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## Key figures on Europe 2014 edition







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### Foreword



Our pocketbook *Key figures on Europe* 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 EU Member States. I hope that you will find information of interest both for your work and your daily life.

You can find the content of this book, in a much richer form, online in *Statistics Explained* as well as in the continuously updated virtual publication *Europe in figures – Eurostat yearbook*. As usual, the latest and most complete versions of 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 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, which presents a subset of the most popular information found in the continuously updated online publication *Europe in figures* — *Eurostat yearbook* (available through http://ec.europa.eu/eurostat/ statistics-explained), 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.

#### **Editors**

Publication team: Catherine Coyette, Isabelle Fiasse, Annika Johansson, Fabienne Montaigne, Jukka Piirto, Helene Strandell Eurostat, Unit B4 — Dissemination

#### **Contact details**

Eurostat Bâtiment Joseph Bech 5, rue Alphonse Weicker L-2721 Luxembourg LUXEMBOURG E-mail: estat-user-support@ec.europa.eu

#### Production

This publication was produced by William Helminger, Alain Mahieu, Bruno Scuvée — CRI (Luxembourg) S.A.

#### For more information please consult

Eurostat website: http://ec.europa.eu/eurostat Statistics Explained: http://ec.eurostat.eu/eurostat/statistics-explained

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## Introduction

### The Eurostat pocketbook

*Key figures on Europe* presents a subset of the most popular information found in the continuously updated online publication *Europe in figures* — *Eurostat yearbook* (available through http://ec.europa.eu/eurostat/statistics-explained, by clicking on the 'Eurostat yearbook' link in the 'Online publications' box, on the left-hand side of the page).

*Key figures on Europe* 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. This publication provides a balanced set of indicators, with a broad cross-section of information.

#### Structure of the publication

*Key figures on Europe* is divided into an introduction and 13 main chapters.

The introduction includes information concerning:

- the extraction of data and the data coverage in the publication;
- Eurostat the statistical office of the European Union (EU) and the European Statistical System (ESS);
- the access to European statistics;
- the link between statistics and European Union policies and high-priority initiatives.

The main chapters of this pocketbook cover the following areas: population; living conditions and social protection; health; education and training; labour market; economy and finance; international trade; agriculture, forestry and fisheries; industry, trade and services; research and communication; environment; energy; and transport.

Each chapter contains data and/or background information relating to a very wide range of European statistics. More information can be found when consulting Eurostat's website, which contains subject-specific publications and online databases.

#### Data extraction and coverage

#### **Data extraction**

The statistical data presented in this pocketbook are the ones analysed in the continuously updated online publication *Europe in figures* — *Eurostat yearbook* at the time of writing of this pocketbook. The accompanying text was drafted between May 2014 and July 2014.

#### Spatial data coverage

This pocketbook usually presents information for the EU-28 (the 28 Member States of the EU), the euro area (based on 18 members), as well as the individual EU Member States. When figures are not available for the EU-28, results for the EU-27 (the 27 Member States of the EU prior to the accession of Croatia in July 2013) are shown. The euro area aggregate is based on data for the 17 members (prior to the adoption of the euro as currency by Latvia in January 2014) when data are not available for the euro area with 18 members. 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 figures the data are ranked according to the values of a particular indicator.

Introduction

The EU and euro area 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, the time series for EU-28 refer to a sum or an average for all 28 countries for the whole of the period presented, as if all 28 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 18 members (as of January 2014), despite the later accessions 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, namely, the former Yugoslav Republic of Macedonia (<sup>1</sup>), Montenegro, Serbia and Turkey, as well as for Japan and the United States. In the event that data for any of these non-member countries are not available, then these have been excluded from tables and figures; however, the full set of 28 Member States is maintained in tables, with footnotes being added in figures for those EU Member States for which information is missing.

#### Temporal data coverage

If data for a reference year (or 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 years, for example showing data for 2011 or 2012 for those countries (or geographical aggregates) for which 2013 data are not yet available.

<sup>(1)</sup> The name of the former Yugoslav Republic of Macedonia is shown in tables and figures in this publication as 'MK' or 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 and the European Statistical System

Eurostat is the statistical office of the European Union (EU), 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 2014, Eurostat had around 850 persons working for it. Its executed budget amounted to EUR 54 million in 2013 (excluding costs of statutory staff and administrative expenses).

#### European Statistical System (ESS)

The European Statistical System (ESS) is the partnership between the European Union's statistical authority, which is the European Commission (Eurostat), and the national statistical institutes (NSIs) and other national authorities responsible in each Member State for the development, production and dissemination of European statistics; this partnership also includes the EFTA countries.

The ESS functions as a network in which Eurostat's role is to lead the way in the harmonisation of statistics in close cooperation with the national statistical authorities. The ESS also coordinates its work with candidate countries and at European level with other European Commission services, agencies and the European Central Bank (ECB), as well as international organisations such as the Organisation for Economic Co-operation and Development (OECD), the United Nations (UN), the World Bank and the International Monetary Fund (IMF).

#### Legal framework of European statistics

Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009 on European statistics established a new legal framework for the development, production and dissemination of European statistics. The Regulation states that European statistics shall be developed in conformity with the statistical principles set out in Article 338 of the Treaty on the functioning of the European Union and further elaborated in the European Statistics Code of Practice, namely, that: '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'.

#### **Objectives and means**

To meet the challenges associated with the adoption of the Regulation, Eurostat aims:

- to provide other European institutions and the governments of the EU Member States with the information needed to design, implement, monitor and evaluate European policies;
- to disseminate statistics to the European public and enterprises and to all economic and social agents involved in decisionmaking;
- to implement a set of standards, methods and organizational 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 ESS, to support the EU Member States, and to assist in the development of statistical systems at an international level.

### Accessing European statistics

The simplest way to access Eurostat's broad range of statistical information is through its website (http://ec.europa.eu/eurostat). Eurostat provides users with free access to its databases and all of its publications in portable document format (PDF) 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, as well as acceding and candidate countries.

## Eurostat online data codes — easy access to the freshest data

Eurostat online data codes, such as tps00001 and nama\_gdp\_c (<sup>2</sup>), allow easy access to 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 edition 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 — where <data\_code> is to be replaced by the online data code lead to either a two- or three-dimensional table in the TGM (tables, graphs, maps) interface or to an open dataset which generally contains more dimensions and longer time series using the Data Explorer interface.

Online data codes can also be fed into the 'Search' function on Eurostat's website. 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>3</sup>), which provide information about each dataset/publication or set of metadata.

Note that the data on the Eurostat's website is frequently updated and that the description above presents the situation as of July 2014.

<sup>(?)</sup> There are two types of online data codes: tables have 8-character codes the first of which is the letter 't' – for example tps00001 and tsdph220, while databases have codes that use an underscore'\_' within the syntax of the code, for example nama\_gdp\_c or demo\_pjan.

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

#### **Statistics Explained**

*Statistics Explained* is part of Eurostat's website. It provides easy access to statistical information concerning the EU. It can also be accessed via an icon at the right-hand end of the top menu bar on most Eurostat webpages, or directly at http://ec.europa.eu/eurostat/statistics-explained.

*Statistics Explained* is an online publishing system about EU statistics which uses MediaWiki technology and resembles Wikipedia. It is a wiki-based system that presents statistical articles which together form an encyclopaedia of European statistics, completed by a glossary of the statistical concepts and 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.

At the time of writing (July 2014), *Statistics Explained* pages in English covered more than 650 statistical articles presenting data, around 130 background articles on methodological practices or developments, and some 1 800 glossary pages defining or explaining terms; their number is continuously growing. The contents of the *Eurostat yearbook* and the *Regional yearbook*, almost 100 statistical articles, are also available in German and French; furthermore, a selection of 20 key articles has been inserted in 18 more EU languages.

It is possible to search for articles using navigational features in the left-hand menu of *Statistics Explained*, while the top-right menu bar offers tools, among others, to share, blog, cite, get a pdf file, print, bookmark or forward content easily.

# Statistics for European policies and high-priority initiatives

Effective political decision-making depends on the regular supply of reliable information. Statistics are one of the principal sources of such information, providing quantitative support to the development, implementation, and monitoring of those policies. Statistics are also a powerful tool for communicating with the general public.

Information needs for policy purposes require constant interaction between policymakers and statisticians: the former formulate their needs for data, and the latter attempt to foresee future needs or adapt the statistical production system so as to fulfil those needs. In this way, policies can lead to improvements in statistical production, both in terms of enhancing the quality of existing indicators and of creating new ones.

Policymakers often require highly aggregated indicators which provide a synthetic and clear picture of the different phenomena in which they are interested. Statisticians therefore have to filter and aggregate basic, detailed data in order to increase data readability and extract information (or indicators).

Over recent years, a number of policies have substantially influenced Eurostat's priorities and activities:

- Economic and monetary union (EMU) and the creation of the euro area (1999);
- the Lisbon strategy (2000, revised in 2005 and expired in 2010), including, for example, the open method of coordination on social inclusion and social protection;
- the EU's sustainable development strategy, EU SDS (2001, renewed in 2006);
- the Europe 2020 strategy (2010), the successor to the Lisbon strategy;
- enhanced economic governance (2010).

Europeans place a high value on their quality of life, including aspects such as a clean environment, social protection, prosperity and equity. In recent years the European Council has focused on a number of key areas intended to shape the future social, economic and environmental development of the EU. While Europe 2020 is the EU's strategy for smart, sustainable and inclusive growth for the decade, the sustainable development strategy is concerned with improving the quality of life and well-being, both for current and future generations, through seeking a balance between economic development, social cohesion and protection of the environment. Furthermore, the economic and financial crisis, starting in 2008, highlighted the need for broader coordination of policy measures and this put a greater focus on relevant statistical information.

Economic and monetary union and the setting-up of the European Central Bank (ECB) in 1999 required a broad range of infra-annual short-term statistics to measure economic and monetary developments within the euro area and to assist in the implementation of a common monetary policy. Effective monetary policy depends on timely, reliable and comprehensive economic statistics giving an overview of the economic situation. These infra-annual short-term statistics are also needed for the assessment of the business cycle.

Gross domestic product (GDP) is the best known measure of macroeconomic activity. Developed in the 1930s, GDP has become a standard benchmark used by policymakers throughout the world and is widely used in public debates. However, the need to improve data and indicators to complement GDP has been increasingly recognised and is the focus of a number of international initiatives, which also reflect renewed societal and political priorities, like environmental sustainability and social inclusion.

Eurostat in unison with other European Commission services has responded to politicians' needs in these areas by helping to develop sets of indicators on 'EU policies and initiatives'. More information in relation to each of these sets may be found within a set of dedicated sections that are available through Eurostat's website:

- Europe 2020 indicators;
- Macroeconomic imbalance procedure;
- Sustainable development indicators;
- Employment and social policy indicators;
- Euro-indicators and Principal European Economic Indicators (PEEIs);
- GDP and beyond.

More detailed information about Statistics for European policies and high-priority initiatives is available from *Statistics Explained*.



## Population

As the population of the European Union (EU) grows beyond 500 million inhabitants, its structure continues to change. Recent demographic developments show that the EU's 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.

## 1.1 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-28's age pyramid; probably the most important change will be the marked transition towards a much older population structure and this development is already becoming apparent in several EU Member States.

Young people (0 to 14 years old) made up 15.6% of the EU-28's population on 1st January 2013, while persons considered to be of working age (15 to 64 years old) accounted for 66.5% of the population, and older persons (65 or more years old) had a 17.9% share (an increase of 0.4% compared with the previous year).

Age dependency ratios may be used to study the level of support given to 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 1.1:** Population pyramids, EU-28, 2001 and 2013 (<sup>1</sup>) (% of the total population)

Source: Eurostat (online data code: demo\_pjangroup)

<sup>(&</sup>lt;sup>1</sup>) Provisional.

	Median age	Young-age dependency ratio	Old-age dependency ratio	Share of population aged 80 or over
	(years)		(%)	
EU-28	41.9	23.6	27.5	5.1
BE	41.1	26.0	26.8	5.3
BG	42.9	20.2	28.5	4.3
CZ	40.4	21.7	24.6	3.9
DK	41.0	27.0	27.6	4.2
DE	45.3	19.8	31.3	5.4
EE	41.0	23.6	27.2	4.7
IE	35.5	33.2	18.6	2.9
EL	42.4	22.5	30.9	5.7
ES	41.3	22.6	26.3	5.5
FR	40.5	29.1	27.5	5.6
HR	42.4	22.3	27.1	4.3
IT	44.4	21.6	32.7	6.3
CY	36.2	23.3	18.8	2.9
LV	42.1	21.6	28.1	4.7
LT	42.1	21.9	27.2	4.8
LU	39.1	24.6	20.2	3.9
HU	41.1	21.1	25.1	4.1
MT	40.5	21.3	25.1	3.7
NL	41.6	26.0	25.5	4.2
AT	42.6	21.4	26.8	5.0
PL	38.7	21.3	20.1	3.7
PT	42.6	22.5	29.4	5.3
RO	40.5	23.0	23.9	3.8
SI	42.2	21.2	25.0	4.5
SK	38.2	21.5	18.4	3.0
FI	42.3	25.3	28.9	5.0
SE	40.9	26.4	29.9	5.2
UK	39.8	27.0	26.4	4.7
IS	35.5	31.1	19.5	3.6
LI	42.1	22.2	21.4	3.2
NO	38.9	27.8	23.7	4.4
СН	42.0	22.1	25.7	4.9
ME	37.1	27.5	19.4	2.6
MK	36.7	24.0	16.9	2.0
RS	42.7	21.1	25.9	3.8
TR	30.1	36.9	11.1	1.5

#### Table 1.1: Population age structure indicators, 1 January 2013

Source: Eurostat (online data code: demo\_pjanind)

## 1.2 Population and population change

On 1 January 2013 the population of the EU-28 was estimated at 505.7 million; this was 1.1 million people more than the year before and therefore continued a pattern of uninterrupted EU-28 population growth that has been apparent since 1960. The number of inhabitants in the EU-28 grew from 406.7 million in 1960, an increase of 98.9 million persons by the end of 2012.

In 2012, natural increase (the positive difference between live births and deaths) added 0.22 million to the population growth in the EU-28. Some 80% of the EU's population growth came from net migration plus statistical adjustment, which continued to be the main determinant of population growth, contributing 0.9 million in 2012.

The number of inhabitants in individual EU Member States on 1 January 2013 ranged from 80.5 million in Germany to 0.4 million in Malta. Germany together with France, the United Kingdom and Italy comprised more than half (53%) of the total EU-28 population on 1 January 2013. Luxembourg, Malta, Sweden, the United Kingdom and Belgium recorded the highest population growth rates in 2012 (more than 6 persons per thousand inhabitants), which was almost three times the EU-28 average of 2.2 persons per thousand inhabitants.



Figure 1.2: Population change by component, EU-28,

(¹) Excluding French overseas departments up to and including 1997. Breaks in series: 2001, 2007 and 2011–12.

Source: Eurostat (online data code: demo\_gind)

<sup>(</sup>²) 1960: not available.

## **Table 1.2:** Demographic balance, 2012(1 000)

	Population, 1 January 2012	Live births	Deaths	Net migration and statistical adjustment ( <sup>1</sup> )	Population, 1 January 2013
EU-28	504 582.5	5 231.2	5 010.0	899.5	505 665.7
BE	11 094.9	128.1	109.1 47.8		11 161.6
BG	7 327.2	69.1	109.3	- 2.5	7 284.6
CZ	10 505.4	108.6	108.2	10.3	10 516.1
DK	5 580.5	57.9	52.3	16.5	5 602.6
DE	80 327.9	673.5	869.6	391.9	80 523.7
EE	1 325.2	14.1	15.5	- 3.6	1 320.2
IE	4 582.7	72.2	28.8	- 35.0	4 591.1
EL	11 123.0	100.4	116.7	- 44.2	11 062.5
ES	46 818.2	453.3	401.1	- 142.6	46 727.9
FR	65 287.9	821.8	570.0	39.1	65 578.8
HR	4 276.0	41.8	51.7	- 3.9	4 262.1
IT	59 394.2	534.2	612.9	369.7	59 685.2
CY	862.0	10.2	5.7	- 0.6	865.9
LV	2 044.8	19.9	29.0	- 11.9	2 023.8
LT	3 003.6	30.5	40.9	- 21.3	2 971.9
LU	524.9	6.0	3.9	10.0	537.0
HU	9 931.9	90.3	129.4	16.0	9 908.8
MT	417.5	4.1	3.4	3.1	421.4
NL	16 730.3	176.0	140.8	14.1	16 779.6
AT	8 408.1	79.0	79.4	44.2	8 451.9
PL	38 538.4	386.3	384.8	-6.6	38 533.3
PT	10 542.4	89.8	107.6	- 37.3	10 487.3
RO	20 096.0	201.1	255.5	15.9	20 020.1
SI	2 055.5	21.9	19.3	0.6	2 058.8
SK	5 404.3	55.5	52.4	3.4	5 410.8
FI	5 401.3	59.5	51.7	17.6	5 426.7
SE	9 482.9	113.2	91.9	51.8	9 555.9
UK	63 495.3	813.0	569.0	156.8	63 896.1
IS	319.6	4.5	2.0	- 0.3	321.9
LI	36.5	0.4	0.2	0.2	36.8
NO	4 985.9	60.3	42.0	47.1	5 051.3
CH	7 954.7	82.2	64.2	66.4	8 039.1
ME	621.2	7.5	5.9	0.0	622.8
МК	2 059.8	23.6	20.1	- 0.9	2 062.3
RS	7 216.6	67.3	102.4	0.0	7 181.5
TR	74 724.3	1 279.9	374.9	- 1.9	75 627.4

(1) Total change minus natural change.

Source: Eurostat (online data code: demo\_gind)

## 1.3 Marriage and divorce

The number of marriages that took place in the EU-28 in 2012 was about 2 million, while around 1 million divorces were recorded. The crude marriage rate, in other words the number of marriages per thousand inhabitants, stood at 4.8 in 2008, while the crude divorce rate was 2.0 in 2010.

The crude marriage rate in the EU-28 declined from 7.9 marriages per thousand inhabitants in 1970 to 4.8 marriages per thousand inhabitants by 2008, a reduction of 3.1 marriages per thousand inhabitants and an overall decline of 39% in the absolute number of marriages. Over the same period, marriages in the EU-28 became less stable, as reflected by the increase in the crude divorce rate, which doubled from 1.0 divorce per thousand inhabitants in 1970 to 2.0 divorces by 2010. When considering the increase in the divorce rate it should be noted that national laws did not allow divorce in several countries until recently; thus, the increased number of divorces in the EU-28 may, at least in part, reflect the addition of divorces in those EU Member States where divorce was not previously possible (for example, in Italy, Spain, Ireland or Malta).



**Figure 1.3:** Crude marriage and divorce rates, EU-28, 1970–2010 (per 1 000 inhabitants)

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

		Marr	iages		Divorces ( <sup>1</sup> )				
	1970	2010	2011	2012	1970	2010	2011	2012	
EU-28 ( <sup>2</sup> )	7.9	4.8	:	:	0.9	2.0	:	:	
BE ( <sup>3</sup> )	7.6	3.9	:	3.6	0.7	2.6	:	2.5	
BG ( <sup>4</sup> )	8.6	3.3	2.9	2.9	1.2	1.5	1.4	1.6	
CZ	9.2	4.5	4.3	4.3	2.2	2.9	2.7	0.5	
DK	7.4	5.6	4.9	5.1	1.9	2.6	2.6	2.8	
DE	7.4	4.7	4.6	4.8	1.3	2.3	2.3	2.2	
EE	9.1	3.8	4.1	4.5	3.2	2.2	2.3	2.4	
IE	7.0	4.6	4.3	:	:	0.7	0.6	0.6	
EL	7.7	5.1	5.0	4.5	0.4	1.2	:	:	
ES	7.3	3.6	3.4	3.5	:	2.2	2.2	2.2	
FR ( <sup>5</sup> )	7.8	3.9	3.6	3.7	0.8	2.1	2.0	:	
HR ( <sup>4</sup> )	8.5	5.0	4.7	4.8	:	1.2	1.3	1.3	
IT	7.3	3.7	3.4	3.5	1.2	0.9	0.9	:	
CY ( <sup>6</sup> )	8.6	7.3	7.3	6.7	0.2	2.3	2.3	2.4	
LV	10.2	4.4	5.2	5.5	4.6	2.4	4.0	3.6	
LT	9.5	6.0	6.3	6.9	2.2	3.2	3.4	3.5	
LU (7)	6.4	3.5	3.3	3.4	0.6	2.1	:	:	
HU (8)	9.3	3.6	3.6	3.6	2.2	2.4	2.3	2.2	
MT	7.9	6.3	6.2	6.7	:	:	0.1	1.1	
NL	9.5	4.5	4.3	4.2	0.8	2.0	2.0	2.1	
AT	7.1	4.5	4.3	4.6	1.4	2.1	2.1	2.0	
PL ( <sup>3</sup> )	8.6	6.0	5.4	5.3	1.1	1.6	1.7	1.7	
PT	9.4	3.8	3.4	3.3	0.1	2.6	2.5	2.4	
RO	7.2	5.7	5.2	5.4	0.4	1.6	1.8	1.6	
SI ( <sup>4</sup> )	8.3	3.2	3.2	3.4	1.1	1.2	1.1	1.2	
SK	7.9	4.7	4.7	4.8	0.8	2.2	2.1	2.0	
FI	8.8	5.6	5.3	5.3	1.3	2.5	2.5	2.4	
SE	5.4	5.3	5.0	5.3	1.6	2.5	2.5	2.5	
UK ( <sup>4</sup> )	8.5	:	:	4.4	1.0	2.1	2.1	:	
IS	7.8	4.9	4.6	:	1.2	1.8	1.6	:	
LI	5.9	5.0	4.5	5.0	:	2.4	2.5	2.4	
NO	7.6	4.8	4.6	4.8	0.9	2.1	2.1	2.0	
CH ( <sup>3</sup> )	7.6	5.5	5.3	5.3	1.0	2.8	2.2	2.2	
ME	:	5.9	:	5.3	:	0.8	0.8	0.8	
MK	9.0	6.9	7.2	6.8	0.3	0.8	0.9	0.9	
RS ( <sup>3</sup> )	:	4.9	4.9	4.8	:	0.9	1.1	1.0	
TR	:	8.0	8.0	8.0	:	1.6	1.6	1.6	

**Table 1.3:** Crude marriage and divorce rates, 1970–2012(per 1 000 inhabitants)

(<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, 2008 instead of 2010.

(<sup>3</sup>) 2011: break in series.

(<sup>4</sup>) 2010: break in series.

<sup>(\*)</sup> Excluding French overseas departments for 1970. 2012: break in series.

(<sup>6</sup>) 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.

(7) Marriages, 2012: break in series.

(8) 2012: break in series.

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

## 1.4 Fertility

In 2012, 5.2 million children were born in the EU-28, which equated to a crude birth rate (the number of live births per thousand inhabitants) of 10.4. From the 1960s up to the beginning of the 21st century, the number of live births in the EU-28 declined sharply from 7.6 million to a low of 5.0 million in 2002. This was followed by a modest rebound in the number of live births, with 5.5 million children born in the EU-28 in 2008, in turn followed by further annual reductions during the period 2009–12.

In recent decades Europeans have generally been having fewer children, and this pattern partly explains the slowdown in the EU-28's population growth. 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. The total fertility rate in the EU-28 declined to a level well below this replacement level in recent decades. Available information suggests that the total fertility rate was 1.45 live births per woman in the EU-28 in 2002. A slight recovery was subsequently observed in most EU Member States, such that the EU-28 average had increased to 1.58 live births per woman by 2012.

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. By 1990 the difference had decreased to 1.1 live births per woman, and by 2012 it had narrowed still further to 0.7 live births per woman. Ireland and France continued to report the highest fertility rates, with just over 2.0 live births per woman.



Figure 1.4: Number of live births, EU-28, 1961–2012 (<sup>1</sup>) (million)

	1960	1970	1980	1990	2000	2005	2010	2011	2012
EU-28 (1)	:	:	:	:	:	1.51	1.61	1.58	1.58
BE ( <sup>2</sup> )	2.54	2.25	1.68	1.62	1.67	1.76	1.86	1.81	1.79
BG ( <sup>3</sup> )	2.31	2.17	2.05	1.82	1.26	1.32	1.57	1.51	1.50
CZ	2.09	1.92	2.08	1.90	1.15	1.29	1.51	1.43	1.45
DK	2.57	1.95	1.55	1.67	1.77	1.80	1.87	1.75	1.73
DE	:	:	:	:	1.38	1.34	1.39	1.36	1.38
EE	1.98	2.17	2.02	2.05	1.36	1.52	1.72	1.61	1.56
IE	3.78	3.85	3.21	2.11	1.89	1.86	2.05	2.03	2.01
EL	2.23	2.40	2.23	1.40	1.27	1.32	1.51	1.39	1.34
ES	:	:	2.20	1.36	1.23	1.33	1.37	1.34	1.32
FR ( <sup>4</sup> )	2.73	2.47	1.95	1.78	1.89	1.94	2.03	2.01	2.01
HR	:	:	:	:	:	1.50	1.55	1.48	1.51
IT	2.37	2.38	1.64	1.33	1.26	1.34	1.46	1.44	1.43
CY	:	:	:	2.41	1.64	1.48	1.44	1.35	1.39
LV	:	:	:	:	1.25	1.39	1.36	1.33	1.44
LT	:	2.40	1.99	2.03	1.39	1.29	1.50	1.55	1.60
LU ( <sup>5</sup> )	2.29	1.97	1.50	1.60	1.76	1.63	1.63	1.52	1.57
HU (⁵)	2.02	1.98	1.91	1.87	1.32	1.31	1.25	1.26	1.34
MT	:	:	1.99	2.04	1.70	1.38	1.36	1.45	1.43
NL	3.12	2.57	1.60	1.62	1.72	1.71	1.79	1.76	1.72
AT	2.69	2.29	1.65	1.46	1.36	1.41	1.44	1.43	1.44
PL (6)	:	:	:	2.06	1.37	1.24	1.38	1.30	1.30
PT	3.16	3.01	2.25	1.56	1.55	1.41	1.39	1.35	1.28
RO	:	:	2.43	1.83	1.31	1.39	1.54	1.46	1.53
SI	:	:	:	1.46	1.26	1.26	1.57	1.56	1.58
SK	3.04	2.41	2.32	2.09	1.30	1.27	1.43	1.45	1.34
FI	2.72	1.83	1.63	1.78	1.73	1.80	1.87	1.83	1.80
SE	:	1.92	1.68	2.13	1.54	1.77	1.98	1.90	1.91
UK	:	:	1.90	1.83	1.64	1.76	1.92	1.91	1.92
IS	:	2.81	2.48	2.30	2.08	2.05	2.20	2.02	2.04
LI	:	:	:	:	1.57	1.49	1.40	1.69	1.51
NO	:	2.50	1.72	1.93	1.85	1.84	1.95	1.88	1.85
CH ( <sup>2</sup> )	2.44	2.10	1.55	1.58	1.50	1.42	1.52	1.52	1.52
ME ( <sup>3</sup> )	:	:	:	:	:	1.60	1.69	1.65	1.71
MK	:	:	:	:	1.88	1.46	1.56	1.46	1.51
RS ( <sup>2</sup> )	:	:	:	:	1.48	1.45	1.40	1.40	1.45
TR	:	:	:	:	:	:	2.04	2.03	2.09

## **Table 1.4:** Total fertility rate, 1960–2012(live births per woman)

(1) 2010-12: break in series.

(<sup>2</sup>) 2011: break in series.
(<sup>3</sup>) 2010: break in series.

(\*) 2010: break in se

(\*) Excluding French overseas departments, up to and including 1990. Breaks in series: 2001, 2005 and 2010–12.

(<sup>5</sup>) 2012: break in series.

(<sup>6</sup>) 2000 and 2011: break in series.

Source: Eurostat (online data code: demo\_frate)

## 1.5 Mortality and life expectancy

In 2012, some 5.0 million persons died in the EU-28 — this was broadly in line with the annual number of deaths recorded over the previous four decades. The crude death rate (the number of deaths per thousand inhabitants) was 9.9.

The most commonly used indicator for analysing mortality is that of life expectancy at birth (the mean number of years that a person can expect to live at birth if subjected throughout the rest of his or her life to current mortality conditions). Life expectancy at birth in the EU-28 averaged 80.3 years in 2012, reaching 83.1 years for women and 77.5 years for men. Improvements in living standards and the establishment and improvement in health systems across Europe have contributed to a continuous increase in life expectancy at birth. Indeed, life expectancy at birth in the EU has increased over the last 50 years by about ten years.

Significant differences in life expectancy at birth are nevertheless observed between the EU Member States. Looking at the extremes of the ranges (2012 data for the majority of countries), a woman born in 2012 is expected to live between 77.9 years (Bulgaria) and 85.5 years (Spain), a range of 7.6 years. A man born in 2012 can be expected to live between 68.4 years (Lithuania) and 79.9 years (Sweden), a range of 11.5 years.



Figure 1.5: Life expectancy at birth, EU-28, 2002–12 (<sup>1</sup>) (years)

(1) 2007, 2011 and 2012: breaks in series.

Source: Eurostat (online data code: demo\_mlexpec)

			Men				1	Womer	1	
	1990	2000	2010	2011	2012	1990	2000	2010	2011	2012
EU-28 ( <sup>1</sup> ) ( <sup>2</sup> ) ( <sup>3</sup> )	:	:	17.5	17.8	17.7	:	:	21.0	21.3	21.1
BE ( <sup>2</sup> )	14.3	15.6	17.6	18.0	17.7	18.8	19.7	21.3	21.6	21.3
BG ( <sup>4</sup> )	12.7	12.7	13.8	14.0	13.9	15.2	15.3	17.1	17.3	17.3
CZ	11.7	13.7	15.5	15.6	15.7	15.3	17.2	19.0	19.2	19.2
DK	14.0	15.2	17.0	17.3	17.5	17.9	18.3	19.7	20.1	20.2
DE	14.0	15.8	17.8	18.2	18.2	17.7	19.6	20.9	21.2	21.2
EE	12.0	12.7	14.3	14.8	14.8	15.8	17.1	19.5	20.1	20.3
IE	13.3	14.6	17.7	17.9	18.0	17.0	18.0	20.8	20.9	21.1
EL	15.7	16.2	18.2	18.2	18.1	18.0	18.7	20.9	21.2	21.0
ES	15.5	16.7	18.6	18.8	18.7	19.3	20.8	22.9	23.0	22.8
FR ( <sup>1</sup> )	20.2	16.8	18.9	19.3	19.1	15.7	21.4	23.4	23.8	23.4
HR	:	:	14.7	15.1	15.0	:	:	18.2	18.6	18.7
IT	15.2	16.7	18.3	18.5	18.5	18.9	20.7	22.1	22.2	22.1
CY	:	15.9	18.3	18.2	17.9	:	18.3	21.0	20.3	20.4
LV	:	:	13.1	13.4	13.6	:	:	18.1	18.7	18.5
LT	13.3	13.6	13.8	14.0	14.1	17.0	17.8	18.8	19.2	19.2
LU ( <sup>3</sup> )	14.3	15.5	17.3	17.8	18.4	18.5	20.1	21.6	21.6	21.4
HU ( <sup>3</sup> )	12.1	13.0	14.1	14.3	14.3	15.4	16.7	18.2	18.3	18.1
MT	:	15.1	18.5	17.7	17.6	:	18.5	21.1	21.0	21.0
NL	14.4	15.4	17.7	18.1	18.0	19.1	19.3	21.0	21.2	21.0
AT	14.4	16.0	17.9	18.1	18.1	18.1	19.6	21.4	21.7	21.3
PL ( <sup>5</sup> )	12.4	13.5	15.1	15.4	15.4	16.2	17.5	19.5	19.9	19.9
PT	14.0	15.4	17.2	17.8	17.6	17.1	19.1	21.0	21.6	21.3
RO	13.2	13.4	14.5	14.7	14.5	15.2	15.9	17.3	17.7	17.7
SI	13.3	14.2	16.8	16.9	17.1	17.1	18.7	21.0	21.1	21.1
SK	12.3	12.9	14.1	14.5	14.6	16.0	16.7	18.0	18.4	18.5
FI	13.8	15.5	17.5	17.7	17.8	17.8	19.5	21.5	21.7	21.6
SE	15.4	16.7	18.3	18.5	18.5	19.2	20.2	21.2	21.3	21.1
UK	:	15.8	18.2	18.5	18.5	:	19.0	20.8	21.1	20.9
IS	16.4	17.8	18.3	18.9	20.1	19.8	19.8	21.5	21.5	21.5
LI	:	15.2	19.6	17.9	18.8	:	19.5	21.8	21.8	23.5
NO	14.6	16.1	18.0	18.2	18.3	18.7	19.9	21.2	21.4	21.0
CH ( <sup>2</sup> )	15.3	17.0	19.0	19.2	19.3	19.7	20.9	22.5	22.6	22.3
ME	:	:	15.1	14.9	15.2	:	:	17.3	17.5	17.3
МК	:	13.1	13.9	14.0	13.9	:	15.1	16.0	15.9	15.9
RS ( <sup>2</sup> )	:	12.5	14.0	13.9	14.0	:	14.6	16.2	16.3	16.5
TR	:	:	15.6	15.7	16.0	:	:	18.7	19.0	19.5

**Table 1.5:** Life expectancy at age 65, 1990–12(years)

(<sup>1</sup>) Excluding French overseas departments before 1991.

