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Pocketbooks

# Key figures on Europe 2012





# **Key figures on Europe 2012**

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## Foreword



Our pocketbook *Key figures on Europe 2012* provides you with a selection of the most important and interesting statistics on Europe. Drawing from the huge amount of data available at Eurostat, we aim to give an insight into the European economy, society and environment – for example, how the population of the European Union is changing, how the economy is performing in comparison with the USA or Japan, or how living conditions vary between Member States. I hope that you will find information of interest both for your work and for your daily life.

You can find the content of this book, in a much richer form, updated online in *Statistics Explained* as the continuously updated virtual publication *Europe in figures – Eurostat yearbook*. As usual, the latest and most complete versions of all the data can be downloaded from the [Eurostat website](#).

Eurostat is the statistical office of the European Union. Working together with national statistical authorities in the European Statistical System, we produce official statistics which meet the highest possible standards of quality.

I wish you an enjoyable reading experience!

**Walter Radermacher**

Director-General, Eurostat  
Chief Statistician of the European Union

## Abstract

*Key figures on Europe 2012* presents a selection of statistical data on Europe. Most data cover the European Union and its Member States, while some indicators are provided for other countries, such as members of EFTA, acceding and candidate countries to the European Union, Japan or the United States. This pocketbook treats the following areas: economy and finance; population; health; education; labour market; living conditions and social protection; industry, trade and services; agriculture, forestry and fisheries; international trade; transport; environment; energy; and science and technology.

This pocketbook, which presents a subset of the most popular information found in *Europe in figures — Eurostat yearbook 2012* (a continuously updated virtual version is available in [http://bit.ly/Eurostat\\_yearbook](http://bit.ly/Eurostat_yearbook)), may be viewed as an introduction to European statistics and provides a starting point for those who wish to explore the wide range of data that is freely available on Eurostat's website at: <http://ec.europa.eu/eurostat>.

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Virtual yearbook  
English edition

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# Introduction

## The Eurostat pocketbook

*Key figures on Europe 2012* provides users of official statistics with an overview of the wealth of information that is available on Eurostat's website and within its online databases. *Key figures on Europe 2012* has been conceived as a publication that provides a balanced set of indicators, with a broad cross-section of information.

### Structure of the publication

*Key figures on Europe 2012* is divided into an introduction, and 13 main chapters. The main chapters contain data and/or background information relating to a very wide range of Eurostat data. Users will find a great deal more information when consulting Eurostat's website, which contains subject-specific publications and online databases.

### Data extraction and coverage

#### Data extraction

The statistical data presented in the pocketbook were mainly extracted during September 2011 although some were extracted a few months later; for example, most of the data relating to government finances were extracted in April 2012. The accompanying text was drafted between September and November 2011 (and in April 2012 for government finances).

#### Spatial data coverage

This publication usually presents information for the EU-27 (the 27 Member States of the EU), the euro area (based on 17 members), as well as the individual Member States. The order of the Member States used in the pocketbook generally follows their order of protocol; in other words, the alphabetical order of the countries' names in their respective original languages; in some of the tables or figures the data are ranked according to the values of a particular indicator.

The EU-27 and euro area (EA-17) aggregates are normally only provided when information for all of the countries is available, or if an estimate has been made for missing information. Any incomplete totals that are created are systematically footnoted.

Time-series for these geographical aggregates are based on a consistent set of countries for the whole of the time period (unless otherwise indicated). In other words, although the EU only had 25 Member States since early 2004 and has only had 27 Member States since the start of 2007, the time-series for EU-27 refer to a sum or an average for all 27 countries for the whole of the period presented, as if all 27 Member States had been part of the EU in earlier periods. In a similar vein, the data for the euro area are consistently presented for the 17 members (as of January 2011), despite the later accessions of Greece, Slovenia, Cyprus and Malta, Slovakia and most recently, Estonia, to the euro area.

When available, information is also presented for EFTA countries (including Iceland that is also a candidate country) and the candidate countries <sup>(1)</sup> of Montenegro, Croatia <sup>(2)</sup>, the former Yugoslav Republic of Macedonia <sup>(3)</sup> and Turkey, as well as for Japan and the United States. In the event that data for any of these non-member countries does not exist, then these have been excluded from tables and figures; however, the full set of 27 Member States is maintained in tables, with footnotes being added in figures for those Member States for which information is missing.

If data for a reference period are not available for a particular country, then efforts have been made to fill tables and figures with data for previous reference years (these exceptions are footnoted); generally, an effort has been made to go back at least two reference periods.

## Temporal data coverage

If data for a reference period are not available for a particular country, then efforts have been made to fill tables and figures with data for previous reference years (these exceptions are footnoted); generally, an effort has been made to go back at least two reference periods.

<sup>(1)</sup> As Serbia was granted candidate country status on 2 March 2012, it was not possible to include it in this edition.

<sup>(2)</sup> The EU and Croatian leaders signed Croatia's EU Accession Treaty on 9 December 2011. Croatia is called thereafter an 'acceding country' (instead of a 'candidate country'). Subject to ratification of the Treaty by all the Member States and Croatia, Croatia will become the EU's 28<sup>th</sup> Member State on 1 July 2013.

<sup>(3)</sup> The name of the former Yugoslav Republic of Macedonia is shown in tables and figures in this publication as FYR of Macedonia – this does not prejudge in any way the definitive nomenclature for this country, which is to be agreed following the conclusion of negotiations currently taking place on this subject at the United Nations.

## Eurostat – the statistical office of the European Union

Eurostat is the statistical office of the European Union, situated in Luxembourg. Its task is to provide the EU with statistics at a European level that enable comparisons between countries and regions.

Eurostat's mission is *'to be the leading provider of high quality statistics on Europe'*.

In 2011, Eurostat had around 880 persons working for it and its executed budget amounted to EUR 85 million (excluding costs of statutory staff and administrative expenses).

The production of Union statistics shall conform to impartiality, reliability, objectivity, scientific independence, cost-effectiveness and statistical confidentiality; it shall not entail excessive burdens on economic operators.

Eurostat aims:

- to provide other European institutions and the governments of the Member States with the information needed to design, implement, monitor and evaluate Community policies;
- to disseminate statistics to the European public and enterprises and to all economic and social agents involved in decision-making;
- to implement a set of standards, methods and organisational structures which allow comparable, reliable and relevant statistics to be produced throughout the Union, in line with the principles of the European statistics Code of Practice;
- to improve the functioning of the European Statistical System, to support the Member States, and to assist in the development of statistical systems on international level.

## A practical guide to accessing European statistics

The simplest way to access Eurostat's broad range of statistical information is through the Eurostat website (<http://ec.europa.eu/eurostat>). Eurostat provides users with free access to its databases and all of its publications in PDF format via the Internet. The website is updated daily and gives access to the latest and most comprehensive statistical information available on the EU, its Member States, EFTA countries, and candidate countries.

### Eurostat online data code(s) – easy access to the freshest data

Eurostat online data codes, such as [tps00001](#) and [nama\\_gdp\\_c](#) <sup>(4)</sup>, allow the reader to easily access the most recent data on Eurostat's website. In this pocketbook these online data codes are given as part of the source below each table and figure.

In the PDF version of this publication, the reader is led directly to the freshest data when clicking on the hyper-links that form part of each online data code. Readers of the paper version can access the freshest data by typing a standardised hyper-link into a web browser, [http://ec.europa.eu/eurostat/product?code=<data\\_code>&mode=view](http://ec.europa.eu/eurostat/product?code=<data_code>&mode=view), where <data\_code> is to be replaced by the online data code printed under the table or figure in question. The data is presented either in the TGM or the Data Explorer interface.

Online data codes can also be fed into the 'Search' function on Eurostat's website, which is found in the upper-right corner of the Eurostat homepage, at <http://ec.europa.eu/eurostat>.

<b>tps00001</b>	<b>Search</b>
-----------------	---------------

The results from such a search present related dataset(s) and possibly publication(s) and metadata. By clicking on these hyper-links users are taken to product page(s) <sup>(5)</sup>, which provide some background information about each dataset / publication or set of

<sup>(4)</sup> There are two types of online data codes:

- Tables (accessed using the TGM interface) have 8-character codes, which consist of 3 or 5 letters – the first of which is 't' – followed by 5 or 3 digits, e.g. [tps00001](#) and [tsdph220](#).
- Databases (accessed using the Data Explorer interface) have codes that use an underscore '\_' within the syntax of the code, e.g. [nama\\_gdp\\_c](#) and [proj\\_08c2150p](#).

<sup>(5)</sup> The product page can also be accessed by using a hyper-link, for example, [http://ec.europa.eu/eurostat/product?code=<data\\_code>](http://ec.europa.eu/eurostat/product?code=<data_code>), where <data\_code> is to be replaced by the online data code in question.

metadata. For example, it is possible to move directly to the data from the data product page by clicking the TGM or Data Explorer icons presented under the 'View table' sub-heading.

Note that the data on the Eurostat's website is frequently updated.

Note also that the description above presents the situation as of the end of November 2011.

## Statistics Explained

Statistics Explained is part of Eurostat's website – it provides easy access to Eurostat's statistical information. It can be accessed via a link on the right-hand side of Eurostat's homepage, or directly at [http://epp.eurostat.ec.europa.eu/statistics\\_explained](http://epp.eurostat.ec.europa.eu/statistics_explained).

Statistics Explained is a wiki-based system that presents statistical topics. Together, the articles make up an encyclopaedia of European statistics, which is completed by a statistical glossary that clarifies the terms used. In addition, numerous links are provided to the latest data and metadata and to further information, making Statistics Explained a portal for regular and occasional users alike.

In May 2012 Statistics Explained contained well over 500 statistical and background articles and some 1 200 glossary pages in English; their number is continuously growing. About 100 of these articles, the content of the Eurostat yearbook (by the end of September 2012) and Eurostat regional yearbook are available in French and German, and 20 representative ones have been translated into 18 other EU languages. As a result, 570 articles in 20 languages besides English can be consulted.

Users can search for articles using navigational features in the left-hand menu. The top-right menu bar of Statistics Explained offers tools, among others, to print, forward, cite, blog or share content easily.



## Economy and finance

Since 1993, the European [single market](#) has enhanced the possibilities for people, goods, services and money to move around the [European Union \(EU\)](#) as freely as within a single country. The start of [economic and monetary union \(EMU\)](#) in 1999 gave economic and market integration further stimulus. The [euro](#) has become a symbol for Europe, and the number of [countries that have adopted the single currency](#) increased from an original 11 to 17 countries by 2011.

Fostering economic and social progress has been a key objective of European policies. In March 2010, the [European Commission](#) launched the [Europe 2020 strategy](#) for smart, sustainable and inclusive growth to follow up the 2000 [Lisbon strategy](#).

Following [actions to stabilise the financial system and the economy](#), the recent crisis also prompted a reinforced economic agenda with closer [EU surveillance](#), as well as agreement over a range of policy priorities and a set of targets as part of the Europe 2020 strategy.

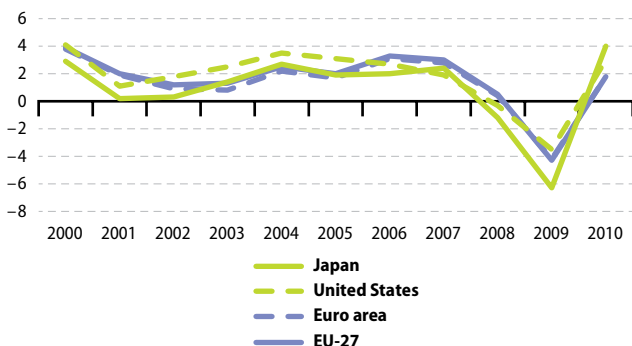
## 1.1 National accounts – GDP

**Gross domestic product (GDP)** is the most frequently used measure for the overall size of an economy, while derived indicators such as **GDP per capita** – for example, in euro or adjusted for differences in price levels – are widely used for a comparison of living standards, or to monitor the process of convergence across the EU.

Moreover, the development of specific GDP components and related indicators, such as those for economic output, **imports** and **exports**, domestic (private and public) consumption or investments, as well as data on the distribution of income and savings, can give valuable insights into the driving forces in an economy and thus be the basis for the design, monitoring and evaluation of specific EU policies. Economic developments in production, income generation and (re)distribution, consumption and investment may be better understood when analysed by **institutional sector**. In particular, sector accounts provide several key indicators for **households** and non-financial corporations, like the household saving rate and business profit share.

Economic growth within the EU suffered from the 2008 global financial and economic crisis. A severe recession in most countries in 2009 was followed by a partial recovery in 2010. Real GDP increased by 1.8 % in the **EU-27** and in the euro area in 2010 after a contraction of 4.3 % and 4.2 % respectively in 2009. In Japan and the United States, the respective figures were growth of 4.0 % and 3.0 % in 2010 following – contractions of 6.3 % and 3.5 % in 2009 (see Figure 1.1).

**Figure 1.1: Real GDP growth, 2000-2010**  
(% change compared with the previous year)



Source: Eurostat (online data codes: [nama\\_gdp\\_c](#) or [tsieb020](#))



**Table 1.1:** GDP at current market prices, 2000, 2009 and 2010

	GDP (EUR 1 000 million)			GDP per capita (PPS, EU-27 = 100)		
	2000	2009	2010	2000	2009	2010
<b>EU-27</b>	9 208	11 770	12 268	100	100	100
<b>EA-17</b>	6 789	8 953	9 191	112	109	108
BE	252	339	353	126	116	118
BG	14	35	36	28	44	43
CZ	61	137	145	68	82	80
DK	174	222	234	132	121	124
DE	2 063	2 397	2 499	118	116	118
EE	6	14	15	45	64	65
IE	106	161	156	132	127	127
EL	138	235	230	84	94	89
ES	630	1 054	1 063	97	103	101
FR	1 440	1 889	1 933	115	107	107
IT	1 191	1 520	1 549	117	104	100
CY	10	17	17	89	98	98
LV	8	19	18	37	52	52
LT	12	27	27	39	55	58
LU	22	38	42	245	272	283
HU	51	93	98	55	65	64
MT	4	6	6	84	81	83
NL	418	572	591	134	131	134
AT	208	274	284	131	124	125
PL	186	310	354	48	61	62
PT	127	169	173	81	80	81
RO	41	117	122	26	46	45
SI	22	35	36	80	88	87
SK	22	63	66	50	73	74
FI	132	173	180	117	114	116
SE	268	291	347	128	119	123
UK	1 602	1 566	1 697	119	113	114
IS	9	9	10	132	117	110
LI	3	3	:	:	:	:
NO	183	267	312	165	175	179
CH	271	355	396	144	144	147
HR	23	46	46	50	64	61
MK	4	7	7	27	36	35
TR	290	440	554	42	45	48
JP	5 057	3 613	4 122	117	103	107
US	10 775	9 994	10 958	161	145	149

Source: Eurostat (online data codes: [nama\\_gdp\\_c](#) and [tec00001](#))

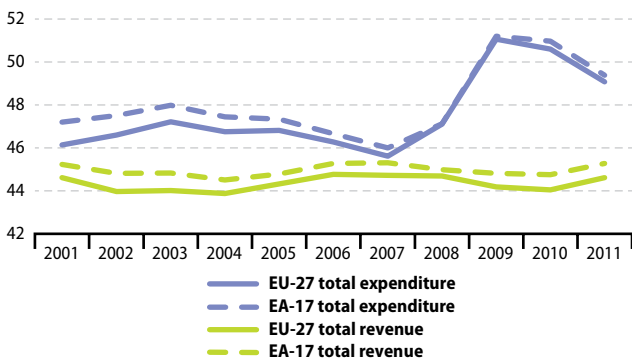
## 1.2 Government finances

These statistics are crucial indicators for determining the health of a Member State's economy and under the terms of the EU's **stability and growth pact (SGP)**, Member States pledged to keep their deficits and debt below certain limits: a Member State's government deficit may not exceed – 3 % of its **gross domestic product (GDP)**, while its debt may not exceed 60 % of GDP. If a Member State does not respect these limits, the so-called **excessive deficit procedure** is triggered.

The same deficit and debt limits are also criteria for **economic and monetary union (EMU)** and hence for joining the euro. Furthermore, the latest revision of the **integrated economic and employment guidelines** (revised as part of the **Europe 2020 strategy for smart, sustainable and inclusive growth**) includes a guideline to ensure the quality and the sustainability of public finances.

In absolute terms, total general government expenditure grew steadily over the period from 2001 to 2010 – both in the EU-27 and in the euro area (see Figure 1.2). From 2010 to 2011 total general government expenditure decreased slightly in absolute terms both in the EU-27 and in the euro area. Revenues also grew steadily through to 2007 in the EU-27 and the euro area, remained relatively unchanged in 2008, decreased in 2009 and then increased again in 2010 and 2011.

**Figure 1.2:** Development of total expenditure and total revenue, 2001-2011 <sup>(1)</sup>  
(% of GDP)



<sup>(1)</sup> Data extracted on 23.04.2012; note that the y-axis is cut.

Source: Eurostat (online data code: [gov\\_a\\_main](#))

**Table 1.2:** Public balance and general government debt, 2009-2011 <sup>(1)</sup>  
(% of GDP)

	Public balance			General government debt		
	2009	2010	2011	2009	2010	2011
<b>EU-27</b>	-6.9	-6.5	-4.5	74.8	80.0	82.5
<b>EA-17</b>	-6.4	-6.2	-4.1	79.9	85.3	87.2
BE	-5.6	-3.8	-3.7	95.8	96.0	98.0
BG	-4.3	-3.1	-2.1	14.6	16.3	16.3
CZ	-5.8	-4.8	-3.1	34.4	38.1	41.2
DK	-2.7	-2.5	-1.8	40.6	42.9	46.5
DE	-3.2	-4.3	-1.0	74.4	83.0	81.2
EE	-2.0	0.2	1.0	7.2	6.7	6.0
IE	-14.0	-31.2	-13.1	65.1	92.5	108.2
EL	-15.6	-10.3	-9.1	129.4	145.0	165.3
ES	-11.2	-9.3	-8.5	53.9	61.2	68.5
FR	-7.5	-7.1	-5.2	79.2	82.3	85.8
IT	-5.4	-4.6	-3.9	116.0	118.6	120.1
CY	-6.1	-5.3	-6.3	58.5	61.5	71.6
LV	-9.8	-8.2	-3.5	36.7	44.7	42.6
LT	-9.4	-7.2	-5.5	29.4	38.0	38.5
LU	-0.8	-0.9	-0.6	14.8	19.1	18.2
HU	-4.6	-4.2	4.3	79.8	81.4	80.6
MT	-3.8	-3.7	-2.7	68.1	69.4	72.0
NL	-5.6	-5.1	-4.7	60.8	62.9	65.2
AT	-4.1	-4.5	-2.6	69.5	71.9	72.2
PL	-7.4	-7.8	-5.1	50.9	54.8	56.3
PT	-10.2	-9.8	-4.2	83.1	93.3	107.8
RO	-9.0	-6.8	-5.2	23.6	30.5	33.3
SI	-6.1	-6.0	-6.4	35.3	38.8	47.6
SK	-8.0	-7.7	-4.8	35.6	41.1	43.3
FI	-2.5	-2.5	-0.5	43.5	48.4	48.6
SE	-0.7	0.3	0.3	42.6	39.4	38.4
UK	-11.5	-10.2	-8.3	69.6	79.6	85.7
IS	-10.0	-10.1	-4.4	87.9	93.1	98.8
NO	10.6	11.2	13.6	43.5	43.7	29.0
HR	-4.1	:	:	35.3	:	:
TR	-6.7	:	:	45.4	:	:

(<sup>1</sup>) Public balance: net borrowing/lending of consolidated general government sector; general government debt: general government consolidated gross debt; data extracted on 23.04.2012.

Source: Eurostat (online data codes: [tsieb080](#) and [tsieb090](#))

## 1.3 Exchange rates and interest rates

Eurostat publishes a number of different data sets concerning exchange rates. Three main data sets can be distinguished, with statistics on:

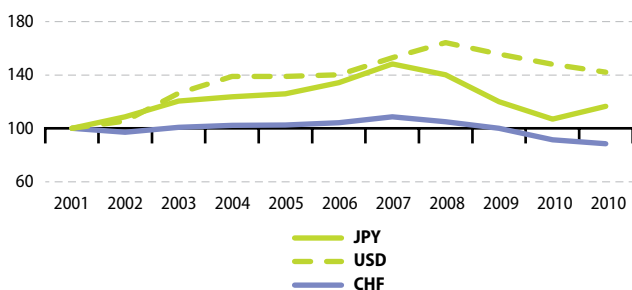
- bilateral exchange rates between currencies, including some special conversion factors for countries that have adopted the euro;
- fluctuations in the exchange rate mechanism (ERM and ERM II) of the EU;
- effective exchange rate indices.

Daily exchange rates are available from 1974 onwards against a large number of currencies.

Interest rates provide information on the cost or price of borrowing, or the gain from lending. Traditionally, interest rates are expressed in annual percentage terms, although the period for lending/borrowing can be anything from overnight to a period of many years. Different types of interest rates are distinguished either by the period of lending/borrowing involved, or by the parties involved in the transaction (business, consumers, governments or interbank operations).

Long-term interest rates are one of the convergence criteria for European **economic and monetary union (EMU)**. In order to comply, Member States need to demonstrate an average nominal long-term interest rate that does not exceed by more than 2 percentage points that of, at most, the three best-performing Member States.

**Figure 1.3:** Exchange rates against the euro, 2001-2010 <sup>(1)</sup>  
(2001 = 100)



<sup>(1)</sup> CHF, Swiss franc; JPY, Japanese yen; USD, United States dollar; a reduction in the value of the index shows an appreciation in the value of the foreign currency and a depreciation in the value of the euro.

Source: Eurostat (online data code: [tec00033](#)), ECB

Long-term interest rates are based upon central government bond yields (or comparable securities), taking into account differences in national definitions, on the secondary market, gross of tax, with a residual maturity of around ten years.

Eurostat also publishes a number of short-term interest rates, with different maturities (overnight, 1 to 12 months).

**Table 1.3:** EMU convergence criterion bond yields (Maastricht criterion), 2000-2010 <sup>(1)</sup>  
(%)

	2000	2005	2006	2007	2008	2009	2010
<b>EU-27</b>	:	3.70	4.03	4.56	4.54	4.13	3.82
<b>EA <sup>(2)</sup></b>	5.44	3.42	3.84	4.32	4.31	3.82	3.62
BE	5.59	3.43	3.81	4.33	4.42	3.90	3.46
BG	:	3.87	4.18	4.54	5.38	7.22	6.01
CZ	:	3.54	3.80	4.30	4.63	4.84	3.88
DK	5.64	3.40	3.81	4.29	4.28	3.59	2.93
DE	5.26	3.35	3.76	4.22	3.98	3.22	2.74
EE	:	:	:	:	:	:	:
IE	5.51	3.33	3.76	4.31	4.53	5.23	5.74
EL	6.10	3.59	4.07	4.50	4.80	5.17	9.09
ES	5.53	3.39	3.78	4.31	4.37	3.98	4.25
FR	5.39	3.41	3.80	4.30	4.23	3.65	3.12
IT	5.58	3.56	4.05	4.49	4.68	4.31	4.04
CY	:	5.16	4.13	4.48	4.60	4.60	4.60
LV	:	3.88	4.13	5.28	6.43	12.36	10.34
LT	:	3.70	4.08	4.55	5.61	14.00	5.57
LU	5.52	2.41	3.30	4.46	4.61	4.23	3.17
HU	:	6.60	7.12	6.74	8.24	9.12	7.28
MT	:	4.56	4.32	4.72	4.81	4.54	4.19
NL	5.40	3.37	3.78	4.29	4.23	3.69	2.99
AT	5.56	3.39	3.80	4.30	4.36	3.94	3.23
PL	:	5.22	5.23	5.48	6.07	6.12	5.78
PT	5.59	3.44	3.91	4.42	4.52	4.21	5.40
RO	:	:	7.23	7.13	7.70	9.69	7.34
SI	:	3.81	3.85	4.53	4.61	4.38	3.83
SK	:	3.52	4.41	4.49	4.72	4.71	3.87
FI	5.48	3.35	3.78	4.29	4.29	3.74	3.01
SE	5.37	3.38	3.70	4.17	3.89	3.25	2.89
UK	5.33	4.46	4.37	5.06	4.50	3.36	3.36

<sup>(1)</sup> The indicator for Luxembourg is based on a basket of long-term bonds, which have an average residual maturity close to ten years; the bonds are issued by a private credit institution.

<sup>(2)</sup> EA-11, 2000; EA-12, 2001-2006; EA-13, 2007; EA-15, 2008; EA-16, 2009-2010.

Source: Eurostat (online data code: [tec00097](#)), ECB

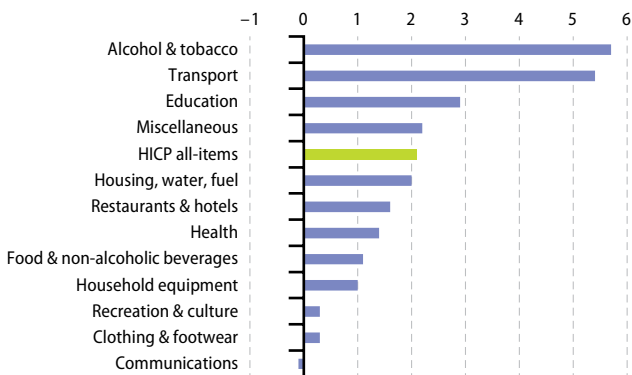
## 1.4 Consumer prices – inflation and comparative price levels

An increase in the general level of prices of goods and services in an economy is called **inflation** that is usually measured by **consumer price indices** or retail price indices. Within the EU a specific consumer price index for the purpose of tracing price developments has been developed – it is called the **harmonised index of consumer prices (HICP)**.

Harmonised indices of consumer prices are presented with a common reference year (currently 2005 = 100). Normally the indices are used to calculate percentage changes that show price increases/decreases. Although the rates of change shown in the tables and figures for this subchapter are annual averages, the basic indices are compiled on a monthly basis and are published at this frequency by Eurostat.

Harmonised indices of consumer prices are, among other things, used for the purposes of monetary policy and assessing inflation convergence as required in the **Treaty on the functioning of the European Union**. In particular, they are used for measuring inflation in the euro area; the primary objective of the **European Central Bank's (ECB)** monetary policy is to maintain price stability. The ECB has defined price stability as a year-on-year increase in the harmonised index of consumer prices for the euro area of below, but close to 2 % over the medium-term.

**Figure 1.4:** HICP main headings, annual average inflation rates, EU-27, 2010 (%)



Source: Eurostat (online data code: [prc\\_hicp\\_aind](#))

**Table 1.4:** HICP all-items, annual average inflation rates, 2005-2010 (%)

	2005	2006	2007	2008	2009	2010
<b>EU <sup>(1)</sup></b>	2.2	2.2	2.3	3.7	1.0	2.1
<b>EA <sup>(2)</sup></b>	2.2	2.2	2.1	3.3	0.3	1.6
BE	2.5	2.3	1.8	4.5	0.0	2.3
BG	6.0	7.4	7.6	12.0	2.5	3.0
CZ	1.6	2.1	3.0	6.3	0.6	1.2
DK	1.7	1.9	1.7	3.6	1.1	2.2
DE	1.9	1.8	2.3	2.8	0.2	1.2
EE	4.1	4.4	6.7	10.6	0.2	2.7
IE	2.2	2.7	2.9	3.1	-1.7	-1.6
EL	3.5	3.3	3.0	4.2	1.3	4.7
ES	3.4	3.6	2.8	4.1	-0.2	2.0
FR	1.9	1.9	1.6	3.2	0.1	1.7
IT	2.2	2.2	2.0	3.5	0.8	1.6
CY	2.0	2.2	2.2	4.4	0.2	2.6
LV	6.9	6.6	10.1	15.3	3.3	-1.2
LT	2.7	3.8	5.8	11.1	4.2	1.2
LU	3.8	3.0	2.7	4.1	0.0	2.8
HU	3.5	4.0	7.9	6.0	4.0	4.7
MT	2.5	2.6	0.7	4.7	1.8	2.0
NL	1.5	1.7	1.6	2.2	1.0	0.9
AT	2.1	1.7	2.2	3.2	0.4	1.7
PL	2.2	1.3	2.6	4.2	4.0	2.7
PT	2.1	3.0	2.4	2.7	-0.9	1.4
RO	9.1	6.6	4.9	7.9	5.6	6.1
SI	2.5	2.5	3.8	5.5	0.9	2.1
SK	2.8	4.3	1.9	3.9	0.9	0.7
FI	0.8	1.3	1.6	3.9	1.6	1.7
SE	0.8	1.5	1.7	3.3	1.9	1.9
UK	2.1	2.3	2.3	3.6	2.2	3.3
IS	1.4	4.6	3.6	12.8	16.3	7.5
NO	1.5	2.5	0.7	3.4	2.3	2.3
CH	:	1.0	0.8	2.3	-0.7	0.6
HR	3.0	3.3	2.7	5.8	2.2	1.1
TR	8.1	9.3	8.8	10.4	6.3	8.6
<b>JP <sup>(3)</sup></b>	-0.3	0.3	0.0	1.4	-1.4	-0.7
<b>US <sup>(3)</sup></b>	3.4	3.2	2.8	3.8	-0.4	1.6

(<sup>1</sup>) The data refer to the official EU aggregate, its country coverage changes in line with the addition of new EU Member States and integrates them using a chain-linked index formula.

(<sup>2</sup>) The data refer to the official euro area aggregate, its country coverage changes in line with the addition of new EA Member States and integrates them using a chain-linked index formula.

(<sup>3</sup>) National CPI: not strictly comparable with the HICP.

Source: Eurostat (online data codes: [prc\\_hicp\\_a](#) and [prc\\_ipc\\_a](#))

## 1.5 Balance of payments

The **balance of payments** records all economic transactions between **resident** and non-resident entities during a given period.

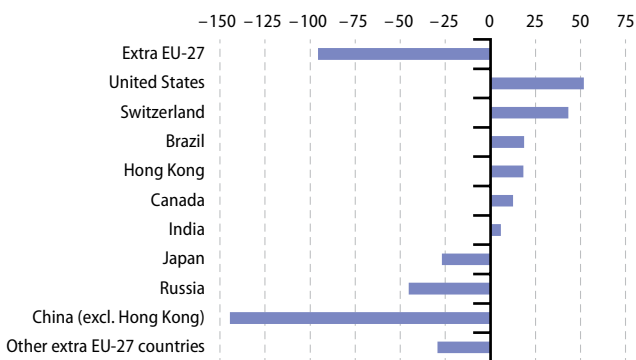
The current account **deficit** of the EU-27 was EUR 95 700 million in 2010, corresponding to 0.8 % of **gross domestic product (GDP)**; the current account deficit in 2009 (EUR 99 500 million) was at a similar level to that recorded in 2010, while both of these deficits were about 60 % lower than in 2008, when the deficit corresponded to about 2.0 % of GDP.

Among those countries shown in Figure 1.5, the EU-27's current account deficit with China was EUR 144 550 million in 2010, more than three times as large as the deficit with Russia and five and half times the deficit with Japan (these two countries accounted for the second and third largest EU-27 current account deficits). The highest current account surplus was recorded with the United States (EUR 51 850 million), followed by Switzerland; with surpluses also registered with Brazil, Hong Kong, Canada and India.

The current account of the balance of payments provides information not only on international trade in goods (generally the largest category), but also on international transactions in services, income and current transfers.

A negative balance – a current account deficit – shows that a country is spending abroad more than it is earning from transactions with other economies, and is therefore a net debtor towards the rest of the world.

**Figure 1.5:** Current account balance with selected partners, EU-27, 2010 (EUR 1 000 million)



Source: Eurostat (online data code: [bop\\_q\\_eu](#))



**Table 1.5:** Current account, balance by components, 2009 <sup>(1)</sup>  
(% of GDP)

	Current account	Goods	Services	Income	Current transfers
<b>EU-27</b>	-0.8	-1.0	0.6	0.2	-0.5
<b>EA-17</b>	-0.5	0.1	0.5	0.0	-1.1
BE	1.5	-1.0	1.8	2.4	-1.8
BG	-1.3	-7.7	5.6	-3.5	4.3
CZ	-3.2	1.4	2.0	-7.0	0.2
DK	5.6	2.8	2.8	1.9	-1.9
DE	5.7	6.4	-0.9	1.8	-1.5
EE	3.5	-1.7	9.1	-5.6	1.8
IE	0.5	23.4	-4.5	-17.6	-0.8
EL	-10.0	-12.3	5.8	-3.5	0.1
ES	-4.6	-4.4	2.6	-2.1	-0.7
FR	-1.7	-2.8	0.5	1.9	-1.4
IT	-3.5	-1.3	-0.6	-0.6	-1.0
CY	-9.8	-26.7	20.5	-2.2	-0.7
LV	3.0	-7.1	6.1	0.3	3.6
LT	1.5	-4.6	3.6	-2.3	4.9
LU	7.4	-9.9	54.5	-35.6	-1.6
HU	1.1	3.3	3.0	-5.6	0.4
MT	-3.9	-15.4	19.2	-8.1	0.5
NL	6.5	6.6	1.3	0.4	-1.8
AT	3.0	-1.1	4.6	0.2	-0.7
PL	-4.7	-2.5	0.7	-3.6	0.8
PT	-10.0	-10.5	3.9	-4.6	1.3
RO	-4.0	-4.8	-0.5	-1.6	2.8
SI	-0.8	-3.4	3.7	-1.4	0.3
SK	-3.5	0.2	-1.1	-1.9	-0.6
FI	1.8	1.7	0.1	1.0	-0.9
SE	6.6	2.4	3.9	1.7	-1.4
UK	-2.5	-6.7	4.0	1.6	-1.4
IS	-11.3	7.8	2.3	-20.8	-0.5
NO	12.4	14.1	-0.8	0.3	-1.1
HR	-1.2	-13.0	12.8	-3.3	2.2
TR	-6.5	-7.7	2.0	-1.0	0.2
JP	3.6	1.7	-0.3	2.4	-0.2
US	-3.3	-4.4	1.0	1.1	-0.9

(<sup>1</sup>) EU-27, extra EU-27 flows; euro area, extra EA-17 flows; Member States and other countries, flows with the rest of the world.

Source: Eurostat (online data codes: [bop\\_q\\_eu](#), [bop\\_q\\_euro](#), [bop\\_q\\_c](#) and [nama\\_gdp\\_c](#)), ECB

## 1.6 Foreign direct investment

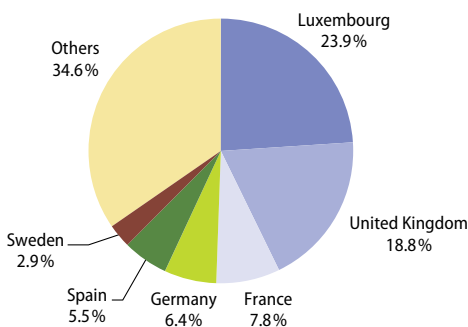
**Foreign direct investment** (FDI) is the category of international investment made by an entity resident in one economy (the direct investor) to acquire a lasting interest in an enterprise operating in another economy (the direct investment enterprise). The lasting interest is deemed to exist if the direct investor acquires at least 10 % of the voting power of the direct investment enterprise.

FDI flows generally increase during times of rapid economic growth, while disinvestment is more likely during periods of recession as businesses are more likely to focus on core activities in their domestic market.

FDI may be seen as an alternative economic strategy, adopted by those enterprises that invest to establish a new plant/office, or alternatively, purchase existing assets of a foreign enterprise. These enterprises seek to complement or substitute external trade, by producing (and often selling) goods and services in countries other than where the enterprise was first established.

FDI differs from portfolio investments because it is made with the purpose of having control or an effective voice in management and a lasting interest in the enterprise. Direct investment not only includes the initial acquisition of equity capital, but also subsequent capital transactions between the foreign investor and domestic and affiliated enterprises.

**Figure 1.6:** FDI outward flows, 2007 to 2009 average  
(% of total EU-27 outward flows)



Source: Eurostat (online data code: [bop\\_fdi\\_main](#))

**Table 1.6:** Top 10 countries as extra EU-27 partners for FDI positions, 2007-2009  
(EUR 1 000 million)

	Outward			
	2007	2008	2009	Growth rate 2007-2009 (%)
<b>Extra EU-27</b>	3 231.6	3 319.8	3 665.6	13.4
United States	1 027.1	1 089.5	1 134.0	10.4
Switzerland	458.0	462.9	503.3	9.9
Canada	142.6	142.7	157.5	10.4
Brazil	107.7	108.5	132.2	22.7
Singapore	66.7	89.2	95.8	43.7
Hong Kong	89.3	89.3	92.9	4.0
Russia	71.5	83.2	88.8	24.2
Japan	74.8	78.4	84.0	12.3
Australia	69.9	70.3	82.8	18.5
South Africa	55.1	55.1	77.0	39.7
	Inward			
	2007	2008	2009	Growth rate 2007-2009 (%)
<b>Extra EU-27</b>	2 447.9	2 522.3	2 707.2	10.6
United States	1 027.2	1 014.6	1 044.1	1.6
Switzerland	323.6	315.7	347.9	7.5
Canada	103.0	108.1	119.5	16.1
Brazil	41.2	52.5	56.3	36.7
Singapore	45.0	39.3	50.2	11.4
Hong Kong	17.2	25.5	26.8	55.9
Russia	24.7	26.4	27.5	11.4
Japan	122.3	122.6	135.3	10.6
Australia	25.7	21.2	30.2	17.3
South Africa	6.0	6.8	6.2	4.1

Source: Eurostat (online data code: [bop\\_fdi\\_pos](#))



# Population

## 2

Recent demographic developments show that the [European Union's \(EU\)](#) population is increasing, while its age structure is becoming older as post-war baby-boom generations reach retirement age. Furthermore, people are living longer, as [life expectancy](#) continues to increase. On the other hand, while [fertility](#) is increasing slowly, it remains well below a level that would keep the size of the population constant in the absence of inward or outward [migration](#). As a result, the EU will, in the coming decades, face a number of challenges associated with an ageing society which will impact on a range of areas, including labour markets, pensions and provisions for [healthcare](#), housing and social services.

Population change and the structure of the population are gaining importance in the political, economic, social and cultural context of demographic behaviour. Demographic trends in population growth, fertility, mortality and migration are closely followed by policymakers. EU policies, notably in social and economic fields, use demographic data for planning and for programme monitoring and evaluation.

## 2.1 European population compared with world population

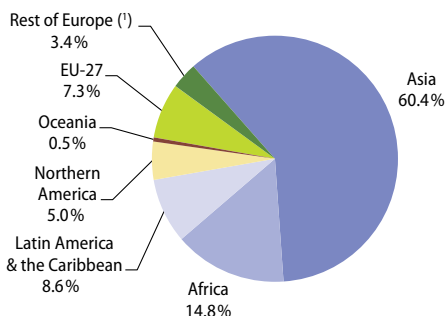
The world's population reached 7 000 million inhabitants towards the end of 2011 and continues to grow. Asia accounted for the majority of the world's population (just over 60 % in 2010) with 4 164 million inhabitants, while Africa was the next most populous continent with 1 022 million inhabitants, or 14.8 % of the world total.

The world's population more than doubled between 1960 and 2010. The increase in global population between 1960 and 2010 can be largely attributed to growth in Asia, Africa and Latin America.

Population density within the EU-27 was 116.7 persons per km<sup>2</sup> in 2010, more than 3.5 times as high as in the United States, but below the values recorded for Indonesia, China, Japan, India and South Korea.

The latest United Nations (UN) population projections (*World Population Prospects, the 2010 Revision*) suggest that the pace at which the world's population is expanding will slow somewhat in the coming decades; however, the total number of inhabitants is nevertheless projected to reach more than 9 600 million by 2060. According to these projections (the medium variant), the world's population will also be relatively older (in other words, with a higher median age) in 2060 than it is now.

**Figure 2.1:** World population, 2010  
(% of total)



<sup>(1)</sup> Albania, Andorra, Belarus, Bosnia and Herzegovina, Croatia, Faeroe Islands, Iceland, Liechtenstein, the former Yugoslav Republic of Macedonia, Moldova, Montenegro, Norway, Russia, Serbia, Switzerland and Ukraine.

Source: United Nations, Department of Economic and Social Affairs, Population: World Population Prospects, 2010 revision

**Table 2.1: World population, 1960-2010**  
(million)

	1960	1970	1980	1990	2000	2010
<b>World</b>	3 038	3 696	4 453	5 306	6 123	6 896
<b>Europe (¹)</b>	604	656	693	720	727	738
Africa	287	368	483	635	811	1 022
Asia	1 708	2 135	2 638	3 199	3 719	4 164
Latin America & the Caribbean	220	286	362	443	521	590
Northern America	204	231	254	281	313	345
Oceania	16	20	23	27	31	37

(¹) EU-27, Albania, Andorra, Belarus, Bosnia and Herzegovina, Croatia, Faeroe Islands, Iceland, Liechtenstein, the former Yugoslav Republic of Macedonia, Moldova, Montenegro, Norway, Russia, Serbia, Switzerland and Ukraine.

Source: United Nations, Department of Economic and Social Affairs, Population: World Population Prospects, 2010 revision

**Table 2.2: Population and population density, 1960 and 2010**

	Population (million)		Population density (persons per km²)	
	1960	2010	1960	2010
<b>EU-27 (¹)</b>	403	501	94.0	116.7
Argentina	21	40	7.4	14.5
Australia	10	22	1.3	2.9
Brazil	73	195	8.5	22.9
Canada	18	34	1.8	3.4
China	658	1 341	68.6	139.8
India	448	1 225	136.2	372.5
Indonesia	92	240	48.3	125.9
Japan	93	127	244.8	334.9
South Korea	25	48	251.9	484.1
Mexico	38	113	19.6	57.9
Russia	120	143	7.0	8.4
Saudi Arabia	4	27	1.9	12.8
South Africa	17	50	14.2	41.1
Turkey	28	73	35.9	92.8
United States	186	310	19.4	32.2
<b>World</b>	3 038	6 896	22.3	50.6

(¹) Excluding French overseas departments for 1960; population density is calculated as the ratio between (annual average) population and the surface (land) area; whenever land area was not available, the total surface area was used instead.

