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Key figures on Europe

2015 edition

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Foreword

Our statistical book *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 living conditions vary between EU Member States or how the economy is performing compared with other large countries, such as Brazil, China, Japan or the United 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, in the continuously updated online publication *Europe in figures – Eurostat yearbook*. 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 statistical book, 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.

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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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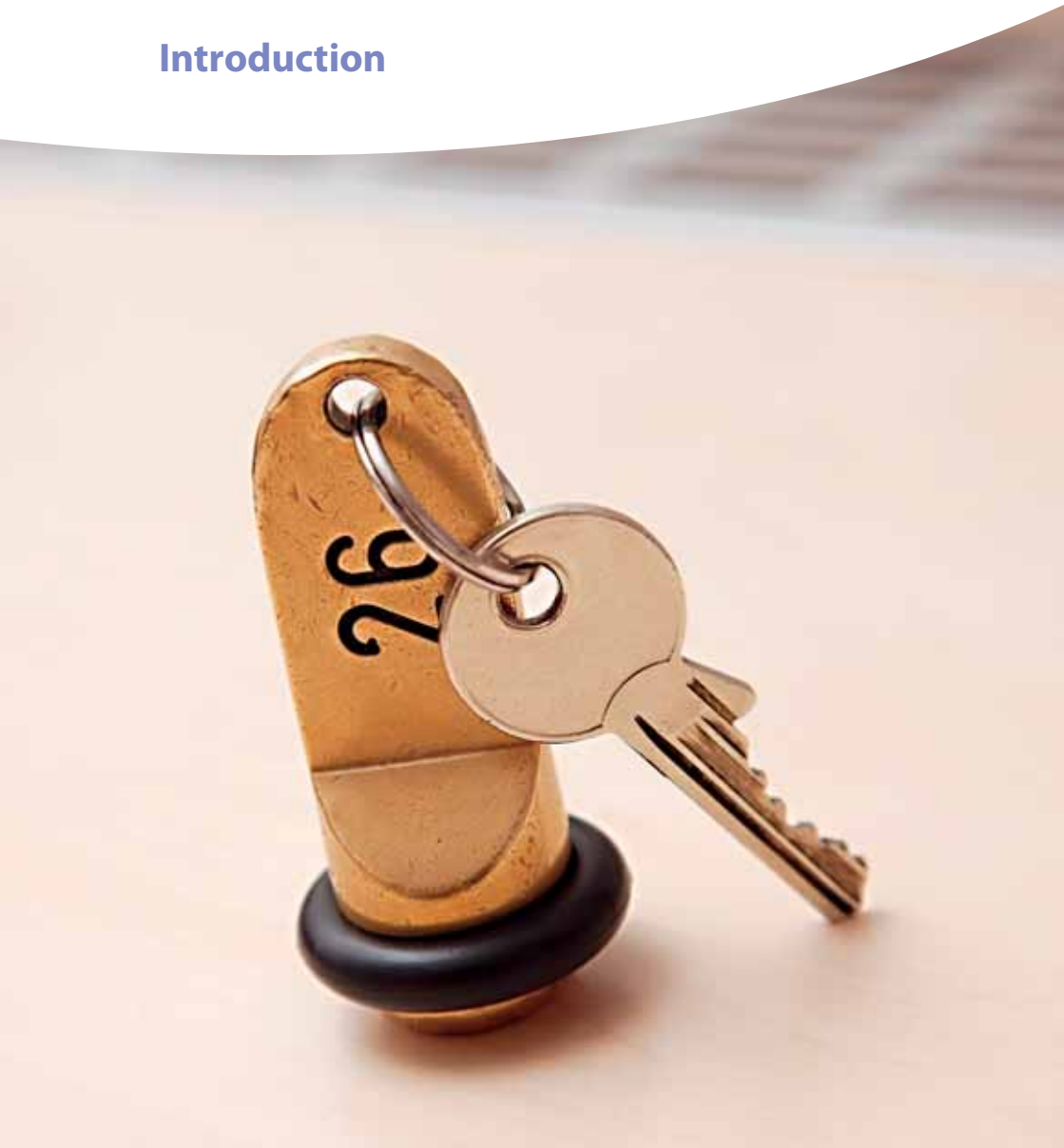
Introduction



The Eurostat statistical book

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 in http://ec.europa.eu/eurostat/statistics-explained/index.php/Europe_in_figures_-_Eurostat_yearbook).

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. *Key figures on Europe* has been conceived as a publication that provides a balanced set of indicators, with a broad cross-section of information.

Structure of the publication

Key figures on Europe 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);
- access to European statistics;
- the link between statistics and EU policies and high-priority initiatives.

The main chapters of this statistical book treat 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 and services; innovation and information society; environment; energy; and transport.

Each of the main chapters contains data and/or background information relating to a very wide range of European statistics. A great deal 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 statistical book are the ones analysed in the continuously updated online publication *Europe in figures — Eurostat yearbook*. The accompanying text was drafted in August 2015.

Spatial data coverage

This statistical book usually presents information for the EU-28 (the 28 Member States of the EU), the euro area (usually based on 19 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 18 members (prior to the adoption of the euro as currency by Lithuania in January 2015) when data are not available for the euro area with 19 members. The order of the EU Member States used in the statistical book generally follows the protocol order; 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.

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 EU Member States for the whole of the period presented, as if all 28 EU Member States had been part of the EU in earlier periods.

When available, information is also presented for EFTA and candidate countries, namely, Albania, the former Yugoslav Republic of Macedonia ([1]), 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 EU 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 2012 or 2013 for those countries (or geographical aggregates) for which 2014 data are not yet available.

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 2015, there are around 860 posts in Eurostat. Of these, 75 % are occupied by officials (civil servants), 6 % by experts seconded from EU Member States and 19 % are occupied by other staff. The operational budget allocated to Eurostat amounted to EUR 53.4 million in 2014. The budget was used for the implementation of the European Statistical Programme (ESP).

European Statistical System (ESS)

The European Statistical System (ESS) is the partnership between the EU'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

([1]) 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.

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 International Monetary Fund (IMF) and the World Bank.

Legal framework of European statistics

On 17 September 2012 the European Commission adopted a Decision on Eurostat (2012/504/EU), which repealed the earlier Decision on Eurostat (97/281/EC). This Decision reaffirms the statistical principles of professional independence, impartiality, objectivity, reliability, statistical confidentiality and cost-effectiveness for the development, production and dissemination of statistics by Eurostat, and also makes reference to the European Statistics Code of Practice — 2011 edition.

The Decision specifies Eurostat's role in steering the planning and coordination of other statistical activities within the European Commission. It underlines the importance of monitoring, assessing and reporting on quality and also refers to a labelling process for European statistics that is to be promoted and applied.

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 decision-making;
- to implement a set of standards, methods and organizational structures which allow comparable, reliable and relevant statistics to be produced throughout the EU, 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 ([2]), allow easy access to the most recent data on Eurostat's website. In this statistical book 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 printed under the table or figure in question. Online data codes 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) ([3]), 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 August 2015.

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. This wiki-based system 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 (August 2015), Statistics Explained pages in English covered some 625 statistical articles presenting data, around 175 background articles on methodological practices or developments, and some 1 865 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 while 20 key articles from these two publications can be consulted in 19 more EU languages.

([2]) 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.
([3]) 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.

It is possible to search for articles using the 'Search' function on the top-right of the webpage, as to get a PDF version of the article, to print, to 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.

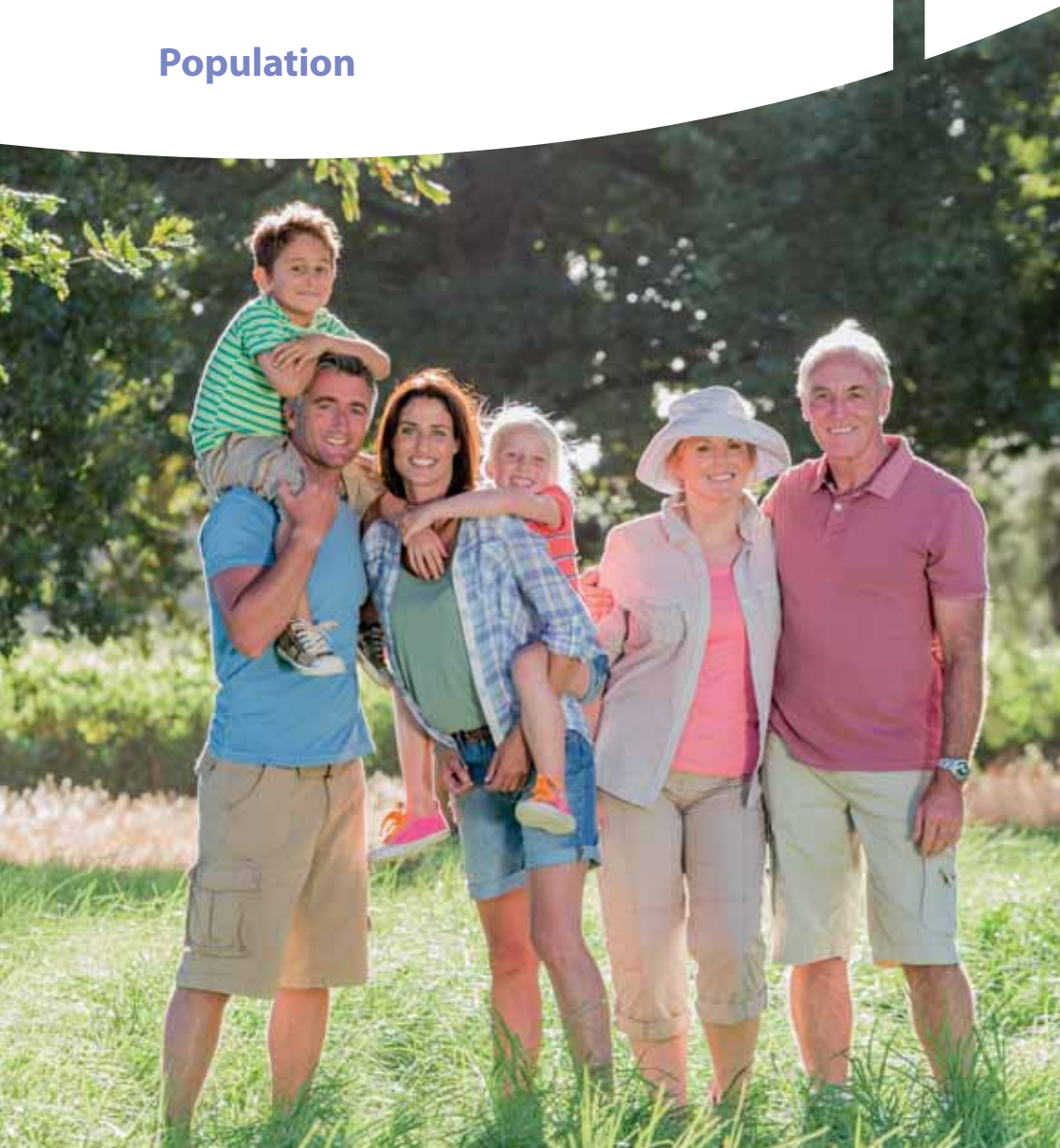
Eurostat in unison with other European Commission services has responded to politicians' needs in these areas by helping to develop sets of indicators on 'EU policies and initiatives'. More information in relation to each of these sets may be found within a set of dedicated sections that are available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

1

Population



Introduction

As the population of the European Union (EU) grew beyond 500 million inhabitants, its structure continued to change. Recent demographic developments show that the EU's population is slowly 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 increased for several years up to 2010, its downward path over several decades means that 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 increasingly the focus of political, economic, social and cultural analyses. 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

This section looks at the impact of demographic ageing within the EU, which 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.

The population of the EU-28 on 1 January 2014 was estimated at 506.8 million. Young people (0 to 14 years old) made up 15.6 % of the EU-28's population, while persons considered to be of working age (15 to 64 years old) accounted for 65.8 % of the population. Older persons (aged 65 or over) had a 18.5 % share (an increase of 0.3 % compared with the previous year). Across the EU Member States, the highest share of young people in the total population in 2014 was observed in Ireland (22.0 %), while the lowest share was recorded in Germany (13.1 %). Regarding the share of persons aged 65 or older in the total population, Italy (21.4 %) and Germany (20.8 %), while Ireland had the lowest proportion (12.6 %).

Age dependency ratios may be used to study the level of support given to younger and/or older persons by the working age population; these ratios are expressed in terms of the relative size of younger and/or older populations compared with the working age population. The old-age dependency ratio for the EU-28 was 28.1 % on 1 January 2014; as such, there were around four persons of working age for every person aged 65 or over.

Table 1.1: Population age structure indicators, 1 January 2014
(%)

	Young-age dependency ratio	Old-age dependency ratio	Total age dependency ratio	Share of population aged 80 or over
EU-28	*23.7*	*28.1*	*51.8*	*5.1*
Belgium	26.1	27.3	53.4	5.3
Bulgaria	20.6	29.3	50.0	4.4
Czech Republic	22.2	25.7	47.9	3.9
Denmark	26.7	28.3	54.9	4.2
Germany	19.9	31.5	51.4	5.4
Estonia	24.0	27.9	51.9	4.9
Ireland	*33.6*	*19.3*	*52.9*	*3.0*
Greece	22.6	31.6	54.2	6.0
Spain	22.8	27.2	50.0	5.7
France	*29.3*	*28.4*	*57.6*	*5.7*
Croatia	22.1	27.6	49.7	4.5
Italy	21.5	33.1	54.6	6.4
Cyprus	23.3	19.9	43.1	3.1
Latvia	22.2	28.8	51.0	4.8
Lithuania	21.8	27.5	49.4	5.0
Luxembourg	24.4	20.4	44.7	3.9
Hungary	21.2	25.8	47.0	4.2
Malta	21.2	26.4	47.6	3.9
Netherlands	25.8	26.4	52.2	4.3
Austria	21.3	27.2	48.4	5.0
Poland	21.5	21.2	42.7	3.9
Portugal	*22.3*	*30.3*	*52.5*	*5.5*
Romania	*22.8*	*24.3*	*47.1*	*4.0*
Slovenia	21.5	25.7	47.2	4.7
Slovakia	21.5	19.0	40.6	3.0
Finland	25.6	30.2	55.8	5.0
Sweden	26.9	30.6	57.4	5.2
United Kingdom	*27.2*	*27.0*	*54.2*	*4.7*
Iceland	31.0	19.9	50.9	3.6
Liechtenstein	22.0	22.4	44.4	3.3
Norway	27.7	24.2	51.8	4.3
Switzerland	22.1	26.1	48.1	4.9
Montenegro	27.3	19.6	46.9	2.6
FYR of Macedonia	23.8	17.5	41.3	2.1
Albania	27.9	17.5	45.3	2.2
Serbia	21.2	26.7	47.9	4.0
Turkey	36.3	11.3	47.6	1.6

Source: Eurostat (online data code: demo_pjanind)

Figure 1.1: Population pyramids, EU-28, 1994 and 2014 (1)
(% of the total population)

(1) 1994: EU-27. 2014: provisional; estimate.
Source: Eurostat (online data code: demo_pjangroup)

1.2 Population and population change

On 1 January 2015 the population of the EU-28 was estimated at 508.2 million, 1.3 million more than the year before (note that these 2015 figures include a break in series with the addition of the French overseas department of Mayotte). The increase during 2014 was smaller than that during 2013 when the population of the EU-28 increased by 1.7 million.

In 2014, natural population increase (the positive difference between live births and deaths) contributed 14.5% (0.2 million persons) to population growth in the EU-28. Some 85.5% of the overall change in population therefore came from net migration plus statistical adjustment, which continued to be the main determinant of population growth in the EU, accounting for an increase of nearly 1 million persons in 2014.

The population of individual EU Member States on 1 January 2015 ranged from 0.4 million in Malta to 81.2 million in Germany. Germany, together with France, the United Kingdom and Italy comprised more than half (54%) of the total EU-28 population on 1 January 2015.

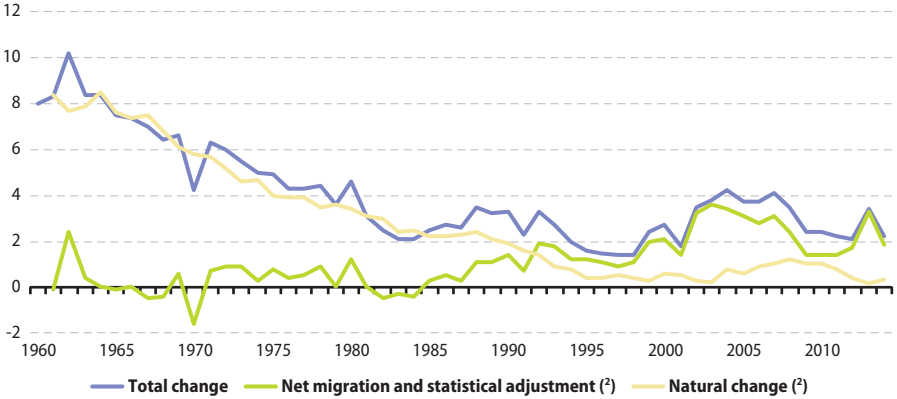
Population growth during 2014 was unevenly distributed across the EU Member States: a total of 16 EU Member States observed an increase in their respective populations, while the population fell in the remaining 12 EU Member States. Luxembourg, Sweden, Malta and Austria recorded the highest population growth rates in 2014, with increases above 9.0 per 1 000 persons; more than triple the EU-28 average of 2.2 per 1 000 persons.

Table 1.2: Demographic balance, 2014
(thousands)

	Population, 1 January 2014	Live births	Deaths	Net migration and statistical adjustment	Population, 1 January 2015
EU-28 (1)	*506 857.5*	*5 108.4*	4 947.0	*951.9*	*508 191.1*
Belgium	11 204.0	125.0	104.8	34.2	11 258.4
Bulgaria	7 245.7	67.6	109.0	– 2.1	7 202.2
Czech Republic	10 512.4	109.9	105.7	21.7	10 538.3
Denmark	5 617.3	56.9	51.3	36.8	5 659.7
Germany	80 767.5	700.0	875.0	581.5	81 174.0
Estonia	1 315.8	13.6	15.5	– 0.6	1 313.3
Ireland	*4 605.5*	*66.5*	29.3	*– 16.8*	*4 625.9*
Greece	10 903.7	92.1	113.9	– 69.4	10 812.5
Spain	46 512.2	426.0	396.1	– 102.3	46 439.9
France (1)	*65 835.6*	820.8	556.1	*31.9*	*66 352.5*
Croatia	4 246.8	39.6	50.8	– 10.2	4 225.3
Italy	60 782.7	502.6	598.4	108.7	60 795.6
Cyprus	858.0	9.3	5.3	– 15.0	847.0
Latvia	2 001.5	21.7	28.5	– 8.7	1 986.1
Lithuania	2 943.5	30.4	40.3	– 12.3	2 921.3
Luxembourg	549.7	6.1	3.8	11.0	563.0
Hungary	9 877.4	93.3	126.3	4.6	9 849.0
Malta	425.4	4.2	3.3	3.0	429.3
Netherlands	16 829.3	175.2	139.2	35.5	16 900.7
Austria	8 506.9	81.7	78.3	74.6	8 584.9
Poland	38 017.9	375.2	376.5	– 10.9	38 005.6
Portugal	10 427.3	82.4	104.8	*– 30.1*	*10 374.8*
Romania	19 947.3	183.8	253.3	*– 16.4*	*19 861.4*
Slovenia	2 061.1	21.2	18.9	– 0.5	2 062.9
Slovakia	5 415.9	55.0	51.3	1.7	5 421.3
Finland	5 451.3	57.2	52.2	15.4	5 471.8
Sweden	9 644.9	114.9	89.0	76.6	9 747.4
United Kingdom	*64 351.2*	776.4	570.3	*210.0*	*64 767.1*
Iceland	325.7	4.4	2.0	1.1	329.1
Liechtenstein	37.1	0.4	0.3	0.1	37.4
Norway	5 108.0	59.1	40.4	39.1	5 165.8
Switzerland	8 139.6	83.8	63.6	76.8	8 236.6
Montenegro	621.5	7.5	6.0	– 0.9	622.1
FYR of Macedonia	2 065.8	23.6	19.7	*– 0.5*	*2 069.2*
Albania	2 895.9	35.8	20.7	– 18.0	2 893.0
Serbia (2)	7 146.8	66.5	101.2	:	7 112.0
Turkey	76 667.9	1 337.5	390.1	80.7	77 695.9
Bosnia and Herzegovina (2)	3 830.9	29.2	34.8	:	3 825.3
Kosovo	1 820.6	32.1	8.2	– 39.6	1 804.9

(1) Break in series for population: includes Mayotte on 1 January 2015.
(2) Due to a lack of data on migration, the demographic balance is based exclusively on the natural change.
Source: Eurostat (online data code: demo_gind)

Figure 1.2: Population change by component (annual crude rates), EU-28, 1960–2014 ([1]) (per 1 000 persons)



([1]) Excluding French overseas departments up to and including 1997. Breaks in series: 2001 and 2010–12.
([2]) 1960: not available.
Source: Eurostat (online data code: demo_gind)

1.3 Marriage and divorce

2.1 million marriages and 986 thousand divorces took place in the EU-28 in 2011, according to the most recent available data for the EU as a whole. These figures may be expressed as 4.2 marriages for every 1 000 persons (in other words the crude marriage rate) and 2.0 divorces for every 1 000 persons (in other words the crude divorce rate).

Since 1965, the crude marriage rate in the EU-28 has declined by close to 50 % in relative terms (from 7.8 per 1 000 persons in 1965 to 4.2 in 2011). At the same time, the crude divorce rate increased from 0.8 per 1 000 persons in 1965 to 2.0 in 2011. Part of this increase is due to the fact that in several EU Member States divorce was legalised during the period (for example, in Italy, Spain, Ireland and Malta).

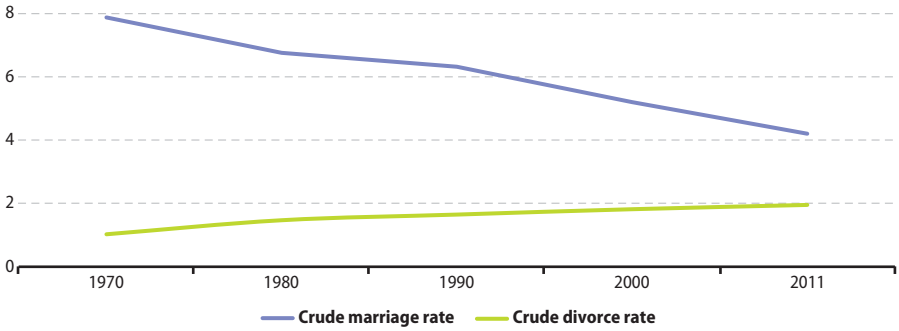
During the period 2011–13, Ireland (0.6 divorces per 1 000 persons in 2012), Slovenia (1.1 in 2013) and several southern EU Member States — Malta (0.8 in 2013), Italy (0.9 in 2012) and Greece (1.3 in 2012) — had significantly lower crude divorce rates than several northern EU Member States, notably Latvia (3.5 in 2013), Lithuania and Denmark (both 3.4 in 2013). Among the EFTA countries, candidate countries and potential candidates, the crude divorce rate in Montenegro was as low as in Malta. In all the EFTA countries, candidate countries and potential candidates for which data are available, the crude divorce rate was below 2.5 (per 1 000 persons).

Table 1.3: Crude marriage and divorce rates, selected years, 1970–2013
(per 1 000 inhabitants)

	Marriages				Divorces (1)			
	1970	2011	2012	2013	1970	2011	2012	2013
EU-28 (2)	7.9	4.2	:	:	0.9	2.0	:	:
Belgium (3)	7.6	3.7	3.8	:	0.7	2.5	2.3	:
Bulgaria	8.6	2.9	2.9	3.0	1.2	1.4	1.6	1.5
Czech Republic	9.2	4.3	4.3	4.1	2.2	2.7	2.5	2.7
Denmark	7.4	4.9	5.1	4.9	1.9	2.6	2.8	3.4
Germany	7.4	4.6	4.8	4.6	1.3	2.3	2.2	2.1
Estonia	9.1	4.1	4.5	4.3	3.2	2.3	2.4	2.5
Ireland	7.0	4.3	4.5	:	:	0.6	0.6	:
Greece	7.7	5.0	4.5	4.7	0.4	1.1	1.3	:
Spain	7.3	3.4	3.5	3.3	:	2.2	2.2	2.0
France (2)	7.8	3.6	3.7	:	0.8	2.0	:	:
Croatia	8.5	4.7	4.8	4.5	1.2	1.3	1.3	1.4
Italy	7.3	3.4	3.5	3.2	:	0.9	0.9	:
Cyprus (4)	8.6	7.3	6.7	6.4	0.2	2.3	2.4	:
Latvia	10.2	5.2	5.5	5.7	4.6	4.0	3.6	3.5
Lithuania	9.5	6.3	6.9	6.9	2.2	3.4	3.5	3.4
Luxembourg (5)	6.4	3.3	3.4	3.2	0.6	2.3	2.0	2.1
Hungary (5)(6)	9.3	3.6	3.6	3.7	2.2	2.3	2.2	2.0
Malta	7.9	6.2	6.7	6.1	:	0.1	1.1	0.8
Netherlands	9.5	4.3	4.2	3.8	0.8	2.0	2.1	2.0
Austria	7.1	4.3	4.6	4.3	1.4	2.1	2.0	:
Poland (7)	8.6	5.4	5.4	4.7	1.1	1.7	1.7	1.7
Portugal	9.4	3.4	3.3	3.1	0.1	2.5	2.4	2.2
Romania	7.2	5.2	5.4	5.4	0.4	1.8	1.6	1.4
Slovenia	8.3	3.2	3.4	3.0	1.1	1.1	1.2	1.1
Slovakia	7.9	4.7	4.8	4.7	0.8	2.1	2.0	2.0
Finland	8.8	5.3	5.3	4.6	1.3	2.5	2.4	2.5
Sweden	5.4	5.0	5.3	5.4	1.6	2.5	2.5	2.8
United Kingdom	8.5	4.5	:	:	1.0	2.1	2.0	:
Iceland	7.8	4.6	:	:	1.2	1.6	:	:
Liechtenstein	5.9	4.5	5.0	:	:	2.5	2.4	:
Norway	7.6	4.6	4.8	4.7	0.9	2.1	2.0	2.0
Switzerland (3)(7)	7.6	5.3	5.3	4.9	1.0	2.2	2.2	2.1
Montenegro	:	:	5.3	6.2	:	0.8	0.8	0.8
FYR of Macedonia	9.0	7.2	6.8	6.8	0.3	0.9	0.9	1.0
Albania	6.8	:	:	8.2	0.8	:	:	:
Serbia	:	4.9	4.8	5.1	:	1.1	1.0	1.1
Turkey	:	8.0	8.0	7.9	:	1.6	1.6	1.6
Bosnia and Herzegovina	9.3	:	4.8	:	:	:	0.6	:
Kosovo	:	9.3	9.5	:	:	0.8	0.7	:

(1) Divorce was not possible by law in Italy until 1970, in Spain until 1981, in Ireland until 1995 and in Malta until 2011.
(2) Excluding French overseas departments in 1970.
(3) Marriages, 2011: break in series.
(4) Marriages, 1970: data refer to total marriages contracted in the country, including marriages between non-residents.
(5) Marriages, 2012: break in series.
(6) Divorces, 2012: break in series.
(7) Divorces, 2011: break in series.
Source: Eurostat (online data codes: demo_nind and demo_ndivind)

Figure 1.3: Crude marriage and divorce rates, EU-28, 1970–2011 ([1])
(per 1 000 inhabitants)



([1]) Note the change in time interval on the x-axis. Excluding French overseas departments for 1970 to 1990.
Source: Eurostat (online data codes: demo_nind and demo_ndivind)

1.4 Fertility

In 2013, 5.1 million children were born in the EU-28, corresponding to a crude birth rate (the number of live births per 1 000 persons) of 10.

The highest annual total of live births for the EU-28 was recorded in 1964, with 7.7 million live births. From the 1960s up to the beginning of the 21st century, the number of live births in the EU-28 declined from 7.5 million to a low of 5.0 million in 2002. This was followed by a modest rebound in the number of live births, with a high of 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. The main indicator of fertility is the total fertility rate: this is the mean number of children that would be born alive to a woman during her lifetime if she were to pass through her childbearing years conforming to the age-specific fertility rates of a given year. A total fertility rate of around 2.1 live births per woman is considered to be the replacement level in industrialised countries: in other words, the average number of live births per woman required to keep the population size constant in the absence of inward or outward migration. A total fertility rate below 1.3 live births per woman is described as 'lowest-low fertility'. The total fertility rate is used as an indicator for the fertility level and is comparable across countries since it takes into account changes in the size and structure of the population.