(2) 2011: break in series.

(<sup>3</sup>) 2012: break in series.

(4) 2010: break in series.

(<sup>5</sup>) 2000 and 2011: break in series.

Source: Eurostat (online data code: demo\_mlexpec)

## 1.6 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.

**Figure 1.6:** Share of nationals and non-nationals among immigrants, 2012



Source: Eurostat (online data code: migr\_imm1ctz)

During 2012, about 3.4 million people immigrated into one of the EU Member States, while at least 2.7 million emigrants were reported to have left an EU Member State. It should be noted that these figures do not represent the migration flows to/from the EU as a whole, since they also include flows between different EU Member States.

				Non-nationals	
	Total immigrants	Nationals	Total	Citizens of other EU-27 Member States	Citizens of non-member countries
EU-27	1 693.9	:	:	:	:
BE	147.4	17.3	129.7	64.9	64.8
BG	14.1	5.0	9.1	4.1	5.0
CZ	34.3	6.8	27.6	12.1	15.5
DK	54.4	18.6	35.8	19.8	16.0
DE	592.2	87.2	503.6	298.5	205.1
EE	2.6	1.5	1.1	0.1	1.0
IE	54.4	16.5	37.9	22.3	15.6
EL	110.1	42.6	67.6	24.8	42.7
ES	304.1	31.6	272.5	100.3	172.2
FR	327.4	115.8	211.7	90.8	120.9
HR	9.0	4.2	4.8	1.3	3.4
IT	350.8	29.5	321.3	104.1	217.2
CY	17.5	1.3	16.2	10.2	6.0
LV	13.3	9.6	3.7	0.5	3.1
LT	19.8	17.4	2.5	0.7	1.7
LU	20.5	1.0	19.4	15.6	3.8
HU	33.7	13.4	20.3	10.4	10.0
MT	7.1	1.8	5.4	2.5	2.9
NL	124.6	36.4	83.0	51.2	31.8
AT	91.6	8.3	83.2	51.9	31.4
PL	217.5	135.9	81.5	24.4	57.1
PT	14.6	9.3	5.3	1.3	3.9
RO	167.3	155.6	11.6	3.5	8.2
SI	15.0	2.7	12.3	2.2	10.1
SK	5.4	2.5	2.9	2.4	0.5
FI	31.3	7.9	22.8	10.3	12.6
SE	103.1	20.5	82.3	25.3	56.9
UK	498.0	80.2	417.8	157.6	260.3
IS	5.0	2.3	2.7	1.8	0.8
LI	0.7	0.2	0.5	0.2	0.3
NO	69.9	6.7	63.2	36.8	26.4
СН	149.1	24.0	125.0	90.1	34.9

**Table 1.6:** Immigration by main citizenship group, 2012 (<sup>1</sup>)(1 000)

() The values for the different categories of citizenship may not sum to the total due to rounding and the exclusion of the category' unknown citizenship' from the table.

Source: Eurostat (online data code: migr\_imm1ctz)

## 1.7 Asylum

Asylum is a form of international 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.

Having peaked in 2001 (424200 applications), the number of asylum applications within the EU-27 fell in successive years to just below 200 000 applications by 2006. From this relative low point there was a gradual increase in the number of applications and by 2012 the number of asylum seekers in the EU-27 reached just over 320 000.

The vast majority of asylum seekers are aged less than 35 (78.8% in the EU-28 in 2013); those aged 18–34 account for slightly more than half (51.3%) of the total number of applicants, while minors aged less than 18 account for more than one in four (27.5%) applicants.



Figure 1.7: Asylum applications (non-EU-27) in the EU-27 Member States, 2002–12

(<sup>1</sup>) 2007, 2011 and 2012: breaks in series.

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

	Total (nu	mber)		Ranking	
	2012	2013	2012	2013	Change
Non-EU-28 total	335 290	433 375	-	-	_
Syria	24 115	50 240	1	3	- 2
Russia	24 290	41 475	2	2	0
Afghanistan	28 020	26 015	3	1	2
Serbia	19 055	22 375	4	5	- 1
Pakistan	19 785	20 765	5	4	1
Kosovo (UNSCR 1244/99)	10 210	20 215	6	10	- 4
Somalia	14 280	18 425	7	6	1
Eritrea	6 400	14 560	8	16	- 8
Iran	13 600	12 755	9	7	2
Nigeria	7 520	11 560	10	13	- 3
Iraq	13 190	11 180	11	8	3
FYR of Macedonia	9 625	11 060	12	11	1
Albania	7 500	11 020	13	14	1
Stateless	3 515	9 595	14	24	- 10
Bangladesh	6 300	9 125	15	17	- 2
Georgia	10 830	9 110	16	9	7
Dem. Rep. of Congo	8 305	8 350	17	12	5
Bosnia and Herzegovina	5 835	7 065	18	19	- 1
Algeria	4 815	6 955	19	23	- 4
Mali	2 420	6 620	20	31	- 11
Sri Lanka	7 345	6 565	21	15	6
Guinea	5 635	6 510	22	20	2
Turkey	6 210	5 635	23	18	5
Egypt	2 670	5 430	24	27	- 3
Armenia	5 520	5 220	25	21	4
China (including Hong Kong)	5 185	5 185	26	22	4
Unknown	3 315	4 330	27	25	2
Morocco	2 620	4 185	28	29	- 1
Gambia	1 515	3 530	29	41	- 12
India	3 240	3 235	30	26	4
Other non-EU-28	52 425	55 085	-	-	-

**Table 1.7:** Countries of origin of (non-EU-28) asylum seekers inthe EU-28 Member States, 2012-13

Source: Eurostat (online data code: migr\_asyappctza)


## Living conditions 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 is one of the seven flagship initiatives of this strategy. Its 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 European Union (EU) Member State, reflecting different situations and circumstances. One of these targets is for there to be at least 20 million fewer people at risk of poverty or social exclusion for the EU as a whole by 2020. The integrated economic and employment guidelines, first combined in 2008, are assessed through the use of a Joint Assessment Framework (JAF) within the context of the Europe 2020 strategy; the guideline 10 concerns promoting social inclusion and combating poverty.

Eurostat data on living conditions and social protection aim to show a comprehensive picture of the social situation in the EU, covering indicators related to income, housing, material deprivation, poverty, social exclusion and social protection.

#### 2.1 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.

In 2012, there were 124.2 million people in the EU-28, equivalent to 24.8 % of the entire population, who lived in households facing poverty or social exclusion. Compared to 2011, the number of people at risk of poverty or social exclusion increased by 2.7 million, equivalent to a 0.5 percentage point increase in the share of the total population. In Bulgaria, close to half (49.3%) of the population was considered to be at risk of poverty or social exclusion in 2012, while in Romania (41.7%), Latvia (36.2%) and Greece (34.6%) the proportion exceeded a third of the population. More than a quarter of the population was considered to be at risk of poverty or social exclusion in eight other Member States in 2012, namely Lithuania (32.5%), Hungary (32.4%), Croatia (32.3%), Italy (29.9%), Spain (28.2%), Cyprus (27.1%), Poland (26.7%) and Portugal (25.3%). Those EU Member States with the lowest proportions of the population considered to be at risk of poverty or social exclusion in 2012 were the Netherlands (15.0%), the Czech Republic (15.4%) and Sweden (15.6%).



(<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 2.1: Population at risk of poverty or social excl	usion,
2007–12	

	Percentage of the total population (%)			Number of persons (thousand)			
	2007	2011	2012	2007	2011	2012	
EU-28	:	24.3	24.8	:	121 543	124 232	
EU-27	24.4	24.3	24.7	119 360	120 171	122 860	
EA-18	21.8	22.9	23.3	70 641	75 372	76 742	
BE	21.6	21.0	21.6	2 261	2 271	2 356	
BG	60.7	49.1	49.3	4 663	3 693	3 621	
CZ	15.8	15.3	15.4	1 613	1 598	1 580	
DK	16.8	18.9	19.0	905	1 039	1 057	
DE	20.6	19.9	19.6	16 760	16 074	15 909	
EE	22.0	23.1	23.4	293	307	311	
IE	23.1	29.4	:	1 005	1 319	:	
EL	28.3	31.0	34.6	3 064	3 403	3 795	
ES	23.3	27.7	28.2	10 373	12 791	13 090	
FR	19.0	19.3	19.1	11 382	11 840	11 760	
HR	:	32.3	32.3	:	1 372	1 370	
IT	26.0	28.2	29.9	15 412	17 112	18 194	
CY	25.2	24.6	27.1	195	207	234	
LV	35.1	40.1	36.2	765	821	731	
LT	28.7	33.1	32.5	967	1 011	975	
LU	15.9	16.8	18.4	73	84	95	
HU	29.4	31.0	32.4	2 916	3 051	3 188	
MT	19.7	22.1	23.1	79	90	94	
NL	15.7	15.7	15.0	2 558	2 598	2 492	
AT (1)	16.7	16.9	18.5	1 376	1 407	1 542	
PL	34.4	27.2	26.7	12 958	10 196	10 128	
PT	25.0	24.4	25.3	2 653	2 601	2 665	
RO	45.9	40.3	41.7	9 904	8 630	8 907	
SI	17.1	19.3	19.6	335	386	392	
SK	21.3	20.6	20.5	1 1 5 0	1 112	1 109	
FI	17.4	17.9	17.2	907	949	916	
SE	13.9	16.1	15.6	1 264	1 538	1 519	
UK ( <sup>1</sup> )	22.6	22.7	24.1	13 527	14 044	15 078	
IS	13.0	13.7	12.7	38	41	38	
NO	16.5	14.5	13.8	764	705	689	
СН	17.9	17.2	17.5	1 306	1 308	1 331	

(1) 2012: break in series.

Source: Eurostat (online data code: ilc\_peps01)

#### 2.2 Income distribution

In 2012, 17 % of the EU-28 population was assessed to be atrisk-of-poverty after social transfers. In five countries, namely Greece (23.1 %), Romania (22.6 %), Bulgaria (21.2 %), and Croatia (20.5 %), more than one fifth of the population was viewed as being at-risk-of-poverty. The lowest proportions of persons atrisk-of-poverty were observed in the Netherlands (10.1 %) and the Czech Republic (9.6 %).

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. This threshold varied considerably in 2012 among the EU Member States from PPS 2 161 in Romania, PPS 3 476 in Bulgaria and PPS 3 603 in Latvia to a level between PPS 11 196 and PPS 12 300 in Denmark, France, Germany, the Netherlands, Cyprus, Sweden and Austria, before peaking in Luxembourg at PPS 15 996.

At-risk-of-poverty rates are not uniformly distributed between households with different compositions of adults and dependent children. For the EU-28 as a whole, single person households with dependent children were the group most at-risk-of-poverty (34.2%), followed by households with two adults and three or more dependent children (25.7%) and single person households (25.4%). On the other hand, persons living in households with two or more adults without dependent children were the least at-risk (11.1%), followed by those living in households with two adults with at least one aged 65 or over (11.3%) as well as households with two adults and one dependent child (13.1%). In summary, the greater the number of dependent children living in a household, the greater the risk of poverty. This was more or less the picture in most EU Member States, although there were some exceptions. In Bulgaria, Spain, Hungary, Poland, Portugal, Romania and Slovakia, the most at risk were those living in households composed of two adults with three or more dependent children. Moreover, in Bulgaria, Denmark, Slovenia, Finland and Cyprus, the percentage of the population that was found to be at-risk-of-poverty in single person households without dependent children was higher than the percentage of those found in single person households with dependent children.



**Figure 2.2:** At-risk-of-poverty rate and threshold, 2012 (<sup>1</sup>) (million)

(<sup>1</sup>) Ireland not available. (<sup>2</sup>) Estimate.

Source: Eurostat (online data codes: ilc\_li01 and ilc\_li02)

2

# **Table 2.2:** At-risk-of-poverty rate by household type, 2012(% of specified population)

		useholds v pendent c		Households	with depend	ent children
	Single person	Two adults at least one aged 65 or over	Two or more adults without dependent children	Single person with dependent children	Two adults with one dependent child	Two adults with three or more dependent children
EU-28	25.4	11.3	11.1	34.2	13.1	25.7
EA-18	25.4	11.3	11.1	36.4	13.5	23.9
BE	19.1	19.3	12.4	33.2	12.7	16.2
BG	45.3	21.0	13.9	42.5	14.6	61.0
CZ	14.9	2.3	5.3	31.3	6.8	22.4
DK	28.6	9.4	8.0	18.7	4.3	9.1
DE	32.4	11.4	10.4	38.8	10.6	12.8
EE	31.9	8.3	12.5	33.0	12.2	19.8
IE	:	:	:	:	:	:
EL	22.2	15.4	18.0	66.0	25.3	36.8
ES	19.9	15.6	15.5	36.9	20.2	43.6
FR	19.3	6.7	7.6	35.2	9.8	23.2
HR	39.5	22.8	17.4	40.4	15.1	29.1
IT	24.8	12.4	11.9	40.7	16.3	37.6
CY	32.1	28.7	15.9	17.3	13.6	14.5
LV	27.6	12.7	13.9	41.5	16.8	35.9
LT	31.6	7.6	12.4	39.2	12.3	29.2
LU	14.9	3.9	6.1	46.9	12.7	24.5
HU	15.8	4.5	7.0	29.5	12.6	32.4
MT	20.0	21.7	9.3	47.6	12.6	35.5
NL	18.2	4.6	4.7	28.2	4.0	16.7
AT	24.2	10.6	9.8	29.2	10.6	24.1
PL	24.4	9.5	11.4	26.7	11.8	36.5
PT	24.2	16.5	13.5	30.5	16.2	41.2
RO	24.9	8.7	11.6	39.8	18.7	59.8
SI	36.7	10.2	8.7	25.8	10.6	15.9
SK	19.3	4.6	6.4	27.5	12.4	35.1
FI	33.3	6.1	6.8	22.0	5.7	14.3
SE	32.2	5.7	6.4	33.3	8.2	17.1
UK	24.1	14.0	11.9	29.5	12.1	23.9
IS	13.9	2.9	4.9	24.5	4.9	6.5
NO	24.5	1.8	5.3	20.4	6.6	7.3
СН	25.2	25.5	12.3	28.3	10.9	26.8

Source: Eurostat (online data code: ilc\_li03)

2

### 2.3 Housing

Decent housing, at an affordable price in a safe environment, is a fundamental need and right. Ensuring this need is met, which is likely to alleviate poverty and social exclusion, is still a significant challenge in a number of European countries.

In 2012, 41.6 % of the EU-28 population lived in flats, just over one third (34.0 %) in detached houses and 23.7 % in semi-detached houses. Over one quarter (27.2 %) of the EU-28 population lived in an owner-occupied home for which there was an outstanding loan or mortgage, while more than two fifths (43.4 %) of the population lived in an owner-occupied home without a loan or mortgage. An 18.5 % share of the population lived as tenants with a market price rent, and 10.9 % as tenants 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 their family situation. In 2012, 17.2 % of the EU-28 population lived in overcrowded dwellings.

Within the population at-risk-of-poverty (in other words, people living in households where equivalised disposable income per person was below 60 % of the national median), the overcrowding rate in the EU-28 was 29.4 % in 2012, some 12.2 percentage points above the rate for the whole population.



**Figure 2.3:** Distribution of population by dwelling type and tenure status, EU-28, 2012 (<sup>1</sup>)

(1) Estimates.

Source: Eurostat (online data codes: ilc\_lvho01 and ilc\_lvho02)



## **Figure 2.4:** Overcrowding rate, 2012 (<sup>1</sup>) (% of specified population)

(<sup>1</sup>) Ireland not available.

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

(<sup>3</sup>) Population below 60 % of national median equivalised income.

Source: Eurostat (online data code: ilc\_lvho05a)

2

#### 2.4 Social protection

Social protection encompasses 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.

Social protection expenditure in the EU-28 was equivalent to 29.1% of gross domestic product (GDP) in 2011. Among the EU Member States, the level of social protection expenditure in relation to GDP was highest in Denmark (34.3%), France (33.6%), and the Netherlands (32.3%), while Belgium, Greece and Finland also reported ratios in excess of 30%. By contrast, social protection expenditure represented less than 20% of GDP in Poland, Malta, Slovakia, Bulgaria, Lithuania, Romania, Estonia and Latvia (where the lowest share was registered, at 15.1%).

Figure 2.5: Structure of social protection expenditure, EU-28,



(% of total expenditure)

 $2011 (^{1})$ 

(1) Provisional.

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

Expenditure on pensions across the EU-28 was equivalent to 13.0% of GDP in 2011, ranging from a high of 16.1% in Italy to lows of just over 7.0% in Ireland.

Figure 2.6: Expenditure on pensions, 2011 (% of GDP)



(<sup>2</sup>) 2010.

Source: Eurostat (online data code: spr\_exp\_pens)

#### 2.5 Crime

Comparisons of crime statistics between Member States 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, not all crimes are recorded by the police.

The total number of police officers across the EU-28 was stable in recent years. Excluding Northern Ireland and Bulgaria, the number of police officers in the EU increased by 2.3% during the 2007–12 period. In 2012, Italy, Spain and Germany had the largest number of police officers among the EU Member States, together accounted for 45% of the EU total.

The number of crimes recorded in the EU-28 has been steadily decreasing since 2003, with 12 % fewer crimes recorded in 2012. Most types of crimes recorded by the police fell between 2007 and 2012. While crimes linked to drug trafficking, robbery and violent crimes decreased by between 4 and 10%, the number of motor vehicle thefts fell considerably faster over the same period (-37%). By contrast, domestic burglary is a category of crime with a rising trend in the EU-28: compared with 2007, 14 % more cases of domestic burglary were reported in 2012. Ten EU Member States saw their crime rates increase between 2007 and 2012. By contrast, total recorded crime decreased in the remaining 16 EU Member States. The most noticeable changes were recorded in Greece (-54%), parts of the United Kingdom (-25% in England and Wales and -29% in Scotland), Estonia (-19%) and Slovakia (-18%). England and Wales had the greatest impact on the downward trend in the EU-28 during this period, with the largest decrease of crimes in terms of registered cases, over 1.2 million less in 2012 compared to 2007.

Prison population figures include all types of prison, including adult and juvenile facilities and pre-trial detainees, but exclude non-criminal prisoners held for administrative purposes such as pending investigation into their immigration status. In 2012, there were about 643 000 prisoners in the EU-28 (excluding Scotland) and between 2007 and 2012 the total number of prisoners rose by 7%.

## **Table 2.3:** Crime indicators, 2012 (2007 = 100)

	Police officers (units)	Crimes recorded by the police (thousand)	Prison population (units)
BE	46 784	1 073.8	11 212
BG	28 167	120.6	9 904
CZ	38 291	304.5	23 112
DK	10 758	440.8	3 984
DE	243 982	5 997.0	65 722
EE	4 424	40.8	3 286
IE	13 424	:	3 789
EL	54 657	194.1	12 479
ES	249 907	2 268.9	68 597
FR	203 982	:	73 780
HR	21 339.0	72.2	4 741
IT	276 750	2 818.8	65 701
СҮ	5 263	8.0	694
LV	6 482	49.9	6 117
LT	9 530	75.3	9 868
LU	1 736	37.6	633
HU	36 503	472.2	17 179
MT	1 902	15.6	585
NL	39 735	1 139.7	13 481
AT	27 767	548.0	8 756
PL	96 322	1 119.8	84 129
PT	46 083	403.2	13 614
RO	53 132	308.5	31 817
SI	7 371	91.4	1 377
SK	24 230	90.4	11 075
FI	8 0 3 7	425.4	3 196
SE	19 890	1 402.6	6 413
UK:			
England and Wales	132 198	3 731.3	86 048
Scotland	17 496	273.1	:
Northern Ireland	:	100.4	1 742
IS	656	11.7	153
LI	87	1.1	75
NO	7 941	273.5	:
СН	17 630	750.4	6 599
ME	4 210	5.8	1 453
МК	11 411	29.9	:
RS	34 361	96.1	10 226
TR	412 624	1 904.5	:
BA	16 733	:	:

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

2



**Figure 2.7:** Offences recorded by the police, EU-28, 2007–12  $(^{1})$  (2007 = 100)

(<sup>1</sup>) Excluding French data for offences reported by the gendarmerie.

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

(<sup>3</sup>) Excluding Cyprus.

Source: Eurostat (online data code: crim\_gen)



#### Health

Health is an important priority for Europeans, who expect to lead a long and healthy life, be protected against illnesses and accidents, and receive appropriate healthcare. Health issues cut across a range of topics — including consumer protection (food safety issues), workplace safety, environmental or social policies.

In March 2014, the third multi-annual programme of EU action in the field of health for the period 2014–20 was adopted (Regulation (EU) No 282/2014)) under the title 'Health for Growth'. This new programme emphasises the link between health and economic prosperity, as the health of individuals directly influences economic outcomes such as productivity, labour supply and human capital.

European statistics on health are derived from two types of sources: administrative data and surveys. Administrative data sources are the basis for important statistical data collections such as human and technical resources and activities, healthcare expenditure, causes of death, and accidents at work. General population surveys in health statistics include the minimum European health module integrated within the annual EU statistics on income and living conditions (EU-SILC), the five-yearly European health interview survey (EHIS) and specific ad-hoc modules of the labour force survey (LFS).

#### 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. These focus on the quality of life spent in a healthy state, rather than the quantity of life — as measured by life expectancy.

In 2012, the number of healthy life years (at birth) was estimated at 61.3 years for men and 61.9 years for women in the EU-28; this represented approximately 79% and 74% of total life expectancy for men and women.

Life expectancy for women in the EU-28 was, on average, 5.6 years longer than that for men in 2012. However, most of these additional years tend to be lived with activity limitations. Indeed, the gender gap was considerably smaller in terms of healthy life years than it was for overall life expectancy, at just 0.6 years difference in favour of women in 2012. Men therefore tend to spend a greater proportion of their somewhat shorter lives free from limitations in activity.



Figure 3.1: Healthy life years, EU-28, 2011–12 (years)

Source: Eurostat (online data code: hlth\_hlye)

Health 3

The expected number of healthy life years at birth was higher for women than for men in 21 of the EU Member States, with the difference exceeding 4 years in each of the Baltic Member States ranging up to 5 years in the Lithuania. Comparing healthy life years between the sexes at the age of 65 in 2012 shows that there were nine EU Member States where men could expect more healthy life years than women. This was most notably the case in Cyprus, Greece and Portugal (where men could expect to live at least one more year free from disability).

	At birth		At a	ge 65
	Males	Females	Males	Females
EU-28	61.3	61.9	8.4	8.5
BE	64.4	65.4	10.7	11.1
BG	62.1	65.7	8.7	9.5
CZ	62.3	64.1	8.3	8.9
DK	60.6	61.4	10.6	12.9
DE	57.4	57.9	6.7	6.9
EE	53.1	57.2	5.4	5.5
IE	66.1	68.3	10.9	11.9
EL	64.8	64.9	8.6	7.3
ES	64.7	65.7	9.2	9.0
FR	62.6	63.9	9.5	10.4
HR	62.0	64.5	7.7	8.2
IT	62.1	61.5	7.8	7.2
CY	63.4	64.0	8.8	7.7
LV	54.8	59.1	5.3	6.4
LT	56.6	61.6	5.6	6.1
LU	65.8	66.4	11.6	11.9
HU	59.2	60.5	6.4	6.4
MT	71.8	72.4	12.5	12.2
NL	63.5	58.9	10.0	10.1
AT	60.2	62.5	8.9	9.5
PL	59.2	62.9	7.4	7.8
PT (1)	60.7	58.6	7.8	6.3
RO	57.7	57.8	5.9	5.1
SI	56.5	55.6	7.3	6.9
SK	53.4	53.1	3.5	3.1
FI	57.3	56.2	8.4	9.0
SE	70.9	70.7	14.0	15.4
UK	64.5	64.5	10.5	10.6
IS	70.4	68.0	14.7	14.3
NO	72.1	70.3	15.4	15.9
СН	68.6	67.6	13.6	14.2

**Table 3.1:** Healthy life years, 2012 (years)

#### (<sup>1</sup>) 2011.

Source: Eurostat (online data code: hlth\_hlye)

#### 3.2 Causes of death

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

Between 2004 and 2010 there was an 8.4% reduction in EU-28 death rates relating to cancer for men and a 4.8% reduction for women; much larger reductions were recorded in relation to deaths from ischaemic heart disease or from transport accidents (where rates fell by more than 20%).

#### Figure 3.2: Causes of death — standardised death rate, EU-28, 2010 (<sup>1</sup>) (per 100 000 inhabitants)



(') 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)

Diseases of the circulatory system include those related to high blood pressure, cholesterol, diabetes and smoking; although, the most common causes of death are ischaemic heart diseases and cerebrovascular diseases. Ischaemic heart diseases accounted for 147.2 deaths per 100 000 inhabitants across the EU-28 in 2010.

Cancer was a major cause of death — averaging 270.4 deaths per 100 000 inhabitants across the EU-28 in 2010. The most common forms of cancer in the EU-28 in 2010 included malignant neoplasms of the trachea, bronchus and lung, colon, breast, pancreas, stomach and liver.

**Figure 3.3:** Causes of death — standardised death rate per 100 000 inhabitants, EU-28, 2004–10 (<sup>1</sup>) (2004 = 100)



<sup>(1)</sup> Provisional. <sup>(2)</sup> Excluding Germany, Italy and the Netherlands.

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

#### 3.3 Health and safety at work

Accidents at work are a discrete occurrence which lead to physical or mental harm. Serious accidents at work are those that imply more than three days of absence from work. Fatal accidents at work are those that lead to the death of the victim within one year.

The number of accidents at work varies considerably depending upon the economic activity in question and is positively skewed in relation to male-dominated activities. Within the EU-28 in 2012, the construction, manufacturing, transportation and storage, and agriculture, forestry and fishing sectors together accounted for just over two thirds (68.4%) of all fatal accidents at work and over half (55.3%) of all serious accidents.

It is also possible to analyse the data according to the type of injury sustained during the accident. EU-28 data for 2012 shows that there were two types of common injury, namely, wounds and superficial injuries (31.5% of the total) and dislocations, sprains and strains (26.3%). Around one in ten accidents resulted in concussion and internal injuries (13.8%), while a similar proportion of accidents concerned bone fractures (12.8%).



**Figure 3.4:** Accidents at work by type of injury, EU-28, 2012 (<sup>1</sup>) (%)

(1) Estimates.

Source: Eurostat (online data code: hsw\_n2\_07)

Figure 3.5: Fatal and serious accidents at work by economic activity, EU-28, 2012 (% of serious and fatal accidents)



Source: Eurostat (online data codes: hsw\_n2\_01 and hsw\_n2\_02)



# Education and training

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. The strategic framework for European cooperation in education and training (known as ET 2020), was adopted by the Council in May 2009. This strategy set a number of benchmarks to be achieved by 2020:

- at least 95% of children between the age of four and the age for starting compulsory primary education should participate in early childhood education;
- the share of early leavers from education and training should be less than 10%;
- the share of low-achieving 15-year olds in reading, mathematics and science should be less than 15%;
- the share of 30–34 year olds with tertiary educational attainment should be at least 40%;
- an average of at least 15% of adults aged 25 to 64 should participate in lifelong learning.

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 European countries have taken part in the Copenhagen process which aims to promote and develop vocational education and training systems.

# 4.1 School enrolment and early leavers from education and training

School helps young people acquire the basic life skills and competences necessary for their personal development.

In 2011, there were approximately 92.9 million pupils and students enrolled in educational establishments in the EU-28. This figure excludes pre-primary education: some 91.4% of four-year-olds (4.8 million individuals) in the EU-28 were in education in 2011. Over four fifths (80.7%) of all 18-year-olds in the EU-28 (or 4.7 million individuals) remained in the education system. However, this ratio rose to above 90 % in eight Member States.

In 2013, some 12% of all pupils and students aged 18 to 24 (13.6% of males and 10.2% of females) were early leavers from education and training, with at most a lower secondary education. The target that the share of early leavers from education and training be less than 10% by 2020 was adopted in the framework of a strategic European cooperation in education and training. That level was already reached in 2013 by 17 of the 28 EU Member States.





(1) Ranked on the total proportion of early leavers.

(2) No Europe 2020 target.

(3) Includes unreliable data for one or more categories.

(4) Break in time series.

(5) Not wanting to work: not available.

Source: Eurostat (online data code: edat\_lfse\_14)

**Table 4.1:** Pupils and students (excluding pre-primary education), 2011 (<sup>1</sup>)

	Total (ISCED 1-6) (thousand)	Four-year- olds in education (%)	Pupil teacher ratio in primary education (pupils per teacher)	18-year-olds in education (%)
EU-28	92 915	91.4	:	80.7
BE	2 462	98.1	12.4	89.9
BG	1 085	78.9	17.5	81.7
CZ	1 822	83.7	18.7	90.3
DK	1 280	97.6	11.8	84.8
DE	13 862	95.6	16.3	90.1
EE	243	89.1	16.3	87.3
IE	1 1 1 2	93.9	15.7	94.9
EL	2 012	54.3	:	70.4
ES	8 068	100.0	13.2	79.8
FR	12 364	100.0	18.4	76.6
HR	704	57.4	14.3	66.9
IT	9 520	96.2	11.7	79.1
CY	150	73.3	13.6	34.4
LV	369	85.9	11.4	95.6
LT	652	73.2	9.9	100.1
LU	86	94.6	9.9	72.0
HU	1 783	92.9	10.7	89.2
MT	74	100.0	12.9	58.2
NL	3 676	99.6	20.6	89.1
AT	1 482	91.5	12.1	72.3
PL	7 570	62.2	11.0	93.2
PT	2 053	90.6	11.2	77.5
RO	3 554	82.0	17.8	73.3
SI	367	88.9	16.0	92.1
SK	981	72.3	16.9	84.5
FI	1 236	57.4	13.7	93.8
SE	2 060	94.0	11.3	95.8
UK	12 993	95.8	19.9	61.3
IS	88	96.8	10.2	81.8
LI	6	54.0	9.9	87.2
NO	1 106	97.1	10.4	88.0
СН	1 367	40.8		83.9
МК	369	29.3	19.1	60.9
TR	19 547	19.2	21.0	50.4
JP	18 209	92.7	18.1	
US	70 234	78.1	15.3	70.2

(<sup>1</sup>) Refer to the internet metadata file (http://ec.europa.eu/eurostat/cache/metadata/EN/ educ\_esms.html).

Source: Eurostat (online data codes: tps00051, educ\_ipart, educ\_iste and tps00060)

#### 4.2 Foreign language learning

Within primary education, a clear majority of pupils (choose to) study English. Indeed, learning English is mandatory in several countries within secondary education institutions, and so a number of EU Member States have close to 100% of pupils learning this language already in primary education.

Turning to language learning in upper secondary education, some 93.8% of all EU-28 students at ISCED level 3 were studying English as a foreign language in 2011, compared with slightly less than one quarter studying French (23.0%) and slightly more than one fifth studying German (21.1%).

Figure 4.2: Proportion of pupils in primary education learning foreign languages, by language, 2011 (1) (%)



(1) Ranked on English; refer to the internet metadata file (http://ec.europa.eu/eurostat/cache/ metadata/EN/educ\_esms.html).

(2) German: not applicable. (3) French: not applicable.

(4) 2008.

(5) English: not applicable.