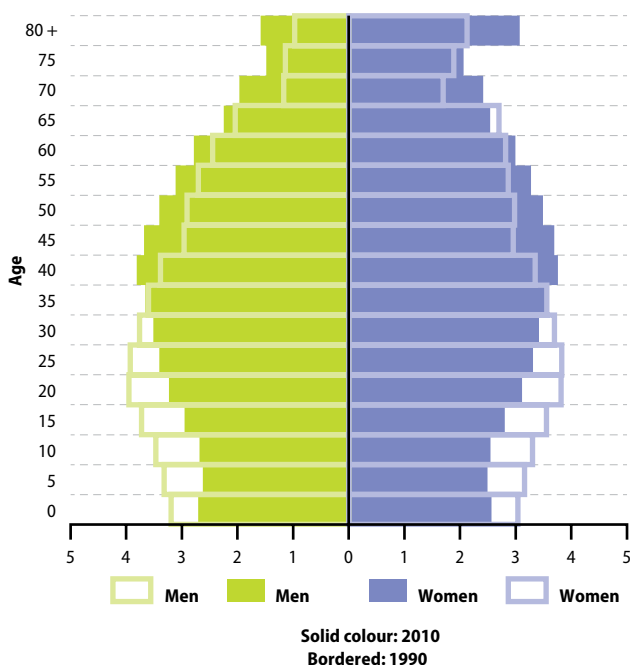
Source: Eurostat (online data codes: [demo\\_pjan](#) and [demo\\_r\\_d3area](#)); United Nations, Department of Economic and Social Affairs, Population: World Population Prospects, 2010 revision

## 2.2 Population structure and ageing

The impact of demographic ageing within the EU is likely to be of major significance in the coming decades. Consistently low birth rates and higher [life expectancy](#) will transform the shape of the EU-27's age pyramid; probably the most important change will be the marked transition towards a much older population and this trend is already becoming apparent in several Member States. As a result, the proportion of people of working age in the EU-27 is shrinking while the relative number of those retired is expanding.

Age dependency ratios may be used to study the level of support of the young and/or older persons by the working age population; these ratios are expressed in terms of the relative size of young and/or older populations relative to the working age population.

**Figure 2.2:** Population pyramids, EU-27, 1990 and 2010 <sup>(1)</sup>  
(% of the total population)



<sup>(1)</sup> Excluding French overseas departments in 1990; 2010, provisional.

Source: Eurostat (online data code: [demo\\_pjangroup](#))



**Table 2.3:** Population age structure indicators, 2010

	Median age	Young age dependency ratio	Old age dependency ratio
	(years)	(%)	
<b>EU-27</b>	40.9	23.3	25.9
BE	40.9	25.6	26.0
BG	41.4	19.7	25.4
CZ	39.4	20.2	21.6
DK	40.5	27.6	24.9
DE	44.2	20.5	31.4
EE	39.5	22.3	25.2
IE	34.3	31.7	16.8
EL	41.7	21.5	28.4
ES	39.9	21.9	24.7
FR	39.8	28.6	25.6
IT	43.1	21.4	30.8
CY	36.2	24.1	18.6
LV	40.0	20.0	25.2
LT	39.2	21.8	23.3
LU	38.9	26.0	20.4
HU	39.8	21.5	24.2
MT	39.2	22.4	21.2
NL	40.6	26.2	22.8
AT	41.7	22.0	26.1
PL	37.7	21.2	19.0
PT	40.7	22.7	26.7
RO	38.3	21.7	21.4
SI	41.4	20.2	23.8
SK	36.9	21.2	16.9
FI	42.0	25.0	25.6
SE	40.7	25.4	27.7
UK	39.6	26.4	24.9
IS	34.8	31.2	17.9
LI	40.8	23.4	19.3
NO	38.6	28.5	22.5
CH	41.5	22.3	24.7
ME	36.2	29.0	18.8
HR	41.3	22.7	25.6
MK	35.8	25.1	16.4
TR	28.8	38.8	10.5

Source: Eurostat (online data code: [demo\\_pjanind](#))

## 2.3 Population and population change

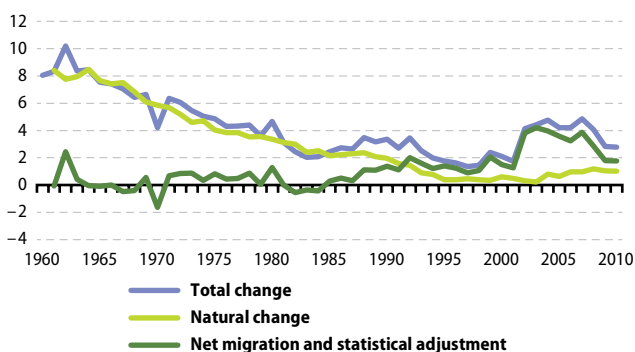
On 1 January 2011 the population of the EU-27 was estimated at 502.5 million; this was 1.4 million people more than the year before and therefore continued a pattern of uninterrupted EU-27 population growth that has been apparent since 1960. The number of inhabitants in the EU-27 grew from 402.6 million in 1960, rising by almost 100 million persons through to 2011.

The relatively low contribution of natural change to total population growth is the result of two factors: net migration in the EU-27 increased considerably from the mid-1980s onwards; secondly, the number of live births fell, while the number of deaths increased.

The number of inhabitants in EU Member States on 1 January 2011 ranged from 81.8 million in Germany to 0.4 million in Malta.

Although the population of the EU-27 increased during 2010, population growth was unevenly distributed across the Member States. A total of 20 Member States observed an increase in their respective populations, while the number of inhabitants fell in Lithuania, Latvia, Bulgaria, Hungary, Romania, Germany and Portugal.

**Figure 2.3:** Population change by component (annual crude rates), EU-27, 1960-2010 <sup>(1)</sup>  
(per 1 000 inhabitants)



<sup>(1)</sup> Excluding French overseas departments up to and including 1997; net migration and natural change, not available for 1960.

Source: Eurostat (online data code: [demo\\_gind](#))

**Table 2.4:** Demographic balance, 2010  
(1 000)

	Population 1 January 2010	Live births	Deaths	Net migration & statistical adjustment (¹)	Population 1 January 2011
<b>EU-27</b>	501 125.9	5 358.7	4 845.4	880.8	502 520.0
BE	10 839.9	127.0	104.5	89.3	10 951.7
BG	7 563.7	75.5	110.2	-24.2	7 504.9
CZ	10 506.8	117.2	106.8	15.6	10 532.8
DK	5 534.7	63.4	54.4	16.8	5 560.6
DE	81 802.3	677.9	858.8	130.2	81 751.6
EE	1 340.1	15.8	15.8	0.0	1 340.2
IE	4 467.9	73.7	27.1	-33.6	4 480.9
EL	11 305.1	110.0	106.7	17.5	11 325.9
ES	45 989.0	485.6	381.4	59.8	46 152.9
FR	64 716.2	829.0	545.0	75.2	65 075.4
IT	60 340.3	561.9	587.5	311.7	60 626.4
CY	803.1	10.0	5.4	-3.3	804.4
LV	2 248.4	19.2	30.0	-7.9	2 229.6
LT	3 329.0	35.6	42.1	-77.9	3 244.6
LU	502.1	5.9	3.8	7.7	511.8
HU	10 014.3	90.3	130.5	11.5	9 985.7
MT	414.4	4.0	3.0	2.2	417.6
NL	16 575.0	184.4	136.1	32.5	16 655.8
AT	8 375.3	78.7	77.2	27.4	8 404.3
PL	38 167.3	413.3	378.5	-2.1	38 200.0
PT	10 637.7	101.3	105.9	3.8	10 637.0
RO	21 462.2	212.2	259.7	-0.8	21 413.8
SI	2 047.0	22.3	18.6	-0.5	2 050.2
SK	5 424.9	60.4	53.4	3.4	5 435.3
FI	5 351.4	61.0	50.9	13.8	5 375.3
SE	9 340.7	115.6	90.5	49.7	9 415.6
UK	62 027.0	807.3	561.7	163.1	62 435.7
IS	317.6	4.9	2.0	-2.1	318.5
LI	35.9	0.3	0.2	0.2	36.1
NO	4 858.2	61.4	41.5	42.2	4 920.3
CH	7 785.8	80.3	62.6	63.1	7 866.5
ME	616.4	7.4	5.6	0.0	618.2
HR	4 425.7	43.4	52.1	-4.9	4 412.1
MK	2 052.7	24.3	19.1	-0.6	2 057.3
TR	72 561.3	1 279.0	459.0	341.7	73 723.0

(¹) Total change minus natural change.

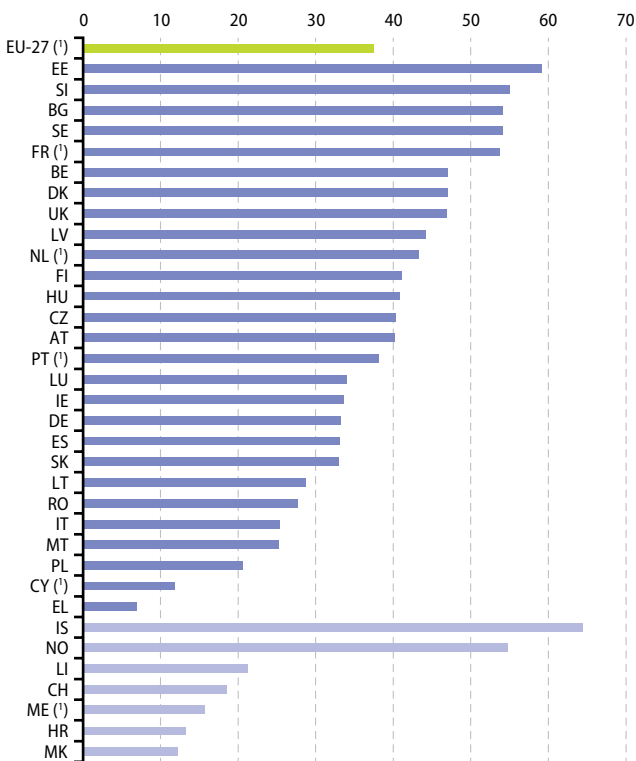
Source: Eurostat (online data code: [demo\\_gind](#))

## 2.4 Marriage and divorce

The number of marriages that took place in the EU-27 in 2009 was 2.3 million, while around 1.0 million divorces were recorded in 2008. The **crude marriage rate**, in other words the number of marriages per 1 000 inhabitants, was 4.5, and the **crude divorce rate** was 2.0.

In the EU-27 some 37.4 % of children were born outside marriage in 2010, while the corresponding figure for 1990 was 17.4 %. Indeed, extra-marital births accounted for the majority of live births in Estonia, Slovenia, Bulgaria, Sweden and France. The number of births outside of marriage was lowest in Greece (6.9 % in 2010) and Cyprus (11.7 % in 2009), while more than one in every five births was outside of marriage in Poland (the EU Member State with the third lowest proportion of births outside of marriage).

**Figure 2.4:** Live births outside marriage, 2010  
(% share of total live births)



(¹) 2009.

Source: Eurostat (online data code: [demo\\_find](#))

**Table 2.5: Crude marriage and divorce rates, 1970-2010**  
(per 1 000 inhabitants)

	Marriages			Divorces <sup>(1)</sup>		
	1970	1990	2010	1970	1990	2010
<b>EU-27 <sup>(2)</sup></b>	7.9	6.3	4.5	1.0	1.6	2.0
BE	7.6	6.5	4.2	0.7	2.0	3.0
BG	8.6	6.9	3.2	1.2	1.3	1.5
CZ	9.2	8.8	4.4	2.2	3.1	2.9
DK	7.4	6.1	5.6	1.9	2.7	2.6
DE	7.4	6.5	4.7	1.3	1.9	2.3
EE	9.1	7.5	3.8	3.2	3.7	2.2
IE	7.0	5.1	4.6	–	–	0.7
EL <sup>(3)</sup>	7.7	5.8	5.1	0.4	0.6	1.2
ES	7.3	5.7	3.6	–	0.6	2.2
FR <sup>(4)</sup>	7.8	5.1	3.8	0.8	1.9	2.1
IT <sup>(5)</sup>	7.4	5.6	3.6	0.3	0.5	0.9
CY <sup>(6)</sup>	8.6	9.7	7.9	0.2	0.6	2.2
LV	10.2	8.9	4.2	4.6	4.0	2.2
LT	9.5	9.8	5.7	2.2	3.4	3.0
LU	6.4	6.1	3.5	0.6	2.0	2.1
HU	9.4	6.4	3.6	2.2	2.4	2.4
MT	7.9	7.1	6.2	–	–	–
NL <sup>(7)</sup>	9.5	6.5	4.4	0.8	1.9	1.9
AT	7.1	5.9	4.5	1.4	2.1	2.1
PL	8.6	6.7	6.0	1.1	1.1	1.6
PT <sup>(8)</sup>	9.4	7.2	3.7	0.1	0.9	2.5
RO	7.2	8.3	5.4	0.4	1.4	1.5
SI	8.3	4.3	3.2	1.1	0.9	1.2
SK	7.9	7.6	4.7	0.8	1.7	2.2
FI	8.8	5.0	5.6	1.3	2.6	2.5
SE	5.4	4.7	5.3	1.6	2.3	2.5
UK <sup>(7)</sup>	8.5	6.6	4.3	1.0	2.7	2.0
IS	7.8	4.5	4.9	1.2	1.9	1.8
LI	5.9	5.6	5.0	–	:	2.4
NO	7.6	5.2	4.8	0.9	2.4	2.1
CH	7.6	6.9	5.5	1.0	2.0	2.8
ME	:	:	6.0	:	:	0.8
HR	8.5	5.9	4.8	1.2	1.1	1.1
MK	9.0	8.3	6.9	0.3	0.4	0.8
TR	:	:	8.0	:	:	1.6

<sup>(1)</sup> Divorce was not possible by law in Italy until 1970, in Spain until 1981, in Ireland until 1995 and in Malta until 2011.

<sup>(2)</sup> Marriages, 2009 instead of 2010; divorces, 1971 instead of 1970 and 2008 instead of 2010.

<sup>(3)</sup> Divorces, 2008 instead of 2010.

<sup>(4)</sup> Excluding French overseas departments for 1970 and 1990; divorces, 2008 instead of 2010.

<sup>(5)</sup> Divorces, 1971 instead of 1970 and 2009 instead of 2010.

<sup>(6)</sup> 2009, instead of 2010; up to and including 2002, data refer to total marriages contracted in the country, including marriages between non-residents; from 2003 onwards, data refer to marriages in which at least one spouse was resident in the country.

<sup>(7)</sup> 2009, instead of 2010.

<sup>(8)</sup> Divorces, 2009 instead of 2010.

Source: Eurostat (online data codes: [demo\\_nind](#) and [demo\\_ndivind](#))

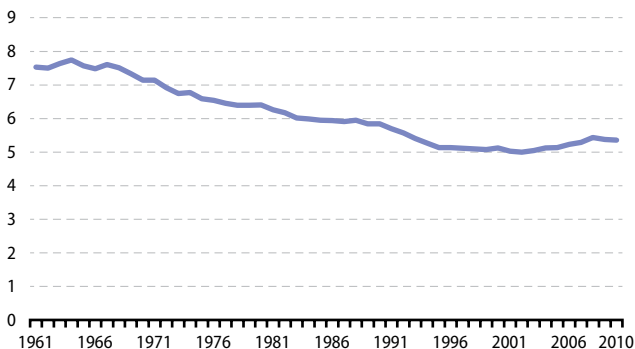
## 2.5 Fertility

From the 1960s up to the beginning of the 21st century, the number of live births in the EU-27 declined sharply from 7.5 million to a low of 5.0 million in 2002 (see Figure 2.5). Since then there has been a modest rebound in the number of live births, with 5.4 million children born in the EU-27 in each of the last three years for which data are available (2008-2010).

A total fertility rate of around 2.1 live births per woman is considered to be the replacement level: in other words, the average number of live births per woman required to keep the population size constant if there were no inward or outward [migration](#) is 2.1. The total fertility rate in the EU-27 declined to a level well below this replacement level in recent decades. The lowest total fertility rate of 1.45 live births per woman was registered in the EU-27 in 2002, according to the available aggregated information. A slight recovery in the fertility rate was subsequently observed in most of the Member States, such that the EU-27 average had increased to 1.59 live births per woman by 2009.

Total fertility rates across EU Member States tended to converge during the last few decades. In 1980, the gap between the highest rate (3.2 live births per woman in Ireland) and the lowest rate (1.5 live births per woman in Luxembourg) was 1.7 live births per woman (see Table 2.6). By 1990 the difference had decreased to 1.1 live births per woman, and by 2009 it had narrowed still further to 0.8.

**Figure 2.5:** Number of live births, EU-27, 1961-2010 <sup>(1)</sup>  
(million)



<sup>(1)</sup> Excluding French overseas departments before 1998; provisional values for 2009 and 2010.

Source: Eurostat (online data code: [demo\\_gind](#))

**Table 2.6: Total fertility rate, 1960-2009**  
(live births per woman)

	1960	1970	1980	1990	2000	2009
<b>EU-27</b>	:	:	:	:	:	1.59
BE	2.54	2.25	1.68	1.62	1.67	1.84
BG	2.31	2.17	2.05	1.82	1.26	1.57
CZ	2.09	1.92	2.08	1.90	1.14	1.49
DK	2.57	1.95	1.55	1.67	1.77	1.84
DE	:	:	:	:	1.38	1.36
EE	:	:	:	2.05	1.38	1.62
IE	3.78	3.85	3.21	2.11	1.89	2.07
EL	2.23	2.40	2.23	1.40	1.26	1.52
ES	:	:	2.20	1.36	1.23	1.40
FR <sup>(1)</sup>	2.73	2.47	1.95	1.78	1.89	2.00
IT	2.37	2.38	1.64	1.33	1.26	1.41
CY	:	:	:	2.41	1.64	1.51
LV	:	:	:	:	:	1.31
LT	:	2.40	1.99	2.03	1.39	1.55
LU	2.29	1.97	1.50	1.60	1.76	1.59
HU	2.02	1.98	1.91	1.87	1.32	1.32
MT	:	:	1.99	2.04	1.70	1.43
NL	3.12	2.57	1.60	1.62	1.72	1.79
AT	2.69	2.29	1.65	1.46	1.36	1.39
PL	:	:	:	2.06	1.35	1.40
PT	3.16	3.01	2.25	1.56	1.55	1.32
RO	:	:	2.43	1.83	1.31	1.38
SI	:	:	:	1.46	1.26	1.53
SK	3.04	2.41	2.32	2.09	1.30	1.41
FI	2.72	1.83	1.63	1.78	1.73	1.86
SE	:	1.92	1.68	2.13	1.54	1.94
UK <sup>(1)</sup>	:	:	1.90	1.83	1.64	1.94
IS	:	2.81	2.48	2.30	2.08	2.23
LI	:	:	:	:	1.57	1.71
NO	:	2.50	1.72	1.93	1.85	1.98
CH	2.44	2.10	1.55	1.58	1.50	1.50
ME <sup>(2)</sup>	:	:	:	:	:	1.77
HR	:	:	:	:	:	1.49
MK	:	:	:	:	1.88	1.52
TR <sup>(2)</sup>	:	:	:	:	:	2.10

<sup>(1)</sup> Excluding French overseas departments, up to and including 1990.

<sup>(2)</sup> 2008 instead of 2009.

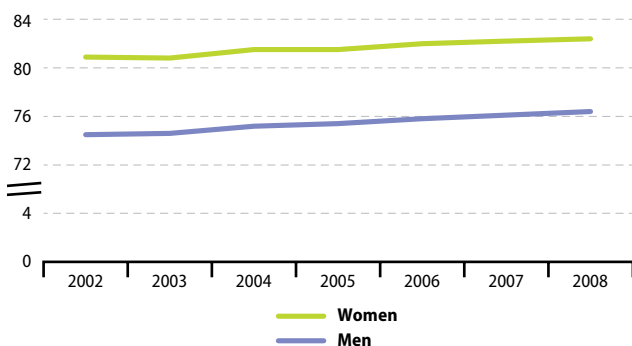
Source: Eurostat (online data code: [demo\\_frate](#))

## 2.6 Mortality and life expectancy

The most commonly used indicator for analysing mortality is that of **life expectancy at birth**. Improvements in living standards and the establishment and improvement in health systems across Europe have led to a continuous increase in life expectancy at birth. Indeed, life expectancy at birth in the EU-27 increased over the last 50 years by about ten years. Even in the last six years for which data at an aggregated EU-27 level are available (2002 to 2008) there was an increase in life expectancy of 1.5 years for women and 1.9 years for men. Life expectancy in the EU-27 is generally higher than in most other regions of the world. Based on EU-27 observations for 2008, a new born male is expected to live, on average, to 76.4 years old, while a new born female is expected to live to 82.4 years old.

Significant differences in life expectancy at birth are nevertheless observed between the EU Member States. Looking at the extremes of the ranges (2009 data for the majority of countries), a woman born in 2009 is expected to live between 77.4 years (Bulgaria) and 85.0 years (France), a range of 7.6 years. A man born in 2009 can be expected to live between 67.5 years (Lithuania) and 79.4 years (Sweden), a range of 11.9 years.

**Figure 2.6:** Life expectancy at birth, EU-27, 2002-2008 (years)



Source: Eurostat (online data code: [demo\\_mlexpec](#))



**Table 2.7:** Life expectancy at age 65, 1994 and 2009 (years)

	Total		Men		Women	
	1994	2009	1994	2009	1994	2009
<b>EU-27 <sup>(1)</sup></b>	:	19.1	:	17.2	:	20.7
BE	17.3	19.5	14.8	17.5	19.3	21.1
BG	14.2	15.5	12.9	13.8	15.5	17.0
CZ	14.7	17.2	12.7	15.2	16.1	18.8
DK	16.2	18.2	14.3	16.8	17.9	19.5
DE	17.0	19.3	14.7	17.6	18.6	20.8
EE	14.1	17.1	11.6	14.0	15.7	19.2
IE	15.7	19.0	13.8	17.2	17.4	20.6
EL	17.2	19.2	16.0	18.1	18.2	20.2
ES	18.3	20.5	16.2	18.3	20.1	22.4
FR <sup>(2)</sup>	18.9	21.2	16.3	18.7	21.0	23.2
IT <sup>(1)</sup>	17.8	20.2	15.7	18.2	19.6	22.0
CY	17.1	19.5	16.1	18.1	18.0	20.9
LV	:	16.3	:	13.4	:	18.2
LT	15.1	16.4	12.7	13.4	16.8	18.4
LU	17.1	19.7	14.7	17.6	19.0	21.4
HU	14.2	16.4	12.1	14.0	15.9	18.2
MT <sup>(3)</sup>	16.6	18.8	15.5	16.8	17.6	20.6
NL	17.2	19.4	14.8	17.6	19.2	21.0
AT	17.2	19.6	15.0	17.7	18.7	21.2
PL	14.9	17.3	12.8	14.8	16.4	19.2
PT	16.6	18.9	14.8	17.1	18.2	20.5
RO	14.2	15.8	12.8	14.0	15.3	17.2
SI	15.8	18.8	13.6	16.4	17.3	20.5
SK	14.8	16.3	12.8	14.1	16.4	18.0
FI	17.1	19.6	14.7	17.3	18.7	21.5
SE	18.2	19.8	16.1	18.2	20.0	21.2
UK	16.7	19.6	14.7	18.1	18.4	20.8
IS	18.5	19.8	16.8	18.6	20.0	21.0
LI	18.0	20.4	16.4	18.4	19.2	22.0
NO	17.4	19.6	15.3	18.0	19.4	21.1
CH	18.6	20.8	16.2	19.0	20.6	22.2
ME	:	15.9	:	16.5	:	15.7
HR	:	16.4	:	14.5	:	17.9
MK	14.1	14.9	13.2	13.9	15.0	15.8

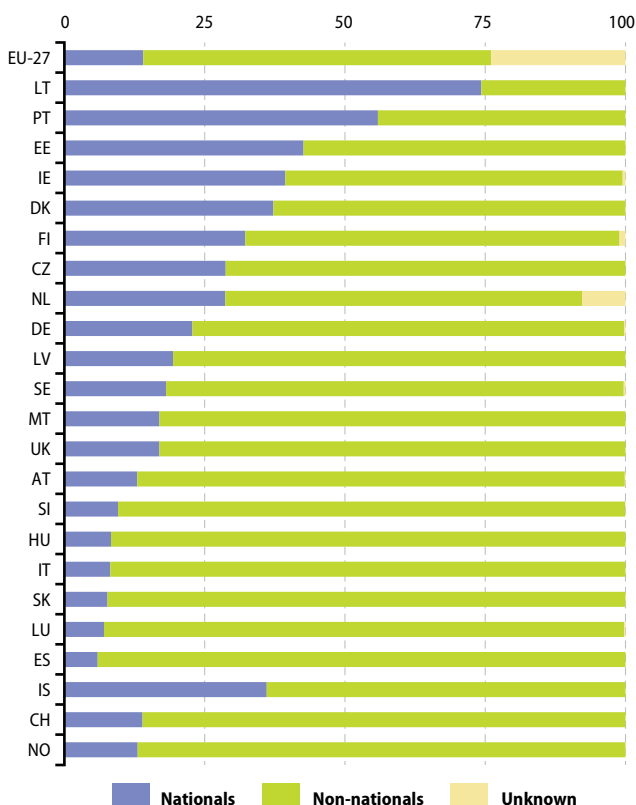
<sup>(1)</sup> 2008 instead of 2009.<sup>(2)</sup> Excluding French overseas departments in 1994.<sup>(3)</sup> 1995 instead of 1994.Source: Eurostat (online data code: [demo\\_mlexpec](#))

## 2.7 Migration and migrant population

**Migration** is influenced by a combination of economic, political and social factors, either in a migrant's country of origin (push factors) or in the country of destination (pull factors); historically, the relative economic prosperity and political stability of the EU are thought to have exerted a considerable pull effect on immigrants.

In destination countries, international migration may be used as a tool to solve specific **labour market** shortages. However, international migration alone will almost certainly not reverse the ongoing trend of population ageing experienced in many parts of the EU.

**Figure 2.7:** Share of nationals and non-nationals among immigrants, 2009 <sup>(1)</sup>  
(%)



<sup>(1)</sup> Data for Belgium, Bulgaria, Greece, Cyprus, France, Poland and Romania, not available.

Source: Eurostat (online data code: [migr\\_imm1ctz](#))

**Table 2.8:** Immigration by main citizenship group, 2009 <sup>(1)</sup>  
(1 000)

	Nationals	Non-nationals		
		Total	Citizens of other EU Member States	Citizens of non-member countries
<b>EU-27</b>	<i>600</i>	<i>2 500</i>	<i>1 000</i>	<i>1 500</i>
BE	:	:	:	:
BG	:	:	:	:
CZ	21.7	53.9	15.5	38.4
DK	19.3	32.5	16.2	16.3
DE	79.2	267.2	126.8	140.4
EE	1.7	2.2	1.0	1.2
IE	14.7	22.5	16.0	6.5
EL	:	84.2	29.5	54.6
ES	29.6	469.3	144.9	324.5
FR	:	:	:	:
IT	36.2	406.7	136.1	270.6
CY	:	:	:	:
LV	0.5	2.2	1.1	1.1
LT	4.8	1.7	0.3	1.4
LU	1.1	14.6	11.9	2.7
HU	2.3	25.6	14.2	11.3
MT	1.2	6.0	4.0	2.0
NL	36.9	81.9	47.3	34.6
AT	9.5	63.6	39.1	24.6
PL	:	:	:	:
PT	18.0	14.3	4.0	10.3
RO	:	:	:	:
SI	2.9	27.4	1.9	25.5
SK	1.2	14.4	6.9	7.6
FI	8.6	17.8	6.5	11.3
SE	18.5	83.5	26.9	56.6
UK	96.0	470.5	167.4	303.1
IS	1.4	2.5	2.0	0.5
NO	7.3	48.6	26.9	21.8
CH	22.4	138.3	91.1	47.1

<sup>(1)</sup> EU-27 rounded totals are based on estimates; the individual values do not add up to the total due to rounding and the exclusion of the 'unknown' citizenship group from the table.

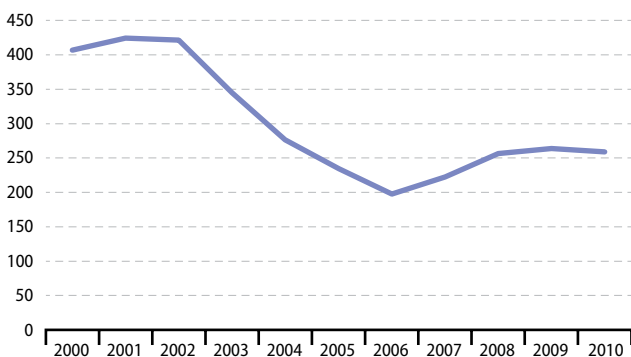
Source: Eurostat (online data code: [migr\\_imm1ctz](#))

## 2.8 Asylum

The 1951 Geneva Convention relating to the status of refugees (as amended by the 1967 New York Protocol) has for almost 60 years defined who is a refugee, and laid down a common approach towards refugees that has been one of the cornerstones for the development of a common asylum system within the EU. Asylum is a form of protection given by a state on its territory. It is granted to a person who is unable to seek protection in his/her country of citizenship and/or residence, in particular for fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion.

In recent years, there has been a sharp decrease in the number of asylum applicants in the EU. Having peaked in 1992 (670 000 applications in the EU-15) and again in 2001 (424 200 applications in the EU-27), there were an estimated 258 950 asylum applications received in the EU-27 in 2010 (see Figure 2.8).

**Figure 2.8:** Asylum applications (non-EU-27) in the EU-27 Member States, 2000-2010 <sup>(1)</sup>  
(1 000)



<sup>(1)</sup> Cyprus, applications relate to the main applicant only; United Kingdom, 2008 data refers to new asylum applicants.

Source: Eurostat (online data codes: [migr\\_asyctz](#) and [migr\\_asyappctza](#))

**Table 2.9:** Countries of origin of (non-EU-27) asylum seekers in the EU-27 Member States, 2009 and 2010 <sup>(1)</sup>  
(number)

	2009	2010	Ranking		
			2009	2010	Change
<b>Non-EU-27 total</b>	263 990	258 945	–	–	–
Afghanistan	20 455	20 590	1	1	0
Russia	20 110	18 590	2	2	0
Serbia	5 460	17 745	16	3	+13
Iraq	18 845	15 800	4	4	0
Somalia	19 000	14 355	3	5	–2
Kosovo (UNSCR 1244/99)	14 275	14 310	5	6	–1
Iran	8 565	10 315	9	7	+2
Pakistan	9 925	9 180	8	8	0
FYR of Macedonia	930	7 550	47	9	+38
Georgia	10 500	6 860	6	10	–4
Nigeria	10 270	6 750	7	11	–4
Sri Lanka	7 380	6 470	11	12	–1
Turkey	7 030	6 350	12	13	–1
Bangladesh	5 970	6 190	14	14	0
China	5 800	5 655	15	15	0
Armenia	6 855	5 525	13	16	–3
Dem. Rep. of Congo	4 950	5 515	18	17	+1
Syria	4 750	5 010	19	18	+1
Guinea	4 485	4 895	20	19	+1
Eritrea	5 230	4 525	17	20	–3
Algeria	3 405	3 575	21	21	0
India	3 030	3 175	22	22	0
Zimbabwe	8 050	2 615	10	23	–13
Haiti	1 840	2 345	30	24	+6
Vietnam	2 460	2 320	24	25	–1
Sudan	1 955	2 295	27	26	+1
Bosnia and Herzegovina	1 330	2 105	34	27	+7
Azerbaijan	2 585	2 060	23	28	–5
Albania	2 065	1 905	25	29	–4
Mongolia	2 030	1 680	26	30	–4
<b>Other non-EU-27</b>	44 455	42 690	–	–	–

(<sup>1</sup>) Cyprus, data relates to applications instead of applicants.

Source: Eurostat (online data code: [migr\\_asyappctza](#))



Health issues cut across a range of topics – including consumer protection (food safety issues), workplace safety, environmental or social policies.

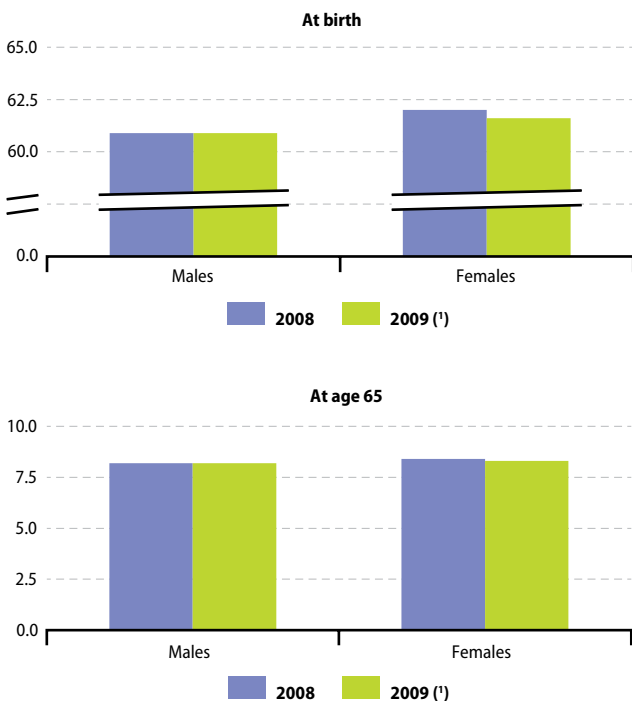
The competence for the organisation and delivery of health services and [healthcare](#) is largely held by the Member States, while the [European Union \(EU\)](#) complements the Member States' health policies through launching actions such as those in relation to cross-border health threats and patient mobility. Gathering and assessing accurate, detailed information on health issues is vital for the EU to effectively design policies and target future actions. A first programme for Community action in the field of public health covered the period from 2003 to 2008. On 23 October 2007 the [European Commission](#) adopted a new strategy 'Together for health: a strategic approach for the EU 2008-2013' (COM(2007) 630). In order to bring about the changes identified within this new strategy, the [second programme of Community action in the field of health](#) came into force from 1 January 2008.

## 3.1 Healthy life years

Whether extra years of life gained through increased longevity are spent in good or bad health is a crucial question. Since [life expectancy at birth](#) is not able to fully answer this question, indicators of health expectancies, such as healthy life years (also called [disability-free life expectancy](#)) have been developed. The calculation of the healthy life years indicator is based on a self-perceived question which aims to measure the extent of any limitations because of a health problem that may have affected respondents as regards activities they usually do (for at least six months).

In 2009 the number of healthy life years at birth stood at 60.9 years for men and 61.6 years for women in the [EU-27](#); this represented 79.4% and 74.5% of total life expectancy at birth for men and women. For survivors at the age of 65, the number of remaining healthy life years was 8.2 years for men and 8.3 years for women.

**Figure 3.1:** Healthy life years, EU-27, 2008 and 2009



(¹) Provisional.

Source: Eurostat (online data code: [hlth\\_hlye](#))



**Table 3.1:** Healthy life years, 2009  
(years)

	Healthy life years			
	At birth		At age 65	
	Males	Females	Males	Females
<b>EU-27</b>	60.9	61.6	8.2	8.3
BE	63.7	63.5	10.5	10.1
BG	61.9	65.6	8.4	9.1
CZ	60.9	62.5	8.0	8.4
DK	61.8	60.4	11.2	12.0
DE	56.7	57.7	6.4	6.5
EE	54.8	59.0	5.5	5.3
IE	63.7	65.2	10.2	10.5
EL	60.2	60.9	7.2	6.6
ES	62.6	61.9	9.2	8.4
FR	62.5	63.2	8.8	9.2
IT <sup>(1)</sup>	62.4	61.2	7.3	6.8
CY	65.1	65.8	9.9	8.5
LV	52.6	55.8	4.7	5.7
LT	57.0	60.9	5.9	6.7
LU	65.1	65.7	10.8	11.4
HU	55.7	58.0	5.7	5.6
MT	69.1	70.6	11.0	11.2
NL	61.4	59.8	9.4	10.3
AT	59.2	60.6	8.1	8.0
PL	58.1	62.1	6.8	7.4
PT	58.0	55.9	6.6	5.4
RO	59.5	61.4	7.2	7.0
SI	60.6	61.5	9.3	9.9
SK	52.1	52.3	3.4	2.8
FI	58.1	58.4	8.1	8.9
SE	70.5	69.5	13.6	14.6
UK <sup>(1)</sup>	65.0	66.3	10.7	11.8
IS	68.7	69.0	12.7	13.6
NO	68.9	67.8	13.5	14.0

<sup>(1)</sup> 2008.Source: Eurostat (online data code: [hlth\\_hlye](#))

## 3.2 Causes of death

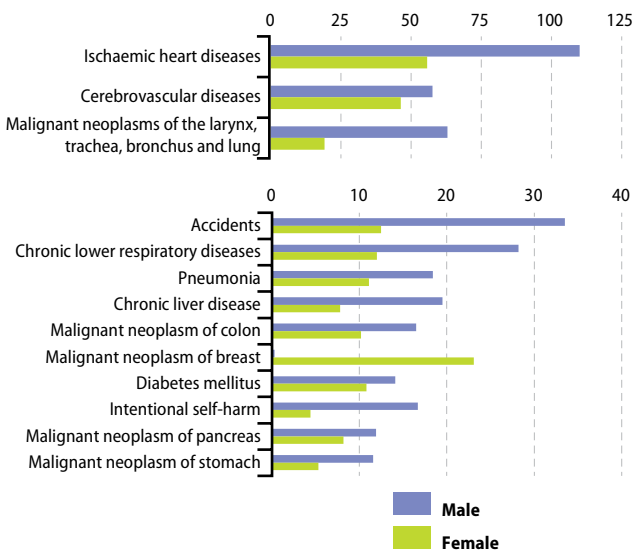
By relating all deaths in the population to an underlying cause of death, the risks associated with death from a range of specific diseases and other causes can be assessed; these figures can be further broken down by age, sex, nationality and region (NUTS level 2), using [standardised death rates](#).

Statistics on causes of death are important to evaluate the state of health and [healthcare](#) in the EU. They suggest which preventive and medical-curative measures and which investments in research might increase the [life expectancy](#) of the population.

The latest information available for 2009 <sup>(6)</sup> shows that diseases of the circulatory system and cancer were, by far, the leading causes of death in Europe. Between 2000 and 2009 there was a marked reduction in EU-27 death rates resulting from ischaemic heart disease and from transport accidents (with combined rates

<sup>(6)</sup> France and Italy, 2008; Switzerland, 2007; Belgium, 2005.

**Figure 3.2:** Causes of death – standardised death rate, EU-27, 2009 <sup>(1)</sup>  
(per 100 000 inhabitants)

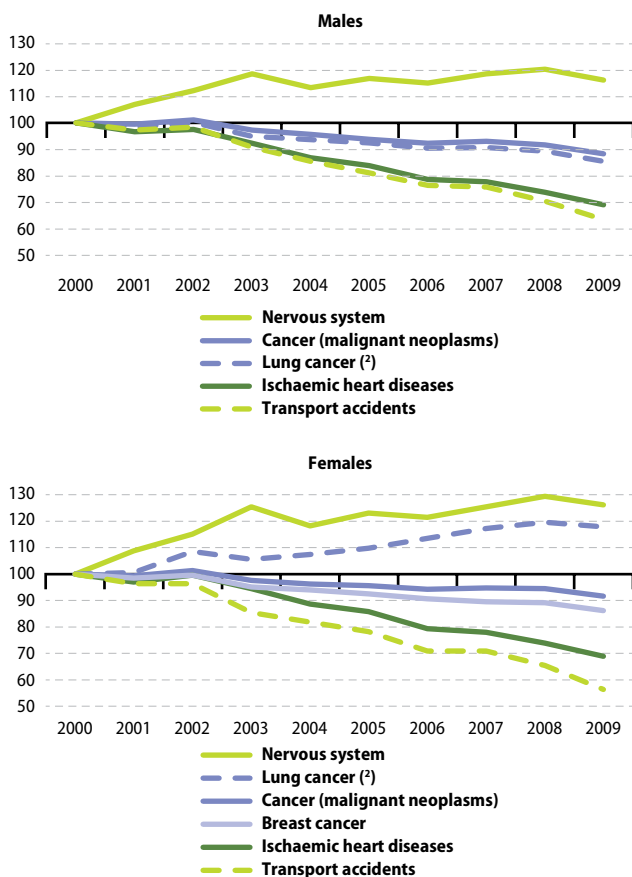


<sup>(1)</sup> Provisional; the figure is ranked on the average of male and female; note the difference in the scales employed between the two parts of the figure.

Source: Eurostat (online data code: [hlth\\_cd\\_asdr](#))

for men and women falling by more than 30 %), while there was a reduction of almost 10 % in the EU-27 death rate for cancer during the same period.

**Figure 3.3:** Causes of death – standardised death rate per 100 000 inhabitants, EU-27, 2000-2009 <sup>(1)</sup> (2000 = 100)



<sup>(1)</sup> Provisional.

<sup>(2)</sup> Malignant neoplasms of the larynx, trachea, bronchus and lung.

Source: Eurostat (online data code: [hlth\\_cd\\_asdr](#))

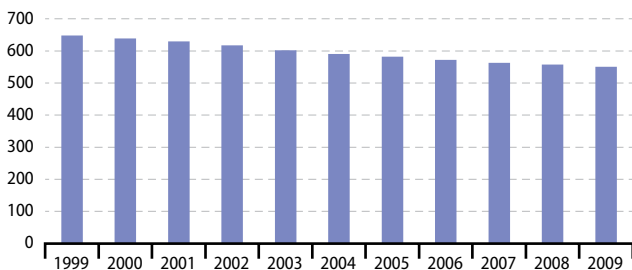
### 3.3 Healthcare

Healthcare systems are organised and financed in different ways across the EU Member States, but most Europeans would agree that universal access to good healthcare, at an affordable cost to both individuals and society at large, is a basic need.

Monetary and non-monetary statistics may be used to evaluate how a country's healthcare system responds to this basic need, through measuring financial, human and technical resources within the healthcare sector and the allocation of these resources between healthcare activities (for example, preventive and curative care), groups of healthcare providers (for example, [hospitals](#) and ambulatory centres), or healthcare professionals (for example, medical and paramedical staff). It is possible to assess and measure the performance of healthcare systems by combining these data with information on technical and managerial choices that are made in relation to healthcare provision (for example, the use of inpatient or outpatient care, or the average length of stays in hospital).

During the ten years between 1999 and 2009, the number of hospital beds per 100 000 inhabitants fell in every Member State, except Greece; the average reduction in bed numbers across the whole of the EU-27 was 97 beds per 100 000 inhabitants. These reductions may reflect, among others, economic constraints, increased efficiency through the use of technical resources (for example, imaging equipment), a general shift from inpatient to outpatient operations, and shorter periods spent in hospital following an operation.

