

#### **ECONOMY AND FINANCE**

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**Government statistics** 

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# Tax revenue in the EU

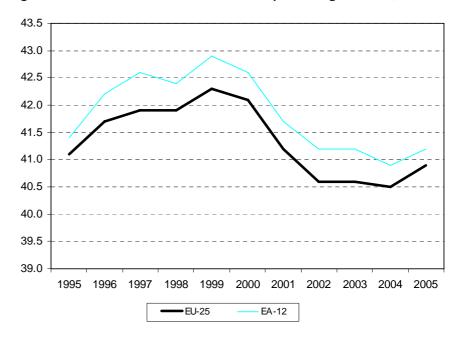
Increases for the first time since 1999, to 40.9% of GDP

Government revenue in the form of taxes and social contributions increased in the EU-25 in 2005 from 40.5% to 40.9% of GDP. In the euro area 12 there was a slightly smaller increase from 40.9% to 41.2% of GDP.

In the EU-25, tax revenue (including social contributions) reached its highest level relative to GDP since the year 2001. As *Figure 1* shows, tax revenue was at a low point in 2004, and the 2005 level remains somewhat below earlier years. The trend for the euro area has been fairly similar to that of the EU-25, but at a slightly higher absolute level.

There are wide variations in levels of tax collected (relative to GDP) among EU Member States. Generally, tax revenue is lower among the new Member States (those which joined the EU in 2004 and 2007), compared to the rest of the EU. Moreover, the experiences of the countries over the period 1995-2005 have differed considerably. These variations are explained in more detail on the following pages.

Figure 1: Total tax revenue in the EU as a percentage of GDP, 1995-2005



#### Levels of tax revenue by country in 2005

A breakdown of the amount of total taxes (including social contributions) collected by country, relative to GDP, is provided in *Tables 1 and 2*. As a generalisation, the amount of taxes collected in Scandinavian countries tends to be higher than the EU-25<sup>1</sup> average (40.9% of GDP), and the amounts collected in the new Member States tend to be lower.

Among the EU-25 countries, the highest ratios of tax revenue to GDP in 2005 were above 50%, in Sweden and Denmark. By contrast, the figures for the three Baltic states and for Slovakia were around 30%. Traditionally Ireland also has relatively low levels of tax revenue, and in 2005 this equalled 32.2% of GDP. It is interesting to note that the arithmetical average of the 25 countries is 38.7%, somewhat below the GDP weighted EU-25 average – this reflects the relatively low levels of GDP

(and therefore low weight) of the countries which tend to have the lower tax revenue.

For the majority of the EU-25 countries, the tax revenue-to-GDP ratio comes within a range of 5 percentage points of the EU-25 average. Bulgaria is below this range, while Norway is towards the top end. The level in Romania is the lowest of all 28 countries shown, at 28.8% of GDP.

Between 2004 and 2005 the most significant changes in the amount of tax revenue measured in terms of GDP were in Cyprus (+2.1 percentage points), Malta and Poland (+1.5), Denmark (+1.3), United Kingdom (+1.2), and Romania (+1.1). There were notable falls in the Czech Republic, Estonia, Slovakia, and most of all Austria (-0.8 percentage points).

#### Trends in tax revenue 1995-2005

There are many reasons why government revenue from taxes and social contributions varies from year to year as a percentage of GDP. A more in-depth analysis than the one presented here would be needed 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 using accrual methods of recording, the effects of changes in legislation or economic activity tend to have a delayed impact on tax revenue.

For both the EU-25 and the euro area, tax revenue reached a peak in 1999, before declining to 2004. In 2005 the levels were only marginally different from those of 1995. However, this trend conceals a variety of experiences among countries over the 11-year period. In Slovakia the tax revenue-to-GDP ratio fell by over 10 percentage points, and in Estonia by almost 7 percentage points. By contrast, it increased by 9.3

and 6.7 percentage points in Cyprus and Malta respectively, but their levels nonetheless remain below the EU average. For countries such as Belgium, France, Italy, Luxembourg, Austria, Slovenia, and the United Kingdom there has been relatively little movement in the ratio during the period.