In the past 50 years, total fertility rates in the EU Member States have in general been converging: in 1960 and in 1980, the disparity between the highest (Ireland) and the lowest (Estonia in 1960, Luxembourg in 1980) was around 1.8 live births per woman,

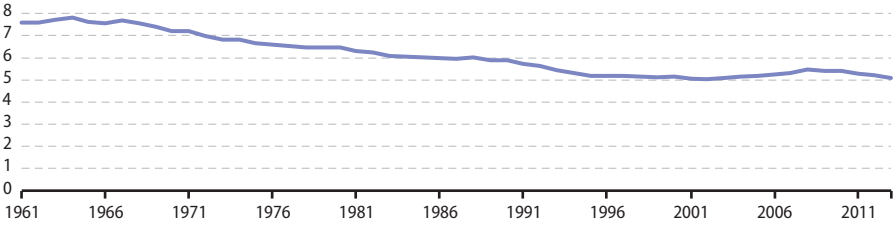
while in 1970 it was around 2.0. By 1990 this difference (between Cyprus and Italy) had decreased to 1.1 live births per woman. Since 2000 it has been around 0.7 to 0.8 live births per woman. Ireland and France reported the highest fertility rates for the most recent period available (2013), with slightly below 2.00 live births per woman. In contrast, the lowest fertility rates in 2013 were recorded in Poland (1.29), Spain (1.27 live births per woman) and Portugal (1.21 live births per woman).

Table 1.4: Total fertility rate, 1960–2013
(live births per woman)

	1960	1970	1980	1990	2000	2010	2011	2012	2013
EU-28 (1)(2)	:	:	:	:	:	1.62	1.58	1.58	*1.55*
Belgium (1)	2.54	2.25	1.68	1.62	1.67	1.86	1.81	1.79	1.75
Bulgaria	2.31	2.17	2.05	1.82	1.26	1.57	1.51	1.50	1.48
Czech Republic	2.09	1.92	2.08	1.90	1.15	1.51	1.43	1.45	1.46
Denmark	2.57	1.95	1.55	1.67	1.77	1.87	1.75	1.73	1.67
Germany	:	:	:	:	1.38	1.39	1.36	1.38	1.39
Estonia	1.98	2.17	2.02	2.05	1.36	1.72	1.61	1.56	1.52
Ireland	3.78	3.85	3.21	2.11	1.89	2.05	2.03	2.01	*1.96*
Greece	2.23	2.40	2.23	1.40	1.27	1.47	1.40	1.35	1.30
Spain	:	:	2.20	1.36	1.23	1.37	1.34	1.32	1.27
France (1)(2)	:	:	:	:	1.89	2.03	2.01	2.01	1.99
Croatia	:	:	:	:	:	1.55	1.48	1.51	1.46
Italy	2.37	2.38	1.64	1.33	1.26	1.46	1.44	1.43	1.39
Cyprus	:	:	:	2.41	1.64	1.44	1.35	1.39	1.30
Latvia	:	:	:	:	1.25	1.36	1.33	1.44	1.52
Lithuania	:	2.40	1.99	2.03	1.39	1.50	1.55	1.60	1.59
Luxembourg (2)	2.29	1.97	1.50	1.60	1.76	1.63	1.52	1.57	1.55
Hungary (2)	2.02	1.98	1.91	1.87	1.32	1.25	1.23	1.34	1.35
Malta	:	:	1.99	2.04	1.70	1.36	1.45	1.43	1.38
Netherlands	3.12	2.57	1.60	1.62	1.72	1.79	1.76	1.72	1.68
Austria	2.69	2.29	1.65	1.46	1.36	1.44	1.43	1.44	1.44
Poland (3)	:	:	:	2.06	1.37	1.41	1.33	1.33	1.29
Portugal	3.16	3.01	2.25	1.56	1.55	1.39	1.35	1.28	1.21
Romania	:	:	2.43	1.83	1.31	1.59	1.47	1.52	1.41
Slovenia	:	:	:	1.46	1.26	1.57	1.56	1.58	1.55
Slovakia	3.04	2.41	2.32	2.09	1.30	1.43	1.45	1.34	1.34
Finland	2.72	1.83	1.63	1.78	1.73	1.87	1.83	1.80	1.75
Sweden	:	1.92	1.68	2.13	1.54	1.98	1.90	1.91	1.89
United Kingdom	:	:	1.90	1.83	1.64	1.92	1.91	1.92	1.83
Iceland	:	2.81	2.48	2.30	2.08	2.20	2.02	2.04	1.93
Liechtenstein	:	:	:	:	1.57	1.40	1.69	1.51	1.45
Norway	:	2.50	1.72	1.93	1.85	1.95	1.88	1.85	1.78
Switzerland (1)	2.44	2.10	1.55	1.58	1.50	1.52	1.52	1.53	1.52
Montenegro	:	:	:	:	:	1.70	1.65	1.72	1.73
FYR of Macedonia	:	:	:	:	1.88	1.56	1.46	1.51	1.49
Serbia (1)	:	:	:	:	1.48	1.40	1.40	1.45	1.43
Turkey	:	:	:	:	:	2.04	2.03	2.09	2.08

(1) 2011: break in series.
(2) 2012: break in series.
(3) 2000 and 2010: break in series.
Source: Eurostat (online data code: demo_frate)

Figure 1.4: Number of live births, EU-28, 1961–2013 ([1])
(million)



([1]) Excluding French overseas departments before 1998. 2013: provisional.
Source: Eurostat (online data code: demo_gind)

1.5 Mortality and life expectancy

In 2013, some 5 million persons died in the EU-28 — this was broadly in line with the annual number of deaths recorded over the previous four decades. A peak was reached in 1993 with 5.03 million deaths. The crude death rate, which is the number of deaths per 1 000 persons, was 9.9 in the EU-28 in 2013.

The most commonly used indicator for analysing mortality is life expectancy at birth: the mean number of years that a person can expect to live at birth if subjected to current mortality conditions throughout the rest of his or her life. It is a simple but powerful way of illustrating the developments in mortality. The total number of deaths depends on the size of the population age groups (cohorts) reaching the end of their life cycle and on mortality rates. Economic development and the improvement in some environmental conditions (for example in many urban areas), improved lifestyles, advances in healthcare and medicine, including reduced infant mortality, have resulted in a continuous increase in life expectancy at birth across Europe during the last century. This process has been going on for longer in Europe than in most other parts of the world, placing the EU-28 among the world leaders for life expectancy. Over the past 50 years life expectancy at birth has increased by about 10 years for both men and women in the EU-28. Further gains are expected to be achieved mostly from the reduction in mortality at older ages. Besides the reduction in fertility, the gradual reduction in mortality is the main factor contributing to the ageing of the population in the EU-28.

While life expectancy has risen in all EU Member States, there are still major differences between and within countries.

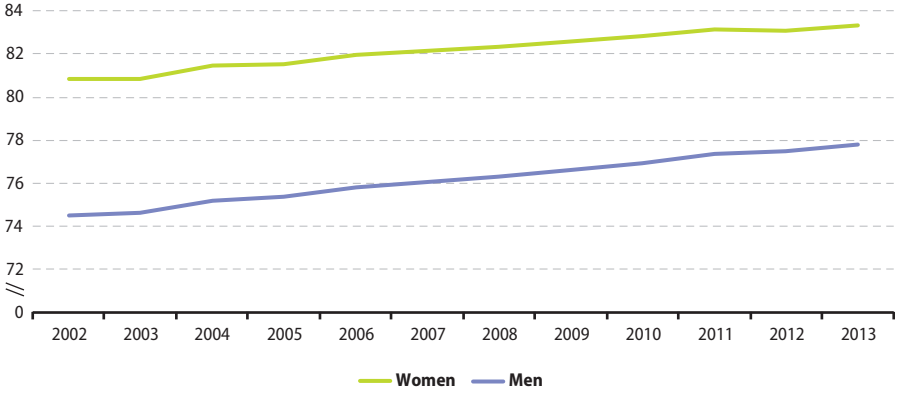
For men, the lowest life expectancy in 2013 was recorded in Lithuania (68.5 years) and the highest in Italy (80.3 years). For women, the range was narrower, from a low of 78.6 years in Bulgaria to a high of 86.1 years in Spain. For comparison, in 2003, the lowest and highest life expectancies were recorded in Latvia (65.3 years) and Sweden (78.0) for men and in Romania (74.8 years) and Spain (83.0) for women.

Table 1.5: Life expectancy at birth, 1990–2013
(years)

	Total					Men					Women				
	1990	2000	2011	2012	2013	1990	2000	2011	2012	2013	1990	2000	2011	2012	2013
EU-28 (1)(2)	:	:	80.3	80.3	80.6	:	:	77.3	77.4	77.8	:	:	83.1	83.1	83.3
Belgium (1)	76.2	77.9	80.7	80.5	80.7	72.7	74.6	78.0	77.8	78.1	79.5	81.0	83.3	83.1	83.2
Bulgaria	71.2	71.6	74.2	74.4	74.9	68.0	68.4	70.7	70.9	71.3	74.7	75.0	77.8	77.9	78.6
Czech Republic	71.5	75.1	78.0	78.1	78.3	67.6	71.6	74.8	75.1	75.2	75.5	78.5	81.1	81.2	81.3
Denmark	74.9	76.9	79.9	80.2	80.4	72.0	74.5	77.8	78.1	78.3	77.8	79.2	81.9	82.1	82.4
Germany	75.4	78.3	80.8	81.0	80.9	72.0	75.1	78.4	78.6	78.6	78.5	81.2	83.2	83.3	83.2
Estonia	69.9	71.1	76.6	76.7	77.5	64.7	65.6	71.4	71.4	72.8	74.9	76.4	81.3	81.5	81.7
Ireland	74.8	76.6	80.9	80.9	81.1	72.1	74.0	78.6	78.7	79.0	77.7	79.2	83.0	83.2	83.1
Greece	77.1	78.2	80.8	80.7	81.4	74.7	75.5	78.0	78.0	78.7	79.5	80.9	83.6	83.4	84.0
Spain	77.0	79.3	82.6	82.5	83.2	73.4	75.8	79.5	79.5	80.2	80.6	82.9	85.6	85.5	86.1
France	:	79.2	82.3	82.1	82.4	:	75.3	78.7	78.7	79.0	:	83.0	85.7	85.4	85.6
Croatia	:	:	77.2	77.3	77.8	:	:	73.8	73.9	74.5	:	:	80.4	80.6	81.0
Italy	77.1	79.9	82.4	82.4	82.9	73.8	76.9	79.7	79.8	80.3	80.3	82.8	84.8	84.8	85.2
Cyprus	:	77.7	81.2	81.1	82.5	:	75.4	79.3	78.9	80.1	:	80.1	83.1	83.4	85.0
Latvia	:	:	73.9	74.1	74.3	:	:	68.6	68.9	69.3	:	:	78.8	78.9	78.9
Lithuania	71.5	72.1	73.7	74.1	74.1	66.4	66.7	68.1	68.4	68.5	76.3	77.4	79.3	79.6	79.6
Luxembourg (2)	75.7	78.0	81.1	81.5	81.9	72.4	74.6	78.5	79.1	79.8	78.7	81.3	83.6	83.8	83.9
Hungary (2)	69.4	71.9	75.1	75.3	75.8	65.2	67.5	71.2	71.6	72.2	73.8	76.2	78.7	78.7	79.1
Malta	:	78.4	80.9	80.9	81.9	:	76.2	78.6	78.6	79.6	:	80.3	83.0	83.0	84.0
Netherlands	77.1	78.2	81.3	81.2	81.4	73.8	75.6	79.4	79.3	79.5	80.2	80.7	83.1	83.0	83.2
Austria	75.8	78.3	81.1	81.1	81.3	72.3	75.2	78.3	78.4	78.6	79.0	81.2	83.8	83.6	83.8
Poland (3)	70.7	73.8	76.8	76.9	77.1	66.3	69.6	72.5	72.6	73.0	75.3	78.0	81.1	81.1	81.2
Portugal	74.1	76.8	80.7	80.6	80.9	70.6	73.3	77.3	77.3	77.6	77.5	80.4	83.8	83.6	84.0
Romania	69.9	71.2	74.4	*74.4*	75.2	66.7	67.7	70.8	*70.9*	71.6	73.1	74.8	78.2	*78.1*	78.7
Slovenia	73.9	76.2	80.1	80.3	80.5	69.8	72.2	76.8	77.1	77.2	77.8	79.9	83.3	83.3	83.6
Slovakia	71.1	73.3	76.1	76.3	76.6	66.7	69.2	72.3	72.5	72.9	75.7	77.5	79.8	79.9	80.1
Finland	75.1	77.8	80.6	80.7	81.1	71.0	74.2	77.3	77.7	78.0	79.0	81.2	83.8	83.7	84.1
Sweden	77.7	79.8	81.9	81.8	82.0	74.8	77.4	79.9	79.9	80.2	80.5	82.0	83.8	83.6	83.8
United Kingdom	:	78.0	81.0	81.0	81.1	:	75.5	79.0	79.1	79.2	:	80.3	83.0	82.8	82.9
Iceland	78.1	79.7	82.4	83.0	82.1	75.5	77.8	80.7	81.6	80.5	80.7	81.6	84.1	84.3	83.7
Liechtenstein	:	77.0	81.9	82.5	82.5	:	73.9	79.5	79.7	80.7	:	79.9	84.2	85.2	83.9
Norway	76.6	78.8	81.4	81.5	81.8	73.4	76.0	79.1	79.5	79.8	79.9	81.5	83.6	83.5	83.8
Switzerland (1)	77.5	80.0	82.8	82.8	82.9	74.0	77.0	80.5	80.6	80.7	80.9	82.8	85.0	84.9	85.0
Montenegro	:	:	76.1	76.3	76.5	:	:	73.3	74.2	74.1	:	:	78.8	78.3	79.0
FYR of Macedonia	:	73.0	75.1	74.9	75.5	:	70.8	73.1	73.0	73.4	:	75.2	77.2	76.9	77.5
Serbia (1)	:	71.6	74.6	74.9	75.3	:	68.9	72.0	72.3	72.6	:	74.4	77.2	77.5	77.9
Turkey	:	:	77.1	77.6	78.2	:	:	74.4	74.8	75.4	:	:	79.8	80.5	81.1

(1) 2011: break in series.
(2) 2012: break in series.
(3) 2000: break in series.
Source: Eurostat (online data code: demo_mlexpec)

Figure 1.5: Life expectancy at birth, EU-28, 2002–13 ([1])
(years)



([1]) 2009, 2011 and 2012: breaks in series. Note: the y-axis is broken.
Source: Eurostat (online data code: demo_mlexpec)

1.6 Migration and migrant publication

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.

A total of 3.4 million people immigrated to one of the EU-28 Member States during 2013, while at least 2.8 million emigrants were reported to have left an EU Member State. These total figures do not represent the migration flows to/from the EU as a whole, since they also include flows between different EU Member States.

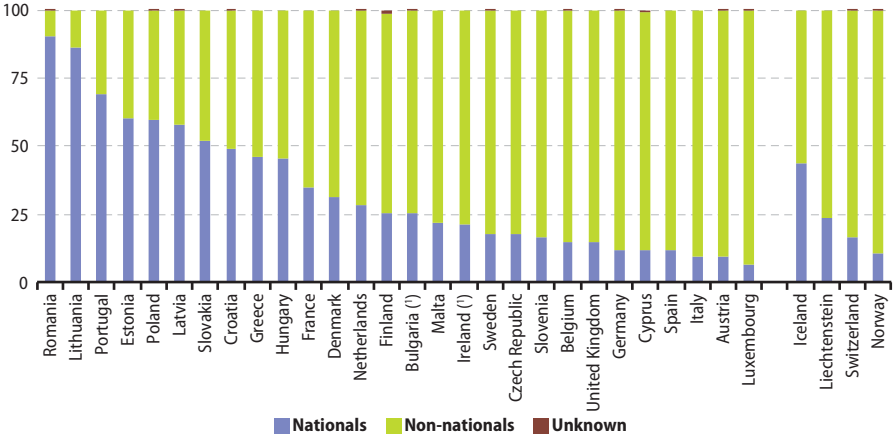
Among these 3.4 million immigrants during 2013 there were an estimated 1.4 million citizens of non-member countries, 1.2 million people with citizenship of a different EU Member State from the one to which they immigrated, around 830 thousand people who migrated to an EU Member State of which they had the citizenship (for example returning nationals or nationals born abroad), and around 6.1 thousand stateless people.

Table 1.6: Immigration by citizenship, 2013 ([1])
(thousands)

	Total immigrants	Nationals	Non-nationals		
			Total	Citizens of other EU Member States	Citizens of non-member countries
Belgium	118.3	17.5	100.5	62.0	38.4
Bulgaria	*18.6*	*4.7*	*13.8*	*1.6*	*12.0*
Czech Republic	30.1	5.3	24.8	14.0	10.8
Denmark	60.3	19.0	41.3	21.3	19.6
Germany	692.7	83.2	606.8	354.0	252.1
Estonia	4.1	2.5	1.6	0.1	1.5
Ireland	59.3	12.7	46.6	23.3	23.2
Greece	47.1	21.6	25.4	12.2	13.2
Spain	280.8	32.4	248.4	90.4	157.8
France	332.6	115.4	217.2	90.6	126.6
Croatia	10.4	5.1	5.3	1.8	3.4
Italy	307.5	28.4	279.0	77.5	201.5
Cyprus	13.1	1.5	11.5	6.7	4.8
Latvia	8.3	4.8	3.5	0.9	2.6
Lithuania	22.0	19.0	3.0	0.7	2.4
Luxembourg	21.1	1.3	19.7	15.5	4.2
Hungary	39.0	17.7	21.3	10.4	10.8
Malta	8.4	1.8	6.6	3.1	3.5
Netherlands	129.4	36.3	93.1	52.2	40.8
Austria	101.9	9.2	92.6	60.2	32.2
Poland	220.3	131.4	88.7	29.6	59.0
Portugal	17.6	12.2	5.4	1.7	3.7
Romania	153.6	138.9	14.7	1.0	13.7
Slovenia	13.9	2.3	11.6	3.3	8.3
Slovakia	5.1	2.7	2.5	2.0	0.5
Finland	31.9	8.1	23.4	10.2	13.2
Sweden	115.8	20.5	94.9	26.4	64.2
United Kingdom	526.0	76.1	449.9	201.4	248.5
Iceland	6.4	2.8	3.6	2.8	0.8
Liechtenstein	0.7	0.2	0.5	0.3	0.2
Norway	68.3	7.0	61.3	36.4	24.5
Switzerland	160.2	26.1	134.1	96.8	37.2

([1]) 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)

Figure 1.6: Distribution of immigrants by citizenship, 2013
(% of all immigrants)



(1) Provisional.
Source: Eurostat (online data code: migr_imm2ctz)

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 1992 (672 thousand applications in the EU-15) and again in 2001 (424 thousand applications in the EU-27), the number of asylum applications within the EU-27 fell in successive years to just below 200 thousand by 2006. Focusing just on applications from citizens of non-member countries there was a gradual increase in the number of asylum applications within the EU-27 and later the EU-28 through to 2012, after which the rate of change quickened considerably as the number of asylum seekers rose to 431 thousand in 2013 and 626 thousand in 2014; this was the highest number of asylum applicants within the EU since the peak in 1992.

The number of asylum applicants in 2014 more than doubled compared with 2013 in Italy (an increase of 143 %), Hungary (126 %) and Denmark (105 %), while it more than halved in Croatia (– 58 %) and nearly halved in Poland (– 47 %).

Nearly four in every five (79 %) asylum seekers in the EU-28 in 2014 were aged less than 35; those aged 18–34 accounted for slightly more than half (54 %) of the total number of applicants, while minors aged less than 18 accounted for one quarter (26 %).

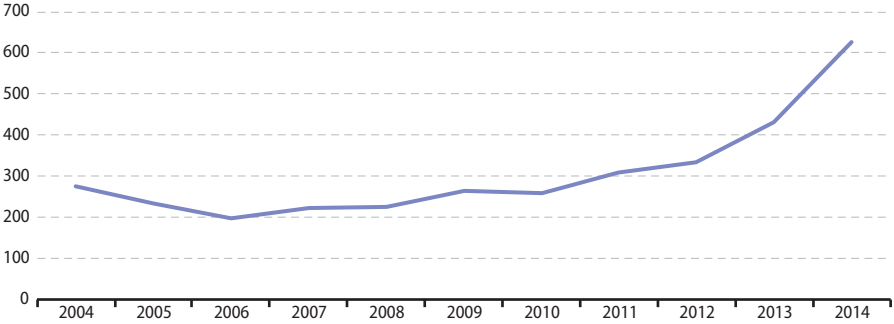
This age distribution for asylum applicants was common in the vast majority of the EU Member States, with the largest share of applicants usually being those aged 18–34. There was one exception to this pattern: Poland reported a higher proportion of asylum applicants aged less than 18.

Table 1.7: Asylum applicants (non-EU) in the EU and EFTA Member States, by age distribution, 2014 (1)

	Total (number)	Minors (%)		Aged 18 and over (%)		
		0–13	14–17	18–34	35–64	65 and over
EU-28	625 920	19	7	54	20	1
Belgium	22 710	23	7	48	22	1
Bulgaria	11 080	17	13	56	13	0
Czech Republic	1 145	17	3	41	37	2
Denmark	14 680	13	7	55	24	1
Germany	202 645	25	6	48	19	1
Estonia	155	10	3	55	32	3
Ireland	1 450	14	4	58	23	1
Greece	9 430	7	7	65	21	0
Spain	5 615	17	4	56	23	1
France	64 310	19	3	51	26	1
Croatia	450	1	2	76	21	0
Italy	64 625	3	4	84	9	0
Cyprus	1 745	16	5	55	23	0
Latvia	375	11	5	49	32	4
Lithuania	440	20	3	50	26	1
Luxembourg	1 150	25	6	50	19	0
Hungary	42 775	19	8	57	16	0
Malta	1 350	15	8	59	17	1
Netherlands	24 495	14	7	53	25	1
Austria	28 035	20	11	51	18	0
Poland	8 020	37	4	33	24	1
Portugal	440	14	5	57	24	2
Romania	1 545	15	9	53	21	1
Slovenia	385	12	18	48	21	0
Slovakia	330	17	3	59	21	0
Finland	3 620	16	6	55	21	1
Sweden	81 180	19	10	46	24	1
United Kingdom	31 745	14	8	54	21	1
Iceland	170	15	3	50	29	0
Liechtenstein	65	23	8	38	31	0
Norway	13 205	20	10	54	17	0
Switzerland	23 555	22	7	55	16	0

(1) Due to the use of rounded figures in these calculations the sum of all age groups does not always equal 100 %.
Source: Eurostat (online data codes: migr_asyappctza and migr_asyunaa)

Figure 1.7: Asylum applications (non-EU) in the EU-28 Member States, 2004–14 ([1]) (thousands)



([1]) 2004–07: EU-27 and extra-EU-27.
Source: Eurostat (online data codes: migr_asyctz and migr_asyappctza)

2 Living conditions

Introduction

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 EU Member State, reflecting different situations and circumstances. One of these targets is for there to be at least 20 million fewer people in or at-risk-of-poverty and social exclusion for the EU as a whole by 2020. The integrated economic and employment guidelines, first combined in 2008 and most recently specified in 2010, are assessed through the use of a joint assessment framework (JAF) within the context of the Europe 2020 strategy; guideline 10 concerns promoting social inclusion and combating poverty. In March 2015, the European Commission proposed a new set of integrated guidelines that once adopted would replace the 2010 guidelines: guideline 8 concerns ensuring fairness, combatting poverty and promoting equal opportunities.

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. There is a range of other indicators that are equally relevant when analysing social inclusion, for example: access to education and training, health, or housing.

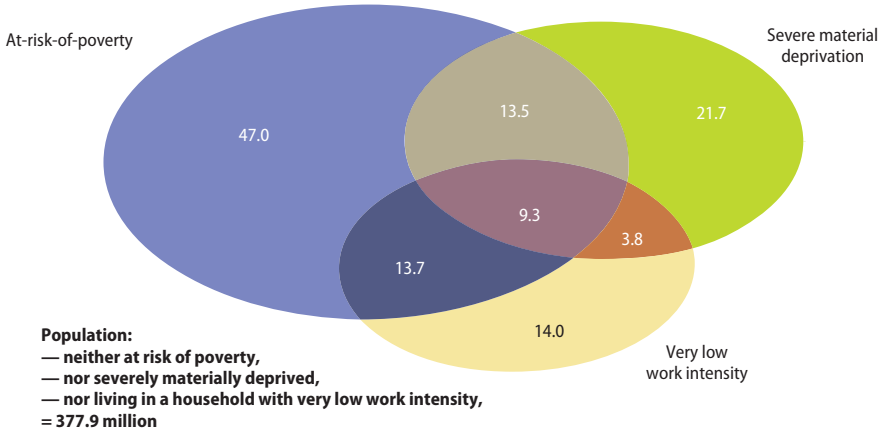
In 2013 there were 123 million people in the EU-28, equivalent to 24.5 % of the entire population, who lived in households facing poverty or social exclusion. In 2013, the number of people at-risk-of-poverty or social exclusion decreased by 1.2 million, equivalent to a 0.2 percentage point decrease in the share of the total population when compared with 2012.

The results for the EU-28 — calculated as a weighted average of the national results — conceal considerable variations between

EU Member States. In Bulgaria, close to half (48.0 %) of the population was considered to be at-risk-of-poverty or social exclusion in 2013, while in Romania (40.4 %), Greece (35.7 %), Latvia (35.1 %) and Hungary (33.5 %) the proportion was more than one third of the population.

Over a quarter of the population was considered to be at-risk-of-poverty or social exclusion in eight other EU-28 Member States in 2013, namely Lithuania (30.8 %), Croatia (29.9 %), Ireland (29.5 %), Italy (28.4 %), Cyprus (27.8 %), Portugal (27.5 %), Spain (27.3 %) and Poland (25.8 %). The EU Member States with the lowest proportions of their populations considered to be at-risk-of-poverty or social exclusion in 2013 were the Czech Republic (14.6 %), the Netherlands (15.9 %), Finland (16.0 %) and Sweden (16.4 %); Iceland (13.0 %), Norway (14.1 %) and Switzerland (16.3 %) also reported a relatively low share of their respective population as being at-risk-of-poverty or social exclusion.

Figure 2.1: Number of persons at-risk-of-poverty or social exclusion analysed by type of risks, EU-28, 2013 ([1])
(million)



([1]) 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. Estimates.