Source: Eurostat (online data code: educ\_ilang), UNESCO Institute for Statistics (UIS), OECD

 Table 4.2: Foreign languages learnt per pupil in upper secondary education, 2006 and 2011 (<sup>1</sup>)

 (%)

(70)	Upper secondary education (ISCED level 3 (GEN))						Proportion of students	
	Pupils learning English in general programmes		Pupils learning French in general programmes		Pupils learning German in general programmes		learning two or more languages at ISCED level 3 (GEN)	
	2006	2011	2006	2011	2006	2011	2006	2011
EU-28	93.1	93.8	:	23.0	:	21.1	:	:
BE	94.4	94.5	48.1	49.2	28.4	27.7	88.8	88.9
BG	86.1	88.4	15.3	13.4	40.3	33.7	78.4	72.8
CZ	100.0	100.0	25.0	22.5	72.2	66.9	100.0	100.0
DK	85.8	91.0	17.5	9.1	51.5	33.7	70.0	59.6
DE	94.3	92.8	28.7	26.5	-	-	:	:
EE ( <sup>2</sup> )	92.6	96.2	6.1	6.9	44.1	39.2	80.9	97.7
IE	-	-	60.5	57.2	18.2	16.0	8.3	7.8
EL	94.0	90.9	8.6	6.7	2.9	3.3	6.9	5.7
ES	94.6	93.1	27.1	21.0	1.1	0.9	27.4	22.7
FR	99.4	99.6	-	-	22.8	21.9	89.6	92.4
HR	98.3	99.1	3.4	3.2	65.6	62.4	89.9	88.0
IT	96.9	97.6	21.4	18.2	7.7	6.5	25.6	24.0
CY	88.1	89.3	38.3	36.0	2.4	3.9	:	89.1
LV	94.9	99.1	4.1	5.1	35.1	30.2	73.8	81.7
LT	82.3	92.9	5.4	3.3	27.2	13.4	55.9	43.1
LU	97.0	97.9	97.0	100.0	97.0	100.0	100.0	100.0
HU	73.3	78.5	6.2	5.9	49.9	44.4	:	44.3
MT	63.5	66.5	7.9	4.9	1.7	1.3	26.6	38.9
NL	100.0	100.0	70.1	33.0	86.2	43.3	100.0	68.6
AT	96.9	99.4	54.1	43.3	-	-	76.2	73.3
PL (3)	91.2	93.4	9.8	8.4	62.7	50.4	:	70.9
PT	50.7	47.0	15.1	3.5	1.6	0.7	9.2	4.6
RO	94.8	99.1	83.6	86.3	11.6	11.2	91.6	98.8
SI	98.9	99.6	10.2	10.7	77.0	67.9	98.9	99.3
SK	97.7	98.7	16.0	17.2	72.6	61.5	99.3	99.3
FI	99.5	99.6	19.7	16.7	35.4	24.8	99.7	99.6
SE	99.9	100.0	22.4	21.7	32.4	26.4	92.1	93.2
UK	-	-	34.8	24.7	13.1	9.2	6.3	4.6
IS	76.1	73.2	17.1	13.4	30.7	25.8	66.9	62.8
LI	:	100.0	:	100.0	:	:	:	100.0
NO (4)	100.0	42.0	20.3	10.1	31.3	18.8	100.0	100.0
MK	:	:	:	:	:	:	:	49.3
TR	67.3	. 99.4	0.7	0.3	6.5	0.5	7.6	:

(<sup>1</sup>) Refer to the internet metadata file (http://ec.europa.eu/eurostat/cache/metadata/EN/educ\_ esms.html).

(2) Data for 2008 instead of 2011.

<sup>(9)</sup> Other than for the proportion of students learning two or more languages: data for 2007 instead of 2006.

(\*) Proportion of students learning two or more languages: data for 2008 instead of 2011.

Source: Eurostat (online data codes: educ\_thfrlan and educ\_ilang), Unesco Institute for Statistics (UIS), OECD

#### 4.3 Educational expenditure

Expenditure on education may help foster economic growth, enhance productivity, contribute to people's personal and social development, and help reduce social inequalities. The proportion of total financial resources devoted to education is one of the key choices made by governments in each country of the EU.





(!) Refer to the internet metadata file (http://ec.europa.eu/eurostat/cache/metadata/EN/tsiir010\_ esms.html).

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

(3) 2005.

(4) 2007; excludes tertiary education.

Source: Eurostat (online data code: tsdsc510)

Public expenditure on education in the EU-28 in 2010 was equivalent to 4.8% of gross domestic product (GDP), while the expenditure of both public and private sources of funds on educational institutions amounted to 5.6% of GDP.

	Public expenditure (% of GDP)		Private expenditure (% of GDP)		Expenditure on public and private educational institutions per pupil/ student (PPS for full-time equivalents)		
	2005	2010	2005	2010	2005	2010	
EU-28	5.0	5.4	0.7	0.8	5 643	6 909	
BE	5.9	6.6	0.4	0.3	6 417	8 119	
BG	4.3	4.1	0.6	0.6	1 949	2 655	
CZ	4.1	4.2	0.6	0.6	3 791	4 600	
DK	8.3	8.8	0.6	0.4	8 075	9 589	
DE	4.6	5.1	0.9	0.7	6 606	7 797	
EE	4.9	5.7	0.4	0.4	2 819	4 243	
IE	4.7	6.5	0.3	0.5	6 023	:	
EL	4.1	:	0.3	:	4 479	:	
ES	4.2	5.0	0.5	0.8	5 669	6 832	
FR	5.7	5.9	0.6	0.6	6 282	7 365	
HR	4.0	4.3	0.3	0.3	:	3 766	
IT	4.4	4.5	0.4	0.5	5 899	6 097	
CY	7.0	7.9	1.2	1.6	6 580	9 179	
LV	5.1	5.0	0.8	0.6	2 702	3 608	
LT	4.9	5.4	0.5	0.7	2 446	3 738	
LU (2)	3.8	3.2	:	:	:	:	
HU	5.5	4.9	0.5	:	3 793	:	
MT	6.6	6.7	0.4	1.3	5 911	7 541	
NL	5.5	6.0	0.9	1.0	7 330	8 523	
AT	5.4	5.9	0.5	0.5	8 075	9 162	
PL	5.5	5.2	0.6	0.8	3 062	4 484	
PT (3)	5.2	5.6	0.4	0.4	4 803	5 302	
RO	3.5	3.5	0.4	0.1	1 437	2 1 3 3	
SI	5.7	5.7	0.8	0.7	5 996	6 677	
SK	3.9	4.2	0.7	0.7	2 689	4 235	
FI	6.3	6.8	0.1	0.2	6 189	7 420	
SE	6.9	7.0	0.2	0.2	7 014	8 294	
UK	5.4	6.2	1.2	2.0	7 123	7 982	
IS	7.6	7.6	0.7	0.8	7 663	7 383	
LI	2.3	2.7	:	:	7260.4	:	
NO (4)	7.0	6.9	0.1	0.1	8 966	10 349	
CH	5.5	5.2	0.6	0.5	:	:	
TR (⁵)	3.1	:	0.08	:	:	:	
JP	3.5	3.9	2.2	2.2	10 530	11 409	
US	5.1	5.5	1.5	1.5	7 064	7 725	

 Table 4.3:
 Expenditure on educational institutions, 2005 and 2010 (<sup>1</sup>)

 (1) Refer to the internet metadata file (http://ec.europa.eu/eurostat/cache/metadata/EN/ educ\_esms.html).

(2) Excludes tertiary education.

(<sup>3</sup>) Expenditure on public and private educational institutions per pupil/student: data for 2009 instead of 2010.

(4) Private expenditure: data for 2004 instead of 2005.

(5) Data for 2004 instead of 2005.

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

### 4.4 Tertiary education

Some European universities are among the most prestigious in the world. The EU-28 had around 4 000 higher education (undergraduate and postgraduate) institutions, with almost 20 million students in 2013.

Across the EU-28, around one third (32.8%) of the students in tertiary education were studying social sciences, business and law, with more female (3.8 million) than male (2.8 million) students in this field of education.



**Figure 4.4:** Proportion of the population aged 30–34 having a tertiary educational attainment, 2013 (<sup>1</sup>)

(!) Ranked on the average shares for males and females combined; refer to the internet metadata file (http://ec.europa.eu/eurostat/cache/metadata/EN/educ\_esms.html).

Source: Eurostat (online data code: t2020\_41)

Over one third (36.9%) of the population aged 30 to 34 in the EU-28 had a tertiary education in 2013, rising to almost four out of ten (41.2%) among women, and falling to just below three out of ten (32.7%) among men. Almost 4.8 million students graduated from tertiary education establishments in the EU-28 in 2013.



Figure 4.5: Students in tertiary education, by field of education and sex, EU-28, 2012 (')

(!) Estimates; refer to the internet metadata file (http://ec.europa.eu/eurostat/cache/metadata/EN/ educ\_esms.html).

Source: Eurostat (online data code: educ\_enrl5)

Figure 4.6: Graduates from tertiary education, by field of education and sex, EU-28, 2012 (<sup>1</sup>) (1 000)



(!) Estimates. Includes French data for 2009 and Croatian data for 2010. Refer to the internet metadata file (http://ec.europa.eu/eurostat/cache/metadata/EN/educ\_esms.html).

Source: Eurostat (online data code: educ\_grad5)

### 4.5 Lifelong learning

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.

In 2013, the proportion of persons aged 25 to 64 in the EU-28 receiving some form of education or training in the four weeks preceding the labour force survey was 10.5%; a share that was 1.2 percentage points higher than the corresponding share for 2008.

The proportion of the population who had participated in such lifelong learning activities was higher among women (11.4% in 2013) than among men (9.6%); these shares for men and women were both higher in 2013 than they had been five years earlier.

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.



**Figure 4.7:** Obstacles to participation in education and training, EU-28, 2011 (<sup>1</sup>)

(!) Multiple answers allowed; refer to the internet metadata file (http://ec.europa.eu/eurostat/ cache/metadata/EN/trng\_aes\_esms.html); estimates.

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

Table 4.4: Lifelong learning, 2008 and 2013 (1)
(% of the population aged 25–64 participating in education and
training)

	Total		Ma	ale	Fen	nale
	2008	2013	2008	2013	2008	2013
EU-28 (2)	9.3	10.5	8.5	9.6	10.2	11.4
BE	6.8	6.7	6.4	6.6	7.2	6.8
BG	1.4	1.7	1.3	1.6	1.5	1.8
CZ	7.8	9.7	7.7	9.7	7.9	9.7
DK	29.9	31.4	24.8	25.7	35.2	37.2
DE	7.9	7.8	8.0	7.9	7.8	7.8
EE	9.7	12.6	6.6	9.8	12.5	15.2
IE	7.0	7.3	6.0	6.9	8.1	7.7
EL	2.9	2.9	2.8	3.0	3.1	2.9
ES	10.6	11.1	9.6	10.3	11.7	12.0
FR (2)	6.0	17.7	5.6	15.4	6.4	19.9
HR	2.2	2.4	2.1	2.5	2.3	2.3
IT	6.3	6.2	6.1	5.8	6.6	6.5
СҮ	8.5	6.9	8.1	6.6	8.9	7.1
LV	6.6	6.5	4.0	5.0	8.8	7.8
LT	4.8	5.7	3.5	5.0	5.9	6.3
LU	8.5	14.4	7.6	13.8	9.5	14.9
HU	3.1	3.0	2.7	2.9	3.5	3.1
MT	6.2	7.5	6.3	7.4	6.1	7.7
NL	17.0	17.4	16.8	16.8	17.2	18.0
AT	13.2	13.9	12.2	12.6	14.2	15.3
PL	4.7	4.3	4.2	3.8	5.2	4.9
PT	5.3	9.8	5.0	9.5	5.6	10.1
RO	1.5	2.0	1.3	2.2	1.6	1.9
SI	13.9	12.4	12.5	10.3	15.4	14.5
SK	3.3	2.9	2.6	2.8	4.0	3.1
FI	23.1	24.9	19.3	21.1	26.9	28.8
SE	22.2	28.1	16.1	21.3	28.4	35.1
UK	19.9	16.1	16.6	14.6	23.2	17.6
IS	25.1	25.8	20.1	22.6	30.5	29.2
NO	19.3	20.4	18.2	18.8	20.5	21.9
СН	27.9	30.4	27.6	31.2	28.2	29.5
МК	2.5	3.5	2.5	3.6	2.6	3.4
TR	1.9	4.0	2.1	4.0	1.6	4.0

(') Refer to the internet metadata file (http://ec.europa.eu/eurostat/cache/metadata/EN/trng\_aes\_ esms.html).

(2) Break in series.

#### Source: Eurostat (online data code: trng\_lfse\_01)




## Labour market

Labour market statistics are at the juxtaposition of economic and social domains. From an economic viewpoint, these statistics address labour as an input for economic growth, providing measures in relation to hours worked, labour productivity, vacant posts, wage levels, labour costs, and so on. However, labour market statistics also shed light on social and socioeconomic matters, such as the jobless (unemployed persons), earnings and their structural components, social inequalities (for example, the gender pay gap), working patterns and social integration. As such, Eurostat statistics cover both the supply and the demand side of the labour market, offering data for short-term and structural analyses, as well as in monetary and non-monetary terms. In addition, the portfolio of labour market statistics developed by Eurostat also includes measures for labour market policy interventions. These are public interventions in the labour market targeted at the unemployed, persons who are employed but at risk of involuntary job loss and inactive persons.

With the aim of stimulating economic recovery, the European Commission set up the Europe 2020 strategy for smart, sustainable and inclusive growth. Two of its flagship initiatives concern labour market issues, namely 'An agenda for new skills and jobs' and 'Youth on the move'. These promote a range of actions aimed at education and training institutions, measures for the creation of a (work) environment conducive to higher activity rates and higher labour productivity, and initiatives aimed at facilitating the entry of young people into the labour market.

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## 5.1 Employment

The employment rate, in other words the proportion of the working age population in employment, is considered as a key social indicator for analytical purposes when studying developments within labour markets. Having peaked in 2008 at 65.7 %, the EU-28 employment rate for persons aged 15 to 64, as measured by the EU's labour force survey (EU LFS), decreased during successive years to stand at 64.0% in 2010. This decrease during the global financial and economic crisis - a total fall of 1.7 percentage points - was halted in 2011 when there was a small increase in the EU-28 employment rate, to stand at 64.1%. In 2012, the employment rate for men stood at 69.6% in the EU-28, as compared with 58.5% for women. A longerterm comparison shows that while the employment rate for men in 2012 was below its corresponding level ten years earlier (70.3% in 2002), there was a marked increase in the proportion of women in employment - rising 4.2 percentage points from 54.3% in 2002.

Employment rates also 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 83.5% across the EU-28 in 2012, much higher than the rate (52.8%) for those who had attained a primary or lower secondary education.



Figure 5.1: Employment rate by highest level of education and age, EU-28, 2012 (%)

Source: Eurostat (online data codes: Ifsa ergaed and Ifsi emp a)

<sup>(1)</sup> Age group 25-64.

	Employn	nent rate (a 15–64)	ige group	Employm	ent rate by	age group
	Total	Male	Female	15–24 years	25–54 years	55–64 years
EU-28	64.1	69.6	58.5	32.9	77.2	48.9
EU-27	64.2	69.8	58.6	32.8	77.2	48.8
EA-17	63.8	69.5	58.2	32.1	76.5	48.7
BE	61.8	66.9	56.8	25.3	79.3	39.5
BG	58.8	61.3	56.3	21.9	73.1	45.7
CZ	66.5	74.6	58.2	25.2	82.9	49.3
DK	72.6	75.2	70.0	55.0	81.9	60.8
DE	72.8	77.6	68.0	46.6	83.2	61.5
EE	67.1	69.7	64.7	33.0	79.2	60.6
IE	58.8	62.7	55.1	28.2	69.5	49.3
EL	50.8	60.6	41.9	13.1	64.1	36.4
ES	55.8	60.2	50.6	18.2	66.3	43.9
FR	63.9	68.0	60.0	28.8	80.8	44.5
HR	50.7	55.1	46.2	16.9	68.7	36.7
IT	56.8	66.5	47.1	18.6	70.3	40.4
СҮ	64.6	70.4	59.4	28.1	78.4	50.7
LV	63.0	64.4	61.7	28.7	76.3	52.8
LT	62.0	62.2	61.8	21.5	78.5	51.7
LU	65.8	72.5	59.0	21.7	83.1	41.0
HU	57.2	62.5	52.1	18.6	74.6	36.9
MT	59.1	73.3	44.2	43.8	72.7	33.6
NL	75.1	79.7	70.4	63.3	83.8	58.6
AT	72.5	77.8	67.3	54.6	85.4	43.1
PL	59.7	66.3	53.1	24.7	77.2	38.7
PT	61.4	64.9	58.7	23.6	75.4	46.5
RO	59.5	66.5	52.6	23.9	74.9	41.4
SI	64.1	67.4	60.5	27.3	83.3	32.9
SK	59.7	66.7	52.7	20.1	76.4	43.1
FI	69.4	70.5	68.2	41.8	82.0	58.2
SE	73.8	75.6	71.8	40.2	85.2	73.0
UK	70.1	75.2	65.1	46.9	80.5	58.1
IS	79.7	81.5	77.8	65.4	84.5	79.1
NO	75.7	77.6	73.8	52.2	84.6	70.9
СН	79.4	85.2	73.6	61.7	86.7	70.5
МК	44.0	52.4	35.3	15.5	55.8	35.4
TR	48.9	69.2	28.7	31.5	58.3	31.9
JP	67.1	80.3	60.7	:	:	65.4
US	70.6	72.3	62.2	:	:	60.7

**Table 5.1:** Employment rates by age group and sex, 2012(%)

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

## 5.2 Unemployment and beyond

Unemployment levels and rates move in a cyclical manner, largely related to the general business cycle. However, other factors such as labour market policies and demographic changes may also influence the short and long-term development of unemployment.

In the wake of the financial and economic crisis the level of EU-28 unemployment climbed rapidly, increasing by 6.7 million persons between the first quarter 2008 and mid-2010, taking the unemployment rate up to 9.6%. The decline of both the unemployment level and rate in the following three quarters was a deceptive sign of a potential end to the effects of the financial and economic crisis, and a return to more stable labour market conditions in the EU. By contrast, from the second quarter of 2011 until the first quarter of 2013 unemployment in the EU-28 continued to rise, reaching a record level of nearly 26.5 million persons during 2013, equivalent to 10.9% of the labour force. From the second quarter of 2013 until the end of 2013, unemployment rate followed a slide decrease, reaching the level of the fourth quarter of 2012, corresponding to 10.7%.

Youth unemployment rates are generally much higher than unemployment rates for other age groups. However, this does not necessarily mean that the group of unemployed persons aged between 15 and 24 is large. In fact, many young people are studying fulltime and are therefore neither working nor looking for a job (so they are not part of the labour force which is used as the denominator for calculating the unemployment rate). Youth unemployment ratios use a slightly different concept: the unemployment ratio is calculated as the number of unemployed persons aged 15 to 24 divided by the total population of the same age. Youth unemployment rates; they have however risen considerably in recent years following the onset of the financial and economic crisis.



Figure 5.2: Unemployment rates, EU-28, 2013

Source: Eurostat (online data codes: une\_rt\_a and une\_ltu\_a)

-	Youth u	inemploym	ent rate	Youth unemployment ratio			
	2011	2012	2013	2011	2012	2013	
EU-28	21.5	23.0	23.5	9.1	9.7	9.8	
EA-18	20.9	23.1	24.0	8.7	9.6	9.8	
BE	18.7	19.8	23.7	6.0	6.2	7.3	
BG (1)	25.0	28.1	28.4	7.4	8.5	8.4	
CZ (1)	18.1	19.5	18.9	5.4	6.1	6.0	
DK	14.3	14.0	13.0	9.6	9.1	8.1	
DE	8.6	8.1	7.9	4.5	4.1	4.0	
EE	22.3	20.9	18.7	9.1	8.7	7.4	
IE	29.1	30.4	26.8	12.1	12.3	10.6	
EL	44.4	55.3	58.3	13.0	16.1	16.6	
ES	46.4	53.2	55.5	19.0	20.6	21.0	
FR (2)	22.9	24.7	24.8	8.4	9.0	9.0	
HR (2)	36.1	43.0	49.7	11.3	12.7	14.4	
IT	29.1	35.3	40.0	8.0	10.1	10.9	
СҮ	22.4	27.8	38.9	8.7	10.8	14.9	
LV	31.0	28.5	23.2	11.6	11.5	9.1	
LT	32.6	26.7	21.9	9.2	7.8	6.9	
LU	16.4	18.0	16.9	4.2	5.0	4.0	
HU	26.1	28.1	27.2	6.4	7.3	7.4	
MT	13.8	14.2	13.0	7.1	7.2	6.9	
NL	7.6	9.5	11.0	5.3	6.6	7.7	
AT (2)	8.3	8.7	9.2	5.0	5.2	5.4	
PL (2)	25.8	26.5	27.3	8.6	8.9	9.1	
PT (1)	30.1	37.7	38.1	11.7	14.3	13.5	
RO	23.7	22.7	23.6	7.4	7.0	7.3	
SI	15.7	20.6	21.6	5.9	7.1	7.3	
SK (1)	33.7	34.0	33.7	10.1	10.4	10.4	
FI	20.1	19.0	19.9	10.1	9.8	10.3	
SE	22.8	23.7	23.6	12.1	12.4	12.8	
UK	21.1	21.0	20.5	12.4	12.4	12.0	
IS	14.6	13.6	10.7	10.6	10.2	8.3	
NO	8.7	8.6	9.1	4.8	4.8	5.2	
СН	:	:	:	5.2	5.7	5.8	
MK	:		:	17.7	18.1	17.5	
TR	16.8	15.7	17.1	6.4	5.9	6.6	
JP	8.2	8.1	6.8	:	:	:	
US	17.3	16.2	15.5	:	:	:	

**Table 5.2:** Youth unemployment rates, 2011–13(%)

(1) 2011: break in series. (2) 2013: break in series.

Source: Eurostat (online data codes: une\_rt\_a and lfsi\_act\_a)

## 5.3 Wages and labour costs

The level and structure of wages and labour costs are important macroeconomic indicators used by policymakers, employers and trade unions to assess labour market supply and demand conditions. For the EU-28 as a whole, women were paid, on average, 16.4% less than men in 2012. The biggest gender pay gaps were identified in Estonia, Austria, Germany, the Czech Republic and Slovakia (all more than 20%). 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 basis, as well as the attitudes of personnel departments within private and public bodies towards career development and unpaid/maternity leave.





(<sup>1</sup>) Enterprises with 10 or more employees. NACE Rev. 2 Sections B to S excluding O. Greece: not available.

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

(4) 2011.

Source: Eurostat (online data code: tsdsc340)

<sup>(&</sup>lt;sup>3</sup>) Estimate.

The average hourly labour cost in the EU-28 was estimated at EUR 23.70 in 2013 and at EUR 28.20 in the euro area (EA-18). However, this average masks significant differences between EU Member States, with hourly labour costs ranging between EUR 3.70 and EUR 40.10.



Figure 5.4: Hourly labour costs, 2013 (<sup>1</sup>) (EUR)

(<sup>1</sup>) Enterprises with 10 or more employees. NACE Rev. 2 Sections B to S excluding O.

(2) Also excluding NACE Rev. 2 Section P.

(\*) Based on Eurostat's estimate for the 3rd and 4th quarter of 2013. Only the total level is estimated.

Source: Eurostat (online data code: lc\_lci\_lev)

Labour costs are made up of costs for wages and salaries plus non-wage costs such as employers' social contributions. The share of non-wage costs for the whole economy was 23.7% in the EU-28 but varies substantially across EU Member States. The highest shares were recorded for Sweden (33.3%), France (32.4%), Lithuania (28.5%) and Italy (28.1%) while the lowest shares were in Malta (8.0%), Denmark (12.4%), Luxembourg (13.4%) and Ireland (13.8%).

## 5.4 Minimum wages

In 2014, 21 of the 28 EU Member States (all except Denmark, Germany, Italy, Cyprus, Austria, Finland and Sweden) had national legislation setting a minimum wage by statute or by national inter-sectoral agreement.

Monthly minimum wages varied widely, from EUR 174 in Bulgaria to EUR 1 921 in Luxembourg as of 1 January 2014. When adjusted for price differentials across countries, the disparities between the EU Member States were reduced from a ratio of 1:11 in euro terms, to a range of 1:5 in purchasing power standard (PPS) terms. Monthly minimum wages, taking account of price differences between the Member States, ranged from a low of 345 PPS in Romania to a high of 1 576 PPS in Luxembourg.

In 2012, the level of gross minimum wages varied between 30% and 50% of the average gross monthly earnings for somebody working in industry, construction or services. The level of minimum wages in relation to average gross monthly earnings, was highest in Greece (50.1%) and Slovenia (50%), followed by France, Luxembourg and Malta (47%). At the lower end of the ranking, the Czech Republic, Estonia, Romania and Spain reported that the level of their minimum wages was less than 35% of average gross monthly earnings.



Figure 5.5a: Minimum wages, January 2014 (<sup>1</sup>) (EUR per month)

(<sup>1</sup>) Denmark, Germany, Italy, Cyprus, Austria, Finland and Sweden: no statutory minimum wage. (<sup>2</sup>) July 2013.

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



Figure 5.5b: Minimum wages, January 2014 (1) (PPS per month)

(<sup>1</sup>) Denmark, Germany, Italy, Cyprus, Austria, Finland and Sweden: no statutory minimum wage. (<sup>2</sup>) July 2013.

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



Figure 5.6: Minimum wages as proportion of the mean value of average gross monthly earnings, 2012 (1)

(1) NACE Rev. 2 Sections B-S. Denmark, Germany, Italy, Cyprus, Austria, Finland and Sweden: no statutory minimum wage.

(<sup>2</sup>) 2011.

US

(<sup>3</sup>) 2010.

#### Source: Eurostat (online data code: earn mw avgr2)

## 5.5 Job vacancies

There was an upward development in the job vacancy rate in the EU-27 from 2003 to 2007, with the rate peaking at 2.2% at the end of this period. Thereafter, the job vacancy rate contracted in successive years, falling to 1.9% in 2008 and a historic low of 1.3% in 2009 (at the height of the global financial and economic crisis). In 2010, there was a slight recovery, as the job vacancy rate stood at 1.5%. Information available for 2011 and 2012 suggests that the job vacancy rate in the EU-27 increased slightly in 2011 before falling back to the 2010 rate of 1.5% in 2012. The same trend is observed for the EU-28.

Among the EU Member States, the job vacancy rate in 2012 was the highest in Malta (3.4%) and Germany (2.6%), followed by Belgium and Finland (between 2.0 and 2.5%). The number of vacant posts accounted for less than 1% of the total number of posts in 15 of the Member States in 2012, with the lowest job vacancy rates (0.4%) in Latvia, Poland and Portugal.

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.



(1) 2003–08: NACE Rev. 1.1 Sections A to O; since 2009: NACE Rev. 2 Sections B to S.
 (2) Provisional.
 (2) 2003–08: EA-16; from 2009: EA-17.
 (2) 2003–08: EU-27; from 2009: EU-28.

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



## **Figure 5.8:** Job vacancy rate, 2012 (<sup>1</sup>) (%)

(1) NACE Rev. 2 Sections B to S.

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

(<sup>a</sup>) Enterprises with 10 or more employees.

(4) NACE Rev. 2 Sections B to N.

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

## 5.6 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 or who are currently employed but at risk of involuntary job loss due to difficult economic circumstances for their employer - a situation that is particularly relevant during the current inconsistent recovery from the financial and economic crisis. 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. Public expenditure on LMP measures was equivalent to 0.5% of gross domestic product (GDP) across the EU-28 in 2011 (excluding Greece, Croatia and United Kingdom). The largest part of this expenditure went on training (41.4%), almost a quarter (23.4%) on employment incentives, while accounted for supported employment and 17.6% was rehabilitation (measures that promote the labour market integration of people with reduced working capacity) and 10.0% by direct job creation (which covers the provision of temporary jobs that are additional to normal market supply).





## **Table 5.3:** Labour market policy measures and supports, participants by type of action, 2011 (<sup>1</sup>) (annual average stock in 1 000)

	LMP measures (categories 2 to 7)	LMP supports (categories 8 and 9)
EU-27 ( <sup>2</sup> )( <sup>3</sup> )	9 608.5	16 202.9
BE ( <sup>3</sup> )	608.7	810.6
BG	17.9	103.3
CZ ( <sup>3</sup> )	58.3	132.4
DK	192.0	178.4
DE	1 207.2	2 960.0
EE	6.1	18.0
IE ( <sup>3</sup> )	86.1	431.3
EL ( <sup>4</sup> )	91.9	271.4
ES ( <sup>3</sup> )	2 744.6	2 845.7
FR ( <sup>3</sup> )	1 453.1	2 646.9
HR	:	:
IT ( <sup>3</sup> )	1 216.0	1 492.0
CY	9.7	16.1
LV	29.0	33.7
LT	:	35.7
LU ( <sup>3</sup> )	17.3	10.0
HU	163.5	340.7
MT	6.4	9.7
NL	370.1	672.1
AT	155.1	272.5
PL ( <sup>3</sup> )	584.3	477.2
PT ( <sup>3</sup> )	186.6	324.2
RO	44.9	195.1
SI	20.7	35.7
SK ( <sup>3</sup> )	73.3	74.3
FI	119.2	247.1
SE	188.3	268.6
UK	:	1 571.7
NO	59.7	59.8

(\*) Participants for LMP measures and for LMP supports should not be added together.

(?) Measures: excluding Greece and the United Kingdom; supports: excluding Greece.

(<sup>()</sup>) Unreliable: includes some values that are incomplete (participant data available for >80 % but <100 % of expenditure).</p>

(4) 2010.

Source: Eurostat (online data code: Imp\_partsumm)



## **Economy and finance**

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. Its objective is to overcome the effects of the 2008 financial and economic crisis and prepare the European Union (EU)'s economy for the next decade; integrated economic and employment guidelines have been revised within the context of this new strategy.

Following actions to stabilise the financial system and the economy, the recent financial and economic 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. Tighter EU surveillance of economic and fiscal policies has been introduced as part of the stability and growth pact, while new tools to tackle macroeconomic imbalances and a new working method — the European semester — have also been introduced in order to promote discussions concerning economic and budgetary priorities at the same time every year. As part of this method, the European Commission publishes an 'Annual growth survey', setting out the broad EU economic priorities for the year to come.

## 6.1 National accounts – GDP

National accounts are the source of a multitude of well-known economic indicators. Gross domestic product (GDP) is the most frequently used gauge 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 comparing living standards, or monitoring the process of convergence across the EU.

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 an economy's driving forces and thus be the basis for the inception, monitoring and evaluation of specific EU policies.

The EU-28 GDP growth slowed down substantially in 2008 and GDP contracted considerably in 2009 as a result of the global financial and economic crisis. There was a recovery in 2010 which continued (albeit at a slower pace) in 2011, 2012 and 2013, as GDP increased to EUR 13 075 000 million — its highest level ever in current price terms.



**Figure 6.1:** Real GDP growth, 2003–13 (% change compared with the previous year)

Source: Eurostat (online data code: nama\_gdp\_k)

			GDP				GDP pe	r capita	
		(1 00	0 million	EUR)		(PPS.	EU-27 = 1		(EUR)
	2002	2003	2011	2012	2013	2002	2011 (2)	2012	2013
EU-28	9 983.7	10 151.5	12 711.2	12 970.2	13 075.2	100.0	100.0	100.0	25 700
EA-18	7 340.0	7 556.6	9 4 4 4.0	9 505.2	9 600.5	110.3	108.1	107.7	28 600
BE	268.6	276.2	369.3	375.9	382.7	125.2	119.6	119.6	34 500
BG	17.0	18.4	38.5	39.9	39.9	31.6	46.4	47.4	5 500
CZ	83.4	84.4	155.5	152.9	149.5	73.2	80.9	80.8	14 200
DK	184.7	188.5	240.5	245.3	249.1	128.2	125.1	125.6	44 400
DE	2 132.2	2 147.5	2 609.9	2 666.4	2 737.6	114.3	122.3	122.8	33 300
EE	7.8	8.7	16.2	17.4	18.4	49.9	69.0	71.2	13 800
IE	130.7	140.6	162.6	163.9	164.0	138.0	128.1	128.3	35 600
EL	156.6	172.4	208.5	193.3	182.1	90.0	80.9	76.3	:
ES	729.3	783.1	1 0 4 6.3	1 029.0	1 023.0	100.0	96.0	95.0	22 300
FR	1 542.9	1 587.9	2 001.4	2 032.3	2 059.9	115.3	108.8	108.4	31 300
HR	28.2	30.2	44.2	43.7	43.3	54.0	60.4	61.2	10 200
IT	1 301.9	1 341.9	1 579.9	1 566.9	1 560.0	112.3	101.3	100.2	25 600
CY	11.1	11.7	17.9	17.7	16.5	88.5	93.4	91.3	19 000
LV (3)	9.8	9.9	20.2	22.3	23.4	41.2	59.7	64.1	11 600
LT	15.1	16.6	31.0	32.9	34.6	44.6	67.2	71.3	11 700
LU	24.0	25.8	41.7	42.9	45.5	239.5	265.2	262.6	83 400
HU	70.5	73.9	98.9	97.0	98.1	61.1	67.0	66.5	9 900
MT	4.7	4.6	6.7	6.9	7.2	82.3	85.9	85.7	17 000
NL	465.2	476.9	599.0	599.3	602.7	133.1	129.0	127.3	35 900
AT	220.5	225.0	299.2	307.0	313.2	126.9	128.5	129.6	37 000
PL	209.6	191.6	370.9	381.5	389.7	48.2	64.9	66.8	10 100
PT	140.6	143.5	171.1	165.1	165.7	79.8	76.8	75.8	15 800
RO	48.6	52.6	131.5	131.6	142.2	29.5	51.1	52.8	:
SI	24.6	25.8	36.2	35.3	35.3	82.3	84.2	83.6	17 100
SK	26.0	29.5	69.0	71.1	72.1	54.0	75.2	75.9	13 300
FI	143.6	145.5	188.7	192.4	193.4	114.7	115.5	115.0	35 600
SE	266.7	278.9	385.5	407.8	420.1	122.0	124.9	125.9	43 800
UK	1 719.8	1 659.7	1 770.9	1 932.7	1 908.5	121.0	104.7	104.4	29 800
IS	9.5	9.7	10.1	10.6	11.0	129.5	114.3	114.9	34 000
LI	2.9	2.7	4.2	4.3	:	:	:	:	:
NO	204.1	198.9	353.0	389.1	384.7	154.4	185.1	194.2	75 700
СН	304.6	296.2	474.7	491.0	490.0	143.1	153.8	157.1	61 100
ME	1.4	1.5	3.2	3.1	:	:	:	:	:
MK	4.0	4.2	7.5	7.5	:	25.2	35.8	:	:
RS	16.0	17.3	31.5	29.6	32.0	:	35.6	35.3	:
TR	243.4	268.3	555.1	612.4	616.3	36.1	53.2	:	:
JP	4 227.9	3 808.9	4 247.6	4 622.7	3 690.0	113.5	102.6	:	:
US	11 611.9	10 177.0	11 159.3	12 643.7	12 649.4	158.9	148.5	151.4	40 000

Table 6.1: GDP at current market prices, 2002–03 and 2011–13

(1) GDP per capita in PPS is expressed in this table relative to the EU-27 average, which by definition has the exact value 100. In this table the EU-28 value relative to the EU-27 average, rounded to the nearest whole number, is also 100, because the impact of Croatia is relatively small. For the same reason the countries' and aggregates' values relative to the EU-28 average would be close to those presented in this table relative to the EU-27 average.