**Figure 3.4:** Number of hospital beds, EU-27, 1999-2009 (per 100 000 inhabitants)



Source: Eurostat (online data code: [tps00046](#))

**Table 3.2:** Healthcare indicators, 2009  
(per 100 000 inhabitants)

	<b>Practising physicians <sup>(1)</sup></b>	<b>Hospital beds <sup>(2)</sup></b>	<b>Hospital discharges <sup>(3)</sup></b>
<b>EU-27</b>	:	550.9	:
BE	291.3	653.4	16 284
BG	370.0	661.6	23 356
CZ	355.5	710.1	19 968
DK	341.6	350.1	16 498
DE	364.1	822.9	22 692
EE	326.7	543.9	17 567
IE	406.6	495.1	13 236
EL	610.6	485.8	:
ES	354.8	319.3	10 416
FR	325.6	660.5	16 035
IT	336.2	364.3	13 236
CY	285.6	377.2	7 500
LV	300.4	638.3	20 290
LT	366.2	682.4	21 887
LU	268.9	551.4	15 869
HU	302.3	715.0	19 435
MT	304.4	482.6	10 901
NL	285.9	466.9	11 279
AT	467.1	765.0	27 839
PL	217.0	665.0	15 658
PT	376.9	334.9	17 507
RO	221.5	657.4	24 634
SI	240.1	462.0	16 576
SK	328.1	649.7	18 031
FI	272.7	623.1	17 890
SE	371.5	277.1	15 200
UK	265.9	330.2	12 913
IS	372.0	585.7	13 027
NO	399.9	336.6	16 637
CH	381.2	513.2	25 868
HR	266.9	536.8	16 259
MK	261.8	447.4	9 939
TR	163.5	251.2	13 345

(<sup>1</sup>) Greece, France, the Netherlands, Slovakia, the former Yugoslav Republic of Macedonia and Turkey, professionally active physicians; Ireland and Portugal, licensed physicians; Denmark, Cyprus, the Netherlands, Romania, Finland, Sweden, Iceland and the former Yugoslav Republic of Macedonia, 2008.

(<sup>2</sup>) Ireland, Cyprus and Romania, 2008; Iceland, 2007.

(<sup>3</sup>) Belgium, Germany, Latvia and Croatia, 2008; Denmark, Cyprus and the former Yugoslav Republic of Macedonia, 2007.

Source: Eurostat (online data codes: [hlth\\_rs\\_prs](#), [tps00046](#) and [hlth\\_co\\_disch2t](#))

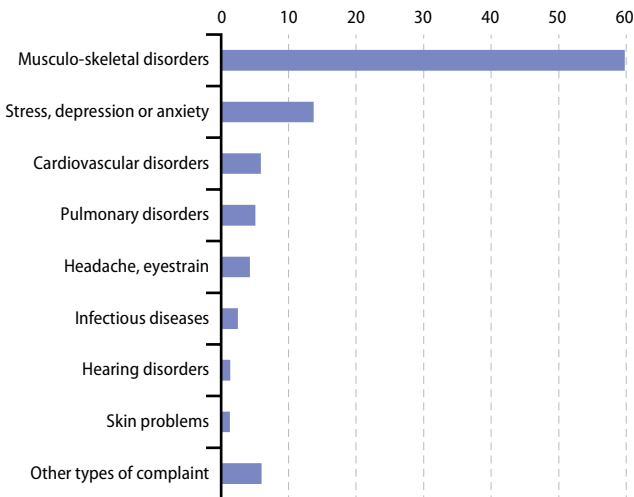
### 3.4 Health and safety at work

A safe, healthy working environment is a crucial factor in an individual's quality of life and is also a collective concern.

An accident at work is a discrete occurrence during the course of work which leads to physical or mental harm. The phrase 'in the course of work' means whilst engaged in an occupational activity or during the time spent at work. This includes cases of road traffic accidents in the course of work but excludes accidents during the journey between home and the workplace.

Figure 3.6, illustrates the incidence rates of fatal accidents at work per 100 000 persons employed. Romania, with an average of 8.0 fatal work accidents per 100 000 persons employed, had the highest incidence rate followed by Lithuania and Bulgaria (6.0 and 5.2 fatal accidents per 100 000 persons employed). Denmark, Germany, the Netherlands, Sweden, Finland and France (as well as the United Kingdom, although values excluded Northern Ireland and road traffic accidents at work) had the lowest incidence rates with less than two fatal accidents at work per 100 000 persons employed in 2008.

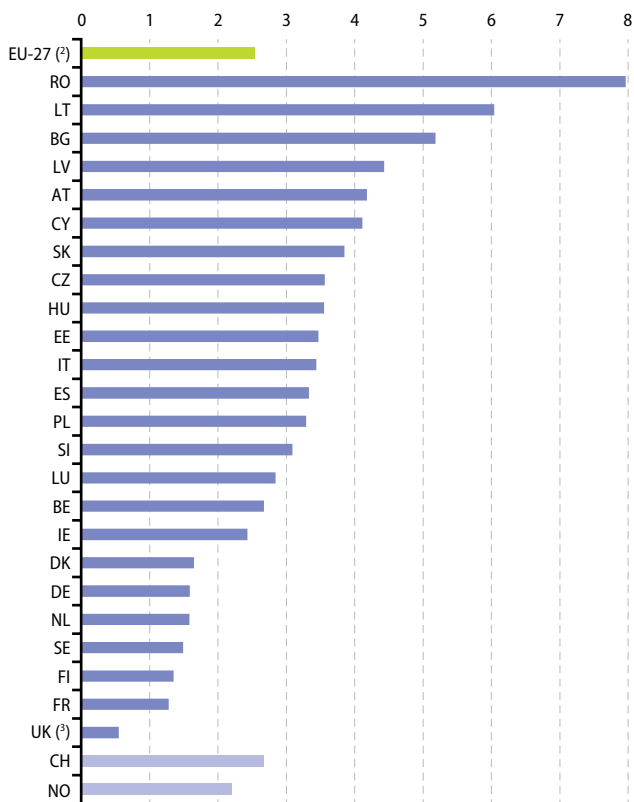
**Figure 3.5:** Type of work-related health problem indicated as the most serious among persons with a work-related health problem, EU-27, 2007 <sup>(1)</sup>  
(% of persons citing each complaint)



<sup>(1)</sup> Excluding France.

Source: Eurostat (online data code: [hsw\\_pb5](#))

**Figure 3.6:** Number of fatal accidents at work, 2008 <sup>(1)</sup>  
(incidence rates per 100 000 persons employed)



<sup>(1)</sup> Greece, not available.

<sup>(2)</sup> Estimate made for the purpose of this publication includes under-reported levels for Latvia, Poland and Romania, but excludes Greece and Northern Ireland.

<sup>(3)</sup> Excluding Northern Ireland; also excludes road traffic accidents at work.

Source: Eurostat (online data code: [hsw\\_n2\\_02](#))





## Education and training

# 4

Education, vocational training and more generally lifelong learning play a vital role in both an economic and social context. The opportunities which the European Union (EU) offers its citizens for living, studying and working in other countries make a major contribution to cross-cultural understanding, personal development and the realisation of the EU's full economic potential.

Political cooperation within the EU has been strengthened through the education and training 2010 work programme which integrated previous actions in the fields of education and training. The follow-up to this programme is the strategic framework for European cooperation in education and training (known as ET 2020) which was adopted by the Council in May 2009.

The Bologna process put in motion a series of reforms to make European higher education more compatible, comparable, competitive and attractive for students. Its main objectives were: the introduction of a three-cycle degree system (bachelor, master and doctorate); quality assurance; and recognition of qualifications and periods of study.

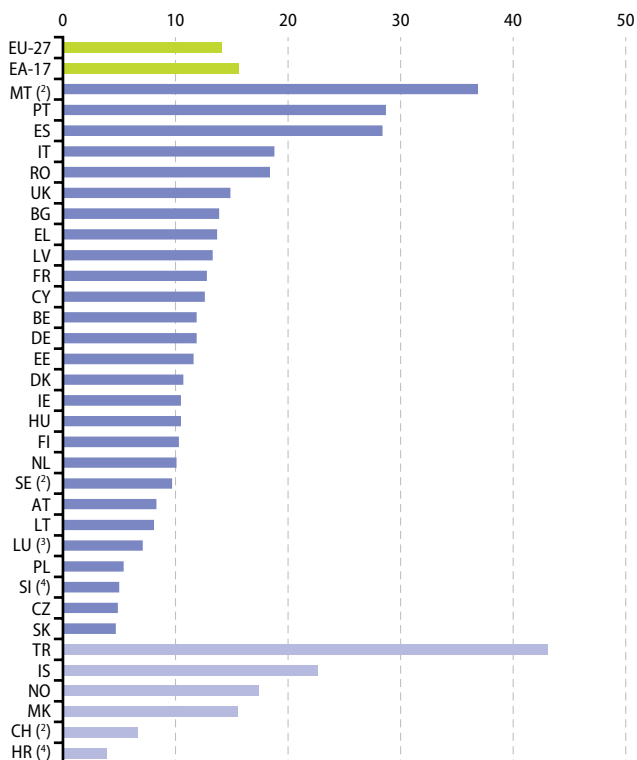
Since 2002 national authorities and social partners from 32 European countries are taking part in the Copenhagen process to help develop vocational education and training (VET) systems.

## 4.1 School enrolment and levels of education

School helps young people acquire the basic life skills and competences necessary for their personal development. The quality of a pupil's school experience affects not only their development, but also his or her place in society, educational attainment, and employment opportunities.

The indicator for early leavers from education and training is defined as the proportion of the population aged 18 to 24 with at most a lower

**Figure 4.1:** Early leavers from education and training, 2010 <sup>(1)</sup> (%)



<sup>(1)</sup> Refer to the Internet metadata file ([http://epp.eurostat.ec.europa.eu/cache/ITY\\_SDDS/en/lfsi\\_edu\\_a\\_esms.htm](http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/lfsi_edu_a_esms.htm)); early leavers from education and training: based on annual averages of quarterly data.

<sup>(2)</sup> Provisional.

<sup>(3)</sup> Early leavers from education and training, 2010: unreliable or uncertain data.

<sup>(4)</sup> Early leavers from education and training: unreliable or uncertain data.

Source: Eurostat (online data code: [tsisc060](#))

secondary level of education (ISCED levels 1, 2 or 3c short), who are no longer in further education or training; the denominator consists of the total population of the same age group, excluding non-response.

**Table 4.1:** Pupils and students (excluding pre-primary education), 2009 <sup>(1)</sup>

	Pupils and students (1 000)	Proportion of four-year olds in education (%)	Pupil/teacher ratio in primary education	Proportion of 18-year olds in education (%)
<b>EU-27 <sup>(2)</sup></b>	92 958	90.5	:	77.6
BE	2 436	99.3	12.5	88.2
BG	1 111	71.8	17.4	76.7
CZ	1 849	86.4	18.4	87.3
DK	1 160	95.5	9.9	80.5
DE	13 984	95.6	17.4	85.7
EE	250	91.1	16.2	86.1
IE	1 076	45.1	15.9	96.8
EL <sup>(3)</sup>	2 009	52.4	10.1	70.2
ES	7 677	99.4	13.3	70.0
FR	12 251	100.0	19.7	76.6
IT	9 514	97.6	10.7	76.8
CY	152	74.8	14.5	39.6
LV	414	81.0	11.4	85.3
LT	719	68.7	9.7	91.5
LU	78	92.2	11.6	69.2
HU	1 825	92.4	10.7	83.0
MT	75	93.9	9.4	71.1
NL	3 402	99.5	15.8	83.3
AT	1 469	87.4	12.6	73.3
PL	8 008	53.2	10.2	92.2
PT	2 161	83.6	11.3	73.7
RO	3 879	78.4	16.4	81.4
SI	381	85.6	16.7	89.7
SK	1 035	73.4	17.7	83.0
FI	1 237	54.5	13.6	93.2
SE	2 028	92.6	12.1	94.8
UK	12 780	97.3	19.9	52.2
IS	87	95.5	9.9	75.3
LI	6	55.9	9.2	85.7
NO	1 081	96.4	10.7	87.0
CH	1 361	40.7	:	83.0
HR	710	54.9	15.4	68.6
MK	378	22.9	16.5	57.1
TR	17 471	14.3	22.9	48.5
JP	18 517	97.1	18.6	:
US	68 685	57.8	14.8	66.7

<sup>(1)</sup> Refer to the Internet metadata file ([http://epp.eurostat.ec.europa.eu/cache/ITY\\_SDDS/en/educ\\_esms.htm](http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/educ_esms.htm)).

<sup>(2)</sup> Includes Greek data for 2008.

<sup>(3)</sup> 2008; 2007 for the pupil/teacher ratio.

Source: Eurostat (online data codes: tps00051, tps00053, tps00054 and tps00060)

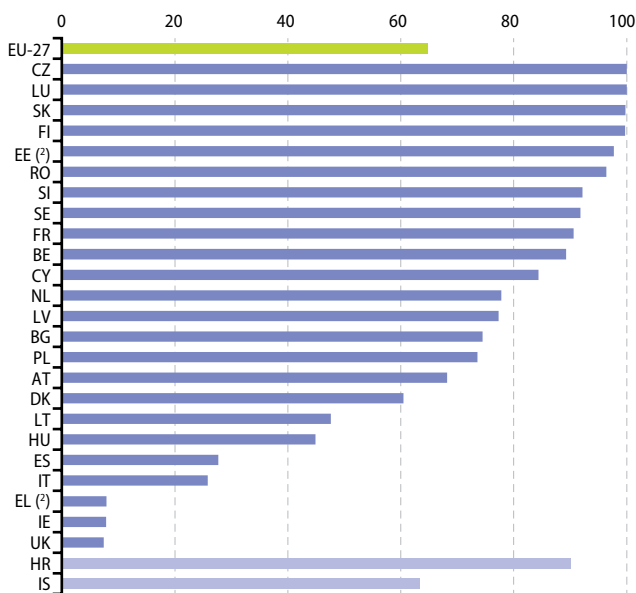
## 4.2 Foreign language learning

Currently there are 23 official languages recognised within the EU, in addition to which there are regional, minority languages, and languages spoken by migrant populations.

School is the main opportunity for the vast majority of people to learn these languages – although linguistic diversity is actively encouraged within schools, universities and adult education centres, as well as the workplace.

For several decades it has been mandatory for most European children to learn at least one foreign language during their compulsory education, with the time devoted to foreign language instruction generally increasing in recent years. In 2002, the Barcelona European Council recommended that at least two foreign languages should be taught to all pupils from a very early age. This recommendation has been implemented to varying degrees,

**Figure 4.2:** Proportion of students learning 2 or more languages (at ISCED level 3 GEN), 2009 <sup>(1)</sup> (%)



<sup>(1)</sup> Germany, Malta and Portugal, not available; refer to the Internet metadata file ([http://epp.eurostat.ec.europa.eu/cache/ITY\\_SDDS/en/educ\\_esms.htm](http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/educ_esms.htm)).

<sup>(2)</sup> 2008.

Source: Eurostat (online data code: [educ\\_thfrlan](#))

usually for compulsory secondary education, either by making it mandatory to teach a second language, or ensuring that pupils have the possibility to study a second foreign language as part of their curriculum.

**Table 4.2:** Foreign languages learnt per pupil in upper secondary education (ISCED 3), 2005 and 2009 <sup>(1)</sup> (%)

	Pupils learning English in general programmes		Pupils learning French in general programmes		Pupils learning German in general programmes	
	2005	2009	2005	2009	2005	2009
<b>EU-27</b>	79.6	94.6	27.7	25.7	25.4	26.5
BE	94.4	95.0	47.8	49.3	28.4	29.3
BG	83.1	87.5	15.4	14.5	40.3	35.9
CZ	98.1	100.0	22.4	24.8	72.2	60.6
DK	82.6	91.6	16.8	10.7	49.7	35.1
DE	93.8	91.8	30.0	28.1	–	–
EE <sup>(2)</sup>	92.6	96.2	6.1	6.9	44.1	39.2
IE	–	–	61.7	58.2	19.1	16.4
EL <sup>(2)</sup>	94.5	95.0	8.6	8.2	2.4	3.3
ES	95.3	94.4	28.0	27.0	1.3	1.1
FR	:	99.5	–	–	:	21.3
IT	85.1	96.5	18.1	20.1	6.5	6.9
CY	89.1	91.4	34.5	40.6	3.4	2.2
LV	93.7	97.2	3.6	3.9	38.8	28.8
LT	80.2	90.8	5.9	3.8	28.4	18.8
LU	96.7	97.7	96.7	100.0	96.7	100.0
HU	73.0	79.4	6.0	6.6	51.4	48.7
MT	65.6	:	6.6	:	1.7	:
NL	100.0	100.0	69.5	64.2	86.2	69.8
AT	96.9	98.5	54.1	42.5	–	–
PL	96.3	92.2	12.1	8.7	72.5	54.4
PT	49.9	:	19.1	:	2.5	:
RO	94.2	98.1	84.2	85.3	11.9	12.1
SI	98.8	92.8	10.9	9.8	78.2	66.4
SK	97.3	98.3	14.4	16.4	75.2	67.9
FI	99.7	99.7	19.3	17.9	37.9	27.8
SE	100.0	99.9	24.2	20.0	34.5	27.0
UK	–	–	40.0	28.9	15.2	10.7
IS	77.2	73.2	16.4	13.7	32.4	25.4
NO	:	44.8	:	12.8	:	20.3
HR	98.4	99.0	3.8	3.7	66.2	62.5
TR	:	81.8	:	1.4	:	14.8

<sup>(1)</sup> Refer to the Internet metadata file ([http://epp.eurostat.ec.europa.eu/cache/ITY\\_SDDS/en/educ\\_esms.htm](http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/educ_esms.htm)).

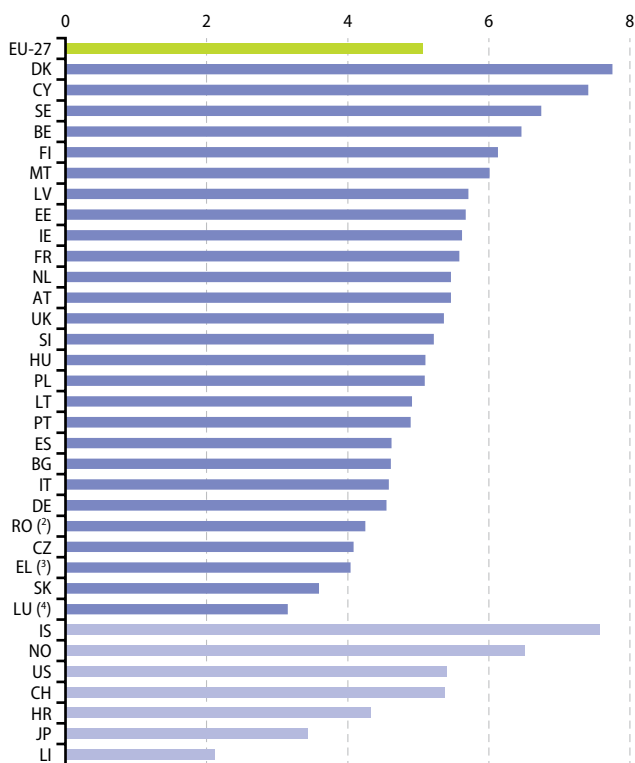
<sup>(2)</sup> 2008 instead of 2009.

Source: Eurostat (online data codes: [tps00057](#), [tps00058](#) and [tps00059](#)), Unesco Institute for Statistics (UIS), OECD

### 4.3 Educational expenditure

Generally, the public sector funds education either by bearing directly the current and capital expenses of educational institutions (direct expenditure for educational institutions) or by supporting students and their families with scholarships and public loans as well as by transferring public subsidies for educational activities to private enterprises or non-profit organisations (transfers to private households and enterprises). Both types of transactions together are reported as total public expenditure on education.

**Figure 4.3:** Public expenditure on education, 2008 <sup>(1)</sup>  
(% of GDP)



<sup>(1)</sup> Refer to the Internet metadata file ([http://epp.eurostat.ec.europa.eu/cache/ITY\\_SDDS/en/tsiir010\\_esms.htm](http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/tsiir010_esms.htm)).

<sup>(2)</sup> 2007.

<sup>(3)</sup> 2005.

<sup>(4)</sup> Excludes tertiary education, 2007.

Source: Eurostat (online data code: [tsiir010](#))

**Table 4.3:** Expenditure on educational institutions, 2003 and 2008 <sup>(1)</sup>

	Public expenditure (% of GDP)		Private expenditure (% of GDP)		Expenditure on public & private educational institutions per pupil/student (PPS for full-time equivalents)	
	2003	2008	2003	2008	2003	2008
<b>EU-27</b>	5.14	5.07	0.64	0.75	5 414	6 459
<b>EA-15</b>	5.03	4.97	:	:	:	:
BE	6.03	6.46	0.35	0.37	6 343	7 866
BG	4.23	4.61	0.67	0.58	1 692	2 840
CZ	4.51	4.08	0.37	0.57	3 354	4 520
DK	8.33	7.75	0.32	0.55	7 133	8 701
DE	4.70	4.55	0.92	0.70	6 005	6 953
EE	5.29	5.67	:	0.30	:	4 226
IE	4.38	5.62	0.31	0.34	5 279	7 172
EL <sup>(2)</sup>	3.56	:	0.20	:	3 778	:
ES	4.28	4.62	0.54	0.66	5 042	6 941
FR	5.90	5.58	0.56	0.60	6 038	7 031
IT	4.74	4.58	0.40	0.41	6 118	6 609
CY	7.29	7.41	1.35	1.35	5 968	8 461
LV	5.32	5.71	0.83	0.60	2 258	4 332
LT	5.16	4.91	0.46	0.52	2 183	3 622
LU <sup>(3)</sup>	3.77	3.15	:	:	:	:
HU <sup>(4)</sup>	5.89	5.10	0.56	0.54	:	3 995
MT <sup>(5)</sup>	4.70	6.01	1.40	0.31	4 272	6 220
NL	5.42	5.46	0.94	0.92	6 881	8 069
AT	5.57	5.46	0.31	0.50	7 604	8 836
PL	5.35	5.09	0.66	0.74	2 524	3 781
PT	5.57	4.89	0.09	0.49	4 287	4 979
RO <sup>(6)</sup>	3.45	4.25	:	0.50	:	:
SI	5.82	5.22	0.83	0.63	5 021	6 529
SK	4.30	3.59	0.45	0.70	2 325	3 523
FI	6.44	6.13	0.13	0.15	5 858	6 988
SE	7.30	6.74	0.19	0.17	6 825	8 067
UK	5.24	5.36	0.95	1.72	6 097	7 942
IS	7.71	7.57	0.70	0.71	6 727	8 290
LI	2.46	2.11	:	:	5 851	7 788
NO	7.54	6.51	0.10	0.09	8 275	10 084
CH	6.00	5.37	0.62	0.56	:	:
HR	3.96	4.33	:	0.36	:	4 147
MK	3.39	:	:	:	:	:
TR <sup>(7)</sup>	2.96	2.86	0.04	:	:	:
JP	3.70	3.44	1.25	1.66	6 682	7 530
US	5.61	5.40	2.05	2.10	9 924	11 759

<sup>(1)</sup> Refer to the Internet metadata file ([http://epp.eurostat.ec.europa.eu/cache/ITY\\_SDDS/en/educ\\_esms.htm](http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/educ_esms.htm)).

<sup>(2)</sup> Expenditure per pupil/student, 2007 instead of 2008.

<sup>(3)</sup> Excludes tertiary education; public expenditure, 2007 instead of 2008.

<sup>(4)</sup> Private expenditure and expenditure per pupil/student, 2006 instead of 2008.

<sup>(5)</sup> Private expenditure and expenditure per pupil/student, break in series.

<sup>(6)</sup> 2007 instead of 2008.

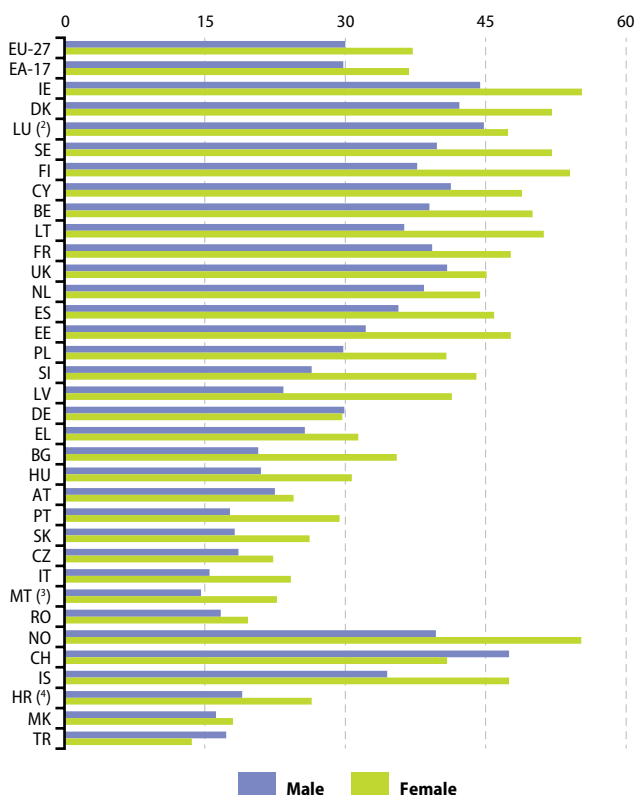
<sup>(7)</sup> 2006 instead of 2008.

Source: Eurostat (online data codes: [educ\\_figdp](#), [tps00068](#) and [tps00067](#)), UNESCO, OECD

## 4.4 Tertiary education

Since the introduction of the Bologna process (see the introduction for [education and training](#)) a major expansion in higher education systems has taken place, accompanied by significant reforms in degree structures and quality assurance systems. However, the financial and economic crisis has affected higher education in different ways, with some countries investing more and others making radical cutbacks in their education spending.

**Figure 4.4:** Proportion of the population aged 30 to 34 having a tertiary educational attainment, 2010 <sup>(1)</sup> (%)



<sup>(1)</sup> Ranked on the average shares for males and females combined; refer to the Internet metadata file ([http://epp.eurostat.ec.europa.eu/cache/ITY\\_SDDS/en/educ\\_esms.htm](http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/educ_esms.htm)).

<sup>(2)</sup> Provisional.

<sup>(3)</sup> Male proportion, unreliable or uncertain data; female proportion, provisional.

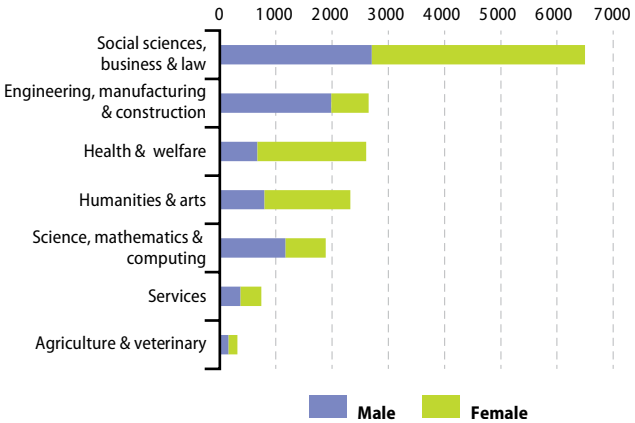
<sup>(4)</sup> Unreliable or uncertain data.

Source: Eurostat (online data code: [t2020\\_41](#))



Just over one third (33.6 %) of the population aged 30 to 34 in the EU-27 had a tertiary education in 2010, rising to over one third (37.2 %) among women, and falling to 30.0 % among men.

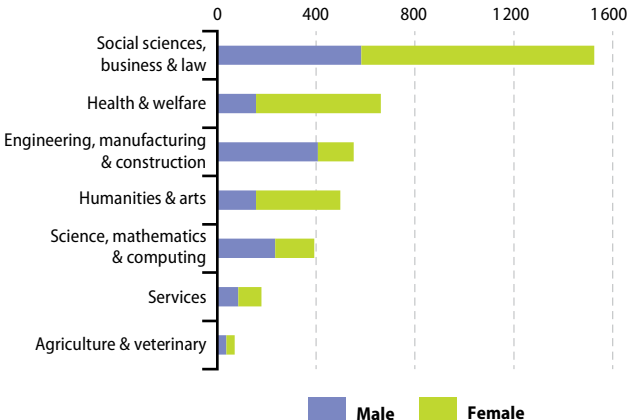
**Figure 4.5:** Students in tertiary education, by field of education and sex, EU-27, 2009 <sup>(1)</sup>  
(1 000)



<sup>(1)</sup> Refer to the Internet metadata file ([http://epp.eurostat.ec.europa.eu/cache/ITY\\_SDDS/en/educ\\_esms.htm](http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/educ_esms.htm)).

Source: Eurostat (online data code: [educ\\_enr15](#))

**Figure 4.6:** Graduates from tertiary education, by field of education and sex, EU-27, 2009 <sup>(1)</sup>  
(1 000)



<sup>(1)</sup> Refer to the Internet metadata file ([http://epp.eurostat.ec.europa.eu/cache/ITY\\_SDDS/en/educ\\_esms.htm](http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/educ_esms.htm)).

Source: Eurostat (online data code: [educ\\_grad5](#))

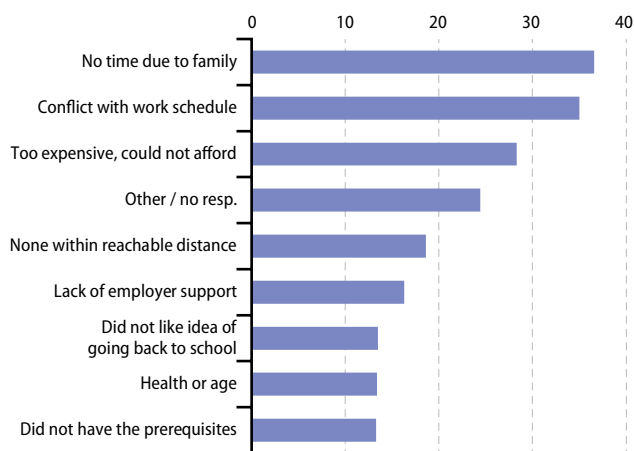
## 4.5 Lifelong learning

In 2010, the proportion of persons aged 25 to 64 in the EU receiving some form of education or training in the four weeks preceded the labour force survey was 9.1 %; a share that was 0.7 percentage points lower than the corresponding share for 2005.

Lifelong learning encompasses all purposeful learning activity, whether formal, non-formal or informal, undertaken on an ongoing basis with the aim of improving knowledge, skills and competence. The intention or aim to learn is the critical point that distinguishes these activities from non-learning activities, such as cultural activities or sports activities. The information collected relates to all subjects whether they are relevant or not for the respondent's current or possible future job.

Lifelong learning can take place in a variety of environments, both inside and outside formal education and training systems. Lifelong learning implies investing in people and knowledge; promoting the acquisition of basic skills, including **digital literacy** and broadening opportunities for innovative, more flexible forms of learning. The aim is to provide people of all ages with equal and open access to high-quality learning opportunities, and to a variety of learning experiences.

**Figure 4.7:** Obstacles to participation in education and training, EU, 2007 <sup>(1)</sup>  
(%)



<sup>(1)</sup> Multiple answers allowed; Denmark, Ireland, France, Luxembourg, Malta and Romania are not included in the EU average; refer to the Internet metadata file ([http://epp.eurostat.ec.europa.eu/cache/ITY\\_SDDS/en/trng\\_aes\\_esms.htm](http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/trng_aes_esms.htm)).

Source: Eurostat (online data code: [trng\\_aes\\_176](#))

**Table 4.4: Lifelong learning, 2005 and 2010 <sup>(1)</sup>**  
 (% of population aged 25 to 64 participating in education and training)

	Total		Male		Female	
	2005	2010	2005	2010	2005	2010
<b>EU-27</b>	9.8	9.1	9.0	8.3	10.5	10.0
<b>EA-17</b>	8.1	7.9	7.9	7.5	8.4	8.3
BE	8.3	7.2	8.2	7.0	8.5	7.4
BG	1.3	1.2	1.3	1.1	1.2	1.3
CZ	5.6	7.5	5.2	7.3	5.9	7.7
DK	27.4	32.8	23.6	26.3	31.2	39.3
DE	7.7	7.7	8.0	7.7	7.4	7.6
EE <sup>(2)</sup>	5.9	10.9	4.3	8.6	7.3	13.0
IE	7.4	6.7	6.2	6.3	8.6	7.2
EL	1.9	3.0	1.9	3.1	1.8	2.9
ES <sup>(3)</sup>	10.5	10.8	9.7	10.0	11.4	11.6
FR	7.1	5.0	7.0	4.6	7.2	5.4
IT	5.8	6.2	5.4	5.9	6.2	6.5
CY <sup>(3)</sup>	5.9	7.7	5.4	7.5	6.3	7.9
LV	7.9	5.0	5.0	3.4	10.6	6.5
LT	6.0	4.0	4.2	3.2	7.7	4.8
LU <sup>(3)</sup>	8.5	13.4	8.5	12.8	8.5	14.0
HU	3.9	2.8	3.2	2.6	4.6	2.9
MT	5.3	5.7	6.1	5.2	4.5	6.1
NL <sup>(3)</sup>	15.9	16.5	15.6	15.9	16.1	17.1
AT	12.9	13.7	12.3	12.7	13.5	14.7
PL	4.9	5.3	4.3	4.8	5.4	5.9
PT	4.1	5.8	4.0	5.8	4.2	5.7
RO	1.6	1.3	1.5	1.2	1.6	1.4
SI	15.3	16.2	13.6	14.1	17.2	18.3
SK	4.6	2.8	4.3	2.2	5.0	3.3
FI	22.5	23.0	19.0	18.9	26.1	27.1
SE <sup>(3)</sup>	17.4	24.5	13.0	18.0	21.9	31.1
UK <sup>(3)</sup>	27.6	19.4	23.1	16.4	32.0	22.4
IS	25.7	25.2	21.6	21.1	29.8	29.4
NO	17.8	17.8	16.3	16.4	19.3	19.2
CH <sup>(3)</sup>	27.0	30.6	27.4	31.6	26.5	29.6
HR <sup>(4)</sup>	2.1	2.0	2.0	2.2	2.1	1.8
MK	:	3.2	:	3.1	:	3.4
TR	:	2.5	:	2.6	:	2.4

<sup>(1)</sup> Refer to the Internet metadata file ([http://epp.eurostat.ec.europa.eu/cache/ITY\\_SDDS/en/lfsi\\_edu\\_a\\_esms.htm](http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/lfsi_edu_a_esms.htm)).

<sup>(2)</sup> 2005 male rate, unreliable or uncertain data.

<sup>(3)</sup> Break in series.

<sup>(4)</sup> 2010 male and female rates, unreliable or uncertain data.

Source: Eurostat (online data codes: [tsiem080](#) and [trng\\_lfs\\_01](#))



## Labour market

**Labour market** statistics measure the involvement of individuals, households and businesses in the labour market, where the former mainly appear offering their labour in return for remuneration while the latter act as employers. The market outcomes – for example **employment**, **unemployment**, vacant posts, wage levels, **labour costs** – heavily affect not only the economy, but directly the personal life of virtually every citizen.

Labour market statistics are at the heart of many **European Union (EU)** policies following the introduction of an employment chapter into the **Amsterdam Treaty** in 1997. The **European employment strategy (EES)** seeks to create more and better jobs throughout the EU.

The **Europe 2020 strategy for smart, sustainable and inclusive growth** put forward by the **European Commission** is the EU's growth strategy for the coming decade. As part of the flagship initiatives, '**An agenda for new skills and jobs**' and '**Youth on the move**', (youth) **unemployment** and **employment** rates will be targeted through a range of policies, including proposals aimed at **education** and training institutions, or measures for the creation of a (work) environment conducive to higher activity rates and higher labour productivity. There are also initiatives aimed at facilitating the entry of young people into the labour market.

## 5.1 Employment

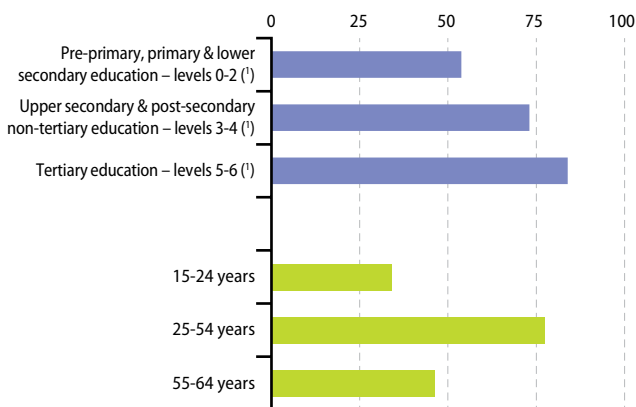
The **employment rate**, in other words the proportion of the working age population in employment, is a key social indicator.

The **EU-27** employment rate for older workers (aged between 55 and 64) reached 46.3 % in 2010. In contrast to overall employment rates, the 2010 employment rate for older workers was higher than in the previous year (46.0%), and this extended an unbroken series of increases in this rate starting in 1998 when the rate was 36.2 %.

Employment rates vary considerably according to **levels of educational attainment**: for statistics on this issue employment rates are based on the age group 25 to 64 rather than 15 to 64. The employment rate of those who had completed a **tertiary education** was 83.9 % across the EU-27 in 2010, much higher than the rate (53.8 %) for those who had attained a **primary or lower secondary education**. The EU-27 employment rate of persons with an upper secondary or post-secondary non-tertiary education was 73.1 %.

In March 2010, the **European Commission** launched the **Europe 2020 strategy** for smart, sustainable and inclusive growth; this was formally adopted by the **European Council** in June 2010. The European Council agreed on five headline targets, the first being to raise the employment rate for women and men aged 20 to 64 years old to 75 % by 2020.

**Figure 5.1:** Employment rate – by highest level of education attained (ISCED 1997) and age, EU-27, 2010 (%)



(¹) Covers all persons aged 25 to 64 years.

Source: Eurostat (online data code: [lfsa\\_ergaed](#) and [lfsi\\_emp\\_a](#))

**Table 5.1: Employment rates, 2010**  
(%)

	Employment rate (age group 15-64)			Employment rates by age group		
	Total	Male	Female	15-24	25-54	55-64
<b>EU-27</b>	64.2	70.1	58.2	34.1	77.6	46.3
<b>EA-17</b>	64.2	70.4	57.9	33.9	77.3	45.8
BE	62.0	67.4	56.5	25.2	80.0	37.3
BG	59.7	63.0	56.4	22.2	75.7	43.5
CZ	65.0	73.5	56.3	25.2	82.2	46.5
DK	73.4	75.8	71.1	58.1	83.2	57.6
DE	71.1	76.0	66.1	46.2	81.5	57.7
EE	61.0	61.5	60.6	25.7	74.8	53.8
IE	60.0	63.9	56.0	30.5	70.3	50.0
EL	59.6	70.9	48.1	20.4	73.3	42.3
ES	58.6	64.7	52.3	24.9	69.6	43.6
FR	64.0	68.3	59.9	30.8	81.8	39.7
IT	56.9	67.7	46.1	20.5	71.1	36.6
CY	69.7	76.6	63.0	33.8	82.5	56.8
LV	59.3	59.2	59.4	26.4	73.4	48.2
LT	57.8	56.8	58.7	19.2	73.8	48.6
LU	65.2	73.1	57.2	21.2	82.3	39.6
HU	55.4	60.4	50.6	18.3	72.5	34.4
MT	56.0	72.3	39.2	44.8	68.7	30.2
NL	74.7	80.0	69.3	63.0	84.7	53.7
AT	71.7	77.1	66.4	53.6	84.2	42.4
PL	59.3	65.6	53.0	26.3	77.1	34.0
PT	65.6	70.1	61.1	28.5	79.2	49.2
RO	58.8	65.7	52.0	24.3	74.4	41.1
SI	66.2	69.6	62.6	34.1	83.7	35.0
SK	58.8	65.2	52.3	20.6	75.8	40.5
FI	68.1	69.4	66.9	38.8	81.6	56.2
SE	72.7	75.1	70.3	38.7	85.0	70.5
UK	69.5	74.5	64.6	47.6	79.8	57.1
IS	78.2	80.1	76.2	61.7	82.9	79.8
NO	75.3	77.3	73.3	51.4	84.7	68.6
CH	78.6	84.6	72.5	62.5	85.8	68.0
HR	54.0	59.4	48.8	23.2	71.2	37.6
MK	43.5	52.8	34.0	15.4	55.8	34.2
TR	46.3	66.7	26.2	30.0	55.4	29.6
JP	70.1	80.0	60.1	:	:	:
US	66.7	71.1	62.4	:	:	:

Source: Eurostat (online data code: [lfsi\\_emp\\_a](#))

## 5.2 Unemployment

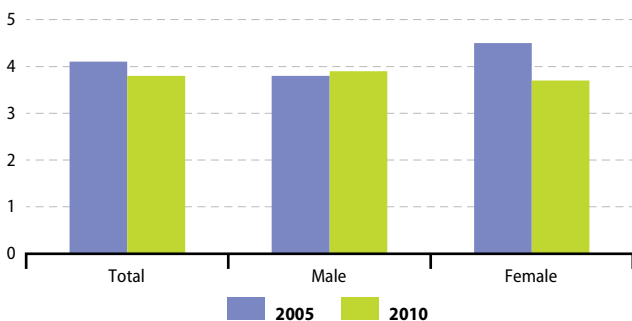
In the wake of the financial and economic crisis the level of unemployment climbed rapidly in the EU-27, increasing by 6.3 million persons between 2008 and 2010 to reach 23.2 million persons. As such, the **impact of the economic crisis on unemployment** more than wiped out the steady contraction in unemployment during the period from 2004 to 2008.

The youth unemployment rate in the EU-27 was more than double the unemployment rate for the whole population throughout the last decade. The EU-27 youth unemployment rate was systematically higher than in the euro area between 2000 and 2007; since this date, these two rates were almost identical.

Since the start of 2008, male and female unemployment rates in the EU-27 have converged and by the second quarter of 2009 the male unemployment rate was higher than that for women. This small difference between unemployment rates by sex continued in 2010, when the rate for men was 9.7 % – just 0.1 percentage points higher than for women.

Long-term unemployment is one of the main concerns of policy-makers. Apart from its financial and social effects on personal life, long-term unemployment negatively affects social cohesion and, ultimately, may hinder economic growth. In total, 3.8 % of the labour force in the EU-27 in 2010 had been unemployed for more than one year; almost half of these, 1.8 % of the labour force, had been unemployed for more than two years.