Source: Eurostat (online data code: ilc_pees01)

Table 2.1: Population at-risk-of-poverty or social exclusion, 2008–13

	Proportion of the total population (%)			Number of persons (thousand)		
	2008	2012	2013	2008	2012	2013
EU-28	:	24.7	*24.5*	:	124 060	*122 897*
EU-27	23.8	24.7	*24.5*	116 584	122 676	*121 626*
EA-18	21.7	23.2	*23.1*	70 642	76 603	*75 827*
Belgium	20.8	21.6	20.8	2 194	2 356	2 286
Bulgaria	44.8	49.3	48.0	3 421	3 621	3 493
Czech Republic	15.3	15.4	14.6	1 566	1 580	1 508
Denmark	16.3	19.0	18.9	887	1 057	1 059
Germany	20.1	19.6	20.3	16 345	15 909	16 212
Estonia	21.8	23.4	23.5	291	311	313
Ireland	23.7	30.0	29.5	1 050	1 378	1 358
Greece	28.1	34.6	35.7	3 046	3 795	3 904
Spain	24.5	27.2	27.3	11 124	12 628	12 630
France	18.5	19.1	18.1	11 150	11 760	11 229
Croatia	:	32.6	29.9	:	1 384	1 271
Italy	25.3	29.9	28.4	15 099	18 194	17 326
Cyprus	23.3	27.1	27.8	181	234	240
Latvia	34.2	36.2	35.1	740	731	702
Lithuania	27.6	32.5	30.8	928	975	917
Luxembourg	15.5	18.4	19.0	72	95	96
Hungary	28.2	32.4	33.5	2 794	3 188	3 285
Malta	20.1	23.1	24.0	81	94	99
Netherlands	14.9	15.0	15.9	2 432	2 492	2 648
Austria	20.6	18.5	18.8	1 699	1 542	1 572
Poland	30.5	26.7	25.8	11 491	10 128	9 748
Portugal	26.0	25.3	27.5	2 757	2 667	2 879
Romania	44.2	41.7	40.4	9 418	8 907	8 601
Slovenia	18.5	19.6	20.4	361	392	410
Slovakia	20.6	20.5	19.8	1 111	1 109	1 070
Finland	17.4	17.2	16.0	910	916	854
Sweden	14.9	15.6	16.4	1 367	1 519	1 602
United Kingdom (1)	23.2	24.1	24.8	14 069	15 099	15 586
Iceland	11.8	12.7	13.0	36	38	40
Norway	15.0	13.7	14.1	701	681	714
Switzerland	18.1	17.5	16.3	1 333	1 350	1 271
FYR of Macedonia	:	50.3	48 1	:	1 038	933
Serbia	:	:	42.0	:	:	3 005

(1) 2012: break in time series.
Source: Eurostat (online data code: ilc_peps01)

2.2 Income distribution

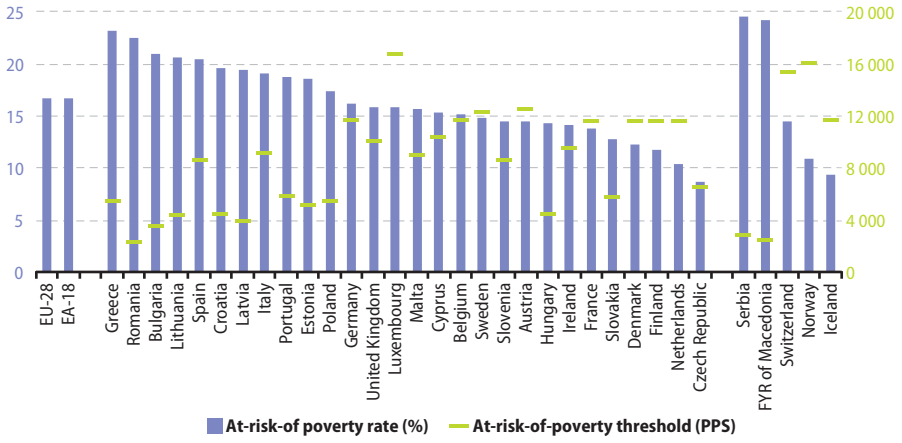
In 2013, 16.6 % of the EU-28 population was assessed to be at-risk-of-poverty after social transfers. This share, calculated as a weighted average of national results, conceals considerable variations across the EU Member States. In five EU Member States, namely Greece (23.1 %), Romania (22.4 %), Bulgaria (21.0 %), Lithuania (20.6 %) and Spain (20.4 %), one fifth or more of the population was viewed as being at-risk-of-poverty; this was also the case in Serbia (24.5 %) and the former Yugoslav Republic of Macedonia (24.2 %). The lowest proportions of persons at-risk-of-poverty were observed in the Netherlands (10.4 %) and the Czech Republic (8.6 %). Norway

(10.9 %) and Iceland (9.3 %) also reported relatively low shares of their respective populations as being at-risk-of-poverty.

The at-risk-of-poverty threshold is set at 60 % of 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 among the EU Member States in 2013 from PPS 2 361 in Romania, PPS 3 540 in Bulgaria and PPS 3 868 in Latvia to a level between PPS 11 507 and PPS 12 542 in Finland, France, the Netherlands, Denmark, Germany, Belgium, Sweden and Austria, before peaking in Luxembourg at PPS 16 818; the poverty threshold was also relatively low in the former Yugoslav Republic of Macedonia (PPS 2 396) and Serbia (PPS 2 863) and high in Switzerland (PPS 15 439) and Norway (PPS 16 069).

The at-risk-of-poverty rate (after social transfers) in the EU-28 remained almost stable between 2011, 2012 and 2013. Between 2012 and 2013, the at-risk-of-poverty rate decreased by at least 1 percentage point in the Czech Republic, Finland and Ireland. In total, 10 other EU Member States reported decreases between 2012 and 2013, ranging from – 0.9 percentage points in Croatia to – 0.1 percentage points in the United Kingdom. Switzerland reported a decrease in the at-risk-of-poverty rate (– 1.4 percentage points) in 2013 compared with the previous year, as did the former Yugoslav Republic of Macedonia (– 2.0 percentage points). In three EU Member States, namely, Germany, Greece and Austria, the at-risk-of poverty rate was unchanged. By contrast, the largest increases between 2012 and 2013 occurred in Lithuania (an increase of 2.0 percentage points), Estonia (1.1 percentage points) and Slovenia (1.0 percentage points), while Iceland (1.4 percentage points) also reported a comparably high increase.

Figure 2.2: At-risk-of-poverty rate and threshold, 2013



Source: Eurostat (online data codes: ilc_li01 and ilc_li02)

Table 2.2: At-risk-of-poverty rate by household type, 2013
(% of specified population)

	Households without dependent children			Households with dependent 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	24.9	10.4	10.7	31.9	12.7	26.6
EA-18	24.7	10.4	11.0	34.2	12.9	24.0
Belgium	24.5	16.9	10.9	34.2	10.6	19.9
Bulgaria	41.4	21.0	14.2	31.6	16.4	68.1
Czech Republic	14.7	2.3	4.7	27.8	8.5	13.8
Denmark	27.8	6.8	7.3	13.3	4.8	15.7
Germany	31.9	10.4	11.2	35.2	11.1	13.7
Estonia	38.6	9.9	12.2	39.8	13.0	18.9
Ireland	26.1	8.2	9.6	36.6	9.7	15.3
Greece	22.4	11.7	16.9	37.2	20.2	31.4
Spain	19.2	15.0	13.5	38.0	18.8	39.4
France	18.0	5.6	7.3	34.9	10.5	23.1
Croatia	32.4	21.3	17.5	31.7	15.7	30.1
Italy	23.1	12.1	12.5	35.9	13.5	38.1
Cyprus	26.8	18.7	14.6	23.2	14.0	17.0
Latvia	31.3	14.2	13.9	38.3	14.3	32.6
Lithuania	33.7	9.9	11.4	42.8	17.4	45.1
Luxembourg	15.7	4.6	5.9	46.1	14.2	27.1
Hungary	13.9	4.3	7.8	34.3	12.0	34.4
Malta	21.0	19.0	9.2	41.9	14.9	36.6
Netherlands	19.7	4.7	5.6	20.1	6.5	20.1
Austria	22.0	11.9	9.5	27.4	11.8	22.1
Poland	22.0	7.5	10.3	29.5	11.6	37.3
Portugal	21.9	13.4	13.7	33.1	16.0	40.4
Romania	25.5	8.2	13.2	31.3	15.2	60.6
Slovenia	32.8	12.0	10.3	30.1	14.4	17.3
Slovakia	15.5	3.8	5.5	30.1	10.0	29.9
Finland	31.3	4.7	5.8	20.5	4.6	9.5
Sweden	32.6	5.8	6.7	36.8	9.0	15.1
United Kingdom	25.8	13.2	10.2	25.2	13.1	28.4
Iceland	16.1	1.3	4.9	27.1	8.0	11.5
Norway	25.7	1.5	4.6	28.2	6.9	6.4
Switzerland	23.8	26.1	12.2	29.3	7.2	25.1
FYR of Macedonia	8.9	18.2	20.4	29.9	16.7	49.9
Serbia	26.3	18.1	20.2	34.2	24.9	44.4

Source: Eurostat (online data code: ilc_li03)

2.3 Housing

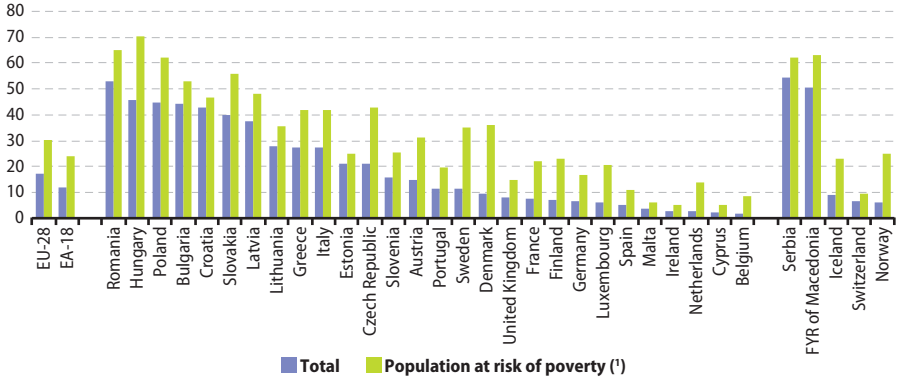
Decent housing, at an affordable price in a safe environment, is a fundamental need and right. Ensuring this need is met, which is likely to alleviate poverty and social exclusion, is still a significant challenge in a number of European countries.

In 2013, 41.1 % of the EU-28 population lived in flats, just over one third (34.0 %) in detached houses and 24.1 % in semi-detached houses. The share of persons living in flats was highest across the EU Member States in Spain (65.4 %), Latvia (65.3 %) and Estonia (63.8 %). The share of people living in detached houses peaked in Croatia (70.9 %), Slovenia (66.5 %), Hungary (64.0 %), Romania (60.1 %) and Denmark (55.8 %); Norway (61.1 %) and Serbia (60.5 %) also reported high shares of their populations living in detached houses. The highest propensities to live in semi-detached houses were reported in the Netherlands (60.7 %), the United Kingdom (60.0 %) and Ireland (58.3 %).

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 2013, 17.3 % 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 30.2 % in 2013, some 12.9 percentage points above the rate for the whole population.

Figure 2.3: Overcrowding rate, 2013
(% of specified population)



(1) Population below 60 % of median equivalised income.
Source: Eurostat (online data code: ilc_lvho05a)

Table 2.3: Distribution of population by dwelling type, 2013
(% of population)

	Flat	Detached house	Semi-detached house	Other
EU-28	41.1	34.0	24.1	0.7
EA-18	46.2	29.6	23.4	0.7
Belgium	21.9	36.5	41.1	0.5
Bulgaria	43.2	45.9	10.5	0.4
Czech Republic	52.8	36.6	10.3	0.2
Denmark	30.0	55.8	0.0	14.2
Germany	54.4	27.8	16.4	1.3
Estonia	63.8	31.0	4.7	0.5
Ireland	4.7	36.8	58.3	0.1
Greece	56.8	33.9	9.2	0.1
Spain	65.4	14.3	20.0	0.3
France	32.2	44.1	23.5	0.2
Croatia	21.6	70.9	7.3	0.2
Italy	50.0	21.2	28.6	0.2
Cyprus	24.5	48.2	26.2	1.2
Latvia	65.3	30.9	3.7	0.2
Lithuania	58.4	35.4	5.9	0.3
Luxembourg	32.2	36.6	30.8	0.5
Hungary	30.4	64.0	5.0	0.6
Malta	52.4	5.1	42.2	0.3
Netherlands	18.7	16.0	60.7	4.6
Austria	43.6	47.6	7.8	1.0
Poland	44.5	50.1	5.3	0.1
Portugal	43.5	39.3	17.0	0.2
Romania	38.1	60.1	1.8	0.0
Slovenia	29.2	66.5	4.1	0.2
Slovakia	48.3	49.7	1.9	0.1
Finland	33.2	47.0	19.3	0.4
Sweden	40.6	48.9	10.0	0.4
United Kingdom	14.3	25.2	60.0	0.5
Iceland	45.4	35.1	19.0	0.6
Norway	15.9	61.1	20.2	2.8
Switzerland	59.2	24.2	13.6	3.0
Serbia	28.2	60.5	11.3	0.1

Source: Eurostat (online data code: ilc_lvho01)

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.

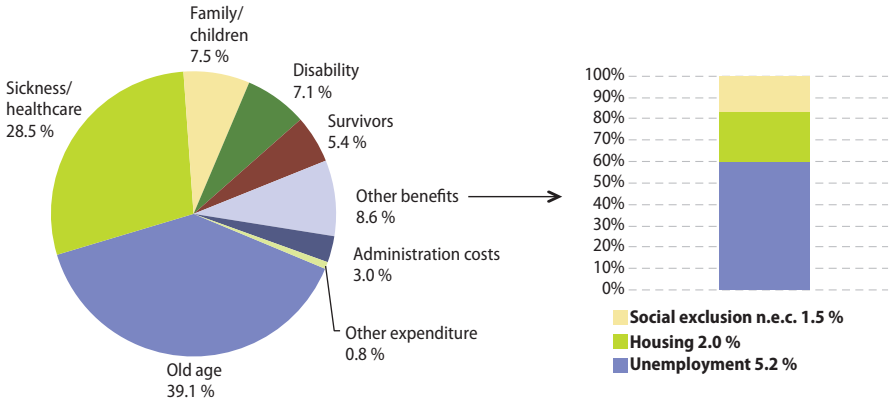
Social protection benefits made up 96.2 % of the EU-28's social protection expenditure in 2012; the remaining 3.8 % covered administration costs and other expenditure. Old age and sickness / healthcare benefits together accounted for 67.6 % of total social protection expenditure while benefits

related to family / children, disability, survivors and unemployment ranged between 5.2 % and 7.5 % each; housing and social exclusion benefits not elsewhere classified accounted for the remaining 2.0 % and 1.5 % respectively.

Among the EU Member States, the level of social protection expenditure in relation to gross domestic product (GDP) in 2012 was highest in Denmark (34.6 %), France (34.2 %) and the Netherlands (33.3 %), while Ireland, Greece, Finland, Belgium, Sweden, Italy and Austria also reported ratios of 30 % or more. By contrast, social protection expenditure represented less than 20 % of GDP in Poland, Malta, Slovakia, Poland, Bulgaria, Lithuania, Romania, Estonia and Latvia (where the lowest share was registered, at 14.0 %); Turkey reported an even lower ratio, just 13.8 %.

In Ireland, expenditure on social protection relative to GDP in 2012 remained 11.3 percentage points higher than it had been in 2008, which was the largest increase over this period among the EU Members States. Greece, Finland, the Netherlands, Slovenia, Denmark, Spain, Cyprus and the United Kingdom all recorded increases ranging from 3.2 percentage points to 5.0 percentage points during the same period. By contrast, the increase in the ratio of expenditure on social protection to GDP between 2008 and 2012 was 1.0 percentage point or less in Sweden, Estonia and Lithuania; while in Hungary and Poland this ratio was lower in 2012 than it had been in 2008.

Figure 2.4: Structure of social protection expenditure, EU-28, 2012 (1)
(% of total expenditure)



(1) Provisional.
Source: Eurostat (online data code: spr_exp_sum)

Table 2.4: Expenditure on social protection, 2002–12
(% of GDP)

	2002	2005	2008	2009	2010	2011	2012
EU-28	:	:	26.7	*29.5*	*29.4*	*29.0*	*29.5*
EU-27	:	27.0	26.7	*29.6*	*29.4*	*29.0*	*29.5*
EA-18	27.3	27.6	27.5	*30.3*	*30.3*	*30.0*	*30.4*
Belgium	26.8	27.5	28.3	30.6	30.1	30.4	30.8
Bulgaria	:	15.1	15.5	17.2	18.1	17.7	17.4
Czech Republic	19.4	18.4	18.0	20.3	20.2	20.4	20.8
Denmark	29.7	30.2	30.7	34.7	34.3	34.3	34.6
Germany	30.4	29.9	28.0	31.5	30.6	29.4	*29.5*
Estonia	12.7	12.6	14.9	19.0	18.0	16.1	15.4
Ireland	16.4	17.2	21.2	26.2	29.0	30.2	*32.5*
Greece	24.0	24.9	26.2	28.0	29.1	30.2	31.2
Spain	20.0	20.6	22.0	25.2	*25.5*	*26.0*	*25.9*
France ([1])	30.5	31.5	31.3	33.6	33.7	33.4	*34.2*
Croatia	:	:	18.7	20.8	21.0	20.7	21.2
Italy	25.2	26.3	27.7	29.9	29.9	29.7	*30.3*
Cyprus	16.3	18.4	19.5	21.1	22.1	22.8	23.1
Latvia	14.3	12.8	12.7	16.9	17.8	15.1	*14.0*
Lithuania	14.0	13.2	16.1	21.2	19.1	17.0	*16.5*
Luxembourg	21.6	21.7	21.4	24.3	23.1	22.5	23.3
Hungary	20.4	21.9	22.9	23.4	23.1	22.1	21.8
Malta	17.2	17.8	18.1	19.6	19.1	18.7	19.4
Netherlands	27.6	27.9	28.5	31.6	32.1	32.3	*33.3*
Austria	28.9	28.8	28.5	30.7	30.6	29.8	30.2
Poland	21.1	20.0	19.4	20.6	20.0	19.1	*18.1*
Portugal	22.8	24.5	24.3	26.8	26.8	26.5	26.9
Romania	13.6	13.4	14.4	17.2	17.6	16.4	15.6
Slovenia	24.3	23.0	21.4	24.2	25.0	25.0	*25.4*
Slovakia	19.1	16.5	16.1	18.8	18.7	18.3	*18.4*
Finland	25.7	26.7	26.2	30.4	30.6	30.0	31.2
Sweden	31.3	31.1	29.5	32.0	30.4	29.7	*30.5*
United Kingdom	25.6	25.8	25.6	28.3	27.9	*28.0*	*28.8*
Iceland	21.2	21.7	22.0	25.4	24.5	25.0	25.2
Norway	26.0	23.7	22.2	26.0	25.6	25.1	25.0
Switzerland	26.4	27.2	24.5	26.9	27.0	26.8	*27.5*
Serbia	:	:	:	:	24.6	23.2	24.4
Turkey ([2])	9.6	11.0	11.9	14.1	13.5	13.2	13.8

([1]) 2009: break in series.
([2]) 2008: break in series.
Source: Eurostat (online data code: spr_exp_sum)

2.5 Crime

Comparisons of crime statistics between EU 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.

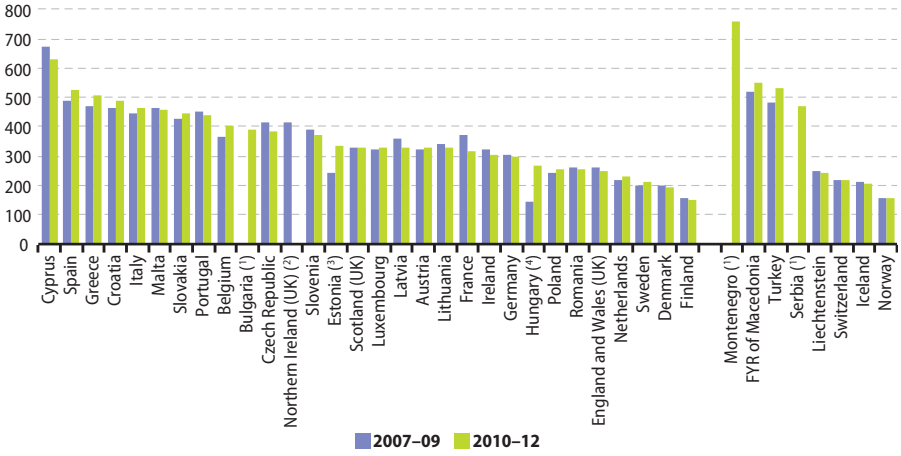
Ten EU Member States saw their number of crimes increase between 2007 and 2012 (time series not available for Ireland or

France). By contrast, total recorded crime decreased in the remaining 16 EU Member States, the most noticeable changes being recorded in Greece (– 54 %), parts of the United Kingdom (– 25 % in England and Wales and -29 % in Scotland), Estonia (– 19 %) and Slovakia (– 18 %); note that there is a break in series for Greece which may in part explain the particularly large reduction.

England and Wales had the greatest influence on the downward trend in the EU-28 during this period, with the largest decrease of crimes in terms of registered cases, more than 1.2 million less in 2012 than in 2007. Among the non-member countries, the total number of crimes recorded by the police in Turkey increased by 96 % between 2007 and 2012.

Relative to the size of the population, the largest number of police officers in the period 2010–12 was in Cyprus (631 per 100 thousand inhabitants), while the lowest was in Finland (151 per 100 thousand inhabitants). Between 2007–09 and 2010–12 the number of police officers relative to the size of the population grew substantially in Hungary and Estonia (although there were breaks in series during this period for both of these EU Member States), as well as in Belgium, Spain and Greece. By contrast, over the same period, France and Cyprus recorded the largest falls in their number of police officers compared with the size of their respective populations.

Figure 2.5: Police officers, average per year, 2007–09 and 2010–12
(per 100 000 inhabitants)



(1) 2007–09: not available.
(2) 2010–12: not available.
(3) 2010: break in series.
(4) 2008 and 2011: break in series.
Source: Eurostat (online data codes: crim_plce, demo_pjan and demo_r_d2jan)

Table 2.5: Crimes recorded by the police, 2002–12
(thousands)

	2002	2007	2008	2009	2010	2011	2012
Belgium	1 012.8	1 034.4	1 043.6	1 067.3	1 072.0	1 111.0	1 073.8
Bulgaria	146.9	134.7	126.7	138.1	147.0	128.6	120.6
Czech Republic	372.3	357.4	343.8	332.8	313.4	317.2	304.5
Denmark	491.5	445.3	477.0	491.8	471.1	466.8	440.8
Germany	6 507.4	6 284.7	6 114.1	6 054.3	5 933.3	5 990.7	5 997.0
Estonia (1)	53.3	50.4	51.0	48.4	48.3	42.6	40.8
Ireland	106.4	:	:	:	:	:	:
Greece (2)	441.1	423.4	417.4	386.9	334.0	194.0	194.1
Spain (1)(3)	2 183.5	2 309.9	2 396.9	2 339.2	2 297.5	2 285.5	2 268.9
France	4 113.9	3 589.3	3 558.3	3 521.3	:	:	:
Croatia	77.9	75.9	74.6	73.5	73.3	75.6	72.2
Italy (1)	2 231.6	2 933.1	2 709.9	2 629.8	2 621.0	2 763.0	2 818.8
Cyprus	4.8	7.6	7.3	7.1	8.4	8.5	8.0
Latvia (1)	49.3	55.6	57.5	56.7	51.1	51.6	49.9
Lithuania	72.6	68.0	72.0	76.3	70.6	72.1	75.3
Luxembourg	26.0	28.3	28.2	32.4	30.5	35.7	37.6
Hungary	420.8	426.9	408.4	394.0	447.2	451.4	472.2
Malta	17.0	15.0	13.8	12.0	13.3	14.2	15.6
Netherlands (1)	1 401.9	1 303.8	1 277.8	1 254.5	1 194.0	1 194.1	1 139.7
Austria	591.6	594.2	572.7	591.6	535.7	540.0	548.0
Poland	1 404.2	1 153.0	1 082.1	1 129.6	1 151.2	1 159.6	1 119.8
Portugal	391.6	398.6	430.5	426.0	422.6	413.7	403.2
Romania	312.2	281.5	289.3	299.9	292.7	258.9	308.5
Slovenia	77.2	88.2	81.9	87.5	89.5	88.7	91.4
Slovakia	107.4	110.8	104.8	104.9	95.3	92.9	90.4
Finland (4)	435.0	435.8	440.7	441.4	431.6	458.3	425.4
Sweden	1 234.8	1 306.3	1 377.9	1 405.6	1 370.4	1 416.3	1 402.6
United Kingdom:							
England and Wales	5 975.0	4 952.3	4 702.7	4 338.3	4 150.9	4 023.3	3 731.3
Scotland (1)	427.0	385.5	377.4	338.1	323.2	314.2	273.1
Northern Ireland	142.5	108.5	110.1	109.1	105.0	103.4	100.4
Iceland (1)(5)	19.9	13.0	14.6	16.0	14.9	12.6	11.7
Liechtenstein	1.0	1.1	1.1	1.2	1.0	1.1	1.1
Norway	319.5	271.7	264.2	277.1	270.7	264.2	273.5
Switzerland (4)	356.8	326.2	323.2	676.3	656.9	693.0	750.4
Montenegro	8.9	9.3	8.3	8.1	7.0	6.1	5.8
FYR of Macedonia	18.3	26.2	28.3	27.3	28.5	29.5	29.9
Serbia	95.6	104.9	106.0	102.4	101.1	99.5	96.1
Turkey (1)	438.7	970.6	1 012.3	1 288.1	1 521.7	1 652.8	1 904.5
Albania	:	:	58.1	:	:	:	:
Kosovo	:	:	36.2	33.1	36.8	64.8	65.2

(1) Between 2002 and 2007: break in series.
(2) 2011: break in series.
(3) 2008: break in series.
(4) 2009: break in series.
(5) 2010: break in series.
Source: Eurostat (online data code: crim_gen)

3

Health

Introduction

Health is an important priority for Europeans, who expect to have a long and healthy life, to be protected against illnesses and accidents, and to 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 survey (EU-SILC), the five-yearly European health interview survey (EHIS) and specific ad-hoc modules of the labour force survey (LFS), such as the 1999, 2007 and 2013 modules on accidents at work and other work-related health problems.

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. Healthy life years are an important measure of the relative health of populations in the EU.

In 2013, the number of healthy life years at birth was estimated at 61.4 years for men and 61.5 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, 5.5 years longer than that for men in 2013. 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 0.1 years difference in favour of women in 2013. Men therefore tend to spend a greater proportion of their somewhat shorter lives free from activity limitations. The expected number of healthy life years at birth was higher for women than for men in 16 of the EU Member States, with the difference exceeding 3.0 years in Estonia, Poland and Bulgaria and peaking at 4.8 years in Lithuania.

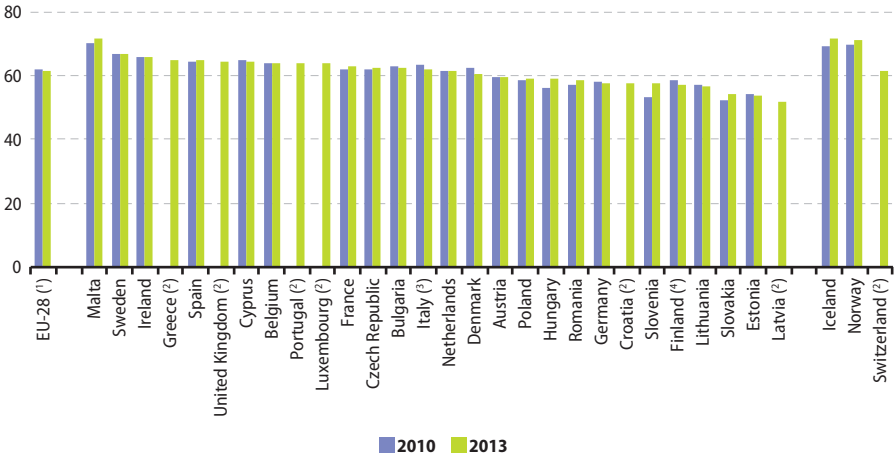
An analysis comparing healthy life years between the sexes at the age of 65 in 2013 shows that there were 12 EU Member States where men could expect more healthy life years than women; this was most notably the case in Greece where men aged 65 could expect to live at least one year longer free from disability than women. By contrast, women could expect to live at least one year longer free from disability than men in Denmark, Ireland and Bulgaria.