(2) Break in series.

(3) GDP per capita in PPS, 2011 and 2012: break in series.

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

### 6.2 Sector accounts

Economic developments in production, income generation and (re)distribution, consumption and investment may be better understood when analysed by institutional sector. In particular, the European Union's (EU) sector accounts provide several key indicators for households and non-financial corporations, like the household saving rate and the business investment rate.

The household saving rate in 2012 was 1.8 percentage points higher in the 17 member euro area (13.0%) than in the EU-28 (11.2%). This gap can be explained mainly by the relatively low saving rate of the United Kingdom (7.3%) and the relatively high rates in Germany (16.4%) and France (15.2%). Among the EU Member States within the euro area, eight had household saving rates above the EU-28 average and seven below, with two (Greece and Malta) not available. The highest household saving rate among the EU Member States not in the euro area was recorded in Sweden (14.8%).

The EU-28's household saving rate peaked at 13.2% in 2009 and then fell in each of the next three years, an overall fall of 2.0 percentage points, which was slightly less than the decrease recorded within the euro area (-2.2 points). The largest reductions in the saving rate between 2011 and 2012 were observed in Estonia (-6.6 percentage points) and Cyprus (-6.1 points), while the largest increases were observed in Poland (2.7 percentage points), Portugal (2.2 points), Sweden (1.7 points) and Belgium (1.2 points). Changes in the other EU Member States ranged from a decrease of 3.3 points to an increase of 0.7 points.

The business investment rate of non-financial corporations in 2012 was 19.7% in the EU-28. The highest rates among the EU Member States were recorded in Austria, Slovakia, the Czech Republic and Latvia, all above 25%; the lowest rate was recorded in Ireland (10%). The business investment rates of the five largest EU-28 economies diverged quite considerably: in Spain the rate was clearly above the EU-28 average; in Italy and France the rates were in line with the average; while in Germany and the United Kingdom the rates were clearly below the average.



Figure 6.2: Key ratios of sector accounts, households, 2012 (1) (% change compared with the previous year)

(1) Bulgaria, Greece, Malta and Romania: not available. (2) 2011.

#### Source: Eurostat (online data code: nasa\_ki)



Figure 6.3: Household net financial wealth-to-income ratio, 2012 (1)

#### (<sup>2</sup>) 2011.

#### Source: Eurostat (online data code: nasa\_ki)

<sup>(1)</sup> Bulgaria, Greece, Malta and Romania: not available.

## 6.3 Government finances

These statistics are crucial indicators for determining the health of a Member State's economy. Under the terms of the EU's stability and growth pact (SGP) Member States pledged to keep their deficits and debt below certain limits. This ruled that 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 2013, the government deficit (net borrowing of the consolidated general government sector, as a share of GDP) of both the EU-28 and the euro area (EA-18) decreased compared with 2012, while general government debt increased. Deficit ratios were greater than the reference threshold of -3% of GDP in 10 of the Member States in 2013. A total of 16 Member States reported a debt ratio above 60% of GDP in 2013.



**Figure 6.4:** Development of total expenditure and total revenue, 2003–13

(<sup>1</sup>) EU-27: total expenditure, 2003-08; EU-28: total expenditure, 2009-13 (<sup>2</sup>) EU-27: total revenue, 2003-08; EU-28: total revenue, 2009-13

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

## Table 6.2: Public balance and general government debt, 2010–13 (¹) (% of GDP)

	of	Public I t borrow consolida overnme	ing/lend ited gene	eral	General government debt (general government consolidated gross debt)				
	2010	2011	2012	2013	2010	2011	2012	2013	
EU-28	- 6.5	- 4.4	- 3.9	- 3.3	79.9	82.4	85.2	87.1	
EA-18	- 6.2	- 4.1	- 3.7	- 3.0	85.5	87.4	90.7	92.6	
BE	- 3.8	- 3.8	- 4.1	- 2.6	96.6	99.2	101.1	101.5	
BG	- 3.1	- 2.0	- 0.8	- 1.5	16.2	16.3	18.4	18.9	
CZ	- 4.7	- 3.2	- 4.2	- 1.5	38.4	41.4	46.2	46.0	
DK	- 2.5	- 1.9	- 3.8	- 0.8	42.8	46.4	45.4	44.5	
DE	- 4.2	- 0.8	0.1	0.0	82.5	80.0	81.0	78.4	
EE	0.2	1.1	- 0.2	- 0.2	6.7	6.1	9.8	10.0	
IE	- 30.6	- 13.1	- 8.2	- 7.2	91.2	104.1	117.4	123.7	
EL	- 10.9	- 9.6	- 8.9	- 12.7	148.3	170.3	157.2	175.1	
ES	- 9.6	- 9.6	- 10.6	- 7.1	61.7	70.5	86.0	93.9	
FR	- 7.0	- 5.2	- 4.9	- 4.3	82.7	86.2	90.6	93.5	
HR	- 6.4	- 7.8	- 5.0	- 4.9	45.0	52.0	55.9	67.1	
IT	- 4.5	- 3.7	- 3.0	- 3.0	119.3	120.7	127.0	132.6	
CY	- 5.3	- 6.3	- 6.4	- 5.4	61.3	71.5	86.6	111.7	
LV	- 8.2	- 3.5	- 1.3	- 1.0	44.5	42.0	40.8	38.1	
LT	- 7.2	- 5.5	- 3.2	- 2.2	37.8	38.3	40.5	39.4	
LU	- 0.8	0.2	0.0	0.1	19.5	18.7	21.7	23.1	
HU	- 4.3	4.3	- 2.1	- 2.2	82.2	82.1	79.8	79.2	
MT	- 3.5	- 2.7	- 3.3	- 2.8	66.0	68.8	70.8	73.0	
NL	- 5.1	- 4.3	- 4.1	- 2.5	63.4	65.7	71.3	73.5	
AT	- 4.5	- 2.5	- 2.6	- 1.5	72.5	73.1	74.4	74.5	
PL	- 7.8	- 5.1	- 3.9	- 4.3	54.9	56.2	55.6	57.0	
PT	- 9.8	- 4.3	- 6.4	- 4.9	94.0	108.2	124.1	129.0	
RO	- 6.8	- 5.5	- 3.0	- 2.3	30.5	34.7	38.0	38.4	
SI	- 5.9	- 6.4	- 4.0	- 14.7	38.7	47.1	54.4	71.7	
SK	- 7.5	- 4.8	- 4.5	- 2.8	41.0	43.6	52.7	55.4	
FI	- 2.5	- 0.7	- 1.8	- 2.1	48.8	49.3	53.6	57.0	
SE	0.3	0.2	- 0.6	- 1.1	39.4	38.6	38.3	40.6	
UK	- 10.0	- 7.6	- 6.1	- 5.8	78.4	84.3	89.1	90.6	
IS	- 10.1	- 5.6	- 3.8	:	93.0	99.1	96.4	:	
NO	11.1	13.6	13.9	11.1	42.5	27.8	29.1	29.5	
TR	- 2.6	:	:	:	42.4	:	:	:	

(1) Data extracted on 23.04.2014.

Source: Eurostat (online data codes: tec00127 and tsdde410)

## 6.4 Exchange rates and interest rates

Eurostat publishes a number of different data sets concerning exchange rates. Two 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;
- effective exchange rate indices.

Bilateral exchange rates are available with reference to the euro. 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, EU 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. 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 10 years.



and a depreciation in the value of the euro.

Source: Eurostat (online data code: ert\_bil\_eur\_a), ECB

Table 6.3: EMU convergence criterion bond yields (Maastricht criterion), 2007–13 (1) (%)

	2003	2008	2009	2010	2011	2012	2013
EU-28 (2)	4.23	4.55	4.15	3.82	4.28	3.66	2.95
EA (3)	4.14	4.31	3.82	3.61	4.35	3.88	3.00
BE	4.18	4.42	3.90	3.46	4.23	3.00	2.41
BG	6.45	5.38	7.22	6.01	5.36	4.50	3.47
CZ	4.12	4.63	4.84	3.88	3.71	2.78	2.11
DK	4.31	4.28	3.59	2.93	2.73	1.40	1.75
DE	4.07	3.98	3.22	2.74	2.61	1.50	1.57
EE	:	:	:	:	:	:	:
IE	4.13	4.53	5.23	5.74	9.60	6.17	3.79
EL	4.27	4.80	5.17	9.09	15.75	22.50	10.05
ES	4.12	4.37	3.98	4.25	5.44	5.85	4.56
FR	4.13	4.23	3.65	3.12	3.32	2.54	2.20
HR	:	6.04	7.83	6.29	6.54	6.13	4.68
IT	4.25	4.68	4.31	4.04	5.42	5.49	4.32
СҮ	4.74	4.60	4.60	4.60	5.79	7.00	6.5
LV	4.90	6.43	12.36	10.34	5.91	4.57	3.34
LT	5.32	5.61	14.00	5.57	5.16	4.83	3.83
LU	3.32	4.61	4.23	3.17	2.92	1.82	1.85
HU	6.82	8.24	9.12	7.28	7.64	7.89	5.92
MT	5.04	4.81	4.54	4.19	4.49	4.13	3.36
NL	4.12	4.23	3.69	2.99	2.99	1.93	1.96
AT	4.14	4.36	3.94	3.23	3.32	2.37	2.01
PL	5.78	6.07	6.12	5.78	5.96	5.00	4.03
PT	4.18	4.52	4.21	5.40	10.24	10.55	6.29
RO	:	7.70	9.69	7.34	7.29	6.68	5.41
SI	6.40	4.61	4.38	3.83	4.97	5.81	5.81
SK	4.99	4.72	4.71	3.87	4.45	4.55	3.19
FI	4.13	4.29	3.74	3.01	3.01	1.89	1.86
SE	4.64	3.89	3.25	2.89	2.61	1.59	2.12
UK	4.58	4.50	3.36	3.36	2.87	1.74	2.03

(') The indicator for Luxembourg is based on a basket of long-term bonds, which have an average residual maturity close to 10 years; the bonds are issued by a private credit institution. (2) EU-27 for 2002-05.

(3) EA-13, 2007; EA-15, 2008; EA-16, 2009-10; EA-17, 2011.

Source: Eurostat (online data code: tec00097), ECB

# 6.5 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; it 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). If there is inflation within an economy, then the purchasing power of money falls as consumers are no longer able to purchase the same amount of goods and services (with the same money). By contrast, if prices fall, then consumers should be able to purchase more goods and services; this is often referred to as deflation. When there is no change in prices (or relatively low rates of inflation) this is often referred to as a period of price stability.

There are 12 main headings for analysing the development of prices for a range of consumer goods and services. Among these, the highest price increases in the EU in 2013 (of 4% or more) were recorded for education and for alcohol and tobacco; otherwise, food and non-alcoholic beverages, housing, water and fuel, restaurants and hotels, miscellaneous goods and services were the only other headings to record price growth in excess of the overall inflation rate. There was only one heading where prices fell in the EU in 2013; this was communications (-3.1%).

**Figure 6.6:** HICP main headings, annual average inflation rates, EU, 2013 (<sup>1</sup>) (%)



(1) HICP data refer to an evolving aggregate reflecting EU membership, which in 2013 was EU-27. *Source:* Eurostat (online data code: prc\_hicp\_aind)

Table 6.4: HICP	all-items,	annual	average	inflation rat	es,
2003–13					
(%)					

	2003	2007	2008	2009	2010	2011	2012	2013
EU (1)	2.0	2.3	3.7	1.0	2.1	3.1	2.6	1.5
Euro area ( <sup>2</sup> )	2.1	2.1	3.3	0.3	1.6	2.7	2.5	1.4
BE	1.5	1.8	4.5	0.0	2.3	3.4	2.6	1.2
BG	2.3	7.6	12.0	2.5	3.0	3.4	2.4	0.4
CZ	- 0.1	3.0	6.3	0.6	1.2	2.1	3.5	1.4
DK	2.0	1.7	3.6	1.1	2.2	2.7	2.4	0.5
DE	1.0	2.3	2.8	0.2	1.2	2.5	2.1	1.6
EE	1.4	6.7	10.6	0.2	2.7	5.1	4.2	3.2
IE	4.0	2.9	3.1	- 1.7	- 1.6	1.2	1.9	0.5
EL	3.4	3.0	4.2	1.3	4.7	3.1	1.0	- 0.9
ES	3.1	2.8	4.1	- 0.2	2.0	3.1	2.4	1.5
FR	2.2	1.6	3.2	0.1	1.7	2.3	2.2	1.0
HR (3)	2.4	2.7	5.8	2.2	1.1	2.2	3.4	2.3
IT	2.8	2.0	3.5	0.8	1.6	2.9	3.3	1.3
CY	4.0	2.2	4.4	0.2	2.6	3.5	3.1	0.4
LV	2.9	10.1	15.3	3.3	-1.2	4.2	2.3	0.0
LT	- 1.1	5.8	11.1	4.2	1.2	4.1	3.2	1.2
LU	2.5	2.7	4.1	0.0	2.8	3.7	2.9	1.7
HU	4.7	7.9	6.0	4.0	4.7	3.9	5.7	1.7
MT	1.9	0.7	4.7	1.8	2.0	2.5	3.2	1.0
NL	2.2	1.6	2.2	1.0	0.9	2.5	2.8	2.6
AT	1.3	2.2	3.2	0.4	1.7	3.6	2.6	2.1
PL	0.7	2.6	4.2	4.0	2.7	3.9	3.7	0.8
PT	3.3	2.4	2.7	- 0.9	1.4	3.6	2.8	0.4
RO (4)	15.3	4.9	7.9	5.6	6.1	5.8	3.4	3.2
SI	5.7	3.8	5.5	0.9	2.1	2.1	2.8	1.9
SK	8.4	1.9	3.9	0.9	0.7	4.1	3.7	1.5
FI	1.3	1.6	3.9	1.6	1.7	3.3	3.2	2.2
SE	2.3	1.7	3.3	1.9	1.9	1.4	0.9	0.4
UK	1.4	2.3	3.6	2.2	3.3	4.5	2.8	2.6
IS	1.4	3.6	12.8	16.3	7.5	4.2	6.0	4.1
NO	2.0	0.7	3.4	2.3	2.3	1.2	0.4	2.0
СН	:	0.8	2.3	- 0.7	0.6	0.1	-0.7	0.1
TR (3)	25.3	8.8	10.4	6.3	8.6	6.5	9.0	7.5
JP ( <sup>3</sup> )	- 0.3	0.0	1.4	- 1.4	- 0.7	:	:	:
US ( <sup>3</sup> )	2.3	2.6	4.4	- 0.8	2.4	3.8	2.1	1.3

(1) 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.

(2) 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.
(3) National CPI: not strictly comparable with the HICP.

(4) 2002-05: not strictly comparable with the HICP.

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

## 6.6 Balance of payments

The balance of payments records all economic transactions between resident and non-resident entities during a given period. The current account surplus of the EU-28 was EUR 155 700 million in 2013, corresponding to 1.2% of gross domestic product (GDP); this could be contrasted with data for 2012, when the current account surplus was EUR 68 600 million. The latest developments of the EU-28's current account showed a continuation of the pattern established in 2009, after the current account deficit peaked in 2008 at 2.2% of GDP. Smaller deficits were recorded progressively between 2009 and 2011, turning to a surplus equivalent to 0.5% of GDP in 2012. The current account surplus for 2013 included a deficit for current transfers (-0.6% of GDP) with surpluses in the current accounts for goods (0.2% of GDP), services (1.3%) and the income account (0.3%).

countries and regions, the EU-28's Among partner current account deficit was largest with China, standing at EUR 95 000 million in 2013, almost twice as large as the deficit with Russia (EUR 53 900 million) and close to nine times the deficit with Japan (these latter two countries accounted for the second and third largest EU-28 current account deficits). The highest current account surpluses were recorded with the United States (EUR 106 000 million), followed by Switzerland (EUR 71 500 million); 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.



**Figure 6.7:** Current account balance with selected partners, EU-28, 2013 (1 000 million EUR)

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

 Table 6.5: Main components of the current account balance, 2013 (')

 (% of GDP)

	Current account	Goods	Services	Income	Current transfers
EU-28	1.2	0.2	1.3	0.3	- 0.6
EA-18	2.4	1.7	1.2	0.7	- 1.3
BE	- 1.6	- 1.8	2.0	0.4	- 2.2
BG	1.9	- 5.9	5.3	- 3.5	6.0
CZ	- 1.4	4.9	1.4	- 8.0	0.4
DK	7.3	2.7	3.2	3.4	- 2.0
DE	7.5	6.7	- 0.5	2.8	- 1.5
EE	- 1.0	- 4.7	6.7	- 3.8	0.8
IE	6.6	19.6	3.7	- 15.8	- 0.9
EL	0.7	- 9.5	9.3	- 1.5	2.5
ES	0.8	- 1.1	4.0	- 1.5	- 0.6
FR	- 1.3	- 3.0	1.8	1.8	- 1.9
HR	1.2	- 14.4	15.7	- 2.6	2.5
IT	1.0	2.4	0.2	- 0.6	- 0.9
CY	- 1.9	- 17.8	19.7	- 2.7	- 1.0
LV	- 0.8	- 9.0	7.1	- 1.4	2.5
LT	1.5	- 3.5	4.6	- 3.9	4.2
LU	5.2	- 13.9	52.5	- 32.6	- 0.8
HU	3.0	4.4	3.6	- 6.1	1.1
MT	1.4	- 13.7	20.1	- 6.2	1.2
NL	10.4	8.4	2.3	2.1	- 2.4
AT	2.7	- 1.2	4.9	- 0.2	- 0.8
PL	- 1.3	0.6	1.3	- 4.2	1.0
PT	0.5	- 4.3	6.0	- 3.6	2.4
RO	- 1.1	- 2.4	1.9	- 3.2	2.6
SI	6.3	1.8	5.7	- 1.2	0.1
SK	2.1	5.9	0.2	- 2.5	- 1.5
FI	- 1.1	0.1	0.2	- 0.3	- 1.1
SE	6.2	2.0	3.2	2.7	- 1.7
UK	- 4.4	- 6.6	4.7	- 0.7	- 1.7
IS	3.9	3.9	3.5	- 2.8	- 0.7
NO	10.7	12.1	- 1.8	1.6	- 1.3
TR	- 7.9	- 9.8	2.9	- 1.1	0.1

(1) EU-28 vis-à-vis extra-EU-28. Euro area vis-à-vis extra euro area. 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

## 6.7 Foreign direct investment

The foreign direct investment (FDI) flows of the EU-27 are still affected by the recent financial and economic crisis. In 2012, outward flows of FDI declined by 53 % in EU-27 compared with that of 2011, and reached their lowest level since 2004. At the same time, inward flows decreased by 34% compared to those the previous year, and bottom ranked since 2005. As a result, in 2012 EU-27 FDI flows came significantly short of their record peaks of 2007 by more than 60% in terms of both inward and outward investment relations with the rest of the world.

FDI flows can vary considerably from one year to another, as they are often influenced by large mergers and acquisitions. Luxembourg reported a large share (32%) of EU-27 FDI outward flows (when averaged over a three-year period from 2010 to 2012), largely as a result of the importance of special purpose entities (SPE) (), which handle most of Luxembourg's total direct investment.



There are two kinds of FDI: namely, the creation of productive assets by foreigners, or the purchase of existing assets by foreigners (for example, through acquisitions, mergers, takeovers). FDI differs from portfolio investments because it is made with the purpose of having control, or an effective voice, in the management of the enterprise concerned 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.

# **Table 6.6:** Top ten countries as extra EU-27 partners for FDIpositions, EU-27, end 2010–12(1 000 million EUR)

		Out	ward	
	2010	2011	2012	Growth rate 2010–12 (%)
Extra EU-27	4 237.0	4 940.9	5 206.8	22.9
United States	1 266.9	1 598.9	1 655.0	30.6
Switzerland	555.5	683.5	679.0	22.2
Brazil	198.9	248.2	246.8	24.1
Canada	197.7	228.6	258.0	30.5
Russia	130.6	169.4	189.5	45.1
Australia	120.2	128.0	141.6	17.8
Hong Kong	112.3	119.8	132.9	18.4
Singapore	109.5	124.8	118.7	8.3
China	81.0	103.0	118.1	45.8
Japan	98.1	100.5	98.8	0.8
		Inw	vard	
	2010	2011	2012	Growth rate 2010–12 (%)
Extra EU-27	3 144.7	3 768.1	3 947.4	25.5
United States	1 247.7	1 526.8	1 536.4	23.1
Switzerland	394.8	482.6	505.2	28.0
Brazil	90.4	96.9	98.1	8.6
Canada	146.1	139.0	142.6	-2.4
Russia	50.3	57.2	76.6	52.4
Australia	30.4	35.9	34.3	12.8
Hong Kong	41.5	64.7	50.2	21.0
Singapore	56.5	60.3	68.6	21.4
China	6.1	18.5	26.8	338.0
Japan	133.4	147.0	161.5	21.1

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



## 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.

Having been disrupted by the global financial and economic crisis in 2009, there was a return to progressively more trade integration for the EU-28 between 2010 and 2012, before this fell back in 2013. For services, the EU-28's trade integration was stable in 2009 before returning to its upwards path thereafter.

The average value of EU-28 credits and debits relative to gross domestic product (GDP) corresponded to 12.9% of GDP in 2013 for goods, up from a relative low of 9.8% in 2009. The level of trade integration for services was less pronounced (than for goods). Nevertheless, for services the average value of credits and debits rose to 4.6% of GDP in 2013. The latest data for 2013 show that the relative importance of trade integration for both goods and services within the EU-28's economy was at or close to its highest level; these figures confirm that the recovery from the crisis was generally more rapid for international trade than for GDP.

The EU-28 trade surplus for goods and services was equivalent to 0.8% of gross domestic product (GDP) in 2012, compared with deficits of 0.7% in Japan and 3.6% in the United States in 2011. The EU-28's surplus in 2012 was composed of a surplus for services (1.2% of GDP) and a smaller deficit for goods (-0.4%).

The combined trade balance for goods and services in 2012 was positive in 17 Member States. Positive balances exceeded 10 % of GDP only in Ireland (24.2 %) and Luxembourg (39.6 %); in the case of Ireland this was due to a particularly large surplus for goods, while for Luxembourg it was due to a large surplus for services. The two largest trade deficits for goods and services were recorded in Romania (-4.7% of GDP) and Cyprus (-3.1%); in both cases the deficit was driven by a relatively large deficit for goods.

### 7.1 International trade in goods

EU-28 international trade in goods with the rest of the world (the sum of extra-EU exports and imports) was valued at EUR 3419 billion in 2012; as such, trade activity for the EU-28 registered record levels for both exports and imports. In comparison with a year before, total trade in goods for the EU-28 increased by EUR 198583 million in 2012. Between 2011 and 2012, the EU-28's exports of goods to most of its major trading partners increased. The highest growth rate was recorded for exports to South Korea and Russia (up 16.2% and 13.6% respectively), while exports to the United States grew more slowly (up 10.9%). However, the United States remained, by far, the most important destination for goods exported from the EU-28 in 2012, although the share of EU-28 exports destined for the United States fell from 28.0% of the total in 2002 to 17.4% by 2012. On the import side, between 2011 and 2012 the EU-28 saw an increase in the level of its imports of goods from Russia (up 6.8%), the United States (up 7.5%), Norway (up 7.6%), and especially from Switzerland (up 13.3%). China remained the most important supplier of goods imported into the EU-28 in 2012, even though imports from China fell by 1.1% between 2011 and 2012. Imports from China registered a reduction in all the main categories, with the exception of imports of machinery and transport equipment (up 0.8%).

The EU-28's trade deficit of EUR 114996 million in 2012 was driven by the sizeable deficit in relation to mineral fuels and lubricant products, which stood at EUR 422 629 million. This was offset by trade surpluses of EUR 253003 million for machinery and transport equipment, and EUR 112 112 million for chemical and related products.



Figure 7.1: External trade, shares in the world market , 2012 (% share of world total)

<sup>(2)</sup> Excluding Hong Kong.

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

**Table 7.1:** Extra EU-28 trade by main products, EU-28, 2007, 2011 and 2012

	2007		2011		2012	
	(1000 million EUR)	(%)	(1 000 million EUR)	(%)	(1 000 million EUR)	(%)
EXPORTS						
Total	1 234.3	100.0	1 554.3	100.0	1 683.1	100.0
Food, drinks & tobacco	61.6	5.0	88.5	5.7	99.0	5.9
Raw materials	30.1	2.4	45.0	2.9	47.6	2.8
Mineral fuels, lubricants	66.6	5.4	100.2	6.4	125.5	7.5
Chemicals & related prod.	196.7	15.9	255.0	16.4	275.4	16.4
Other manufactured goods	306.6	24.8	351.7	22.6	379.3	22.5
Machinery & transport equip.	546.2	44.2	648.1	41.7	705.2	41.9
IMPORTS						
Total	1 446.8	100.0	1 728.3	100.0	1 798.1	100.0
Food, drinks & tobacco	75.7	5.2	91.5	5.3	93.1	5.2
Raw materials	70.0	4.8	85.4	4.9	80.7	4.5
Mineral fuels, lubricants	338.3	23.4	493.4	28.5	548.1	30.5
Chemicals & related prod.	120.7	8.3	155.2	9.0	163.3	9.1
Other manufactured goods	382.7	26.4	401.4	23.2	387.8	21.6
Machinery & transport equip.	429.0	29.7	443.8	25.7	452.2	25.2
TRADE BALANCE						
Total	- 212.5	-	- 174.1	-	- 115.0	-
Food, drinks & tobacco	- 14.1	-	- 3.0	-	5.9	-
Raw materials	- 39.9	-	- 40.4	-	- 33.1	-
Mineral fuels, lubricants	- 271.8	-	- 393.1	-	- 422.6	-
Chemicals & related prod.	76.0	-	99.7	-	112.1	-
Other manufactured goods	- 76.1	_	- 49.7	_	- 8.5	_
Machinery & transport equip.	117.1	-	204.3	_	253.0	_

Source: Eurostat (online data code: tet00061) and http://ec.europa.eu/eurostat/web/ international-trade/data/database

## 7.2 International trade in services

The EU-28 reported a surplus in international services of EUR 153.4 billion with the rest of the world in 2012, reflecting credits of EUR 661.9 billion and debits of EUR 508.5 billion.

The United Kingdom recorded a surplus (extra and intra-EU combined) of EUR 86.2 billion in service transactions in 2012, the largest value among the Member States and considerably more than the next highest levels that were recorded by Spain (EUR 37.0 billion), France (EUR 32.6 billion) and Luxembourg (EUR 23.4 billion). By contrast, Germany recorded a deficit in service transactions of EUR 19.7 billion in 2012, the largest deficit, by far, among the Member States. It is important to underline that the majority of the international trade in services made by the EU-28 Member States involved intra-EU transactions, amounting to 55.0% of credits and 59.3% of debits in 2012.





(1) Preliminary figures based on annualised quarterly data.
 Source: Eurostat (online data code: bop\_its\_det)

## **Table 7.2:** Trade in services, 2007 and 2012 (1)(1 000 million EUR)

		Credi	ts		Debi	ts	N	et
	2007	2012	2011–12 growth rate (%)	2007	2012	2011–12 growth rate (%)	2007	2012
EU-28	:	661.9	8.7	:	508.5	6.4	:	153.4
EA-18	:	:	:	:	:	:	:	:
BE	54.8	79.0	11.8	50.3	71.2	11.4	4.5	7.8
BG	4.8	5.7	7.2	3.6	3.4	12.3	1.2	2.3
CZ	12.6	17.2	3.1	10.5	15.2	6.4	2.1	2.0
DK	44.9	51.4	7.3	39.4	45.3	7.2	5.4	6.1
DE	162.2	210.5	6.8	191.0	230.2	7.4	-28.8	-19.7
EE	3.3	4.3	6.8	2.2	3.0	14.2	1.0	1.2
IE	68.0	90.3	10.8	69.1	87.1	4.7	-1.1	3.2
EL	31.3	27.5	-3.8	14.7	12.4	-11.4	16.6	15.1
ES	93.3	107.2	4.0	70.3	70.2	2.6	23.1	37.0
FR	109.0	168.3	-0.7	94.6	135.7	-1.6	14.4	32.6
HR	9.1	9.3	2.2	2.9	2.8	8.7	6.3	6.4
IT	81.8	81.8	5.8	88.9	82.6	-0.6	-7.1	-0.7
CY	6.4	6.2	-1.5	2.7	2.9	6.8	3.7	3.3
LV	2.7	3.6	11.8	2.0	2.0	9.7	0.7	1.5
LT	2.9	4.6	22.8	2.5	3.4	22.5	0.5	1.2
LU	47.4	56.2	8.8	27.5	32.8	7.8	19.9	23.4
HU	12.6	15.8	0.3	11.2	12.4	-1.6	1.3	3.4
MT	2.5	3.8	4.9	1.6	2.4	2.9	0.9	1.4
NL	81.5	103.8	4.4	71.7	93.6	6.9	9.8	10.3
AT	39.6	47.1	7.0	28.5	33.0	8.7	11.2	14.1
PL	21.0	29.5	9.3	17.6	24.8	8.1	3.4	4.7
PT	17.0	19.1	-0.3	10.4	10.4	-9.2	6.5	8.7
RO	6.9	8.4	15.8	6.5	7.3	5.1	0.4	1.1
SI	4.1	5.2	6.7	3.1	3.4	-0.1	1.0	1.8
SK	5.1	5.6	17.3	4.7	5.3	2.8	0.4	0.3
FI	16.8	22.0	4.9	16.4	23.4	12.8	0.5	-1.5
SE	45.4	55.3	8.3	33.7	42.4	8.4	11.6	12.9
UK	211.1	227.9	6.9	147.0	141.6	8.7	64.1	86.2
IS	1.7	2.3	10.6	2.2	2.2	16.1	-0.5	0.2
NO	29.5	33.4	9.9	28.9	37.8	11.3	0.6	-4.4
СН	48.1	70.7	3.3	20.4	36.5	11.9	27.7	34.2
MK	0.6	0.8	2.7	0.6	0.8	10.3	0.0	0.0
TR	21.9	34.1	15.5	11.7	16.3	8.1	10.2	17.8
JP	94.2	113.3	8.3	109.7	137.6	14.2	-15.5	-24.3
US	358.4	507.1	14.0	268.2	346.1	11.6	90.2	161.0

(1) Preliminary figures for 2012 are based on annualised quarterly data; data for individual countries concerns exports to the rest of the world; data for EU and the euro area include only extra-EU and extra-euro area exports respectively.

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


More than two thirds of the EU-28's credits (68.8%) and debits (71.1%) in the international trade of services with the rest of the world in 2012 were accounted for by three categories: transport, travel and other business services. The surplus of EUR 63752 million for other business services with non EU-28 countries was the highest among services, followed by surpluses of EUR 31729 million for financial services, EUR 26135 million for transport, and EUR 25718 million for computer and information services. By contrast, the only deficit (EUR 8075 million) was registered for royalties and license fees.