Taking the whole 1995-2005 period, tax revenue as a percentage of GDP rose slightly in Greece, but a different trend is observed if the shorter time scale of 2000-2005 is used, the ratio falling over this period by 3.3 percentage points to 36.7% in 2005. In Germany and Finland, too, an increase in the ratio from 1995-2000 was followed by a fall of over 3 percentage points to 40.2% and 44.0% respectively in 2005. In the Czech Republic the opposite trend occurred, the ratio falling in 1995-2000 before moving up 2.9 percentage points between 2000 and 2004, though it eased in 2005 to 36.3%. Data are available only since 2000 for Bulgaria, where the ratio has increased each year since 2002 to reach 34.8% in 2005.

#### Structure of taxes and social contributions

There are three main categories or types of compulsory levies – indirect taxes such as value added tax (VAT), direct taxes on income and wealth, and social contributions for paying into social security funds or other social insurance schemes. In the ESA 95 classification these three categories correspond closely to the following transactions: taxes on production and imports (D.2), current taxes on income, wealth, etc. (D.5), and actual social contributions (D.611). In 2005 these categories amounted to 39.7% of GDP in the EU-25, and accounted for nearly 97% of total tax revenue.

Measured in terms of GDP, government revenue from D.2 taxes in the EU-25 was equal to 13.8%, D.5 taxes 12.9%, and D.611 social contributions 13.0% (see Figure 2).

Because of differing national tax structures, these three components vary considerably in importance among countries in terms of their tax revenue generated. One notable feature is that, in the new Member States generally (including Bulgaria and Romania), there is less reliance on direct taxes as a form of government revenue than in the EU as a whole.

<sup>&</sup>lt;sup>1</sup> As the data analysed refer to the period before the enlargement of the EU by Romania and Bulgaria, and the euro area by Slovenia, as of 1.01.2007, only EU-25 and EA-12 aggregates are presented.



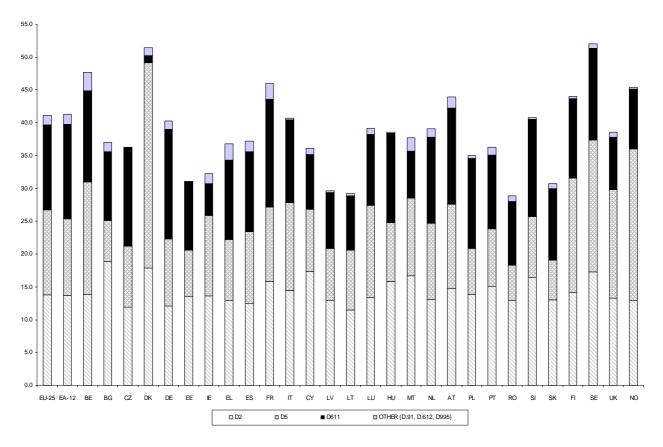
Taxes on production and imports are split into taxes on products (D.21) and other taxes on production (D.29). The most important type of tax on production and imports in terms of government revenue is VAT (D.211). D.2 taxes are most significant relative to GDP in Bulgaria (18.9% in 2005), followed by Denmark (17.9%), and lowest in Lithuania (11.5%) and the Czech Republic (11.9%)

Current taxes on income, wealth, etc. (D.5) include taxes on income (D.51) and other current taxes (D.59). D.51 taxes cover both individual or household income and the income or profits of corporations, and include taxes on holding gains. Measured in terms of GDP, the amount of revenue collected from taxes on income differs widely among countries, considerably more than their revenue from taxes on products. The range in 2005 is from 31.2% in Denmark and 23.1% in Norway, to 5.3% in Romania and 6.1% in Slovakia. Denmark's

exceptionally high figure may be explained by the fact that most welfare spending is financed via D.51 taxes, and consequently the figures for actual social contributions are very low relative to other countries.

Actual social contributions (D.611) cover compulsory and voluntary contributions paid to government (mainly into social security funds) by employees, employers, the self-employed, and non-employed. They also include any amounts payable to government as an employer. Apart from the case of Denmark mentioned above, where D.611 social contributions were only 1.1% of GDP in 2005, they are relatively low in Ireland (4.8%) and Malta (7.2%). The highest ratios of D.611 to GDP are in Germany (16.7%) and France (16.4%). Therefore, as with taxes on income, revenue from D.611 social contributions varies widely among the countries.

