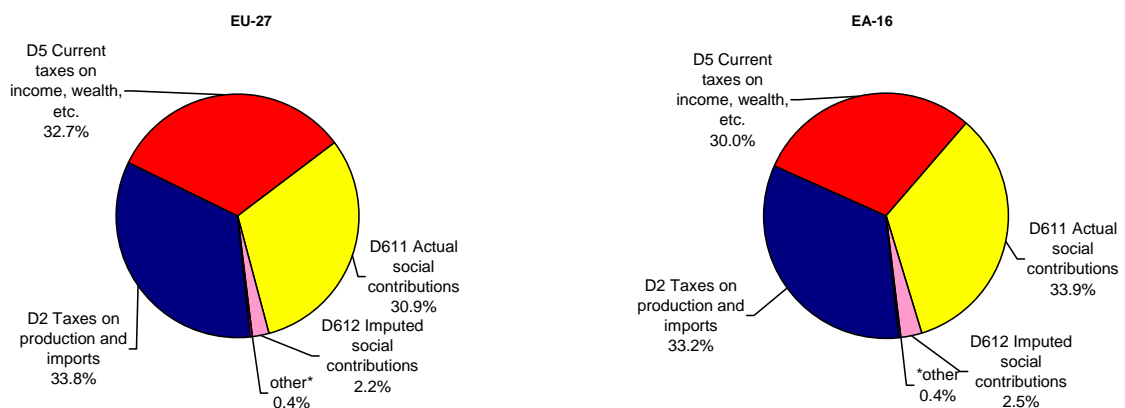
## In 2007 indirect taxes, direct taxes and social contributions contributed almost equally to tax revenue in the EU-27

Tax revenue can be grouped into three main categories or types: indirect taxes defined as taxes linked to production and imports (such as value added tax - VAT), direct taxes consisting of current taxes on income and wealth plus capital taxes, and social contributions that include actual social contributions (for paying into social security funds or other social insurance schemes) plus imputed social contributions. In the ESA 95 classification, these categories correspond to the following transactions: taxes on production and imports (D.2), current taxes on income, wealth, etc. (D.5) and capital taxes (D.91), social contributions (D.61) composed by actual social contributions (D.611) and imputed social contributions (D.612).

The analysis of the breakdown of tax revenue in 2007 in EU-27 and the euro area showed that the share of each

transaction in total tax revenue remained generally unchanged compared to the previous years. As shown in Figure 3, tax revenue in the EU-27 was relatively equally distributed between taxes on production and imports (33.8%), social contributions (33.1%) and current taxes on income, wealth, etc. (32.7%). The remaining components of tax revenue made up only 0.4% of the total. A less balanced distribution of tax revenue was recorded for the euro area, with social contributions registering the biggest share (36.4%) in 2007, while current taxes on income, wealth, etc. accounted for the lowest share, at 30.0%. The EA-16 results highlight the relative importance of social contributions in Germany and France. In fact, these two countries together accounted for 54.4% of the EA-16 aggregate in this category.

**Figure 3: Composition of EU-27 and EA-16 tax revenue in 2007**



\*other: capital taxes (D91) and capital transfers to relevant sectors representing taxes and social contributions assessed but unlikely to be collected (D995)

In terms of GDP, EU-27 government revenue from taxes on production and imports (D.2) amounted to 13.8% in 2007; 13.4% was accounted for by current taxes on income, wealth, etc. (D.5) and 12.6% and 0.9% were recorded for actual (D.611) and imputed (D.612) social contributions respectively (see Figure 4).