Table 3.1: Healthy life years, 2013
(years)

	Healthy life years at birth			Healthy life years at age 65		
	Women	Men	Difference	Women	Men	Difference
EU-28	*61.5*	*61.4*	*0.1*	*8.6*	*8.5*	*0.1*
Belgium	63.7	64.0	–0.3	10.9	10.8	0.1
Bulgaria	66.6	62.4	4.2	9.9	8.7	1.2
Czech Republic	64.2	62.5	1.7	8.9	8.5	0.4
Denmark	59.1	60.4	–1.3	12.7	11.6	1.1
Germany	57.0	57.8	–0.8	7.0	7.0	0.0
Estonia	57.1	53.9	3.2	5.7	5.1	0.6
Ireland	68.0	65.8	2.2	12.1	10.9	1.2
Greece	65.1	64.7	0.4	6.8	8.0	–1.2
Spain	63.9	64.7	–0.8	9.0	9.7	–0.7
France	64.4	63.0	1.4	10.7	9.8	0.9
Croatia	60.4	57.6	2.8	5.9	5.5	0.4
Italy	60.9	61.8	–0.9	7.1	7.7	–0.6
Cyprus	65.0	64.3	0.7	8.7	9.5	–0.8
Latvia	54.2	51.7	2.5	4.2	4.0	0.2
Lithuania	61.6	56.8	4.8	6.3	5.9	0.4
Luxembourg	62.9	63.8	–0.9	10.6	10.9	–0.3
Hungary	60.1	59.1	1.0	6.1	6.2	–0.1
Malta	72.7	71.6	1.1	12.7	12.8	–0.1
Netherlands	57.5	61.4	–3.9	9.2	9.5	–0.3
Austria	60.2	59.7	0.5	8.8	8.9	–0.1
Poland	62.7	59.2	3.5	7.8	7.2	0.6
Portugal	62.2	63.9	–1.7	9.3	9.6	–0.3
Romania	57.9	58.6	–0.7	5.2	5.8	–0.6
Slovenia	59.5	57.6	1.9	7.6	7.2	0.4
Slovakia	54.3	54.5	–0.2	3.7	4.2	–0.5
Finland (1)	56.2	57.3	–1.1	9.0	8.4	0.6
Sweden	66.0	66.9	–0.9	13.8	12.9	0.9
United Kingdom	64.8	64.4	0.4	10.7	10.6	0.1
Iceland	66.7	71.7	–5.0	15.1	15.1	0.0
Norway	68.6	71.0	–2.4	14.8	15.0	–0.2
Switzerland	58.4	61.5	–3.1	10.4	10.6	–0.2

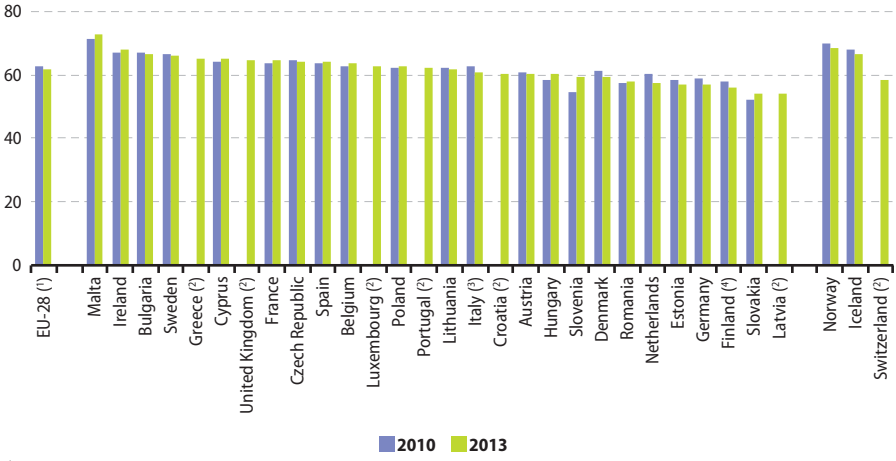
(1) 2012.
Source: Eurostat (online data code: hlth_hlye)

Figure 3.1.1: Healthy life years at birth, women, 2010 and 2013
(years)



(1) Estimates.
(2) 2010: not comparable due to a break in series.
(3) Data for 2011 instead of 2010.
(4) Data for 2012 instead of 2013.
Source: Eurostat (online data code: hlth_hlye)

Figure 3.1.2: Healthy life years at birth, men, 2010 and 2013
(years)



(1) Estimates.
(2) 2010: not comparable due to a break in series.
(3) Data for 2011 instead of 2010.
(4) Data for 2012 instead of 2013.
Source: Eurostat (online data code: hlth_hlye)

3.2 Causes of death

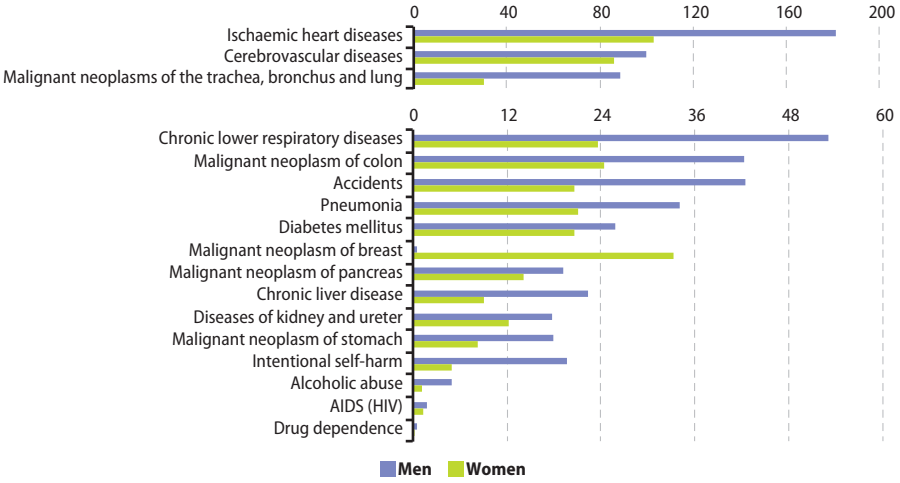
By relating all deaths in the population to an underlying cause of death, the risks associated with death from a range of specific diseases and other causes can be assessed; these figures can be further analysed by age, sex, country where the death occurred / residency of the deceased, and region (NUTS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

Between 2004 and 2012, there was a 10.2 % reduction in EU-28 standardised death rates relating to cancer for men and a 5.5 % reduction for women. Larger declines were recorded in relation to deaths from ischaemic heart disease, where death rates fell by 28.5 % for men and 30.4 % for women, while even greater reductions were recorded for deaths from transport accidents where rates fell by 40.8 % for men and 43.8 % for women.

Diseases of the circulatory system include those related to high blood pressure, cholesterol, diabetes and smoking; the most common causes of death from diseases of the circulatory system are ischaemic heart diseases and cerebrovascular diseases. Ischaemic heart diseases accounted for 137 deaths per 100 000 inhabitants across the EU-28 in 2012.

Cancer was a major cause of death, averaging 267 deaths per 100 000 inhabitants across the EU-28 in 2012. The most common forms of cancer — all with standardised death rates in excess of 10 per 100 000 inhabitants — included malignant neoplasms of the: trachea, bronchus and lung; colon, rectosigmoid junction, rectum, anus and anal canal; breast; pancreas; stomach and liver and bile ducts.

Figure 3.2: Causes of death — standardised death rate, EU-28, 2012 (1)
(per 100 000 inhabitants)



(1) Estimates. The figure is ranked on the average of men and women Note the difference in the scales employed between the two parts of the figure.

Source: Eurostat (online data code: hlth_cd_asdr2)

Table 3.2: Causes of death — standardised death rate per 100 000 inhabitants, EU-28, 2004–12 ([1])
(2009 = 100)

	2004	2005	2006	2007	2008	2009	2010	2011	2012
	Women								
Cancer ([2])	104.2	103.4	102.3	101.6	101.4	100.0	99.2	99.0	98.5
Lung cancer ([3])	:	:	:	:	:	100.0	101.8	104.5	105.7
Nervous system	89.7	93.9	93.6	95.5	99.0	100.0	101.3	104.1	110.6
Ischaemic heart diseases	127.5	123.9	114.8	110.2	104.8	100.0	95.7	90.3	88.7
Transport accidents	138.9	130.6	122.2	119.4	111.1	100.0	88.9	85.3	78.1
Breast cancer	107.6	106.1	104.4	102.0	102.0	100.0	98.8	98.1	97.1
	Men								
Cancer ([2])	107.5	105.5	103.5	102.2	101.4	100.0	98.5	97.4	96.5
Lung cancer ([3])	:	:	:	:	:	100.0	98.4	97.0	95.1
Nervous system	93.4	97.1	95.8	96.3	99.2	100.0	101.1	102.6	108.6
Ischaemic heart diseases	125.6	121.8	113.3	108.9	104.1	100.0	96.7	91.6	89.8
Transport accidents	135.4	128.3	121.3	119.7	111.0	100.0	88.2	86.5	80.2

([1]) 2004, 2005 and 2010: provisional. 2012: estimate.
([2]) Malignant neoplasms.
([3]) Malignant neoplasm of trachea, bronchus and lung.
Source: Eurostat (online data codes: hlth_cd_asdr and hlth_cd_asdr2)

3.3 Healthcare provision

An individual's state of health and that of the population in general is influenced by genetic and environmental factors, cultural and socioeconomic conditions, as well as the healthcare services that are available to prevent and to treat illness and disease.

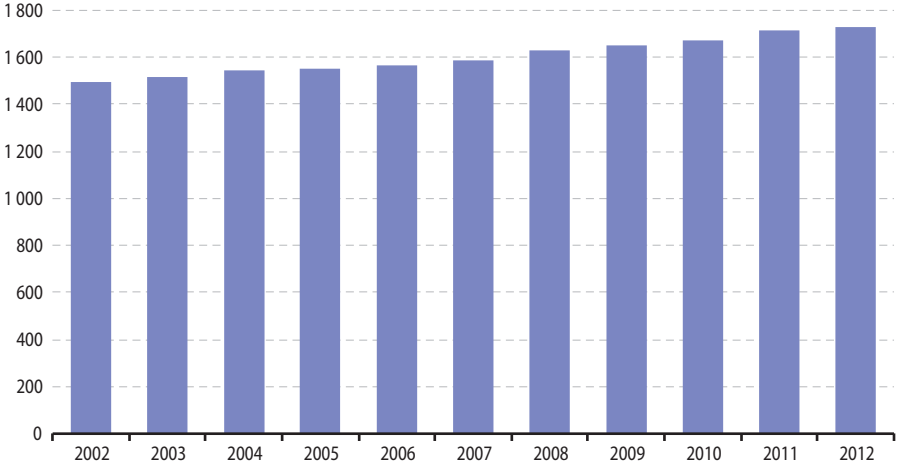
Non-monetary statistics may be used to evaluate how a country's healthcare system responds to the challenge of universal access to good healthcare, through measuring human and technical resources, the allocation of these resources and the demand by patients.

In 2012, there were approximately 1.7 million physicians in the EU-28, an increase of 227 thousand compared with 10 years earlier.

One of the key indicators for measuring healthcare personnel is the total number of physicians, expressed per 100 000 inhabitants. Greece recorded the highest ratio among the EU Member States, at 614 per 100 000 inhabitants (2011 data for professionally active physicians). Austria (490), Lithuania (422) and Portugal (410; physicians licensed to practise) had the next highest ratios and were the only other EU Member States to record in excess of 400 physicians per 100 000 inhabitants. In contrast, there were fewer than 270 physicians per 100 000 inhabitants in Romania, Slovenia and Poland, where the lowest ratio was recorded (221 physicians per 100 000 inhabitants).

The number of hospital beds per 100 000 inhabitants averaged 534.9 in the EU-28 in 2011. The reduction in bed numbers between 2001 and 2011 across the whole of the EU-28 was equal to 92 fewer beds per 100 000 inhabitants. This reduction may reflect, among other factors, economic constraints, increased efficiency through the use of technical resources (for example, imaging equipment), a general shift from in-patient to out-patient operations, and shorter periods spent in hospital following an operation.

Figure 3.3: Number of practising physicians, EU-28, 2002–12 ([1])
(thousands)



([1]) Estimates made for the purpose of this publication. Breaks in series. Excluding Denmark and Ireland. Greece, France, Italy, the Netherlands, Slovakia and Finland: professionally active physicians. Malta and Portugal: licensed physicians.
Source: Eurostat (online data code: hlth_rs_prs1)

Table 3.3: Physicians, by speciality, 2012 ([1])
(per 100 000 inhabitants)

	Total	Generalist medical practitioners	General paediatricians	Gynaecologists and obstetricians	Psychiatrists	Medical group of specialists	Surgical group of specialists	Other specialists not elsewhere classified
Belgium ([2])	293	111.2	12.2	12.2	16.9	80.3	54.8	:
Bulgaria ([2])	391	67.0	19.4	18.9	8.0	127.9	76.7	68.5
Czech Republic ([2])	367	70.2	12.6	25.2	14.2	149.2	87.1	:
Denmark ([3])	348	73.3	6.7	9.5	16.9	57.8	52.2	:
Germany ([2])	389	160.0	11.8	19.7	20.8	89.7	78.0	2.2
Estonia ([2])	328	84.9	12.3	20.2	13.8	87.0	72.5	11.6
Ireland	*271*	240.0	11.5	8.4	25.4	83.0	55.5	1.3
Greece ([5])	614	30.3	29.6	25.3	16.9	185.7	101.6	4.0
Spain ([2])	*369*	74.3	25.8	12.1	10.1	74.5	83.4	25.5
France	308	155.6	11.6	12.3	22.3	81.8	45.1	3.0
Croatia ([2])	299	77.0	17.6	17.3	14.5	99.8	56.1	9.3
Italy ([2])	385	98.1	13.0	22.0	18.9	137.5	104.4	24.9
Cyprus	304	:	:	:	:	:	:	:
Latvia ([2])	314	64.5	13.3	21.8	16.0	94.0	69.0	34.9
Lithuania ([2])	422	85.1	28.2	25.1	21.4	147.0	95.6	7.4
Luxembourg	280	83.1	15.6	15.3	20.5	81.9	61.8	0.0
Hungary ([4])	309	33.5	26.6	12.2	10.5	78.4	37.4	:
Malta	329	192.2	15.0	11.7	6.4	63.9	60.1	:
Netherlands ([6])	313	125.5	8.9	7.8	20.5	77.8	36.6	19.2
Austria ([2])	490	159.7	15.2	19.6	14.7	103.5	88.7	0.8
Poland ([2])	221	41.2	12.5	13.4	8.3	94.0	49.0	0.2
Portugal ([2])	410	207.6	15.6	15.1	10.8	91.3	61.2	10.7
Romania ([2])	261	87.9	11.3	11.3	9.2	74.1	44.0	16.0
Slovenia ([2])	254	52.9	24.2	16.4	10.8	83.3	51.0	5.4
Slovakia	336	:	:	:	:	:	:	:
Finland ([2])	*329*	*116.5*	*9.8*	*11.1*	*20.0*	*62.5*	*37.9*	*3.6*
Sweden ([6])	392	62.9	10.4	14.2	21.9	87.6	62.5	11.1
United Kingdom	275	*80.1*	*14.9*	*11.9*	*18.8*	*63.4*	*74.2*	*10.9*
Iceland	357	57.1	4.4	11.5	21.2	111.6	69.5	0.3
Liechtenstein	316	100.9	13.6	21.8	27.3	84.6	68.2	0.0
Norway ([2])	423	99.2	11.9	9.8	20.2	53.3	43.0	85.8
Switzerland ([2])	392	105.6	17.6	18.1	45.1	64.8	68.1	2.2
FYR of Macedonia ([2])	279	93.9	19.3	17.4	10.1	76.9	41.9	14.8
Serbia	310	:	:	:	:	:	:	:
Turkey ([2])	173	56.4	8.9	8.5	3.8	47.7	38.6	5.8

([1]) Practising physicians, except: Greece, the Netherlands, Slovakia, Finland, the former Yugoslav Republic of Macedonia, Serbia and Turkey (professionally active); Portugal (licensed).
([2]) Analysis by speciality: 2011.
([3]) 2009.
([4]) 2010.
([5]) 2011.
([6]) Total: 2011. Analysis by speciality: 2010.
Source: Eurostat (online data codes: hlth_rs_prs1, hlth_rs_spec and demo_pjan)

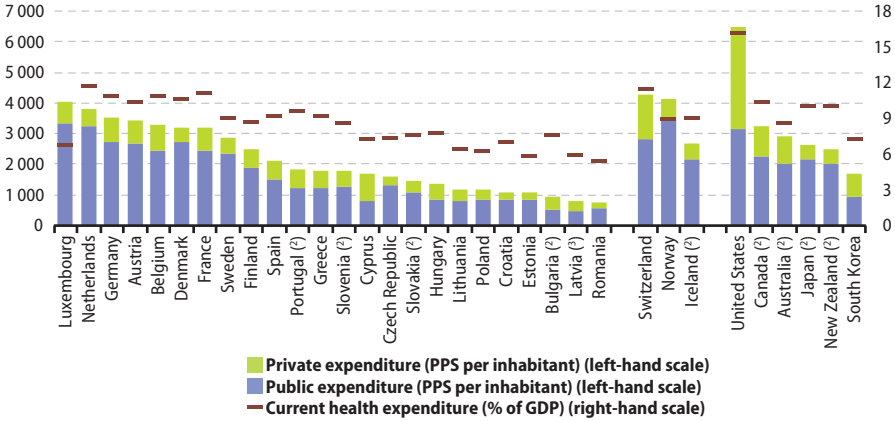
3.4 Healthcare expenditure

Healthcare systems are organised and financed in different ways across the EU Member States, but most Europeans would agree that universal access to quality healthcare, at an affordable cost to both individuals and society at large, is a basic need. Moreover this is one of the common values and principles in EU health systems.

The level of current healthcare expenditure in Germany was around EUR 290 billion in 2012, equivalent to 10.9 % of GDP. In Belgium, current healthcare expenditure was also equivalent to 10.9 % of GDP, with France (11.2 %) and the Netherlands (11.8 %) the only EU Member States for which data are available to report higher ratios. Denmark and Austria also reported that current healthcare expenditure exceeded 10.0 % of GDP. Among the non-member countries, the ratio of current healthcare expenditure to GDP reached or exceeded 10.0 % in New Zealand, Japan, Canada (all 2011 data) and Switzerland, peaking at 16.2 % in the United States. In contrast, current healthcare expenditure accounted for less than 6.5 % of GDP in Lithuania, Poland, Latvia (2010 data) and Estonia, with Romania recording the lowest ratio (5.5 %).

The functional patterns of healthcare expenditure show that in 2012 curative and rehabilitative services incurred more than 50 % of current healthcare expenditure in the majority of EU Member States for which data are available, the exceptions being Belgium, Bulgaria, Slovakia (both 2011 data) and Romania; in Canada (2011 data) curative and rehabilitative services also incurred less than half of current healthcare expenditure.

Figure 3.4: Current healthcare expenditure, 2012 (1)



(1) Countries are ranked on total (public + private) healthcare expenditure in PPS per inhabitant. Denmark, Cyprus, Portugal, Iceland, Norway and Switzerland: provisional. Ireland, Italy, Malta and the United Kingdom: not available.
(2) 2011.
(3) 2010.
Source: Eurostat (online data code: hlth_sha_hf)

Table 3.4: Healthcare expenditure by function, 2012
(% of current healthcare expenditure)

	Services of curative and rehabilitative care	Services of long-term nursing care	Ancillary services to healthcare	Medical goods dispensed to outpatients	Prevention and public health services	Health administration and health insurance
Belgium	49.0	22.4	3.8	18.8	1.1	4.9
Bulgaria (1)	48.9	0.1	3.2	41.4	3.8	2.0
Czech Republic	60.1	3.9	5.7	24.5	2.1	3.0
Denmark	*57.3*	*24.0*	*4.1*	*10.1*	*2.3*	*2.2*
Germany	54.5	12.6	4.8	19.4	3.3	5.4
Estonia	54.9	4.4	11.1	24.3	3.4	2.0
Ireland	:	:	:	:	:	:
Greece	64.4	0.7	4.5	27.2	1.2	2.0
Spain	58.9	10.9	5.4	19.6	2.1	3.2
France	54.6	11.4	5.1	20.8	2.0	6.1
Croatia	53.7	0.7	8.5	31.1	2.3	2.7
Italy	:	:	:	:	:	:
Cyprus	*64.8*	*2.8*	*10.7*	*18.9*	*1.3*	*1.3*
Latvia (2)	52.3	6.0	6.4	29.7	2.4	3.3
Lithuania	52.4	7.7	5.0	31.8	1.2	2.0
Luxembourg	56.5	22.5	5.8	11.6	1.9	1.7
Hungary	50.4	3.8	5.2	35.4	3.4	1.7
Malta	:	:	:	:	:	:
Netherlands	51.0	25.1	2.0	13.3	3.6	3.9
Austria	60.2	14.5	3.2	16.5	1.8	3.8
Poland	60.1	7.0	5.1	24.6	2.0	1.2
Portugal (1)	*62.6*	*1.7*	*8.8*	*23.0*	*2.1*	*1.8*
Romania	46.2	11.5	3.9	29.9	6.8	1.7
Slovenia (1)	56.5	8.9	3.4	23.8	4.0	3.5
Slovakia (1)	46.9	0.3	8.5	38.0	2.8	3.5
Finland	62.4	9.4	3.6	16.7	6.2	1.7
Sweden	66.6	7.6	4.4	15.2	3.9	1.6
United Kingdom	:	:	:	:	:	:
Iceland	*59.3*	*18.6*	*1.7*	*17.0*	*1.3*	*2.2*
Norway	*50.1*	*28.9*	*7.2*	*10.6*	*2.5*	*0.6*
Switzerland	*58.9*	*20.1*	*3.4*	*11.0*	*2.1*	*4.4*
Australia (1)	70.1	1.2	6.0	18.6	2.0	2.1
Canada (1)	48.2	14.9	6.5	20.3	6.1	3.4
Japan (1)	63.7	9.1	0.7	22.0	2.9	1.6
New Zealand (1)	59.2	14.5	5.2	10.7	6.4	4.0
South Korea	56.0	12.7	1.0	22.5	3.1	4.8
United States	70.1	5.8	:	13.6	3.1	7.5

(1) 2011.
(2) 2010.
Source: Eurostat (online data code: hlth_sha_hc)

Medical goods dispensed to outpatients was the second largest function, with average spending accounting for around one quarter of total current healthcare expenditure, although with a significant degree of variation: the lowest share of 10.1 % was recorded for Denmark, rising to more than one third of the total in Hungary (35.4 %), Slovakia (38.0 %, 2011 data) and Bulgaria (41.4 %, 2011 data).

3.5 Accidents at work

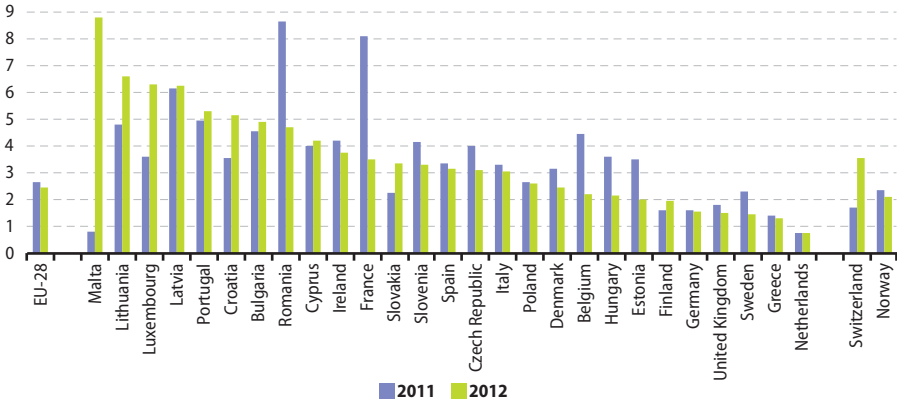
An accident at work is a discrete occurrence during the course of work which leads to physical or mental harm. Non-fatal accidents at work are those that imply at least four full calendar days of absence from work (they are sometimes also called 'serious accidents at work'). Fatal accidents at work are those that lead to the death of the victim within one year.

In 2012, there were just under 2.5 million non-fatal accidents that resulted in at least four calendar days of absence from work and 3 515 fatal accidents in the EU-28. These figures marked a substantial reduction in relation to 2009, when there had been approximately 313 thousand more non-fatal accidents and 310 more fatal accidents. Men are considerably more likely than women to have a non-fatal accident or to die at work.

In the EU-28, almost four out of every five (78.5 %) non-fatal accidents at work and 19 out of every 20 (95.6 %) fatal accidents at work involved men.

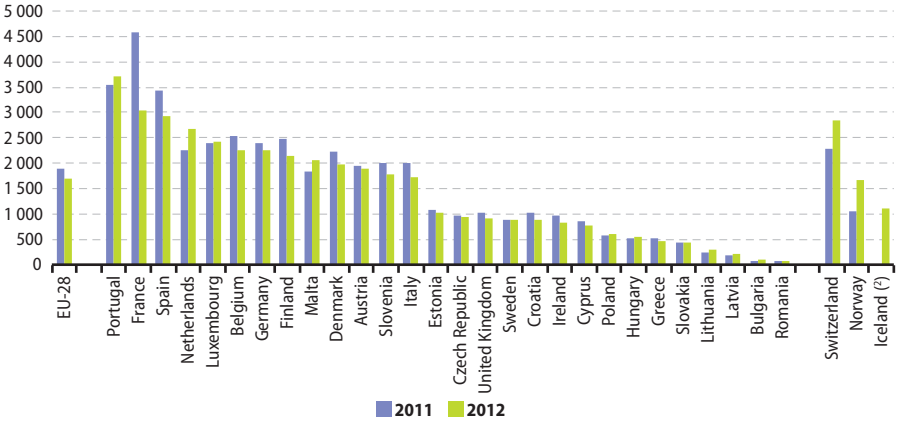
An alternative way to analyse the information on accidents at work is to express the number of accidents in relation to the number of persons employed (referred to as the 'incidence rate'); in Figures 3.5.1 and 3.5.2 the so-called 'standardised incidence rates' are shown which assume that the relative sizes of economic sectors within each national economy are the same as within the EU as a whole. Across the EU-28 there were, on average, 2.44 fatal accidents per 100 000 persons employed in 2012, while there were 1 702 non-fatal accidents per 100 000 persons employed.