**Figure 5.2:** Long-term unemployment rate, EU-27, 2005 and 2010 (%)



Source: Eurostat (online data code: [une\\_ltu\\_a](#))



**Table 5.2:** Unemployment rate, 2005 and 2010  
(%)

	Total		Male		Female		Less than 25 years
	2005	2010	2005	2010	2005	2010	2010
<b>EU-27</b>	9.0	9.6	8.3	9.7	9.8	9.6	20.9
<b>EA-17</b>	9.1	10.1	8.2	9.9	10.3	10.3	20.7
BE	8.5	8.3	7.6	8.1	9.5	8.5	22.4
BG	10.1	10.2	10.3	10.9	9.8	9.5	23.2
CZ	7.9	7.3	6.5	6.4	9.8	8.5	18.3
DK	4.8	7.4	4.4	8.2	5.3	6.6	13.8
DE	11.2	7.1	11.4	7.5	10.9	6.6	9.9
EE	7.9	16.9	8.8	19.5	7.1	14.3	32.9
IE	4.4	13.7	4.6	16.9	4.1	9.7	27.8
EL	9.9	12.6	6.1	9.9	15.3	16.2	32.9
ES	9.2	20.1	7.1	19.7	12.2	20.5	41.6
FR	9.3	9.7	8.4	9.4	10.3	10.2	23.3
IT	7.7	8.4	6.2	7.6	10.1	9.7	27.8
CY	5.3	6.5	4.3	6.4	6.5	6.7	17.8
LV	8.9	18.7	9.1	21.7	8.7	15.7	34.5
LT	8.3	17.8	8.2	21.2	8.3	14.5	35.1
LU	4.6	4.5	3.6	4.0	6.0	5.3	16.1
HU	7.2	11.2	7.0	11.6	7.4	10.7	26.6
MT	7.2	6.8	6.4	6.6	8.9	7.2	12.9
NL	5.3	4.5	4.9	4.4	5.8	4.5	8.7
AT	5.2	4.4	4.9	4.6	5.5	4.2	8.8
PL	17.8	9.6	16.6	9.3	19.2	10.0	23.7
PT	8.6	12.0	8.1	11.8	9.1	12.2	27.7
RO	7.2	7.3	7.8	7.9	6.4	6.5	22.1
SI	6.5	7.3	6.1	7.5	7.1	7.1	14.7
SK	16.3	14.4	15.5	14.2	17.2	14.6	33.6
FI	8.4	8.4	8.2	9.1	8.6	7.6	21.4
SE	7.7	8.4	7.7	8.5	7.6	8.2	25.2
UK	4.8	7.8	5.2	8.6	4.3	6.8	19.6
NO	4.5	3.5	4.7	4.0	4.3	3.0	8.9
HR	12.7	11.8	11.6	11.0	13.9	12.8	30.7
TR	9.2	10.7	9.1	10.4	9.3	11.4	19.7
JP	4.4	5.1	4.6	5.4	4.2	4.6	9.3
US	5.1	9.6	5.1	10.5	5.1	8.6	18.4

Source: Eurostat (online data code: [une\\_rt\\_a](#))

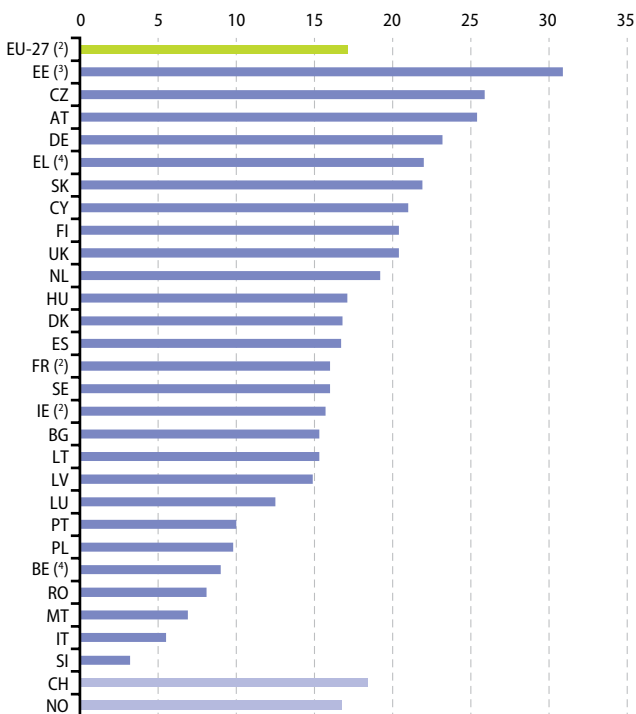
## 5.3 Wages and labour costs

The level and structure of wages and labour costs are important macro-economic indicators used by policymakers, employers and trade unions to assess [labour market](#) supply and demand conditions.

Despite some progress, there remains an important gap between the average earnings of men and women in the EU-27. Various effects may contribute to these [gender pay gaps](#), such as: differences in [labour force](#) participation rates, differences in the occupations and activities that tend to be male- or female-dominated, differences in the degrees to which men and women work on a part-time

**Figure 5.3:** Gender pay gap, 2009 <sup>(1)</sup>

(% difference between average gross hourly earnings of male and female employees, as % of male gross earnings, unadjusted form)



<sup>(1)</sup> Enterprises with ten or more persons employed; NACE Rev. 2 Sections B to S excluding O.

<sup>(2)</sup> Provisional.

<sup>(3)</sup> NACE Rev. 1.1 Sections C to O excluding L; 2007.

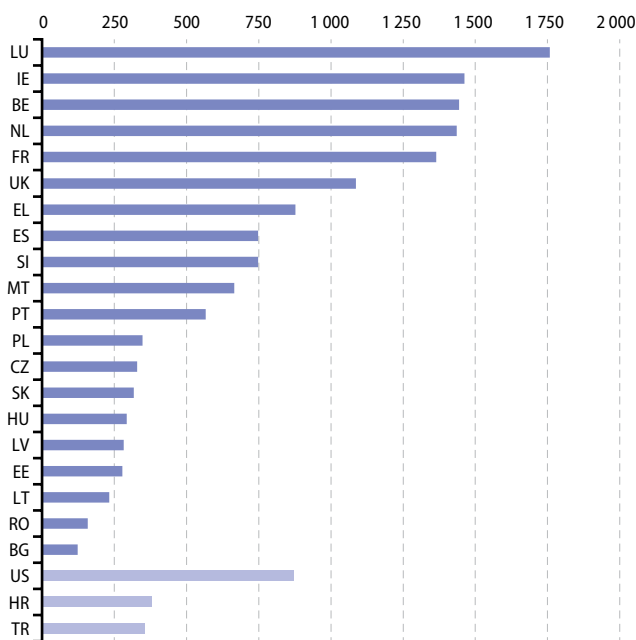
<sup>(4)</sup> 2008.

Source: Eurostat (online data code: [tsiem040](#))

basis, as well as the attitudes of personnel departments within private and public bodies towards career development and unpaid/maternity leave.

In July 2011, 20 of the EU's 27 Member States (all except Denmark, Germany, Italy, Cyprus, Austria, Finland and Sweden), as well as two [candidate countries](#) (Croatia and Turkey) had national legislation setting a [minimum wage](#) by statute or by national inter-sectoral agreement.

**Figure 5.4:** Minimum wage, 1 July 2011 <sup>(1)</sup>  
(EUR per month)



<sup>(1)</sup> Member States not shown: not applicable.

Source: Eurostat (online data code: [earn\\_mw\\_cur](#))

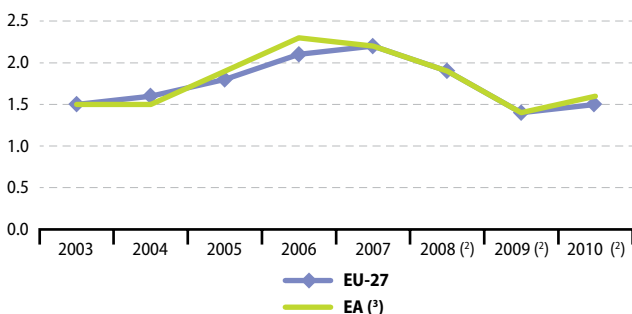
## 5.4 Job vacancies

The job vacancy rate, in part, reflects the unmet demand for labour, as well as potential mismatches between the skills and availability of those who are **unemployed** and those sought by employers. Job vacancy statistics are used by the **European Commission** and the **European Central Bank (ECB)** to analyse and monitor the evolution of the labour market at a national and European level. These statistics are also a key indicator for assessing the **business cycle** and for a structural analysis of the economy.

Policy developments in this area have mainly focused on trying to improve the labour market by more closely matching supply and demand, through:

- modernising and strengthening labour market institutions, notably employment services;
- removing obstacles to worker mobility across Europe;
- better anticipating skills needs, labour market shortages and bottlenecks;
- managing economic **migration**;
- improving the adaptability of workers and enterprises so that there is a greater capacity to anticipate, trigger and absorb economic and social change.

**Figure 5.5:** Job vacancy rate, 2003-2010 <sup>(1)</sup>  
(%)



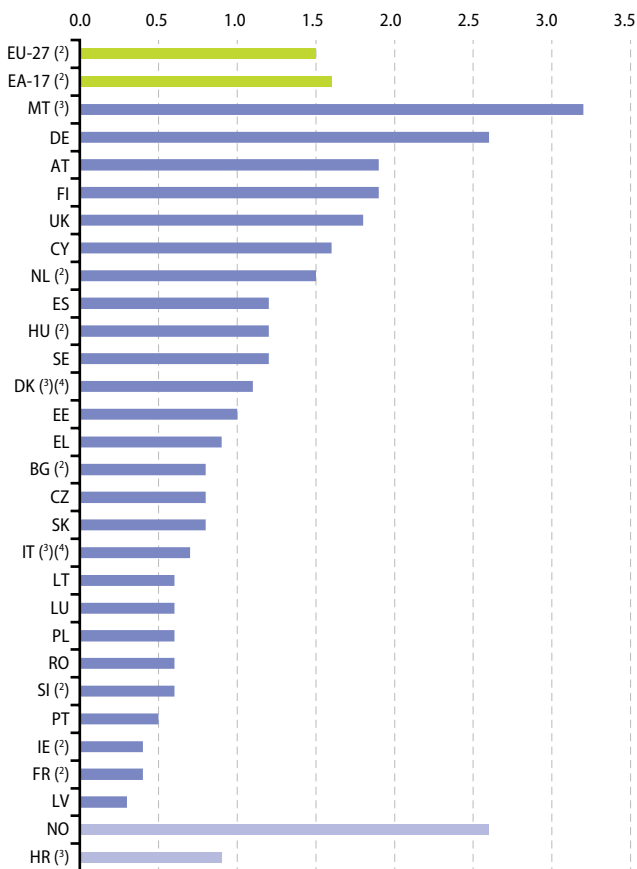
<sup>(1)</sup> NACE Rev. 1.1 Sections A to O for 2003-2008; NACE Rev. 2 Sections B to S for 2009 and 2010.

<sup>(2)</sup> Provisional.

<sup>(3)</sup> EA-16 for 2003-2008; EA-17 for 2009 and 2010.

Source: Eurostat (online data codes: [jvs\\_a\\_nace1](#) and [jvs\\_a\\_nace2](#))

**Figure 5.6: Job vacancy rate, 2010 <sup>(1)</sup>**  
(%)



<sup>(1)</sup> NACE Rev. 2 Sections B to S; Belgium, not available.

<sup>(2)</sup> Provisional.

<sup>(3)</sup> Enterprises with ten or more employees.

<sup>(4)</sup> NACE Rev. 2 Sections B to N.

Source: Eurostat (online data code: [jvs\\_a\\_nace2](#))

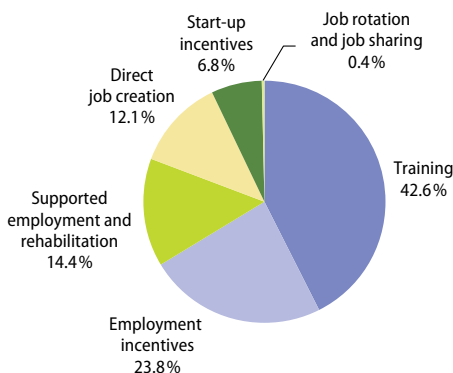
## 5.5 Labour market policy interventions

**Labour market policy (LMP)** interventions are generally targeted at providing assistance to the **unemployed** and other groups of people who face particular difficulties to enter the **labour market**. In most **EU** Member States the primary target group is people who are registered as unemployed by national public employment services. However, policy objectives aimed at increasing participation in the labour market are increasingly focused on a broader range of persons who are not formally unemployed but are often receiving some other form of social benefit and are believed to be capable of working given the right support and opportunities.

LMP measures mostly support the transition from **unemployment** or inactivity into **employment**, either: by improving employability through training or work experience; by providing incentives for employers to take on people from selected target groups; or by encouraging individuals to become **self-employed**.

Across the EU-27 there was an average of 10.5 million people participating in LMP measures at any point during 2009, only slightly more than in 2008 (10.3 million). Of these, around 4.3 million received employment incentives, which mostly involve the use of public funds to provide a fixed-term subsidy to employers who take on people from selected target groups, either into a regular job or into a specially arranged placement for work experience.

**Figure 5.7:** Public expenditure on labour market policy measures, EU-27, 2009 <sup>(1)</sup>  
(% of total)



<sup>(1)</sup> Estimates; figures do not sum to 100% due to rounding.

Source: Eurostat (online data code: [tps00077](#))

**Table 5.3:** Selected labour market policy measures, participants by type of action, 2009  
(annual average stock in 1 000)

	Training	Employment incentives	Supported employment & rehabilitation	Direct job creation	Start-up incentives
<b>EU-27 <sup>(1)</sup></b>	3 240.0	4 308.4	1 199.7	894.7	782.3
BE	126.4	226.4	37.2	159.3	1.4
BG <sup>(1)</sup>	6.1	7.7	0.9	43.4	2.6
CZ	4.5	2.8	26.0	2.4	3.2
DK <sup>(2)</sup>	64.9	30.8	66.5	–	–
DE <sup>(1)</sup>	801.4	259.7	43.5	295.5	147.4
EE	2.7	0.1	0.0	0.0	0.3
IE <sup>(1)</sup>	56.1	2.2	3.4	24.9	5.7
EL <sup>(2)</sup>	1.6	64.7	–	–	25.5
ES <sup>(1)</sup>	341.6	2 183.1	53.0	:	394.3
FR <sup>(1)(3)</sup>	580.8	533.8	145.3	224.6	145.3
IT <sup>(1)</sup>	730.5	582.0	–	20.9	–
CY <sup>(1)</sup>	0.4	6.4	0.2	–	–
LV	4.9	1.9	–	5.1	0.1
LT	5.4	:	0.2	2.7	–
LU <sup>(1)</sup>	0.8	14.0	0.1	0.9	–
HU	13.5	27.5	–	13.8	1.4
MT	0.5	0.1	–	0.1	0.0
NL <sup>(2)</sup>	178.3	27.8	154.7	–	–
AT <sup>(2)</sup>	113.1	69.1	1.9	7.4	3.5
PL <sup>(1)</sup>	3.1	141.1	602.8	11.1	6.7
PT <sup>(1)</sup>	81.6	79.4	5.6	31.7	6.1
RO	10.0	27.0	–	7.7	:
SI <sup>(2)</sup>	33.5	2.6	–	3.1	4.1
SK <sup>(1)</sup>	0.9	13.3	2.8	20.0	26.9
FI <sup>(2)</sup>	48.7	13.3	7.9	11.6	5.1
SE	10.5	87.4	44.2	–	2.8
UK <sup>(1)(4)</sup>	21.7	38.2	16.2	8.0	–
NO	25.2	4.8	14.3	10.3	0.3

<sup>(1)</sup> Includes some values that are incomplete (participant data available for >80 % but <100 % of expenditure).

<sup>(2)</sup> Includes estimates.

<sup>(3)</sup> Employment incentives, 2008.

<sup>(4)</sup> Training and supported employment & rehabilitation, 2008.

Source: Eurostat (online data code: [lmp\\_partsumm](#))





## Living conditions and social protection

[Eurostat](#) data on living conditions and social protection aim to show a comprehensive picture of the social situation in the [European Union \(EU\)](#), covering indicators related to income, housing, material deprivation, poverty, social exclusion and social protection.

The [Europe 2020 strategy for smart, sustainable and inclusive growth](#) put forward by the [European Commission](#) provides a growth strategy for the coming decade. A European platform against poverty will be one of the seven flagship initiatives of this strategy. The goals are to:

- ensure economic, social and territorial cohesion;
- guarantee respect for the fundamental rights of people experiencing poverty and social exclusion, and enable them to live in dignity and take an active part in society;
- mobilise support to help people integrate into the communities where they live, get training and help them to find a job and have access to social benefits.

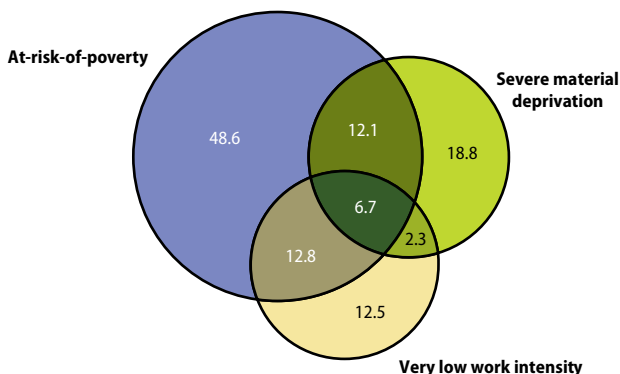
To measure progress in meeting the Europe 2020 goals, five headline targets to be met by 2020 have been agreed and translated into national targets in each EU Member State, reflecting different situations and circumstances. One of these targets is that for the EU as a whole there will be at least 20 million fewer people in or at-risk-of poverty and social exclusion by 2020. The [integrated economic and employment guidelines](#), first combined in 2008, were also revised as part of the Europe 2020 strategy. Guideline 10 concerns promoting social inclusion and combating poverty.

## 6.1 Social inclusion

As multi-dimensional concepts, poverty and social exclusion cannot easily be measured through statistics. As a result, both monetary and non-monetary indicators have been developed, such as the **at-risk-of-poverty rate**, the **at-risk-of-poverty threshold**, the **severe material deprivation rate** and the share of **people living in households with very low work intensity**. The **material deprivation rate** is defined as those persons who cannot afford to pay for at least three out of a list of nine specific items, while those who lack four or more of these items are considered to be **severely materially deprived**. The indicator covering people living in households with a very low work intensity is defined as those people aged 0 to 59 who are living in households where the adults worked less than 20 % of their total work potential during the year prior to the survey; these people are more likely to be exposed to social exclusion.

In 2009, 113.7 million people in the **EU-27** lived in households facing poverty or social exclusion, equivalent to 23.1 % of the entire population (see Table 6.1). These overall figures for the EU-27 conceal considerable variations between Member States. In Bulgaria and Romania more than two fifths of the population was considered to be at-risk-of-poverty or social exclusion in 2009, while in Latvia the share was above one third. The lowest proportions of the population considered to be at-risk-of-poverty or social exclusion in 2009 were observed in the Czech Republic, the Netherlands and Sweden.

**Figure 6.1:** Number of persons at-risk-of-poverty or social exclusion analysed by type of risks, EU-27, 2009 <sup>(1)</sup> (million)



<sup>(1)</sup> The sum of the data for the seven groups at-risk-of-poverty or social exclusion differs slightly from the total (published elsewhere) due to rounding.

Source: Eurostat (online data code: [ilc\\_pees01](#))

**Table 6.1:** Population at-risk-of-poverty or social exclusion, 2005 and 2009

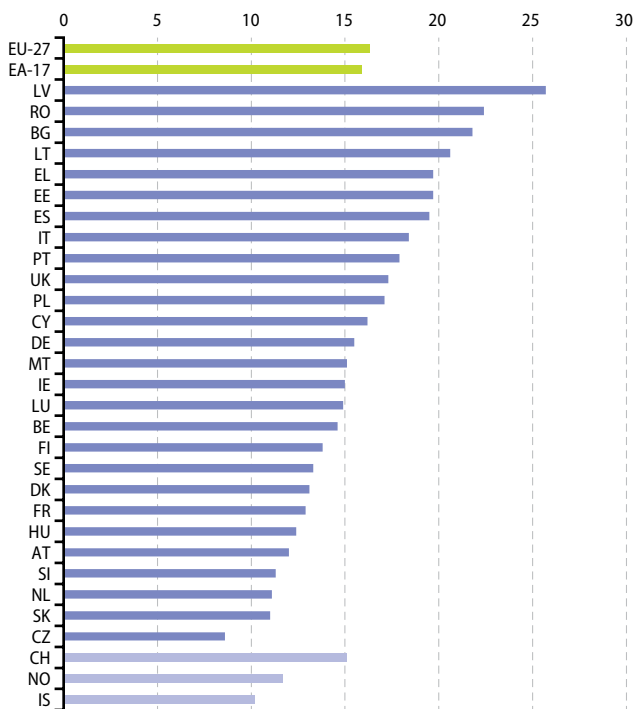
	Percentage of the total population (%)		Number of persons (1 000)	
	2005	2009	2005	2009
<b>EU-27</b>	26.0	23.1	123 893	113 668
<b>EA-17</b>	21.4	21.2	67 809	68 639
BE	22.6	20.2	2 338	2 145
BG <sup>(1)</sup>	:	46.2	:	3 511
CZ	19.6	14.0	1 988	1 448
DK	17.2	17.4	921	952
DE	18.4	20.0	15 022	16 217
EE	25.9	23.4	347	312
IE	25.0	25.7	1 038	1 150
EL	29.4	27.6	3 131	3 007
ES	23.4	23.4	10 045	10 652
FR <sup>(1)</sup>	18.9	18.4	11 127	11 155
IT	25.0	24.7	14 621	14 835
CY <sup>(1)</sup>	25.3	22.2	188	176
LV <sup>(1)</sup>	45.8	37.4	1 017	834
LT	41.0	29.5	1 400	985
LU	17.3	17.8	77	85
HU	32.1	29.6	3 185	2 924
MT	20.6	20.2	82	82
NL	16.7	15.1	2 705	2 483
AT	16.8	17.0	1 369	1 406
PL <sup>(1)</sup>	45.3	27.8	17 080	10 454
PT	26.1	24.9	2 745	2 648
RO	:	43.1	:	9 112
SI	18.5	17.1	362	339
SK	32.0	19.6	1 724	1 061
FI	17.2	16.9	886	886
SE	14.4	15.9	1 325	1 459
UK	24.8	21.9	14 530	13 351
IS	12.7	11.6	36	36
NO	16.2	15.2	746	731
CH	:	17.2	:	1 288

<sup>(1)</sup> Break in series, 2008.Source: Eurostat (online data code: [ilc\\_peps01](#))

## 6.2 Income distribution

The **at-risk-of-poverty threshold** is set at 60 % of the national **median equivalised disposable income**. It is often expressed in **purchasing power standards (PPS)** in order to take account of the differences in the cost of living across countries. It varied greatly in 2009 across the Member States from PPS 2 066 in Romania and PPS 3 452 in Bulgaria to a level between PPS 11 000 and PPS 12 000 in four Member States (Sweden, Austria, the Netherlands and Cyprus), peaking in Luxembourg above this range at PPS 16 226; the poverty threshold was also relatively high in Iceland, Norway and Switzerland (above PPS 12 000 in each of these countries). In 2009, 16.3 % of the EU-27 population was assessed to be **at-risk-of-poverty** (see Figure 6.2). This share, calculated as a weighted average of national results, conceals considerable variations between countries. In four of the EU Member States, namely Latvia (25.7 %),

**Figure 6.2:** At-risk-of-poverty rate, 2009 (%)



Source: Eurostat (online data code: [ilc\\_li02](#))

Romania (22.4%), Bulgaria (21.8%) and Lithuania (20.6%), more than one fifth of the population was assessed to be at-risk-of-poverty. The lowest proportions of persons at-risk-of-poverty were observed in the Czech Republic (8.6 %), Slovakia (11.0 %), the Netherlands (11.1 %) and Slovenia (11.3 %); Iceland (10.2 %) and Norway (11.7 %) also reported relatively low shares of their respective populations at-risk-of-poverty.

Different groups in society are more or less vulnerable to monetary poverty. There was a relatively small difference in the at-risk-of-poverty rate (after social transfers) between men and women in the EU-27 in 2009 (15.4 % compared with 17.1 % respectively).

**Table 6.2:** At-risk-of-poverty rate after social transfers, 2009 (%)

	Total	Male	Female
<b>EU-27</b>	16.3	15.4	17.1
<b>EA-17</b>	15.9	14.9	16.8
BE	14.6	13.4	15.7
BG	21.8	19.8	23.7
CZ	8.6	7.5	9.5
DK	13.1	13.0	13.3
DE	15.5	14.7	16.3
EE	19.7	17.5	21.6
IE	15.0	14.9	15.1
EL	19.7	19.1	20.2
ES	19.5	18.3	20.6
FR	12.9	12.0	13.7
IT	18.4	17.0	19.8
CY	16.2	14.4	17.9
LV	25.7	24.2	27.0
LT	20.6	19.1	21.9
LU	14.9	13.8	16.0
HU	12.4	12.8	12.1
MT	15.1	14.7	15.6
NL	11.1	10.8	11.3
AT	12.0	10.7	13.2
PL	17.1	16.9	17.4
PT	17.9	17.3	18.4
RO	22.4	21.4	23.4
SI	11.3	9.8	12.8
SK	11.0	10.1	11.8
FI	13.8	12.9	14.7
SE	13.3	12.0	14.5
UK	17.2	16.8	17.9
IS	10.2	9.3	11.1
NO	11.7	10.1	13.2
CH	15.1	13.5	16.7
HR	17.9	16.0	19.7

Source: Eurostat (online data code: [ilc\\_li02](#))

## 6.3 Housing

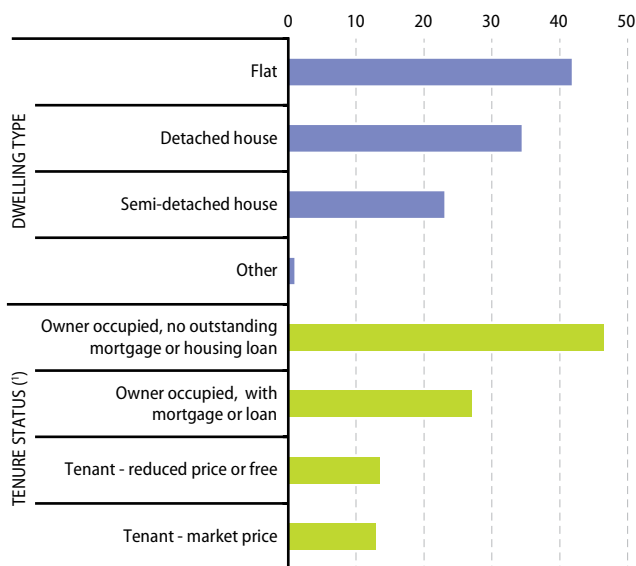
In 2009, 41.8% of the EU-27 population lived in flats, 34.4% in detached houses and 23.0% in semi-detached houses.

In 2009, over one quarter (27.1%) of the EU-27 population lived in an owner-occupied home for which there was an outstanding loan or mortgage, while close to half (46.5%) of the population lived in an owner-occupied home without a loan or mortgage. As such, a total of nearly three quarters (73.6%) of the population lived in owner-occupied dwellings, while 13.0% lived in dwellings with a market price rent, and 13.5% in reduced-rent or free accommodation.

One of the key dimensions in assessing the quality of housing conditions is the availability of sufficient space in the dwelling. The **overcrowding rate** describes the proportion of people living in an overcrowded dwelling, as defined by the number of rooms available to the **household**, the household's size, as well as its members' ages and family situation.

Some 17.7% of the EU-27 population lived in overcrowded dwellings in 2009 (see Figure 6.4).

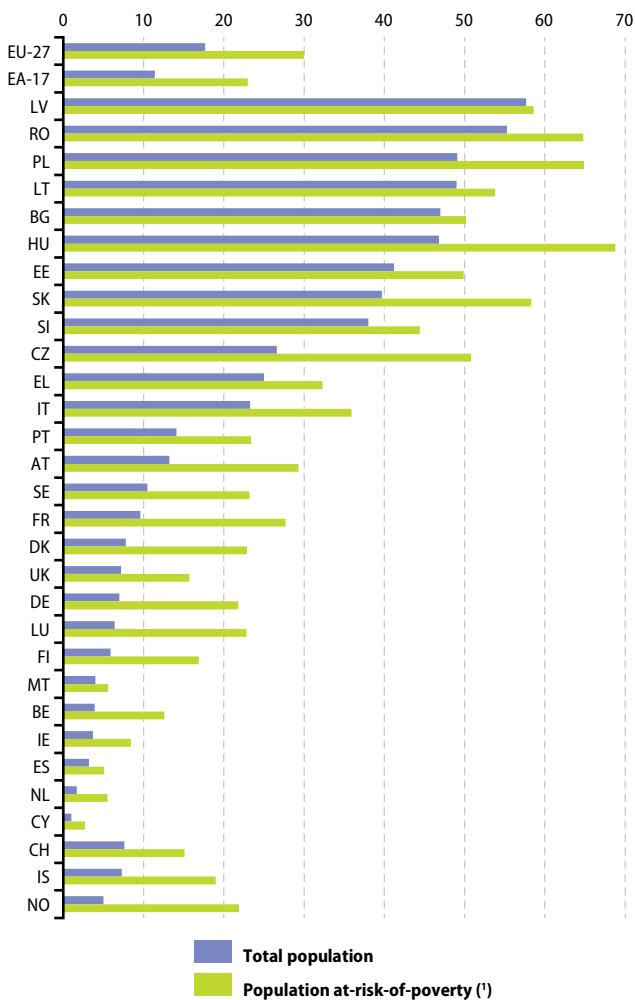
**Figure 6.3:** Dwelling type and tenure status, EU-27, 2009 (%)



(<sup>1</sup>) Estimates.

Source: Eurostat (online data code: [ilc\\_lvho01](#) and [ilc\\_lvho02](#))

**Figure 6.4:** Overcrowding rate, 2009  
(% of specified population)



(¹) Population below 60% of median equivalised income.

Source: Eurostat (online data code: [ilc\\_lvho05a](#))

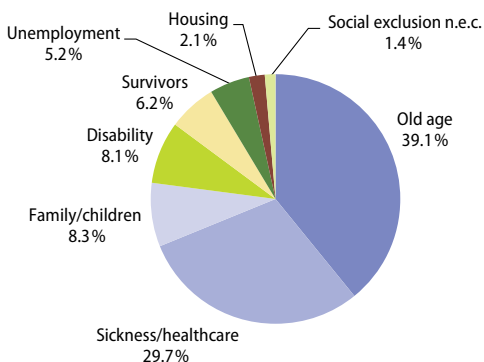
## 6.4 Social protection

**Social protection** encompasses all interventions from public or private bodies intended to relieve **households** and individuals of the burden of a defined set of risks or needs, provided that there is neither a simultaneous reciprocal nor an individual arrangement involved.

The highest share of **social protection benefits** (the largest component of social protection expenditure) was accounted for by old age and by sickness/**healthcare** benefits; together these two functions accounted for 68.8 % of total EU-27 social benefits in 2008 (see Figure 6.5). Benefits related to family/children, disability, survivors and **unemployment** ranged between 5 % and 8 % each, while housing accounted for 2.1 %.

**Expenditure on pensions** across the EU-27 was equivalent to 11.7 % of GDP in 2008, ranging from a high of 15.0 % in Italy to lows of 6.0 % in Ireland and Latvia (see Table 6.3). Expenditure on care for the elderly in the EU-27 accounted for 0.4 % of GDP in 2008, although Sweden reported a rate that was almost six times as high as the average; expenditure on the elderly fell to less than 0.1 % of GDP in Greece, Estonia, Belgium, Bulgaria, Romania and Cyprus.

**Figure 6.5:** Social benefits, EU-27, 2008 <sup>(1)</sup>  
(%, based on PPS)



<sup>(1)</sup> Provisional; figures do not sum to 100 % due to rounding.

Source: Eurostat (online data code: [spr\\_exp\\_sum](#))



**Table 6.3:** Expenditure on social protection, 2008

	Social protection		Expenditure on care for the elderly (% of GDP)	Expenditure on pensions (% of GDP)
	(PPS per inhabitant)	(% of GDP)		
<b>EU-27</b>	6 604	26.4	0.4	11.7
<b>EA-16</b>	8 108	27.5	:	12.4
BE	8 171	28.3	0.1	11.4
BG	1 661	15.5	0.0	7.0
CZ	3 774	18.7	0.5	8.5
DK	8 942	29.7	1.7	11.1
DE	7 998	27.8	0.2	12.3
EE	2 548	15.1	0.1	7.1
IE	7 460	22.1	0.3	6.0
EL	6 048	26.0	0.1	12.6
ES	5 846	22.7	0.5	9.3
FR	8 310	30.8	0.4	13.6
IT	7 090	27.8	0.1	15.0
CY	4 426	18.4	0.0	6.9
LV	1 803	12.6	0.2	6.0
LT	2 514	16.2	0.4	7.4
LU (¹)	14 057	20.1	:	8.3
HU	3 693	22.7	0.3	10.9
MT	3 637	18.9	0.5	9.3
NL	9 557	28.4	0.7	12.0
AT	8 763	28.2	1.0	13.9
PL	2 630	18.6	0.2	11.6
PT	4 791	24.3	0.3	13.2
RO	1 716	14.3	0.0	7.5
SI	4 921	21.5	0.2	9.6
SK	2 900	16.0	0.4	7.1
FI	7 724	26.3	0.7	10.7
SE	9 033	29.4	2.3	11.8
UK	6 895	23.7	0.6	8.7
IS	6 708	22.0	0.3	7.2
NO	10 642	22.4	1.6	7.6
CH	9 352	26.4	0.3	12.2

(¹) Expenditure on care for the elderly: not available as expenditure was recorded together with similar benefits under the disability function as the split between old-age and disability was not available.

Source: Eurostat (online data codes: [tps00100](#), [tps00098](#), [tsdde530](#) and [tps00103](#))

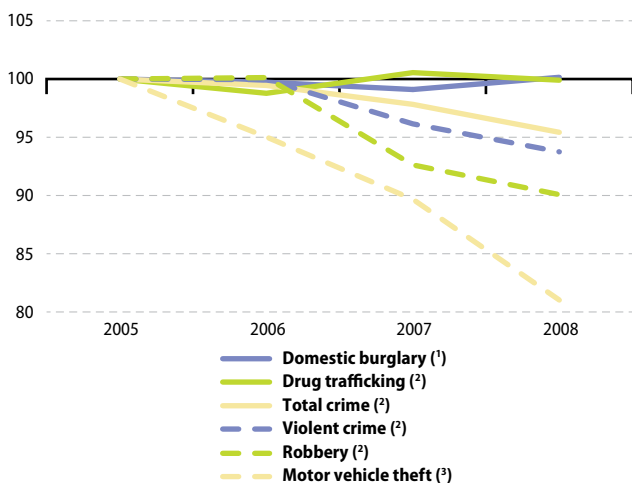
## 6.5 Crime

Comparisons of crime statistics between Member States ideally should focus on trends over time, rather than directly comparing levels between countries for a specific year, given that the data can be affected by a range of factors, including different levels of criminalisation, the efficiency of criminal justice systems, and police recording practices; furthermore, it is likely that a relatively high proportion of crime remains unrecorded.

There were an estimated 29 million crimes recorded by the police within the EU-27 in 2008 (see Table 6.4). From 2000, the number of recorded crimes in the EU-27 rose to a peak around 2003, but subsequently fell each year through to 2008. From the peak in recorded crime in the EU in 2003 through to 2008 the number of recorded crimes fell by 20 % or more in Poland, Malta, and England and Wales (within the United Kingdom). Figure 6.6 shows the development in the number of recorded crimes between 2005 and 2008: the most substantial fall in the number of reported crimes over this period concerned motor vehicle theft.

The EU-27 **prison population** rose by 1.2 % per annum during the period 1998 to 2008 to reach a total of close to 620 000, which equated to 124 prisoners per 100 000 members of the total population.

**Figure 6.6:** Offences recorded by the police, EU-27, 2005-2008 (2005 = 100)



(¹) Excluding Ireland, Latvia, the Netherlands and Slovenia.

(²) Excluding Estonia, Ireland, Latvia and the Netherlands.

(³) Excluding Ireland, Latvia and the Netherlands.

Source: Eurostat (online data code: [crim\\_gen](#))

**Table 6.4:** Crime indicators, 2008

	Police officers (units)	Crimes recorded by the police (1 000)	Prison population (units)
<b>EU-27 <sup>(1)</sup></b>	1 677 846	28 512	617 676
BE	38 068	993	9 858
BG	33 800	127	9 922
CZ	42 117	344	20 471
DK	10 743	477	3 530
DE	247 619	6 114	73 203
EE	3 218	51	3 656
IE <sup>(2)</sup>	14 411	103	2 872
EL <sup>(3)</sup>	50 798	417	10 864
ES	224 086	2 331	73 558
FR <sup>(4)</sup>	228 402	3 558	64 003
IT	245 152	2 710	58 127
CY	5 280	7	646
LV	8 410	57	6 873
LT	11 018	72	7 736
LU	1 555	28	673
HU	33 698	408	14 626
MT	1 884	14	444
NL <sup>(5)</sup>	35 463	1 215	14 734
AT	26 623	573	7 899
PL	100 648	1 082	84 549
PT	51 584	431	10 807
RO	50 339	289	26 212
SI	7 779	82	1 318
SK	14 059	105	8 313
FI	8 191	355	3 457
SE	18 321	1 378	6 806
UK			
England and Wales	140 230	4 702	83 194
Scotland	17 048	377	7 835
Northern Ireland	7 302	110	1 490
IS <sup>(3)</sup>	646	15	115
LI	83	1	78
NO	7 505	264	3 420
CH <sup>(3)</sup>	16 326	323	5 780
ME	:	8	1 255
HR	19 823	75	4 734
MK	9 905	28	2 235
TR	341 770	986	103 435
JP <sup>(2)</sup>	251 939	2 051	:
US	708 569	11 150	2 396 140

<sup>(1)</sup> Excluding French overseas departments and territories; crimes recorded by the police include 2006 data for Ireland and 2007 data for the Netherlands; prison population includes 2007 data for Greece.

<sup>(2)</sup> Crimes recorded by the police, 2006.

<sup>(3)</sup> Prison population, 2007.

<sup>(4)</sup> Excluding overseas departments and territories.

<sup>(5)</sup> Crimes recorded by the police, 2007.

Source: Eurostat (online data codes: [crim\\_plce](#), [crim\\_gen](#) and [crim\\_pris](#))



## Industry, trade and services

# 7

The [European Commission's](#) enterprise policies aim to create a favourable environment for business to thrive within the [European Union \(EU\)](#), thus creating higher [productivity](#), economic growth, jobs and wealth. Policies are aimed at reducing administrative burden, stimulating [innovation](#), encouraging [sustainable](#) production, and ensuring the smooth functioning of the EU's [internal market](#).

In October 2010 the European Commission presented a Communication on '[An industrial policy for the globalisation era](#)' (COM(2010) 614), which provides a blueprint to put industrial competitiveness and sustainability centre stage. This industrial policy establishes a strategic agenda and proposes some broad cross-sectoral measures, as well as tailor-made actions for specific industries, mainly targeting the so-called 'green innovation' performance of these sectors.

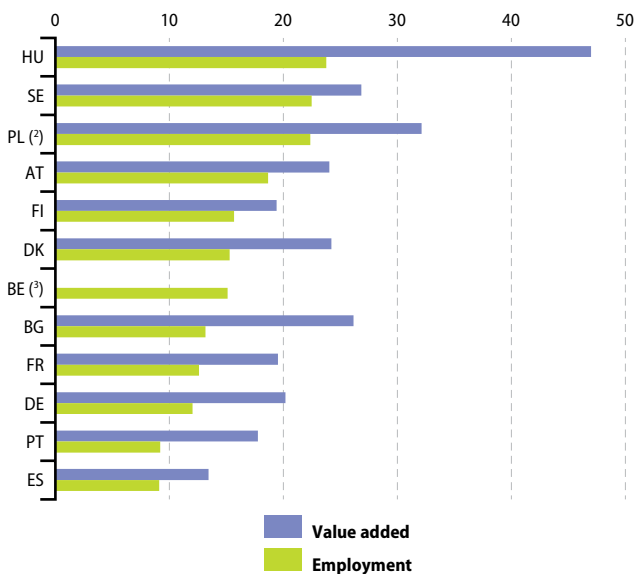
European Commission Communication titled, '[A digital agenda for Europe](#)' (COM(2010) 245) outlines policies and actions aimed at maximising the benefit of the digital era to all sections of society. The agenda outlines seven priority areas for action – see the subchapter on [information society](#) for more detail.

## 7.1 Structural business statistics

In 2008 a total of EUR 6 155 700 million of gross value added was generated in the EU-27's non-financial business economy (industry, construction, distributive trades and non-financial services), which was equivalent to 63.4% of the whole economy's value added at factor cost. The non-financial business economy workforce reached 136.3 million persons employed, around three fifths (60.2%) of those employed in the EU-27. Among the NACE Rev. 2 sections in the non-financial business economy, manufacturing was the largest in terms of employment and value added. Some 2.1 million manufacturing enterprises generated EUR 1 669 500 million of value added in 2008, whilst providing employment for about 33.0 million persons.

In general, foreign-controlled enterprises are few in number, but due to their larger than average size they have a significant economic impact. In those Member States for which data are available (see Figure 7.1),

**Figure 7.1:** Share of value added and employment accounted for by foreign controlled enterprises, non-financial business economy, 2008 <sup>(1)</sup> (%)



<sup>(1)</sup> No data available for Member States not shown.

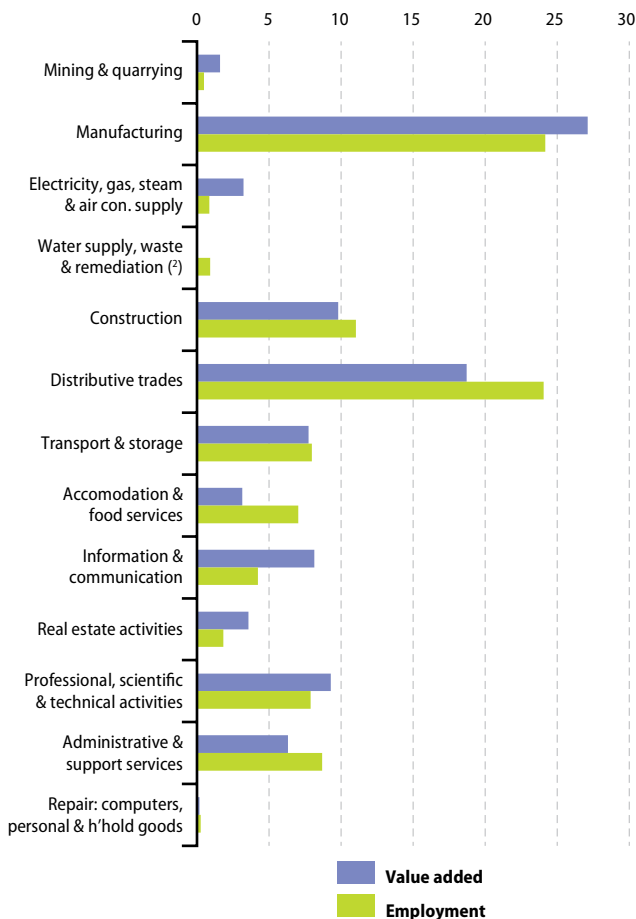
<sup>(2)</sup> A size threshold is applied excluding enterprises below the threshold.

<sup>(3)</sup> Value added, not available.

Source: Eurostat (online data code: [fats\\_g1a\\_08](#))

foreign-controlled enterprises generated substantial shares of value added in the non-financial business economy: the highest percentage contribution of foreign-controlled enterprises to non-financial business economy value added in 2008 was registered in Hungary where it reached 47.0 %, while shares in excess of 25 % were recorded for Poland, Sweden and Bulgaria.