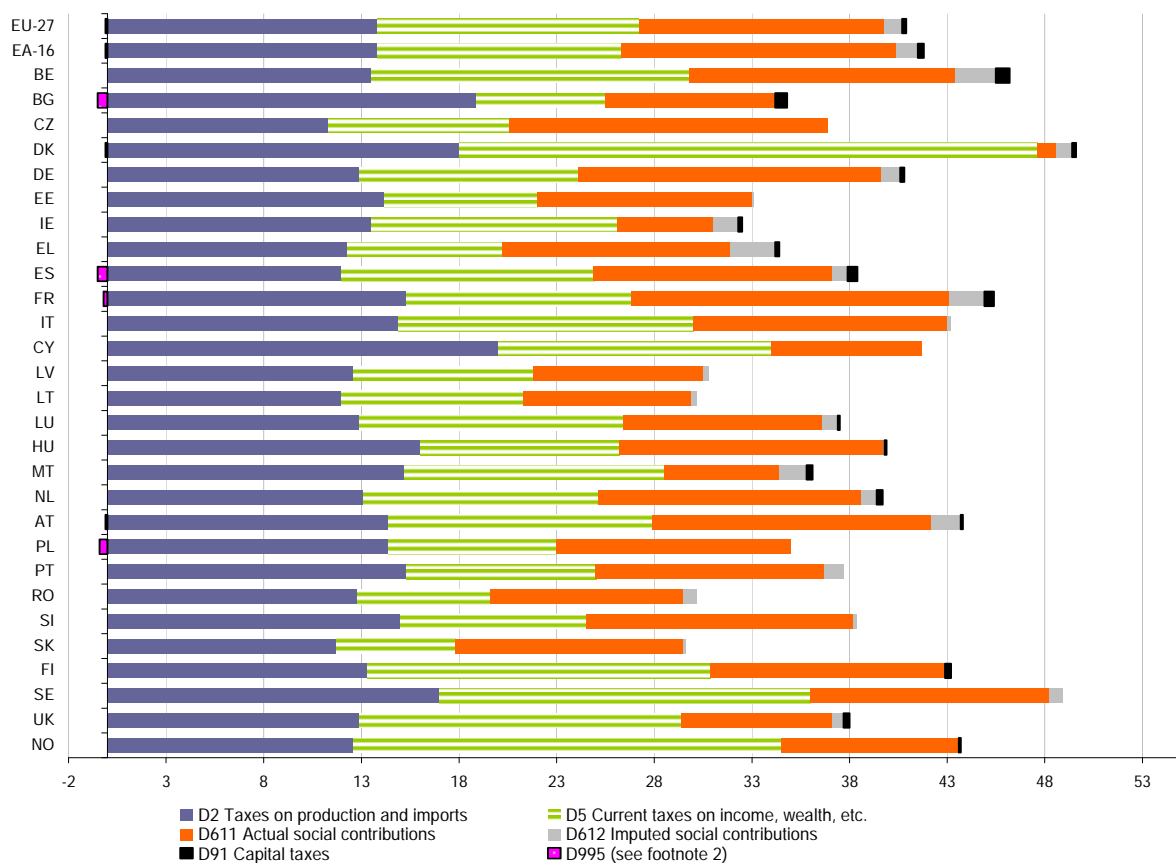
Because of differing national tax structures, indirect taxes, direct taxes and social contributions vary considerably in importance from country to country in terms of the tax revenue they generate. It is important to note that, in the new Member States, there is generally less reliance on direct taxes as a form of government revenue than in the EU as a whole.

Taxes on production and imports (D.2) are divided into taxes on products (D.21) payable per unit of some good or service produced or transacted, which include value added type taxes (D.211), and other taxes on production (D.29). In the EU-27, revenue from taxes on products reached

over 80% of the total taxes on production and imports in 2007. The biggest share of taxes on production and imports relative to GDP was recorded in Cyprus (20.0%), followed by Bulgaria (18.9%) and Denmark (18.0%), whereas the lowest level of these indirect taxes was recorded in the Czech Republic (11.3%).

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 individual or household income and the income or profits of corporations, and include taxes on holding gains. The contribution of these taxes by country varies significantly: from 29.6% of GDP in Denmark and 21.9% in Norway, down to around 6% in Slovakia. However, the comparatively high level for Denmark is due to the fact that most welfare spending is financed via taxes on income and, consequently, the figures for actual social contributions are very low relative to other countries.

Figure 4: Breakdown of tax revenue by country and by main tax categories in 2007 (% of GDP)<sup>2</sup>



Actual social contributions (D.611) are the main component of social contributions. This source of government revenue covers the compulsory and voluntary contributions paid to government by employees, employers, self- and non-employed persons. They also include any amounts payable to government as an employer. Actual social contributions accounted for the highest ratios in GDP terms in France, the Czech Republic (both 16.3%) and Germany (15.5%) and for the lowest shares in Malta and Ireland (5.9% and 4.9% respectively). Thus, as with taxes on income, revenue from actual social contributions differs widely among countries. The case of Denmark mentioned above is an exception, in that its share was only 1.0% of GDP in 2007 for this type of tax revenue.