Figure 2: Breakdown of tax revenue by country and by main tax categories in 2005 in percentage of GDP, 2005



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

The 'Other' category of taxes shown in *Figure 2* comprises capital taxes (D.91) and imputed social contributions (D.612), less taxes and social contributions assessed but unlikely to be collected (D.995).

Capital taxes (D.91) refer to taxes levied at irregular and infrequent intervals on the value of assets or net worth owned, or transferred in the form of legacies or gifts. D.91 taxes averaged to 0.3% of GDP in the EU-25 in 2005, though it tends to be less important as a source of revenue in the new Member States. The range is from 0.9% in Cyprus and 0.6% in Belgium, to less than 0.05% in the Czech Republic, Estonia, Lithuania, Poland, Portugal, Slovakia, and Sweden.



Imputed social contributions (D.612) represent in the national accounts system the counterpart of unfunded social benefits provided by the government as an employer. In 2005 imputed social contributions were equal to 1.0% of GDP in the EU-25, ranging from 2.3% in Greece to less than 0.05% in the Czech Republic and Cyprus.

Finally, for those countries implementing the assessment method of accrual recording (see Essential information – 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 2005, for EU-25 as a whole this adjustment was equivalent to 0.1% of GDP.

Table 1: Total tax revenue by country in percentage of GDP, 1995-2005

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
EU-25	41.1	41.7	41.9	41.9	42.3	42.1	41.2	40.6	40.6	40.5	40.9
EA-12	41.4	42.2	42.6	42.4	42.9	42.6	41.7	41.2	41.2	40.9	41.2
BE	45.9	46.5	47.0	47.6	47.6	47.3	47.4	47.5	47.1	47.4	47.7
BG	:	:	:	:	:	32.6	31.4	30.2	32.9	34.6	34.8
CZ	36.2	34.7	35.0	33.4	34.1	33.9	34.0	34.8	35.8	36.8	36.3
DK	49.8	50.1	49.9	50.3	50.9	50.2	49.3	48.7	48.7	49.9	51.2
DE	41.3	42.3	42.2	42.4	43.2	43.3	41.4	41.0	41.1	40.2	40.2
EE	37.9	35.6	35.9	34.9	34.6	31.3	30.2	31.2	31.6	31.5	31.0
IE	34.9	35.1	34.3	33.4	33.4	32.9	31.1	29.8	30.5	31.9	32.2
EL	34.7	35.1	36.4	38.4	39.6	40.0	38.7	38.9	37.8	36.7	36.7
ES	33.6	34.0	34.1	33.9	34.4	34.8	34.3	34.7	34.7	35.4	36.4
FR	44.5	45.7	45.9	45.8	46.8	45.9	45.6	44.9	44.7	45.0	45.8
IT	41.8	42.3	44.2	42.9	42.9	42.1	41.8	41.2	41.7	41.0	40.8
CY	26.9	26.8	26.0	28.2	28.5	30.5	31.5	31.5	33.3	34.1	36.2
LV	33.2	30.8	32.1	33.8	32.4	29.7	28.7	28.4	28.7	28.7	29.6
LT	28.6	27.9	31.0	32.0	31.9	30.2	28.7	28.4	28.2	28.6	29.2
LU	38.2	38.6	40.4	40.4	39.2	40.0	40.6	40.0	39.4	38.8	39.1
HU	41.7	40.6	39.0	39.1	39.2	38.6	39.0	38.6	38.5	38.7	38.6
MT	31.0	26.0	28.3	26.4	28.1	29.2	31.5	33.1	33.2	36.2	37.7
NL	41.4	41.4	40.8	40.6	41.5	40.9	39.4	38.7	38.4	38.7	39.2
AT	43.6	44.8	46.2	46.2	45.8	44.8	46.5	45.5	44.8	44.4	43.6
PL	32.4	37.2	36.5	35.4	35.3	34.0	33.6	34.3	33.4	32.7	34.2
PT	32.7	33.5	33.6	33.9	34.8	35.2	34.8	35.6	36.3	35.4	36.3
RO	:	:	:	:	:	:	27.8	28.6	28.1	27.8	28.8
SI	40.5	39.4	38.3	39.1	39.5	38.9	39.2	39.6	39.8	39.9	40.7
SK	39.7	38.1	35.1	35.7	34.3	33.0	31.6	32.0	31.1	30.0	29.5
FI	46.3	47.6	46.8	46.5	46.1	47.4	44.7	44.7	44.1	43.7	44.0
SE	49.7	52.1	52.6	53.4	54.0	54.1	52.1	50.5	51.0	51.3	52.1
UK	36.9	36.5	37.1	38.0	38.4	38.9	38.7	37.3	37.1	37.4	38.6
NO	42.3	42.8	42.5	42.5	42.8	43.0	43.2	43.6	42.9	44.0	45.0