**Figure 7.2:** Breakdown of non-financial business economy value added and employment, EU-27, 2008 <sup>(1)</sup>  
(% of non-financial business economy value added and employment)



<sup>(1)</sup> Estimates.

<sup>(2)</sup> Value added, not available.

Source: Eurostat (online data codes: [sbs\\_na\\_ind\\_r2](#), [sbs\\_na\\_con\\_r2](#), [sbs\\_na\\_dt\\_r2](#) and [sbs\\_na\\_1a\\_se\\_r2](#))

## 7.2 Industrial production

**PRODCOM** is the name given to the EU's system of industrial production statistics which covers mining and quarrying and manufactured products.

PRODCOM covers mining and quarrying as well as manufacturing, in other words, **NACE** Rev. 2 Sections B and C. PRODCOM statistics are based on a list of products called the PRODCOM List which consists of about 3 900 headings and is revised every year. Products are detailed at an 8-digit level – only information at this detailed level can be found in the PRODCOM database, as production data for different products cannot always be meaningfully aggregated.

Table 7.2 shows the level of production in the EU-27 for a selection of products. As can be seen, transport equipment products (within Divisions 29 and 30) dominated the list of the most sold manufacturing products in the EU-27 in value terms in 2010, occupying the top two places with a number of further products among the top 15 shown, while there were also several manufactured food products (within Division 10) and a couple of fabricated metal products (Division 25).

**Table 7.1:** Quantity of production sold, selected products, EU-27, 2010

PRODCOM code	Product	Quantity (million)	Rounding base (million) (¹)	Unit
12.00.11.50	Cigarettes containing tobacco or mixtures of tobacco and tobacco substitutes (excluding tobacco duty)	691 236		p/st
18.12.14.21	Printed children's picture, drawing or colouring books	41		kg
20.11.11.70	Oxygen	30 540		m³
23.51.12.10	Portland cement	155 125		kg
28.29.22.10	Fire extinguishers	13		p/st
29.32.30.40	Road wheels and parts and accessories thereof	1 320	30	kg
32.50.13.11	Syringes, with or without needles, used in medical, surgical, dental or veterinary sciences	10 092		p/st
32.91.12.70	Brushes for the application of cosmetics	1 740	30	p/st
32.99.12.10	Ball-point pens	1 744		p/st
32.99.12.30	Felt-tipped and other porous-tipped pens and markers	1 862		p/st

(¹) Indicates the magnitude of the rounding employed to protect confidential cell (in the case of PRODCOM code 29.32.30.40, the confidential value lies within the range +/- 30 million kg of the reported value).

Source: Eurostat, from [http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search\\_database](http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database) go to Data Navigation Tree/Database by themes/Industry, trade and services/Statistics on the production of manufactured goods (prom)/NACE Rev. 2 (prodcom\_n2)/Prodcom Annual Sold (NACE Rev. 2.) (DS-066341)



As well as data by value, information on the physical quantity (also referred to as volume) of production sold during the survey period is also requested. Table 7.1 shows the quantity of production sold for a selection of products.

**Table 7.2:** Production sold in value terms, selected products, EU-27, 2010

PRODCOM code	Product	Value (EUR million)	Rounding base (million) (¹)
29.10.22.30	Motor vehicles with a petrol engine > 1 500 cm <sup>3</sup>	113 175	
29.10.23.30	Motor vehicles with a diesel or semi-diesel engine > 1 500 cm <sup>3</sup> but ≤ 2 500 cm <sup>3</sup>	100 000	20 000
21.20.13.80	Other medicaments of mixed or unmixed products, p.r.s., n.e.c.	75 591	
10.00.00.Z1	Prepared and preserved meat, meat offal or blood, including prepared meat and offal dishes	48 575	
29.32.30.90	Other parts and accessories, n.e.c., for vehicles of HS 87.01 to 87.05; parts thereof	45 000	9 000
10.90.10.Z0	Preparations for animal feeds other than dog and cat food	38 382	
29.10.21.00	New vehicles with spark-ignition engine of a cylinder capacity ≤ 1 500 cm <sup>3</sup>	34 024	
11.05.10.00	Beer from malt other than non-alcoholic and low-alcohol beer, excluding alcohol duty	32 000	1 000
25.11.23.60	Other structures of iron or steel	28 274	
29.32.20.90	Parts and accessories of bodies (including cabs), n.e.c.	28 098	
10.71.11.00	Fresh bread	27 691	
30.30.50.90	Parts for all types of aircraft excluding propellers, rotors, under carriages, for civil use	22 995	
25.62.20.00	Metal parts (excluding turned metal parts)	21 062	
10.51.40.50	Grated, powdered, blue-veined and other non-processed cheese	20 000	5 000
17.21.13.00	Cartons, boxes and cases, of corrugated paper or paperboard	19 128	

(¹) Indicates the magnitude of the rounding employed to protect confidential cell (in the case of PRODCOM code 29.10.23.30, the confidential value lies within the range +/- EUR 20 000 million of the reported value).

Source: Eurostat, from [http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search\\_database](http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database) go to Data Navigation Tree/Database by themes/Industry, trade and services/Statistics on the production of manufactured goods (prom)/NACE Rev. 2 (prodcom\_n2)/Prodcom Annual Sold (NACE Rev. 2.) (DS-066341)

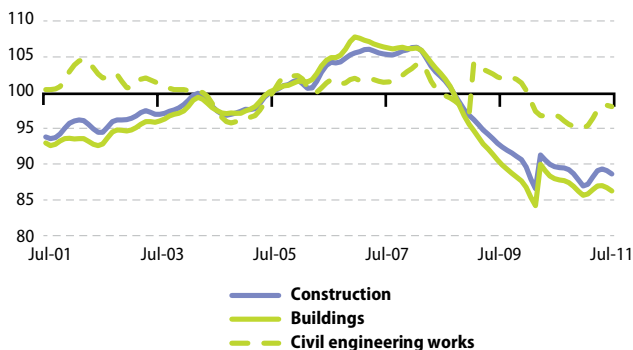
## 7.3 Industry and construction – short-term developments

**Short-term business statistics (STS)** are provided in the form of indices that allow the most rapid assessment of the economic climate within industry and construction, providing a first assessment of recent developments for a range of activities. STS show developments over time, and so may be used to calculate rates of change, typically showing comparisons with the month or quarter before, or the same period of the previous year.

The impact of the financial and economic crisis and the subsequent recovery of the EU-27's industrial economy can be clearly seen in the main industrial indicators. The downturn in industrial activity was widespread across the EU, illustrated by the fact that every Member State recorded lower output in 2009 than in 2008, with falls ranging from –3.7% in Poland to –23.9% in Estonia (see Table 7.3). The subsequent recovery was also widespread, as only Cyprus and Greece recorded a further contraction in activity during 2010, with growth rates peaking at 20.3% in Estonia.

Although slightly less in magnitude, the downturn in activity for construction within the EU-27 lasted longer than for industry. Construction output in the EU-27 peaked in March 2007 and fell gradually for five months. This initial downturn was followed by a slight, temporary recovery until January 2008, after which substantial

**Figure 7.3:** Index of production, construction, EU-27, 2001-2011 <sup>(1)</sup>  
(2005 = 100)



<sup>(1)</sup> Trend-cycle; estimates.

Source: Eurostat (online data code: [sts\\_copr\\_m](#))

falls were recorded, reaching a low in February 2010, just under three years after the initial downturn. Between January 2008 and February 2010 the index of production for construction in the EU-27 fell by 18.6 % overall, deteriorating to a level not seen since June 1998.

**Table 7.3:** Annual growth rates for the index of industrial production, 2006-2010 <sup>(1)</sup>  
(%)

	2006	2007	2008	2009	2010
<b>EU-27</b>	4.1	3.7	-1.7	-13.7	6.9
<b>EA-17</b>	4.2	3.9	-1.6	-14.7	7.5
BE	4.3	6.4	3.7	-9.4	11.9
BG	6.1	9.5	0.4	-18.2	2.2
CZ	8.7	10.1	-2.2	-12.9	9.9
DK	4.1	-2.1	-1.1	-15.0	1.9
DE	5.7	6.1	-0.1	-16.3	10.9
EE	10.1	6.4	-4.8	-23.9	20.3
IE	3.2	5.2	-2.2	-4.5	7.3
EL	0.8	2.3	-4.2	-9.2	-6.6
ES	3.9	2.0	-7.3	-15.8	0.9
FR	1.1	1.3	-2.8	-12.5	5.2
IT	3.6	1.8	-3.5	-18.8	6.4
CY	0.6	4.5	4.0	-8.6	-1.8
LV	6.5	1.1	-3.3	-17.6	14.5
LT	6.6	2.5	5.1	-14.6	6.5
LU	2.5	-0.7	-5.3	-15.8	10.5
HU	10.6	8.1	-1.0	-17.4	10.3
MT	8.7	9.1	-9.1	-13.8	7.3
NL	1.5	2.3	1.4	-7.6	7.1
AT	7.7	5.9	1.2	-11.2	6.6
PL	12.3	9.2	2.4	-3.7	10.8
PT	3.2	0.1	-4.1	-8.5	1.6
RO	9.6	10.5	3.0	-6.4	5.5
SI	6.3	7.4	1.6	-17.6	6.4
SK	15.6	16.9	3.2	-13.7	18.9
FI	10.1	4.7	1.0	-18.1	5.5
SE	3.6	3.9	-2.9	-17.9	8.7
UK	0.5	0.3	-3.1	-10.0	2.7
NO	-2.1	-1.3	0.3	-3.6	-5.4
CH	7.8	9.5	1.2	-7.7	6.1
HR	4.3	5.0	0.6	-8.9	-1.5
TR	7.1	7.5	-0.8	-10.0	13.9

<sup>(1)</sup> Working day adjusted.

<sup>(2)</sup> Gross series.

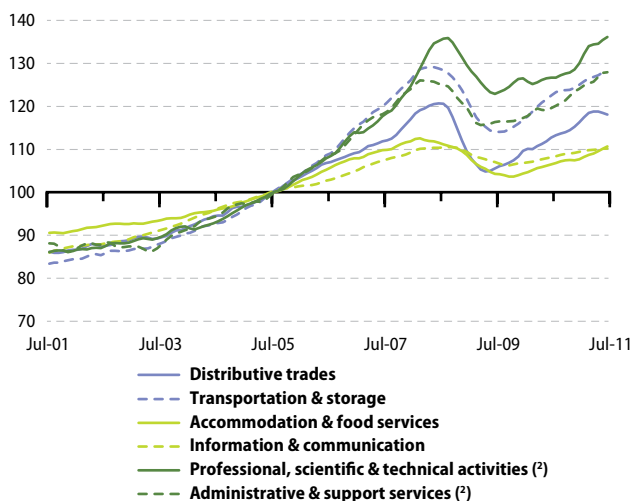
Source: Eurostat (online data code: [sts\\_inprgr\\_a](#))

## 7.4 Services – short-term developments

Services turnover fell by 8.5 % in the EU-27 in 2009 compared with the year before but rebounded in 2010 increasing by 5.0 %. Among service activities (at the NACE Rev. 2 section level), the fastest rates of turnover growth in 2010 were recorded for transportation and storage activities, as well as distributive trades, where turnover grew by around 6 % having fallen by more than 9 % in 2009.

Among the services for which an EU-27 price index is shown in Figures 7.5a and 7.5b two stand out as having atypical developments – telecommunications and sea and coastal water transport. Since 2006 (the beginning of the series) EU-27 output prices for telecommunications have been on a steady downward path and in just over five years they fell by a total of 18.2 %. Output prices for sea and coastal water transport are remarkable for their relatively high volatility, although the net impact of these movements was that prices in the first quarter of 2011 were within 0.3 % of their level at the beginning of the series. Most of the other services recorded overall price increases in a range of 6 % to 12 % during the five years shown, with air transport output prices increasing at a faster pace, rising by an amount close to 15 %.

**Figure 7.4:** Index of turnover, selected service activities, EU-27, 2001-2011 <sup>(1)</sup>  
(2005 = 100)

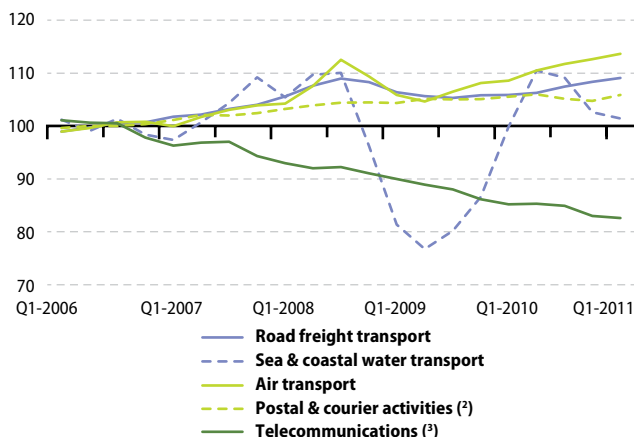


<sup>(1)</sup> Trend cycle; estimates.

<sup>(2)</sup> As required by the STS Regulation.

Source: Eurostat (online data codes: [sts\\_trtu\\_m](#) and [sts\\_setu\\_m](#))

**Figure 7.5a:** Output price indices, selected service activities, EU-27, 2006-2011 <sup>(1)</sup>  
(2006 = 100)



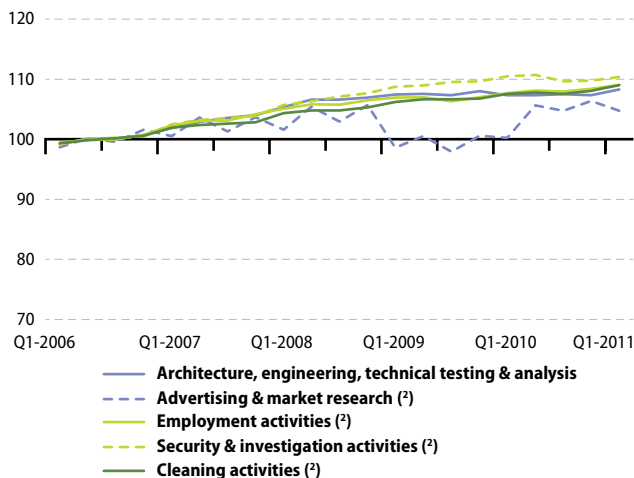
<sup>(1)</sup> Gross series.

<sup>(2)</sup> 2006 to 2009, estimates.

<sup>(3)</sup> 2006 to 2008, estimates.

Source: Eurostat (online data code: [sts\\_sepp\\_q](#))

**Figure 7.5b:** Output price indices, selected service activities, EU-27, 2006-2011 <sup>(1)</sup>  
(2006 = 100)



<sup>(1)</sup> Gross series.

<sup>(2)</sup> 2006 to 2009, estimates.

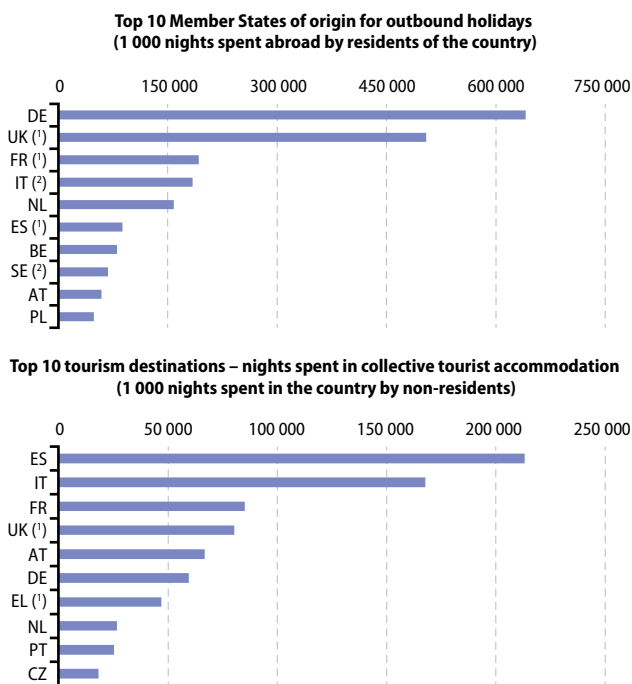
Source: Eurostat (online data code: [sts\\_sepp\\_q](#))

## 7.5 Tourism

German residents spent 640.6 million nights in collective accommodation establishments outside of Germany in 2010, while residents of the United Kingdom spent 504.3 million nights abroad; residents of these two Member States accounted for almost half (49.4 %) of the total number of nights spent abroad by EU-27 residents.

The number of nights spent (by residents and non-residents) can be put into perspective by making a comparison with the size of the country in population terms, providing an indicator of **tourism intensity**. In 2010, using this measure, the Mediterranean island destinations of Malta and Cyprus, as well as the alpine and city trip destination of Austria were the most popular tourist destinations in the EU-27 (see Table 7.4).

**Figure 7.6:** Top ten Member States for outbound and for inbound tourism, 2010



<sup>(1)</sup> Estimate based on monthly or quarterly data.

<sup>(2)</sup> 2009.

Source: Eurostat (online data codes: [tour\\_dem\\_tnw](#), [tour\\_dem\\_tnq](#), [tour\\_occ\\_ninat](#) and [tour\\_occ\\_nim](#))

**Table 7.4:** Tourism indicators, 2010

	Nights spent in hotels and similar establishments (1 000) <sup>(1)</sup>	Tourism intensity (nights spent per inhabitant) <sup>(2)</sup>	Tourism receipts relative to GDP (%) <sup>(3)</sup>
<b>EU-27</b>	919 522	4.5	0.6
<b>EA-17</b>	764 396	5.8	:
BE	16 170	2.8	2.2
BG	10 547	2.1	7.6
CZ	18 366	3.5	3.4
DK	8 982	4.9	1.8
DE	59 659	4.0	1.1
EE	3 204	3.5	5.7
IE	17 727	6.8	2.0
EL	47 007	5.7	4.2
ES	213 350	7.9	3.8
FR	85 191	4.4	1.8
IT	167 839	6.3	1.9
CY	12 448	17.2	9.5
LV	1 912	1.3	2.7
LT	1 571	0.8	2.8
LU	2 076	4.5	7.7
HU	9 358	1.9	4.2
MT	7 266	18.4	13.2
NL	26 800	5.1	1.7
AT	66 838	11.7	4.9
PL	10 065	1.5	2.0
PT	25 386	4.2	4.4
RO	2 767	0.7	0.7
SI	4 680	4.1	4.9
SK	3 750	1.9	2.6
FI	5 005	3.6	1.2
SE	11 185	5.1	2.4
UK	80 373	4.1	1.4
IS	2 090	9.2	4.6
LI	150	4.6	:
NO	7 882	5.9	1.1
CH	20 416	4.7	2.8
HR	33 235	8.4	13.9
MK	575	0.6	:
TR	:	:	2.9
JP	:	:	0.2
US	:	:	0.9

<sup>(1)</sup> Nights spent by residents and non-residents; Ireland, Greece and the United Kingdom, monthly data was used to estimate the annual figures; Ireland, Luxembourg, Norway and the former Yugoslav Republic of Macedonia, 2009.

<sup>(2)</sup> Ratio of nights spent by residents and non-residents in collective tourism accommodation per inhabitant; EU-27 and EA-17 estimates made for the purpose of this publication, based on annual and quarterly data; Ireland, Greece and the United Kingdom, monthly data was used to estimate the annual figures; Ireland and Luxembourg, 2009.

<sup>(3)</sup> EU-27, extra-EU-27 flows; euro area, extra EA-17 flows; the Netherlands, Finland, Turkey and the United States, quarterly data was used to estimate the annual figures; Iceland, Norway, Switzerland, Croatia and Japan, 2009.

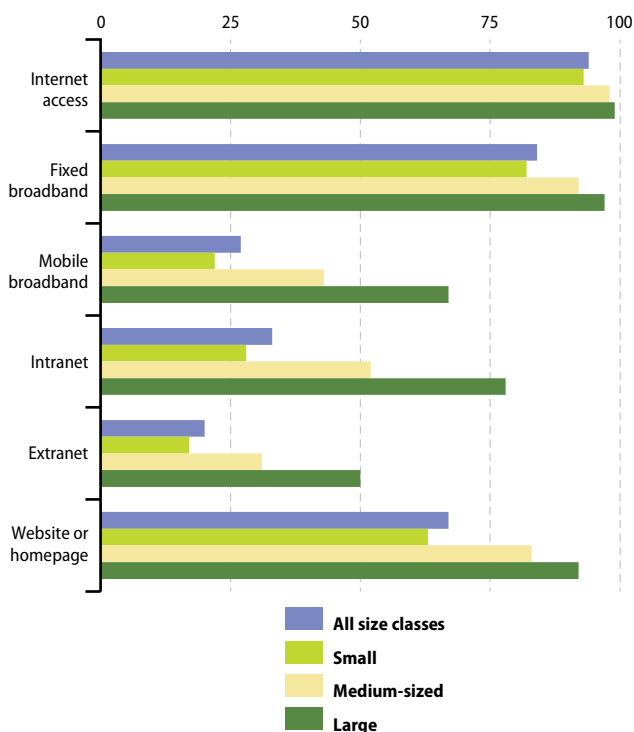
Source: Eurostat (online data codes: [tour\\_occ\\_ninat](#), [tour\\_occ\\_nim](#), [tps00001](#), [bop\\_its\\_deth](#), [bop\\_its\\_det](#), [bop\\_q\\_c](#) and [nama\\_gdp\\_c](#))

## 7.6 Information society

During the last decade, ICT have become widely available to the general public, both in terms of accessibility as well as cost. A boundary was crossed in 2007, when a majority (54 %) of **households** in the EU-27 had **internet access**. This proportion continued to increase and in 2010 reached 70 %. The highest proportion (91 %) of households with internet access in 2010 was recorded in the Netherlands, the lowest (33 %) in Bulgaria (see Figure 7.8).

Only about one in 20 of all **enterprises** in the EU-27 did not have internet access as of the beginning of 2010 (see Figure 7.7). Around two thirds (67 %) of all enterprises in the EU-27 had their own website and this proportion rose to 92 % among **large enterprises**.

**Figure 7.7:** Enterprise use of information technology, by size-class, EU-27, January 2010  
(% of enterprises)

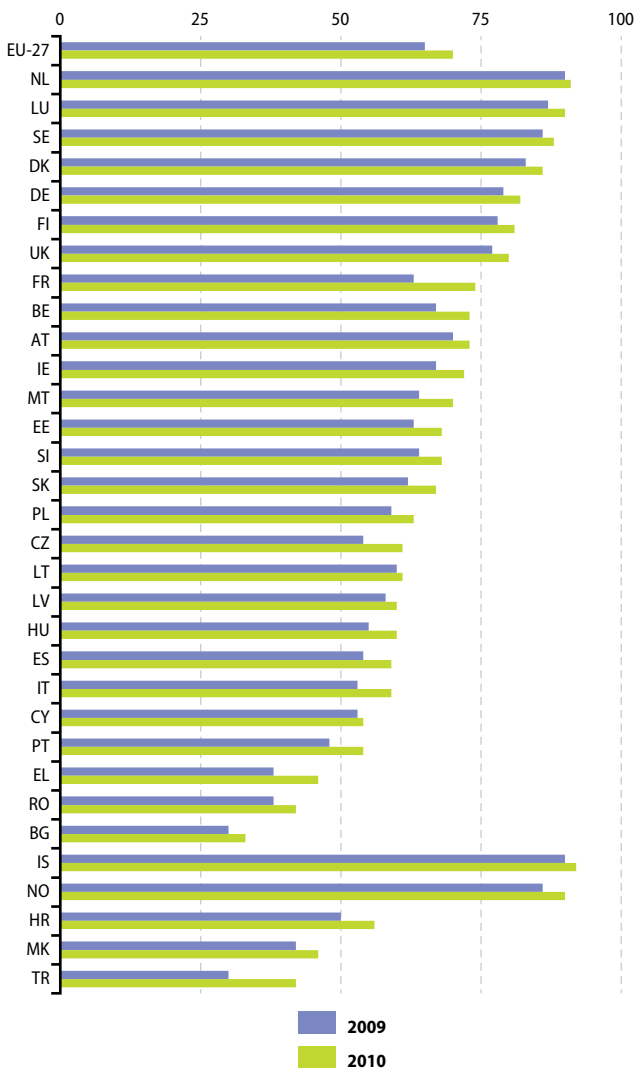


Source: Eurostat (online data codes: [isoc\\_ci\\_in\\_en2](#), [isoc\\_ci\\_it\\_en2](#) and [isoc\\_ci\\_cd\\_en2](#))



By 2010, the proportion of enterprises with internet access exceeded 90% in all Member States except Romania, Bulgaria and Cyprus, while in each of the Member States except Romania, Bulgaria and Latvia more than half of all enterprises had a website.

**Figure 7.8:** Internet access of households, 2009-2010  
(% of all households)

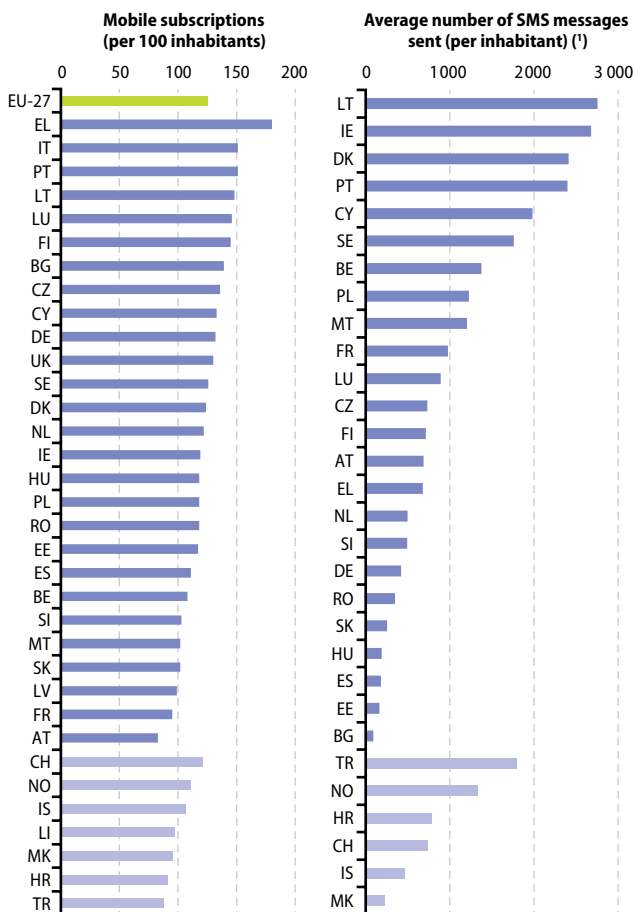


Source: Eurostat (online data code: [tsiir040](#))

## 7.7 Telecommunications

The share of the total telecommunications market accounted for by fixed-line voice operations has shrunk. Growth has been concentrated in mobile telephony markets and other data services. In 2008, the **incumbent** ex-monopoly service providers in fixed telecommunications markets accounted for more than two fifths of international calls across those Member States for which data are available

**Figure 7.9:** Mobile phone subscriptions and the use of SMS, 2009



(¹) Italy, Latvia and the United Kingdom, not available; France, provisional; Norway, 2008.

Source: Eurostat (online data codes: [tin00060](#), [isoc\\_tc\\_sms](#) and [tps00001](#))

(see Table 7.5), a share that reached 85 % in Malta. The share of the leading operator in the mobile market was relatively low at 38 % in the EU-27 in 2010, varying between 31 % in Poland and 76 % in Cyprus.

The average number of **mobile phone subscriptions** per 100 inhabitants stood at 125 in the EU-27 in 2009 (see Figure 7.9). It surpassed parity (100) in 24 of the Member States, where there were more subscriptions than inhabitants; the Member States where rates were below 100 subscriptions per 100 inhabitants were Austria, France and Latvia.

**Table 7.5:** Market share of incumbents in fixed telecommunications and leading operators in mobile telecommunications, 2007-2010 (% of total market)

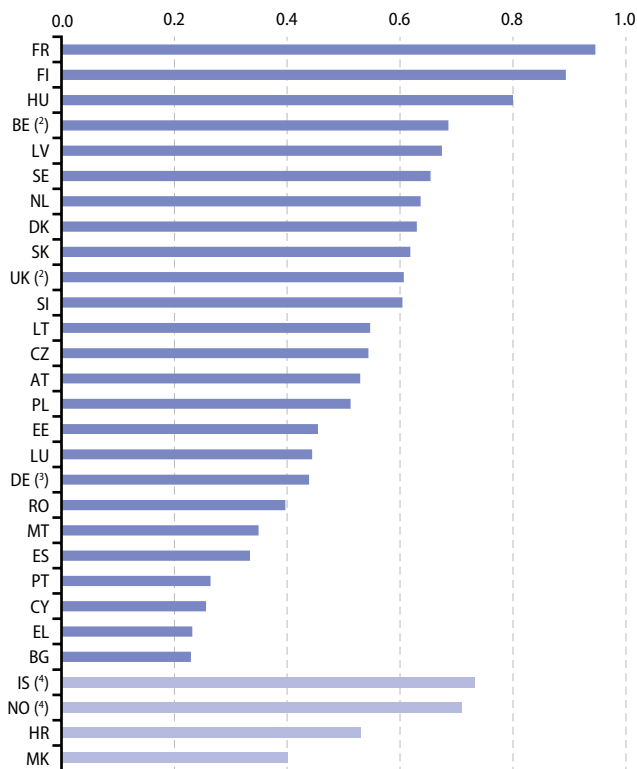
	Fixed telecommunications: international calls		Leading operator in mobile telecommunications		
	2007	2008	2007	2008	2010
<b>EU-27</b>	:	:	40	39	38
BE	62	62	45	43	43
BG	86	82	53	49	52
CZ	50	52	42	40	38
DK	:	:	40	46	41
DE	:	:	37	36	33
EE	:	:	45	47	46
IE	56	54	45	42	41
EL	74	:	38	43	54
ES	68	55	46	45	44
FR	57	56	43	44	41
IT	44	47	40	39	33
CY	79	69	89	85	76
LV	65	69	35	53	49
LT	77	79	41	39	40
LU	:	:	57	54	51
HU	:	:	44	44	45
MT	92	85	47	53	48
NL	:	:	48	38	39
AT	58	52	40	42	41
PL	66	63	36	33	31
PT	:	:	46	48	44
RO	69	62	44	45	43
SI	79	75	67	72	56
SK	89	80	51	55	48
FI	:	:	41	40	38
SE	43	48	43	43	41
UK	48	44	24	25	34

Source: Eurostat (online data codes: [tsier070](#) and [tsier080](#)), National Regulatory Authorities

## 7.8 Postal services of universal service providers

The purpose of EU policy in the postal sector is to complete the internal market for postal services and to ensure, through an appropriate regulatory framework, that efficient, reliable and good quality postal services are available throughout the EU for all citizens and enterprises at affordable prices. The importance of postal services both for the economic prosperity and social well-being and cohesion of the EU make this a priority area for EU action.

**Figure 7.10:** Number of persons employed in the domestic postal sector as a share of total employment, 2009 <sup>(1)</sup> (%)



<sup>(1)</sup> Ireland and Italy, not available; Germany and Slovakia, estimates.

<sup>(2)</sup> 2008 instead of 2009.

<sup>(3)</sup> 2009, data relate to the leading operator.

<sup>(4)</sup> 2007 instead of 2009.

Source: Eurostat (online data codes: [post\\_ps\\_empn](#) and [nama\\_aux\\_pem](#))

Fundamental aspects of the EU's postal policy include a desire to improve the quality of service made available, in particular in terms of delivery performance and convenient access.

The ongoing process of liberalisation has brought about a gradual reduction of reserved postal services. Most of the Member States were due to reach a state of complete liberalisation of their postal sectors as of 1 January 2011 while the remainder have a deadline to do so by 1 January 2013.

**Table 7.6:** Key economic indicators for the postal sector, 2004 and 2009

	Domestic turnover (EUR million)		Domestic employment (number)	
	2004	2009	2004	2009
BE	2 001	2 200	32 311	:
BG	29	30	9 134	8 543
CZ	396	:	31 681	28 431
DK <sup>(1)</sup>	1 482	1 511	28 349	18 049
DE <sup>(2)</sup>	14 076	12 200	201 541	177 000
EE <sup>(3)</sup>	42	42	4 222	2 631
IE	515	581	7 502	:
EL	402	448	10 412	11 037
ES	1 855	1 833	63 779	64 037
FR	11 998	:	283 945	241 835
IT	3 973	:	:	:
CY	30	31	942	1 006
LV	20	53	7 080	6 600
LT	19	40	8 164	7 744
LU	146	:	1 485	1 563
HU	269	357	27 713	31 987
MT	:	20	625	570
NL	2 660	2 658	58 000	55 176
AT	1 668	2 447	26 058	21 598
PL	922	1 239	75 986	80 977
PT	608	613	14 844	13 235
RO	:	340	36 073	36 525
SI	128	169	5 645	5 941
SK	:	168	13 990	13 500
FI	1 035	:	22 570	22 000
SE	2 753	2 184	34 299	29 242
UK	9 837	:	184 299	:
IS	53	:	1 257	:
NO	1 104	:	19 650	:
HR	115	161	9 838	8 515
MK	:	22	:	2 215

<sup>(1)</sup> Employment, break in series, 2009.

<sup>(2)</sup> 2009, data relate to the leading operator.

<sup>(3)</sup> Employment, break in series, 2008.

Source: Eurostat (online data codes: [post\\_ps\\_tur](#) and [post\\_ps\\_emptn](#))



## Agriculture, forestry and fisheries

Agriculture was one of the first sectors of the economy (following coal and steel) to receive the attention of the [European Union \(EU\)](#) policymakers. Article 39 of the [Treaty of Rome](#) on the EEC (1957) set out the objectives for the first [common agricultural policy \(CAP\)](#); these were focused on increasing agricultural productivity as a way to ensure a fair standard of living for the agricultural community, stabilising markets, and ensuring security of supply at affordable prices for consumers.

The 2003 reform introduced a new system of direct payments, known as the single payment scheme, under which aid is no longer linked to production (decoupling). The single payment scheme aims to guarantee farmers more stable incomes. In 2008 further changes were made, building on the reform package from 2003, such that all aid to the agricultural sector will be decoupled by 2012.

The European Commission has started a process of reviewing agricultural policy within the context of the Europe 2020 strategy and has already conducted a public debate and released proposals for legislative changes. It is expected that these will be introduced progressively following debate within the European Parliament and that a revised agricultural policy will be in place by 2013.

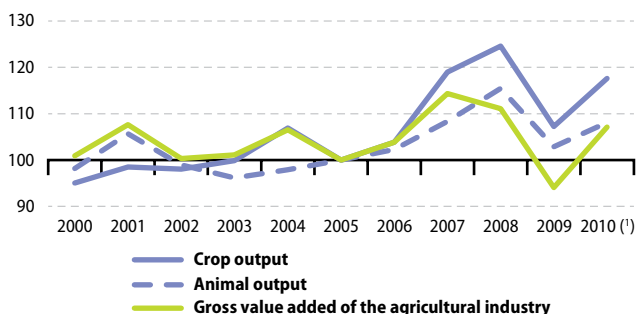
## 8.1 Agricultural output, price indices and income

The EU-27's agricultural industry generated EUR 138 721 million of gross value added at producer prices in 2010, which represented a 13.9% increase in relation to the previous year. There were increases in both the value of **crop output** (up 9.7% to EUR 185 186 million in 2010) and **animal output** (up 5.1% to EUR 138 903 million); these were partly compensated for by a modest increase in the value of **intermediate consumption** of goods and services (up 3.2%).

The output of agricultural activity includes output sold (including trade in agricultural goods and services between agricultural units), changes in stocks, output for own final use (own final consumption and own-account gross fixed capital formation), output produced for further processing by agricultural producers, as well as intra-unit consumption of livestock feed products. The output of the agricultural industry is made up of the sum of the output of agricultural products and of the goods and services produced in inseparable non-agricultural secondary activities; animal and crop output are the main product categories of agricultural output.

Significant reforms of the common agricultural policy (CAP) have taken place in recent years, most notably in 2003 and 2008, with the aim of making the agricultural sector more market-oriented. The 2003 reform introduced a new system of direct payments,

**Figure 8.1:** Agricultural output and gross value added at producer prices, EU-27, 2000-2010 (2005 = 100)



<sup>(1)</sup> Crop output and animal output, estimates.

Source: Eurostat (online data code: [aact\\_eaa01](#))



known as the single payment scheme, under which aid is no longer linked to production (decoupling); this single payment scheme aims to guarantee farmers more stable incomes. Farmers can decide what to produce in the knowledge that they will receive the same amount of aid, allowing them to adjust production to suit demand. In 2008 further changes were made to the CAP, building on the reform package from 2003, such that all aid to the agricultural sector will be decoupled by 2012.

**Table 8.1:** Agricultural output and gross value added at producer prices, 2005 and 2010 (EUR million)

	Gross value added of the agricultural industry		Crop output		Animal output	
	2005	2010	2005	2010	2005	2010
<b>EU-27</b>	129 497	138 721	157 479	185 186	128 511	138 903
BE	2 153	2 494	2 903	3 561	3 570	3 987
BG	1 544	1 404	1 627	2 039	1 129	1 132
CZ	970	960	1 674	2 160	1 574	1 612
DK	2 253	2 125	2 472	3 182	4 867	5 383
DE	12 920	15 043	18 167	21 766	19 042	21 394
EE	197	232	194	254	267	315
IE	1 623	1 512	1 376	1 497	3 651	3 851
EL	6 284	5 350	7 007	6 490	2 685	2 662
ES	20 345	21 348	21 234	24 354	12 641	12 393
FR	21 375	26 004	29 939	37 668	21 663	22 452
IT	24 410	22 587	25 434	25 273	13 178	14 347
CY	332	318	326	331	301	332
LV	222	230	308	448	282	359
LT	409	500	657	878	693	796
LU	107	95	102	108	151	166
HU	1 793	1 968	3 020	3 777	2 118	2 139
MT	45	53	39	46	63	68
NL	7 751	8 974	10 131	12 287	7 906	9 424
AT	2 207	2 606	2 199	2 914	2 543	2 840
PL	5 161	6 135	6 043	8 603	7 585	8 978
PT	1 927	1 864	3 584	3 971	2 241	2 429
RO	6 003	6 399	7 687	10 141	4 051	3 811
SI	397	391	496	576	468	484
SK	382	316	691	930	760	720
FI	720	1 152	1 062	1 339	1 703	1 958
SE	1 128	1 370	1 595	2 108	2 091	2 263
UK	6 842	7 292	7 512	8 485	11 287	12 608
NO	902	1 085	1 252	1 465	1 799	2 217
CH	2 583	2 742	2 855	3 227	3 171	3 463
HR	883	940	1 181	1 476	921	941
MK	490	:	774	:	212	:

Source: Eurostat (online data code: [aact\\_eaa01](#))

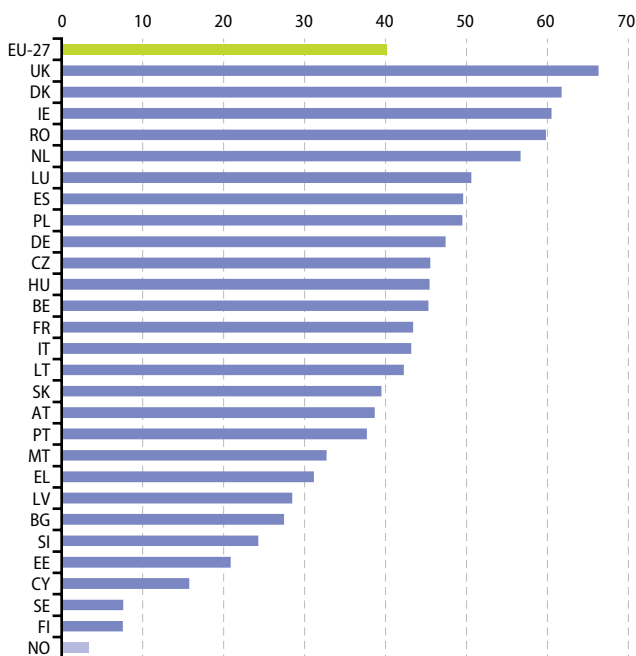
## 8.2 Farm structure

The structure of agriculture in the Member States of the EU varies as a function of differences in geology, topography, climate and natural resources, as well as the diversity of regional activities, infrastructure and social customs. The survey on the structure of agricultural holdings, also known as the [farm structure survey \(FSS\)](#), helps assess the agricultural situation across the EU, monitoring trends and transitions in the structure of [agricultural holdings](#), while also modelling the impact of external developments or policy proposals.

There were 7.3 million commercial agricultural holdings in the EU-27 in 2007, with a further 6.4 million small holdings (those below a threshold of one [European size unit \(ESU\)](#)).

Two fifths (an estimated 40.1 %) of the total land area of the EU-27 was [utilised agricultural area \(UAA\)](#) in 2007. This proportion rose to two thirds (66.3 %) of the land area of the United Kingdom, but was less than one tenth of the total in Sweden and Finland.

**Figure 8.2:** Utilised agricultural area, 2007 <sup>(1)</sup>  
(% share of total land area)



<sup>(1)</sup> Areas belonging to agricultural holdings.

Source: Eurostat (online data codes: [demo\\_r\\_d3area](#) and [ef\\_lu\\_ovcropaa](#))

**Table 8.2:** Agricultural holdings and cattle, 2003 and 2007

	Number of agricultural holdings (1 000)		Head of cattle (1 000)		Holdings with irrigable area (% of holdings)	
	2003	2007	2003	2007	2003	2007
<b>EU-27</b>	15 021	13 700	92 048	89 470	:	:
BE	55	48	2 778	2 649	4.3	4.7
BG	666	493	692	602	20.7	15.0
CZ	46	39	1 505	1 419	4.6	5.2
DK	49	45	1 724	1 566	19.5	15.1
DE	412	370	13 639	12 675	:	:
EE	37	23	274	253	:	:
IE	136	128	6 990	6 573	0.0	0.0
EL	824	860	733	732	64.5	62.7
ES	1 141	1 044	5 973	5 741	47.8	45.6
FR	614	527	19 454	19 350	17.5	18.2
IT	1 964	1 679	6 261	6 364	36.2	40.4
CY	45	40	61	58	75.3	78.5
LV	127	108	379	398	0.1	0.2
LT	272	230	895	784	0.0	0.0
LU	2	2	190	192	0.0	0.0
HU	773	626	706	704	4.3	0.2
MT	11	11	19	19	34.6	25.5
NL	86	77	3 759	3 763	22.6	26.1
AT	174	165	2 039	1 973	3.6	4.4
PL	2 172	2 391	5 533	5 855	0.7	1.1
PT	359	275	1 398	1 324	62.4	62.2
RO	4 485	3 931	2 871	2 734	5.8	2.7
SI	77	75	478	472	1.5	2.3
SK	72	69	583	502	6.1	2.3
FI	75	68	1 000	927	10.6	8.5
SE	68	73	1 607	1 560	7.8	5.2
UK	281	300	10 507	10 280	1.8	13.9
NO	58	50	957	906	16.5	17.5
CH	:	62	:	1 572	:	:
HR	:	181	:	475	:	:

Source: Eurostat (online data codes: [tag00001](#) and [ef\\_ov\\_lusum](#))

## 8.3 Agricultural products

In 2010, the EU-27 produced 285.2 million tonnes of **cereals** (including rice). Despite the vagaries of the weather, cereal production in the EU-27 was relatively stable between 2000 and 2010 (see Figure 8.3), albeit with notably higher harvests in 2004 and 2008.