Imputed social contributions (D.612) in the national accounts system represent the counterpart of unfunded social benefits provided by the government as an employer. In 2007, they accounted for 2.3% in Greece and 2.1% in Belgium in terms of GDP, but for less than 0.1% in the Czech Republic, Cyprus and Norway.

More detailed breakdowns of D.2, D.5 and D.611 by country are shown in Table 2.

Besides the main transactions of taxes on production and imports, current taxes on income, wealth, etc. and social

contributions, Figure 4 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).

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 0.2% of GDP in the EU-27 in 2007, with very low ratios mainly recorded for the new Member States. They range from 0.7% in Belgium to under 0.02% in Latvia, Lithuania, Portugal, Romania, Slovakia and Sweden.

For those countries implementing the assessment method of accrual recording (see Methodological notes), capital transfers from general government to other sectors of the economy (D.995), representing taxes and social contributions assessed but unlikely to be collected, have to be deducted from tax revenue. In 2007, for the EU-27 as a whole, this adjustment amounted to 0.1% of GDP, with the highest shares being registered for Bulgaria, Spain (both 0.5%) and Poland (0.4%).

<sup>2</sup> The negative amounts represent capital transfers to the relevant sectors, relating to taxes and social contributions assessed but unlikely to be collected (D995)

Table 1: Total tax revenue by country, 1999-2007 (% of GDP and million euro)