Table 2: Breakdown of tax revenue by country and by detailed tax categories in percentage of GDP, 2005

### ESA95 tax categories (see key on page 7)

	d2	d21	d211	d212	d214	d29	d5	d51	d59	d91	d2_d5_d91	d611	d6111	d6112	d6113	d612	d995	TOTAL
EU-25	13.8	:	:	:	:	:	12.9	:	:	0.3	27.0	13.0	:	:	:	1.0	0.1	40.9
EA-12	13.7	:	:	:	į	:	11.7	:	:	0.3	25.7	14.4	:	:	:	1.1	0.1	41.2
BE	13.9	12.1	7.2	0.8	4.1	1.8	17.1	16.4	0.8	0.6	31.7	13.9	8.4	4.3	1.2	2.2	-	47.7
BG	18.9	18.4	12.4	2.0	4.0	0.6	6.2	6.0	0.1	0.3	25.4	10.5	7.0	2.3	1.3	0.0	1.1	34.8
CZ	11.9	11.5	7.2	1.1	3.1	0.5	9.3	9.1	0.1	0.0	21.2	15.1	10.4	3.6	1.0	0.0	-	36.3
DK	17.9	16.1	10.0	0.2	5.9	1.7	31.2	28.4	2.8	0.2	49.3	1.1	0.1	1.1	-	0.9	0.1	51.2
DE	12.1	10.0	6.2	0.8	3.0	2.1	10.2	9.8	0.3	0.2	22.5	16.7	7.0	6.4	3.2	1.1	0.0	40.2
EE	13.5	12.9	8.8	4.0	0.2	0.6	7.1	7.1	0.0	-	20.2	10.4	10.0	0.3	0.1	0.1	-	31.0
IE	13.6	13.0	7.7	1.9	3.5	0.6	12.3	12.0	0.3	0.2	26.0	4.8	2.7	1.8	0.2	1.4	-	32.2
EL	12.9	12.5	7.4	0.2	5.0	0.3	9.3	8.8	0.5	0.2	22.4	12.1	5.5	4.8	1.8	2.3	0.0	36.7
ES	12.5	11.4	6.3	0.2	4.9	1.1	10.9	10.6	0.3	0.4	23.9	12.2	8.5	1.9	1.7	0.8	0.4	36.4
FR	15.8	11.5	7.4	0.1	4.0	4.3	11.4	10.5	0.9	0.5	27.7	16.4	11.1	4.1	1.1	1.8	0.1	45.8
IT	14.5	11.0	6.0	0.1	4.9	3.5	13.3	12.9	0.4	0.1	28.0	12.6	8.9	2.3	1.5	0.2	-	40.8
CY	17.4	15.5	9.9	1.2	4.4	1.9	9.4	8.7	0.7	0.9	27.8	8.4	6.0	:	0.3	0.0	-	36.2
LV	12.9	12.0	7.9	0.2	3.9	0.9	8.0	7.8	0.2	0.0	20.9	8.5	6.2	2.3	0.1	0.2	-	29.6
LT	11.5	11.0	7.2	0.3	3.5	0.5	9.1	9.1	0.0	0.0	20.6	8.3	7.4	0.7	0.1	0.3	0.0	29.2
LU	13.4	11.4	5.9	4.4	1.1	1.9	14.0	13.3	0.7	0.1	27.5	10.8	4.7	4.7	1.3	0.9	0.0	39.1
HU	15.8	15.3	8.4	0.2	6.7	0.5	9.0	8.7	0.3	0.1	24.9	13.6	9.7	3.4	0.5	0.1	-	38.6
MT	16.7	15.8	8.5	0.7	6.6	0.9	11.8	11.0	0.9	0.4	28.9	7.2	3.2	3.2	0.7	1.6	-	37.7
NL	13.1	12.0	7.3	1.3	3.3	1.1	11.6	10.4	1.2	0.3	25.0	13.1	4.1	6.5	2.6	1.0	-	39.2
AT	14.7	11.8	7.9	0.2	3.7	2.9	12.9	12.2	0.7	0.1	27.6	14.6	6.8	6	1.8	1.5	0.1	43.6
PL	13.9	12.2	7.7	0.5	4.0	1.7	7.0	6.5	0.5	0.0	20.9	13.7	4.9	6.2	2.6	-	0.4	34.2
PT	15.1	:	:	:	:	:	8.7	:	:	0.0	23.8	11.3	:	:	:	1.2	-	36.3
RO	13.0	12.5	8.1	0.7	3.6	0.5	5.3	5.1	0.2	:	18.3	9.7	6.4	2.9	0.4	8.0	-	28.8
SI	16.4	13.4	9.0	0.2	4.3	3.0	9.3	8.9	0.3	0.0	25.7	14.8	5.8	7.8	1.3	0.3	0.0	40.7
SK	13.0	12.1	8.0	0.2	3.9	0.9	6.1	5.8	0.3	0.0	19.1	10.9	7.1	3.0	0.7	0.1	0.6	29.5
FI	14.1	13.9	8.7	0.1	5.0	0.2	17.5	16.8	0.7	0.3	31.9	12.1	9.0	2.3	0.8	-	-	44.0
SE	17.3	13.2	9.3	0.2	3.7	4.1	20.1	19.7	0.4	0.0	37.4	13.9	10.8	2.9	0.3	0.7	-	52.1
UK	13.3	11.6	6.8	0.2	4.6	1.6	16.5	14.2	2.4	0.3	30.0	8.0	4.4	3.4	0.2	0.5	0.0	38.6
NO	12.9	12.3	8.3	0.1	3.9	0.6	23.1	22.8	0.3	0.1	36.1	9.1	5.5	3.5	:	:	0.2	45.0