8

### Agriculture, forestry and fisheries

Article 39 of the Treaty of Rome on the EEC (1957) set out the objectives for the first common agricultural policy (CAP). Its aim was to increase agricultural productivity as a way to ensure a fair standard of living for the agricultural community, stabilise markets, and ensure security of supply at affordable prices for consumers.

The 2003 reform of the CAP 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. 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, building on the 2003 reform package, such that all aid to the agricultural sector should be decoupled from production by 2012.

In December 2013, the latest reform of the CAP was formally adopted by the European Parliament and the Council. It is based on four new legislative instruments that aim to simplify the rules of the CAP and which cover:

- support for rural development, Regulation No 1305/2013;
- financing, management and monitoring of the CAP, Regulation No 1306/2013;
- direct payments, Regulation 1307/2013;
- measures linked to agricultural products, Regulation 1308/2013.

The main elements of the CAP post-2013 are: a fairer distribution of direct payments (with targeted support and convergence goals); strengthening the position of farmers within the food production chain (such as through: the promotion of professional and inter-professional organisations; changes to the organisation of the sugar and wine sectors; revisions to public intervention and private storage aid; and new crisis management tools); and continued support for rural development, safeguarding the environment and biodiversity.

# 8.1 Agricultural output, price indices and income

One of the principal objectives of the CAP is to provide farmers with a reasonable standard of living. Although this concept is not defined explicitly within the CAP, a range of indicators including income development from farming activities may be used to determine the progress being made towards this objective.

In value terms, the EU-28's crop output grew 2.3% in 2012 to EUR 208764 million and animal output increased by 4.7% to EUR 164219 million; these increases in gross output were offset by an increase in the value of intermediate consumption of goods and services at basic prices (up 3.4%). As a result, the agricultural sector generated EUR 156908 million of gross value added at producer prices in 2012, which represented a 3.0% increase in relation to the previous year (value added at producer prices the value of output before taking account of subsidies and taxes on products and production).

Types of agricultural subsidy have changed over time through successive reforms of the CAP: the shift from product to production subsidies was mainly implemented in 2005 and 2006. Whereas production subsidies were nearly twelve times as high as product subsidies in 2012, in 2005 they had only been 1.5 times as high. In total these two types of subsidy were equivalent to an extra 36.1% of value added at producer prices in 2012 in the EU-28. The net impact of subsidies less taxes in 2012 was to add an extra 32.9% to value added at producer prices; for comparison, in 2005 the increase due to subsidies less taxes was 34.5%.



**Figure 8.1:** Agricultural output and gross value added at producer prices, EU-28, 2005–12 (2005 = 100)

Source: Eurostat (online data code: aact\_eaa01)

# **Table 8.1:** Agricultural output and gross value added atproducer prices, 2005 and 2012(million EUR)

	Crop output		Anima	l output	of	lue added the ıral sector
	2005	2012	2005	2012	2005	2012
EU-28	156 292	208 764	129 421	164 219	130 160	156 908
BE	2 903	3 766	3 563	4 607	2 146	2 314
BG	1 627	2 626	1 129	1 145	1 544	1 542
CZ	1 674	2 855	1 574	1 765	970	1 333
DK	2 472	4 149	4 867	7 035	2 253	3 592
DE	18 167	26 790	19 042	25 096	12 920	16 082
EE	194	429	267	380	197	356
IE	1 378	1 896	3 663	4 820	1 567	1 784
EL	7 058	6 514	2 711	2 850	6 146	5 297
ES	21 234	24 505	12 641	15 595	20 345	21 021
FR	29 939	44 731	21 663	25 698	21 375	30 830
HR	1 181	1 446	921	861	883	872
IT	23 882	25 182	13 152	16 713	24 357	25 363
CY	326	348	301	340	332	333
LV	216	527	198	317	156	220
LT	657	1 654	693	917	409	988
LU	117	202	151	178	97	124
HU	3 020	4 335	2 118	2 546	1 800	2 496
MT	39	48	63	71	45	55
NL	10 131	12 384	7 906	10 527	7 751	8 416
AT	2 065	3 233	2 543	3 308	2 077	2 953
PL	6 043	11 290	7 584	10 497	5 159	8 222
PT	2 897	3 346	2 310	2 595	2 201	1 993
RO	7 687	9 008	4 051	3 993	6 003	6 201
SI	496	593	468	535	397	387
SK	691	1 196	760	958	382	577
FI	1 077	1 836	1 705	2 265	738	1 367
SE	1 617	3 014	2 090	2 726	1 137	1 833
UK	7 503	10 862	11 287	15 882	6 775	10 357
NO	1 254	1 661	1 799	2 679	924	1 370
СН	2 739	3 489	3 167	3 845	2 564	2 966
МК	776	:	212	:	491	:

Source: Eurostat (online data code: aact\_eaa01)

#### 8.2 Farm structure

The survey on the structure of agricultural holdings, also known as the farm structure survey (FSS), helps assess the agricultural situation across the European Union (EU), monitoring trends and transitions in the structure of agricultural holdings, while also modelling the impact of external developments or policy proposals.

In the last decade there has been a general tendency for a reduction in the number of agricultural holdings in the EU. For the 19 EU Member States for which 2000 and 2010 census results were available at the time of writing, the total number of holdings fell by an average of 25.5%. This downward tendency can be seen in all 19 of these Member States; there were particularly fast structural changes in Slovakia, Latvia, Hungary and Germany; this may reflect methodological as well as structural changes.

Based on the latest available data (2010), the utilized agricultural area (UAA) in the EU-28 was approximately 176 million hectares (around 40% of the total land area), giving an average size of 14.4 hectares per agricultural holding.



Figure 8.2: Utilized agricultural area, 2010 (1)

 Denmark, Germany, France, Poland, Portugal and Montenegro: share of total area. Italy and Slovakia: total land area 2009. Hungary: total land area 2008.
 EU-28: sum of available data for the Member States.

#### Source: Eurostat (online data code: demo\_r\_d3area and ef\_oluft)

#### Table 8.2: Agricultural holdings, 2000 and 2010

	Number of agricultural holdings (1 000)		area	gricultural (UAA) )0 ha)	Average UAA per holding (ha)		
	2000	2010	2000	2010	2000	2010	
EU-28	:	12 248.0	:	175 815.2	:	14.4	
BE	61.7	42.9	1 393.8	1 358.0	22.6	31.7	
BG	:	370.5	:	4 475.5	:	12.1	
CZ	:	22.9	:	3 483.5	:	152.4	
DK	57.8	42.1	2 644.6	2 646.9	45.7	62.9	
DE	472.0	299.1	17 151.6	16 704.0	36.3	55.8	
EE	:	19.6	:	940.9	:	48.0	
IE	141.5	139.9	4 4 4 4 . 0	4 991.4	31.4	35.7	
EL	817.1	723.1	3 583.2	5 177.5	4.4	7.2	
ES	1 287.4	989.8	26 158.4	23 752.7	20.3	24.0	
FR	663.8	516.1	27 856.3	27 837.3	42.0	53.9	
HR	:	233.3	:	1 316.0	:	5.6	
IT	2 153.7	1 620.9	13 062.3	12 856.1	6.1	7.9	
CY	:	38.9	:	118.4	:	3.0	
LV	140.8	83.4	1 432.7	1 796.3	10.2	21.5	
LT	:	199.9	:	2 742.6	:	13.7	
LU	2.8	2.2	127.5	131.1	45.4	59.6	
HU	966.9	576.8	4 555.1	4 686.3	4.7	8.1	
MT	:	12.5	:	11.5	:	0.9	
NL	101.6	72.3	2 027.8	1 872.4	20.0	25.9	
AT	199.5	150.2	3 388.2	2 878.2	17.0	19.2	
PL	:	1 506.6	:	14 447.3	:	9.6	
PT	416.0	305.3	3 863.1	3 668.2	9.3	12.0	
RO	:	3 859.0	:	13 306.1	:	3.4	
SI	86.5	74.7	485.9	482.7	5.6	6.5	
SK	71.0	24.5	2 159.9	1 895.5	30.4	77.5	
FI	81.2	63.9	2 218.4	2 291.0	27.3	35.9	
SE	81.4	71.1	3 073.2	3 066.3	37.7	43.1	
UK	233.3	186.8	15 798.5	16 881.7	67.7	90.4	
IS	:	2.6	:	1 595.7	:	616.1	
NO	70.7	46.6	1 038.2	1 005.9	14.7	21.6	
СН	:	59.1	:	1 047.8	:	17.7	
ME	:	48.9	:	221.3	:	4.5	

Source: Eurostat (online data codes: ef\_ov\_kvaa and ef\_kvaareg)

### 8.3 Agricultural products

In 2012, the EU-28 produced 285 million tonnes of cereals (including rice). Despite the vagaries of the weather, cereal production in the EU-28 was relatively stable between 2002 and 2012 — never fluctuating by more than  $\pm 12\%$  — albeit with notably higher harvests in 2004 and 2008 and a relatively low one in 2003.

The principal meat product in the EU-28 was pig meat (22 million tonnes in 2012), with the weight of production almost three times as high as that for cuts of beef/veal from cattle meat (7.6 million tonnes); the production of sheep meat in the EU-28 was relatively modest (0.7 million tonnes).

The total collection of milk in the EU-28 in 2012 amounted to an estimated 140 million tonnes. Just under one third (32.9%) of the whole milk that was utilised in the EU-28 in 2012 was converted into cheese, with butter accounting for the next highest proportion (29.4%); just over a tenth of the whole milk utilised in the EU-28 was used for drinking milk (13.3%) and for cream (13.0%).

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, and losses during transport, storage and packaging.

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. 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.



Figure 8.3: Indices of the agricultural production of crops,

 Table 8.3: Agricultural production related to animals, 2012

 (1 000 tonnes)

	Collection of cows' milk	Butter	Cheese	Cattle meat	Pig meat	Sheep meat
EU-28 (1)	140 150	1 759	9 258	7 578	22 000	707
BE	3 072	34	78	262	1 110	2
BG	514	1	69	5	49	2
CZ	2 429	23	112	66	240	0
DK	4 927	39	300	125	1 604	2
DE	29 703	448	2 161	1 140	5 459	22
EE	665	4	43	7	30	0
IE	5 379	145	:	495	241	54
EL	637	1	195	56	115	69
ES	6 089	35	316	591	3 466	122
FR	24 246	354	1 929	1 477	1 957	83
HR	602	4	32	47	86	0
IT	10 500	100	1 204	981	1 621	31
CY	154	0	19	5	52	3
LV	718	5	31	16	24	0
LT	1 360	11	112	40	59	0
LU	278	:	:	8	10	0
HU	1 398	4	73	25	346	0
MT	:	:	:	1	6	0
NL	11 675	:	764	373	1 332	13
AT (2)	2 964	31	160	221	530	8
PL	9 858	146	721	371	1 695	1
РТ	1 861	28	72	93	362	10
RO	888	9	67	29	282	2
SI	535	:	18	33	21	0
SK	851	7	32	10	54	1
FR	2 254	41	102	80	193	1
SE	2 861	18	101	135	233	5
UK	13 591	:	357	883	825	276
CH (3)	3 444	46	181	145	248	5

(1) Includes Eurostat estimates made for the purpose of this publication.

(2) Butter: 2011.

(3) Meat products: 2011.

Source: Eurostat (online data codes: apro\_mk\_pobta and apro\_mt\_pann)

#### 8.4 Forestry

In 2010, the EU-28 had approximately 179 million hectares of forests and other wooded land, corresponding to 41% of its land area. Forest cover and other wooded land in the EU-28 is gradually increasing: over the past 20 years (1990 to 2010) its area has increased in total by 4.9%, equivalent to an average increase of 0.2% per annum.

From 1995 to 2007, there was a relatively steady rise in the level of roundwood production in the EU-28, both for coniferous (softwood) and non-coniferous (broadleaved or hardwood) species. However, the effects of the financial and economic crisis led to the level of coniferous production falling in 2008 and this pattern was confirmed with a further reduction in 2009, when nonconiferous production also fell. EU-28 production rebounded strongly in 2010 (10.1 %) and continued to rise in 2011, but at a much more modest pace (1.4%). The overall level of roundwood production in the EU-28 in 2012 reached 429.0 million m<sup>3</sup>, around 33.5 million m<sup>3</sup> (or 7.2%) lower than the peak level in 2007. Some of the peaks (most recently 2000, 2005 and 2007) in roundwood production are due to forestry and logging having to cope with unplanned numbers of trees that were felled by severe storms.

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, joists, boards, rafters, scantlings, laths, boxboards and lumber.

#### 8 Agriculture, forestry and fisheries



Figure 8.4: Annual production of roundwood, EU-28,

1995–2012 (<sup>1</sup>) (1 000 m<sup>3</sup>)

(1) Estimates. 2011 and 2012: provisional.

Source: Eurostat (online data code: for\_remov)

	Roundwood production Sawnwood pr					oduction		
	2000	2010	2012	2000	2010	2012		
EU-28	411 764	427 611	429 031	100 706	100 815	99 555		
EA (1)	236 540	234 993	233 061	61 337	59 673	56 966		
BE	4 510	4 827	6 663	1 150	1 383	1 342		
BG	4 784	5 668	:	312	554	695		
CZ	14 441	16 736	:	4 106	4 744	:		
DK	2 952	2 669	:	364	448			
DE	53 710	54 418	52 338	16 340	22 059	21 031		
EE	8 910	7 200	7 290	1 436	1 771	1 500		
IE	2 673	2 618	2 580	888	772	782		
EL	2 245	1 048	:	123	118	:		
ES	14 321	16 089	15 527	3 760	2 038	1 971		
FR	65 865	55 808	56 097	10 536	8 316	8 242		
HR	3 669	4 477	5 714	642	677	851		
IT	9 329	7 844	7 744	1 630	1 200	1 370		
CY	21	9	11	9	4	3		
LV	14 304	12 534	12 530	3 900	3 150	3 316		
LT	5 500	7 097	6 921	1 300	1 272	1 150		
LU	260	275	:	133	94	:		
HU	5 902	5 740	5 946	291	133	:		
MT	0	0	0	0	0	0		
NL	1 039	1 081	955	389	231	190		
AT	13 276	17 831	18 021	10 390	9 603	8 952		
PL	26 025	35 467	37 045	4 262	4 220	4 267		
PT	10 831	9 6 4 8	10 271	1 427	1 045	1 191		
RO	13 148	13 112	15 921	3 396	4 323	5 500		
SI	2 253	2 945	3 341	439	760	660		
SK	6 163	9 599	8 202	1 265	2 576	1 560		
FI	54 542	50 952	49 967	13 420	9 473	9 350		
SE	63 300	72 200	68 900	16 176	16 750	15 900		
UK	7 791	9 7 1 8	10 120	2 622	3 101	3 409		
IS	0	:	4	0	:	0		
LI	:	25	23	:	4	:		
NO	8 156	10 443	10 572	2 280	2 118	:		
CH	9 238	4 938	4 4 4 7	1 625	1 457	1 104		
ME	:	364		:	50	:		
MK	:	631	:	:	5	:		
TR	15 939	20 554	:	5 528	6 243			
BR	:	271 501	284 985	:	25 080	25 210		
CA	201 845	142 013	152 594	50 465	38 667	40 715		
CN	:	291 251	285 135	:	37 231	55 738		
IN		332 499	331 436		6 889	6 889		
ID		113 849	115 623		4 169	4 169		
RU	158 100	175 000	216 379	20 000	28 870	32 230		
US	466 549	323 986	376 629	91 076	57 629	64 246		

### **Table 8.4:** Wood production, 2000–12 (1 000 m<sup>3</sup>)

(1) EA-11 for 2000. EA-12 for 2005. EA-16 for 2010. EA-17 for 2011 and 2012.

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

#### 8.5 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 2012, the fishing fleets of each of these countries had a total power of between 0.8 million kW and 1.0 million kW. In terms of tonnage, however, the Spanish fishing fleet was by far the largest (388000 gross tonnes); this was close to two times as high as the size of the fleets in the United Kingdom. Having peaked in 1995 at 7.6 million tonnes of live weight the total EU-28 catch fell almost every year since; the total catch in 2012 was 28.0% less than in 2002 and 42.1% lower than in 1995. Total catches by the fishing fleets of Denmark, Spain, the United Kingdom and France accounted for just over half (53.1%) of all the catches made by EU-28 fishing fleets in 2012. Some 74% of the catches made by the EU-28 in 2012 were in the north-east Atlantic, with the Mediterranean and Black sea the second largest fishing area.



(1) The Czech Republic, Luxembourg, Hungary, Austria and Slovakia: landlocked countries without a marine fishing fleet. Croatia: not available.

Source: Eurostat (online data code: fish\_fleet)

The level of aquaculture production in the EU-28 remained stable during the period from 2002 to 2012, with annual output of between 1.24 and 1.36 million tonnes. 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 (76.0%) of total aquaculture production in 2012.

**Table 8.5:** Fishery indicators, 2002, 2011 and 2012(1 000 tonnes live weight)

	Total ca	tches in all	fishing	Aquac	ulture prod	uction
		regions (1)			-	
	2002	2011	2012	2002	2011	2012
EU-28 (4)	6 136	4 832	4 420	1 285	1 244	1 251
BE	29	22	24	2	0	0
BG	14	9	8	2	7	7
CZ ( <sup>2</sup> )	-	-	-	19	21	21
DK	1 4 4 2	716	503	32	:	34
DE	199	218	205	50	:	:
EE	97	78	63	0	0	:
IE	282	206	276	63	44	36
EL	93	63	62	88	111	109
ES	793	799	758	259	274	267
FR	694	487	461	252	194	205
HR	21	71	64	9	17	14
IT ( <sup>3</sup> )	266	213	196	184	164	:
CY	2	1	1	2	5	4
LV	113	156	90	0	1	1
LT	149	137	70	2	:	:
LU (2)	-	-	-	:	:	
HU ( <sup>2</sup> )	-	-	-	12	16	15
MT	1	2	2	1	4	7
NL	461	365	345	54	44	46
AT (2)	-	-	-	2	:	:
PL	188	176	180	33	:	33
PT	202	214	196	8	9	10
RO	2	1	1	9	8	10
SI	1	1	0	1		
SK ( <sup>2</sup> )	-	-	-	1	1	1
FI	109	125	138	15	:	:
SE	294	180	150	6	13	. 14
UK	684	595	626	179	199	206
IS	2 144	1 154	1 452	4	5	
LI	-		- 1152			
NO	2 740	2 178	2 047	551	1 145	1 321
СН				1		
ME	0	0	0			
MK	-	-	-	. 1		
RS	-	-	-			
TR	523	478	396	61	189	212

(1) Total catches in the seven regions covered by legal acts, namely: 21 - Atlantic, Northwest; 27 -Atlantic, Northeast; 34 - Atlantic, Eastern Central; 37 - Mediterranean and Black Sea; 41 - Atlantic, Southwest; 47 - Atlantic, Southeast; and 51 - Indian Ocean, Western. Consequently catches in Inland waters are excluded.

(2) Landlocked countries without a marine fishing fleet.

(3) Total catches in all fishing regions, 2012: partially estimated due to incomplete data sets.

(4) 2012: estimate including 2011 data for Italy.

#### Source: Eurostat (online data code: fish\_ca\_main, fish\_aq\_q and fish\_aq2a)



9

### Industry, trade and services

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.

A European Commission Communication titled 'A digital agenda for Europe' (COM(2010) 245 final) outlines policies and actions aimed at maximising the benefit of the digital era to all sections of society.

In October 2010, the European Commission presented a Communication on 'An industrial policy for the globalization era' (COM(2010) 614 final), which provides a blueprint to put industrial competitiveness and sustainability centre stage.

In April 2011, leading up to the twentieth anniversary of the beginning of the single market, the European Commission released a Communication titled 'Single Market Act —twelve levers to boost growth and streng then confidence' (COM(2011) 206 final), aimed at improving the single market for businesses, workers and consumers. The initiatives within the Communication cover areas as diverse as improving access to finance for small and medium-sized enterprises (SMEs), worker mobility, the regulatory environment, strengthening standardisation, or providing consumers with easier, quicker and cheaper procedures for dispute settlement. In October 2012, this was supported by a further Communication from the European Commission titled 'Single Market Act II — Together for new growth' (COM(2012) 573 final). The purpose of this second Communication was to build upon the first Single Market Act and it identified four drivers around which to focus key actions:

- developing fully integrated networks (such as transport and energy) in the single market;
- fostering the mobility of citizens and businesses across borders;
- supporting the digital economy across Europe to boost productivity and creativity;
- strengthening social entrepreneurship, cohesion and consumer confidence.

In January 2014, the European Commission adopted a Communication titled 'For a European Industrial Renaissance' (COM(2014) 14 final), which stresses the importance of full and effective implementation of industrial policy in the EU and aims to facilitate this.

#### 9.1 Structural business statistics

Structural business statistics can provide answers to questions on the wealth creation (value added), investment and labour input of different economic activities. The data can be used to analyse structural shifts, for example from industry to services, country specialisations, sectoral productivity and profitability, as well as a range of other topics.

In 2011, a total of EUR 6 190 200 million of gross value added at factor cost was generated in the EU-28's non-financial business economy; the non-financial business economy accounted for 70.1% of the whole economy's value added at basic prices in 2011. The non-financial business economy workforce reached 134.5 million persons employed, around three fifths (62.9%) of those employed in the EU-27.

In general, foreign-controlled enterprises are few in number, but have a significant economic impact due to their larger than average size. Foreign-controlled enterprises generated substantial shares of value added in the non-financial business economy in many EU Member States. Employment shares of foreign-controlled enterprises were generally lower than their value added shares, but nevertheless exceeded one quarter in Romania and the Czech Republic, rising to well above one third in Estonia (37.1 %) and more than two fifths in Luxembourg (41.1 %). **Figure 9.1:** Share of value added and employment accounted for by foreign-controlled enterprises, non-financial business economy, 2010 (<sup>1</sup>) (%)

10 20 30 40 50 60 IE ΗU EE MT (2) CZ (3) RO LU SK PL BG LT LV UK SE NL DK (4) AT HR DE FI ES PT SI FR IT CY NO Value added Employment (1) Belgium and Greece: not available. (2) 2008.

(3) Provisional.

(4) 2009.

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

**Figure 9.2:** Breakdown of non-financial business economy value added and employment, EU-28, 2011 (<sup>1</sup>) (% of non-financial business economy value added and employment)



(1) Estimates.

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

#### 9.2 Industrial production

PRODCOM is the name given to the EU's system of industrial production statistics which covers products from 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 3 800 headings and is revised every year.

PRODCOM information is currently requested for each heading in terms of the value of production sold during the survey period. Table 7.1 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 2012, occupying the top two places with a number of further products among the top 15 shown. There were also several manufactured food and beverage products (within Divisions 10 and 11) and a couple of fabricated metal products (Division 25) registered high values of production sold.

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 7.2 shows the quantity of production sold for a selection of products. Table 9.1: Production sold in value terms, selected products, EU-27, 2012

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>	129 226	
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>	94 583	
21.20.13.80	Other medicaments of mixed or unmixed products, p.r.s., not elsewhere classified (n.e.c.)	68 444	
29.32.30.90	Other parts and accessories, n.e.c., for vehicles of Harmonised System codes 87.01 to 87.05	54 000	9 000
10.00.00.Z1	Prepared and preserved meat, meat offal or blood, including prepared meat and offal dishes	50 311	
10.90.10.Z0	Preparations for animal feeds other than dog and cat food	48 822	
29.32.20.90	Parts and accessories of bodies (including cabs), n.e.c.	35 100	300
29.10.21.00	New vehicles with spark-ignition engine of a cylinder capacity <= 1 500 cm <sup>3</sup>	34 315	
11.05.10.00	Beer from malt other than non-alcoholic and low-alcohol beer, excluding alcohol duty	32 000	800
10.71.11.00	Fresh bread	29647	
30.30.50.90	Parts for all types of aircraft excluding propellers, rotors, under carriages, for civil use	27 606	
25.11.23.55	Weirs, sluices, lock-gates, landing stages, fixed docks and other maritime and waterway structures, of iron or steel; structures and parts of structures of iron or steel, n.e.s. (excl. bridges and bridge- sections; towers; lattice masts; gates; doors, windows and their frames and thresholds; equipment for scaffolding, shuttering, propping or pit-propping, and structures and parts of structures not manufactured exclusively or mainly from plate)	26 197	
25.62.20.00	Metal parts (excluding turned metal parts)	25 526	
10.51.40.50	Grated, powdered, blue-veined and other non-processed cheese	24 000	2 000
11.07.19.30	Waters, with added sugar, other sweetening matter or flavoured, i.e. soft drinks (including mineral and aerated)	22 500	500

(!) Indicates the magnitude of the rounding employed to protect confidential cell (in the case of PRODCOM code 29.32.30.90, the confidential value lies within the range +/- EUR 300 million of the reported value).

Source: Eurostat from http://ec.europa.eu/eurostat/data/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) Table 9.2: Quantity of production sold, selected products, EU-27, 2012

(excluding bottles covered with leather or composition leather, infant's feeding bottles) Building blocks and bricks of	PRODCOM code	Product	Quantity (1 000)	Rounding base (1 000) (1)	Unit
Flavoured liquid yoghurt or acidified milk (curdled milk; cream; yoghurt and other fermented products flavoured or containing added fruit; nuts or cocoa)       5 552 816         10.51.52.45       yoghurt and other fermented products flavoured or containing added fruit; nuts or cocoa)       5 552 816         10.73.11.30       Unccoked pasta, containing eggs (excluding stuffed or otherwise prepared)       1 472 170         11.07.11.30       Mineral waters and aerated waters, unsweetened       60 000 000       10 000 000         16.10.23.03       Coniferous wood in chips or particles       41 130 000       30 000         17.12.11.00       Newsprint in rolls or sheets       8 839 547         20.11.11.70       Oxygen       28 872 887         20.15.80.00       Animal or vegetable fertilizers       5 074 454         Washing preparations and cleaning preparations, with or without soap, p.r.s.       6 800 000       400 000         20.41.32.50       including auxiliary washing preparations excluding those for use as soap, surface-active preparations       6 800 000       400 000         23.13.11.40       Bottles of colourless glass of a nominal capacity < 2.5 litres, for beverages and foodstuffs (excluding bottles covered with leather or composition leather, infant's feeding bottles)       16 907 791       pie         Building blocks and bricks of       16 907 791       pie	08.11.11.33		5 280 651		kg
acidified milk (curdled milk; cream; yoghurt and other fermented products flavoured or containing added fruit; nuts or cocoa)5 552 81610.51.52.45yoghurt and other fermented products flavoured or containing added fruit; nuts or cocoa)5 552 81610.73.11.30Unccoked pasta, containing eggs (excluding stuffed or otherwise prepared)1 472 17011.07.11.30Mineral waters and aerated waters, unsweetened60 000 00010 000 00016.10.23.03Coniferous wood in chips or particles41 130 00030 00017.12.11.00Newsprint in rolls or sheets8 839 54720.11.11.70Oxygen28 872 88720.15.80.00Animal or vegetable fertilizers5 074 454Washing preparations and cleaning preparations excluding those for use as soap, surface-active preparations6 800 000400 00023.13.11.40Bottles of colourless glass of a nominal capacity < 2.5 litres, for beverages and foodstuffs (excluding bottles covered with leather or composition leather, infant's feeding bottles)16 907 791pieBuilding blocks and brick ofBuilding blocks and brick of16 907 791pie	08.11.30.10	Chalk	5 575 811		kg
10.73.11.30       (excluding stuffed or otherwise prepared)       1 472 170         11.07.11.30       Mineral waters and aerated waters, unsweetened       60 000 000       10 000 000         16.10.23.03       Coniferous wood in chips or particles       41 130 000       30 000         17.12.11.00       Newsprint in rolls or sheets       8 839 547         20.11.11.70       Oxygen       28 872 887         20.15.80.00       Animal or vegetable fertilizers       5 074 454         Washing preparations and cleaning preparations, with or without soap, p.r.s.       including auxiliary washing for use as soap, surface-active preparations         20.41.32.50       Bottles of colourless glass of a nominal capacity < 2.5 litres, for beverages and foodstuffs (excluding bottles covered with leather or composition leather, infant's feeding bottles)	10.51.52.45	acidified milk (curdled milk; cream; yoghurt and other fermented products flavoured or containing	5 552 816		kg
11.07.11.30       unsweetened       60 000 000       10 000 000         16.10.23.03       Coniferous wood in chips or particles       41 130 000       30 000         17.12.11.00       Newsprint in rolls or sheets       8 839 547         20.11.11.70       Oxygen       28 872 887         20.15.80.00       Animal or vegetable fertilizers       5 074 454         Washing preparations and cleaning preparations, with or without soap, p.r.s.       5 074 454         20.41.32.50       including auxiliary washing for use as soap, surface-active preparations       6 800 000       400 000         preparations       Bottles of colourless glass of a nominal capacity < 2.5 litres, for beverages and foodstuffs (excluding bottles covered with leather or composition leather, infant's feeding bottles)	10.73.11.30	(excluding stuffed or otherwise	1 472 170		kg
16.10.23.03       particles       41 130 000       30 000         17.12.11.00       Newsprint in rolls or sheets       8 839 547         20.11.11.70       Oxygen       28 872 887         20.15.80.00       Animal or vegetable fertilizers       5 074 454         Washing preparations and cleaning preparations, with or without soap, p.r.s.       20.41.32.50       including auxiliary washing for use as soap, surface-active preparations         20.41.32.50       including auxiliary washing for loop of cloourless glass of a nominal capacity < 2.5 litres, for beverages and foodstuffs (excluding bottles covered with leather or composition leather, infant's feeding bottles)	11.07.11.30		60 000 000	10 000 000	
20.11.11.70     Oxygen     28 872 887       20.15.80.00     Animal or vegetable fertilizers     5 074 454       Washing preparations and cleaning preparations, with or without soap, p.r.s.     6 800 000     400 000       20.41.32.50     including auxiliary washing for use as soap, surface-active preparations     6 800 000     400 000       Bottles of colourless glass of a nominal capacity < 2.5 litres, for beverages and foodstuffs (excluding bottles covered with leather or composition leather, infant's feeding bottles)	16.10.23.03		41 130 000	30 000	kg
20.15.80.00       Animal or vegetable fertilizers       5 074 454         Washing preparations and cleaning preparations, with or without soap, p.r.s.       800 000       400 000         20.41.32.50       including auxiliary washing for use as soap, surface-active preparations       6 800 000       400 000         Bottles of colourless glass of a nominal capacity < 2.5 litres, for beverages and foodstuffs (excluding bottles covered with leather or composition leather, infant's feeding bottles)	17.12.11.00	Newsprint in rolls or sheets	8 839 547		kg
Washing preparations and cleaning preparations, with or without soap, p.r.s.         20.41.32.50 including auxiliary washing for use as soap, surface-active preparations         Bottles of colourless glass of a nominal capacity < 2.5 litres, for beverages and foodstuffs (excluding bottles covered with leather or composition leather, infant's feeding bottles)	20.11.11.70	Oxygen	28 872 887		m <sup>3</sup>
preparations, with or without soap, p.r.s.         20.41.32.50         including auxiliary washing preparations excluding those for use as soap, surface-active preparations         Bottles of colourless glass of a nominal capacity < 2.5 litres, for beverages and foodstuffs (excluding bottles covered with leather or composition leather, infant's feeding bottles)         Building blocks and bricks of	20.15.80.00	Animal or vegetable fertilizers	5 074 454		kg
23.13.11.40     nominal capacity < 2.5 litres, for beverages and foodstuffs (excluding bottles covered with leather or composition leather, infant's feeding bottles)	20.41.32.50	preparations, with or without soap, p.r.s. including auxiliary washing preparations excluding those for use as soap, surface-active	6 800 000	400 000	kg
Building blocks and bricks of	23.13.11.40	nominal capacity < 2.5 litres, for beverages and foodstuffs (excluding bottles covered with leather or composition leather,	16 907 791		pieces
23.61.11.30 cement, concrete or artificial stone 2847 066 709	23.61.11.30	Building blocks and bricks of cement, concrete or artificial stone	2 847 066 709		kg
23.61.11.50       Tiles, flagstones and similar articles of cement, concrete or artificial stone (excluding building blocks and bricks)       56 508 323	23.61.11.50	of cement, concrete or artificial stone (excluding building blocks	56 508 323		kg
Cans used for preserving food25.92.11.33and drink of iron or steel, < 50 l,	25.92.11.33	and drink of iron or steel, < 50 l,	26 968 761		pieces
27.20.11.00 Primary cells and primary batteries 4 958 278 pie	27.20.11.00	Primary cells and primary batteries	4 958 278		pieces

(1) Indicates the magnitude of the rounding employed to protect confidential cell (in the case of PRODCOM code 11.07.11.30, the confidential value lies within the range +/- 10 000 million I of the reported value).