	Tax revenue in % of GDP										Tax revenue in million euro								
	1999	2000	2001	2002	2003	2004	2005	2006	2007	1999	2000	2001	2002	2003	2004	2005	2006	2007	
EU-27	42.0	41.8	40.9	40.3	40.3	40.1	40.4	40.9	40.9	3606835	3843474	3918188	4003147	4069124	4249183	4468017	4774728	5050417	
EA-16	42.8	42.5	41.5	41.1	41.0	40.7	40.8	41.4	41.6	2754947	2879390	2938236	3009225	3095765	3195338	3327933	3541636	3736495	
BE	47.6	47.3	47.4	47.5	47.1	47.2	47.1	46.6	46.1	113483	119140	122645	127207	129324	136670	142198	148320	154411	
BG	30.6	32.5	30.9	29.6	32.2	33.1	34.0	33.2	34.2	3718	4458	4717	4924	5714	6569	7441	8376	9889	
CZ	34.1	33.9	34.0	34.8	35.8	37.5	37.2	36.8	36.9	19237	20839	23496	27878	28971	33071	37239	41729	46933	
DK	50.9	50.2	49.3	48.7	48.9	49.9	51.7	50.5	49.5	83142	87181	88419	90060	92261	98415	107294	110325	112232	
DE	43.2	43.3	41.4	41.0	41.1	40.2	40.1	40.6	40.8	868890	893080	875070	879230	889290	888040	900450	941660	988190	
EE	32.7	31.3	30.5	31.2	30.9	30.8	31.0	31.4	33.2	1745	1911	2109	2418	2690	2968	3437	4119	5065	
IE	33.1	32.8	31.0	29.8	30.4	31.6	32.1	33.5	32.5	29994	34428	36304	38783	42363	47148	52031	59349	62014	
EL	35.4	36.6	35.2	35.7	34.3	33.3	33.6	33.4	34.4	46642	50415	51561	55885	58844	61956	66386	71287	78428	
ES	34.4	34.8	34.3	34.7	34.7	35.3	36.4	37.3	37.9	199716	219035	233424	253263	271901	296987	330988	366585	398282	
FR	46.7	45.9	45.6	44.9	44.7	45.0	45.4	45.6	45.0	639119	661989	682440	695718	713635	747116	784264	825028	852147	
IT	42.9	42.1	41.8	41.2	41.7	40.9	40.7	42.2	43.3	483084	501825	522357	533676	556264	568903	581668	627398	668921	
CY	28.0	30.0	30.9	31.2	33.0	33.4	35.5	36.5	41.6	2564	3022	3339	3484	3885	4255	4851	5350	6520	
LV	32.3	29.7	28.7	28.5	28.7	28.7	29.2	30.7	30.7	2199	2523	2673	2824	2865	3208	3803	4924	6488	
LT	31.9	30.1	28.7	28.4	28.1	28.6	28.8	29.7	30.2	3262	3730	3892	4271	4641	5185	6009	7124	8593	
LU	39.2	40.0	40.6	40.2	39.0	38.1	38.4	36.7	37.6	7794	8798	9172	9634	10081	10485	11618	12433	13636	
HU	39.2	38.6	38.3	38.0	37.8	37.7	37.6	37.3	39.9	17668	20076	22815	26846	28159	31022	33320	33542	40303	
MT	28.7	29.3	31.9	33.0	32.8	34.3	35.3	35.1	36.1	1050	1237	1371	1481	1452	1549	1696	1795	1965	
NL	41.5	40.9	39.4	38.7	38.4	38.5	38.6	39.9	39.7	160138	171149	176355	180173	183075	189192	197945	215454	225191	
AT	46.2	45.3	47.1	45.7	45.5	44.9	43.8	43.3	43.6	91409	93978	100148	100004	101665	104610	107030	111498	118152	
PL	34.9	32.6	32.2	32.7	32.2	31.5	32.8	33.8	34.6	54956	60490	68340	68563	61739	64265	80152	91892	107537	
PT	34.8	35.2	34.8	35.6	36.0	35.2	36.3	37.0	37.8	39728	43008	45051	48255	49898	50712	54096	57470	61636	
RO	31.7	30.6	28.9	28.5	28.1	27.7	28.5	29.2	30.1	10581	12420	13099	13857	14794	16941	22722	28499	37266	
SI	38.4	37.7	37.9	38.2	38.4	38.6	39.0	38.6	38.4	7949	8075	8610	9363	9877	10463	11186	11984	13243	
SK	35.5	34.2	33.2	33.3	33.2	31.8	31.6	29.6	29.7	6803	7528	7821	8652	9801	10837	12178	13180	16305	
FI	46.1	47.4	44.8	44.8	44.2	43.7	44.2	43.6	43.1	56586	62684	62569	64416	64408	66416	69349	72844	77453	
SE	52.4	52.4	50.5	48.6	49.0	49.4	50.3	49.7	48.9	126268	139663	126923	128336	135207	142063	148185	155637	162107	
UK	37.5	38.1	37.9	36.5	36.2	36.8	37.7	38.5	37.9	529112	610794	623470	623948	596319	650137	690483	746926	777508	
NO	42.3	42.7	42.9	43.1	42.3	43.3	43.6	44.0	43.7	63158	77898	81926	88043	84270	90235	105809	118094	123992	



## METHODOLOGICAL NOTES

This box gives some background explanation on government revenue in the form of taxes and social contributions. More exhaustive information and data can be found on [Eurostat's homepage](#) in the section dedicated to [Government finance statistics](#).

### Reporting of data to Eurostat

Data are collected by Eurostat on the basis of the European System of Accounts (ESA 95) transmission programme, table 0900, 'Detailed tax and social contributions receipts by type and receiving sub-sector'. The legal requirement for transmission of data by EU Member States is at year t+9 months. The data in this publication correspond to the end-September 2008 transmission.

Accordingly, there could be slight differences compared to data collected on the basis of table 0200, 'Main aggregates of general government' (transmitted at t+3 and t+9 months) which correspond to the end-March 2009 transmission that has been recently released.

### Definition of government

The data relate to the general government sector of the economy, as defined in ESA95, comprising the sub-sectors central government, state government, local government, and social security funds.

For the purpose of this publication the term 'general government' also includes taxes collected on behalf of the EU institutions. In this way it presents all tax revenues collected at the EU level.

### Definition of tax revenue

The definition used in this *Statistics in Focus* is 'Total taxes and social contributions payable to general government, including those for government as an employer'. 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 0900 of the ESA 95 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 ESA95):

- 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 payable to the social security funds (S.1314)
- = Indicator 1 (Total taxes and compulsory social security contributions)
- + Compulsory actual social contributions payable to the central government (S.1311), state government (S.1312), and local government (S.1313) sub-sectors as employers
- = Indicator 2 (Total taxes and compulsory actual 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
- = Indicator 3 (Total taxes and compulsory social contributions payable to general government, including those for government as an employer)
- + Voluntary actual social contributions payable to the general government sector
- = Indicator 4 (Total taxes and social contributions payable to general government, including those for government as an employer).