#### > ESSENTIAL INFORMATION - METHODOLOGICAL NOTES

#### 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+12 months, but under a gentlemen's agreement data are requested at t+9 months.

#### **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. In the cross-country comparisons, however, it reflects overall domestic tax burden rather than the domestic tax revenues.

#### 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
- + 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
- + Imputed social contributions (D.612) payable to general government as an employer
- = Indicator 3
- + Voluntary actual social contributions payable to the general government sector
- = Indicator 4.

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 'Structures of the taxation systems in the European Union', 2006 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.



Key to tables and graphs						
ESA 95 classification	Main tax categories					
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 Total (D2_D5_D91_D611_D612_M_D995)	Capital transfers from general government to relevant sectors representing taxes and social contributions assessed but unlikely to be collected TOTAL RECEIPTS FROM TAXES AND SOCIAL CONTRIBUTIONS (including imputed social contributions) AFTER DEDUCTION OF AMOUNTS ASSESSED BUT UNLIKELY TO BE COLLECTED					
:	Not available					
-	Not applicable					
Country codes	EU-25: the 25 Member States of the European Union from 1.5.2004 onwards.					
	EA-12: the 12 countries of the euro area from 2001 until 2006 (BE, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI).					
	BE: Belgium, BG: Bulgaria, CZ: Czech Republic, DK: Denmark, DE: Germany, EE: Estonia, EL: Greece, ES: Spain, FR: France, IE: Ireland, IT: Italy, CY: Cyprus, LV: Latvia, LT: Lithuania, LU: Luxembourg, HU: Hungary, MT: Malta, NL: Netherlands, AT: Austria, PL: Poland, PT: Portugal, RO: Romania, SI: Slovenia, SK: Slovakia, FI: Finland, SE: Sweden, UK: United Kingdom.					



# Further information:

Data: <u>EUROSTAT Website/Economy and finance/Government statistics/Annual government finance statistics/Main national accounts tax aggregates</u>

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