Source: Eurostat from http://ec.europa.eu/eurostat/data/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)

#### 9.3 Industry and construction short-term indicators

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 evaluation 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 inconsistent recovery of the EU-28's industrial economy can be clearly seen in the main industrial indicators. Over several years there was relatively stable output and price growth across the EU-28, which was interrupted from the second half of 2007 as price growth accelerated, while industrial output slowed. The decline in industrial output in the EU-27 from its relative peak in April 2008 was particularly steep (-19.6%), as the relative trough recorded in April 2009 was the lowest level of output since September 1997.

The downturn in activity for construction within the EU-28 lasted longer than for industry. Furthermore, after stabilising in 2010 and 2011, a second downturn started in the first quarter of 2012. In June 2013 there were no clear signs of stabilizing, although the three consecutive positive rates of change recorded in April, May and June 2013 were the first since October 2010. By March 2013 output had fallen a further 8.8 % from its January level.



Figure 9.3: Index of production, construction, EU-28,

Source: Eurostat (online data code: sts copr m)

<sup>(1)</sup> Seasonally adjusted.

Table 9.3: Annual gro	owth rates for	r construction, 2007–12
(%)		

		Index	c of pr	oducti	on (1)		Co	onstru	ction	costs i	ndex	(²)
	2007	2008	2009	2010	2011	2012	2007	2008	2009	2010	2011	2012
EU-28	2.8	- 2.9	- 7.5	-4.6	0.1	- 5.2	4.4	4.7	0.7	1.5	2.9	1.9
EU-27	2.8	- 2.9	- 7.5	-4.6	0.1	- 5.2	4.3	4.7	0.7	1.5	2.9	1.9
EA-17	2.1	-4.3	-6.8	- 7.2	- 1.7	- 5.3	4.2	4.3	0.3	2.0	3.3	1.6
BE	1.9	0.7	- 3.3	- 1.5	5.6	-0.6	4.5	2.5	- 1.1	0.0	3.9	1.9
BG	27.8	12.0	- 14.4	- 14.9	- 12.9	-0.5	7.1	13.3	8.2	-0.8	0.8	- 0.3
CZ	6.9	- 0.1	- 0.5	- 7.6	- 3.6	- 7.4	4.8	3.5	-0.3	1.2	1.7	0.5
DK	- 2.3	6.1	- 13.5	- 11.2	9.3	-6.7	6.3	2.9	-0.4	1.2	3.6	2.6
DE	2.8	-0.3	0.0	- 0.5	7.8	- 1.2	3.3	3.4	- 0.1	2.1	3.4	2.1
EE	13.6	- 13.3	- 29.8	- 8.5	27.3	18.4	12.7	3.5	- 8.4	- 2.6	3.4	4.3
IE	- 13.5	- 29.2	- 37.0	- 29.7	- 17.3	- 5.4	1.7	- 7.7	- 9.9	0.5	- 2.2	1.1
EL	14.3	7.6	- 17.5	- 29.2	- 28.1	- 26.1	4.6	5.1	-0.3	1.8	1.1	- 0.1
ES	- 4.3	- 16.3	- 11.2	-20.4	- 19.6	- 5.4	5.0	4.7	1.0	2.5	3.8	-0.3
FR	4.4	- 2.1	- 5.1	- 4.8	2.1	- 2.9	4.6	5.5	0.4	2.7	4.0	2.2
HR	2.8	11.5	-6.5	- 15.7	- 8.6	- 10.9	11.6	10.4	- 8.2	- 5.3	1.4	- 2.5
IT	6.4	-0.9	- 11.5	- 3.5	-4.0	- 13.9	3.7	3.8	0.9	1.5	3.0	2.3
CY	6.8	2.3	- 10.6	- 8.0	- 9.5	- 22.2	5.0	8.0	0.8	3.2	3.6	0.6
LV	13.7	- 3.1	- 34.9	-23.4	12.5	14.1	22.5	8.7	- 7.8	- 7.4	2.6	3.0
LT	22.4	4.2	- 48.3	- 7.5	22.2	- 7.2	16.1	9.5	- 14.5	-4.8	3.8	3.0
LU	2.7	- 1.2	0.2	0.2	2.0	- 5.3	2.9	3.2	1.4	0.8	2.6	2.9
HU	- 14.0	- 5.2	- 4.4	- 10.4	- 7.8	-6.7	7.2	7.5	3.0	-0.4	1.0	4.4
MT	8.7	7.5	3.4	-4.3	- 2.0	- 1.8	:	:	:	:	:	:
NL	5.6	3.2	- 5.5	- 10.6	5.1	-8.1	4.0	4.6	0.3	0.4	1.9	1.8
AT	3.9	- 0.9	- 1.7	-4.0	1.9	2.0	4.5	5.2	0.6	3.2	2.3	2.2
PL	16.9	9.5	3.9	3.2	16.6	- 4.7	6.9	7.0	0.2	- 0.1	1.1	0.3
PT	- 4.0	- 1.2	-6.6	- 8.5	- 10.2	- 17.0	3.4	5.2	-0.6	1.8	1.6	2.0
RO	33.0	26.7	- 15.1	- 13.4	3.0	1.4	10.1	16.2	1.6	1.9	9.0	6.4
SI	18.4	15.3	- 20.9	- 16.9	- 24.9	- 16.9	6.9	6.5	- 3.1	5.7	4.6	- 1.2
SK	5.5	11.5	- 11.0	- 4.5	- 2.0	- 12.2	4.1	6.1	2.1	- 0.1	0.7	0.1
FI	10.3	4.0	- 13.1	6.9	9.1	- 1.7	5.9	3.9	- 1.1	1.1	3.3	2.4
SE	10.6	- 0.8	- 9.9	8.1	13.2	5.3	6.1	4.9	2.0	2.5	3.0	2.5
UK	2.3	- 1.3	- 11.6	7.3	2.2	- 7.6	3.2	5.2	2.7	- 0.3	0.8	3.1
NO	6.0	0.9	- 8.2	-0.1	3.3	7.1	7.4	5.7	2.3	3.2	3.6	3.1
СН	1.2	2.4	1.4	1.9	1.7	- 1.2	:	:	:	:	:	:
ME	- 1.7	20.7	- 19.2	-0.7	18.6	7.6	:	:	:	:	:	:
MK	7.4	27.2	12.0	15.3	28.0	9.3	2.5	4.6	6.0	- 2.2	5.1	1.6
TR	5.6	- 7.9	- 16.2	18.6	11.4	0.7	8.3	13.8	- 4.1	5.7	12.4	5.5

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

<sup>(2)</sup> Gross series for new residential buildings.

Source: Eurostat (online data code: sts\_coprgr\_a and sts\_copigr\_a)

#### 9.4 Services - short-term indicators

Services turnover fell by 8.9% in the EU-28 in 2009 compared with the year before but rebounded in 2010 and 2011 increasing by 4.8% and 5.2% respectively. Growth continued in 2012, at a more modest pace (0.7%). Among service activities (at the NACE Rev. 2 section level), the fastest rates of turnover growth in 2012 were recorded for administrative and support services (4.1%) and professional, scientific and technical activities (3%). Slower growth was recorded for transportation and storage activities (1.5%), information and communication activities (0.6%) and distributive trades (0.3%). Accommodation and food services were the only service activities that recorded a fall in turnover (-0.4%) in 2012. Among the services for which an EU-28 price index is shown in Figures 9.5a and 9.5b two stand out as having atypical developments - telecommunications and sea and coastal water transport. Since 2006 (the beginning of the series), EU-28 output prices for telecommunications have been on a steady downward path and in just over seven years they fell by a total of 24.7%. Output prices for sea and coastal water transport are remarkable for their relatively high volatility, in particular the fall and subsequent rise in prices related to the financial and economic crisis. The net impact of these movements was that prices in the first quarter of 2013 were within 0.8% of their level at the beginning of the series. Most of the other services recorded overall price increases in a range of 5.0% to 14.0% during the seven years shown, with air transport output prices increasing at a faster pace, rising by 20.1 %.



Source: Eurostat (online data code: sts\_trtu\_q and sts\_setu\_q)

Figure 9.5a: Output price indices, transport and communications services, EU-28, 2006-13 (1) (2010 = 100)



(3) 2006-08: estimates.

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



Figure 9.5b: Output price indices, selected business services,

Source: Eurostat (online data code: sts sepp g)

#### 9.5 Tourism

Tourism plays an important role in the EU because of its economic and employment potential, as well as its social and environmental implications. Tourism statistics are not only used to monitor the EU's tourism policies but also its regional and sustainable development policies. EU-28 residents spent 2 236 million nights abroad on holiday (personal travel only) in 2012.

When taking into account a country's size in terms of its population, Luxembourg was the Member State whose residents spent the most nights abroad per inhabitant (an average of 22.6 nights per annum on holiday in 2012), followed by Cyprus (16.3), the Netherlands (12.1) and Ireland (12.0). At the other end of the spectrum, residents of Romania, Bulgaria, Greece (data for 2011), and Portugal spent, on average, less than one night abroad on holiday in 2012.

Figure 9.6: Top 10 Member States for outbound and for inbound tourism, 2012 (1000 nights spent abroad by residents of the country) Top 10 Member States of origin for outbound holidays 100 000 200 000 300 000 400 000 500 000 600 000 700 000 DE UK (2) FR (2) NL IT (2) ES SE (2) BE AT DK (2) Top 10 tourism destinations — nights spent at tourist accommodation establishments 50 000 100 000 150 000 200 000 250 000 FS IT FR UK (3) AT DE EL HR PT NL

(1) Estimate made for the purpose of this publication, based on available data.

(²) 2011.

(3) Estimate based on monthly data.

Source: Eurostat (online data codes: tour\_dem\_tntot, tour\_occ\_ninat and tour\_occ\_ nim)



# Research and communication

The seventh framework programme for research and technological development (FP7) was the European Union's (EU's) main instrument for funding research across Europe; it ran from 2007 to 2013.

Horizon 2020 is planned as the framework programme for research and innovation for the period running from 2014 through to 2020, building upon FP7, the competitiveness and innovation framework programme and the European institute of innovation and technology. In December 2013, Regulation 1291/2013 of the European Parliament and of the Council establishing Horizon 2020 was adopted along with Council Regulation (Euratom) 1314/2013 on the research and training programme of the European Atomic Energy Community, together making up Horizon 2020. 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. In March 2013, the European Commission released the 'State of the innovation union 2012 - accelerating change' (COM(2013) 149 final), which reviewed progress made with respect to the 34 commitments made in the innovation union.

#### 10.1 R & D expenditure

Gross domestic expenditure on R & D (GERD) is often expressed relative to GDP or in relation to population. The ratio of GERD to GDP declined modestly in the EU-28 during the period from 2002 to 2005, falling from 1.87% to 1.82%. From 2006 it started to climb, reaching 2.06% in 2012, despite a small decline in 2010. Nevertheless, the EU-28's R & D expenditure relative to GDP remained well below the corresponding shares recorded in Japan (3.25%, 2010 data) and the United States (2.73%, 2011 data); this pattern has existed for a lengthy period of time. Among the EU Member States, the highest R & D intensities in 2012 were recorded in Finland (3.55%), Sweden (3.41%) and Denmark (2.99%).

The Lisbon strategy set the EU an objective of devoting 3% of its gross domestic product (GDP) to R & D activities by 2010. The target was not reached — and subsequently the 3% target was maintained, forming one of five key targets within the Europe 2020 strategy adopted in 2010.



Figure 10.1: Gross domestic expenditure on R & D in the Triad and China, 2002–12 (% of GDP)

(4) Except Hong Kong.

Source: Eurostat (online data code: tsc00001), OECD

## Table 10.1: Gross domestic expenditure on R & D by source of funds, 2011–12 (% of GDP)

	Gross d expenditu	omestic		By source of funds of total gross expenditure on R & D)			
		e of GDP)	Business enterprises	Government	Abroad		
	2011	2012	2011	2011	2011		
EU-28	2.04	2.06	54.9	33.4	9.2		
EA-17	2.12	2.14	56.8	33.9	7.4		
BE	2.21	2.24	60.2	23.4	13.0		
BG	0.57	0.64	16.9	38.8	43.9		
CZ	1.64	1.88	37.7	41.7	19.7		
DK	2.98	2.99	60.3	28.9	7.2		
DE	2.89	2.92	65.6	29.8	4.2		
EE	2.37	2.18	55.0	32.8	11.9		
IE	1.66	1.72	48.4	30.3	20.1		
EL ( <sup>1</sup> )	0.67	0.69	32.7	49.2	14.8		
ES	1.36	1.30	44.3	44.5	6.7		
FR ( <sup>2</sup> )	2.25	2.26	55.0	35.4	7.7		
HR	0.76	0.75	38.2	48.2	11.6		
IT	1.25	1.27	45.1	41.9	9.1		
CY	0.50	0.47	11.0	70.6	14.1		
LV	0.70	0.66	24.8	22.5	51.0		
LT	0.91	0.90	28.2	42.2	28.4		
LU (3)	:	:	44.3	34.8	20.7		
HU	1.22	1.30	47.5	38.1	13.5		
MT	0.72	0.84	51.9	29.0	16.8		
NL (1)(2)	2.03	2.16	49.9	35.5	10.9		
AT	2.77	2.84	46.2	35.8	16.9		
PL	0.76	0.90	28.1	55.8	13.4		
PT ( <sup>2</sup> )	1.52	1.50	44.0	41.8	5.9		
RO (1)(4)	0.50	0.42	37.4	49.1	12.1		
SI (1)(2)	2.47	2.80	61.2	31.5	7.0		
SK ( <sup>5</sup> )	0.68	0.82	33.9	49.8	14.2		
FI ( <sup>6</sup> )	3.80	3.55	67.0	25.0	6.5		
SE	3.39	3.41	57.3	27.7	11.1		
UK	1.78	1.72	45.9	30.5	17.8		
IS	2.40	:	47.5	42.3	8.4		
NO	1.65	1.66	44.2	46.5	7.8		
СН	:	:	:	:	:		
RS	0.77	0.96	9.1	63.4	5.5		
TR ( <sup>7</sup> )	0.86	:	45.8	29.2	0.7		
CN ( <sup>8</sup> )	1.84	:	73.9	21.7	1.3		
JP ( <sup>2</sup> )( <sup>3</sup> )( <sup>5</sup> )	:	:	75.9	17.2	0.4		
US	2.67	:	60.0	33.4	:		

(<sup>1</sup>) Gross domestic expenditure, 2011: break in series.

(<sup>2</sup>) Business enterprises, government and abroad: break in series.

(<sup>3</sup>) Business enterprises, government and abroad: 2010 instead of 2011.

(4) Gross domestic expenditure, 2012: definition differs.

(<sup>5</sup>) Government sector: definition differs.

(<sup>6</sup>) Government sector: break in series.

(7) Business enterprises and government: break in series.

(<sup>8</sup>) Except Hong Kong.

Note: when definitions differ, see http://ec.europa.eu/eurostat/cache/metadata/EN/ rd\_esms.htm.

Source: Eurostat (online data codes: t2020\_20, rd\_e\_gerdtot and tsc00031), OECD

#### 10.2 R & D personnel

The number of researchers in the EU-28 has increased in recent years. There were 1.65 million researchers (in full-time equivalents (FTE)) employed in the EU-28 in 2012, which marked an increase of almost 446 771 (or 39.4%) when compared with 2002.

An analysis of researchers by sex shows that men accounted for 67% of the EU-28's workforce in 2011, three percentage points less than in 2003. Women accounted for more than half of the total number of researchers in 2011 in Latvia and Lithuania, and their share was very close to parity in Bulgaria.

Within the EU-27 there were 16.8 graduates from mathematics, science and technology fields of education per thousand persons aged 20 to 29 years in 2011. In 2012, particularly high ratios — above 20 graduates per thousand persons aged 20 to 29 years — were recorded in Lithuania, Ireland, France (2011 data) and Finland. This ratio should be interpreted with care as some graduates may be foreigners who 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 low ratios recorded intwoofthesmallestMemberStates, namelyLuxembourg and Cyprus.





(<sup>3</sup>) 2010 instead of 2012.

(4) 2006 instead of 2007.

Source: Eurostat (online data code: tps00188)

## **Table 10.2:** Researchers in full-time equivalents (FTE), by institutional sector, 2012 (<sup>1</sup>)

	Ву	institutional	onal sector, 2012 (1 000 FTE)			x, 2011 of total orchers)
	Total	Business enterprise sector	Government sector	Higher education sector	Male	Female
EU-28 (2)	1 650.4	765.2	202.0	663.6	33.2	66.8
EA-17	1 140.5	569.8	151.2	405.1	31.0	69.0
BE	44.1	22.2	2.8	18.8	33.5	66.5
BG	11.3	2.1	5.3	3.8	49.1	50.9
CR	33.2	15.4	6.1	11.5	28.2	71.8
DK	37.7	22.2	1.2	14.0	33.1	66.9
DE	342.7	191.0	55.1	96.6	26.7	73.3
EE	4.6	1.4	0.5	2.5	43.7	56.3
IE	16.1	9.8	0.5	5.8	32.4	67.6
EL	24.1	4.4	4.4	15.2	36.7	63.3
ES	126.8	44.9	21.9	59.8	38.7	61.3
FR (3)	249.1	153.1	26.8	71.2	25.6	74.4
HR	6.7	1.2	2.0	3.6	47.3	52.7
IT	110.8	43.1	18.7	45.2	34.9	65.1
СҮ	0.9	0.2	0.1	0.6	36.9	63.1
LV	3.9	0.6	0.7	2.6	53.3	46.7
LT	8.0	1.3	1.4	5.3	52.1	47.9
LU (4)	2.6	1.7	0.7	0.5	21.2	78.8
HU	23.8	13.2	4.7	5.9	31.7	68.3
MT	0.8	0.5	0.0	0.3	26.9	73.1
NL (5)	58.6	30.9	6.6	21.2	24.1	75.9
AT	38.6	24.1	1.6	12.7	29.0	71.0
PL	67.0	15.1	13.6	38.2	38.6	61.4
PT	50.7	12.1	2.2	30.2	46.4	53.6
RO (6)	16.3	3.3	6.4	6.6	46.1	53.9
SI	9.1	4.8	1.9	2.4	36.4	63.6
SK ( <sup>4</sup> )	15.3	2.5	3.0	9.8	42.6	57.4
FI	40.5	23.3	4.4	12.4	32.1	67.9
SE (7)	49.3	30.5	2.0	16.6	37.2	62.8
UK	252.7	90.4	7.6	150.6	37.7	62.3
IS ( <sup>8</sup> )	2.1	1.0	0.4	0.7	37.5	62.5
NO ( <sup>9</sup> )	27.9	13.4	4.7	9.9	36.2	63.8
CH ( <sup>5</sup> )( <sup>10</sup> )	25.1	10.3	0.4	16.8	30.2	69.8
ME (8)	0.4	0.1	0.1	0.2	49.9	50.1
MK (11)	0.9	0.1	0.4	0.4	51.3	48.7
RS	11.8	0.3	3.0	8.5	49.3	50.7
TR (8)	72.1	30.4	6.1	35.6	35.6	64.4
CN (12)	1 152.3	818.8	250.3	249.0	:	:
JP ( <sup>13</sup> )	656.0	490.5	32.4	125.3	13.8	86.2
US (14)	1 412.6	1 130.5	:	:	:	:
- () Shares do not sum to 100 % due to estimates and the exclusion of private non-profit sector data from the table.
- (2) Males, females: estimates.
- (3) 2011, except for business enterprise sector (2012).
- (4) Industrial sectors 2010, except for business enterprise sector (2012). Males, females: 2009.
- (5) Government sector: definition differs.
- (<sup>6</sup>) Total and business enterprise sector: definition differs.
- () Total and government sector: definition differs.
- (8) 2011.
- (9) Business enterprise sector: definition differs.
- (<sup>10</sup>) Total and business enterprise sector: 2008. Government sector: 2012. Higher education sector: 2010. Males, females: 2008.
- (11) 2009.
- (12) 2011, except for total (2010).
- (13) Industrial sectors: 2010. Males, females: 2010.

(14) 2007.

Note: when definitions differ, see http://ec.europa.eu/eurostat/cache/metadata/EN/rd\_esms.htm.

Source: Eurostat (online data codes: tsc00004 and rd\_p\_femres), OECD

# 10.3 Innovation

Among the EU Member States, the highest shares of innovative enterprises during the period 2008–10 were recorded in Germany (79.3% of all enterprises), followed by Luxembourg (68.1%), Belgium (60.9%) and Portugal (60.3%). More than half of all enterprises (52.9%) in the EU-27 (excluding Greece) reported innovation activity. The lowest shares were recorded in Bulgaria (27.1%), Poland (28.1%) and Latvia (29.9%).



Figure 10.3: Proportion of innovative enterprises, 2008–10 (% of all enterprises)

(¹) Excluding Greece; the survey reference period covers the three years from 2008 to 2010. Source: Eurostat (online data code: inn\_cis7\_type) An analysis of the proportion of product and/or process innovative enterprises that cooperate in their innovation activities, by enterprise size class, shows that larger the innovative enterprises were, the more likely they were to cooperate. This was the case for all of the countries except for Latvia, Luxembourg and Iceland (where medium-sized enterprises cooperated less than small enterprises) and the United Kingdom (where large enterprises cooperated less than medium-sized enterprises).

**Enterprises with** Total 50 to 249 250 or more 10 to 49 employees employees employees EU-27 (1) 25.5 20.5 32.7 53.9 74.1 RF 42.3 53.4 BG 22.4 19.0 22.3 44 5 25.1 45.9 CZ 34.2 62.1 DK 35.1 43.5 39.7 70.4 DF 29.1 74 3 10.8 55.8 EE 42.1 35.6 53.1 70.0 IE 28.5 22.8 37.0 60.8 EL ES 22.3 18.0 28.9 47.1 FR 36.1 30.9 42.0 58.7 HR 32.6 28.7 36.0 55.4 IT 12.1 9.3 20.2 40.2 CY 62.3 59.2 70.4 73.0 LV 29.1 28.4 22.5 57.2 LT 43.3 35.2 53.1 69.4 ιu 22.2 33.8 237 48.5 HU 43.2 32.1 54.2 66.8 MT 18.5 16.4 47.4 NI 33 5 30.3 38.4 52.8 44.7 AT 51.0 59.1 77.1 PL 33.5 23.8 35.6 59.0 ΡТ 137 19.5 331 63.6 RO 24.1 214 24.5 37.4 SI 44.7 35.1 54.9 71.3 SK 347 28.4 37.4 522 FI 39.8 49.1 SE 46.5 38.8 34.3 68.2 UK 13.7 12.9 16.3 15.6 IS 32.2 34.6 20.7 37.8 NO 30.6 26.0 38.3 51.9 RS 24.9 20.4 30.4 43.9 TR 18.7 17.5 19.2 36.8

**Table 10.3:** Proportion of product and/or process innovativeenterprises engaged in any type of cooperation by size class, 2008–10(% of all product and/or process innovative enterprises)

(\*) Excluding Greece; the survey reference period covers the three years from 2008 to 2010.

Source: Eurostat (online data code: inn\_cis7\_coop)

# 10.4 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; from a consumers perspective it may be argued that patent protection motivates the invention of new goods and services but at the same time may slow down the diffusion of new technologies, techniques and products.

In relative terms, in 2011, Germany reported the highest number of patent applications to the European Patent Office (EPO), some 272 per million inhabitants, followed by Sweden (260) and Finland (243). Between 2005 and 2011, the number of patent applications filed with the EPO fell in 15 of the EU Member States, the largest contractions, in relative terms, being recorded in Croatia (-54.4%), Bulgaria (-52.0%) and Luxembourg (-46.3%) and the largest, in absolute terms, in Germany (-1698), Italy (-1039) and the United Kingdom (-668).

The increases recorded for the remaining 11 Member States were highest, in absolute terms, in Spain, Poland and France. In relative terms the largest increases recorded in Estonia, Poland and the Czech Republic. Figure 10.4: Top 30 metropolitan areas in terms of total patent applications to the EPO, 2010 (<sup>1</sup>) (number)



(1) Provisional.

Source: Eurostat (online data codes: pat\_ep\_rtot and pat\_ep\_rtec)

Eurostat recently started to compile patent applications data by metropolitan areas, in other words a geographical analysis based on data for one or more NUTS level 3 regions. Unsurprisingly many capital city areas appear near the top of the ranking, for example Paris, Berlin, London, Stockholm, Bruxelles/Brussel, Helsinki, København and Wien.

	Patent applications to the EPO (number)			plications to EPO	Annual average growth rate,	
			(per million inhabitants)		2005–11 (%) ( <sup>2</sup> )	
	2005	2011	2005	2011		
EU-28	56 938	54 005	115	107	- 0.9	
BE	1 505	1 265	144	115	- 2.8	
BG	24	11	3	2	- 11.5	
CZ	109	183	11	17	9.1	
DK	1 181	1 139	218	205	- 0.6	
DE	23 955	22 257	290	272	- 1.2	
EE	6	59	5	44	45.0	
IE	277	359	67	78	4.4	
EL	111	85	10	7	- 4.4	
ES	1 361	1 630	32	35	3.1	
FR	8 374	8 615	133	133	0.5	
HR	33	15	8	3	- 12.3	
IT	4 904	3 865	84	64	- 3.9	
CY	17	:	22	:	:	
LV	19	. 20	8	10	1.0	
LT	9	7	3	2	- 3.1	
LU	102	55	221	107	- 9.8	
HU	135	183	13	107	5.1	
MT	11	:	28	:	:	
NL	3 494	3 239	214	194	- 1.3	
AT	1 517	1 630	185	194	1.2	
PL	128	376	3	10	19.7	
PT	124	75	12	7	- 7.9	
RO	29	33	1	2	2.2	
SI	109	132	54	64	3.3	
SK	31	23	6	4	- 4.7	
FI	1 323	1 308	253	243	- 0.2	
SE	2 417	2 448	268	260	0.2	
UK	5 634	4 966	94	79	- 2.1	
IS	31	:	107	:	•	
LI	26	29	738	801	2.1	
NO	491	651	107	132	4.8	
СН	3 201	2 918	432	371	- 1.5	
TR	166	450	2	6	18.1	
AU	1 123	827	55	37	- 5.0	
BR	203	267	1	1	4.7	
CA	2 465	2 141	76	62	- 2.3	
CN	1 663	5 283	1	4	21.2	
IN	590	965	1	1	8.5	
IL	1 413	1 011	211	130	- 5.4	
JP	21 869	17 896	171	140	- 3.3	
RU	305	243	2	2	- 3.7	
KR	5 136	4 527	107	91	- 2.1	
TW	750	1 438	33	62	11.5	
US	36 892	26 064	125	84	- 5.6	

### Table 10.4: Patent applications, 2005 and 2011 (<sup>1</sup>)

(1) Estimates.

<sup>(2)</sup> Based on the total number of patent applications to the EPO.

Source: Eurostat (online data code: pat\_ep\_ntot)

# 10.5 Information society — households and individuals

During the last decade, information and communication technologies (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 (55%) of households in the EU-28 had internet access. This proportion continued to increase and in 2013 reached 79%, rising by an additional percentage points compared with 2012. The highest 3 proportion (95%) of households with internet access in 2013 was recorded in the Netherlands, while Luxembourg, Denmark and Sweden also reported that at least nine out of every ten households had internet access in 2013. The lowest rate of internet access among the EU Member States was recorded in Bulgaria (54%). However, there was a rapid expansion in household access to the internet in Bulgaria, the proportion of households with access rose as bv 29 percentage points between 2008 and 2013. Romania, the Czech Republic and Greece were the only other Member States where increases of 25 percentage points or more were recorded over the same period.

Figure 10.5: Internet access of households, 2008 and 2013 (% of all households)



Source: Eurostat (online data code: isoc\_ci\_in\_h)

The use of mobile devices to access the internet has increased greatly within the EU: while three quarters (75%) of individuals used the internet in 2013, more than two fifths (43%) accessed the internet from a mobile device, such as a portable computer or a handheld device (including mobile phones), away from their home or place of work. There were significant differences between countries in mobile internet usage. In 2012, 36% of individuals aged 16 to 74 within the EU-28 used a mobile device to connect to the internet. Sweden recorded the highest proportion of mobile internet use from laptops, notebooks and netbooks (46%) and from mobile or smart phones (59%), while the United Kingdom recorded the highest proportion of mobile internet use from tablet computers (23%) and from other handheld devices (9%).

# Table 10.5: Use of internet on mobile devices, by type of device, 2012 (% of individuals aged 16 to 74)

	Any mobile device (portable computer or a handheld device)	Laptop, notebook or netbook computer	Tablet computer (')	Mobile phone or smart phone	Other handheld device ( <sup>2</sup> )
EU-28	36	23	7	27	4
EA-17	34	21	6	25	3
BE	44	31	10	28	7
BG	13	11	1	7	1
CZ	41	37	1	13	4
DK	61	36	12	50	1
DE	31	22	5	23	3
EE	37	31	5	18	2
IE	51	37	5	29	4
EL	23	15	2	15	1
ES	39	23	7	31	5
FR	43	24	8	33	1
HR	38	25	2	29	4
IT	16	8	3	11	2
CY	25	16	4	17	1
LV	25	17	1	16	1
LT	17	9	1	13	1
LU	63	41	19	46	8
HU	18	13	2	11	3
MT	40	29	7	28	4
NL	55	31	17	43	6
AT	45	29	7	35	3
PL	22	17	2	15	2
PT	21	16	3	12	2
RO	7	5	0	5	1
SI	30	19	4	20	5
SK	38	29	4	26	4
FI	56	37	9	45	4
SE	70	46	14	59	6
UK	63	38	23	56	9
IS	60	39	19	42	5
NO	75	61	23	56	13

(1) Greece and Croatia: unreliable.

(<sup>2</sup>) Such as a PDA, MP3 player, e-book reader or handheld games console. Denmark, Greece and Cyprus: unreliable.

Source: Eurostat (online data code: isoc\_cimobi\_dev)

# 10.6 Information society — enterprises

Less than 1 in 20 enterprises in the EU-28 (covered by the survey on ICT usage in enterprises) did not have internet access as of the beginning of 2013, while the vast majority (90%) made use of a fixed broadband connection to access the internet. There was a rapid uptake in the use of mobile internet connections, in part fuelled by enterprises equipping their staff with portable computers, smart phones and other mobile devices, something that was done by more than half (54%) of all enterprises in the EU-28. Generally, large enterprises made greater use of information technology than small enterprises, with all large enterprises having internet access, 98% a fixed broadband access and 90% providing employees with portable devices for mobile internet connections.

Figure 10.6: Enterprise use of information technology, by size-class, EU-28, 2013

(% of enterprises)



Source: Eurostat (online data codes: isoc\_ci\_in\_en2, isoc\_ci\_it\_en2 and isoc\_bde15b\_e)

The use of information and communication technologies the way that enterprises influences are run, internal communications organised, information shared with business partners, and customers communicated with. Nearly all (96%) enterprises in the EU-28 with at least 10 persons employed had internet access by 2013. This proportion has risen slightly in recent years, up 2 percentage points since 2010. Many enterprises may consider it important to be visible on the internet and close to three quarters (73%) of enterprises had a website at the beginning of 2013, up from two thirds (67%) in 2010. The electronic sharing of information within an enterprise may lead to efficiency gains. This practice found in just over half (53%) of the enterprises in the EU-28.

The proportion of EU-28 enterprises that used enterprise resource planning (ERP) software applications reached 26% in 2013, an increase of 5 percentage points compared with three years earlier. In 2012, a slightly smaller proportion of enterprises (23%) had integrated supply chain (SCM) information, through automatic links with suppliers and/or customers, this marked an increase of 5 percentage points compared with 2010. Some 26% of enterprises in the EU-28 used customer relationship management (CRM) applications in 2012 — applications that manage information about an enterprise's customers, which was 3 percentage points more than in 2010.

**Figure 10.7:** Adoption of e-business technologies in enterprises, EU-28, 2010 and 2013 (% of enterprises)



(1) Data for 2012 instead of 2013.

Source: Eurostat (online data codes: isoc\_ci\_in\_en2, isoc\_ci\_cd\_en2, isoc\_bde15dip, isoc\_bde15disc and isoc\_bde15dec)



# 11

## Environment

Eurostat produces statistics and accounts on environmental pressures, impacts on the state and change of environmental quality and on the measures to avoid or mitigate impacts on the environment. Environmental-economic accounts describe the relationship of the environment with the economy, including the impacts of the economy on the environment and the contribution of the environment to the economy.

At the European Council meeting of 26 March 2010, EU leaders set out their plans for a Europe 2020 strategy. The strategy includes three targets specifically related to the environment and climate change: greenhouse gas emissions 20 % lower than 1990; 20% of energy from renewables by 2020; and a 20% increase in energy efficiency by 2020. As part of the sustainable growth priority one of the flagship initiatives concerns a resource-efficient Europe.