Figure 3.5.1: Fatal accidents at work, 2011 and 2012 ([1])
(standardised incidence rates per 100 000 persons employed)



([1]) NACE Rev. 2 Section A and Sections C to N. Austria: data not yet validated.
Source: Eurostat (online data code: hsw_mi01)

Figure 3.5.2: Non-fatal accidents at work, 2011 and 2012 ([1])
(standardised incidence rates per 100 000 persons employed)



([1]) NACE Rev. 2 Section A and Sections C to N. Non-fatal (serious) accidents reported in the framework of ESAW are accidents that imply at least four full calendar days of absence from work.
([2]) 2011: not available.
Source: Eurostat (online data code: hsw_mi01)

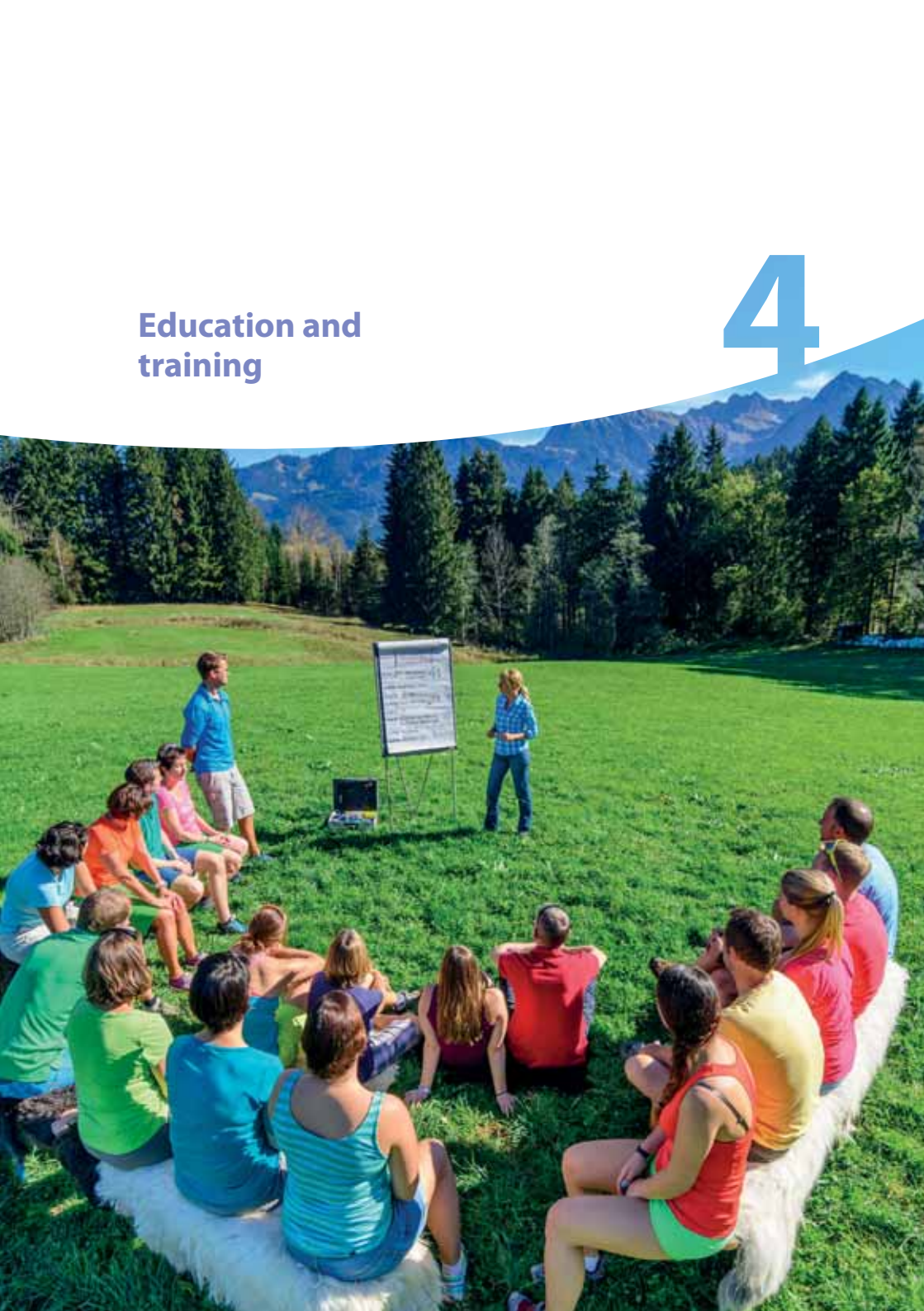
Table 3.5: Number of non-fatal and fatal accidents at work, 2012 ([1])
(persons)

	Accidents at work involving at least four calendar days of absence from work			Fatal accidents at work		
	Total	Men	Women	Total	Men	Women
EU-28	*2 487 794*	*1 953 554*	*533 984*	3 515	3 362	153
Belgium	49 546	40 451	9 093	46	46	0
Bulgaria	1 768	1 353	415	90	82	8
Czech Republic	36 013	26 820	9 193	104	102	2
Denmark	34 245	26 825	7 292	43	42	1
Germany	709 940	578 076	131 794	473	452	21
Estonia	4 993	3 065	1 928	11	10	1
Ireland	9 794	6 828	2 921	42	42	0
Greece	11 926	9 446	2 480	37	34	3
Spain	281 045	212 968	68 077	273	266	7
France	461 376	353 980	107 396	524	494	30
Croatia	8 844	6 766	2 078	50	50	0
Italy	274 040	219 282	54 758	469	450	19
Cyprus	1 511	1 127	384	7	7	0
Latvia	1 213	875	338	33	30	3
Lithuania	2 303	1 698	605	55	54	1
Luxembourg	6 299	5 378	921	13	13	0
Hungary	16 717	11 879	4 838	60	58	2
Malta	2 190	1 978	212	7	7	0
Netherlands	116 029	89 307	26 722	31	31	0
Austria	56 299	46 731	9 568	137	128	9
Poland	67 472	50 290	17 182	303	284	19
Portugal	109 511	82 685	26 826	162	157	5
Romania	2 889	2 308	581	257	245	12
Slovenia	11 505	9 318	2 187	21	21	0
Slovakia	7 469	5 405	2 064	49	49	0
Finland	34 821	28 042	6 779	32	30	2
Sweden	24 864	18 674	6 189	37	34	3
United Kingdom	143 171	111 998	31 162	149	144	5
Norway ([2])	14 855	12 335	2 520	34	32	2
Switzerland	72 106	60 352	11 754	60	57	3

([1]) NACE Rev. 2 Section A and Sections C to N. Non-fatal accidents reported in the framework of ESAW are accidents that imply at least four full calendar days of absence from work (serious accidents).
([2]) 2011.
Source: Eurostat (online data code: hsw_mi01)

4

Education and training



Introduction

Education, vocational training and more generally lifelong learning play a vital role in both an economic and social context. The opportunities which the EU offers its citizens for living, studying and working in other countries make a major contribution to cross-cultural understanding, personal development and the achievement of the EU's full economic potential. Each year, well over a million EU citizens of all ages benefit from EU-funded educational, vocational and citizenship-building programmes.

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.

Two supplementary benchmarks on learning mobility were adopted by the Council in November 2011:

- by 2020, an EU average of at least 20 % of higher education graduates should have had a period of higher education-related study or training (including work placements) abroad, representing a minimum of 15 European credit transfer and accumulation system (ECTS) credits or lasting a minimum of three months;
- by 2020, an EU average of at least 6 % of 18 to 34 year-olds with an initial vocational education and training (VET) qualification should have had an initial VET-related study or training period (including work placements) abroad lasting a minimum of two weeks, or less if documented by Europass.

Another benchmark on employability was added in May 2012:

- by 2020, the share of employed graduates (20 to 34 year-olds) having left education and training no more than three years before the reference year should be at least 82 %.

4.1 School enrolment and early leavers from education and training

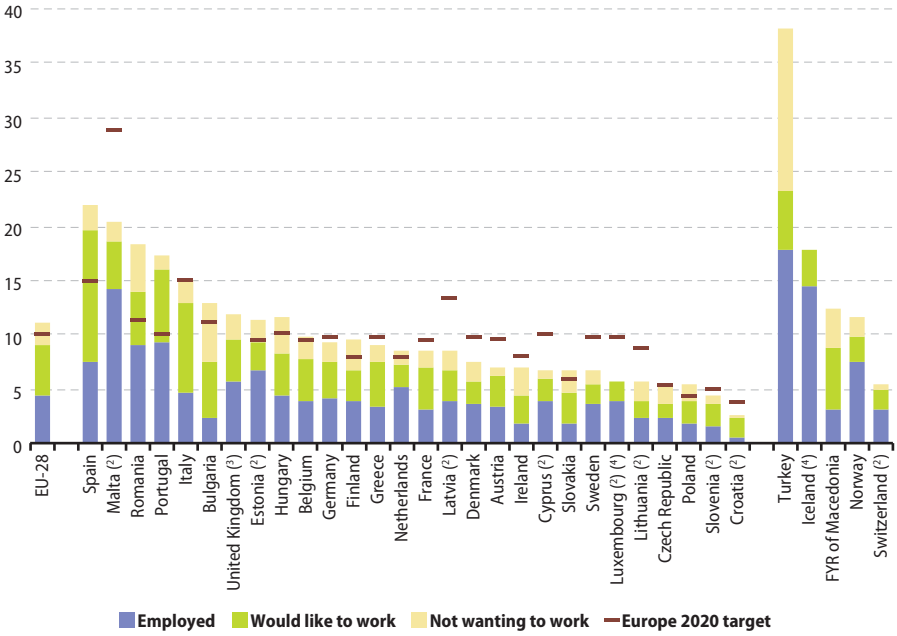
School helps young people acquire basic life skills and competences that are necessary for their personal development. The quality of a pupil's school experience affects not only their development, but also his or her place in society, level of educational attainment, and employment opportunities. The quality of education may be linked to teaching standards, which in turn are related to the demands placed upon teachers, the training they receive, the roles they are asked to fill and the resources available.

Data on educational attainment show that, in 2014, just over four fifths (82.3 %) of the EU-28's population aged 20 to 24 had completed at least an upper secondary level of education, a figure that reached 84.7 % for women. However, 11.1 % of those aged 18 to 24 (12.7 % of men and 9.5 % of women) were early leavers from education and training, with at most a lower secondary education. Among the EU Member States, the highest proportion of early leavers in 2014 was recorded in Spain (21.9 %) and the lowest in Croatia (2.7 %).

There were 93.2 million pupils and students enrolled in educational establishments in 2012 in the EU-28. The highest share (14.9 %) of pupils and students in the EU-28 total was accounted for by Germany, where 13.9 million pupils and students attended educational establishments in 2012; this figure was 823 thousand higher than the next largest student population which was in the United Kingdom, and 1.5 million higher than in France.

Between 2007 and 2012, the proportion of pupils and students in tertiary education in the EU-28 rose by 1.5 percentage points to reach 21.7 %. By contrast, there were several EU Member States where the relative importance of tertiary education, in terms of its share of student numbers, fell during the period under consideration, namely Slovenia, Ireland, Hungary, Italy, Latvia and Romania.

Figure 4.1: Early leavers from education and training, 2014 ([1])
(% of population aged 18–24)



([1]) Ranked on the total proportion of early leavers.
([2]) Includes unreliable data for one or more categories.
([3]) No Europe 2020 target.
([4]) Not wanting to work: not available.
Source: Eurostat (online data code: edat_lfse_14)

Table 4.1: Pupils and students (excluding pre-primary education), 2012 ([1])

	Total (ISCED 1–6) (in thousands)	Analysis by level of education (% of total)			
		Primary education (ISCED 1)	Lower secondary education (ISCED 2)	Upper and post-secondary non-tertiary education (ISCED 3–4)	Tertiary education (ISCED 5–6)
EU-28	93 237	30.2	23.1	24.9	21.7
Belgium	2 484	30.0	13.6	37.2	19.2
Bulgaria	1 066	23.7	21.8	27.8	26.7
Czech Republic	1 794	26.6	20.4	28.5	24.5
Denmark	1 301	36.2	18.9	23.8	21.1
Germany	13 916	21.1	34.3	22.9	21.1
Estonia	238	31.2	16.0	24.3	28.5
Ireland	1 114	46.5	17.0	19.1	17.3
Greece	2 013	31.6	16.3	19.1	33.0
Spain	8 172	35.6	25.0	15.4	24.1
France	12 419	33.5	26.6	21.4	18.5
Croatia	702	22.8	28.1	26.7	22.4
Italy	9 408	30.3	19.4	29.8	20.5
Cyprus	149	36.5	19.8	22.3	21.4
Latvia	350	32.4	16.3	23.6	27.7
Lithuania	615	18.1	35.1	18.3	28.5
Luxembourg	88	40.3	24.5	28.3	6.9
Hungary	1 762	21.9	22.5	34.1	21.6
Malta	70	33.7	19.9	28.8	17.4
Netherlands	3 698	34.5	21.8	22.0	21.5
Austria	1 484	22.0	23.1	29.5	25.4
Poland	7 410	29.5	16.7	26.7	27.1
Portugal	1 969	36.6	22.2	21.4	19.8
Romania	3 315	24.4	24.7	29.6	21.3
Slovenia	362	29.8	15.0	26.5	28.7
Slovakia	954	21.9	28.0	26.9	23.2
Finland	1 229	28.3	15.0	31.6	25.1
Sweden	2 062	34.6	16.0	27.4	22.0
United Kingdom	13 094	34.5	19.0	27.4	19.1
Iceland	89	33.2	14.6	30.6	21.6
Liechtenstein	6	30.9	27.1	26.1	15.0
Norway	1 108	38.2	17.2	23.1	21.5
Switzerland	1 391	34.8	20.4	24.5	19.4
FYR of Macedonia	358	30.0	26.0	26.3	17.7
Albania	:	:	:	:	:
Turkey	20 089	32.0	22.6	23.7	21.7
Japan	18 266	37.9	19.8	20.2	21.3
United States	70 062	34.8	17.7	17.6	30.0

([1]) Refer to the internet metadata file (http://ec.europa.eu/eurostat/cache/metadata/en/educ_uoe_h_esms.htm).
Source: Eurostat (online data codes: tps00051 and educ_enrl1tl)

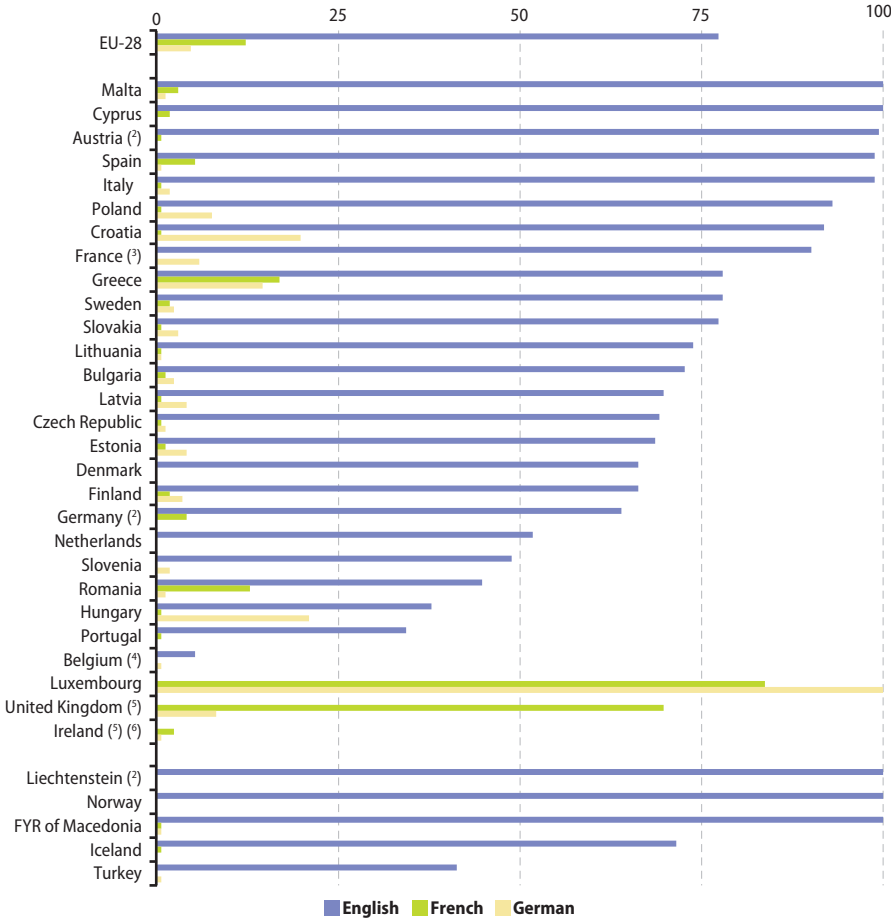
4.2 Foreign language learning

Currently there are 24 official languages recognised within the EU, in addition to which there are regional, minority languages, and languages spoken by migrant populations. School and other educational institutions provide the main opportunity for the vast majority of people to learn languages, while linguistic diversity is actively encouraged within many further educational establishments and workplaces.

Within primary education, a clear majority of pupils (choose to) study English in the vast majority of EU Member States. 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. All primary school pupils in Malta and Cyprus studied English in 2012, as was also the case in Liechtenstein, Norway and the former Yugoslav Republic of Macedonia. In Austria, Spain and Italy, very high shares of primary school pupils studying English (between 98.9 % and 99.6 %) were also recorded, while more than nine out of every ten primary school children studied English in Poland, Croatia and France. The relative importance of English as a foreign language may be further magnified because pupils tend to receive more instruction in their first foreign language than they do for any subsequent languages they (choose to) study.

Turning to language learning in upper secondary education, some 94.5 % of all EU-28 students at ISCED level 3 were studying English as a foreign language in 2012, compared with slightly less than one quarter (23.6 %) studying French and slightly more than one fifth (20.9 %) studying German. Between 2007 and 2012, the proportion of students at ISCED level 3 in the EU-28 studying English increased (up 2.0 percentage points), while the proportions studying French and German fell 1.7 and 7.6 percentage points respectively.

Figure 4.2: Proportion of pupils in primary education learning foreign languages, by language, 2012
(%)



(1) Ranked on English. Refer to the internet metadata file (http://ec.europa.eu/eurostat/cache/metadata/EN/educ_esms.htm).
(2) German: not applicable.
(3) French: not applicable.
(4) French: not available.
(5) English: not applicable.
(6) 2011.
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, 2007 and 2012 (1)
(%)

	Upper secondary education (ISCED level 3 (GEN))						Proportion of students learning two or more languages at ISCED level 3 (GEN)	
	Pupils learning English in general programmes		Pupils learning French in general programmes		Pupils learning German in general programmes			
	2007	2012	2007	2012	2007	2012	2007	2012
EU-28 (2)	92.5	94.5	25.3	23.6	28.5	20.9	57.2	50.6
Belgium	94.1	95.4	:	:	28.5	28.3	88.5	89.1
Bulgaria	86.2	90.0	15.0	12.9	38.5	34.1	77.0	74.3
Czech Republic	100.0	100.0	24.5	19.3	65.8	63.2	100.0	98.8
Denmark	91.8	91.1	10.7	9.0	35.6	33.5	60.8	59.2
Germany	91.0	94.7	27.4	26.3	–	–	:	:
Estonia (3)	95.0	95.8	6.7	6.5	41.6	31.8	80.9	91.1
Ireland	–	–	59.6	54.5	18.3	14.9	8.2	7.6
Greece (4)	94.0	94.1	8.6	4.4	2.9	2.1	6.9	3.5
Spain	95.3	97.7	27.7	22.3	1.1	1.2	28.3	24.6
France	99.4	99.7	–	–	21.8	22.1	90.0	94.5
Croatia (4)	98.3	99.2	3.4	3.6	65.6	62.0	89.9	87.9
Italy	95.3	95.5	20.5	18.0	7.2	8.0	24.7	24.9
Cyprus (5)	78.5	89.9	32.2	37.7	2.4	3.5	100.0	82.4
Latvia	96.0	98.6	4.1	5.8	32.2	31.2	75.6	82.9
Lithuania	85.1	93.4	4.9	3.2	25.4	11.5	56.2	45.0
Luxembourg	96.5	97.9	96.5	100.0	96.5	100.0	100.0	100.0
Hungary	76.4	79.1	6.5	5.7	50.1	43.9	41.9	45.3
Malta (3)	36.2	100.0	5.0	22.7	1.1	5.2	26.6	64.7
Netherlands	100.0	100.0	70.3	32.8	86.3	42.4	100.0	69.8
Austria (4)	96.9	99.6	54.1	42.7	–	–	76.2	74.2
Poland	91.2	93.7	9.8	8.2	62.7	48.8	79.3	70.1
Portugal (4)	50.7	53.1	15.1	3.2	1.6	1.0	9.2	5.3
Romania	95.9	99.9	83.0	85.0	0.0	12.0	92.1	98.4
Slovenia	98.3	98.1	10.8	10.9	76.0	66.0	98.3	98.0
Slovakia	97.9	98.8	16.0	15.9	71.2	59.9	98.3	99.0
Finland	99.3	99.6	19.3	16.7	33.2	24.8	99.8	99.6
Sweden	99.9	100.0	21.1	18.9	29.6	21.9	91.6	80.1
United Kingdom	–	–	32.0	27.3	11.7	9.4	6.1	4.4
Iceland	73.2	72.5	15.7	12.7	27.6	24.7	63.3	61.4
Liechtenstein	:	100.0	:	100.0	:	–	:	100.0
Norway (3)	100.0	43.0	9.2	10.3	15.8	20.9	100.0	:
FYR of Macedonia (3)	:	:	:	:	:	:	0.0	51.5
Turkey (4)	67.3	99.4	0.7	0.7	6.5	4.9	7.6	:

(1) Refer to the internet metadata file (http://ec.europa.eu/eurostat/cache/metadata/EN/educ_uoe_h_esms.htm).
(2) Upper secondary education, English, French and German, 2007: EU-27.
(3) Proportion of students learning two or more languages: data for 2006 instead of 2007.
(4) Data for 2006 instead of 2007.
(5) Proportion of students learning two or more languages: data for 2008 instead of 2007.
Source: Eurostat (online data codes: educ_thfrlan and educ_ilang), Unesco Institute for Statistics (UIS), OECD

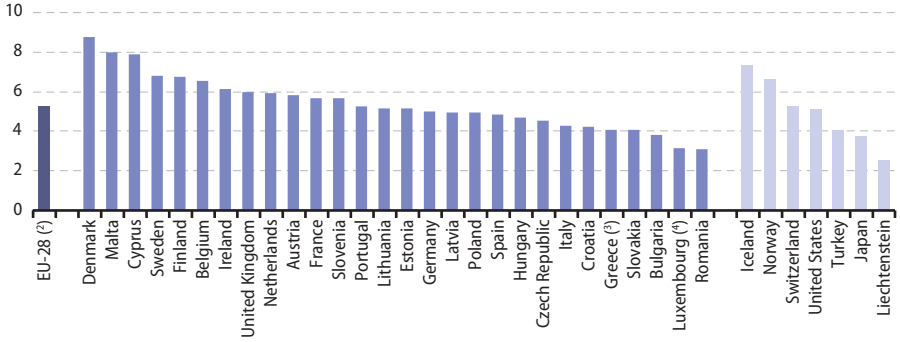
4.3 Educational expenditure

Expenditure on education may help foster economic growth, enhance productivity, contribute to people's personal and social development, and help reduce social inequalities. Within the EU the proportion of financial resources devoted to education is one of the key choices made by national governments. In a similar vein, enterprises, students and their families also make decisions on the financial resources that they are able or willing to set aside for education.

Public expenditure on education in the EU-28 in 2011 was equivalent to an estimated 5.3 % of GDP, while the expenditure of both public and private sources of funds on educational institutions amounted to 6.0 % of GDP.

The highest public spending on education relative to GDP was observed in Denmark (8.8 % of GDP), while Malta (8.0 %), Cyprus (7.9 %), Sweden, Finland (both 6.8 %) and Belgium (6.6 %) also recorded relatively high proportions. Most EU Member States reported public expenditure on education within a range between 3.8 % and 6.2 % of their GDP, with only Romania (3.1 %) and Luxembourg (3.2 %) below this range — note that the data for Luxembourg dates from 2007 and excludes the tertiary education sector. Between 2006 and 2011 the combined public and private expenditure on education as a share of GDP rose by 2.4 percentage points in Malta, 1.6 percentage points in Ireland and 1.3 percentage points in Cyprus. Six EU Member States recorded a decrease in their expenditure relative to GDP, the most substantial being in Romania (– 0.7 percentage points; 2005–11). It should be noted that changes in GDP (growth or decline) can mask significant increases or decreases made in terms of the level of education spending.

Figure 4.3: Public expenditure on education, 2011 (1)
(% of GDP)



(1) Refer to the internet metadata file (http://ec.europa.eu/eurostat/cache/metadata/EN/tsdsc510_esmsip.htm).
(2) Estimate.
(3) 2005.
(4) 2007; excludes tertiary education.
Source: Eurostat (online data code: tsdsc510)

Table 4.3: Expenditure on educational institutions, 2006 and 2011 ([1])

	Public expenditure (% of GDP)		Private expenditure (% of GDP)		Expenditure on public and private educational institutions per pupil/student (PPS for full-time equivalents)	
	2006	2011	2006	2011	2006	2011
EU-28	*4.9*	*5.3*	*0.7*	*0.7*	*5 930*	*6 846*
Belgium	6.0	6.6	0.3	0.3	6 961	8 235
Bulgaria	4.0	3.8	0.6	0.7	2 127	2 713
Czech Republic	4.4	4.5	0.5	0.6	4 410	5 032
Denmark	8.0	8.8	0.6	0.4	8 386	9 665
Germany	4.4	5.0	0.7	0.7	6 463	8 042
Estonia	4.7	5.2	0.3	0.3	3 175	4 426
Ireland ([2])	4.7	6.2	0.3	0.5	6 023	:
Greece ([3])	4.1	:	0.3	:	4 479	:
Spain	4.3	4.8	0.5	0.9	6 158	6 689
France	5.6	5.7	0.5	0.7	6 481	7 368
Croatia	4.0	4.2	0.4	0.4	:	3 902
Italy	4.7	4.3	0.4	0.5	6 436	6 107
Cyprus	7.0	7.9	1.2	1.7	7 134	9 519
Latvia	5.1	5.0	0.7	0.6	3 093	3 988
Lithuania	4.8	5.2	0.5	0.7	2 750	4 044
Luxembourg ([4])	3.4	:	:	:	:	:
Hungary	5.4	4.7	0.5	:	3 987	:
Malta	6.5	8.0	0.4	1.3	6 176	9 435
Netherlands	5.5	5.9	0.9	1.1	7 591	8 591
Austria	5.4	5.8	0.6	0.5	8 617	9 449
Poland	5.3	4.9	0.5	0.7	3 035	4 641
Portugal ([5])	5.1	5.3	0.4	0.4	5 007	5 302
Romania ([3])	3.5	3.1	0.4	0.1	1 437	2 075
Slovenia	5.7	5.7	0.8	0.7	6 297	6 782
Slovakia	3.8	4.1	0.6	0.6	2 931	4 262
Finland	6.2	6.8	0.2	0.2	6 388	7 716
Sweden	6.8	6.8	0.2	0.2	7 381	8 571
United Kingdom	5.4	6.0	1.4	1.6	7 912	7 914
Iceland	7.6	7.4	0.8	0.7	7 903	7 493
Liechtenstein	2.1	2.5	:	0.7	7 647	:
Norway	6.5	6.7	:	0.1	9 273	10 377
Switzerland	5.3	5.3	0.5	0.5	:	:
Turkey	2.9	4.1	:	0.4	:	2 552
Japan	3.5	3.8	1.7	1.6	7 209	7 956
United States	5.2	5.1	2.3	2.2	10 798	11 308

([1]) Refer to the internet metadata file (http://ec.europa.eu/eurostat/cache/metadata/EN/educ_uoe_h_esms.htm).
([2]) Expenditure on public and private educational institutions per pupil/student: data for 2005 instead of 2006.
([3]) Data for 2005 instead of 2006.
([4]) Excludes tertiary education.
([5]) Expenditure on public and private educational institutions per pupil/student: data for 2009 instead of 2011.
Source: Eurostat (online data codes: educ_figdp, tps00068 and tps00067), UNESCO, OECD

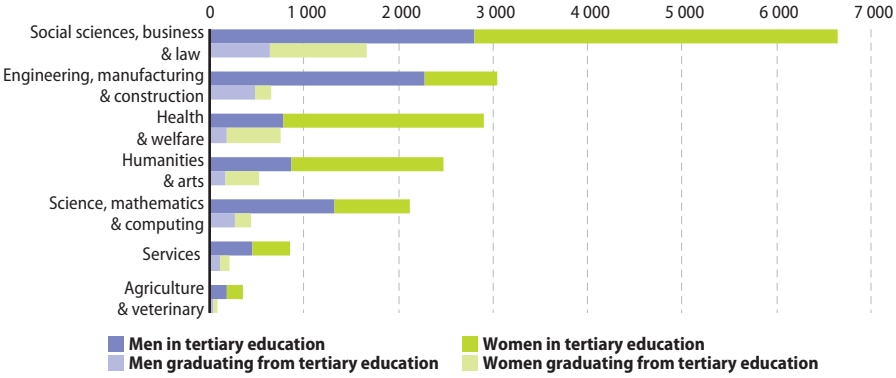
4.4 Tertiary education

Tertiary education — provided by universities and other higher education institutions — is the level of education following secondary schooling. It plays an essential role in society, creating new knowledge, transferring knowledge to students and fostering innovation; some European universities are among the most prestigious in the world.

The EU-28 had just over 20 million tertiary education students in 2012. Five EU Member States reported 2.0 million tertiary education students or more in 2012, namely Germany, the United Kingdom, France, Poland and Spain; tertiary education student numbers in Italy were just below this level and together these six countries accounted for two thirds of all EU-28 students in tertiary education. No other EU Member State recorded more than 800 thousand tertiary education students in 2012.

Across the EU-28, one third (32.8 %) of the students in tertiary education were studying social sciences, business or law in 2012, with more women (3.9 million) than men (2.8 million) in this field of education. The second largest number of students by field of education was in engineering, manufacturing and construction-related studies which accounted for 15.0 % of all students in tertiary education; three quarters of the students in this field were men. The third largest field of study was health and welfare, with 14.3 % of all tertiary education students; close to three quarters of the students in this field were women. Approximately 4.8 million students graduated from tertiary education establishments in the EU-28 in 2012.