It has been found that, 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. For a full analysis of tax structures, see Eurostat / DG Taxud joint publication 'Taxation trends in the European Union', 2008 edition.

### Time of recording

According to ESA 95, taxes and social contributions should be recorded on an accrual basis. Council Regulation 2516/2000 details the rules to be followed on the time of recording and the amounts to be recorded. Two methods can be used:

- a) '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;
- b) 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 95 code D.995) to the relevant sectors.

### Abbreviations

Euro area 16 (EA-16): BE (Belgium), DE (Germany), IE (Ireland), EL (Greece), ES (Spain), FR (France), IT (Italy), Cyprus (CY), LU (Luxembourg), Malta (MT), NL (the Netherlands), AT (Austria), PT (Portugal), SI (Slovenia), Slovakia (SK) and FI (Finland). In this publication, the euro area is defined as including Cyprus, Malta and Slovakia, although Cyprus and Malta joined the euro area on 1 January 2008 and Slovakia on 1 January 2009.

EU or EU-27 (European Union of 27 Member States): Euro area countries plus BG (Bulgaria), CZ (the Czech Republic), DK (Denmark), EE (Estonia), LV (Latvia), LT (Lithuania), HU (Hungary), PL (Poland), RO (Romania), SE (Sweden) and UK (the United Kingdom).

### ESA 95 classifications and codes

- D2: TAXES ON PRODUCTION AND IMPORTS
- D21: Taxes on products
- D211: Value added type taxes
- D212: Taxes and duties on imports excluding VAT
- D214: Taxes on products, except VAT and import taxes
- D29: Other taxes on production
- D5: CURRENT TAXES ON INCOME, WEALTH, ETC.
- D51: Taxes on income
- D59: Other current taxes
- D91: Capital Taxes
- D2\_D5\_D91: TOTAL TAX RECEIPTS
- D611: Actual social contributions
- D6111: Employers' actual social contributions
- D6112: Employees' social contributions
- D6113: Social contributions by self- and non-employed persons
- D612: Imputed social contributions
- D995: Capital transfers from general government to relevant sectors representing taxes and social contributions assessed but unlikely to be collected

TOTAL (D2\_D5\_D91\_D611\_D612\_M\_D995): total receipts from taxes and social contributions (including imputed social contributions) after deduction of amounts assessed but unlikely to be collected

### More data

Data used in this report is collected from the Member States, by the European Commission. More data can be found on Eurostat's homepage under the theme [Economy and finance](#).

### Symbols

- "-" 'not applicable', 'real zero' or 'zero by default'
- ":" not available

## Further information

---

Data: [Eurostat Website: http://ec.europa.eu/eurostat](http://ec.europa.eu/eurostat)

Select your theme on the left side of the homepage and then 'Data' from the menu.

Data: [Eurostat Website/Economy and Finance/Government finance statistics](#)

Government statistics

  Annual government finance statistics

---

### Journalists can contact the media support service:

Bech Building Office A4/125 L - 2920 Luxembourg

Tel. (352) 4301 33408 Fax (352) 4301 35349

E-mail: [eurostat-mediasupport@ec.europa.eu](mailto:eurostat-mediasupport@ec.europa.eu)

---

### European Statistical Data Support:

Eurostat set up with the members of the 'European statistical system' a network of support centres, which will exist in nearly all Member States as well as in some EFTA countries.

Their mission is to provide help and guidance to Internet users of European statistical data.

Contact details for this support network can be found on our Internet site:

<http://ec.europa.eu/eurostat/>

---

A list of worldwide sales outlets is available at the:

### Office for Official Publications of the European Communities.

2, rue Mercier

L - 2985 Luxembourg

URL: <http://publications.europa.eu>

E-mail: [info@publications.europa.eu](mailto:info@publications.europa.eu)

---

Manuscript completed on: 18.05.2009

Data extracted on: 24.03.2009

ISSN 1977-0316

Catalogue number: KS-SF-09-043-EN-N

© European Communities, 2009