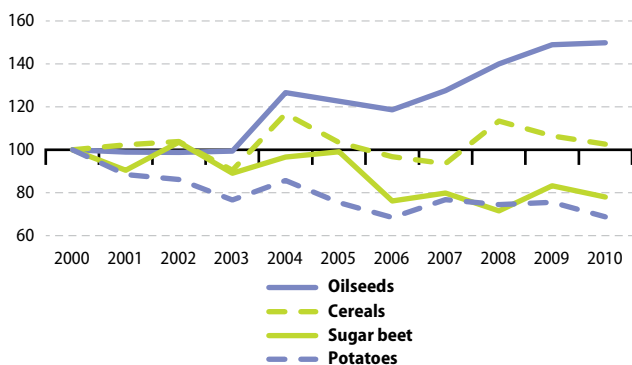
There was a large overall increase (49.9%) in the production of oilseeds between 2000 and 2010. On the other hand, the output of potatoes declined steadily during the last decade (with production falling by 31.2% between 2000 and 2010). The production of sugar beet also fell over the last decade (– 21.9%), with all of the losses taking place during the second half of the decade, with output contracting considerably in 2006 and again in 2010.

The principal meat product in the EU-27 was **pig** meat (22.0 million tonnes in 2010), where the weight of production was almost three times as high as cuts of **beef/veal** from cattle meat (7.9 million tonnes).

Dairy production has a diverse structure across the Member States, in terms of farm and **dairy herd** sizes, as well as milk yields. The total collection of cows' milk in the EU-27 in 2010 amounted to 136.1 million tonnes.

Agricultural production of crops is synonymous with harvested production and includes marketed quantities, as well as quantities consumed directly on the farm, losses and waste on the **holding**,

**Figure 8.3:** Indices of the agricultural production of crops, EU-27, 2000-2010 (2000 = 100)



Source: Eurostat (online data code: [apro\\_cpp\\_crop](#))

and losses during transport, storage and packaging. Milk collection is only a part of the total use of milk production on the farm, the remainder generally includes own consumption, direct sale and cattle feed. Meat production is based on the carcass weight of meat fit for human consumption. The concept of **carcass weight** is generally the weight of the slaughtered animal's cold body, although the precise definition varies according to the animal under consideration.

**Table 8.3:** Agricultural production, 2010  
(1 000 tonnes)

	Cereals	Sugar beet	Potatoes	Cows' milk	Cattle meat	Pig meat
<b>EU-27 <sup>(1)</sup></b>	285 227	106 950	56 972	136 090	7 918	22 011
BE	3 105	4 465	3 456	3 067	263	1 124
BG	7 036	0	251	565	5	37
CZ	6 878	3 065	665	2 312	74	276
DK	8 748	2 356	1 358	4 830	131	1 666
DE	44 293	23 858	10 202	29 076	1 187	5 443
EE	670	0	93	621	9	32
IE	2 040	45	363	:	559	214
EL	4 098	761	792	673	58	114
ES	19 642	3 399	2 278	5 877	607	3 369
FR	65 414	34 767	6 528	23 558	1 521	2 010
IT	20 960	3 550	1 558	10 500	1 075	1 633
CY	54	87	93	151	4	57
LV	1 417	0	293	625	18	23
LT	2 768	723	469	1 278	43	55
LU	166	0	20	282	10	10
HU	12 300	754	440	1 322	27	416
MT	0	0	10	:	1	7
NL	1 887	5 280	6 844	11 626	389	1 288
AT	4 818	3 132	672	2 771	225	542
PL	27 299	9 823	8 766	9 002	386	1 741
PT	1 051	7	509	1 829	94	384
RO	16 752	900	3 567	904	28	234
SI	568	0	102	520	36	25
SK	2 571	978	126	800	14	69
FI	2 972	542	659	2 289	82	203
SE	4 333	1 974	816	2 862	148	263
UK	23 387	6 484	6 045	13 582	925	774
CH	:	:	:	3 388	:	:
HR	2 925	1 249	179	682	55	89
MK	537	:	202	:	:	:
TR	59 649	17 942	4 548	:	:	:

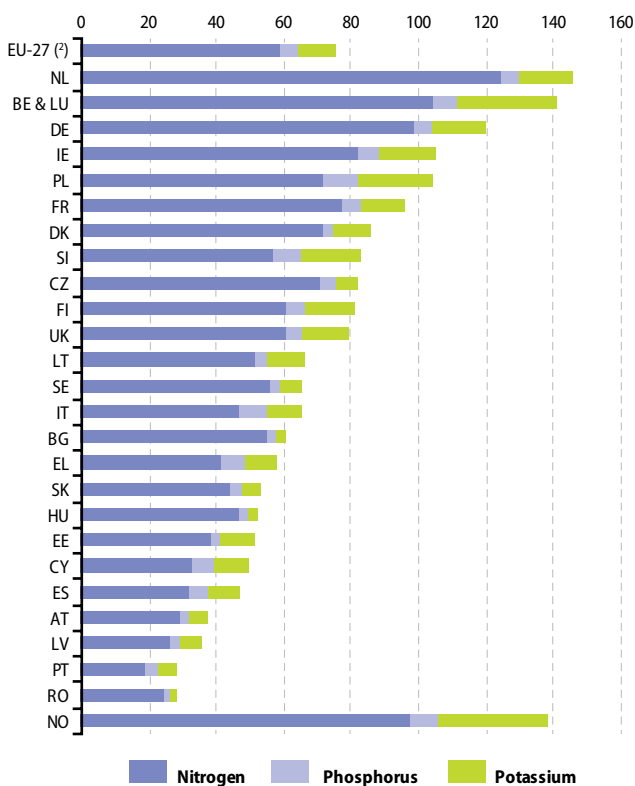
(<sup>1</sup>) Includes Eurostat estimates made for the purpose of this publication.

Source: Eurostat (online data codes: [apro\\_cpp\\_crop](#), [apro\\_mt\\_pann](#) and [apro\\_mk\\_pobta](#))

## 8.4 Fertiliser consumption and nutrient balances

Around 40% of the EU-27's land area is farmed, highlighting the importance of farming for the EU's natural environment. Links between the natural environment and farming practices are complex: farming has contributed over the centuries to creating and maintaining a variety of valuable semi-natural habitats within which a wide range of species rely for their survival; on the other hand, inappropriate agricultural practices and **land use** can have an adverse effect

**Figure 8.4:** Estimated consumption of manufactured fertilisers, 2009 <sup>(1)</sup>  
(kg of nutrient per hectare of UAA)



<sup>(1)</sup> Utilised agricultural area, 2007; Malta, not available.

<sup>(2)</sup> Excluding Malta.

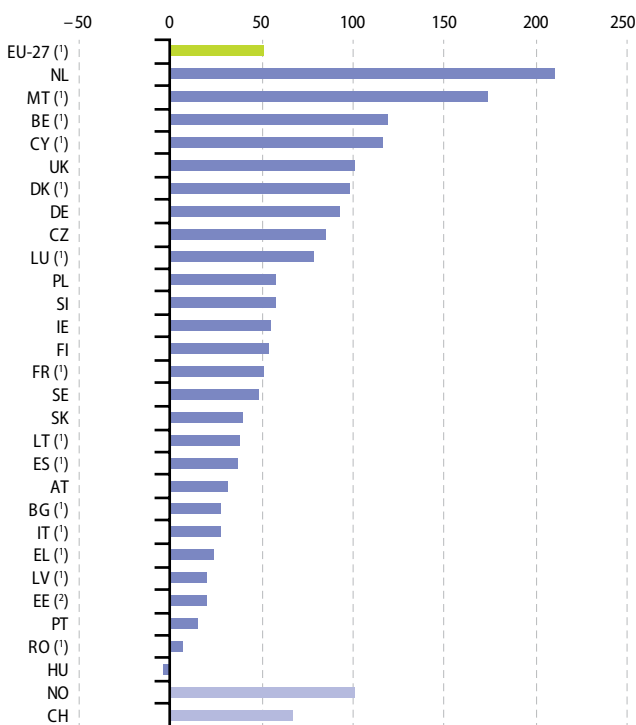
Source: Eurostat (online data codes: [aei\\_fm\\_manfert](#) and [ef\\_lu\\_ovcropaa](#)) and Fertilizers Europe

on natural resources, through the pollution of soil, water and air, or the fragmentation of habitats and a subsequent loss of wildlife.

Fertilisers contain important nutrients, such as nitrogen (N), phosphorus (P) and potassium (K), which plants absorb from the soil for their growth. Fertilisers are often considered as an essential input in agricultural production. When the amount of fertiliser applied exceeds the plants' nutritional requirements, there is a greater risk of nutrient losses from agricultural soils into ground and surface water. The resulting higher concentration of nutrients (eutrophication) can cause serious degradation of ecosystems.

The gross nutrient balance provides an insight into the links between agricultural nutrient use, losses of nutrients into the environment, and the sustainable use of soil nutrient resources.

**Figure 8.5:** Gross nitrogen balance, average 2005-2008 (kg nitrogen per hectare of agricultural land)



(¹) Estimates.

Source: Eurostat (online data code: [aei\\_pr\\_gnb](#))

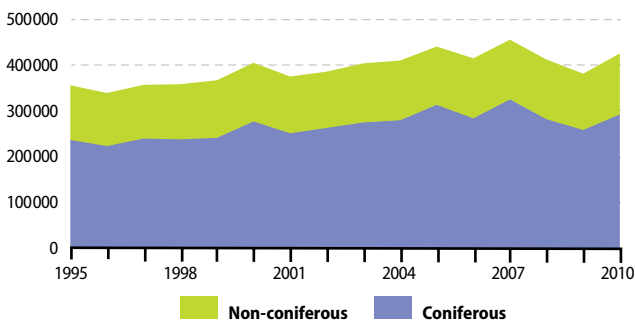
## 8.5 Forestry

The EU-27 has approximately 178 million hectares of forests and other wooded land, corresponding to 42 % of its land area, and forest cover is gradually increasing: over the past 20 years the forest area has increased by 5 % – approximately 0.3 % per year – although the rate varies substantially between Member States.

From 1995 to 2007, there was a relatively steady rise in the level of roundwood production in the EU-27, both for coniferous (softwood) and non-coniferous (broadleaved or hardwood) species – see Figure 8.6. However, the effects of the financial and economic crisis led to the level of coniferous production falling in 2008 and this was confirmed with a further reduction in 2009, when non-coniferous production also fell. In 2010 roundwood production increased for both categories of tree species: the larger category of coniferous species recorded an increase of 13.0 % compared with 2009, while there was production growth of 8.2 % for non-coniferous species. Overall production increased by 44.1 million m<sup>3</sup> in 2010, bringing the level of production back to 428.5 million m<sup>3</sup>, around 6.5 % below its peak level from 2007.

Roundwood production is a synonym for removals; it comprises all quantities of wood removed from forests and other wooded land or other felling sites during a given period; it is reported in cubic metres (m<sup>3</sup>) underbark (in other words, excluding bark). Sawnwood production is wood that has been produced either by sawing lengthways or by a profile-chipping process and that exceeds 6 mm in thickness; it includes for example planks, beams,

**Figure 8.6:** Annual production of roundwood, EU-27, 1995-2010 <sup>(1)</sup> (1 000 m<sup>3</sup>)



<sup>(1)</sup> 2000, 2001 and 2007, estimates.

Source: Eurostat (online data code: [for\\_remove](#))



joists, boards, rafters, scantlings, laths, boxboards and lumber, in the following forms – unplaned, planed, and end-jointed; it is reported in cubic metres of solid volume.

**Table 8.4:** Wood production, 2000 and 2010  
(1 000 m<sup>3</sup>)

	Roundwood		Sawnwood	
	2000	2010	2000	2010
<b>EU-27</b>	<i>408 095</i>	<i>428 526</i>	<i>100 064</i>	<i>100 430</i>
BE	4 510	4 827	1 150	1 332
BG	4 784	5 668	312	633
CZ	14 441	17 022	4 106	4 670
DK	2 952	2 669	364	448
DE	53 710	54 418	16 340	22 351
EE	8 910	7 560	1 436	1 360
IE	2 673	2 789	888	875
EL	2 245	1 251	123	118
ES	14 321	15 648	3 760	2 038
FR	65 865	57 362	10 536	8 565
IT	9 329	7 254	1 630	1 200
CY	21	9	9	4
LV	14 304	12 965	3 900	3 150
LT	5 500	7 097	1 300	1 213
LU	260	275	133	94
HU	5 902	5 740	291	133
MT	0	0	0	0
NL	1 039	1 081	389	231
AT	13 276	17 831	10 390	9 603
PL	26 025	35 378	4 262	4 245
PT	10 831	9 648	1 427	1 045
RO	13 148	14 333	3 396	4 349
SI	2 253	2 945	439	596
SK	6 163	13 939	1 265	2 524
FI	54 542	50 952	13 420	9 473
SE	63 300	70 200	16 176	17 100
UK	7 791	9 662	2 622	3 078
IS	0	:	0	:
LI	:	25	:	4
NO (¹)	8 156	8 884	2 280	1 850
CH	9 238	4 920	1 625	1 457
ME (¹)	:	364	:	50
HR (¹)	3 669	4 242	642	653
MK (¹)	:	639	:	2
TR (¹)	15 939	19 430	5 528	5 853
BR (¹)	:	256 306	:	24 987
CA (¹)	201 845	107 266	50 465	32 820
CN (¹)	:	291 850	:	29 311
IN (¹)	:	330 975	:	14 789
ID (¹)	:	100 585	:	4 330
RU (¹)	158 100	151 400	20 000	18 974
US (¹)	466 549	344 835	91 076	61 998

(¹) 2009 instead of 2010.

Source: Eurostat (online data codes: [for\\_remov](#) and [for\\_swpan](#))

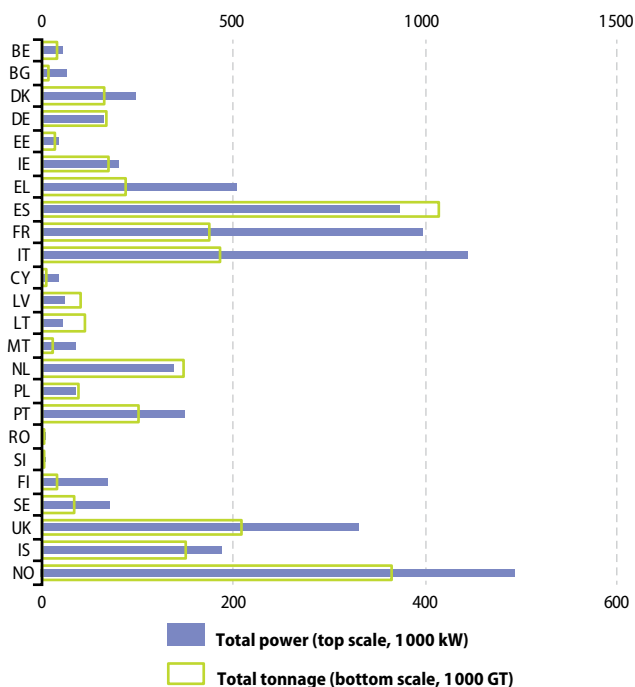
## 8.6 Fisheries

By far the largest fishing fleets among the EU Member States, in terms of power, were those from Italy, France, Spain and the United Kingdom. In terms of tonnage, however, the Spanish fishing fleet was by far the largest (415 000 gross tonnes), which was more than twice the size of the fleets in the United Kingdom, Italy or France.

Total catches by the fishing fleets of Denmark, Spain, the United Kingdom and France accounted for just over half (50.6 %) of all the catches made by EU-27 fishing fleets in 2009. Around 70 % of the catches made by the EU-27 in 2009 were in the north east Atlantic, with the eastern central Atlantic the second largest [fishing area](#).

The five largest aquaculture producers among the EU Member States were Spain, France, the United Kingdom, Italy and Greece, which together accounted for around three quarters (75.6 %) of total aquaculture production in 2009.

**Figure 8.7:** Fishing fleet, 2010 <sup>(1)</sup>



<sup>(1)</sup> The Czech Republic, Luxembourg, Hungary, Austria and Slovakia are landlocked countries without a marine fishing fleet.

Source: Eurostat (online data code: [fish\\_fleet](#))

**Table 8.5:** Fishery indicators, 1999, 2009 and 2010

	Total catches in all fishing regions (1 000 tonnes live weight)		Aquaculture production (1 000 tonnes live weight)		Fishing fleet, 2010 (1 000 GT)
	1999	2009	1999	2009	
<b>EU-27</b>	6 869	5 068	1 429	1 300	1 754
BE	30	22	2	1	16
BG	11	9	8	8	8
CZ	4	4	19	20	–
DK	1 405	778	43	34	66
DE	238	250	80	41	68
EE	112	97	0	1	15
IE	285	269	44	47	69
EL	121	83	84	122	88
ES	1 164	761	318	269	415
FR	665	440	265	234	174
IT	283	253	210	162	186
CY	40	1	1	3	4
LV	125	163	0	1	41
LT	73	173	2	3	46
LU	0	:	:	:	–
HU	8	6	12	14	–
MT	1	2	2	5	12
NL	511	382	109	56	148
AT	0	0	3	2	–
PL	236	224	34	37	37
PT	210	199	6	7	101
RO	8	4	9	13	1
SI	2	1	1	2	1
SK	1	2	1	1	–
FI	144	155	15	14	17
SE	351	203	6	9	33
UK	841	587	155	197	208
IS <sup>(1)</sup>	1 754	1 164	4	5	150
LI	0	:	:	:	–
NO	2 628	2 524	476	962	366
CH <sup>(1)</sup>	2	2	1	1	–
ME <sup>(1)</sup>	:	2	:	0	:
HR <sup>(1)</sup>	19	56	6	16	:
MK <sup>(1)</sup>	0	0	2	1	–
TR <sup>(1)</sup>	574	464	63	152	:

(<sup>1</sup>) Aquaculture production, 2008 instead of 2009.

Source: Eurostat (online data codes: [fish\\_ca\\_00](#), [fish\\_aq\\_q](#) and [fish\\_fleet](#))



## International trade

The [European Union \(EU\)](#) has a common trade policy, often referred to as the common commercial policy. In other words, the EU acts as a single entity on trade issues, including issues related to the [World Trade Organisation \(WTO\)](#). In these cases, the [European Commission](#) negotiates trade agreements and represents Europe's interests on behalf of the EU Member States.

The EU's trade policy aims to make the EU competitive in foreign markets. Being an open economy, the EU seeks to secure improved market access for its industries, services and investments, and to enforce the rules of free and fair trade. A coordinated trade policy takes on even greater importance in an era of globalisation, when economies and borders have opened up, leading to an increase in trade and capital movements, and the spread of information, knowledge and technology, often accompanied by deregulation. The economic impact of globalisation on the EU is felt through trade in goods and services, as well as through financial flows and the movement of persons linked to cross-border economic activity.

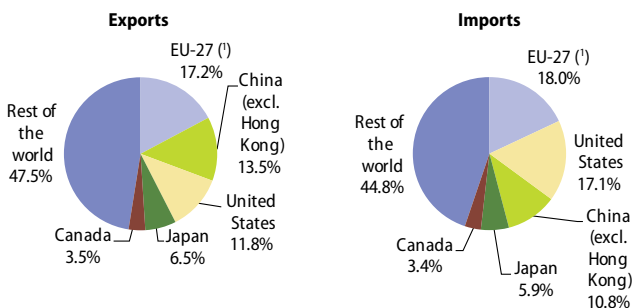
## 9.1 International trade in goods

The EU-27 accounts for just under a fifth of the world's trade in goods. The value of external trade in goods significantly exceeds that of services, which by their nature are harder to move across borders.

Total EU-27 trade with the rest of the world (the sum of extra-EU exports and imports) was valued at EUR 2 850 539 million in 2010. As such, trade activity for the EU-27 returned almost to the record levels that had been recorded in 2008. In comparison with a year before, total trade in the EU-27 increased by EUR 546 922 million in 2010.

After experiencing a sharp fall in both exports and imports in 2009, the EU-27 saw its exports rise to a record level of EUR 1 348 778 million in 2010, an increase of 23 % compared with the year before. This was largely driven by increases in the level of exports of machinery and transport equipment and other manufactured goods. Imports rose by 24 % to be valued at EUR 1 501 761 million, with the largest expansions recorded for imports of machinery and transport equipment, and energy products.

**Figure 9.1:** External trade, shares in the world market, 2009  
(% share of world total)



(<sup>1</sup>) External trade flows with extra EU-27.

Source: Eurostat (online data code: [ext\\_lt\\_introle](#))

**Table 9.1:** Extra EU-27 trade by main products, EU-27, 2005 and 2010

	2005		2010	
	(EUR 1 000 million)	(%)	(EUR 1 000 million)	(%)
<b>EXPORTS</b>				
Total	1 052.7	100.0	1 348.8	100.0
Food, drinks & tobacco	52.0	4.9	76.3	5.7
Raw materials	23.8	2.3	37.9	2.8
Mineral fuels, lubricants	45.9	4.4	75.6	5.6
Chemicals & related products	164.9	15.7	235.8	17.5
Other manufactured goods	265.8	25.3	310.4	23.0
Machinery & transport equipment	470.3	44.7	572.1	42.4
<b>IMPORTS</b>				
Total	1 179.6	100.0	1 501.8	100.0
Food, drinks & tobacco	63.0	5.3	80.7	5.4
Raw materials	52.7	4.5	70.4	4.7
Mineral fuels, lubricants	272.6	23.1	381.7	25.4
Chemicals & related products	96.4	8.2	137.4	9.1
Other manufactured goods	290.3	24.6	360.2	24.0
Machinery & transport equipment	378.7	32.1	442.4	29.5
<b>TRADE BALANCE</b>				
Total	-126.8	-	-153.0	-
Food, drinks & tobacco	-11.0	-	-4.4	-
Raw materials	-28.9	-	-32.5	-
Mineral fuels, lubricants	-226.7	-	-306.1	-
Chemicals & related products	68.4	-	98.4	-
Other manufactured goods	-24.4	-	-49.8	-
Machinery & transport equipment	91.6	-	129.7	-

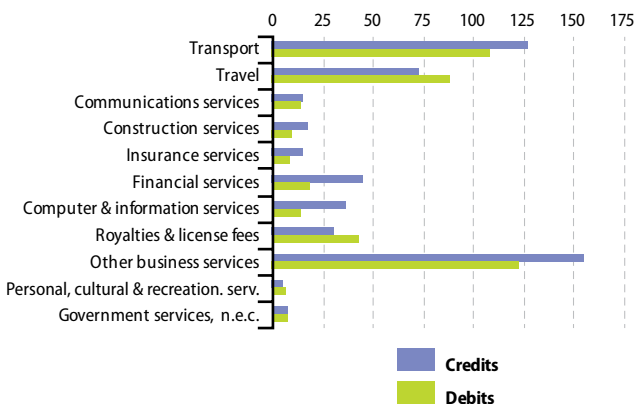
Source: Eurostat (online data code: [ext\\_lt\\_intertrd](#))

## 9.2 International trade in services

Many services are non-transportable, in other words, they require the physical proximity of the service provider and consumer. Often services are tailored according to the client's needs and tastes and hence tend not to be homogeneous or mass-produced. For international trade in non-transportable services to take place, either the consumer must go to the service provider or the service provider must go to the consumer. Services are also often difficult to separate from goods with which they may be associated or bundled.

More than two thirds of the EU-27's credits (67.0%) and debits (69.8%) in the international trade of services in 2010 were accounted for by three categories: transport, travel and other business services (see Figure 9.2). The surplus of EUR 32 600 million for other business services was the highest among services, followed by a surplus of EUR 26 700 million for financial services, EUR 21 900 million for computer and information services and EUR 18 900 million for transport. In contrast, the largest deficits were EUR 14 700 million for travel and EUR 11 900 million for royalties and license fees.

**Figure 9.2:** Extra-EU trade in services, by main categories, EU-27, 2010 <sup>(1)</sup>  
(EUR 1 000 million)



<sup>(1)</sup> Provisional.

Source: Eurostat (online data code: [bop\\_its\\_det](#))



**Table 9.2: Trade in services, 2005 and 2010 <sup>(1)</sup>**  
(EUR 1 000 million)

	Credits		Debits		Net	
	2005	2010	2005	2010	2005	2010
<b>EU-27</b>	405.2	527.7	351.9	454.2	53.3	73.5
<b>EA-17</b>	405.4	513.8	369.9	474.1	35.6	39.8
BE	45.2	64.6	41.2	59.2	4.0	5.3
BG	3.6	5.3	2.7	3.4	0.8	1.9
CZ	9.5	16.4	8.2	13.7	1.2	2.6
DK	35.0	45.2	29.8	38.3	5.1	6.9
DE	134.3	179.4	170.4	198.7	-36.2	-19.3
EE	2.6	3.4	1.8	2.1	0.8	1.3
IE	48.2	73.3	57.5	81.8	-9.3	-8.5
EL	27.6	28.5	11.9	15.2	15.7	13.2
ES	76.2	93.7	54.0	65.7	22.2	27.9
FR	98.4	108.5	86.1	98.0	12.3	10.5
IT	71.9	74.2	72.4	83.1	-0.5	-8.9
CY	5.2	8.7	2.2	3.1	3.1	5.6
LV	1.8	2.8	1.3	1.7	0.5	1.1
LT	2.5	3.1	1.7	2.1	0.8	1.0
LU	32.5	51.0	19.5	28.2	13.1	22.8
HU	10.4	14.4	9.2	12.0	1.1	2.4
MT	1.6	3.0	1.0	1.9	0.6	1.1
NL	74.0	72.0	67.9	64.3	6.1	7.7
AT	34.1	41.2	24.8	27.8	9.4	13.3
PL	13.1	24.5	12.5	21.9	0.6	2.6
PT	12.2	17.6	8.3	10.9	3.9	6.7
RO	4.1	6.5	4.4	7.1	-0.3	-0.6
SI	3.2	4.4	2.3	3.3	0.9	1.1
SK	3.5	4.4	3.3	5.1	0.3	-0.7
FI	13.7	18.6	14.2	16.4	-0.6	2.2
SE	34.7	48.6	28.5	36.6	6.2	12.0
UK	167.0	179.7	131.1	127.5	36.0	52.2
IS	1.6	1.9	2.1	1.6	-0.4	0.3
NO	23.6	30.0	23.8	32.4	-0.2	-2.4
HR	8.0	8.5	2.7	2.6	5.3	5.9
TR	21.5	25.9	9.2	14.9	12.3	10.9
JP	88.8	92.4	108.1	107.0	-19.3	-14.6
US	296.1	357.4	242.5	265.2	53.6	92.3

(<sup>1</sup>) EU-27, extra EU-27 flows; euro area, extra EA-17 flows; Member States and other countries, flows with the rest of the world.

Source: Eurostat (online data codes: [bop\\_q\\_eu](#), [bop\\_q\\_euro](#) and [bop\\_q\\_c](#))



An efficient and well-functioning passenger and freight transport system is vital for [European Union \(EU\)](#) enterprises and inhabitants. The EU's transport policy aims to foster clean, safe and efficient travel throughout Europe, underpinning the internal market for goods (transferring them between their place of production and consumption) and the right of citizens to travel freely throughout the EU (for both work and leisure).

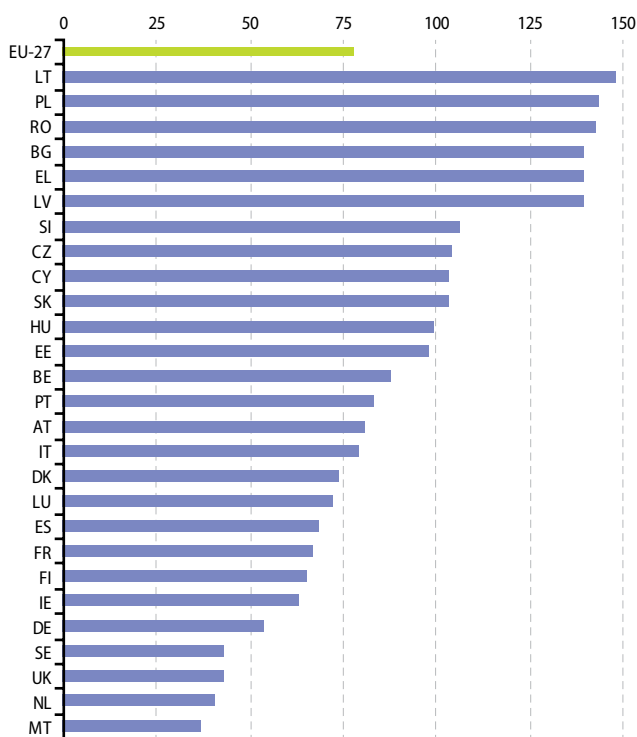
Eurostat's transport statistics describe the most important features of transport, not only in terms of the quantities of freight and numbers of passengers that are moved each year, or the number of vehicles and infrastructure that are used, but also the contribution of transport services to the economy as a whole. Data collection is supported by several legal acts obliging the Member States to report statistical data, as well as voluntary agreements to supply additional data.

In March 2011 the European Commission adopted a White paper titled '[Roadmap to a single European transport area – towards a competitive and resource efficient transport system](#)' (COM(2011) 144 final). This comprehensive strategy contains 40 specific initiatives for the next decade to build a competitive transport system that aims to increase mobility, remove major barriers in key areas and fuel growth and employment.

## 10.1 Transport accidents

While [rail](#), air, or sea transport incidents often receive considerable media coverage as they generally involve larger numbers of people, road accidents are often treated in a more mundane manner by the media, despite the fact that the vast majority of transport accidents and deaths in the EU occur on the road; the high number of deaths related to road transport reflects in part the high level of road traffic.

**Figure 10.1:** People killed in road accidents, 2008  
(persons killed per million inhabitants)



Source: Eurostat (online data code: [tsdtr420](#)), European Commission CARE database (Community Database on Road Accidents)

The annual number of road fatalities in the EU is falling, despite growth (prior to the financial and economic crisis) in passenger and freight transport. Indeed, the number of road fatalities in the EU-27 fell sharply during the decade between 1999 and 2009, from 57 691 deaths to an estimated 34 500 deaths (down 40.2 % overall). Nevertheless, the number of people killed on Europe's roads still accounted for almost nine out of every ten deaths resulting from transport accidents in 2009. The use of alcohol or drugs, the failure to observe speed limits, and the refusal to wear seatbelts are involved in about half of all road fatalities in the EU.

Some 1 428 people were killed in railway accidents in the EU-27 in 2009 (see Table 10.1); this represented a slight increase (119 more victims) compared with the year before; it should be noted that the number of victims in any particular year can be greatly influenced by a small number of major accidents.

**Table 10.1:** People killed in rail accidents by type of accident, EU-27, 2009  
(number of persons)

	<b>Collisions (excluding level- crossing accidents)</b>	<b>Derail- ments</b>	<b>Accidents involving level- crossings</b>	<b>Accidents to persons caused by rolling stock in motion</b>	<b>Others</b>
<b>Total</b>	10	32	433	942	11
Passengers	0	0	2	34	1
Railway employees	4	2	5	23	2
Others	6	30	426	883	8

Source: Eurostat (online data code: [rail\\_ac\\_catvict](#))

## 10.2 Passenger transport

London Heathrow was the busiest airport in the EU-27 in terms of passenger numbers in 2010 (65.7 million), followed by Paris' Charles-de-Gaulle airport (58.0 million), and then Frankfurt airport, Madrid's Barajas airport and Amsterdam's Schiphol airport (all with between 52.6 million and 45.1 million passengers) – see Figure 10.2.

Just under 800 million passengers were carried by air in 2010 in the EU-27 (see Table 10.2). The number of air passengers carried in the EU-27 had stagnated in 2008, fell by 5.9 % in 2009, and rebounded by 6.0 % in 2010.

Table 10.2 also shows that ports in the EU-27 handled almost 404 million maritime passengers in 2009; this marked a reduction of 2.2 % compared with 2008 following a fall of 0.3 % in 2008 (compared with 2007). Italian and Greek ports handled more passengers in 2009 than in any other Member State (accounting for 23.0 % and 21.9 % of the EU-27 total respectively).

**Figure 10.2:** Top 15 airports, passengers carried (embarked and disembarked), EU-27, 2010 (million passengers)



Source: Eurostat (online data code: [avia\\_paoa](#))

Relative to national population, the importance of maritime passenger transport was particularly high in Malta (18.9 passengers per inhabitant), followed by Denmark (7.9), Greece (7.8) and Estonia (6.8).

**Table 10.2:** Air and sea passenger transport, 2009 and 2010 <sup>(1)</sup>

	Air passengers, 2010 <sup>(2)</sup>		Maritime passengers, 2009 <sup>(3)</sup>	
	(1 000)	(passengers per inhabitant)	(1 000)	(passengers per inhabitant)
<b>EU-27</b>	796 396	1.6	403 752	0.8
BE	22 691	2.1	751	0.1
BG	6 168	0.8	0	0.0
CZ	12 242	1.2	–	–
DK	24 331	4.4	43 561	7.9
DE	166 131	2.0	29 573	0.4
EE	1 381	1.0	9 140	6.8
IE	23 094	5.2	2 878	0.6
EL	32 132	2.8	88 351	7.8
ES	153 387	3.3	21 458	0.5
FR	123 021	1.9	25 067	0.4
IT	109 174	1.8	92 707	1.5
CY	6 948	8.7	96	0.1
LV	4 656	2.1	591	0.3
LT	2 283	0.7	205	0.1
LU	1 614	3.2	–	–
HU	8 175	0.8	–	–
MT	3 294	7.9	7 799	18.9
NL	48 617	2.9	1 632	0.1
AT	23 532	2.8	–	–
PL	18 383	0.5	2 481	0.1
PT	25 732	2.4	833	0.1
RO	8 849	0.4	0	0.0
SI	1 382	0.7	56	0.0
SK	1 882	0.3	–	–
FI	14 221	2.7	17 226	3.2
SE	26 647	2.9	31 066	3.4
UK	192 885	3.1	28 281	0.5
IS	2 036	6.4	433	1.4
NO	29 517	6.1	5 728	1.2
CH	37 616	4.8	–	–
HR	4 677	1.1	26 037	5.9
TR	:	:	1 386	0.0

<sup>(1)</sup> For air: aggregates exclude the double-counting impact of passengers flying between countries belonging to the same aggregate. For maritime: figures refer to the number of passengers 'handled in ports' (i.e. the sum of passengers embarked and then disembarked in ports); if both the port of embarkation and disembarkation report data to Eurostat, then these passengers are counted twice.

<sup>(2)</sup> Total passengers carried (arrivals and departures for national and international).

<sup>(3)</sup> Iceland, 2006.

Source: Eurostat (online data codes: [ttr00012](#), [tps00001](#) and [mar\\_pa\\_aa](#))

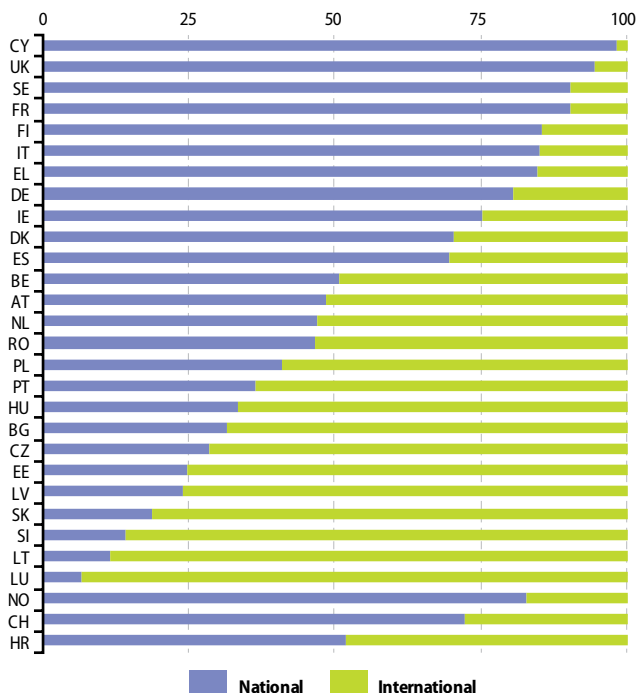
## 10.3 Freight transport

Total inland freight transport in the EU-27 was estimated to be close to 2 200 000 million **tonne-kilometres (tkm)** in 2009; a little over three quarters (77.5 %) of this freight total was transported over roads in 2009.

Slightly more than two thirds of the goods transported on the EU-27's roads in 2010 related to the transportation of goods on national road networks.

About 14.2 million tonnes of air freight (both national and international) was carried through airports within the EU-27 in 2010. Airports in Germany dealt with 4.1 million tonnes of air freight, considerably more than in any other EU Member State – the United Kingdom had the second highest amount of air freight at 2.4 million tonnes.

**Figure 10.3:** National and international road transport of goods, 2010 <sup>(1)</sup>  
(% based on million tkm of laden transport)



<sup>(1)</sup> Greece and the United Kingdom, 2009; Malta, not available.

Source: Eurostat (online data code: [road\\_go\\_ta\\_tott](#))



Maritime ports in the EU-27 handled 3 445 million tonnes of seaborne goods in 2009, which marked a reduction of 12.1 % when compared with 2008. Sea ports in the United Kingdom handled 501 million tonnes of goods in 2009, more than any other Member State and equivalent to 14.5 % of the EU-27 total.

**Table 10.3:** Freight transport, 2010

	Inland freight transport (million tkm)		Air freight transport (1 000 tonnes) <sup>(3)</sup>	Gross weight of seaborne goods handled in ports (million tonnes) <sup>(4)</sup>
	Road <sup>(1)</sup>	Rail <sup>(2)</sup>		
<b>EU-27</b>	:	360 636	:	:
BE	35 002	6 268	973.8	203.4
BG	19 433	3 064	21.1	21.9
CZ	51 832	13 770	65.6	–
DK	15 018	1 700	160.4	90.6
DE	313 104	107 317	4 099.1	262.9
EE	5 614	6 638	11.9	38.5
IE	10 939	92	122.2	41.8
EL	28 585	435	86.6	135.4
ES	210 068	8 119	592.3	363.5
FR	182 193	29 965	1 505.4	315.5
IT	175 775	18 616	848.7	469.9
CY	1 087	–	37.3	6.8
LV	10 590	17 179	11.3	60.1
LT	19 398	13 431	9.8	34.3
LU	8 694	200	705.8	–
HU	33 721	8 809	65.3	–
MT	:	–	16.9	5.5
NL	68 242	6 385	1 600.4	483.1
AT	28 659	19 833	236.6	–
PL	210 846	48 705	61.2	45.1
PT	35 368	2 174	137.1	61.7
RO	25 889	12 375	24.5	36.1
SI	15 931	3 421	6.1	–
SK	27 575	6 964	17.8	13.4
FI	29 532	9 750	165.3	93.2
SE	36 268	23 464	186.3	161.8
UK	139 536	18 576	2 429.0	500.9
IS	:	:	35.2	:
LI	303	11	:	–
NO	19 751	3 579	49.1	182.6
CH	12 838	323	375.2	–
HR	8 780	2 618	7.4	23.4
TR	:	11 300	:	293.9

<sup>(1)</sup> Greece and the United Kingdom, 2009; road transport is based on movements all over the world of vehicles registered in the reporting country.

<sup>(2)</sup> EU-27, Denmark, Luxembourg, Portugal and Slovakia, 2009.

<sup>(3)</sup> Underestimated: freight transport at Paris Charles-de-Gaulle and Paris Orly is incomplete.

<sup>(4)</sup> 2009.

Source: Eurostat (online data codes: [road\\_go\\_ta\\_tott](#), [rail\\_go\\_typeall](#), [trr00011](#) and [mar\\_go\\_aa](#)) and Directorate-General for Mobility and Transport



# Environment

# 11

## Sixth environment action programme

The action programme, laid down by [European Parliament](#) and [Council Decision 1600/2002/EC](#) of 22 July 2002 is a ten-year (2002-2012) policy programme for the environment. It identifies four key priorities: tackling climate change; nature and biodiversity; environment and health; and sustainable use of natural resources and the management of waste.

## Sustainable development strategy

Several environmental indicators have been chosen as [sustainable development indicators](#) for the assessment of the progress achieved towards the goals of the sustainable development strategy. Examples of environmental headline indicators are the common bird index as an indicator for natural resources and greenhouse gas emissions by sector as an indicator for climate change and energy.

## Europe 2020 – Europe's growth strategy

As part of the sustainable growth priority one of the flagship initiatives concerns a [resource-efficient Europe](#). The aims are to help decouple economic growth from the use of resources, support the shift towards a low-carbon economy, protect biodiversity, increase the use of renewable energy sources, modernise the transport sector, and promote energy efficiency.

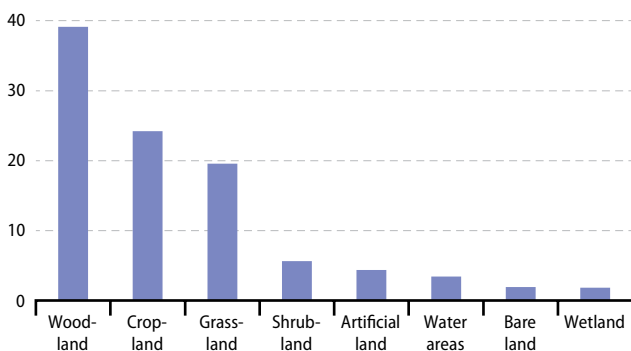
## 11.1 Land cover, land use and landscape

Land is the basis for most biological and human activities on Earth. Agriculture, forestry, industries, transport, housing and other services use land as a natural and/or an economic resource. Land is also an integral part of ecosystems and indispensable for **biodiversity** and the carbon cycle.

Forests and other wooded areas occupied 39.1 % of the total area of the **European Union (EU)** in 2009, cropland nearly a quarter (24.2 %) of the area and grassland almost one fifth (19.5 %), while built-up and other artificial areas, such as roads and railways, accounted for 4.3 % of the total area (see Figure 11.1).

Woodland is the prevailing land cover in northern parts of Europe and for a number of countries whose typography is dominated by mountains and hilly areas (see Figure 11.2). Denmark and Hungary were the countries that reported the highest proportion of their total area covered by cropland, its share rising close to 50 %. Natural and agricultural grasslands dominate the landscape in Ireland, the United Kingdom and the Netherlands. Shrubland is a typical land cover feature of hot and arid countries such as Greece, Portugal and Spain; on the other hand, shrubland is also prevalent on the moors and heath lands of northern areas of the United Kingdom and parts of Ireland, as well as in transitional areas between forests and tundra in Sweden. The Benelux countries had the highest proportions of built-up areas.