Figure 4.4: Students and graduates in tertiary education, by field of education and sex, EU-28, 2012 ([1])
(in 1 000)



([1]) Estimates. Refer to the internet metadata file (http://ec.europa.eu/eurostat/cache/metadata/en/educ_uoe_h_esms.htm).
Source: Eurostat (online data codes: educ_enrl5 and educ_grad5)

Table 4.4: Students in tertiary education, 2012 ([1])

	Total number of students (in 1 000)	of which, studying (%)						
		Humanities and arts	Social sciences, business and law	Science, mathematics and computing	Engineering, manufacturing and construction	Agriculture and veterinary	Health and welfare	Services
EU-28	*20246*	*12.2*	*32.8*	*10.4*	*15.0*	*1.8*	*14.3*	*4.2*
Belgium	478	10.0	29.0	5.2	10.5	2.4	23.3	1.8
Bulgaria	285	7.6	40.5	5.3	19.2	2.3	7.6	8.5
Czech Republic	440	9.3	31.9	11.4	13.5	3.8	11.1	5.2
Denmark	275	12.7	33.9	8.3	10.8	1.5	20.8	2.4
Germany	2940	12.9	25.9	14.5	18.3	1.5	16.4	2.6
Estonia	68	13.6	32.8	11.5	14.8	2.2	9.7	7.9
Ireland	193	17.1	25.4	16.4	11.7	1.7	17.2	4.2
Greece	664	14.3	31.5	15.0	17.6	4.5	7.9	2.8
Spain	1966	11.0	31.6	9.5	16.9	1.5	12.8	5.5
France	2296	13.4	38.1	11.6	13.4	1.1	16.0	3.4
Croatia	157	9.5	40.3	8.5	15.8	3.9	9.3	8.7
Italy	1926	14.6	34.0	8.0	16.3	2.3	15.0	2.8
Cyprus	32	10.9	45.6	8.8	12.0	0.5	7.9	4.7
Latvia	97	9.3	43.3	6.6	14.5	1.3	10.4	7.9
Lithuania	175	7.6	45.5	5.5	16.7	2.2	10.4	3.0
Luxembourg	6	11.2	46.3	11.0	7.2	0.4	7.3	0.0
Hungary	381	9.1	39.4	7.4	15.2	2.5	9.7	10.0
Malta	12	13.2	33.2	12.7	8.2	0.3	20.4	2.0
Netherlands	794	8.0	38.8	6.5	7.9	1.1	17.4	6.7
Austria	377	12.5	35.6	10.9	14.6	1.3	7.6	2.4
Poland	2007	9.0	36.9	8.0	14.7	1.7	8.5	8.1
Portugal	390	9.5	31.3	7.2	21.9	1.9	15.9	6.4
Romania	705	8.5	43.0	5.8	22.8	2.6	10.8	4.5
Slovenia	104	8.7	33.6	7.5	19.3	3.1	10.7	9.2
Slovakia	221	7.5	30.6	8.4	14.8	2.2	17.8	6.2
Finland	309	13.8	23.2	9.9	24.1	2.2	16.5	5.4
Sweden	453	13.5	27.1	9.3	16.6	1.0	17.7	2.4
United Kingdom	2496	16.5	28.4	13.7	8.4	1.1	17.6	1.7
Iceland	19	15.8	37.0	9.5	8.4	1.0	13.9	2.5
Liechtenstein	1	0.0	72.3	0.0	22.4	0.0	5.3	0.0
Norway	238	10.4	31.6	8.6	8.3	0.8	19.9	5.1
Switzerland	270	11.2	34.7	10.0	14.2	1.1	13.4	5.6
FYR of Macedonia	63	12.4	38.0	12.1	10.9	2.2	11.8	7.6
Turkey	4354	9.6	54.5	7.0	10.7	2.4	4.8	3.5
Japan	3885	15.3	28.4	2.9	15.1	2.5	14.2	5.2
United States	20994	15.1	27.7	8.6	7.2	0.7	14.9	6.2

([1]) Refer to the internet metadata file (http://ec.europa.eu/eurostat/cache/metadata/en/educ_uoe_h_esms.htm).
Source: Eurostat (online data codes: tps00062 and educ_enrl5)

4.5 Lifelong learning

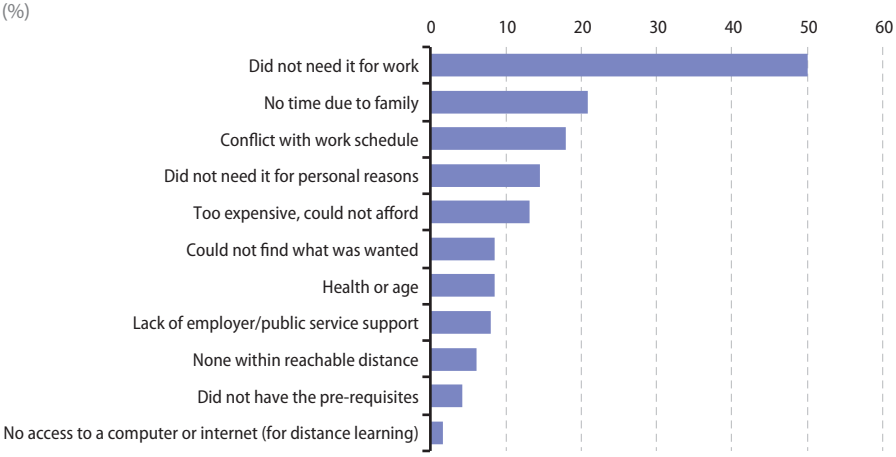
Lifelong learning encompasses all purposeful learning activity, whether formal, non-formal or informal, undertaken on an ongoing basis with the aim of improving knowledge, skills and competence. The intention or aim to learn is the critical point that distinguishes these activities from non-learning activities, such as cultural or sporting activities.

In 2014, the proportion of persons aged 25 to 64 in the EU-28 who participated in education or training was 10.7 %; a share that was 1.6 percentage points higher than the corresponding share for 2009.

The proportion of the population who had participated in such lifelong learning was higher among women (11.6 % in 2014) in the EU-28 than among men (9.8 % in 2014); the shares for men and women were both higher in 2014 than they had been five years earlier. In 2014, women recorded higher participation rates than men in all EU Member States except for Greece, Romania and Germany. The largest gender differences, in percentage points, were in Sweden and Denmark, where the participation rates for women were at least 10 percentage points higher than for men.

Information on education and training is also available from the adult education survey (AES). The most recent wave of the survey was conducted between July 2011 and June 2012. According to this survey, the three most commonly cited obstacles to participation in education and training among those who wanted to participate but did not do so were: no need of training for work (50.0 % in the EU-27); lack of time due to family responsibilities (20.9 %); and conflict with work schedules (18.0 %).

Figure 4.5: Obstacles to participation in education and training, EU-28, 2011 ([1])
(%)



([1]) Multiple answers allowed. Refer to the internet metadata file (http://ec.europa.eu/eurostat/cache/metadata/en/trng_aes_12m0_esms.htm).
Source: Eurostat (online data code: trng_aes_176)

Table 4.5: Lifelong learning, 2009 and 2014 ([1])
(% of the population aged 25 to 64 participating in education and training)

	Total		Men		Women	
	2009	2014	2009	2014	2009	2014
EU-28 ([2])	9.1	10.7	8.2	9.8	10.0	11.6
Belgium	6.8	7.1	6.4	6.7	7.2	7.6
Bulgaria ([2])	1.4	1.8	1.3	1.6	1.5	2.0
Czech Republic ([2])	6.8	9.3	6.5	9.1	7.0	9.6
Denmark	31.2	31.7	25.3	26.0	37.2	37.5
Germany ([2])	7.8	7.9	7.8	8.0	7.7	7.8
Estonia	10.5	11.5	7.5	9.2	13.2	13.7
Ireland	6.3	6.7	5.6	6.0	7.0	7.3
Greece	3.3	3.0	3.3	3.1	3.3	2.8
Spain ([2])	10.6	9.8	9.6	9.2	11.6	10.5
France ([2])	5.7	18.6	5.3	16.1	6.1	21.0
Croatia	2.6	2.5	2.8	2.4	2.5	2.6
Italy	6.0	8.0	5.6	7.7	6.3	8.3
Cyprus	7.8	6.9	7.7	6.3	7.8	7.3
Latvia	5.4	5.5	3.5	4.8	7.0	6.2
Lithuania	4.4	5.0	3.4	4.5	5.2	5.4
Luxembourg	13.4	14.0	13.4	13.4	13.5	14.5
Hungary	2.7	3.2	2.4	2.9	3.0	3.5
Malta	6.1	7.1	6.0	6.8	6.2	7.5
Netherlands ([2])	17.0	17.8	16.5	17.4	17.5	18.2
Austria	13.8	14.2	12.8	13.2	14.8	15.3
Poland ([2])	4.7	4.0	4.3	3.6	5.1	4.3
Portugal ([2])	6.0	9.3	5.6	8.9	6.4	9.6
Romania ([2])	1.5	1.5	1.3	1.6	1.6	1.3
Slovenia	14.6	11.9	12.9	10.4	16.4	13.6
Slovakia ([2])	2.8	3.0	2.2	2.8	3.3	3.1
Finland	22.1	25.1	18.5	21.6	25.9	28.8
Sweden	22.2	28.9	16.1	22.1	28.5	36.0
United Kingdom	20.1	15.8	16.7	14.2	23.3	17.4
Iceland	25.1	25.9	20.4	21.7	30.0	30.2
Norway	18.1	19.7	16.8	18.1	19.5	21.4
Switzerland	23.9	31.7	22.8	32.2	25.0	31.2
FYR of Macedonia	3.3	3.1	3.2	3.0	3.4	3.2
Turkey ([2])	2.3	5.0	2.4	5.1	2.1	4.9

([1]) Refer to the internet metadata file (http://ec.europa.eu/eurostat/cache/metadata/en/trng_lfs_4w0_esms.htm).
([2]) Break in series.
Source: Eurostat (online data code: trng_lfs_01)

5

Labour market

Introduction

Labour market statistics are at the juxtaposition of economic and social domains. Market outcomes within the labour market directly affect not only the economy, but also the personal lives of virtually all Europeans. From an economic viewpoint, these statistics address labour as an input for 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.

With the aim of stimulating economic recovery, the European Commission set up the Europe 2020 strategy for smart, sustainable and inclusive growth. One of the main priorities of the College of Commissioners that entered into office in 2014 is to focus on boosting jobs, growth and investment, with the goal of cutting regulation, making smarter use of existing financial resources and public funds.

In November 2014, the European Commission provided an outline of its strategy through the annual growth survey (AGS), which launched the European Semester. In February 2015, it published a series of country reports, analysing the economic policies of EU Member States and providing information on EU Member States priorities for the coming year to boost growth and job creation. In the same month, the European Commission also proposed to make EUR 1 billion from the Youth Employment Initiative available in 2015 so as to increase by up to 30 times the pre-financing EU Member States could receive to boost youth employment rates, helping up to 650 000 young people into work.

5.1 Employment

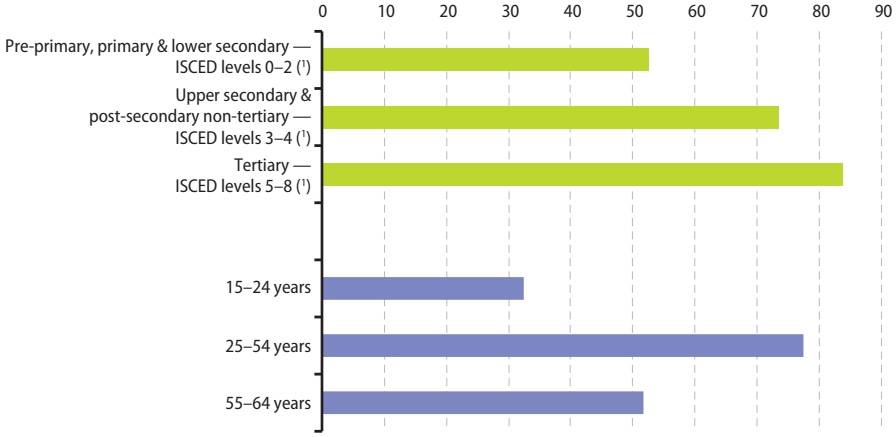
Labour market statistics are at the heart of many EU policies following the introduction of an employment chapter into the Amsterdam Treaty in 1997. The employment rate, in other words the proportion of the working age population that is in employment, is considered to be a key social indicator for analytical purposes when studying developments within labour markets.

In 2014, the EU-28 employment rate for persons aged 15 to 64, as measured by the EU's labour force survey (EU LFS), stood at 64.9 %. The EU-28 employment rate peaked in 2008 at 65.7 % and decreased during successive years to stand at 64.1 % in 2010. This decrease during the global financial and economic crisis — a total fall of 1.6 percentage points — was followed by a period of stability between 2010 and 2013 when the EU-28 employment rate was 64.1 % or 64.2 %. In 2014, the employment rate returned to the upward path observed prior to the crisis, increasing by 0.8 percentage points compared with 2013 to reach 64.9 %.

Employment rates are generally lower among women and older workers. In 2014, the employment rate for men stood at 70.1 % in the EU-28, as compared with 59.6 % for women. A longer-term comparison shows that while the employment rate for men in 2014 was below its corresponding level 10 years earlier (70.3 % in 2004), there was a marked increase in the proportion of women in employment — rising 4.1 percentage points from 55.5 % in 2004.

Employment rates also vary considerably according to the level 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 (short-cycle tertiary, bachelor's, master's or doctoral levels (or equivalents)) education was 83.7 % across the EU-28 in 2014, much higher than the rate (52.6 %) for those who had attained no more than a primary or lower secondary education.

Figure 5.1: Employment rate by highest level of education and by age, EU-28, 2014
(%)



(1) Age group 25–64.
Source: Eurostat (online data codes: lfsa_ergaed and lfsi_emp_a)

Table 5.1: Employment rates by age group and sex, 2014
(%)

	Employment rate (age group 15–64)			Employment rate by age group		
	Total	Men	Women	15–24	25–54	55–64
EU-28	64.9	70.1	59.6	32.5	77.5	51.8
EA-19	63.9	69.0	58.8	30.7	76.1	51.7
Belgium	61.9	65.8	57.9	23.2	79.1	42.7
Bulgaria	61.0	63.9	58.2	20.7	74.5	50.0
Czech Republic	69.0	77.0	60.7	27.1	83.8	54.0
Denmark	72.8	75.8	69.8	53.7	82.0	63.2
Germany	73.8	78.1	69.5	46.1	83.5	65.6
Estonia	69.6	73.0	66.3	33.3	80.9	64.0
Ireland	61.7	66.9	56.7	28.4	72.6	53.0
Greece	49.4	58.0	41.1	13.3	62.4	34.0
Spain	56.0	60.7	51.2	16.7	67.4	44.3
France	64.3	67.7	60.9	28.4	80.4	47.0
Croatia	54.6	59.1	50.0	18.3	71.2	36.2
Italy	55.7	64.7	46.8	15.6	67.9	46.2
Cyprus	62.1	66.0	58.6	25.8	76.2	46.9
Latvia	66.3	68.4	64.3	32.5	78.2	56.4
Lithuania	65.7	66.5	64.9	27.6	80.8	56.2
Luxembourg	66.6	72.6	60.5	20.4	83.7	42.5
Hungary	61.8	67.8	55.9	23.5	79.2	41.7
Malta	62.3	74.9	49.3	46.1	75.8	37.7
Netherlands	73.1	78.1	68.1	58.8	81.7	59.9
Austria	71.1	75.2	66.9	52.1	83.4	45.1
Poland	61.7	68.2	55.2	25.8	78.4	42.5
Portugal	62.6	65.8	59.6	22.4	77.4	47.8
Romania	61.0	68.7	53.3	22.5	77.1	43.1
Slovenia	63.9	67.5	60.0	26.8	81.9	35.4
Slovakia	61.0	67.6	54.3	21.8	76.8	44.8
Finland	68.7	69.5	68.0	41.4	80.5	59.1
Sweden	74.9	76.5	73.1	42.8	85.4	74.0
United Kingdom	71.9	76.8	67.1	48.1	82.1	61.0
Iceland	81.7	84.0	79.3	69.2	85.1	83.6
Norway	75.2	77.0	73.4	50.1	83.9	72.2
Switzerland	79.8	84.4	75.1	61.6	86.9	71.6
FYR of Macedonia	46.9	56.1	37.4	15.2	59.3	38.6
Turkey	49.5	69.5	29.5	33.5	58.8	31.4
Japan	72.7	81.5	63.6	:	:	68.7
United States	68.1	73.5	63.0	:	:	61.3

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.

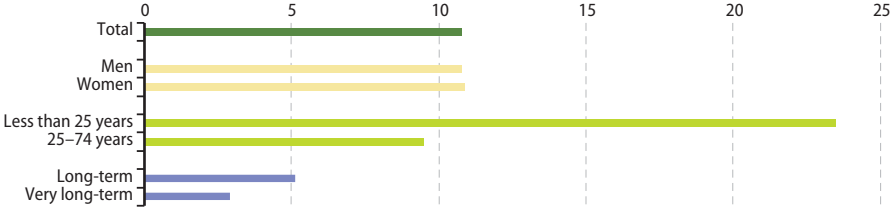
At the beginning of 2000, some 20.6 million persons were unemployed in the EU-28, corresponding to 9.2 % of the total labour force; note that all of the rates given in this section refer to seasonally adjusted data.

Between the first quarter of 2011 and the first quarter of 2013 EU-28 unemployment increased at a steady pace to a record level of 26.5 million persons, corresponding to a rate of 10.9 %. There was subsequently a modest reduction in the unemployment rate, such that it stood at 10.7 % by the final quarter of 2013.

Youth unemployment rates (covering persons aged less than 25 years) are generally much higher, sometimes more than double unemployment rates for persons of all ages (15–74). As for the overall unemployment rate, the youth unemployment rate in the EU-28 declined sharply between 2005 and 2007, reaching its lowest value (15.1 %) in the first quarter of 2008. The financial and economic crisis, however, severely hit the young. From the second quarter of 2008, the youth unemployment rate followed an upward path peaking at 23.6 % in the first quarter of 2013, before declining to 23.1 % by the final quarter of the same year.

High youth unemployment rates reflect, to some degree, the difficulties faced by young people in finding jobs. However, this does not necessarily mean that the group of unemployed persons aged between 15 and 24 is large, as many young people are studying full-time 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). For this reason, the youth unemployment ratio is calculated as an alternative concept as the share of unemployed youths among the whole of the youth population. The youth unemployment ratio in the EU-28 was, unsurprisingly, much lower than the youth unemployment rate; the youth unemployment ratio did however rise from 2008 onwards due to the effects of the financial and economic crisis on the labour market.

Figure 5.2: Unemployment rate, EU-28, 2013
(%)



Source: Eurostat (online data codes: une_rt_a and une_ltu_a)

Table 5.2: Youth unemployment rate and ratio, 2011–13
(%)

	Youth unemployment rate				Youth unemployment ratio		
	2011	2012	2013	Q4-2013 (1)	2011	2012	2013
EU-28	21.5	23.0	23.5	23.1	9.1	9.7	9.8
EA-18	20.9	23.1	24.0	23.8	8.7	9.5	9.8
Belgium	18.7	19.8	23.7	23.9	6.0	6.2	7.3
Bulgaria	25.0	28.1	28.4	28.1	7.4	8.5	8.4
Czech Republic	18.1	19.5	18.9	18.9	5.4	6.1	6.0
Denmark	14.2	14.1	13.0	12.8	9.6	9.1	8.1
Germany	8.6	8.1	7.9	7.9	4.5	4.1	4.0
Estonia (2)	22.4	20.9	18.7	19.1	9.1	8.7	7.4
Ireland	29.1	30.4	26.8	25.5	12.1	12.3	10.6
Greece	44.7	55.3	58.3	57.3	13.0	16.1	16.6
Spain	46.2	52.9	55.5	54.9	19.0	20.6	20.8
France (2)	22.6	24.4	24.8	23.7	8.4	8.9	9.0
Croatia	36.1	43.0	50.0	48.6	11.3	12.7	14.4
Italy	29.1	35.3	40.0	41.8	8.0	10.1	10.9
Cyprus	22.4	27.7	38.9	40.8	8.7	10.8	15.0
Latvia	31.0	28.5	23.2	23.9	11.6	11.5	9.1
Lithuania	32.6	26.7	21.9	20.6	9.2	7.8	6.9
Luxembourg	16.4	18.0	16.9	17.2	4.2	5.0	4.0
Hungary	26.1	28.1	27.2	24.8	6.4	7.3	7.4
Malta	13.3	14.1	13.0	13.5	7.1	7.2	7.0
Netherlands	7.6	9.5	11.0	11.4	5.3	6.6	7.7
Austria (2)	8.3	8.7	9.2	9.9	5.0	5.2	5.4
Poland	25.8	26.5	27.3	27.2	8.6	8.9	9.1
Portugal	30.3	37.9	38.1	34.8	11.7	14.3	13.5
Romania	23.7	22.7	23.6	:	7.4	7.0	7.3
Slovenia	15.7	20.6	21.6	19.9	5.9	7.1	7.3
Slovakia	33.7	34.0	33.7	33.5	10.1	10.4	10.4
Finland	20.1	19.0	19.9	20.0	10.1	9.8	10.3
Sweden	22.8	23.7	23.6	22.6	12.1	12.4	12.8
United Kingdom	21.1	21.0	20.5	19.7	12.4	12.4	12.0
Iceland	14.6	13.6	10.7	10.2	10.6	10.2	8.3
Norway	8.7	8.6	9.1	8.9	4.8	4.8	5.2
Switzerland	:	:	:	:	5.2	5.7	5.8
FYR of Macedonia	:	:	:	:	17.7	18.1	17.5
Turkey	16.9	15.8	17.1	17.1	6.4	5.9	6.6
Japan	8.2	8.1	6.8	:	:	:	:
United States	17.3	16.2	15.5	14.2	:	:	:

(1) Seasonally adjusted.
(2) Youth unemployment ratio, 2013: break in series.
Source: Eurostat (online data codes: une_rt_a, une_rt_q and lfsi_act_a)

5.3 Wages and labour cost

Labour plays a major role in the functioning of an economy. From the point of view of businesses, it represents a cost (labour costs) that includes not only the wages and salaries paid to employees but also non-wage costs, mainly social contributions payable by the employer. Thus, it is a key determinant of business competitiveness, although this is also influenced by the cost of capital (for example interests on loans and dividends on equity) and non-price elements such as innovation and the brand / products positioning on the market.

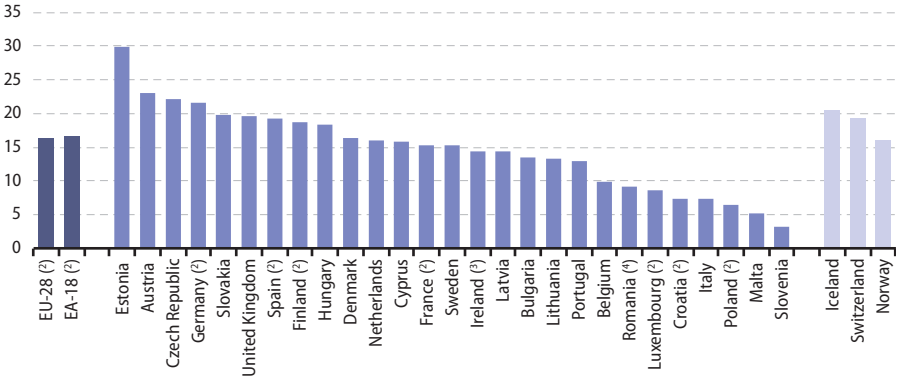
The average hourly labour cost in the EU-28 was estimated at EUR 24.60 in 2014 and at EUR 29.20 in the euro area (EA-18). However, this average masks significant differences between EU Member States, with hourly labour costs ranging between EUR 3.80 and EUR 40.30.

Despite some convergence, there remains a substantial difference between the average earnings of men and women in the EU, a concept commonly known as the gender pay gap. In 2013, in the EU-28 as a whole, women were paid, on average, 16.4 % less than men. The smallest differences in average pay between the sexes were found in Slovenia, Malta, Poland, Italy, Croatia, Luxembourg, Romania and Belgium (less than 10 % difference). The biggest gender pay gaps were identified in Estonia (29.9 %), Austria (23.0 %), the Czech Republic (22.1 %) and Germany (21.6 %).

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 and / or maternity leave.

Figure 5.3: Gender pay gap, 2013 (1)

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



(1) Enterprises with 10 or more employees. NACE Rev. 2 Sections B to S excluding O. Greece: not available.
(2) Provisional.
(3) Provisional. 2012.
(4) Estimate.
Source: Eurostat (online data code: tsdsc340)

Table 5.3: Estimated hourly labour costs, 2014 ([1])
(EUR)

	Total labour cost	Wages and salaries	Other labour costs
EU-28	24.6	18.6	6.0
EA-18	29.2	21.6	7.6
Belgium	39.1	28.2	10.9
Bulgaria	3.8	3.2	0.6
Czech Republic	9.4	6.9	2.6
Denmark	40.3	35.0	5.3
Germany	31.4	24.4	7.0
Estonia	9.8	7.2	2.6
Ireland	29.8	25.8	4.0
Greece ([2])	14.6	14.6	:
Spain	21.3	15.7	5.5
France	34.6	23.1	11.5
Croatia	9.4	8.0	1.4
Italy	28.3	20.3	8.0
Cyprus	15.8	13.1	2.7
Latvia	6.6	5.3	1.3
Lithuania	6.5	4.7	1.8
Luxembourg	35.9	31.0	4.9
Hungary	7.3	5.6	1.7
Malta	12.3	11.5	0.9
Netherlands	34.0	25.5	8.5
Austria	31.5	23.2	8.3
Poland	8.4	6.8	1.6
Portugal	13.1	10.4	2.7
Romania	4.6	3.6	1.1
Slovenia	15.6	13.1	2.4
Slovakia	9.7	7.1	2.6
Finland	32.3	25.2	7.2
Sweden	37.4	25.6	11.8
United Kingdom	22.3	18.6	3.7
Norway	54.0	44.2	9.8

([1]) Enterprises with 10 or more employees. NACE Rev. 2 Sections B to S excluding O. Provisional data.
([2]) Only the total labour cost is available.
Source: Eurostat (online data code: lc_lci_lev)

5.4 Minimum wages

In January 2015, 22 out of the 28 EU Member States (Denmark, Italy, Cyprus, Austria, Finland and Sweden were the exceptions) had a national minimum wage. As of 1 January 2015, monthly minimum wages varied widely, from EUR 184 in Bulgaria to EUR 1 923 in Luxembourg.

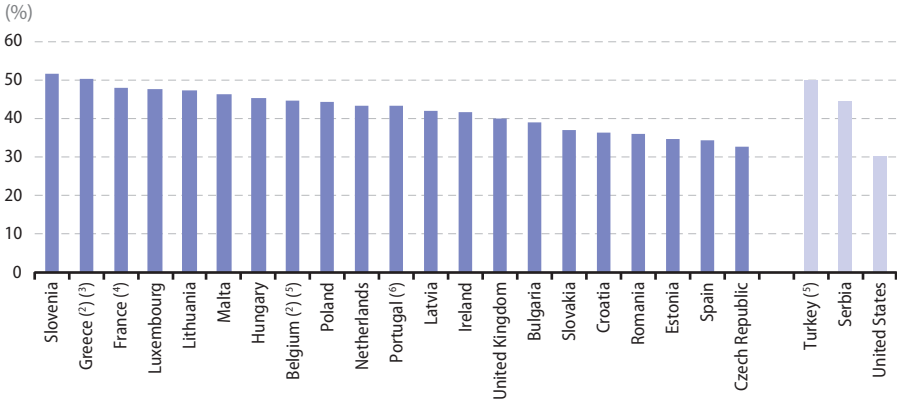
As might be expected, adjusting for differences in price levels reduces the variation between countries. The disparities in minimum wage rates between the EU Member States were reduced from a ratio of 1:10 in euro terms to a ratio of 1:4 in PPS terms. Across the EU Member States,

monthly minimum wages ranged from 380 PPS in Bulgaria to 1 561 PPS in Luxembourg.

In 2013, the level of gross minimum wages across the EU Member States varied from almost 33 % to just over 50 % of average gross monthly earnings for those persons working in industry, construction or services (activities of households as employers and extra-territorial organisations and bodies are excluded) as covered by NACE Rev. 2 Sections B–S.

The level of minimum wages in relation to the mean value of average (mean value) gross monthly earnings was highest in Slovenia (51.4 %), Greece (50.1 %, 2011) and Turkey (50.0 %, 2010). At the lower end of the ranking, the United States, the Czech Republic, Spain and Estonia each reported that the level of their minimum wage was less than 35 % of average gross monthly earnings.

Figure 5.4: Minimum wages as proportion of the mean value of average gross monthly earnings, 2013 ([1])



([1]) NACE Rev. 2 Sections B–S. Denmark, Germany, Italy, Cyprus, Austria, Finland and Sweden: no national minimum wage.
([2]) Excluding NACE Rev.2 Section O.
([3]) 2011.
([4]) 2012.
([5]) 2010.
([6]) Excluding NACE Rev. 2 Sections O–Q.
Source: Eurostat (online data code: earn_mw_avgr2)

Table 5.4: Minimum wages, January 2015 ([1])

	Minimum wages	
	(EUR per month)	(PPS per month)([2])
Belgium	1 502	1 374
Bulgaria	184	380
Czech Republic	332	502
Germany	1 473	1 441
Estonia	390	488
Ireland	1 462	1 238
Greece	684	764
Spain	757	798
France	1 458	1 337
Croatia	396	584
Latvia	360	507
Lithuania	300	464
Luxembourg	1 923	1 561
Hungary	333	593
Malta	720	906
Netherlands	1 502	1 363
Poland	410	738
Portugal	589	685
Romania	218	384
Slovenia	791	949
Slovakia	380	536
United Kingdom	1 379	1 114
Montenegro	288	513
FYR of Macedonia	214	457
Serbia	235	470
Turkey	424	739
Albania	157	309
United States	1 035	1 019

([1]) Denmark, Italy, Cyprus, Austria, Finland and Sweden: no national minimum wage.
([2]) Estimates.
Source: Eurostat (online data code: earn_mw_cur)

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. The EU-28 job vacancy rate fell to 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 1.4 % and a similar increase was registered in 2011 as the EU-28 job vacancy rate rose to 1.5 %. The latest data available shows little change in the job vacancy rate in the EU-28, with the rate falling to 1.4 % in 2012, and subsequently moving back up to 1.5 % in 2013.