A European Commission Communication titled the 'Blueprint to Safeguard Europe's Water Resources' was submitted to the Council and the European Parliament in November 2012 and endorsed by EU Member States in December 2012. This blueprint is intended to combine a stocktaking of the achievements of the Water Framework Directive with an analysis of policy needs in the water domain for the years to come.

# **11** Environment

The latest EU environment action programme (7th EAP) was adopted by the European Commission on 28 November 2012. It will guide the EU's environment policy up to 2020. The programme draws on a number of recent strategic initiatives, including the Resource Efficiency Roadmap, the 2020 Biodiversity Strategy and the Low Carbon Economy Roadmap. Practical steps to be taken include phasing out environmentally harmful subsidies, shifting taxation from labour to pollution, drawing up partnership implementation agreements between Member States and the European Commission on the implementation of environmental laws, and developing a system for reporting and tracking environment-related expenditure in the EU budget.

# 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 41.2 % of the total area of the EU-27 in 2012, cropland nearly a quarter (24.7%) of the area and grassland almost one fifth (19.5%), while built-up and other artificial areas, such as roads and railways, accounted for 4.6% of the total area, as did water areas and wetland. Woodland was the prevailing land cover in northern parts of Europe in 2012 and for a number of countries whose topography is dominated by mountains and hilly areas.

Cropland (including both arable land and permanent crops) covered, on average, some 24.7% of the total area of the EU-27 in 2012. Denmark and Hungary were the countries that reported the highest proportion of their total area covered by cropland, its share rising close to 50.0%. Natural and agricultural grasslands dominate the landscape in Ireland, the United Kingdom, the Netherlands and Luxembourg. Shrubland is a typical land cover feature of hot and arid countries such as Cyprus, Greece, Malta, Spain, Portugal and Italy; on the other hand, shrubland is also prevalent on the moors and heathlands of northern areas of the United Kingdom. Malta and the Benelux countries had the highest proportions of built-up areas. Finland, Sweden, the Netherlands and Estonia reported the highest proportions of their total area accounted for by water areas and wetlands.



Figure 11.1: Main land cover by land cover type, EU-27, 2012 (% of total area)

Source: Eurostat (online data code: lan\_lcv\_ovw)

# **11** Environment

Figure 11.2: Main land cover by land cover type, 2012 (1) (% of total area)



(1) Croatia: not available.

Source: Eurostat (online data code: lan\_lcv\_ovw)

# 11.2 Greenhouse gas emissions by industries and households

Greenhouse gas emissions comprise carbon dioxide (CO<sub>2</sub>), nitrous oxide (N<sub>2</sub>O) and methane (CH<sub>4</sub>). Fluorinated gases (hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride), which are responsible for about 2% of the EU's greenhouse gas emissions, are not included in this analysis. Emissions of the three gases resulting from the activities of various industries and households in the EU-27 stood in 2011 at 4.66 billion tonnes of carbon dioxide (CO<sub>2</sub>) equivalents.

In 2011, the supply of electricity, gas, steam and air conditioning had the largest share of the EU-27's greenhouse gas emissions, accounting for 27% of the total. Manufacturing's share of all emissions was around 20%, meaning that manufacturing and the supply of electricity, gas, steam and air conditioning together contributed nearly half (47%) of all greenhouse gas emissions in the EU-27 in 2011. Households accounted for 18% of greenhouse gas emissions, while agriculture, forestry and fishing were responsible for a further 12% which was the same as the combined share of other services, water supply and construction. Transport services (including land, water and air transport) had a relatively low share of all emissions in 2011 (10%). The remaining 2% share was for mining and quarrying. **Figure 11.3:** Greenhouse gas  $(CO_2, CH_4 \text{ and } N_2O)$  emissions by economic activity, EU-27, 2000 and 2011 (<sup>1</sup>) (% of total emissions in CO<sub>2</sub> equivalents)



(1)2011: estimates.

(?)Emissions from the supply of electricity, gas, steam and air conditioning result from fossil fuel combustion for electricity generation and district heating, but do not include emissions from combustion in individual houses or households.

(3)Only commercial transport (for hire and reward); the own-account operation of motor vehicles by other activities as well as the operation of motor vehicles by private households are excluded.

Source: Eurostat (online data codes: env\_ac\_ainah\_r1 and env\_ac\_ainah\_r2)

With 7.4 kg of CO<sub>2</sub> equivalents per euro the supply of electricity, gas, steam and air conditioning had by far the highest greenhouse gas intensity in the EU-27 in 2011. Agriculture, forestry and fishing had the second highest greenhouse gas intensity, around 3.0 kg of CO, equivalents per euro and this grouping of economic activities was also the only one in which emissions of methane and nitrous oxide were higher than those of carbon dioxide. Between 2000 and 2011, the largest fall in greenhouse gas intensity in relative terms was observed for manufacturing (-30.7%), while the biggest reduction in absolute terms was observed for the supply of electricity, gas, steam and air conditioning  $(-1.2 \text{ kg of CO}_2 \text{ equivalents per euro})$ .

There were also reductions in intensity for the other activities, except for transport, for which there was a slight increase (4.4%).





(1) Estimates.

All economic Agriculture, activities

foretry and

fishina

3 -2

Source: Eurostat (online data codes: env ac ainah r1, env ac ainah r2 and nama nace64 k)

2011 (<sup>1</sup>)

quarrying

2000

Mining and Manufacturing Electricity, gas, Transport

steam and air conditioning

supply

# 11.3 Carbon dioxide emissions from final use of products

Besides the carbon dioxide 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 8.0 tonnes of carbon dioxide emissions per inhabitant in 2009 was composed of three main elements:

- some 5.0 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);
- another 1.2 tonnes per inhabitant as a result of investments (gross capital formation) in the EU-27 economy.

**Figure 11.5:** Domestic and global  $CO_2$  emissions — consumption and production perspective, EU-27, 2009 (<sup>1</sup>) (tonnes  $CO_2$  per inhabitant)



#### (1) Estimates.

Source: Eurostat (online data codes: env\_ac\_ainah\_r2, env\_ac\_io2 and demo\_gind)

**Table 11.1:** CO<sub>2</sub> emissions induced by final use, by product groups and categories of final use, EU-27, 2009 (<sup>1</sup>) (kg of CO<sub>2</sub> per inhabitant)

Product group	Final consumption expenditure	Gross capital formation	Exports	Final tot	
	(kg o	f CO <sub>2</sub> per inha	abitant)		(%)
Electricity, gas, steam and air-conditioning	1 032	16	48	1 097	11.7
Constructions and construction works	38	672	3	713	7.6
Food products, beverages and tobacco products	432	2	47	481	5.1
Public administration and defence services; compulsory social security services	301	1	1	303	3.2
Coke and refined petroleum products	196	- 4	80	272	2.9
Motor vehicles, trailers and semi-trailers	139	45	67	251	2.7
Chemicals and chemical products	97	- 4	157	250	2.7
Retail trade services, except of motor vehicles and motorcycles	217	14	16	247	2.6
Wholesale trade services, except of motor vehicles and motorcycles	156	37	49	241	2.6
Accommodation and food services	223	1	4	228	2.4
Land transport services and transport services via pipelines	199	8	18	225	2.4
Human health services	219	0	0	219	2.3
Machinery and equipment n.e.c.	6	101	110	217	2.3
Air transport services	139	- 2	65	202	2.1
Water transport services	39	1	148	188	2.0
Education services	144	0	0	145	1.5
Textiles, wearing apparel and leather products	117	- 3	25	139	1.5
Products of agriculture, hunting and related services	110	8	13	132	1.4
Other products	1 196	273	569	2 038	21.7
Total products	5 002	1 166	1 421	7 589	80.6
Direct emissions by private households	1 821	0	0	1 821	19.4
Total products plus direct emissions by private households	6 823	1 166	1 421	9 410	100.0

(1) Estimates.

Source: Eurostat (online data codes: env\_ac\_io2 and demo\_gind)

### 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', potentially 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.

In 2010, the total generation of waste from economic activities and households in the EU-28 amounted to 2 506 million tonnes. Inhabitants in the EU-28 generated on average about 5.0 tonnes of waste each, of which 201 kg were hazardous waste.

There were two activities that generated particularly high levels of waste across the EU-28 in 2010: they were construction (NACE Section F) accounting for 860 million tonnes (34.3% of the total) and mining and quarrying (NACE Section B) contributing 672 million tonnes (26.8% of the total). The vast majority of the waste that was generated within these activities was composed of mineral waste or soils (excavated earth, road construction waste, demolition waste, dredging spoil, waste rocks, tailings and so on).

Almost half (45.4%) of the waste treated within the EU-28 in 2010 was subject to disposal operations other than waste incineration (this was predominantly landfills, but also included mining waste disposed in and around mining sites and waste discharges into water bodies). A further 49.0% of the waste treated in the EU-28 in 2010 was sent to recovery operations (other than energy recovery. The remaining 5.6% of the waste treated in the EU-28 in 2010 was sent for incineration (with or without energy recovery).



# **Figure 11.6:** Waste generation, EU-28, 2010 (%)

Source: Eurostat (online data code: env\_wasgen)

# Table 11.2: Waste treatment, 2010 (1 000 tonnes)

EU-282 338 77089 65042 2801 145 1401 061 700BE30 3584 7971 97520 4143 172BG159 95514421 922157 886CZ18 2477675513 2204 204DK11 3432 74906 7671 828DE349 56428 42312 646241 56366 932EE17 95333605 95611 661IE9 421168433 3565 854EL70 3901262111 72258 520ES132 6882 52341280 28949 464FR336 0211 4 2417 809200 677113 294HR2 585110244032 048IT127 1562 3736 09293 03725 655CY2 371771 381976LV1 0066303126 630LT4 54611121 0623 371LU12 424321246 1636 105HU13 424859825 1257 357MT1 260071711 081NL113 6405 8353 55257 56346 691AT29 7511 3641 64914 98211 756PL146 5803 804369109 6953 2712PT20 1152 3434197 5839 7		Total	Energy recovery	Incineration without energy recovery	Recovery other than energy recovery	Disposal other than incineration
BG159 95514421 922157 886CZ18 2477675513 2204 204DK11 3432 74906 7671828DE349 56428 42312 646241 56366 932EE17 95333605 95611 661IE9 421168433 3565 854EL70 3901262111 72258 520ES132 6882 52341280 28949 464FR336 02114 2417 809200 677113 294HR2 585110244032 048IT127 1562 3736 09293 03725 655CY2 371771 381976LV1 0066303126 30LT4 54611121 0623 371LU12 424321246 1636 105HU13 424859825 1257 357MT1 260071711 081NL113 6405 8353 55257 56346 691AT29 7511 3641 64914 98211 756PL14 6 5803 804369109 69532 712PT20 1152 3434197 5839 771RO212 8581 5077516 561194 716SI5 6382 825663 5593 812FI	EU-28	2 338 770	89 650	42 280	1 145 140	1 061 700
CZ         18 247         767         55         13 220         4 204           DK         11 343         2 749         0         6 767         1 828           DE         349 564         28 423         12 646         241 563         66 932           EE         17 953         336         0         5 956         11 661           IE         9 421         168         43         3 356         5 854           EL         70 390         126         21         11 722         58 520           ES         132 688         2 523         412         80 289         49 464           FR         336 021         14 241         7 809         200 677         113 294           HR         2 585         110         24         403         2 048           IT         127 156         2 373         6 092         93 037         25 655           CY         2 371         7         7         1 381         976           LV         1006         63         0         312         630           LT         4 546         111         2         1062         3 371           LU         12 424         32	BE	30 358	4 797	1 975	20 414	3 172
DK11 3432 74906 7671 828DE349 56428 42312 646241 56366 932EE17 95333605 95611 661IE9 421168433 3565 854EL70 3901262111 72258 520ES132 6882 52341280 28949 464FR336 02114 2417 809200 677113 294HR2 585110244032 048IT127 1562 3736 09293 03725 655CY2 371771 381976LV1 006630312630LT4 54611121 0623 371LU12 424321246 1636 105HU13 424859825 1257 357MT1 260071711 081NL113 6405 8353 55257 56346 691AT29 7511 3641 64914 98211 756PL146 5803 804369109 69532 712PT20 1152 3434197 5839 771RO21 2 8581 5077553 8 851 436SK7 692255663 5593 812FI105 6309 84738931 99963 395SE110 4766 2618716 58787 541<	BG	159 955	144	2	1 922	157 886
DE349 56428 42312 646241 56366 932EE17 95333605 95611 661IE9 421168433 3565 854EL70 3901262111 72258 520ES132 6882 52341280 28949 464FR336 02114 2417 809200 677113 294HR2 585110244032 048IT127 1562 3736 09293 03725 655CY2 371771 381976LV1 006630312630LT4 54611121 0623 371LU12 424321246 1636 105HU13 424859825 1257 357MT1 260071711 081NL113 6405 8353 55257 56346 691AT29 7511 3641 64914 98211 756PL146 5803 804369109 69532 712PT20 1152 3434197 5839 771RO212 8581 50775516 561194 716SI5 6382 82353 8851 436SK7 6922 55663 5593 812FI100 6309 84738931 99963 395SE110 4766 2618716 58787 541 <tr<< td=""><td>CZ</td><td>18 247</td><td>767</td><td>55</td><td>13 220</td><td>4 204</td></tr<<>	CZ	18 247	767	55	13 220	4 204
EE         17 953         336         0         5 956         11 661           IE         9 421         168         43         3 356         5 854           EL         70 390         126         21         11 722         58 520           ES         132 688         2 523         412         80 289         494 64           FR         336 021         14 241         7 809         200 677         113 294           HR         2 585         110         24         403         2 048           IT         127 156         2 373         6 092         93 037         25 655           CY         2 371         7         7         1 381         976           LV         1 006         63         0         312         630           LT         4 546         111         2         1 062         3 371           LU         12 424         32         124         6 163         6 105           HU         13 424         859         82         5 125         7 357           MT         1 260         0         7         171         1 081           NL         113 640         5 835         3 5	DK	11 343	2 749	0	6 767	1 828
IE         9 421         168         43         3 356         5 854           EL         70 390         126         21         11 722         58 520           ES         132 688         2 523         412         80 289         49 464           FR         336 021         14 241         7 809         200 677         113 294           HR         2 585         110         24         403         2 048           IT         127 156         2 373         6 092         93 037         25 655           CY         2 371         7         7         1 381         976           LV         1 006         63         0         312         630           LT         4 546         111         2         1 062         3 371           LU         12 424         32         124         6 163         6 105           HU         13 424         859         82         5 125         7 357           MT         1 260         0         7         171         1 081           NL         113 640         5 835         3 552         57 563         46 691           AT         29 751         1 364	DE	349 564	28 423	12 646	241 563	66 932
EL70 3901262111 72258 520ES132 6882 52341280 28949 464FR336 02114 2417 809200 677113 294HR2 585110244032 048IT127 1562 3736 09293 03725 655CY2 371771 381976LV1 0066303126 30LT4 54611121 0623 371LU12 424321246 1636 105HU13 424859825 1257 357MT1 260071711 081NL113 6405 8353 55257 56346 691AT29 7511 3641 64914 98211 756PL146 5803 804369109 69532 712PT20 1152 3434197 5839 771RO212 8581 50775516 561194 716SI5 6382 82353 8851 436SK7 6922 55663 5593 812FI105 6309 8473 8931 99963 395SE110 4766 2618716 58787 541UK2 85 67431 66 343189 18389 832IS5 226190340167NO6 2921 2802762 5662 170	EE	17 953	336	0	5 956	11 661
ES132 6882 52341280 28949 464FR336 02114 2417 809200 677113 294HR2 585110244032 048IT127 1562 3736 09293 03725 655CY2 371771 381976LV1 006630312630LT4 54611121 0623 371LU12 424321246 1636 105HU13 424859825 1257 357MT1 260071711 081NL113 6405 8353 55257 56346 691AT29 7511 3641 64914 98211 756PL146 5803 804369109 69532 712PT20 1152 3434197 5839 771RO212 8581 5077516 561194 716SI5 6382 82353 8851 436SK7 6922 55663 5593 812FI105 6309 8473 8931 99963 395SE110 4766 2618716 58787 541UK2 85 67431 66 3431 89 18389 832IS5 26190340167NO6 2921 2802762 5662 170MK2 106013311 775RS <td< td=""><td>IE</td><td>9 421</td><td>168</td><td>43</td><td>3 356</td><td>5 854</td></td<>	IE	9 421	168	43	3 356	5 854
Indication         Indication         Indication         Indication           FR         336 021         14 241         7 809         200 677         113 294           HR         2 585         110         24         403         2 048           IT         127 156         2 373         6 092         93 037         25 655           CY         2 371         7         7         1 381         976           LV         1 006         63         0         312         630           LT         4 546         111         2         1 062         3 371           LU         12 424         32         124         6 163         6 105           HU         13 424         859         82         5 125         7 357           MT         1 260         0         7         171         1 081           NL         113 640         5 835         3 552         57 563         46 691           AT         29 751         1 3 64         1 649         14 982         11 756           PL         146 580         3 804         369         109 695         32 712           PT         20 115         2 343         419 <td>EL</td> <td>70 390</td> <td>126</td> <td>21</td> <td>11 722</td> <td>58 520</td>	EL	70 390	126	21	11 722	58 520
HR2 585110244032 048IT127 1562 3736 09293 03725 655CY2 371771 381976LV1 006630312630LT4 54611121 0623 371LU12 424321246 1636 105HU13 424859825 1257 357MT1 260071711 081NL113 6405 8353 55257 56346 691AT29 7511 3641 64914 98211 756PL146 5803 804369109 69532 712PT20 1152 3434197 5839 771RO212 8581 5077516 561194 716SI5 638282353 8851 436SK7 692255663 5593 812FI105 6309 8473 8931 99963 395SE110 4766 2618716 58787 541UK285 67431 66 343189 18389 832IS526190340167NO6 2921 2802762 5662 170MK2 106013311 775RS33 1512705683 2 556	ES	132 688	2 523	412	80 289	49 464
IT         127 156         2 373         6 092         93 037         25 655           CY         2 371         7         7         1 381         976           LV         1 006         63         0         312         630           LV         1 006         63         0         312         630           LV         1 006         63         0         312         630           LU         12 424         32         124         6163         6105           HU         13 424         859         82         5 125         7 357           MT         1 260         0         7         171         1 081           NL         113 640         5 835         3 552         57 563         46 691           AT         29 751         1 364         1 649         14 982         11 756           PL         146 580         3 804         369         109 695         32 712           PT         20 115         2 343         419         7 583         9 771           RO         212 858         1 507         75         16 561         194 716           SI         5 638         282         35 <td>FR</td> <td>336 021</td> <td>14 241</td> <td>7 809</td> <td>200 677</td> <td>113 294</td>	FR	336 021	14 241	7 809	200 677	113 294
N         N	HR	2 585	110	24	403	2 048
LV         1 006         63         0         312         630           LT         4 546         111         2         1 062         3 371           LU         12 424         32         124         6 163         6 105           HU         13 424         859         82         5 125         7 357           MT         1 260         0         7         1711         1 081           NL         113 640         5 835         3 552         57 563         46 691           AT         29 751         1 364         1 649         14 982         11 756           PL         146 580         3 804         369         109 695         32 712           PT         20 115         2 343         419         7 583         9 771           RO         212 858         1 507         75         16 561         194 716           SI         5 638         282         35         3 885         1 436           SK         7 692         255         66         3 559         3 812           FI         105 630         9 847         389         31 999         63 395           SE         110 476         6 261 </td <td>IT</td> <td>127 156</td> <td>2 373</td> <td>6 092</td> <td>93 037</td> <td>25 655</td>	IT	127 156	2 373	6 092	93 037	25 655
LT4 54611121 0623 371LU12 424321246 1636 105HU13 424859825 1257 357MT1 2600717111 081NL113 6405 8353 55257 56346 691AT29 7511 3641 64914 98211 756PL146 5803 804369109 69532 712PT20 1152 3434197 5839 771RO212 8581 5077516 561194 716SI5 638282353 8851 436SK7 692255663 5593 812FI105 6309 84738931 99963 395SE110 4766 2618716 58787 541UK285 6743166 343189 18389 832IS526190340167NO6 2921 2802762 5662 170MK2 106013311 775RS33 15127056832 556	CY	2 371	7	7	1 381	976
LU12 424321246 1636 105HU13 424859825 1257 357MT1 260071711 081NL113 6405 8353 55257 56346 691AT29 7511 3641 64914 98211 756PL146 5803 804369109 69532 712PT20 1152 3434197 5839 771RO212 8581 5077516 561194 716SI5 638282353 8851 436SK7 692255663 5593 812FI105 6309 84738931 99963 395SE110 4766 2618716 58787 541UK285 6743166 343189 18389 832IS526190340167NO6 2921 2802762 5662 170MK2 106013311 775RS33 15127056832 556	LV	1 006	63	0	312	630
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MT         1 260         0         7         171         1 081           NL         113 640         5 835         3 552         57 563         46 691           AT         29 751         1 364         1 649         14 982         11 756           PL         146 580         3 804         369         109 695         32 712           PT         20 115         2 343         419         7 583         9 771           RO         212 858         1 507         75         16 561         194 716           SI         5 638         282         35         3 885         1 436           SK         7 692         255         66         3 559         3 812           FI         105 630         9 847         389         31 999         63 395           SE         110 476         6 261         87         16 587         87 541           UK         285 674         316         6 343         189 183         89 832           IS         526         19         0         340         167           NO         6 292         1280         276         2 566         2 170           MK         2 106         <	LU	12 424	32	124	6 163	6 105
NL         113 640         5 835         3 552         57 563         46 691           AT         29 751         1 364         1 649         14 982         11 756           PL         146 580         3 804         369         109 695         32 712           PT         20 115         2 343         419         7 583         9 771           RO         212 858         1 507         75         16 561         194 716           SI         5 638         282         35         3 885         1 436           SK         7 692         255         66         3 559         3 812           FI         105 630         9 847         389         31 999         63 395           SE         110 476         6 261         87         16 587         87 541           UK         285 674         316         6 343         189 183         89 832           IS         526         19         0         340         167           NO         6 292         1 280         276         2 566         2 170           MK         2 106         0         1         331         1 775           RS         33 151	HU	13 424	859	82	5 125	7 357
AT29 7511 3641 64914 98211 756PL146 5803 804369109 69532 712PT20 1152 3434197 5839 771RO212 8581 5077516 561194 716SI5 638282353 8851 436SK7 692255663 5593 812FI105 6309 84738931 99963 395SE110 4766 2618716 58787 541UK285 6743166 343189 18389 832IS526190340167NO6 2921 2802762 5662 170MK2 106013311 775RS33 15127056832 556	MT	1 260	0	7	171	1 081
PL         146 580         3 804         369         109 695         32 712           PT         20 115         2 343         419         7 583         9 771           RO         212 858         1 507         75         16 561         194 716           SI         5 638         282         35         3 885         1 436           SK         7 692         255         66         3 559         3 812           FI         105 630         9 847         389         31 999         63 395           SE         110 476         6 261         87         16 587         87 541           UK         285 674         316         6 343         189 183         89 832           IS         526         19         0         340         167           NO         6 292         1 280         276         2 566         2 170           MK         2 106         0         1         331         1 775           RS         33 151         27         0         568         32 556	NL	113 640	5 835	3 552	57 563	46 691
PT         20 115         2 343         419         7 583         9 771           RO         212 858         1 507         75         16 561         194 716           SI         5 638         282         35         3 885         1 436           SK         7 692         255         66         3 559         3 812           FI         105 630         9 847         389         31 999         63 395           SE         110 476         6 261         87         16 587         87 541           UK         285 674         316         6 343         189 183         89 832           IS         526         19         0         340         167           NO         6 292         1 280         276         2 566         2 170           MK         2 106         0         1         331         1 775           RS         33 151         27         0         568         32 556	AT	29 751	1 364	1 649	14 982	11 756
RO         212 858         1 507         75         16 561         194 716           SI         5 638         282         35         3 885         1 436           SK         7 692         255         66         3 559         3 812           FI         105 630         9 847         389         31 999         63 395           SE         110 476         6 261         87         16 587         87 541           UK         285 674         316         6 343         189 183         89 832           IS         526         19         0         340         167           NO         6 292         1 280         276         2 566         2 170           MK         2 106         0         1         331         1 775           RS         33 151         27         0         568         32 556	PL	146 580	3 804	369	109 695	32 712
SI         5 638         282         35         3 885         1 436           SK         7 692         255         66         3 559         3 812           FI         105 630         9 847         389         31 999         63 395           SE         110 476         6 261         87         16 587         87 541           UK         285 674         316         6 343         189 183         89 832           IS         526         19         0         340         167           NO         6 292         1 280         276         2 566         2 170           MK         2 106         0         1         331         1 775           RS         33 151         27         0         568         32 556	PT	20 115	2 343	419	7 583	9 771
SK         7 692         255         66         3 559         3 812           FI         105 630         9 847         389         31 999         63 395           SE         110 476         6 261         87         16 587         87 541           UK         285 674         316         6 343         189 183         89 832           IS         526         19         0         340         167           NO         6 292         1 280         276         2 566         2 170           MK         2 106         0         1         331         1 775           RS         33 151         27         0         568         32 556	RO	212 858	1 507	75	16 561	194 716
FI         105 630         9 847         389         31 999         63 395           SE         110 476         6 261         87         16 587         87 541           UK         285 674         316         6 343         189 183         89 832           IS         526         19         0         340         167           NO         6 292         1 280         276         2 566         2 170           MK         2 106         0         1         331         1 775           RS         33 151         27         0         568         32 556	SI	5 638	282	35	3 885	1 436
SE         110 476         6 261         87         16 587         87 541           UK         285 674         316         6 343         189 183         89 832           IS         526         19         0         340         167           NO         6 292         1 280         276         2 566         2 170           MK         2 106         0         1         331         1 775           RS         33 151         27         0         568         32 556	SK	7 692	255	66	3 559	3 812
UK         285 674         316         6 343         189 183         89 832           IS         526         19         0         340         167           NO         6 292         1 280         276         2 566         2 170           MK         2 106         0         1         331         1 775           RS         33 151         27         0         568         32 556	FI	105 630	9 847	389	31 999	63 395
IS         526         19         0         340         167           NO         6 292         1 280         276         2 566         2 170           MK         2 106         0         1         331         1 775           RS         33 151         27         0         568         32 556	SE	110 476	6 261	87	16 587	87 541
NO         6 292         1 280         276         2 566         2 170           MK         2 106         0         1         331         1 775           RS         33 151         27         0         568         32 556	UK	285 674	316	6 343	189 183	89 832
MK         2 106         0         1         331         1 775           RS         33 151         27         0         568         32 556	IS	526	19	0	340	167
<b>RS</b> 33 151 27 0 568 32 556	NO	6 292	1 280	276	2 566	2 170
	МК	2 106	0	1	331	1 775
TR         777 471         126         27         197 216         580 102	RS	33 151	27	0	568	32 556
	TR	777 471	126	27	197 216	580 102

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

# 11.5 Water

Water resources refer to the water available for use in a territory and include surface water (i.e. coastal bays, lakes, rivers, and streams) and groundwater. Freshwater availability in a country is determined by climate conditions, geomorphology, land use and transboundary water flows (i.e. external inflows). Therefore, there are significant differences among countries, with Germany, France, Sweden, Italy and the UK being the Member States with the highest amount of freshwater resources, with a long-term annual average between 164 300 and 188 000 million m<sup>3</sup>.

A significant water-related indicator is the freshwater resources per inhabitant. Among the EU-28 Member States, Croatia, Finland and Sweden recorded the highest freshwater annual resources per inhabitant (around 20 000 m<sup>3</sup> or more). By contrast, relatively low levels per inhabitant (below 3 000 m<sup>3</sup> were recorded in the six most populous Member States (France, Italy, the United Kingdom, Spain, Germany and Poland). Poland, the Czech Republic, Cyprus and Malta present the lowest values with between 200 and 1 600 m<sup>3</sup> per person.



**Figure 11.7:** Freshwater resources per inhabitant — long-term average (<sup>1</sup>)

(1) The minimum period taken into account for the calculation of long term annual averages is 20 years. Population data are as of 1 January 2011; Estonia, not available; Ireland and Turkey, estimates.

Source: Eurostat (online data code: env\_wat\_res)

 Table 11.3: Water resources — long-term annual average (1)

 (1 000 million m<sup>3</sup>)

	Precipitation	Evapotrans- piration	Internal flow	External inflow	Outflow	Freshwater resources
BE	28.9	16.6	12.3	7.6	15.6	19.9
BG	69.8	52.3	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	:	:	:	:	:
IE	80.0	32.5	47.5	3.5	:	51.0
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	500.8	320.8	175.3	11.0	168.0	186.3
HR	65.7	40.1	23.0	:	:	:
IT	241.1	155.8	167.0	8.0	155.0	175.0
CY	3.0	2.7	0.3	-	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	150.4	72.5	0.1	-	:	0.1
NL	31.6	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	2.9	17.9	42.3
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	342.2	169.4	172.5	13.7	186.2	186.2
UK	275.0	117.2	157.9	6.4	164.3	164.3
IS	200.0	30.0	170.0	-	170.0	170.0
NO	470.7	112.0	371.8	12.2	384.0	384.0
CH	61.6	21.6	40.7	12.8	53.5	53.5
MK	19.5	:	:	1.0	6.3	:
RS	56.1	43.3	12.8	162.6	175.4	175.4
TR	503.1	275.7	227.4	6.9	178.0	234.3

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

Source: Eurostat (online data code: env\_wat\_res)

# 11.6 Chemicals management

The production of chemicals is largely concentrated in western Europe: Germany was the largest producer in the EU-27 in 2012, followed by France, Italy and the United Kingdom.

EU-27 production of chemicals increased continuously between 2002 and 2007, rising overall by 9.7% to reach a peak of 362 million tonnes. During the financial and economic crisis, production fell by 24 million tonnes (or 6.6%) in 2008 and by a further 46 million tonnes (or 13.6%) in 2009. The rebound in activity in 2010 more than made up for the losses reported in 2009 and the production of chemicals in the EU-27 continued to expand in 2011 (albeit at a relatively modest pace), reaching 347 million tonnes, which was still some 15 million tonnes below the pre-crisis peak. In 2012, production fell again, down 22 million tonnes, by 6.3% compared with the year before; the level of output in 2012 was 325 million tonnes which was the second lowest level between 2002 and 2012, higher only than the level of production in 2009.

The level of output of environmentally harmful chemicals in 2012 was 174 million tonnes, roughly the same as had been produced in 2002 and lower than in all intervening years except for 2009. The share of environmentally harmful chemicals in total EU-27 chemical output has not changed significantly over the last ten years: their share stood at 53.3% in 2002 and rose modestly to 53.5% in 2012 (reaching a maximum of 55.8% during the intervening years).



Figure 11.8: Total production of chemicals, EU-27, 2002–12 (million tonnes)

Source: Eurostat (online data code: tsdph320)

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In 2012, the level of output for toxic chemicals stood at some 12 million tonnes less than 10 years earlier, around 192 million tonnes. The overall share of toxic chemicals in total EU-27 chemicals production followed a very gradual downward path over the last ten years. From a peak of 61.8% of total chemicals production in 2002, the share of toxic chemicals fell (despite a temporary rise in 2009) to 60.5% in 2010 before falling substantially to 58.5% in 2011 and rising up to 59.1% in 2012.



Figure 11.9: Production of environmentally harmful chemicals, EU-27, 2002–12 (<sup>1</sup>)

(1) The different classes of chemicals are ranked according to their environmental impact from the most harmful (bottom class) up to the least harmful (top class).

Source: Eurostat (online data code: ten00011)



**Figure 11.10:** Production of toxic chemicals, EU-27, 2002–12 (<sup>1</sup>) (million tonnes)

(1) The different classes of chemicals are ranked according to their toxicity from the most dangerous (bottom class) up to the least dangerous (top class).

Source: Eurostat (online data code: tsdph320)

# 11.7 Environmental protection expenditure

Clean air, clean water, healthy ecosystems and fertile soils are vital for human life, and it is therefore not surprising to find that environmental protection expenditure plays a prominent role in a wide range of EU policy areas.

Specialised producers of environmental services (public and private enterprises specialised in environmental services such as waste collection) accounted for the highest level of environmental protection expenditure in the EU-28 in 2011, some EUR 146 909 million, which equated to just over half (51.7%) of the total level of expenditure. The remainder was split between expenditure from the public sector (EUR 86 750 million) and that from industry (EUR 50 587 million).

The relative weight of environmental protection expenditure by specialized producers (compared with gross domestic product (GDP)) rose by 0.2 percentage points between 2001 and 2011. By contrast, the relative importance of public sector environmental protection expenditure (in relation to GDP) was more or less stable in the same period, while the level of expenditure made by the industrial sector fell in relation to GDP between 2001 and 2003, before rose through until 2009, and then fell until 2011. In most European countries, public sector environmental protection expenditure accounted for between 0.3 % and 1.4 % of GDP in 2011.