**Figure 11.1:** Main land cover by land cover type, EU, 2009 <sup>(1)</sup>  
(% of total area)

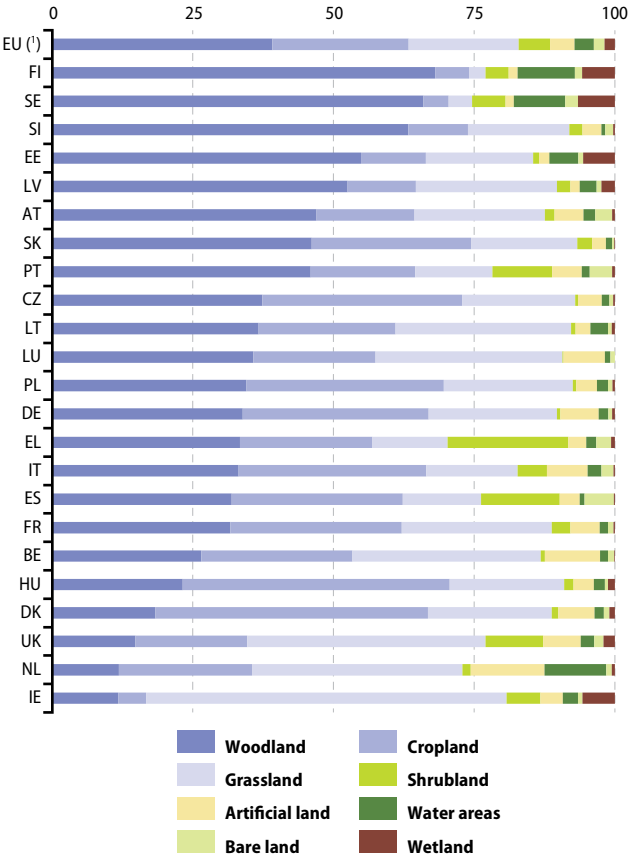


<sup>(1)</sup> EU average excluding Bulgaria, Cyprus, Malta and Romania.

Source: Eurostat (online data code: [lan\\_lcv](#))

Wetland is typically found along lakesides and in coastal areas, as well as in the form of bogs. Sweden, Finland, Ireland and Estonia reported the highest proportions (in excess of 5 %) of their total area accounted for by wetlands. Spain and Portugal (5.2 % and 4.0 %) recorded the highest shares of bare land.

**Figure 11.2:** Main land cover by land cover type, 2009  
(% of total area)



(¹) EU average excluding Bulgaria, Cyprus, Malta and Romania.

Source: Eurostat (online data code: [lan\\_lcv](#))

## 11.2 Air emissions accounts

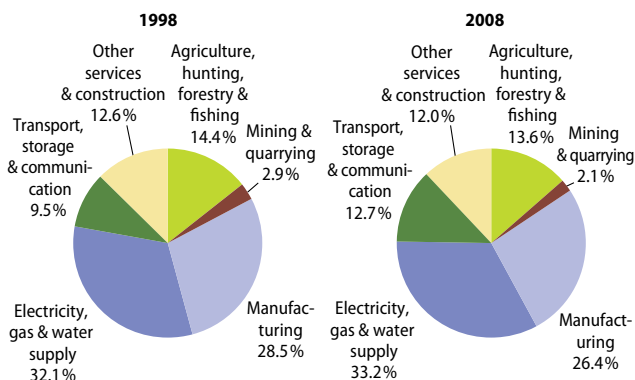
Greenhouse gas emissions for the purpose of this subchapter comprise carbon dioxide, nitrous oxide and methane; emissions of these three gases resulting from economic activities stood at 4 176 million tonnes of carbon dioxide equivalents in 2008; this was 2.4 % lower than in 1998. The development of greenhouse gas emissions over this period showed generally quite small shifts in the structure of emissions according to economic activity (see Figure 11.3).

EU-27 emissions of acidifying substances totalled 21.3 million tonnes of acid equivalents in 2008; this was 28.6% lower than in 1998. The largest emitters of acidifying substances (which for the purpose of this subchapter comprise sulphur oxides ( $\text{SO}_x$ ), nitrogen oxides ( $\text{NO}_x$ ) and ammonia ( $\text{NH}_3$ )) were agriculture, hunting, forestry and fishing with a 35.8% share of the EU-27 total in 2008 (mainly from ammonia emissions), transport, storage and communication with 22.0% (mainly through the combustion of fossil fuels leading to emissions of nitrogen oxides and sulphur dioxide), and electricity, gas and water supply with 20.8% (especially from thermal power plants using coal).

There were 22.0 million tonnes of emissions of tropospheric ozone precursors in the EU-27 in 2008; this figure was 16.0 % lower than in 1998. The transport, storage and communication sector was responsible

**Figure 11.3:** Greenhouse gas emissions, analysis by activity, EU-27, 1998 and 2008 <sup>(1)</sup>

(% of total, based on  $\text{CO}_2$  equivalents of  $\text{CO}_2$ ,  $\text{CH}_4$  and  $\text{N}_2\text{O}$ )

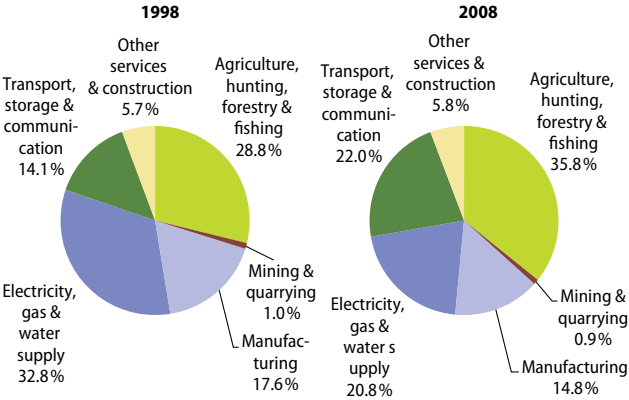


<sup>(1)</sup> Estimates.

Source: Eurostat (online data code: [env\\_ac\\_ainacehh](#))

for the highest share of EU-27 tropospheric ozone precursor emissions, accounting for nearly one third (30.1 %) of the total in 2008.

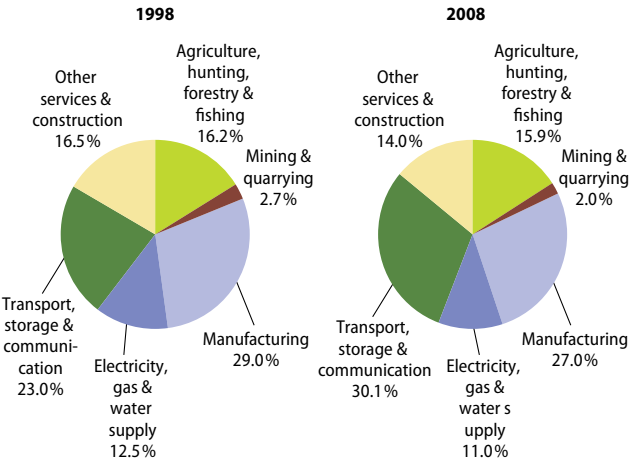
**Figure 11.4:** Emissions of acidifying substances, analysis by activity, EU-27, 1998 and 2008 <sup>(1)</sup>  
(% of total, based on acid equivalents of SO<sub>x</sub>, NH<sub>3</sub> and NO<sub>x</sub>)



<sup>(1)</sup> Estimates.

Source: Eurostat (online data code: [env\\_ac\\_ainacehh](#))

**Figure 11.5:** Emissions of tropospheric ozone precursors, analysis by activity, EU-27, 1998 and 2008 <sup>(1)</sup>  
(% of total, based on tonnes of transopospheric ozone formation potential (TOFP) equivalents)



<sup>(1)</sup> Estimates.

Source: Eurostat (online data code: [env\\_ac\\_ainacehh](#))

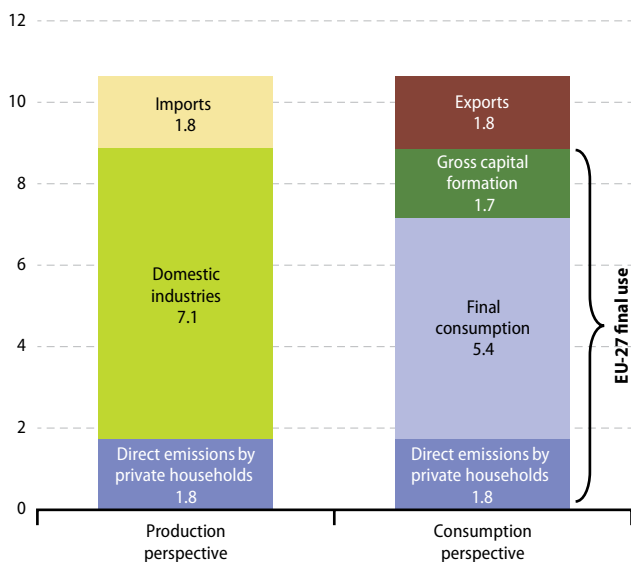
## 11.3 Carbon dioxide emissions from final consumption

Beside the carbon dioxide that is emitted by industries within the EU while processing products for final use, the estimates presented also take into account the carbon dioxide that is ‘embedded’ within the EU’s **imports**; these arise from the worldwide production chains of goods imported into the EU-27. Carbon dioxide emissions that are embedded within products that are made in the EU but exported outside of the EU-27 are, in a similar vein, included in the account of consumers abroad.

The EU-27 total of 8.9 tonnes of carbon dioxide emissions per inhabitant in 2007 was composed of three main elements (see the right-hand bar of Figure 11.6):

- some 5.4 tonnes per inhabitant as a result of the consumption expenditure of **households** and **governments** on goods and services;
- a further 1.8 tonnes per inhabitant from direct carbon dioxide emissions from **private households** in the EU-27 (for example, through burning fossil fuels for private vehicles or for heating);

**Figure 11.6:** Domestic and global CO<sub>2</sub> emissions – production and consumption perspective, EU-27, 2007 (tonnes CO<sub>2</sub> per inhabitant)



Source: Eurostat (online data codes: [env\\_ac\\_ainacehh](#) and [env\\_ac\\_io](#))



- another 1.7 tonnes per inhabitant as a result of investments (gross capital formation) in the EU-27 economy.

Carbon dioxide emissions may also be analysed from a production perspective, in other words, according to where the emissions were actually generated; this may be seen in the left-hand bar of Figure 11.6.

**Table 11.1:** CO<sub>2</sub> emissions induced by final use, by product groups and categories of final use, EU-27, 2007  
(kg of CO<sub>2</sub> per inhabitant)

	Final consumption	Gross capital formation	Exports	Final use	
	(kg of CO <sub>2</sub> per inhabitant)				(%)
Electrical energy, gas, steam and hot water	1 103	1	38	1 141	11
Construction work	38	874	2	915	9
Food products and beverages	440	13	58	511	5
Chemicals, chemical products and man-made fibres	193	6	234	433	4
Motor vehicles, trailers and semi-trailers	154	118	118	390	4
Machinery and equipment	34	181	135	350	3
Health and social work services	311	0	0	311	3
Coke, refined petroleum products and nuclear fuel	203	-8	110	305	3
Public administration and defence services; compulsory social security services	295	2	0	297	3
Retail trade services, except of motor vehicles and motorcycles; repair services of personal and household goods	261	14	13	289	3
Hotel and restaurant services	268	0	3	271	3
Wholesale trade and commission trade services, except of motor vehicles and motorcycles	167	40	47	254	2
Land transport and transport via pipeline services	103	16	14	133	1
Remaining 46 product groups	1 837	446	1 000	3 283	31
<b>Total products</b>	<b>5 407</b>	<b>1 703</b>	<b>1 771</b>	<b>8 881</b>	<b>84</b>
Direct emissions by private households	1 753			1 753	16
<b>Total (products + direct emissions by households)</b>	<b>7 160</b>	<b>1 703</b>	<b>1 771</b>	<b>10 634</b>	<b>100</b>

Source: Eurostat (online data code: [env\\_ac\\_io](#))

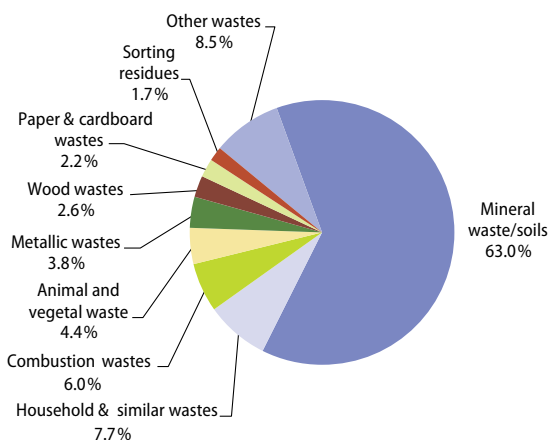
## 11.4 Waste

Waste, defined by [Directive 2008/98/EC](#) Article 3(1) as ‘any substance or object which the holder discards or intends or is required to discard’, represents an enormous loss of resources in the form of both materials and energy. In addition, the management and disposal of waste can have serious environmental impacts. [Landfills](#), for example, take up land space and may cause air, water and soil pollution, while [incineration](#) may result in emissions of dangerous air pollutants, unless properly regulated.

In 2008, the total generation of waste from economic activities and households in the EU-27 amounted to 2 615 million tonnes; this was slightly lower than in either 2004 or 2006. Among the waste generated in the EU-27 in 2008, some 98 million tonnes (3.7 % of the total) were classified as [hazardous waste](#). As such, inhabitants in the EU-27 generated on average about 5.2 tonnes of waste each, of which 196 kg were hazardous waste.

In 2008, some 2 391 million tonnes of waste was treated in the EU-27; this includes the treatment of waste that was imported into the EU. Almost half (48.9 %) of the waste treated within the EU-27 in 2008 was subject to disposal operations other than waste [incineration](#) (this was predominantly landfills, but also included a small amount of mining waste disposed in and around mining sites and waste

**Figure 11.7:** Waste generation, EU-27, 2008 <sup>(1)</sup>  
(%)



<sup>(1)</sup> Figures do not sum to 100% due to rounding.

Source: Eurostat (online data code: [env\\_wasgen](#))

discharges into water bodies). A further 45.7 % of the waste treated in the EU-27 was sent to recovery operations (other than energy recovery). The remaining 5.4 % of the waste treated in the EU-27 in 2008 was sent for incineration (with or without energy recovery).

**Table 11.2:** Waste treatment, 2008  
(1 000 tonnes)

	Total	Energy recovery	Incineration without energy recovery	Recovery other than energy recovery	Disposal other than incineration
<b>EU-27</b>	2 391 070	81 690	47 550	1 092 900	1 168 950
BE	28 731	4 453	3 883	17 345	3 050
BG	279 608	94	61	2 700	276 752
CZ	18 864	556	69	13 442	4 798
DK	14 636	3 320	0	10 283	1 034
DE	367 256	23 316	13 895	255 337	74 708
EE	17 388	257	0	5 456	11 675
IE	16 247	104	21	10 415	5 707
EL	67 523	135	29	5 251	62 108
ES	137 687	2 552	490	70 355	64 291
FR	322 641	12 056	8 612	194 549	107 424
IT	127 894	2 459	5 157	87 826	32 452
CY	1 843	8	14	745	1 076
LV	1 386	18	0	646	721
LT	5 417	194	52	1 361	3 810
LU	11 632	38	135	5 311	6 147
HU	15 823	767	65	5 307	9 684
MT	1 419	0	6	43	1 371
NL	98 049	2 456	6 369	67 619	21 606
AT	48 353	3 904	1 594	32 150	10 706
PL	140 456	3 122	670	107 179	29 486
PT	22 044	1 432	400	8 812	11 400
RO	158 507	1 333	55	8 172	148 947
SI	5 242	314	16	3 040	1 873
SK	9 243	586	66	3 875	4 715
FI	74 851	9 631	170	22 855	42 195
SE	81 352	8 411	87	9 818	63 036
UK	316 991	171	5 635	143 008	168 178
NO	9 537	2 091	514	4 542	2 390
HR	3 351	321	25	384	2 621
MK	1 503	0	0	323	1 180
TR	60 236	143	81	14 632	45 380

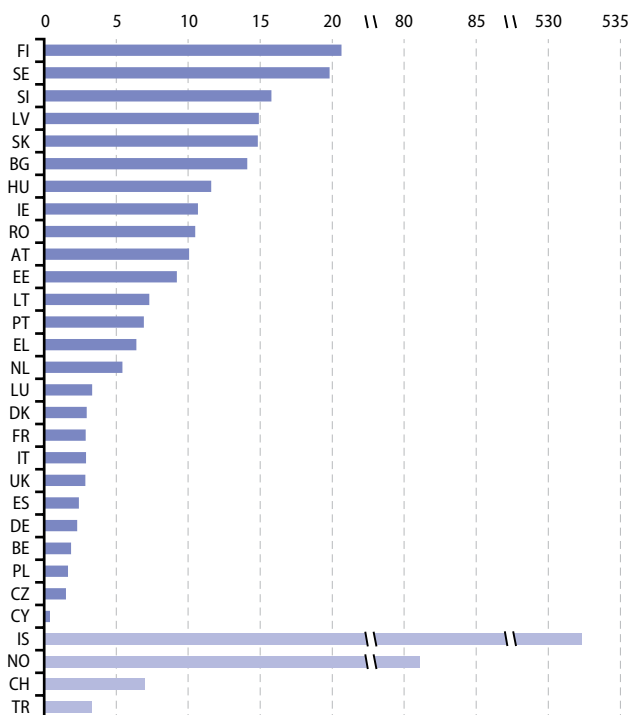
Source: Eurostat (online data code: [env\\_wastrt](#))

## 11.5 Water

The overall abstraction and use of water resources can be considered to be sustainable in the long-term in most of Europe. However, specific regions may face problems associated with water scarcity; this is especially the case in southern Europe, where it is likely that efficiency gains in relation to agricultural water use will need to be achieved in order to prevent seasonal water shortages.

When expressed in relation to population size (see Figure 11.8), Finland and Sweden recorded the highest freshwater annual resources **per capita** (around 20 000 m<sup>3</sup> per inhabitant or more). In contrast, relatively low levels (below 3 000 m<sup>3</sup> per capita) were recorded

**Figure 11.8:** Freshwater resources per capita – long-term average <sup>(1)</sup>  
(1 000 m<sup>3</sup> per inhabitant)



<sup>(1)</sup> The minimum period taken into account for the calculation of long term annual averages is 20 years; population data are as of 1 January 2009; Malta, not available.

Source: Eurostat (online data code: [env\\_watq1a](#))

in the six largest Member States (France, Italy, the United Kingdom, Spain, Germany and Poland), as well as in Belgium and the Czech Republic, with the lowest level in Cyprus (410 m<sup>3</sup> per inhabitant).

**Table 11.3:** Water resources, long-term annual average <sup>(1)</sup>  
(1 000 million m<sup>3</sup>)

	Precipitation	Evapo-transpiration	Internal flow	External inflow	Outflow	Fresh-water resources
BE	28.9	16.6	12.3	7.6	15.3	19.9
BG	68.6	50.5	18.1	89.1	108.5	107.2
CZ	54.7	39.4	15.2	0.7	16.0	16.0
DK	38.5	22.1	16.3	0.0	1.9	16.3
DE	307.0	190.0	117.0	75.0	182.0	188.0
EE	29.0	:	:	:	12.3	12.3
IE	80.0	32.5	47.5	:	:	47.5
EL	115.0	55.0	60.0	12.0	:	72.0
ES	346.5	235.4	111.1	0.0	111.1	111.1
FR	485.7	310.4	175.3	11.0	168.0	186.3
IT	296.0	129.0	167.0	8.0	155.0	175.0
CY	3.1	2.7	0.3	0.0	0.1	0.3
LV	42.7	25.8	16.9	16.8	32.9	33.7
LT	44.0	28.5	15.5	9.0	25.9	24.5
LU	2.0	1.1	0.9	0.7	1.6	1.6
HU	55.7	48.2	7.5	108.9	115.7	116.4
MT	:	:	:	:	:	:
NL	29.8	21.3	8.5	81.2	86.3	89.7
AT	98.0	43.0	55.0	29.0	84.0	84.0
PL	193.1	138.3	54.8	8.3	63.1	63.1
PT	82.2	43.6	38.6	35.0	34.0	73.6
RO	154.0	114.6	39.4	186.3	245.6	225.7
SI	31.7	13.2	18.6	13.5	32.3	32.1
SK	37.4	24.3	13.1	67.3	81.7	80.3
FI	222.0	115.0	107.0	3.2	110.0	110.0
SE	313.9	141.2	172.7	11.8	194.6	183.4
UK	283.7	111.2	172.5	2.8	175.3	175.3
IS	200.0	30.0	170.0	–	170.0	170.0
NO	470.7	112.0	377.3	12.2	389.4	389.4
CH	61.6	21.6	40.7	12.8	53.5	53.5
HR	63.1	40.1	23.0	:	:	:
MK	19.5	:	:	1.0	6.3	:
TR	501.0	273.6	227.4	6.9	178.0	234.3

<sup>(1)</sup> The minimum period taken into account for the calculation of long term annual averages is 20 years.

Source: Eurostat (online data code: [env\\_watq1a](#))

## 11.6 Chemicals management

The production of chemicals is largely concentrated in western Europe: Germany was the largest producer in the EU-27 in 2010, followed by France, Italy and the United Kingdom and these four Member States collectively generated two thirds of the EU-27's chemical production in 2010; adding Spain, the Netherlands, Belgium and Ireland, the overall share of these eight Member States was 88 %.

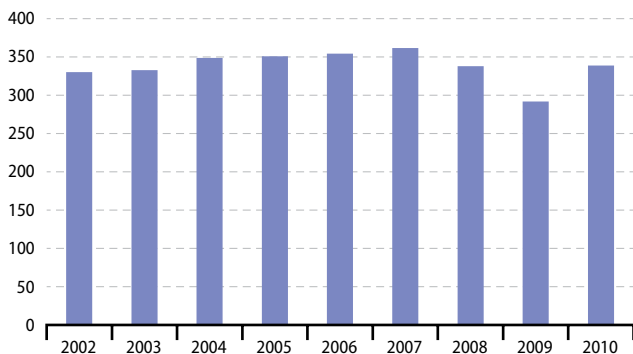
Figure 11.10 presents the development of production of environmentally harmful chemicals, broken down into five environmental impact classes. Aggregated production of these chemicals in the EU-27 grew from 2002 to 2007 by 10.1 % overall to a peak of 194 million tonnes. Production fell by 32 million tonnes (– 16.5 %) over the next two years to a level of 162 million tonnes, which was 8.1 % lower than in 2002.

The share of environmentally harmful chemicals in total EU-27 chemical output has not changed significantly, from 53.3 % in 2002 to 54.3 % in 2010.

The EU-27's production of toxic chemicals increased by 6.8 % between 2002 and 2007 to reach a peak of 218 million tonnes. Production fell by 15 million tonnes in 2008 (– 7.0 %) and by 23 million tonnes (– 11.3 %) in 2009 to a level of 180 million tonnes. In 2010 the production of toxic industrial chemicals increased by 25 million tonnes (+ 13.9 %) to 205 million tonnes.

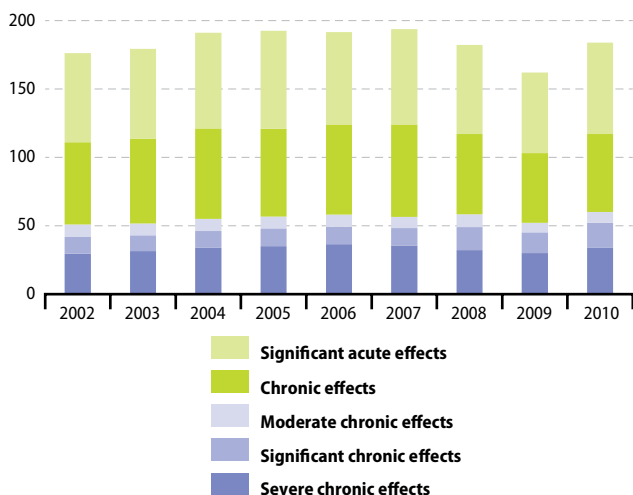
The overall share of chemicals classified as toxic in total EU-27 chemicals production was 60.5 % in 2010 – which was slightly less than the ratio that had been recorded in 2002 (61.8 %).

**Figure 11.9:** Total production of chemicals, EU-27, 2002-2010 (million tonnes)



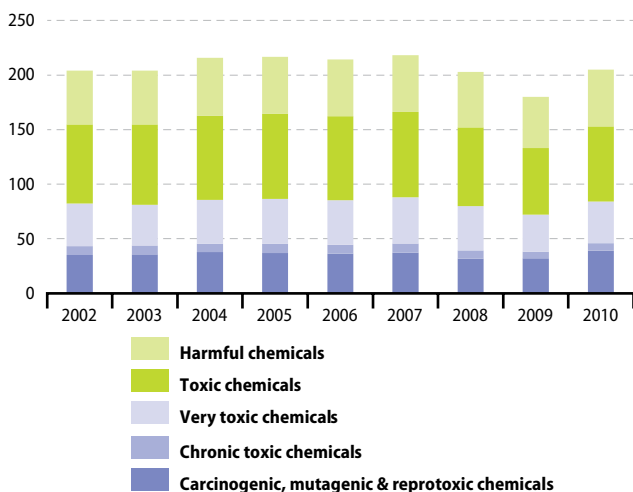
Source: Eurostat (online data code: [tsdph320](#))

**Figure 11.10:** Production of environmentally harmful chemicals, EU-27, 2002-2010  
(million tonnes)



Source: Eurostat (online data code: [ten00011](#))

**Figure 11.11:** Production of toxic chemicals, EU-27, 2002-2010  
(million tonnes)



Source: Eurostat (online data code: [tsdph320](#))

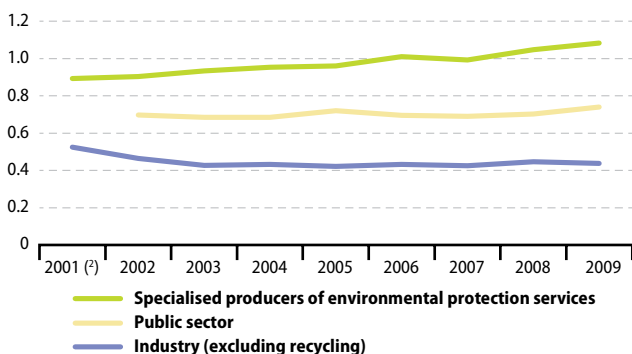
## 11.7 Environmental protection expenditure

Clean air, water and soils, healthy ecosystems and biodiversity are vital for human life, and thus it is not surprising that societies devote large amounts of money to curbing pollution and preserving a healthy environment.

Figure 11.12 shows that the EU-27 environmental protection expenditure of specialised producers of environmental protection services increased by 0.2 percentage points between 2001 and 2009 to reach 1.1 % of GDP. The relative importance of EU-27 environmental protection expenditure made by the public sector was stable around 0.7 % of GDP between 2002 and 2008, increasing somewhat in 2009. In contrast, the relative importance of EU-27 environmental protection expenditure made by industry declined between 2001 and 2003 by about 1 percentage point and then remained relatively stable though until 2009.

Between 2008 and 2009 there was a 5.8 % reduction in EU-27 GDP in current price terms. This decline in economic activity was at a more rapid pace than the reduction in EU-27 environmental protection expenditure for specialised producers of environmental protection services or the public sector, resulting in their relative shares of GDP rising in 2009 while there was a very small reduction in the relative importance of industrial environmental protection expenditure.

**Figure 11.12:** Total environmental protection expenditure, EU-27, 2001-2009 <sup>(1)</sup>  
(% of GDP)



<sup>(1)</sup> Estimates.

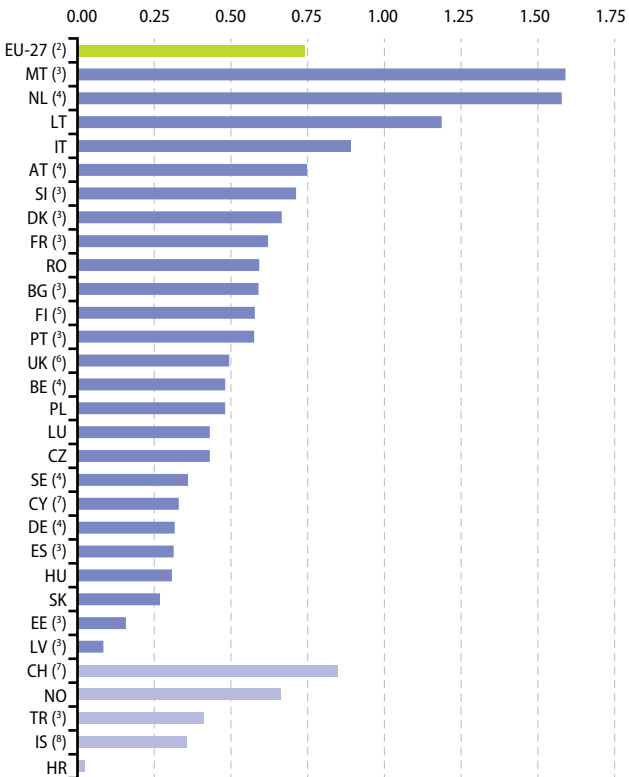
<sup>(2)</sup> Public sector, not available.

Source: Eurostat (online data codes: [env\\_ac\\_exp1](#) and [nama\\_gdp\\_c](#))



In most European countries, environmental protection investments and current expenditure (thus excluding subsidies) made by the public sector accounted for between 0.25 % and 0.9 % of GDP in 2009 (see Figure 11.13). Croatia (0.02 %), Latvia (0.08 %) and Estonia (0.16 %) were below this range, while relatively high levels of public sector investments and current expenditure were recorded in Malta (1.59 %, 2008), the Netherlands (1.58 %, 2007) and Lithuania (1.19 %).

**Figure 11.13:** Public sector environmental protection investments and current expenditure, 2009 <sup>(1)</sup> (% of GDP)



<sup>(1)</sup> Ireland and Greece, not available.

<sup>(2)</sup> Estimate.

<sup>(3)</sup> 2008.

<sup>(4)</sup> 2007.

<sup>(5)</sup> 2006.

<sup>(6)</sup> 2004.

<sup>(7)</sup> 2003.

<sup>(8)</sup> 2002.

Source: Eurostat (online data codes: [env\\_ac\\_exp1](#), [env\\_ac\\_exp1r2](#) and [nama\\_gdp\\_c](#))

## 11.8 Environmental taxes

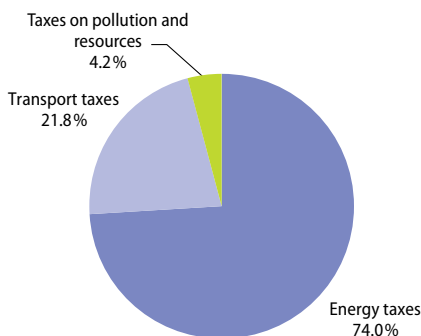
Environmental taxes are distinguished by four different types of tax relating to: energy, transport, pollution and resources; note that **value added tax (VAT)** is excluded from the definition of environmental taxes. These taxes may be viewed as a tool for implementing the ‘polluter pays’ principle, since they allow environmental externalities to be taken into account. Through environmental taxes, consumers and producers may be motivated to use natural resources more responsibly and to limit or avoid environmental pollution.

Energy taxes (which include taxes on transport fuels) represented, by far, the highest share of overall environmental tax revenue – accounting for 74.0 % of the EU-27 total in 2009 (see Figure 11.14).

Transport taxes made the second most important contribution to total revenues from environmental taxes, some 21.8 % of the EU-27 total in 2009. However, their relative significance was considerably higher in Malta, Cyprus, Greece and Ireland (as well as Norway), ranging between 48.4 % and 38.0 % of the environmental tax total.

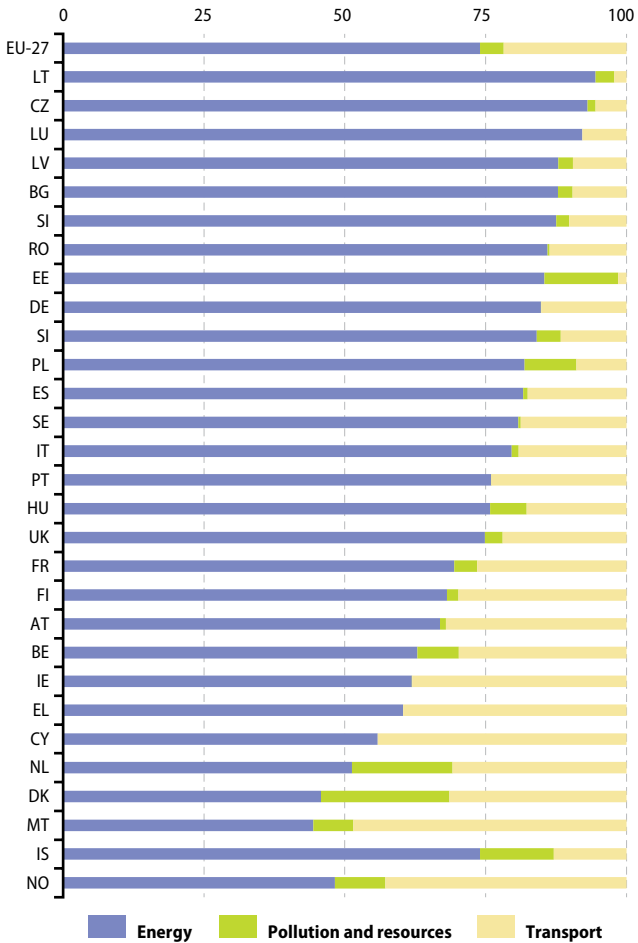
Pollution/resource taxes represented a relatively small share (4.2 %) of total environmental tax revenues in the EU-27 in 2009.

**Figure 11.14:** Environmental taxes by tax category, EU-27, 2009 (% of total)



Source: Eurostat (online data code: [env\\_ac\\_tax](#))

**Figure 11.15:** Environmental taxes by tax category, 2009  
(% of total environmental taxes)



Source: Eurostat (online data code: [env\\_ac\\_tax](#))

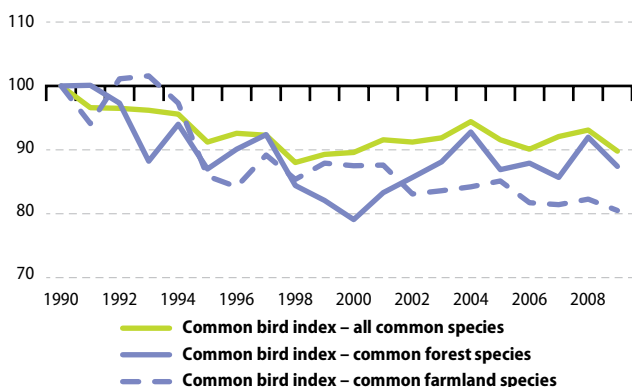
## 11.9 Biodiversity

**Biodiversity** – a contraction of biological diversity – encompasses the number, variety and variability of living organisms, including mankind. Preventing a loss of biodiversity is important for mankind, given that humans depend on the natural richness of the planet for the food, energy, raw materials, clean air and clean water that make life possible and drive economies and societies. As such, a reduction or loss of biodiversity may not only undermine the natural environment but also economic and social goals.

Areas protected for the preservation of biodiversity are proposed by the Member States under the EU's **Habitats Directive**; they are indicated as a percentage of the total area of each country. About 14 % of the EU-27's territory was proposed for protection under the Habitats Directive as of 2010. In general, these protected areas adequately cover the biogeographical regions present in the Member States, with an EU-27 average of 89 % of sufficiently covered species and habitats in 2010; using this measure, only Cyprus reported less than 50 % sufficiency (see Figure 11.17).

Since 1990 there has been a general downward trend in the abundance of both common farmland and forest species of birds, as measured by common bird indices (see Figure 11.16). Part of the

**Figure 11.16:** Common bird indices, EU, 1990-2009 <sup>(1)</sup>  
(aggregated index of population estimates of selected groups of breeding bird species, 1990 = 100)

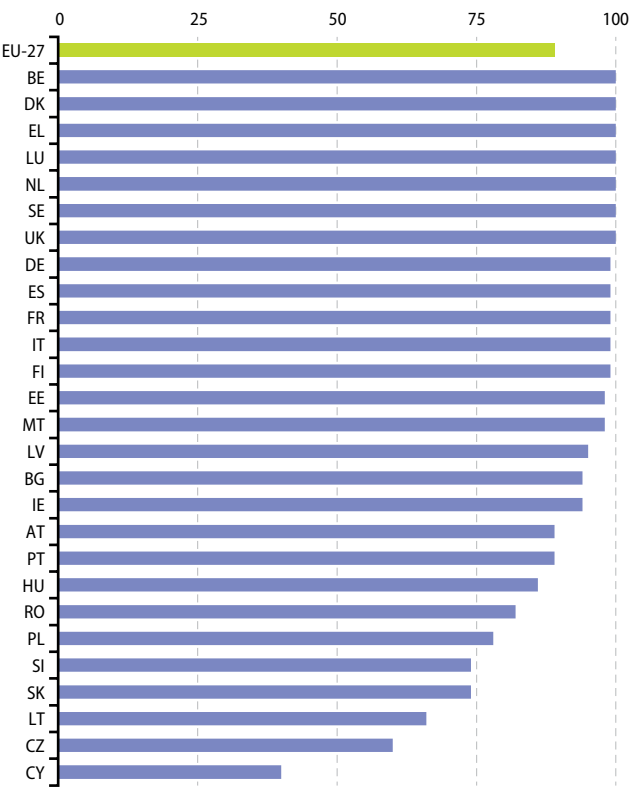


<sup>(1)</sup> Estimates; 'all common species' covers information on 145 different bird species; 'common farmland species' covers 36 bird species; 'common forest species' covers 33 bird species.

Source: EBCC/RSPB/BirdLife/Statistics Netherlands, Eurostat (online data code: [env\\_bio2](#))

relatively steep decline (– 20 % between 1990 and 2009) in numbers of common farmland birds may be attributed to changes in land use and agricultural practices.

**Figure 11.17:** Protected areas for biodiversity – sufficiency of sites, 2010 (%)



Source: EEA/European topic centre on biodiversity, Eurostat (online data code: [env\\_bio1](#))



The use of [renewable energy sources](#) is seen as a key element of the [European Union's \(EU\)](#) energy policy and should help to: reduce dependence on fuel from non-member countries; reduce emissions from carbon-based energy sources, and; decouple energy costs from oil prices. Another key aspect of the EU's energy policy is to constrain consumption by promoting energy efficiency, both within the energy sector itself and among end-users. Indeed, the EU is putting in place an ambitious energy policy – covering a broad range of energy sources from fossil fuels (oil, gas and coal) to nuclear energy and renewables (solar, wind, biomass, geothermal, hydroelectric and tidal). This policy is designed to bring about a new industrial revolution that will result in a low-energy economy, whilst making the energy consumed more secure, competitive and sustainable, with the goal of the EU becoming a world leader in renewable energy and low-carbon technologies.

Energy efficiency is at the heart of the transition to a resource efficient economy and is considered to be one of the most cost effective ways to enhance security of energy supply and to reduce emissions of greenhouse gases and other pollutants.

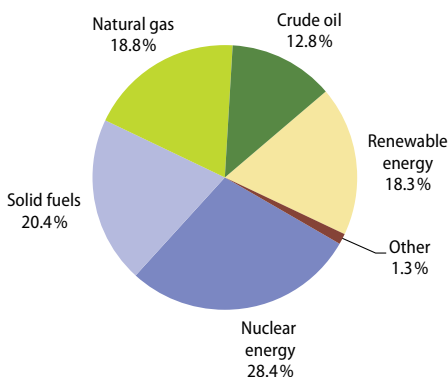
## 12.1 Energy production and imports

Production of primary energy in the EU-27 totalled 812.2 million tonnes of oil equivalent (toe) in 2009. This continued the generally downward trend of EU-27 production, as supplies of raw materials become exhausted and/or producers considered the exploitation of limited resources uneconomical.

Primary energy production in the EU-27 in 2009 was spread across a range of different energy sources, the most important of which was nuclear energy (28.4% of the total); the significance of nuclear fuel was particularly high in Belgium, France, Lithuania and Slovakia – where it accounted for more than half of the national production of primary energy. Around one fifth of the EU-27's total production of primary energy was accounted for by solid fuels (20.4%, largely coal), by natural gas (18.8%) and by renewable energy sources (18.3%), while crude oil (12.8%) made up the remainder of the total (see Figure 12.1).

The downturn in the primary production of hard coal, lignite, crude oil, natural gas and more recently nuclear energy has led to a situation where the EU is increasingly reliant on primary energy imports in order to satisfy demand. The EU-27's imports of primary energy exceeded exports by some 943.6 million toe in 2009.