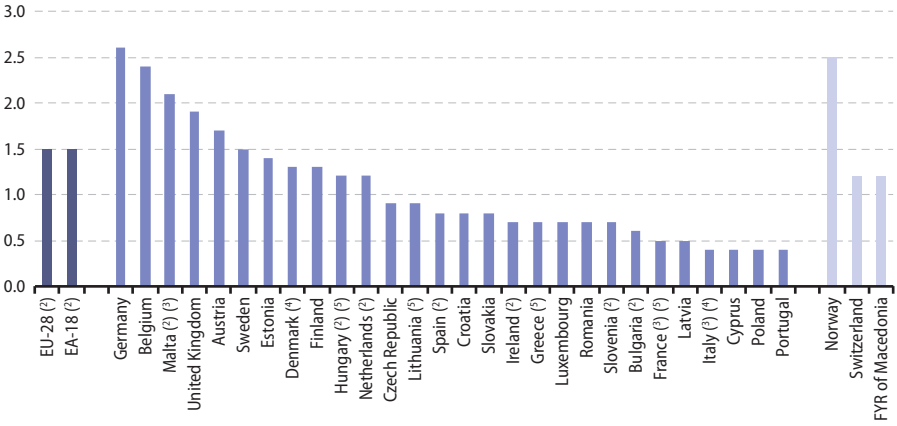
Among the EU Member States, the job vacancy rate in 2013 was highest in Germany (2.6 %), Belgium (2.4 %) and Malta (2.1 %); among the non-member countries, Norway also recorded a relatively high job vacancy rate (2.5 %). The number of vacant

posts accounted for less than 1 % of the total number of posts in 17 of the EU Member States in 2013 (the data for Greece relate to 2012), with the lowest job vacancy rates (0.4 %) recorded in Italy, Cyprus, 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.

Figure 5.5: Job vacancy rate, 2013 ([1])

(%)



([1]) NACE Rev. 2 Sections B to S.
([2]) Provisional.
([3]) Business units with 10 or more employees.
([4]) NACE Rev. 2 Sections B to N.
([5]) 2012.
Source: Eurostat (online data code: jvs_a_nace2)

Table 5.5: Job vacancy rate, 2003–13 ([1])
(%)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
EU-28 ([2])	1.5	1.6	1.8	2.1	2.2	*1.9*	*1.3*	*1.4*	*1.5*	*1.4*	*1.5*
EA-18 ([3])	1.5	1.5	1.9	2.3	2.2	*1.9*	*1.3*	*1.5*	*1.6*	*1.5*	*1.5*
Belgium	:	2.2	2.2	2.2	2.2	:	:	1.7	*1.8*	2.4	2.4
Bulgaria	:	:	0.9	0.9	1.0	0.9	0.7	0.7	0.7	0.7	0.6
Czech Republic	:	:	*1.4*	2.0	2.8	3.2	1.1	0.8	0.9	1.0	0.9
Denmark	:	:	:	:	:	:	:	:	:	:	:
Germany	2.5	2.2	3.2	*3.8*	*3.5*	*3.1*	:	2.6	2.7	*2.6*	2.6
Ireland	:	:	:	3.8	:	:	0.9	1.0	1.3	*1.4*	1.4
Estonia	:	:	2.4	3.0	3.3	2.5	0.4	0.5	0.6	0.7	0.7
Greece	:	2.4	0.9	2.0	1.5	1.2	1.7	1.1	1.0	0.7	:
Spain	0.6	0.7	0.7	0.8	0.8	0.6	0.6	1.2	1.0	0.8	*0.8*
France ([4])	:	:	:	:	:	:	*0.4*	*1.0*	*1.1*	*1.0*	*0.9*
Croatia	:	:	:	:	:	:	:	:	:	1.0	0.8
Italy	:	:	:	:	:	:	:	:	:	:	:
Cyprus	:	:	1.5	1.4	4.6	4.1	:	1.6	1.1	0.6	0.4
Latvia	:	:	1.3	1.9	1.9	1.0	0.3	0.3	0.4	0.4	0.5
Lithuania	:	0.8	0.7	1.5	2.0	1.7	0.5	0.6	0.9	0.9	:
Luxembourg	0.3	0.4	0.4	0.6	0.8	0.6	0.4	0.6	0.8	0.8	0.7
Hungary	:	1.1	1.0	1.2	1.4	1.3	*1.1*	*1.2*	*1.3*	*1.2*	:
Malta	:	:	:	:	1.9	:	:	:	:	:	:
Netherlands	1.1	1.5	2.2	2.8	3.2	2.9	1.7	1.5	1.6	1.4	1.2
Austria	:	1.5	1.4	:	:	:	1.5	1.9	2.0	1.9	1.7
Poland	:	:	:	:	2.0	1.5	0.6	0.6	0.6	0.4	0.4
Portugal ([4])	0.6	0.5	0.5	0.5	0.6	0.6	0.4	0.4	0.4	0.4	0.4
Romania	:	:	1.7	1.8	2.1	1.9	0.9	0.6	0.6	0.6	0.7
Slovenia	*0.7*	*0.8*	*0.9*	*1.0*	*1.1*	*0.9*	0.7	0.7	0.8	0.8	0.7
Slovakia	:	0.6	0.8	0.9	1.1	1.3	1.0	0.8	0.8	0.8	0.8
Finland	1.7	1.7	1.9	2.3	2.5	2.3	1.6	1.9	2.1	2.2	:
Sweden	1.2	1.0	1.1	1.2	1.3	1.2	0.8	1.2	1.5	1.5	1.5
United Kingdom	2.2	2.3	2.3	2.2	2.4	2.2	1.6	1.7	1.7	1.7	1.9

([1]) 2003–08: NACE Rev. 1.1 Sections A to O. Since 2009: NACE Rev. 2 Sections B to S.
([2]) 2003–08: EU-27.
([3]) 2003–08: EA-16.
([4]) 2010: break in time series.
Source: Eurostat (online data codes: jvs_a_nace1 and jvs_a_nace2)

6

Economy and finance

Introduction

In 2014, the European Commission set out a list of 10 key priorities, which would be the focus of its 2015 work programme. Three of these were of particular relevance for economic statistics, namely: the top priority to boost jobs, growth and investment; the EU's internal market; and economic and monetary union.

It is envisaged that the European Commission's jobs, growth and investment package will focus on cutting regulation, making smarter use of existing financial resources and making flexible use of public funds in order to provide up to EUR 300 billion in additional private and public investment over three years. This investment should be targeted towards: infrastructure; education, research and innovation; renewable energy and energy efficiency; youth employment.

The internal market is seen as the best asset for meeting the challenges of globalisation. Strengthening the industrial base of the economy in the EU — by bringing industry's share of GDP in the EU back to 20 % by 2020 — is intended to ensure that Europe maintains its global leadership in strategic sectors with high value jobs. Among the objectives for this priority is creating a capital markets union, intended to make it easier for small businesses to raise money and make Europe a more attractive place for investment.

Concerning economic and monetary union, the European Commission's objectives are to: make decisions about support for struggling euro area countries more democratically legitimate; evaluate support and reform programmes not only for financial sustainability but also for their impact on citizens; review the fiscal and macroeconomic surveillance legislation and budgetary rules; encourage further structural reforms in euro area countries.

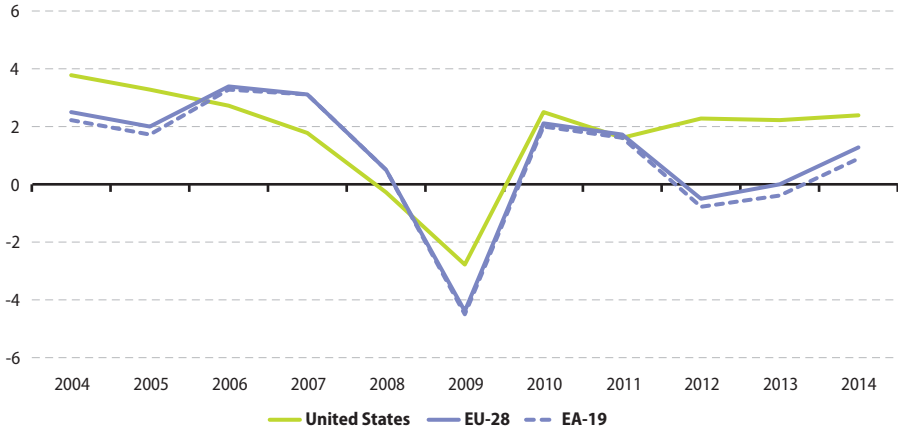
6.1 National accounts — GDP

National accounts are the source for a multitude of well-known economic indicators which are presented in this article. Gross domestic product (GDP) is the most frequently used measure for the overall size of an economy, while derived indicators such as GDP per capita — for example, in euro or adjusted for differences in price levels — are widely used for a comparison of living standards, or to monitor the process of convergence across the EU.

Growth in the EU-28's GDP (in current prices) slowed substantially in 2008 and GDP contracted considerably in 2009 as a result of the global financial and economic crisis. There was a recovery in the level of EU-28 GDP in 2010 and this development continued (albeit at a progressively slower pace) in 2011–13, before growth accelerated again in 2014, as current price GDP increased by 3.0 %. By 2014, GDP in the EU-28 had reached EUR 13.9 trillion (EUR 13 900 billion), some 6.2 % more than in the United States. The euro area (EA-19) accounted for 72.6 % of the EU-28 GDP in 2014, down from 75.8 % in 2009.

To evaluate standards of living, it is more appropriate to use GDP per capita in purchasing power standards (PPS), in other words, adjusted for the size of an economy in terms of population and also for differences in price levels across countries. The average GDP per capita within the EU-28 in 2013 was PPS 26.6 thousand, somewhat above the peak (PPS 25.9 thousand) reached in 2008 prior to the effects of the financial and economic crisis being felt. The relative position of individual countries can be expressed through a comparison with this average, with the EU-28 value set to equal 100. The highest value among the EU Member States was recorded for Luxembourg, where GDP per capita in PPS was about 2.6 times the EU-28 average in 2013 (which is partly explained by the importance of cross-border workers from Belgium, France and Germany). On the other hand, GDP per capita in PPS was less than half the EU-28 average in Bulgaria in 2013.

Figure 6.1: Real GDP growth, 2004–14
(% change compared with the previous year)



Source: Eurostat (online data code: nama_10_gdp)

Table 6.1: GDP at current market prices, 2003–04 and 2012–14

	GDP (billion EUR)					GDP per capita (PPS, EU-28 = 100)			(EUR)
	2003	2004	2012	2013	2014	2003	2012 (1)	2013	2014
EU-28	10490	11016	13426	13520	13921	100	100	100	27300
EA-19	7825	8157	9846	9931	10111	109	107	107	29800
Belgium	282	298	388	395	402	123	120	119	36000
Bulgaria	19	21	41	41	*42*	33	45	45	*5800*
Czech Republic	88	96	161	157	155	77	82	82	14700
Denmark	193	202	251	253	257	124	125	124	45600
Germany	2217	2268	2750	2809	2904	116	123	122	35200
Estonia	9	10	18	19	20	52	71	73	14800
Ireland	145	155	173	175	185	141	130	130	40200
Greece	179	193	*194*	*182*	*179*	93	74	73	*16300*
Spain	*803*	*861*	*1055*	*1049*	*1058*	100	94	94	*22800*
France	1637	1711	2091	2114	2142	111	107	107	32400
Croatia	31	33	44	44	43	56	61	61	10200
Italy	1391	1449	1615	1609	1616	112	101	99	26600
Cyprus	13	14	19	*18*	*18*	94	93	89	*20500*
Latvia	10	12	22	23	24	45	60	64	12100
Lithuania	:	18	33	35	36	48	69	73	12400
Luxembourg	26	28	44	45	:	240	264	257	:
Hungary	75	83	99	101	103	62	65	66	10500
Malta	5	5	7	8	8	82	84	86	18600
Netherlands	506	520	*641*	*643*	*655*	133	132	131	*38900*
Austria	231	242	317	323	329	127	129	128	38500
Poland	192	205	386	396	413	48	66	67	*10700*
Portugal	146	152	168	*169*	*173*	78	76	79	*16600*
Romania	53	61	134	*144*	*150*	31	53	55	*7500*
Slovenia	26	28	36	36	37	83	82	82	18100
Slovakia	30	35	72	74	75	55	74	75	13900
Finland	152	158	200	202	204	114	115	113	37400
Sweden	293	307	423	436	429	127	126	127	44300
United Kingdom	1720	1850	2041	2017	2222	123	107	109	34400
Iceland	10	11	11	12	13	126	116	119	39500
Norway	202	213	397	393	377	154	190	186	73400
Switzerland	312	317	*518*	*516*	:	136	162	163	:
Montenegro	:	:	:	:	:	:	39	40	:
FYR of Macedonia	4	5	8	*8*	:	27	34	36	:
Albania	:	:	:	:	:	:	28	28	:
Serbia	19	20	32	34	*33*	:	37	37	:
Turkey	:	:	:	:	:	35	52	53	:
Bosnia and Herzegovina	:	:	:	:	:	:	28	29	:
Japan	:	:	:	:	:	111	102	103	:
United States	10176	9868	12580	12626	13112	157	148	150	41100

(1) Break in series.
Source: Eurostat (online data codes: nama_10_gdp, nama_10_pc and tec00114)

6.2 Sector accounts

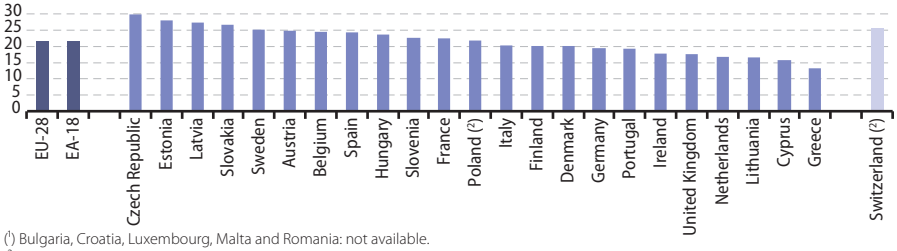
Economic developments in production, income generation and (re)distribution, consumption and investment may be better understood when analysed by institutional sector. In particular, the EU's sector accounts provide several key indicators for households and non-financial corporations, like the household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

The household saving rate in 2013 was almost two percentage points higher in the 18 member euro area (12.9 %) than in the EU-28 (11.0 %). This gap is, at least in part, explained by the relatively high saving rates in Germany (16.3 %), France and the Netherlands (both 14.7 %). Among the EU Member States within the euro area (no data available for Greece, Luxembourg and Malta), eight had household saving rates that were higher than the EU-28 average (Germany, France, the Netherlands, Slovenia, Belgium, Austria, Ireland and Italy) and the remaining eight below. The household saving rate was negative in Latvia (– 4.0 %) and Cyprus (– 7.6 %). The highest household saving rate among those EU Member States not in the euro area (and for which data were available at the time of writing) was recorded in Sweden (18.1 %) which was in fact the highest saving rate among all EU Member States.

In 2013, the household investment rate was 7.8 % in the EU-28. This rate ranged (among the 21 EU Member States for which data are available) from 10.7 % in Finland and 10.0 % in Belgium to around 5 % in Spain, Latvia, and Hungary and down to 4.6 % in Portugal and 4.1 % in Sweden.

The business investment rate for non-financial corporations in 2013 was 21.6 % in the EU-28. Between 2012 and 2013, the business investment rate fell in a small majority of the EU Member States (for which data are available), most notably in Finland (– 2.1 percentage points), Latvia (– 1.4 points), Slovakia (– 1.2 points) and Portugal (– 1.1 points), and on average by 0.4 percentage points across the euro area (EA-18) and by 0.2 points across the EU-28 as a whole. The highest increases in the business investment rate in 2013 (compared with 2012) were recorded in Slovenia and Estonia (both up 1.4 percentage points).

Figure 6.2: Investment rate (gross) of non-financial corporations, 2013 (1)
(%)



(1) Bulgaria, Croatia, Luxembourg, Malta and Romania: not available.
(2) 2012.
Source: Eurostat (online data code: nasa_10_ki)

Table 6.2: Key ratios of sector accounts, households, 2013 ([1])

	Saving rate	Investment rate	Debt to income ratio	Net financial wealth to income ratio	Saving rate	Investment rate	Debt to income ratio	Net financial wealth to income ratio
	(%)				Change from 2012 (percentage points)			
EU-28	11.0	7.8	:	:	–0.2	–0.2	:	:
EA-18	12.9	8.3	:	:	0.2	–0.4	:	:
Belgium	13.5	10.0	93.6	372.9	–0.4	–0.3	2.0	9.2
Bulgaria	:	:	:	:	:	:	:	:
Czech Republic	9.7	7.9	57.7	128.3	–1.6	0.0	1.9	4.2
Denmark	6.7	7.8	255.8	270.8	–0.3	0.0	–8.6	17.9
Germany	16.3	9.3	83.3	183.4	–0.2	0.0	–1.0	6.5
Estonia	8.8	7.2	72.2	130.3	0.8	0.4	–5.2	10.6
Ireland	12.7	5.6	186.0	182.9	–0.2	0.3	–4.1	10.2
Greece	:	:	:	:	:	:	:	:
Spain	10.4	4.9	115.8	146.1	1.0	–1.4	–6.8	28.0
France	14.7	8.9	85.7	235.1	–0.2	–0.3	1.1	12.3
Croatia	:	:	:	:	:	:	:	:
Italy	11.3	8.6	63.3	269.1	1.7	–0.5	–1.2	7.2
Cyprus	–7.6	6.4	197.9	219.8	–9.4	–1.0	16.7	83.4
Latvia	–4.0	4.9	48.8	83.6	1.7	–1.2	–8.1	–5.7
Lithuania	2.2	5.5	:	:	0.8	0.8	:	:
Luxembourg	:	:	:	:	:	:	:	:
Hungary	10.7	4.8	48.2	143.8	0.4	–0.1	–5.0	9.7
Malta	:	:	:	:	:	:	:	:
Netherlands	14.7	8.2	222.3	311.5	1.1	–1.0	–6.5	–15.0
Austria	12.8	8.5	82.7	200.5	–1.5	0.0	–0.4	4.6
Poland	:	:	:	:	:	:	:	:
Portugal	8.7	4.6	120.9	165.3	1.0	–0.6	–5.3	15.9
Romania	:	:	:	:	:	:	:	:
Slovenia	14.4	5.5	47.1	119.2	3.0	–0.5	–1.6	8.1
Slovakia	8.5	7.3	48.1	59.5	1.3	–0.2	3.0	–0.5
Finland	8.2	10.7	106.6	106.6	0.4	–0.3	0.3	8.6
Sweden	18.1	4.1	144.4	289.9	0.3	–0.2	2.0	30.9
United Kingdom	6.4	6.7	:	:	–1.6	0.4	:	:
Switzerland ([2])	22.0	5.7	168.1	314.2	:	:	:	:

([1]) Including non-profit institutions serving households.
([2]) 2012.
Source: Eurostat (online data code: nasa_10_ki)

6.3 Government finances

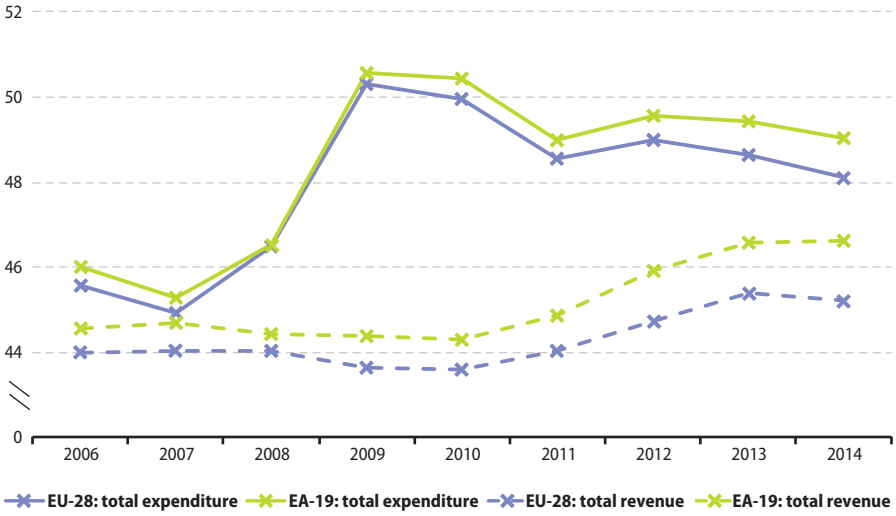
These statistics are crucial indicators for determining the health of a Member State's economy. Under the terms of the EU's Stability and Growth Pact (SGP), EU Member States pledged to keep their deficits and debt below certain limits: a Member State's government deficit may not exceed –3 % of its GDP,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

In the EU-28 the government deficit-to-GDP ratio decreased from –3.2 % in 2013 to

– 2.9 % in 2014 and in the EA-19 it decreased from – 2.9 % to – 2.4 %. Four EU Member States — Denmark, Germany, Estonia and Luxembourg — registered government surpluses in 2014. There were 11 EU Member States, namely Bulgaria, the Czech Republic, Latvia, Lithuania, Hungary, Malta, the Netherlands, Austria, Romania, Slovakia and Sweden, which recorded deficits in 2014 that were lower than – 3.0 % of GDP. Italy registered a deficit of – 3.0 % of GDP in 2014. Deficit ratios in 2014 were greater than – 3.0 % of GDP in 12 EU Member States: the largest government deficits (as a percentage of GDP) were recorded by Cyprus (– 8.8 %), Spain (– 5.8 %), Croatia and the United Kingdom (both – 5.7 %). Among the 12 EU Member States with deficit ratios exceeding – 3.0 % of GDP, 10 had also reported deficits exceeding – 3.0 % for each of the three previous years, therefore for the whole reporting period.

The importance of the general government sector in the economy may be measured in terms of total general government revenue and expenditure as a percentage of GDP. In the EU-28, total government revenue in 2014 amounted to 45.2 % of GDP (down from 45.4 % of GDP in 2013), and expenditure amounted to 48.1 % of GDP (down from 48.6 % in 2013). In the EA-19, total general government expenditure amounted to 49.0 % of GDP in 2014 (down from 49.4 % of GDP in 2013) and total revenue to 46.6 % of GDP (unchanged compared with 2013).

Figure 6.3: Development of total general government expenditure and revenue, 2006–14 ([1])
(% of GDP)



([1]) Data extracted on 21.04.2015. Note that the y-axis is cut.
Source: Eurostat (online data code: gov_10a_main)

Table 6.3: Public balance and general government debt, 2011–14 ([1])
(% of GDP)

	Public balance (net borrowing/lending of consolidated general government sector)				General government debt (general government consolidated gross debt)			
	2011	2012	2013	2014	2011	2012	2013	2014
EU-28	−4.5	−4.2	−3.2	−2.9	80.9	83.7	85.5	86.8
EA-19	−4.1	−3.6	−2.9	−2.4	85.8	89.1	90.9	91.9
Belgium	−4.1	−4.1	−2.9	−3.2	102.0	103.8	104.4	106.5
Bulgaria	−2.0	−0.7	−0.9	−2.8	15.7	18.0	18.3	27.6
Czech Republic	−2.7	−3.9	−1.2	−2.0	39.9	44.6	45.0	42.6
Denmark	−2.1	−3.7	−1.1	1.2	46.4	45.6	45.0	45.2
Germany	−0.9	0.1	0.1	0.7	77.9	79.3	77.1	74.7
Estonia	1.2	−0.2	−0.2	0.6	6.0	9.7	10.1	10.6
Ireland	−12.7	−8.1	−5.8	−4.1	111.2	121.7	123.2	109.7
Greece	−10.2	−8.7	−12.3	−3.5	171.3	156.9	175.0	177.1
Spain	−9.4	−10.3	−6.8	−5.8	69.2	84.4	92.1	97.7
France	−5.1	−4.8	−4.1	−4.0	85.2	89.6	92.3	95.0
Croatia	−7.5	−5.3	−5.4	−5.7	63.7	69.2	80.6	85.0
Italy	−3.5	−3.0	−2.9	−3.0	116.4	123.1	128.5	132.1
Cyprus	−5.8	−5.8	−4.9	−8.8	66.0	79.5	102.2	107.5
Latvia	−3.3	−0.8	−0.7	−1.4	42.7	40.9	38.2	40.0
Lithuania	−8.9	−3.1	−2.6	−0.7	37.2	39.8	38.8	40.9
Luxembourg	0.4	0.1	0.9	0.6	19.1	21.9	24.0	23.6
Hungary	−5.5	−2.3	−2.5	−2.6	81.0	78.5	77.3	76.9
Malta	−2.6	−3.6	−2.6	−2.1	69.7	67.4	69.2	68.0
Netherlands	−4.3	−4.0	−2.3	−2.3	61.3	66.5	68.6	68.8
Austria	−2.6	−2.2	−1.3	−2.4	82.1	81.5	80.9	84.5
Poland	−4.9	−3.7	−4.0	−3.2	54.8	54.4	55.7	50.1
Portugal	−7.4	−5.6	−4.8	−4.5	111.1	125.8	129.7	130.2
Romania	−5.3	−2.9	−2.2	−1.5	34.2	37.3	38.0	39.8
Slovenia	−6.6	−4.0	−14.9	−4.9	46.5	53.7	70.3	80.9
Slovakia	−4.1	−4.2	−2.6	−2.9	43.4	52.1	54.6	53.6
Finland	−1.0	−2.1	−2.5	−3.2	48.5	52.9	55.8	59.3
Sweden	−0.1	−0.9	−1.4	−1.9	36.2	36.6	38.7	43.9
United Kingdom	−7.6	−8.3	−5.7	−5.7	81.8	85.8	87.3	89.4
Norway	13.4	13.8	11.3	9.1	27.5	29.2	29.3	26.4

([1]) Data extracted on 21.04.2015.
Source: Eurostat (online data codes: tec00127 and tsdde410)

6.4 Exchange rates and interest rates

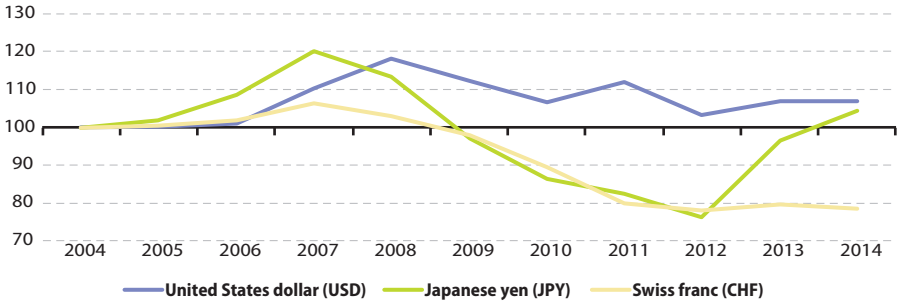
This section starts by considering the development of exchange rates across the EU, as well as exchange rate fluctuations between the euro, the Japanese yen, the Swiss franc and the United States dollar. The second half of the section examines interest rates — in other words, the cost of borrowing and / or lending money. At the macroeconomic level, key interest rates are generally set by central banks, as a primary tool for monetary policy with the goal of maintaining price stability and controlling inflation

The index of annual average exchange rates presented in Figure 6.4 starts in 2004, during a period when the euro was still appreciating from historically low levels against many other currencies. There was a marked appreciation in the value of the euro

compared with the Japanese yen through until 2007 after which the euro depreciated rapidly, falling, on average, by 8.7 % per year between 2007 and 2012. Initially, a similar pattern was observed against the United States dollar, with the euro appreciating until 2008. Thereafter, a more gentle but less regular depreciation through to 2012 (– 3.3 % per year) was observed, followed by a slight appreciation in 2013 and stability in 2014. By contrast, the euro appreciated less against the Swiss franc, increasing by 2.1 % per year between 2004 and 2007. Between 2007 and 2011, the euro depreciated at an accelerating pace against the Swiss franc. The stabilisation that started in September 2011 resulted from the Swiss central bank introducing a minimum exchange rate of CHF 1.20 = EUR 1, effectively capping the Swiss franc's appreciation. This minimum exchange rate was maintained until 15 January 2015: after its removal the Swiss Franc appreciated 30 % in inter-day trading and closed up 23 %.