**Figure 11.11:** Total environmental protection expenditure, EU-28, 2001–11 (<sup>1</sup>) (% of GDP)

(1) Estimates.

Source: Eurostat (online data code: env\_ac\_exp2)

**Figure 11.12:** Public sector environmental protection expenditure, 2011 (% of GDP)



Source: Eurostat (online data code: env\_ac\_exp2)

### 11.8 Environmental taxes

An environmental tax is one whose tax base is a physical unit (or a proxy of it) of something that has a proven, specific negative impact on the environment. European statistics distinguish four different types of environmental taxes relating to: energy, transport, pollution and resources; note that value added tax (VAT) is excluded from the definitions employed. The total revenue from environmental taxes in the EU-28 in 2012 was equal to EUR 311 683 million; this figure equates to 2.4% of GDP and to 6.1% of the total revenues derived from all taxes and social contributions.

Energy taxes (which include taxes on transport fuels) represented, by far, the highest share of overall environmental tax revenue — accounting for 75% of the EU-28 total in 2012. These taxes were particularly prominent in Lithuania, Luxembourg and the Czech Republic, where they accounted for upwards of 90% of environmental tax revenues.

Transport taxes made the second most important contribution to total revenues from environmental taxes, some 21% of the EU-28 total in 2012. However, their relative significance was considerably higher in Malta, Denmark, and Ireland, accounting for a share between 43% and 36% of all revenues from environmental taxes.

Pollution and resource taxes represented a relatively small share (4%) of total environmental tax revenues in the EU-28 in 2012. This pattern was repeated across most of the EU Member States, as only Croatia (20%) and the Netherlands (14%) reported that much larger shares of their total environmental tax revenue were raised from taxes on pollution and resources.



Figure 11.13: Environmental tax revenue by type of tax, EU-28, 2012



Figure 11.14: Environmental taxes by tax category, 2012 (% 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. Figures for the Member States show that areas protected under the Habitats Directive range between 31% of the total terrestrial area of Slovenia and 30% of that in Bulgaria to less than 10% in France, the Netherlands, Denmark or the United Kingdom. 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.

Between 1990 and 2000 there was a general downward trend in the abundance of both common farmland and common forest species of birds. This downward path continued for farmland species, with a relatively steep decline (– 26% between 1990 and 2011) in the number of common farmland birds; much of this development may be attributed to changes in land use and agricultural practices. While the reduction in numbers of common forest birds declined by 20% between 1990 and 2000 across the EU, recent years have seen a recovery in forest bird numbers.

**Figure 11.15:** Common bird indices, EU, 1990–2011 (<sup>1</sup>) (aggregated index of population estimates of selected groups of breeding bird species, 1990 = 100)



(1) Estimates. 'All common species' covers information on 163 different bird species. 'Common farmland species' covers 39 bird species. 'Common forest species' covers 33 bird species. Coverage has increased from nine to twenty-two EU Member States over the period 1990 to 2010, with three more countries covered as of the reference year 2011. Data from Norway and Switzerland are also available, but are excluded from the EU indicators. It should be noted that countries joined the scheme at different times that are in no way linked to their joining the EU.

Source: EBCC/RSPB/BirdLife/Statistics Netherlands, Eurostat (online data code: env\_ bio2)



Figure 11.16: Protected areas for biodiversity — sufficiency of sites, 2010 (<sup>1</sup>)

(1) Croatia: not available.

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



# Energy

A competitive, reliable and sustainable energy sector is essential for all advanced economies. The energy sector has been under the spotlight in recent years due to a number of issues that have pushed energy to the top of national and European Union (EU) political agendas, these include:

- the volatility of oil and gas prices;
- interruptions to energy supplies from non-member countries;
- blackouts aggravated by inefficient connections between national electricity networks;
- the difficulties of market access for suppliers in relation to gas and electricity markets;
- concerns over the production of nuclear energy;
- increased attention to anthropogenic (human-induced) effects on climate change, in particular, increased greenhouse gas emissions.

The European Commission is looking at cost-efficient ways to make the European economy more climate-friendly and less energy-consuming; energy efficiency is expected to be a key driver of this transition. With its Roadmap for moving to a competitive low-carbon economy in 2050, the European Commission has looked beyond short-term objectives and set out a cost-effective pathway for achieving much deeper emission cuts by the middle of the century: by moving to a low-carbon society, the EU could be using around 30% less energy in 2050 than it did in 2005.

# 12.1 Energy production and imports

Primary energy production in the EU-28 amounted to 794.3 million tonnes of oil equivalent (toe) in 2012. This continued the generally downward trend observed in recent years, with 2010 the main exception as production rebounded after a relatively strong fall in 2009 that coincided with the financial and economic crisis. When viewed over a longer period, the production of primary energy in the EU-28 was 15.7% lower in 2012 than it had been a decade earlier.

Primary energy production in the EU-28 in 2012 was spread across a range of different energy sources, the most important of which was nuclear energy (28.7% of the total). Around more than one fifth of the EU-28's total production of primary nergy was accounted for by renewable energy sources (22.3%) and solid fuels (20.9%, largely coal), while the share for natural gas was somewhat lower (16.8%); crude oil (8.9%) made up the remainder of the total. The growth of primary production from renewable energy sources exceeded that of all the other energy types. Growth in primary production from renewables was relatively stable most years from 2002 to 2012, with a slight dip in 2011. Over this 10-year period the production of renewables increased in total by 81.3%. By contrast, the production levels for the other primary sources of energy generally fell over this period.



**Figure 12.1:** Production of primary energy, EU-28, 2012 (% of total, based on tonnes of oil equivalent)

Source: Eurostat (online data codes: ten00080, ten00077, ten00079, ten00078, ten00081 and nrg\_107a)
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The EU-28's imports of primary energy exceeded exports by some 922.8 million toe in 2012. The largest net importers of primary energy were generally the most populous Member States, with the exception of the United Kingdom and Poland (where indigenous reserves of oil/natural gas and coal remain). Since 2004 the only net exporter of primary energy among the EU Member States has been Denmark.

	Total production Share of total production (%)					.)
	of primary energy	Nuclear energy	Solid fuels	Natural gas	Crude oil	Renewable energy
EU-28	794.3	28.7	20.9	16.8	8.9	22.3
BE	15.7	66.3	0.0	0.0	0.0	18.0
BG	11.7	35.0	48.0	2.6	0.2	14.0
CZ	32.0	24.5	63.0	0.7	0.5	10.2
DK	18.9	0.0	0.0	27.5	53.9	16.5
DE	123.5	20.8	38.5	7.7	2.1	26.6
EE	5.1	0.0	79.3	0.0	0.0	20.7
IE	1.3	0.0	24.5	14.3	0.0	57.8
EL	10.4	0.0	77.1	0.1	0.9	21.8
ES	33.2	47.8	7.4	0.2	0.4	43.7
FR	133.3	82.4	0.0	0.3	0.6	15.6
HR	3.5	0.0	0.0	47.3	16.1	34.2
IT	31.8	0.0	0.2	22.2	17.3	56.3
CY	0.1	0.0	0.0	0.0	0.0	100.0
LV	2.3	0.0	0.1	0.0	0.0	99.8
LT	1.3	0.0	1.3	0.0	7.9	90.8
LU	0.1	0.0	0.0	0.0	0.0	74.5
HU	10.5	38.8	15.3	16.8	6.0	18.7
MT	0.0	0.0	0.0	0.0	0.0	100.0
NL	64.9	1.6	0.0	88.6	1.7	5.8
AT	12.8	0.0	0.0	12.2	6.5	75.3
PL	71.1	0.0	80.9	5.4	0.9	11.9
PT	4.6	0.0	0.0	0.0	0.0	94.8
RO	27.4	10.8	23.2	31.7	14.5	19.2
SI	3.5	40.3	30.9	0.0	0.0	27.9
SK	6.2	64.9	9.1	2.0	0.2	23.0
FI	17.1	34.7	5.8	0.0	0.0	58.1
SE	35.7	46.3	0.4	0.0	0.0	51.8
UK	116.4	15.6	8.2	30.1	37.0	6.1

**Table 12.1:** Primary energy production, 2012(million tonnes of oil equivalent)

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

# 12.2 Consumption of energy

Gross inland consumption of primary energy within the EU-28 in 2012 was 1 683 million tonnes of oil equivalent (toe). Having remained relatively unchanged during the period from 2003 to 2008, gross inland consumption of primary energy decreased by 5.8% in 2009; much of this change can be attributed to a lower level of economic activity as a result of the financial and economic crisis, rather than a structural shift in the pattern of energy consumption. Indeed, in 2010 there was a 3.8% rebound in the level of gross inland consumption of primary energy in the EU-28, although this was followed by a similarly large fall (3.4%) in 2011. After these three years of relatively large changes, 2012 saw a more modest rate of change as consumption fell by 1.0%. The gross inland consumption of each Member State depends, to a large degree, on the structure of its energy system, the availability of natural resources for primary energy production, and the structure and development of each economy; this is true not only for conventional fuels and nuclear power, but also for renewable energy sources.

The lowest levels of energy intensity — a measure of an economy's energy efficiency — were recorded for Ireland, Denmark, the United Kingdom and Italy in 2012, while the most energy–intensive Member States were Bulgaria and Estonia. It should be noted that the economic structure of an economy plays an important role in determining energy intensity, as service based economies will, a priori, display relatively low energy intensity rates, while economies with energy intensive industries (such as iron and steel production) may have a considerable proportion of their economic activity within industrial sectors, thus leading to higher energy intensity.



Figure 12.2: Gross inland consumption, EU-28, 2002–12 (% of total consumption)

Source: Eurostat (online data code: nrg\_100a)

# **Table 12.2:** Gross inland consumption of primary energy andenergy intensity, 2002 and 2012

	primary (million to	Gross inland consumption of primary energy (million tonnes of oil equivalent)		ntensity uivalent per 0 of GDP)
	2002	2012	2002	2012
EU-28	1 760.2	1 683.5	168.2	143.2
BE	56.2	56.3	196.1	172.2
BG	18.7	18.2	962.9	669.9
CZ	42.6	42.8	472.3	355.4
DK	19.9	18.1	101.2	87.2
DE	344.5	319.5	157.1	129.2
EE	5.0	6.1	559.3	481.0
IE	15.3	13.8	107.6	82.8
EL	29.6	27.7	173.3	165.7
ES	130.5	127.3	158.3	136.4
FR	266.9	258.4	163.6	142.9
HR	8.3	8.1	262.2	225.6
IT	175.6	163.2	125.5	117.3
CY	2.5	2.5	199.1	167.0
LV	4.1	4.5	410.6	328.6
LT	8.7	7.1	528.8	291.6
LU	4.0	4.5	147.8	133.8
HU	25.9	23.6	330.1	268.7
MT	0.8	0.8	174.2	147.7
NL	78.0	81.8	159.0	149.4
AT	30.8	33.7	133.1	123.9
PL	88.6	98.0	411.1	298.7
PT	26.6	22.2	174.7	146.5
RO	38.4	35.4	572.8	378.8
SI	6.9	7.0	267.2	227.7
SK	18.9	16.7	575.3	329.3
FI	35.0	34.1	242.9	204.0
SE	51.4	49.8	189.6	148.2
UK	226.7	202.3	134.4	105.1

Source: Eurostat (online data codes: nrg\_100a and tsdec360)



# 12.3 Electricity production, consumption and market overview

Total net electricity generation in the EU-28 was 3.13 million gigawatt hours (GWh) in 2012 — which was almost the same level (-0.1%) compared with the year before. This was the first year of relatively stable output after three years of historically quite large changes: a 5.0% fall in electricity generation in 2009 due to the financial and economic crisis, a 4.7% rebound the year after, followed by a further reduction of 2.2% in 2011. As such, the level of net electricity generation in 2012 remained 2.8% below its peak level of 2008 (3.22 million GWh).

More than one quarter of the net electricity generated in the EU-28 in 2012 came from nuclear power plants (26.7%) while almost double this share (52.6%) came from power stations using combustible fuels (such as natural gas, coal and oil).

During the ten-year period from 2002 to 2012, the consumption of electricity by households rose in the EU-28 by 10.0%. Household electricity consumption fell in four of the Member States — Denmark, Sweden, Slovakia, and Belgium — in the latter the reduction in electricity consumption by households was almost one quarter (23.9%).



Figure 12.3: Net electricity generation, EU-28, 2012 (1) (% of total, based on GWh)

#### Table 12.3: Electricity, 2002, 2011 and 2012

	Net electricity generation (1 000 GWh)		Market share of the largest generator in the electricity market (% of total generation)	Electricity consumption by households (2000 = 100)	
	2002	2012	2011	2012	
EU-28	2 975.8	3125.6	:	110.0	
BE	78.1	79.8	70.7	76.1	
BG	38.6	42.9	:	116.5	
CZ	70.4	81.1	69.4	103.3	
DK	37.3	29.2	42.0	98.1	
DE (1)	549.3	592.7	28.4	100.4	
EE	7.6	10.5	87.0	123.5	
IE	23.9	26.5	38.0	123.4	
EL (1)	50.6	53.7	85.1	120.8	
ES	232.7	286.6	23.5	148.3	
FR	534.9	539.8	86.0	119.0	
HR	11.8	10.2	83.0	108.6	
IT	270.8	287.8	27.0	110.3	
CY	3.6	4.5	100.0	144.6	
LV	3.5	5.7	86.0	134.9	
LT	16.1	4.7	24.9	145.9	
LU	3.7	3.8	82.0	104.7	
HU	33.5	32.3	44.1	101.7	
MT	1.9	2.2	100.0	107.1	
NL	92.1	98.6	:	109.7	
AT	59.9	70.9	55.3	105.2	
PL	131.4	147.6	17.8	130.7	
PT	44.4	45.3	44.9	113.3	
RO	51.1	53.7	26.0	154.9	
SI	13.7	14.7	52.4	117.5	
SK	30.0	26.1	77.7	91.8	
FI	71.6	67.7	25.6	111.5	
SE	143.2	162.8	41.0	93.8	
UK	370.1	345.8	45.6	100.1	

(1) Market share of the largest generator in the electricity market, 2010 data.

Source: Eurostat (online data codes:: nrg\_105a, ten00119 and tsdpc310)

# 12.4 Renewable energy

Renewable energy sources accounted for an 11.0% share of the EU-28's gross inland energy consumption in 2012. Over one third of the energy consumed in Sweden (37.2%) and Latvia (36.4%) was derived from renewable in 2012, while the relative importance of renewables was also high in Austria (30.1%), Finland (29.2%) and Denmark (23.3%).

The latest information available for 2012 shows that electricity generated from renewable energy sources contributed almost one quarter (23.5%) of the EU-28's gross electricity consumption. The growth in electricity generated from renewable energy sources during the period 2002 to 2012 largely reflects an expansion in three renewable energy sources, namely, wind turbines, solar power and biomass. Although hydropower remained the single largest source for renewable electricity generation in the EU-28 in 2012 (54.1% of the total), the amount of electricity generated in this way in 2012 was relatively similar to that a decade earlier, rising by just 3.9% overall. By contrast, the quantity of electricity generated from biomass more than doubled, while that from wind turbines increased more than fivefold. The relative shares of wind turbines and biomass in the total quantity of electricity generated from renewable energy sources rose to 30.4% and 4.1% respectively in 2012. The growth in electricity from solar power was even more dramatic, rising from just 0.3 TWh in 2002 to reach a level of 71.0 TWh in 2012, some 252 times as high as 10 years earlier. Over this 10-year period, the contribution of solar power to all electricity generated from renewable energy sources rose from 0.1 % to 10.5 %.

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Figure 12.4: Electricity generated from renewable energy sources, EU-28, 2002–12 (% of total, based on GWh)

(1) 2002 and 2003: not available.

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

	Primary production (1 000 toe)			wables in gross onsumption (%)
	2002	2012	2012	2020 (1)
EU-28	97 754.9	177 269.3	14.1	20.0
EA-18	67 352.8	125 602.6	:	:
BE	575.8	2 815.8	6.8	13.0
BG	832.1	1 638.1	16.3	16.0
CZ	1 594.1	3 247.1	11.2	13.0
DK	1 990.5	3 113.6	26.0	13.0
DE	10 782.7	32 912.7	12.4	18.0
EE	567.9	1 056.3	25.2	25.0
IE	260.9	744.1	7.2	16.0
EL (2)	1 392.9	2 274.5	15.1	18.0
ES	6 894.1	14 487.7	14.3	20.0
FR	15 025.2	20 766.0	13.4	23.0
HR	757.3	1 181.2	16.8	20.0
IT	9 249.1	17 894.2	13.5	17.0
CY	44.7	106.2	6.8	13.0
LV (2)	1 575.3	2 331.4	35.8	40.0
LT	773.0	1 197.9	21.7	23.0
LU	37.9	93.7	3.1	11.0
HU (²)	877.2	1 965.4	9.6	14.7
MT (²)	0.8	6.2	1.4	10.0
NL	1 618.1	3 778.6	4.5	16.0
AT	6 490.5	9 623.2	32.1	34.0
PL	4 140.6	8 478.0	11.0	15.5
PT	3 551.9	4 358.3	24.6	31.0
RO	3 748.5	5 242.2	22.9	24.0
SI	715.3	989.5	20.2	25.0
SK	744.1	1 433.5	10.4	14.0
FI	7 825.6	9 930.7	34.3	38.0
SE	13 123.2	18 508.1	51.0	49.0
UK	2 565.6	7 095.0	4.2	15.0

**Table 12.4:** Primary production and consumption ofrenewable energy, 2002, 2012 and 2020

(1) Legally binding targets for 2020.

(2) Share of renewables in gross final energy consumption, 2012: estimate.

Source: Eurostat (online data codes: ten00081, nrg\_107a and t2020\_31)



# 12.5 Energy prices

The price and reliability of energy supplies, electricity in particular, are key elements in a country's energy supply strategy. Electricity prices are of particular importance for international competitiveness, as electricity usually represents a significant proportion of total energy costs for industrial and service-providing businesses. The price of energy depends on a range of different supply and demand conditions, including the geopolitical situation, import diversification, network costs, environmental protection costs, severe weather conditions, and levels of excise and taxation; note that the prices presented generally include taxes, levies and value added tax (VAT) for household consumers but exclude (deductible) VAT for industrial/business users.

Electricity prices for a medium-sized household were highest during the first half of 2013 in Denmark, Germany and Cyprus. The lowest electricity prices for household consumers were found in Bulgaria, Romania, Estonia, Lithuania, Croatia, Latvia and Hungary. The average price of electricity for household consumers in the EU-28 (the prices for each Member State are weighted according to their consumption by the household sector in 2012) was EUR 0.199 per kWh in the first half of 2013.

In the first half of 2013, the price of natural gas to a medium-sized household within the EU-28 was EUR 0.065 per kWh. Natural gas prices were highest in Sweden (EUR 0.123 per kWh) and Denmark (EUR 0.113 per kWh). The lowest natural gas prices for households were found in Romania (EUR 0.029 per kWh), while Poland, Croatia and Hungary all reported prices below EUR 0.05 per kWh. The price of natural gas for households in the most expensive country — Sweden — was 4.3 times as high as the price charged in the cheapest country — Romania.





**Figure 12.5:** Half-yearly electricity and gas prices, EU-28, first half of year, 2013

(EUR per kWh)

- (1) Annual consumption: 2 500 kWh < consumption < 5 000 kWh.
- (2) Annual consumption: 500 MWh < consumption < 2 000 MWh. Excluding VAT.
- (?) Annual consumption: 20 GJ < consumption < 200 GJ. Finland: not available. Cyprus and Malta: not applicable.
- (\*) Annual consumption: 10 000 GJ < consumption < 100 000 GJ. Excluding VAT. Cyprus and Malta: not applicable.

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

# Table 12.5: Half-yearly electricity and gas prices, first half ofyear, 2013(EUR per kWh)

	Electricit	y prices	Gas p	rices
	Households (1)	Industry (²)	Households (3)	Industry (4)
EU-28	0.199	0.120	0.065	0.041
BE	0.217	0.108	0.066	0.040
BG	0.092	0.081	0.051	0.036
CZ	0.153	0.102	0.064	0.034
DK	0.300	0.103	0.113	0.049
DE	0.292	0.143	0.066	0.048
EE	0.135	0.097	0.052	0.038
IE	0.230	0.136	0.065	0.042
EL	0.156	0.125	0.077	0.053
ES	0.223	0.122	0.073	0.039
FR	0.147	0.096	0.068	0.041
HR	0.137	0.095	0.047	0.046
IT	0.229	0.168	0.083	0.042
CY	0.276	0.208	-	-
LV	0.138	0.113	0.051	0.038
LT	0.137	0.123	0.060	0.044
LU	0.167	0.098	0.062	0.051
HU	0.140	0.096	0.043	0.041
MT	0.170	0.180	-	-
NL	0.192	0.096	0.081	0.040
AT	0.208	0.111	0.077	0.045
PL	0.148	0.093	0.047	0.036
PT	0.208	0.115	0.084	0.042
RO	0.132	0.090	0.029	0.028
SI	0.161	0.097	0.067	0.049
SK	0.170	0.129	0.050	0.037
FI	0.158	0.075	:	0.049
SE	0.210	0.080	0.123	0.055
UK	0.174	0.118	0.053	0.035
IS	0.105	:	:	:
NO	0.191	0.097	:	:
ME	0.102	0.073	:	:
MK	0.081	0.080	:	0.041
RS	0.056	0.057	0.041	0.038
TR	0.150	0.093	0.041	0.031

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

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

(3) Annual consumption: 20 GJ < consumption < 200 GJ.

(4) Annual consumption: 10 000 GJ < consumption < 100 000 GJ; excluding VAT.

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



### Transport

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, and stimulate growth and employment.

Freight transport is the focus of many of the initiatives, including road freight, multimodal transport of goods (e-freight), cargo security, transport of dangerous goods and multimodal freight corridors for sustainable transport networks. Other initiatives are specific to passenger transport, for example, attaining high levels of passenger security with minimum inconvenience or passengers' rights.

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 European Union (EU) Member States to report statistical data, as well as voluntary agreements to supply additional data.

# 13.1 Passenger transport

The most dominant mode of passenger transport is that of the car, fuelled by a desire to have greater mobility and flexibility. Passenger cars accounted for 84.1% of inland passenger transport in the EU-27 in 2011, with buses and coaches (8.8%) and railways, trams and metros (7.1%) both accounting for less than a tenth of all traffic (as measured by the number of inland passenger-kilometres (pkm) travelled by each mode).

London Heathrow was the busiest airport in the EU-27 in terms of passenger numbers in 2012 (70.0 million), followed — at some distance — by Paris' Charles de Gaulle airport (61.4 million), Frankfurt airport (57.3 million), Amsterdam's Schiphol airport (51.0 million) and then Madrid's Barajas airport (45.1 million passengers). Some 832 150 million passengers were carried by air in 2012 in the EU-28. This represented a small increase (0.7%) compared with 2011, following on from growth of 5.7% in 2011 and 3.5% in 2010. The number of air passengers carried in the EU-28 in 2012 was 3.7% above the pre-financial and economic crisis peak reached in 2008.

Ports in the EU-28 handled more than 412 million maritime passengers in 2011; this marked the third successive annual decline in passenger numbers, down 2.9% compared with 2010, after falls of 1.2% in 2010 and 2.1% in 2009. Italian and Greek ports each handled more than twice as many passengers in 2011 than in any other Member State (accounting for 19.9% and 19.2% of the EU-28 total respectively).



**Figure 13.1:** Top 15 airports, passengers carried (embarked and disembarked), EU-28, 2012

Source: Eurostat (online data code: avia\_paoa)

	Air passen	Air passengers, 2012 ( <sup>2</sup> )		sengers, 2011 (²)
	(1 000)	(passengers per inhabitant)	(1 000)	(passengers per inhabitant)
EU-28	832 150	1.6	412 349	0.8
EU-27	826 728	1.6	385 402	0.8
BE	25 914	2.3	824	0.1
BG	6 819	0.9	1	0.0
CZ	11 742	1.1	-	-
DK	26 528	4.8	41 527	7.5
DE	178 591	2.2	29 233	0.4
EE	2 202	1.7	11 840	8.9
IE	23 594	5.1	2 906	0.6
EL	31 576	2.8	79 183	7.1
ES	159 771	3.4	21 868	0.5
FR	135 006	2.1	25 552	0.4
HR	5 423	1.3	26 947	6.1
IT	116 067	1.9	81 895	1.4
CY	7 328	8.5	92	0.1
LV	4 755	2.3	786	0.4
LT	3 167	1.1	281	0.1
LU	1 894	3.6	-	-
HU	8 430	0.8	-	-
MT	3 650	8.7	8 250	19.9
NL	55 680	3.3	1 770	0.1
AT	25 966	3.1	-	-
PL	21 791	0.6	2 528	0.1
PT	28 186	2.7	659	0.1
RO	9 674	0.5	0	0.0
SI	1 168	0.6	36	0.0
SK	1 563	0.3	-	-
FI	16 459	3.0	18 074	3.4
SE	30 351	3.2	30 094	3.2
UK	203 067	3.2	28 002	0.4
IS	2 741	8.6	:	:
NO	34 590	6.9	6 130	1.2
СН	43 236	5.4	-	-
TR	:	:	1 842	0.0

#### Table 13.1: Air and sea passenger transport, 2011 and 2012 (1)

(1) 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' (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.

(2) Total passengers carried (arrivals and departures for national and international).

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

# 13.2 Freight transport

Total inland freight transport in the EU-28 was estimated to be close to 2 100 000 million tonne-kilometres (tkm) in 2012; a little over three quarters (75.5%) of this freight total was transported over roads in 2011. The share of freight that was transported inland by road was more than four times as high as the share transported by rail (18.4%), while the remainder (6.2%) of the freight transported in the EU-27 in 2011 was carried along inland waterways.

About 14.4 million tonnes of air freight (both national and international) was carried through airports within the EU-28 in 2012. Some of the smaller EU Member States are relatively specialized in air freight, notably all of the Benelux countries, and in particular, Luxembourg (which ranked as the seventh largest air freight transporter among the EU Member States).



(<sup>1</sup>) Luxembourg: 2011; the United Kingdom: 2010; Malta: not available. *Source:* Eurostat (online data code: road\_go\_ta\_tott)

Maritime ports in the EU-27 handled 3 728 million tonnes of seaborne goods in 2011, which marked an increase of 1.6% when compared with 2010. Sea ports in the United Kingdom and Italy handled in excess of 500 million tonnes of goods in 2011, while in the Netherlands the level was slightly lower. Relative to population size, the quantity of goods handled in the maritime ports of Estonia, Latvia, the Netherlands, Finland, Belgium and Sweden was high.

	Inland freight transport, 2012			Air freight	Gross weight of
	Road (1)	Rail (²)	Inland waterways (³)	transport, 2012	seaborn goods handled in ports, 2011
		(million tk	m)	(1 000 tonnes)	(million tonnes)
EU-28	1 519 624	393 827	141 531	:	233
BE	25 008	7 593	9 251	964	:
BG	24 372	2 907	5 349	19	93
CZ	51 228	14 267	38	59	296
DK	16 679	2 239	-	166	48
DE	307 009	110 065	58 488	4 218	45
EE	5 791	5 129	:	24	135
IE	9 976	91	-	127	398
EL	20 839	614	-	70	322
ES	199 209	9 957	-	594	22
FR	172 060	32 552	8 905	1 810	500
HR	8 6 4 9	2 332	772	7	7
IT	124 015	20 244	:	808	67
CY	896	-	-	28	43
LV	12 178	21 867	:	31	:
LT	23 4 4 9	14 172	:	14	:
LU	8 835	288	290	615	6
HU	33 736	9 118	1 982	62	492
MT	:	-	-	16	:
NL	68 991	6 157	46 650	1 564	58
AT	26 089	20 345	2 191	198	68
PL	222 332	48 903	131	75	39
PT	32 935	2 322	-	118	16
RO	29 662	13 472	12 520	29	:
SI	15 888	3 470	-	8	115
SK	29 693	7 591	986	21	182
FI	25 460	9 275	:	196	519
SE	33 481	22 043	-	141	:
UK	146 685	21 444	:	2 428	199
LI	280	10	-	40	:
NO	20 171	3 574	-	78	:
СН	12 957	11 526	-	365	:
ME	:	73	:	:	359
MK	:	423	-	:	:
TR	:	11 223	-	:	:

#### Table 13.2: Freight transport, 2011 and 2012

(1) Luxembourg: 2011; the United Kingdom: 2010; road transport is based on movements all over the world of vehicles registered in the reporting country.

(2) Belgium, Luxembourg, Hungary, Austria, Portugal, Norway and Switzerland: 2011; EU-28, EU-27, Denmark and Greece: 2010.

(3) EU-28, EU-27 and Belgium: 2011.

*Source*: Eurostat (online data codes: road\_go\_ta\_tott, rail\_go\_typeall, avia\_gooc, ttr00011 and mar\_go\_aa) and Directorate-General for Mobility and Transport

# 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-28	European Union of 28 Member States
EU-27	European Union of 27 Member States
EU	European Union
EA-18	Euro area of 18 Member States
EA-17	Euro area of 17 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
HR	Croatia
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
MK	the former Yugoslav Republic of Macedonia ( <sup>1</sup> )
RS	Serbia
TR	Turkey
BR	Brazil
CA	Canada
CN	China
IN	India
ID	Indonesia
JP	Japan
RU	Russia
US	United States
USA	United States of America

In this publication like in the other Eurostat publications, the geographical descriptions and the use of the terms 'southern', 'northern', 'central', 'eastern' and 'western' Europe are not meant as political categorisations. The references in the text are made in relation to the geographical location of one group of Member States of the European Union in comparison to another group of Member States.

<sup>(1)</sup> The name of the former Yugoslav Republic of Macedonia is shown in tables and figures in this publication as 'MK' or 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.

# Units of measurement

%	per cent
CHF	Swiss franc
cm <sup>3</sup>	cubic centimetre
EUR	euro
FTE	full-time equivalent(s)
GJ	gigajoule
GT	gross tonnage
GWh	gigawatt-hour
ha	hectare
JPY	Japanese yen
kg	kilogram
km <sup>2</sup>	square kilometre
kW	kilowatt
kWh	kilowatt hour
m <sup>3</sup>	cubic metre
mm	millimetre
MWh	megawatt-hour
p/st	piece/unit
pkm	passenger-kilometre
PPS	purchasing power standard
tkm	tonne-kilometre
toe	tonne of oil equivalent
TWh	terawatt hour
USD	United States dollar

### Other abbreviations

act.	activities
CAP	common agricultural policy
$CH_4$	methane
con.	(air) conditioning
CO <sub>2</sub>	carbon dioxide
CPI	consumer price index
EAP	environment action programme
ECB	European Central Bank
EEA	European Environment Agency
EFTA	European free trade association
EHIS	European health interview survey
EMU	economic and monetary union
EPO	European Patent Office
ERM	exchange rate mechanism
ESA	European system of accounts
ESS	European Statistical System
ET	education and training
EU	European Union
Eurostat	statistical office of the European Union
EU-SILC	EU statistics on income and living conditions
FDI	foreign direct investment
FP7	seventh framework programme for research
	and development
FSS	farm structure survey
GDP	gross domestic product
GERD	gross domestic expenditure on R & D
govt.	government
h'hold	household
HICP	harmonised index of consumer prices
HIV	human immunodeficiency virus
HS	harmonised system
ICD	International classification of diseases
ICT	information and communication technology
IMF	International Monetary Fund
ISCED	international standard classification of
	education
JAF	Joint Assessment Framework
LFS	labour force survey
LMP	labour market policy
N <sub>2</sub> O	nitrous oxide
NĂCE	statistical classification of economic
	activities within the European Community
n.e.c.	not elsewhere classified

#### Annexes

NUTS	classification of territorial units for statistics
OECD	(NUTS levels 1, 2 and 3 regions)
UECD	Organisation for Economic Co-operation and Development
PDF	portable document format
PEEI(s)	Principal European Economic Indicator(s)
()	packaged for retail sale
p.r.s. R & D	research and development
REACH	registration, evaluation, authorisation and restriction of chemical substances
recreation.	recreational
resp.	(no) response
Rev.	revision
SDS	sustainable development strategy
serv.	services
SGP	stability and growth pact
SME	small and medium-sized enterprise
SMS	short message service
SPE	special purpose entities
STS	short-term (business) statistics
TGM	tables, graphs and maps (software for
	viewing data)
UAA	utilised agricultural area
UN	United Nations
UNESCO	United Nations educational, scientific and
0112000	cultural organisation
USB	universal serial bus
VAT	value added tax
WTO	World Trade Organisation
3G	third generation
JG	uniu generation

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