**Figure 12.1:** Production of primary energy, EU-27, 2009  
(% of total, based on tonnes of oil equivalent)



Source: Eurostat (online data codes: [ten00080](#), [ten00077](#), [ten00079](#), [ten00078](#), [ten00081](#) and [ten00082](#))



**Table 12.1:** Energy production, 2009

	Production of primary energy (million toe)	Share of total production (%)				
		Nuclear energy	Solid fuels	Natural gas	Crude oil	Renewables
<b>EU-27</b>	812.2	28.4	20.4	18.8	12.8	18.3
<b>EA-17</b>	448.4	39.8	14.6	17.1	3.3	23.4
BE	14.6	83.7	0.0	0.0	0.0	11.4
BG	9.7	40.8	47.0	0.1	0.3	11.6
CZ	31.1	22.6	67.0	0.5	1.0	8.3
DK	23.9	0.0	0.0	31.5	55.4	11.5
DE	127.5	27.3	35.9	8.7	3.6	21.7
EE	4.2	0.0	79.2	0.0	0.0	20.8
IE	1.5	0.0	38.2	20.8	0.0	40.2
EL	10.1	0.0	81.1	0.1	0.8	17.9
ES	29.6	46.0	12.3	0.0	0.4	40.2
FR	128.5	82.3	0.0	0.6	1.0	15.2
IT	27.3	0.0	0.2	24.0	19.0	54.0
CY	0.1	0.0	0.0	0.0	0.0	91.5
LV	2.1	0.0	0.3	0.0	0.0	99.6
LT	4.0	71.7	0.4	0.0	2.9	25.0
LU	0.1	0.0	0.0	0.0	0.0	75.5
HU	11.0	36.4	14.2	20.9	11.0	16.9
MT	0.0	0.0	0.0	0.0	0.0	0.0
NL	63.2	1.7	0.0	89.2	3.5	4.4
AT	11.4	0.0	0.0	12.6	9.2	73.3
PL	67.2	0.0	83.5	5.5	1.0	9.0
PT	4.9	0.0	0.0	0.0	0.0	97.2
RO	28.5	10.6	23.0	31.4	16.4	18.5
SI	3.5	42.0	32.9	0.1	0.0	24.5
SK	5.7	64.5	11.4	1.5	0.3	21.4
FI	16.4	37.1	13.3	0.0	0.9	47.8
SE	29.9	45.0	0.7	0.0	0.0	52.8
UK	156.3	11.4	6.4	34.4	44.2	3.3
NO	215.9	0.0	0.8	42.0	51.5	5.6
CH	12.7	56.5	0.0	0.0	0.0	37.5
HR	4.1	0.0	0.0	54.0	20.4	25.3
TR	30.3	0.0	57.3	1.9	8.1	32.7

Source: Eurostat (online data codes: [ten00076](#), [ten00080](#), [ten00077](#), [ten00079](#), [ten00078](#) and [ten00081](#))

## 12.2 Consumption of energy

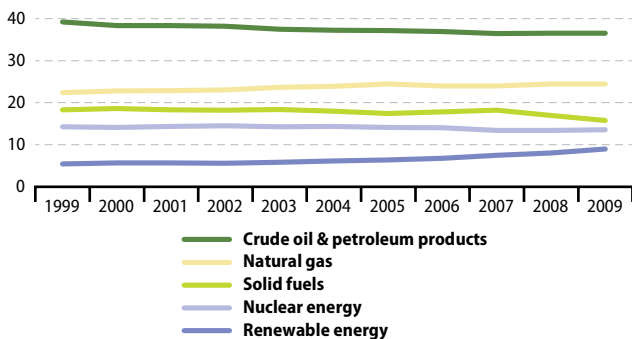
In tandem with supply-side policies, the EU has launched a number of initiatives which aim to increase the efficiency of energy use, reduce energy demand and attempt to decouple it from economic growth. Several instruments and implementing measures exist in this field, including the promotion of **co-generation**, the energy performance of buildings (whether private or public buildings), and energy labelling of domestic appliances.

**Gross inland energy consumption** of primary energy within the EU-27 in 2009 was 1 703 million **tonnes of oil equivalent** (toe).

Over the period 1999 to 2009 there was a gradual decline in the share of crude oil and petroleum products, solid fuels, and nuclear energy in total gross inland consumption, while an increasing share of EU-27 consumption was accounted for by natural gas and renewable energy sources (see Figure 12.2).

The lowest levels of **energy intensity** – a measure of an economy's energy efficiency – were recorded for Denmark and Ireland in 2009, while the most energy-intensive Member States were Bulgaria, Estonia and Romania (see Table 12.2). It should be noted that the economic structure of an economy plays an important role in determining energy intensity, as post-industrial economies with large service sectors will, a priori, have considerably lower energy use than economies characterised by heavy, traditional industrial activities.

**Figure 12.2:** Gross inland consumption, EU-27, 1999-2009  
(% of total consumption)



Source: Eurostat (online data codes: [ten00086](#), [nrg\\_102a](#), [nrg\\_103a](#), [nrg\\_101a](#), [nrg\\_104a](#) and [nrg\\_1071a](#))

**Table 12.2:** Gross inland consumption of primary energy and energy intensity, 1999 and 2009

	Gross inland consumption of primary energy (million toe)		Energy intensity (kg of oil equivalent per EUR 1 000 of GDP)	
	1999	2009	1999	2009
<b>EU-27</b>	1 711	1 703	193.0	165.2
<b>EA-17</b>	1 185	1 202	181.2	161.0
BE	59.0	58.2	242.4	205.7
BG	18.3	17.6	1 378.0	842.5
CZ	39.2	42.3	661.2	514.1
DK	20.3	19.4	121.3	106.7
DE	341.5	326.6	170.9	150.6
EE	5.0	5.3	890.9	607.0
IE	13.7	14.9	143.6	109.4
EL	27.0	30.6	204.1	167.9
ES	118.0	130.2	196.6	168.1
FR	255.0	262.7	183.8	164.3
IT	172.6	168.9	150.3	140.1
CY	2.2	2.8	233.3	211.5
LV	4.0	4.3	498.6	354.5
LT	7.9	8.3	658.6	445.9
LU	3.4	4.4	169.5	151.9
HU	25.9	25.3	528.9	413.5
MT <sup>(1)</sup>	0.8	0.8	241.3	168.3
NL	74.8	81.6	186.0	173.8
AT	29.2	32.3	145.7	136.2
PL	93.5	95.3	524.7	363.7
PT	25.0	25.0	204.2	186.5
RO	36.7	35.4	924.4	576.9
SI	6.4	7.0	313.0	252.3
SK	17.8	16.8	818.1	496.6
FI	33.3	34.0	265.1	222.0
SE	50.2	45.9	195.4	147.9
UK	230.0	206.8	149.2	113.7
NO	26.8	28.9	151.4	135.8
CH	26.7	28.2	102.0	90.9
HR	8.0	8.7	355.7	284.3
MK	:	:	736.1	553.8
TR	71.2	100.0	262.2	257.4

<sup>(1)</sup> Energy intensity, 1999, provisional.

Source: Eurostat (online data codes: [ten00086](#) and [t2020\\_32](#))

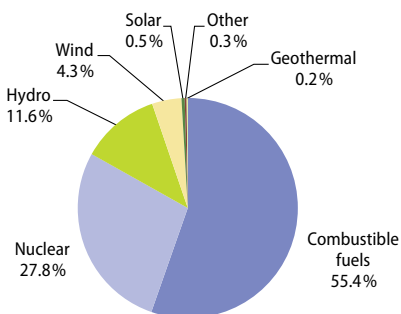
## 12.3 Electricity production, consumption and market overview

Total **net electricity generation** in the EU-27 was 3.0 million **gigawatt hours (GWh)** in 2009 – which marked a decrease of 4.9 % compared with the year before, reflecting in part the impact of the financial and economic crisis. This large fall in the level of electricity generation effectively undid the increases built up over the five previous years, as the level of electricity generation in 2009 was approximately the same as it had been in 2003. The reduction in 2009 was the first year on year fall in net electricity generation since 1992 (– 0.5 %).

More than one quarter of the net electricity generated in the EU-27 in 2009 came from nuclear power plants (27.8 %) while almost exactly double this share (55.4 %) came from power stations using combustible fuels such as natural gas, coal and oil.

During the ten-year period from 1999 to 2009, the consumption of electricity by households rose in the EU-27 by 18.5 % overall. There was much faster growth in a number of Member States, in particular Cyprus, Spain, Portugal, Romania and all three of the **Baltic Member States** where growth was at least double the EU-27 average.

**Figure 12.3:** Net electricity generation, EU-27, 2009 <sup>(1)</sup>  
(% of total, based on GWh)



<sup>(1)</sup> Figures do not sum to 100% due to rounding.

Source: Eurostat (online data code: [nrg\\_105a](#))

**Table 12.3:** Electricity, 2004 and 2009

	Net electricity generation (1 000 GWh)		Market share of largest generator, 2009 (% of total generation)	Electricity consumption by households, 2009 (1998= 100)
	2004	2009		
<b>EU-27</b>	3 119	3 046	:	118.5
<b>EA-17</b>	2 194	2 161	:	:
BE	82	88	77.7	86.1
BG	38	39	:	101.8
CZ	78	76	73.7	104.6
DK	38	34	47.0	110.0
DE	577	557	26.0	106.0
EE	9	8	90.0	138.5
IE	24	27	37.0	132.5
EL	55	56	91.8	134.5
ES	269	283	32.9	153.0
FR	550	518	87.3	135.5
IT	290	281	29.8	113.5
CY	4	5	100.0	180.5
LV	4	5	87.0	173.7
LT	18	14	70.9	144.4
LU	4	4	:	131.6
HU	31	33	43.1	114.3
MT	2	2	100.0	104.3
NL	98	109	:	113.1
AT	61	67	:	117.2
PL	141	138	18.1	132.4
PT	43	49	52.4	149.0
RO	53	53	29.3	139.8
SI	14	15	55.0	131.7
SK	28	24	81.7	78.1
FI	82	69	24.5	119.5
SE	149	133	44.0	102.0
UK	377	359	24.5	111.1
NO	110	132	29.5	103.8
CH	64	66	:	115.2
HR	13	12	92.0	112.6
TR	145	187	:	173.3

Source: Eurostat (online data codes: [nrg\\_105a](#), [tsier060](#) and [tsdpc310](#))

## 12.4 Renewable energy

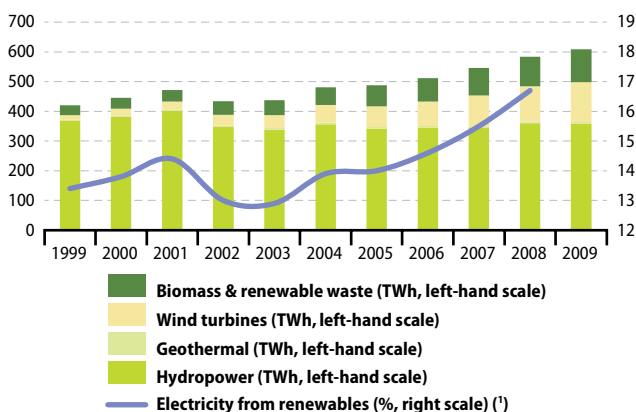
The **primary production** of renewable energy within the EU-27 in 2009 was 148.4 million **tonnes of oil equivalent (toe)** – an 18.3 % share of total primary energy production. The volume of renewable energy produced within the EU-27 increased overall by 60.2 % between 1999 and 2009, equivalent to an average increase of 4.8 % per annum.

There were considerable differences in the renewable energy mix across the Member States, which reflect to a large degree natural endowments and climatic conditions.

Table 12.4 shows the latest data available for the share of renewable energies in gross **final energy consumption** and the indicative targets that have been set for each country by 2020. The share of renewables in gross final energy consumption stood at 11.7 % in the EU-27 in 2009, more than half the target that has been set for 2020.

The latest information available for 2009 shows that electricity generated from renewable energy sources contributed 18.2 % of the EU-27's **gross electricity consumption**. The growth in electricity generated from renewable energy sources during the period 1999 to 2009 (see Figure 12.4) largely reflects an expansion in two renewable energy sources; namely, wind turbines and biomass. Although hydropower remained the single largest source for renewable electricity generation in the EU in 2009, the amount of electricity generated was somewhat lower than a decade earlier (– 2.4 %).

**Figure 12.4:** Electricity generated from renewable energy sources, EU-27, 1999-2009



(<sup>1</sup>) Percentage of consumption; 2009, not available.

Source: Eurostat (online data codes: [nrg\\_105a](#) and [tsdcc330](#))

**Table 12.4:** Production and consumption of renewable energy, 1999 and 2009

	Primary production (1 000 toe)		Share of renewables in gross final energy consumption (%)	
	1999	2009	2009	2020 <sup>(1)</sup>
<b>EU-27</b>	92 674	148 435	11.7	20
<b>EA-17</b>	62 261	104 794	:	:
BE	498	1 661	4.6	13
BG	665	1 129	11.6	16
CZ	1 409	2 593	8.5	13
DK	1 619	2 754	19.9	30
DE	8 069	27 692	9.8	18
EE	526	864	22.8	25
IE	222	614	5.0	16
EL	1 419	1 804	8.2	18
ES	6 031	11 905	13.3	20
FR <sup>(2)</sup>	16 528	19 567	12.3	23
IT	9 401	14 746	8.9	17
CY	44	75	4.6	13
LV	1 571	2 089	34.3	40
LT	656	992	17.0	23
LU	35	80	2.7	11
HU	843	1 851	7.7	13
MT	0	0	0.2	10
NL	1 210	2 768	4.1	14
AT	6 675	8 352	29.7	34
PL	3 757	6 031	8.9	15
PT	3 342	4 747	24.5	31
RO	4 400	5 275	22.4	24
SI	551	863	16.9	25
SK	458	1 223	10.3	14
FI	7 256	7 833	30.3	38
SE	13 359	15 819	47.3	49
UK	2 133	5 107	2.9	15
NO	11 872	12 116	61.9	:
CH	4 693	4 760	:	:
HR	900	1 030	:	:
TR	10 701	9 909	:	:

(<sup>1</sup>) Indicative targets for 2020; not available for Norway.

(<sup>2</sup>) Share of renewables in gross final energy consumption, excluding French overseas departments and territories.

Source: Eurostat (online data codes: [ten00081](#) and [t2020\\_31](#))

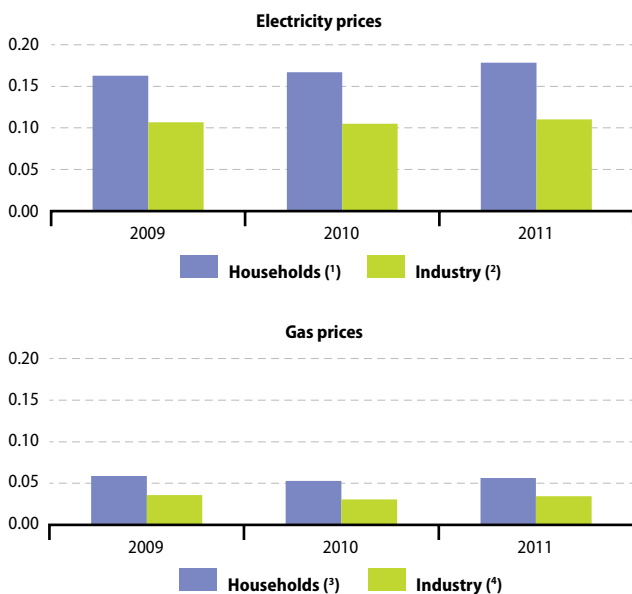
## 12.5 Energy prices

The price of energy in the EU depends on a range of different supply and demand conditions, including the geopolitical situation, import diversification, network costs, environmental protection costs, severe weather conditions, or levels of excise and taxation; note that all of the prices presented in this subchapter include taxes and VAT for household consumers but exclude refundable taxes and VAT for industrial/business consumers.

Between the first half of 2010 and the first half of 2011, the price of electricity for households in the EU-27 rose by 6.9%. On average, the EU-27 price of natural gas for households rose by 6.9% during the period considered.

Table 12.5 shows the proportion of taxes in the overall price for household consumers, with information for the basic price excluding

**Figure 12.5:** Half-yearly electricity and gas prices, EU-27, first half of year 2009-2011 (EUR per kWh)



(¹) Annual consumption: 2 500 kWh < consumption < 5 000 kWh.

(²) Annual consumption: 500 MWh < consumption < 2 000 MWh; excluding VAT

(³) Annual consumption: 5 600 kWh < consumption < 56 000 kWh (20-200 GJ).

(⁴) Annual consumption: 2 778 MWh < consumption < 27 778 MWh (10 000 - 100 000 GJ); excluding VAT.

Source: Eurostat (online data codes: [nrg\\_pc\\_204](#), [nrg\\_pc\\_205](#), [nrg\\_pc\\_202](#) and [nrg\\_pc\\_203](#))



all taxes, actual tax contributions in euro per kilowatt hour, as well as the relative share of the tax contribution in the final price. The share of the tax contribution in the total price was lowest in the United Kingdom and highest in Denmark.

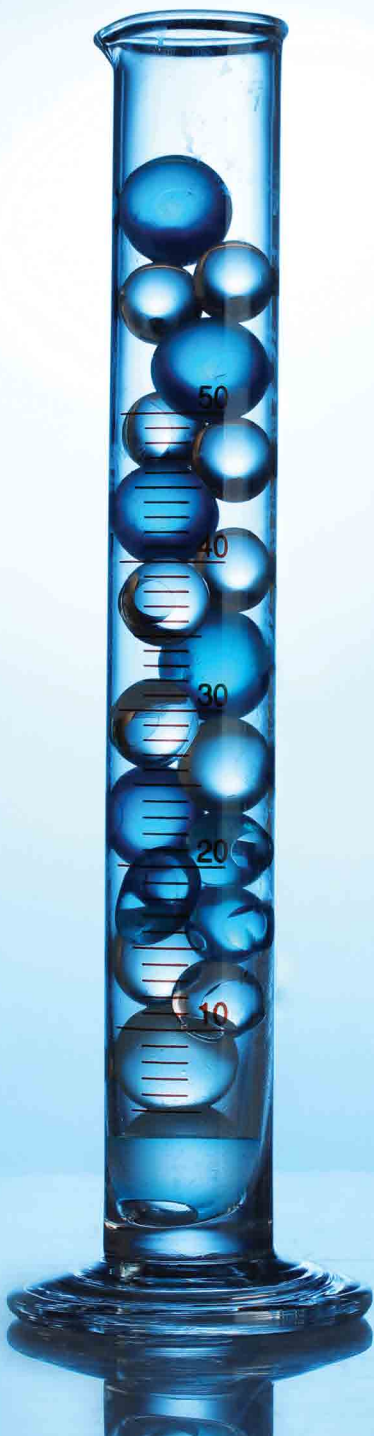
**Table 12.5:** Prices for household consumers, first half of year 2011

	Electricity prices <sup>(1)</sup>		Gas prices <sup>(2)</sup>	
	Basic price (EUR per kWh)	Share of taxes, levies and VAT in total price (%)	Basic price (EUR per kWh)	Share of taxes, levies and VAT in total price (%)
<b>EU-27</b>	0.128	28.53	0.056	23.70
<b>EA-17</b>	0.128	31.91	0.062	27.80
BE	0.157	26.40	0.046	19.99
BG	0.069	16.71	0.036	16.65
CZ	0.123	17.59	0.045	16.67
DK	0.126	56.57	0.059	48.95
DE	0.141	44.38	0.043	26.07
EE	0.070	27.65	0.033	22.08
IE	0.158	16.68	0.042	17.33
EL	0.100	19.92	:	:
ES	0.160	17.98	0.045	15.25
FR	0.099	28.18	0.048	16.64
IT	0.142	29.71	0.044	36.43
CY	0.173	15.56	:	:
LV	0.096	18.07	0.035	10.79
LT	0.100	17.30	0.036	17.37
LU	0.145	13.53	0.046	10.36
HU	0.134	20.58	0.045	20.00
MT	0.162	5.00	:	:
NL	0.130	25.42	0.042	41.86
AT	0.144	27.39	0.051	26.28
PL	0.115	22.16	0.038	18.71
PT	0.102	38.63	0.057	7.08
RO	0.085	21.63	0.015	47.56
SI	0.108	25.12	0.051	23.33
SK	0.137	18.43	0.039	16.63
FI	0.108	29.81	:	:
SE	0.138	34.23	0.066	46.05
UK	0.137	4.75	0.040	4.78
NO	0.156	26.72	:	:
HR	0.092	19.26	0.031	18.67
TR	0.098	19.57	0.023	18.63

(<sup>1</sup>) Annual consumption: 2 500 kWh < consumption < 5 000 kWh.

(<sup>2</sup>) Annual consumption: 5 600 kWh < consumption < 56 000 kWh (20-200 GJ).

Source: Eurostat (online data codes: [nrg\\_pc\\_204](#) and [nrg\\_pc\\_202](#))



Research and development (R & D) is often considered as one of the driving forces behind growth and job creation. However, its influence extends well beyond the economic sphere, as it can potentially resolve environmental or international security threats, ensure safer food, or lead to the development of new medicines to fight illness and disease.

In October 2010, the European Commission launched a Europe 2020 flagship initiative, titled ‘[innovation union](#)’ (COM(2010) 546 final) which sets out a strategic approach to a range of challenges like climate change, energy and food security, health and an ageing population.

[Horizon 2020](#) is planned as the framework programme for research and innovation after 2013. A Green paper titled ‘[From challenges to opportunities: towards a common strategic framework for EU research and innovation funding](#)’ (COM(2011) 48) was adopted by the European Commission in February 2011 and proposed major changes to [European Union \(EU\)](#) research and innovation funding to make participation easier, increase scientific and economic impact and provide better value for money.

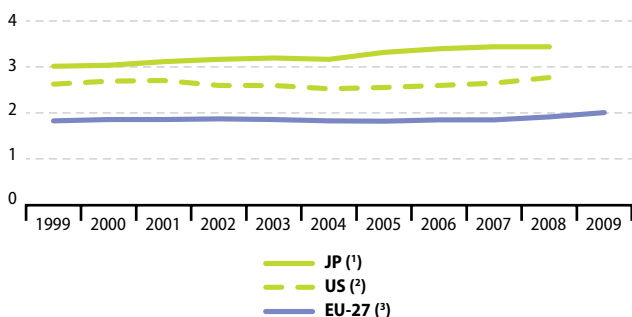
## 13.1 R & D expenditure

Gross domestic expenditure on R & D (GERD) stood at EUR 236 820 million in the EU-27 in 2009, which marked a 1.2 % decrease on the level of GERD in 2008.

At the [Barcelona Council](#) in 2002, the EU agreed to a target of spending at least 3 % of gross domestic product (GDP) on research by 2010, of which two thirds was to be financed by the business sector; most of the EU Member States specified their own targets in national reform programmes. Using this measure, the highest [R & D intensity](#) in 2009 was recorded in Finland (3.96 %), Sweden (3.62 %) and Denmark (3.02 %) – see Table 13.1.

The European Commission has through its Europe 2020 flagship initiative, titled '[innovation union](#)', placed renewed emphasis on the conversion of Europe's scientific expertise into marketable products and services, through seeking to use public sector intervention to stimulate the private sector and to remove bottlenecks which stop such ideas reaching the market. Furthermore, the latest revision of the [integrated economic and employment guidelines](#) (revised as part of the [Europe 2020 strategy](#) for smart, sustainable and inclusive growth) includes a guideline to optimise support for R & D and innovation, strengthening the knowledge triangle and unleashing the potential of the digital economy.

**Figure 13.1:** Gross domestic expenditure on R&D in the Triad, 1999-2009  
(% share of GDP)



(¹) Break in series, 2008; not available for 2009.

(²) Excludes most or all capital expenditure; 2008, provisional; not available for 2009.

(³) Estimates.

Source: Eurostat (online data code: [t2020\\_20](#)), OECD

**Table 13.1:** Gross domestic expenditure on R&D, 2009 <sup>(1)</sup>  
(% share of GDP)

	Share of GDP	Breakdown by source of funds		
		Business enterprises	Government	Abroad
<b>EU-27</b>	2.01	1.25	0.27	0.48
<b>EA-16</b>	2.05	1.27	0.29	0.47
BE	1.96	1.32	0.17	0.45
BG	0.53	0.16	0.29	0.07
CZ	1.53	0.92	0.33	0.28
DK	3.02	2.02	0.09	0.90
DE	2.82	1.92	0.41	0.49
EE	1.42	0.64	0.16	0.60
IE	1.77	1.17	0.08	0.52
EL	0.58	0.16	0.12	0.29
ES	1.38	0.72	0.28	0.39
FR	2.21	1.37	0.36	0.45
IT	1.27	0.65	0.18	0.40
CY	0.46	0.10	0.10	0.20
LV	0.46	0.17	0.11	0.18
LT	0.84	0.20	0.20	0.44
LU	1.68	1.24	0.29	0.15
HU	1.15	0.66	0.23	0.24
MT	0.54	0.34	0.03	0.17
NL	1.84	0.88	0.23	0.73
AT	2.75	1.94	0.15	0.66
PL	0.68	0.19	0.23	0.25
PT	1.66	0.78	0.12	0.59
RO	0.47	0.19	0.17	0.12
SI	1.86	1.20	0.39	0.27
SK	0.48	0.20	0.16	0.12
FI	3.96	2.83	0.36	0.75
SE	3.62	2.55	0.16	0.90
UK	1.87	1.16	0.17	0.50
IS	3.10	1.64	0.62	0.77
NO	1.80	0.95	0.29	0.57
CH	3.00	2.20	0.02	0.72
HR	0.84	0.34	0.23	0.27
TR	0.85	0.34	0.11	0.40
JP	3.44	2.70	0.29	0.40
US	2.77	2.01	0.29	0.36

(<sup>1</sup>) Greece, 2007; Switzerland, Japan and the United States, 2008.

Source: Eurostat (online data codes: [tsiir020](#) and [tsiir030](#)), OECD

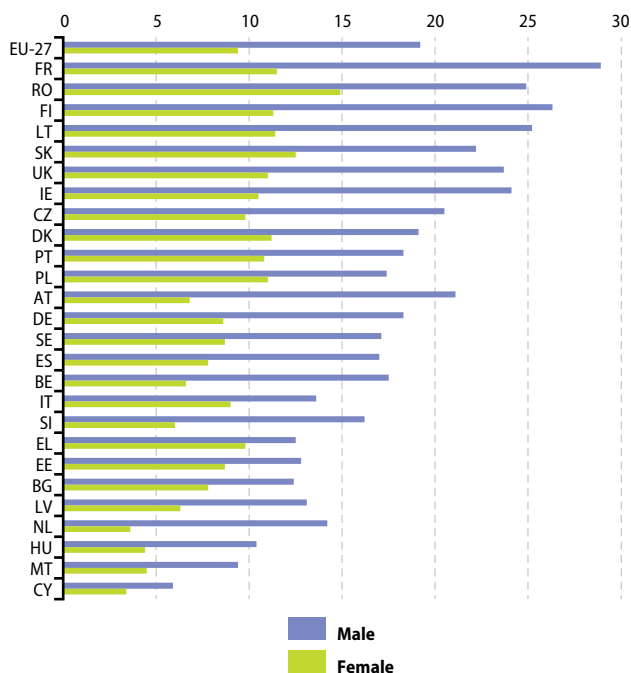
## 13.2 R & D personnel

The number of **researchers** in the EU-27 has increased in recent years. There were 1.6 million researchers (**full-time equivalents (FTE)**) employed in the EU-27 in 2009 (see Table 13.2), which marked an increase of almost 466 000 (or 41.6%) when compared with 2000.

A breakdown of R & D personnel in the EU-27 by **institutional sector** in 2009 shows that more than two fifths of the total were concentrated in the business enterprise sector (44%) and the higher education sector (42%) and 12% in the **government sector**.

Within the EU-27 there were 14.3 graduates in mathematics, science and technology fields of education per 1 000 persons aged 20 to 29 years in 2009, with particularly high ratios in France, Romania, Finland and Lithuania (see Figure 13.2). This ratio should be interpreted with care as some graduates may be foreigners who

**Figure 13.2:** Science and technology graduates, 2009 <sup>(1)</sup>  
(tertiary graduates in science and technology per 1 000 persons aged 20-29 years)



<sup>(1)</sup> Luxembourg, not available; Greece and Italy, 2008.

Source: Eurostat (online data code: [tsiir050](#))

return home following their studies and so push up the ratio in the country where they studied and pull down the ratio in their country of origin; this may explain to a large extent the very low ratios recorded in two of the smallest Member States, Cyprus and Malta.

**Table 13.2:** Researchers, 2008 and 2009

	Number of researchers, 2009 (1 000 FTEs) <sup>(1)</sup>				Gender breakdown, 2008 (%) <sup>(2)</sup>	
	Total	Business enterprises	Government	Higher education	Male	Female
<b>EU-27</b>	1 584.9	702.6	196.5	668.0	29.3	70.7
<b>EA-16</b>	1 101.9	526.2	146.5	416.3	27.2	72.8
BE	37.2	17.4	2.8	16.6	30.7	69.3
BG	12.0	1.7	5.8	4.4	48	52
CZ	28.8	12.7	6.3	9.7	25.4	74.6
DK	35.3	21.8	1.3	12.0	29.3	70.7
DE	311.5	180.0	49.0	82.5	18.6	81.4
EE	4.3	1.3	0.5	2.4	37.9	62.1
IE	14.9	7.8	0.6	6.5	30.6	69.4
EL	20.8	6.1	2.2	12.4	31.7	68.3
ES	133.8	46.2	24.2	63.2	38.2	61.8
FR	289.5	146.9	29.2	109.2	:	:
IT	101.8	38.4	16.5	43.1	33.5	66.5
CY	0.8	0.2	0.1	0.4	34.9	65.1
LV	3.6	0.3	0.7	2.6	49.7	50.3
LT	8.5	1.1	1.7	5.7	48.8	51.2
LU	2.4	1.4	0.7	0.4	17.6	82.4
HU	20.1	9.0	4.9	6.2	30.7	69.3
MT	0.5	0.2	0.0	0.2	28	72
NL	46.7	20.3	6.8	19.5	:	:
AT	34.5	21.8	1.5	11.0	20.6	79.4
PL	61.1	9.8	13.2	38.1	38	62
PT	45.9	10.8	3.4	28.1	43.7	56.3
RO	19.3	6.1	5.7	7.3	45.6	54.4
SI	7.4	3.3	2.2	2.0	33.1	66.9
SK	13.3	1.6	2.8	8.9	42.3	57.7
FI	40.8	23.6	4.5	12.3	:	:
SE	46.8	29.3	1.5	15.9	29.5	70.5
UK	243.3	83.3	8.4	147.6	:	:
IS	2.9	1.1	0.5	1.1	36.4	63.6
NO	26.6	13.3	4.4	9.0	:	:
CH	25.1	10.3	0.5	14.3	:	:
HR	6.9	1.3	2.0	3.6	48.7	51.3
TR	57.8	21.0	5.7	31.0	33.6	66.4
JP	656.7	492.8	32.1	123.5	:	:
US	1 412.6	1 130.5	:	:	:	:

(<sup>1</sup>) Greece and the United States, 2007; Switzerland and Japan, 2008.

(<sup>2</sup>) Greece and Luxembourg, 2005; Belgium, Denmark, Germany, Austria and Sweden, 2007.

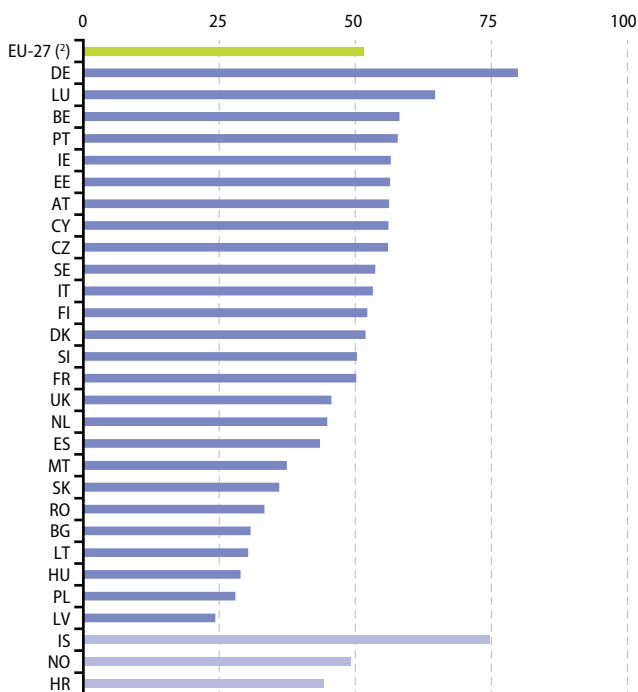
Source: Eurostat (online data codes: [tsc00004](#) and [tsc00006](#)), OECD

## 13.3 Innovation

Among the EU Member States the highest propensity to innovate in 2008 (see Figure 13.3) was recorded in Germany (79.9% of all enterprises), followed by Luxembourg (64.7%) – these were the only Member States where more than 60% of enterprises were innovative – the EU-27 average (excluding Greece) was 51.6%. Note that **large enterprises** tend to innovate more than **small and medium-sized enterprises (SMEs)** and as such these figures for the Member States may, at least to some degree, reflect the enterprise structure of each domestic economy.

Large enterprises (with 250 or more employees) were more likely to have brought product innovations to market in 2008 than either **medium-sized enterprises** (50 to 249 employees) or **small enterprises**

**Figure 13.3:** Proportion of innovative enterprises, 2008 <sup>(1)</sup>  
(% of all enterprises)



<sup>(1)</sup> Greece, not available.

<sup>(2)</sup> Excluding Greece.

Source: Eurostat (online data code: [inn\\_cis6\\_type](#))



(10 to 49 employees); this pattern held for all of the Member States for which data are available – as shown in Table 13.3.

Innovations are based on the results of new technological developments, new combinations of existing technology, or the use of other knowledge acquired (by the enterprise).

**Table 13.3:** Proportion of innovative enterprises which introduced products new to the market, 2008 (%)

	Total	With 10 to 49 employees	With 50 to 249 employees	With ≥ 250 employees
BE	47.5	47.1	45.5	59.3
BG	25.9	23.3	30.8	30.8
CZ	39.1	34.0	47.0	54.1
DK	44.4	44.1	42.3	54.1
DE	26.0	23.2	29.5	43.7
EE	25.8	24.2	28.0	36.1
IE	:	:	:	:
EL	:	:	:	:
ES	21.5	18.0	28.1	43.6
FR	43.2	39.9	46.3	60.0
IT	47.7	45.5	55.5	61.4
CY	26.8	24.0	33.6	40.9
LV	23.4	22.7	21.5	35.6
LT	37.2	40.2	28.8	47.1
LU	40.6	35.3	47.6	55.8
HU	33.1	31.2	32.0	45.2
MT	39.1	38.3	32.7	60.0
NL	49.2	48.1	51.3	53.6
AT	49.5	46.3	52.1	66.4
PL	41.5	40.1	41.6	47.5
PT	35.6	33.1	41.7	53.7
RO	24.8	23.0	26.8	31.4
SI	51.3	51.3	48.1	59.5
SK	35.7	34.2	33.4	48.0
FI	37.3	35.5	35.9	57.7
SE	50.4	48.3	53.6	62.8
UK	:	:	:	:
NO	34.5	36.8	28.5	34.6
HR	37.4	36.7	38.5	39.1

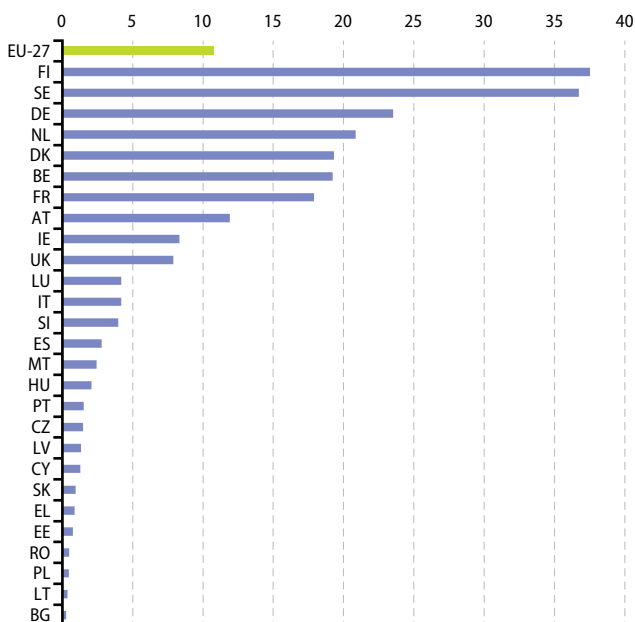
Source: Eurostat (online data code: [inn\\_cis6\\_prod](#))

## 13.4 Patents

**Intellectual property rights**, in particular **patents**, provide a link between **innovation**, **inventions** and the marketplace. Applying for a patent makes an invention public, but at the same time gives it protection.

With the exception of the years 2000 to 2002, the number of EU-27 patent applications filed with the **European Patent Office (EPO)** increased at a relatively fast pace from 1998 to the latest period for which data are available (2008), with annual growth averaging 7.3 % per annum between 1998 and 2000, and 2.6 % between 2002 and 2008. Over the whole of the period under consideration (1998-2008), the number of EU-27 patent applications filed with the EPO increased from 44 796 to 59 468. In relative terms, Sweden reported the highest number of patent applications per million inhabitants (318.9), followed by Germany (298.7) and Finland (250.3).

**Figure 13.4:** High-technology patent applications to the EPO, 2008 <sup>(1)</sup>  
(per million inhabitants)



<sup>(1)</sup> Estimates.

Source: Eurostat (online data code: [pat\\_ep\\_ntec](#))

Finland and Sweden registered the highest number of high-technology patent applications per million inhabitants in 2008, the figures for both countries being over 35, while Germany, the Netherlands, Denmark, Belgium, France and Austria were the only other Member States to record double-digit ratios.

**Table 13.4:** Patents, 2003, 2005 and 2008

	Patent applications to the EPO		Patent applications to the EPO	Patents granted by the USPTO
	(units)		(per million inhabitants)	
	2003	2008	2008	2005
<b>EU-27</b>	52 318	59 468	119.5	37.0
BE	1 340	1 519	142.4	46.4
BG	22	32	4.2	9.9
CZ	112	200	19.3	5.6
DK	1 071	1 275	232.9	64.5
DE	21 994	24 557	298.7	94.1
EE	11	35	25.9	6.0
IE	223	324	73.7	43.5
EL	85	127	11.3	2.9
ES	948	1 545	34.1	5.3
FR	7 902	8 557	133.7	44.0
IT	4 378	5 349	89.7	19.7
CY	6	10	13.2	3.8
LV	8	24	10.4	1.4
LT	17	10	3.0	8.5
LU	88	115	238.1	94.0
HU	132	195	19.4	5.9
MT	6	10	23.9	2.5
NL	3 459	3 711	226.2	75.3
AT	1 358	1 932	232.2	52.0
PL	111	226	5.9	1.3
PT	65	144	13.6	1.9
RO	16	36	1.7	0.8
SI	73	119	59.1	5.2
SK	31	50	9.2	1.4
FI	1 278	1 327	250.3	121.5
SE	2 029	2 928	318.9	59.9
UK	5 555	5 511	90.1	36.5
IS	31	28	88.8	62.2
LI	22	34	963.9	470.3
NO	342	563	118.8	42.0
CH	2 762	3 351	441.3	120.8
HR	42	32	7.2	2.2
TR	85	270	3.8	0.2
JP	21 600	20 239	158.5	253.3
US	32 601	31 602	103.8	283.0

Source: Eurostat (online data codes: [tsc00009](#), [tsiir060](#), [pat\\_us\\_ntot](#) and [tsiir070](#))

# Annexes

## Nomenclatures and classifications

Full listings of the nomenclatures and classifications are available on the following websites:

### NUTS (nomenclature of territorial units for statistics)

[http://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=LST\\_CLS\\_DLD&StrNom=NUTS\\_33&StrLanguageCode=EN#](http://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=LST_CLS_DLD&StrNom=NUTS_33&StrLanguageCode=EN#)

### NACE Rev. 1.1 (statistical classification of economic activities in the European Community)

[http://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=ACT\\_OTH\\_BUILD\\_TREE&StrNom=NACE\\_1\\_1&StrLanguageCode=EN](http://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=ACT_OTH_BUILD_TREE&StrNom=NACE_1_1&StrLanguageCode=EN)

### NACE Rev. 2 (statistical classification of economic activities in the European Community)

[http://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=LST\\_NOM\\_DTL&StrNom=NACE\\_REV2&StrLanguageCode=EN](http://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=LST_NOM_DTL&StrNom=NACE_REV2&StrLanguageCode=EN)

### SITC Rev. 4 (standard international trade classification)

<http://unstats.un.org/unsd/trade/sitcrev4.htm>

### ISCED (international standard classification of education)

[http://www.uis.unesco.org/ev.php?ID=3813\\_201&ID2=DO\\_TOPIC](http://www.uis.unesco.org/ev.php?ID=3813_201&ID2=DO_TOPIC)

# Data presentation and abbreviations

## Data presentation

Eurostat online databases contain a large amount of metadata that provides information on the status of particular values or data series. In order to improve readability, only the most significant information has been included in the tables and figures. The following symbols are used, where necessary:

- Italic* data value is forecasted, provisional or estimated and is likely to change;  
 : not available, confidential or unreliable value;  
 – not applicable.

Breaks in series are indicated in the footnotes provided under each table and figure.

## Geographical aggregates and country codes

EU-27	European Union of 27 Member States
EU	European Union
EA-17	Euro area of 17 Member States
EA-16	Euro area of 16 Member States
EA-15	Euro area of 15 Member States
EA	Euro area

BE	Belgium
BG	Bulgaria
CZ	Czech Republic
DK	Denmark
DE	Germany
EE	Estonia
IE	Ireland
EL	Greece
ES	Spain
FR	France
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
IS	Iceland
LI	Liechtenstein
NO	Norway
CH	Switzerland
ME	Montenegro
HR	Croatia
MK <sup>(7)</sup>	the former Yugoslav Republic of Macedonia
TR	Turkey
BR	Brazil
CA	Canada
CN	China
IN	India
ID	Indonesia
JP	Japan
RU	Russia
US	United States

## Units of measurement

%	per cent
CHF	Swiss franc
cm <sup>3</sup>	cubic centimetre
ESU	European size unit
EUR	euro
FTE	full-time equivalent(s)
GJ	gigajoule
GT	gross tonnage
GWh	gigawatt-hour
JPY	Japanese yen
kg	kilogram
kW	kilowatt

<sup>(7)</sup> Provisional ISO code which does not prejudice in any way the definitive nomenclature for this country, which is to be agreed following the conclusion of negotiations currently taking place on this subject at the United Nations.

kWh	kilowatt hour
LSU	livestock unit(s)
m <sup>3</sup>	cubic metre
mm	millimetre
MWh	megawatt-hour
p/st	piece/unit
PPS	purchasing power standard
tkm	tonne-kilometre
toe	tonne of oil equivalent
TWh	terawatt hour
USD	United States dollar

## Other abbreviations

CAP	common agricultural policy
CH <sub>4</sub>	methane
CO <sub>2</sub>	carbon dioxide
CPI	consumer price index
ECB	European Central Bank
EDP	excessive deficit procedure
EES	European employment strategy
EFTA	European free trade association
EMU	economic and monetary union
EPO	European Patent Office
ERM	exchange rate mechanism
ET	education and training
EU	European Union
Eurostat	statistical office of the European Union
FDI	foreign direct investment
FSS	farm structure survey
GDP	gross domestic product
GERD	gross domestic expenditure on R & D
GFS	government finance statistics
HICP	harmonised index of consumer prices
ICT	information and communication technology
ISCED	international standard classification of education
LMP	labour market policy
N <sub>2</sub> O	nitrous oxide
NACE	statistical classification of economic activities within the European Community
n.e.c.	not elsewhere classified
NH <sub>3</sub>	ammonia
NO <sub>x</sub>	nitrogen oxide(s)

NUTS	hierarchical classification of territorial units for statistics (Eurostat) (NUTS 1, 2 and 3)
OECD	Organisation for Economic Co-operation and Development
p.r.s.	packaged for retail sale
R & D	research and development
Rev.	revision
SME	small and medium-sized enterprise
SMS	short message service
SO <sub>x</sub>	sulphur oxide(s)
STS	short-term (business) statistics
TOFP	tropospheric ozone formation potential
UAA	utilised agricultural area
UN	United Nations
UNESCO	United Nations educational, scientific and cultural organisation
UNSCR	United States Security Council Resolution
USPTO	United States patent and trademark office
VAT	value added tax
VET	vocational education and training
WTO	World Trade Organisation



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