About interest rates, the overall pattern in bond yields for the EU-28 (weighted) average was that yields were highest in the lead-up to the financial and economic crisis, namely in 2007 and 2008, before declining through to 2014 (with a notable increase in 2011, reflecting issues linked to financing sovereign debt). By 2014, yields were less than half the level they had been in 2007. This pattern was broadly repeated across many of the EU Member States, as several saw their yields at the end of the period under consideration fall below the levels recorded in 2007 and 2008. The main exceptions to this pattern were Greece and Cyprus where yields in 2014 were higher than they had been up to and including the financial and economic crisis, although in both cases they were lower than the yields recorded in 2012. Other economies affected by the sovereign debt crisis, such as Portugal, Ireland and to a lesser degree Spain, Italy and Slovenia, also recorded yields in 2014 that had dropped backed down from highs in 2011, 2012 or 2013.

Figure 6.4: Exchange rates against the euro, 2004–14 ([1])
(2004 = 100)



([1]) A reduction in the value of the index shows an appreciation in the value of the foreign currency and a depreciation in the value of the euro.
Source: Eurostat (online data code: ert_bil_eur_a), ECB

Table 6.4: EMU convergence criterion bond yields (Maastricht criterion), 2004–14 ([1])
(%)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
EU-28 ([2])	4.38	3.70	4.10	4.57	4.56	4.15	3.82	4.28	3.66	2.96	2.21
EA ([3])	4.12	3.42	3.84	4.32	4.31	3.82	3.61	4.35	3.88	3.00	2.05
Belgium	4.15	3.43	3.81	4.33	4.42	3.90	3.46	4.23	3.00	2.41	1.71
Bulgaria	5.36	3.87	4.18	4.54	5.38	7.22	6.01	5.36	4.50	3.47	3.35
Czech Republic	4.82	3.54	3.80	4.30	4.63	4.84	3.88	3.71	2.78	2.11	1.58
Denmark	4.30	3.40	3.81	4.29	4.28	3.59	2.93	2.73	1.40	1.75	1.32
Germany	4.04	3.35	3.76	4.22	3.98	3.22	2.74	2.61	1.50	1.57	1.16
Estonia	:	:	:	:	:	:	:	:	:	:	:
Ireland	4.08	3.33	3.76	4.31	4.53	5.23	5.74	9.60	6.17	3.79	2.37
Greece	4.26	3.59	4.07	4.50	4.80	5.17	9.09	15.75	22.50	10.05	6.93
Spain	4.10	3.39	3.78	4.31	4.37	3.98	4.25	5.44	5.85	4.56	2.72
France	4.10	3.41	3.80	4.30	4.23	3.65	3.12	3.32	2.54	2.20	1.67
Croatia	:	:	4.43	4.93	6.04	7.83	6.29	6.54	6.13	4.68	4.05
Italy	4.26	3.56	4.05	4.49	4.68	4.31	4.04	5.42	5.49	4.32	2.89
Cyprus	5.80	5.16	4.13	4.48	4.60	4.60	4.60	5.79	7.00	6.50	6.00
Latvia	4.86	3.88	4.13	5.28	6.43	12.36	10.34	5.91	4.57	3.34	2.51
Lithuania	4.50	3.70	4.08	4.55	5.61	14.00	5.57	5.16	4.83	3.83	2.79
Luxembourg	2.84	2.41	3.30	4.46	4.61	4.23	3.17	2.92	1.82	1.85	1.34
Hungary	8.19	6.60	7.12	6.74	8.24	9.12	7.28	7.64	7.89	5.92	4.81
Malta	4.69	4.56	4.32	4.72	4.81	4.54	4.19	4.49	4.13	3.36	2.61
Netherlands	4.10	3.37	3.78	4.29	4.23	3.69	2.99	2.99	1.93	1.96	1.45
Austria	4.13	3.39	3.80	4.30	4.36	3.94	3.23	3.32	2.37	2.01	1.49
Poland	6.90	5.22	5.23	5.48	6.07	6.12	5.78	5.96	5.00	4.03	3.52
Portugal	4.14	3.44	3.91	4.42	4.52	4.21	5.40	10.24	10.55	6.29	3.75
Romania	:	:	7.23	7.13	7.70	9.69	7.34	7.29	6.68	5.41	4.48
Slovenia	4.68	3.81	3.85	4.53	4.61	4.38	3.83	4.97	5.81	5.81	3.27
Slovakia	5.03	3.52	4.41	4.49	4.72	4.71	3.87	4.45	4.55	3.19	2.07
Finland	4.11	3.35	3.78	4.29	4.29	3.74	3.01	3.01	1.89	1.86	1.45
Sweden	4.42	3.38	3.70	4.17	3.89	3.25	2.89	2.61	1.59	2.12	1.72
United Kingdom	4.93	4.46	4.37	5.06	4.50	3.36	3.36	2.87	1.74	2.03	2.14

([1]) 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 2004 and 2005.
([3]) EA-12, 2004–06; EA-13, 2007; EA-15, 2008; EA-16, 2009–10; EA-17, 2011–13; EA-18, 2014.
Source: Eurostat (online data code: tec00097), ECB

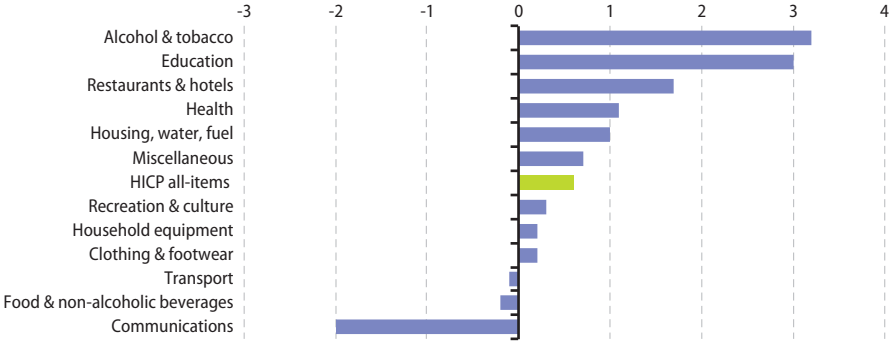
6.5 Consumer prices — inflation and comparative price levels

Inflation is the increase in the general level of prices of goods and services in an economy; the reverse situation is deflation when the general level of prices falls. Inflation and deflation are usually measured by consumer price indices or retail price indices. Within the EU, a specific consumer price index has been developed — the harmonised index of consumer prices (HICP). Other factors (such as wages) being equal, inflation in an economy means that the purchasing power of consumers falls as they are no longer able to purchase the same amount of goods and services with the same amount of money.

Compared with historical trends, consumer price indices rose at a relatively modest pace during the last two decades. After sharp movements during the period 2008–14, the rate at which prices were rising slowed to 0.6 % in 2014, the lowest point since records began. Moreover, during several months of 2014 negative inflation rates (indicating deflation) were recorded. Among EU Member States, Romania registered the biggest increase in the HICP between 2005 and 2014 (an increase of 54.7 %), while Ireland experienced the lowest rise in the same period (9.6 %). The overall change in the EU was 20.9 %, similar to the rate recorded in the United States (22.1 %).

As regards the main components of the HICP, energy prices in the EU rose at the highest rate (an increase of 49.0 %) between 2005 and 2014, despite the drop recorded in 2014, while non-energy industrial goods prices increased by 4.8 % over the same period. The rates for food and for services increased at a slightly faster pace when compared with the all-items index. Within services, developments for communications should be highlighted as prices decreased by 13.1 % during the period under review.

Figure 6.5: HICP main headings, annual average inflation rates, EU-28, 2014
(%)



Source: Eurostat (online data code: prc_hicp_aind)

Table 6.5: HICP all-items, annual average inflation rates, 2004–14
(%)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
EU (1)	2.0	2.2	2.2	2.3	3.7	1.0	2.1	3.1	2.6	1.5	0.6
EA (2)	2.1	2.2	2.2	2.1	3.3	0.3	1.6	2.7	2.5	1.4	0.4
Belgium	1.9	2.5	2.3	1.8	4.5	0.0	2.3	3.4	2.6	1.2	0.5
Bulgaria	6.1	6.0	7.4	7.6	12.0	2.5	3.0	3.4	2.4	0.4	–1.6
Czech Republic	2.6	1.6	2.1	3.0	6.3	0.6	1.2	2.1	3.5	1.4	0.4
Denmark	0.9	1.7	1.9	1.7	3.6	1.1	2.2	2.7	2.4	0.5	0.3
Germany	1.8	1.9	1.8	2.3	2.8	0.2	1.2	2.5	2.1	1.6	0.8
Estonia	3.0	4.1	4.4	6.7	10.6	0.2	2.7	5.1	4.2	3.2	0.5
Ireland	2.3	2.2	2.7	2.9	3.1	–1.7	–1.6	1.2	1.9	0.5	0.3
Greece	3.0	3.5	3.3	3.0	4.2	1.3	4.7	3.1	1.0	–0.9	–1.4
Spain	3.1	3.4	3.6	2.8	4.1	–0.2	2.0	3.1	2.4	1.5	–0.2
France	2.3	1.9	1.9	1.6	3.2	0.1	1.7	2.3	2.2	1.0	0.6
Croatia	2.1	3.0	3.3	2.7	5.8	2.2	1.1	2.2	3.4	2.3	0.2
Italy	2.3	2.2	2.2	2.0	3.5	0.8	1.6	2.9	3.3	1.3	0.2
Cyprus	1.9	2.0	2.2	2.2	4.4	0.2	2.6	3.5	3.1	0.4	–0.3
Latvia	6.2	6.9	6.6	10.1	15.3	3.3	–1.2	4.2	2.3	0.0	0.7
Lithuania	1.2	2.7	3.8	5.8	11.1	4.2	1.2	4.1	3.2	1.2	0.2
Luxembourg	3.2	3.8	3.0	2.7	4.1	0.0	2.8	3.7	2.9	1.7	0.7
Hungary	6.8	3.5	4.0	7.9	6.0	4.0	4.7	3.9	5.7	1.7	0.0
Malta	2.7	2.5	2.6	0.7	4.7	1.8	2.0	2.5	3.2	1.0	0.8
Netherlands	1.4	1.5	1.7	1.6	2.2	1.0	0.9	2.5	2.8	2.6	0.3
Austria	2.0	2.1	1.7	2.2	3.2	0.4	1.7	3.6	2.6	2.1	1.5
Poland	3.6	2.2	1.3	2.6	4.2	4.0	2.7	3.9	3.7	0.8	0.1
Portugal	2.5	2.1	3.0	2.4	2.7	–0.9	1.4	3.6	2.8	0.4	–0.2
Romania (3)	11.9	9.1	6.6	4.9	7.9	5.6	6.1	5.8	3.4	3.2	1.4
Slovenia	3.7	2.5	2.5	3.8	5.5	0.9	2.1	2.1	2.8	1.9	0.4
Slovakia	7.5	2.8	4.3	1.9	3.9	0.9	0.7	4.1	3.7	1.5	–0.1
Finland	0.1	0.8	1.3	1.6	3.9	1.6	1.7	3.3	3.2	2.2	1.2
Sweden	1.0	0.8	1.5	1.7	3.3	1.9	1.9	1.4	0.9	0.4	0.2
United Kingdom	1.3	2.1	2.3	2.3	3.6	2.2	3.3	4.5	2.8	2.6	1.5
Iceland	2.3	1.4	4.6	3.6	12.8	16.3	7.5	4.2	6.0	4.1	1.0
Norway	0.6	1.5	2.5	0.7	3.4	2.3	2.3	1.2	0.4	2.0	1.9
Switzerland	:	:	1.0	0.8	2.3	–0.7	0.6	0.1	–0.7	0.1	0.0
Turkey (4)	10.1	8.1	9.3	8.8	10.4	6.3	8.6	6.5	9.0	7.5	8.9
Japan (4)	0.0	–0.3	0.3	0.0	1.4	–1.4	–0.7	0.1	0.0	0.4	2.7
United States (4)	2.7	3.4	3.2	2.8	3.8	-0.4	1.6	3.2	2.1	1.5	1.6

(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) 2004–05: not strictly comparable with the HICP.
(4) National CPI: 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 balance determines the exposure of an economy to the rest of the world, whereas the capital and financial account explains how it is financed.

The current account surplus of the EU-28 was EUR 126.5 billion in 2014, corresponding to 0.9 % of GDP. This can be contrasted with data for 2013, when the current account surplus was EUR 155.5 billion. The latest developments for the EU-28's current account showed a slight discontinuation of the pattern established in 2008: while the current account deficit peaked in 2008 at 2.3 % of GDP, it gradually reduced and in 2012 turned into a surplus equivalent to 0.7 % of GDP; the surplus was equivalent to 1.2 % of GDP in 2013 and 0.9 % in 2014. The current account surplus for 2014 comprised a deficit for secondary income (– 0.6 % of GDP) with surpluses in the current accounts for goods (0.3 % of GDP), services (1.1 %) and primary income (0.1 %). There were eight EU Member States that reported current account deficits in 2014, while 20 recorded surpluses. The largest deficits (relative to GDP) were observed in the United Kingdom (– 5.5 %) and Cyprus (– 5.1 %), while the Netherlands (10.3 % of GDP) reported the largest surplus, followed by Germany (7.6 %), Ireland and Denmark (both 6.2 %).

Among the partner countries and regions, the EU-28's current account deficit was largest with China, standing at EUR 57.2 billion in 2014, followed by Russia (EUR 37.4 billion). The highest current account surpluses were recorded with the United States (EUR 138.0 billion) and Switzerland (EUR 85.4 billion), while surpluses were also registered with Hong Kong, Brazil, Canada, Japan and India. It is noteworthy that the current account balance of the EU-28 with Japan, turned from a deficit into a surplus in 2014 (EUR 4.5 billion).

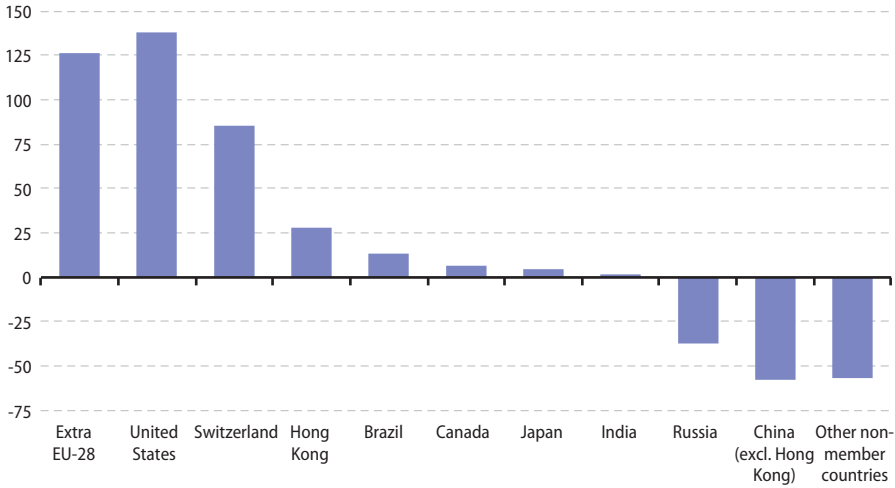
The net financial account is interpreted as net lending to the rest of the world when positive, and net borrowing from the rest of the world when negative. A total of 19 EU Member States were net lenders to the rest of the world in 2014, with the highest value relative to GDP reported by the Netherlands (10.7 % of GDP), while nine EU Member States were net borrowers, most prominently Malta (– 8.3 % of GDP) and Croatia (– 6.1 % of GDP). However, in absolute terms the largest net lender in the EU-28 by far was Germany with EUR 243.8 billion in 2014. The euro area was also a net lender to the rest of the world in 2014 with EUR 296.3 billion of net lending, equivalent to 2.9 % of GDP.

Table 6.6: Main components of the current account balance, 2014
(% of GDP)

	Current account	Goods	Services	Primary income	Secondary income
EU-28 (1)	0.9	0.3	1.1	0.1	–0.6
EA-19 (1)	2.1	2.4	0.6	0.4	–1.4
Belgium	1.4	–0.7	1.3	2.8	–2.0
Bulgaria	0.9	–8.2	7.3	–2.1	3.8
Czech Republic	0.6	5.6	1.3	–6.1	–0.2
Denmark	6.2	2.8	2.4	2.9	–2.0
Germany	7.6	7.9	–1.3	2.3	–1.3
Estonia	–0.1	–5.2	7.7	–2.6	0.1
Ireland	6.2	25.0	–3.6	–14.0	–1.2
Greece	0.9	–10.0	11.0	0.1	–0.2
Spain	0.8	–2.0	4.6	–0.6	–1.2
France	–1.0	–1.7	0.7	2.2	–2.2
Croatia	0.6	–14.7	16.8	–3.3	1.8
Italy	1.9	3.1	0.0	:	:
Cyprus	–5.1	–15.2	15.1	–2.6	–2.3
Latvia	–3.1	–10.1	7.3	–0.8	0.5
Lithuania	0.1	–4.2	4.3	–3.1	3.1
Luxembourg	5.4	–0.9	37.7	–31.6	0.1
Hungary	4.1	2.6	4.8	–2.6	–0.8
Malta	2.7	–14.1	20.4	–6.1	:
Netherlands	10.3	11.8	–1.0	1.3	–1.9
Austria	0.8	–0.7	3.1	–0.6	–1.1
Poland	–1.4	–0.2	2.0	–3.2	–0.1
Portugal	0.6	–5.2	6.3	–1.4	0.9
Romania	–0.4	–3.6	3.9	–1.9	1.2
Slovenia	5.8	3.5	4.6	–1.6	–0.7
Slovakia	0.1	4.5	0.2	–3.0	–1.6
Finland	–1.8	0.4	–0.7	:	:
Sweden	6.3	3.0	1.6	3.3	–1.7
United Kingdom	–5.5	–6.7	4.8	–2.2	–1.4
Iceland	3.7	:	:	:	:
Norway	8.5	9.5	–1.1	1.7	–1.6
Montenegro	–15.3	–40.0	20.1	1.3	3.3
FYR of Macedonia	–1.3	–21.7	4.2	–2.6	18.9
Serbia	–6.3	–12.3	1.4	–4.4	9.1
Turkey	–5.8	–8.0	3.2	–1.1	0.1

(1) EU-28 vis-à-vis extra-EU-28. Euro area vis-à-vis extra euro area. Contains confidential data.
Source: Eurostat (online data codes: bop_c6_q, bop_gdp6_q and nama_10_gdp), ECB

Figure 6.6: Current account balance with selected partners, EU-28, 2014
(billion EUR)



Source: Eurostat (online data code: bop_eu6_q)

6.7 Foreign direct investment

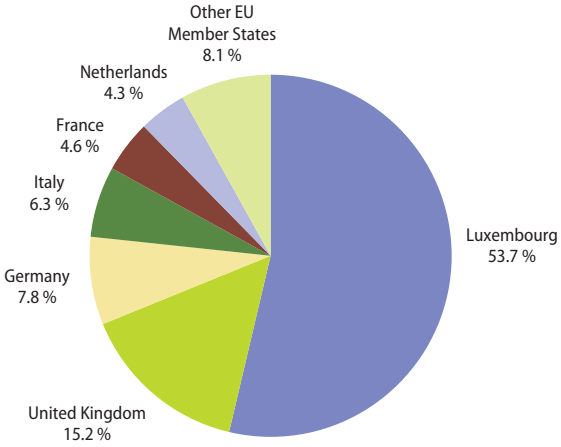
EU foreign direct investment (FDI) is recovering after the global financial and economic turmoil. In 2013, EU-28 outward flows were 34 % higher than EU-27 flows in 2012. Similarly, EU-28 inward flows were 12 % above EU-27 flows in the previous year. However, EU-28 FDI flows in 2013 stood at more than 20 % below the EU-27 peak levels of 2011 in terms of both inward and outward investment relations with the rest of the world. The income rates of return from both EU-27 outward and inward investment in 2012 were slightly down from the previous year but remained above the rates of 2008 and 2009. As in earlier years, FDI flows channelled through special-purpose entities (SPE) played a very significant role in the results.

In 2013, EU-28 direct investment into the United States were more than double (up 153 %) the 2012 level recorded for the EU-27. The EU-28's outward FDI increased substantially in Switzerland (to reach EUR 24.4 billion), Brazil (EUR 35.6 billion) and offshore financial centres (EUR 39.9 billion). Nevertheless, the EU-28 direct investment activity decreased in China (down from EUR 15.5 billion for the EU-27 in 2012 to EUR 8.2 billion for the EU-28 in 2013), Hong Kong (from EUR 15.0 billion to EUR 10.4 billion) and India (from EUR 5.5 billion to EUR 3.2 billion), while that in Russia and Canada was less than the level of (earlier) outward FDI withdrawn from these countries such that overall the EU-28's outward FDI flows to these countries were negative (disinvestments).

EU-28 inward flows of FDI in 2013 were higher than the equivalent flows for the EU-27 in the previous year, up 12 %. The United States remained the main source of incoming FDI and its direct investment into the EU more than tripled in 2013. Inward flows of FDI from Brazil in 2013 (up from EUR 2.2 billion for the EU-27 in 2012 to EUR 21.5 billion for the EU-28 in 2013) and Japan (from EUR 3.9 billion to EUR 9.6 billion) also expanded sharply, while Hong Kong and India turned to investment in the EU-28 in 2013 after the disinvestment in the EU-27 registered in 2012. Nevertheless, large decreases were registered for inward FDI flows from Canada and China, while the inward flow from offshore financial centres fell sharply such that it turned negative (a disinvestment) in 2013.

FDI flows can vary considerably from one year to another, influenced mainly by large mergers and acquisitions. In the period 2011–13, Luxembourg had the largest share (54 %) of EU FDI outward flows because special-purpose entities handle most of Luxembourg's total direct investment. Special-purpose entities also play an important role in other EU Member States, especially the Netherlands, Austria, Hungary and Cyprus, but the data presented here exclude special-purpose entities for these countries.

Figure 6.7: FDI outward flows, 2011–13 average ([1])
(% of extra EU outward flows)



([1]) 2013: provisional. 2011 and 2012: extra-EU-27 flows. 2013: extra EU-28 flows.
Source: Eurostat (online data code: bop_fdi_main)

Table 6.7: Foreign direct investment, EU, 2010–13 ([1])
(billion EUR)

	Outward FDI flows				Inward FDI flows			
	2011	2012	2013	Share in 2012 (%)	2011	2012	2013	Share in 2012 (%)
Extra-EU	474.8	255.6	*341.4*	100.0	424.0	291.8	*326.6*	100.0
Europe (non-EU, including EFTA), of which	94.3	72.2	:	28.2	50.2	66.1	:	22.7
Switzerland	48.7	4.5	*24.4*	1.8	42.4	19.7	*18.2*	6.7
Norway	6.5	19.3		7.6	10.0	10.6	:	3.6
Russia	8.3	16.2	*– 10.7*	6.3	3.1	8.4	*8.1*	2.9
Turkey	9.9	4.9	:	1.9	0.3	2.6	:	0.9
Ukraine	1.0	0.0	:	0.0	– 0.1	0.1	:	0.0
Africa, of which	14.8	7.8	:	3.1	3.2	15.3	:	5.2
Egypt	5.4	2.9	:	1.1	0.2	0.4	:	0.1
South Africa	2.8	4.9	:	1.9	– 1.7	– 4.8	:	– 1.6
North America, of which	193.7	80.5	:	31.5	261.9	118.5	:	40.6
Canada	30.3	17.6	*– 1.8*	6.9	1.2	19.7	*2.5*	6.8
United States	163.4	62.9	*159.3*	24.6	260.5	98.8	*312.8*	33.9
Central America, of which	42.5	– 4.9	:	– 1.9	41.7	48.3	:	16.6
Mexico	4.8	0.1	:	0.0	0.4	4.9	:	1.7
South America, of which	37.8	31.6	:	12.4	18.2	3.7	:	1.3
Argentina	0.4	2.4	:	0.9	0.0	0.2	:	0.1
Brazil	30.3	22.2	*35.6*	8.7	13.0	2.2	*21.5*	0.8
Asia, of which	89.8	57.0	:	22.3	47.7	38.0	:	13.0
Arabian Gulf countries	11.5	13.8	:	5.4	14.1	– 0.1	:	0.0
China (excl. Hong Kong)	20.1	15.5	*8.2*	6.1	4.3	7.7	*1.1*	2.6
Hong Kong	7.0	15.0	*10.4*	5.9	7.2	– 1.1	*8.2*	– 0.4
Japan	3.7	1.4	*2.8*	0.6	10.0	3.9	*9.6*	1.3
India	13.8	5.5	*3.2*	2.1	2.3	– 0.7	*0.4*	– 0.2
Singapore	7.9	– 8.9	:	– 3.5	4.4	5.8	:	2.0
South Korea	2.5	0.0	:	0.0	1.7	4.3	:	1.5
Oceania and southern polar regions, of which	– 3.2	11.0	:	4.3	3.7	0.5	:	0.2
Australia	– 4.0	11.6	:	4.5	3.7	0.2	:	0.1
Offshore financial centres	*69.9*	*23.0*	*39.9*	*9.0*	*46.4*	*74.2*	*– 41.4*	*25.4*

([1]) 2011 and 2012: EU-27. 2013: EU-28. Preliminary figures for 2013 are based on annualised quarterly data. The sum of data by continent does not always equal the extra-EU total because of non-allocated flows.
Source: Eurostat (online data code: bop_fdi_main)

7

International trade

Introduction

The EU has a common international 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. The crisis had a considerable impact on the international exchange of goods in 2009. However, this was relatively short-lived and the level of trade integration for goods bounced back in 2010 to a level that was above that recorded in 2008. For services, the EU-28's trade integration was stable in 2009 before continuing its upwards path thereafter.

The average value of EU-28 credits and debits, relative to 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, up from 3.2 % in 2003. 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 1.5 % of GDP in 2013, compared with deficits of 0.7 % in Japan and 3.6 % in the United States; note the latest data available for these latter two countries relate to 2011. The EU-28's surplus in 2013 was composed of a surplus for both services (1.3 % of GDP) and goods (0.2 %).

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 3 419 billion (= EUR 3 419 000 million) in 2013; while EU-28 exports registered a record level, imports decreased by more than EUR 100 billion in comparison with 2012. As a result, the EU-28's trade balance was positive for the first time since the beginning of the series (data for the extra-EU exports for the EU-28 are available since 2002).

Between 2012 and 2013, the development of the EU-28's exports of goods by major trading partner varied considerably. The highest growth rate was recorded for exports to Switzerland (up 27.0 %), while exports to South Korea, Turkey and China grew more slowly (up 5.8 %, 3.1 % and 3.0 % respectively). The biggest fall was registered in relation to exports to India (down 6.9 %), and there were smaller reductions for exports to Russia (down 2.9 %), Japan (down 2.8 %) and the United States (down 1.6 %). Nevertheless, the United States remained, by far, the most common destination for goods exported from the EU-28 in 2013, although the share of EU-28 exports destined for the

United States fell from 26.4 % of the total in 2003 to 16.6 % by 2013. In value terms, the product category with the highest level of EU-28 exports to the United States in 2013 was machinery and transport equipment. The same group of products was also the main export category for goods destined for China, which was the third most important destination market for EU-28 exports in 2013 (8.5 % of the EU-28 total), after Switzerland (9.8 %).

On the import side, between 2012 and 2013 the EU-28 saw a decrease in the level of its imports of goods from all of its main partners, except those from Turkey (up 4.4 %). The greatest falls were registered for imports from Japan (down 12.7 %), Brazil (down 11.8 %), Switzerland (down 11.0 %) and Norway (down 10.9 %). China — which was the origin of one sixth of all imports into the EU-28 in 2013 — remained the most important supplier of goods imported into the EU-28 in 2013, even though imports from China fell by 4.0 % between 2012 and 2013. Imports from China registered a reduction for all the main product categories, with the exception of chemicals (up 1.1 %) and food, drinks and tobacco (up 0.2 %).

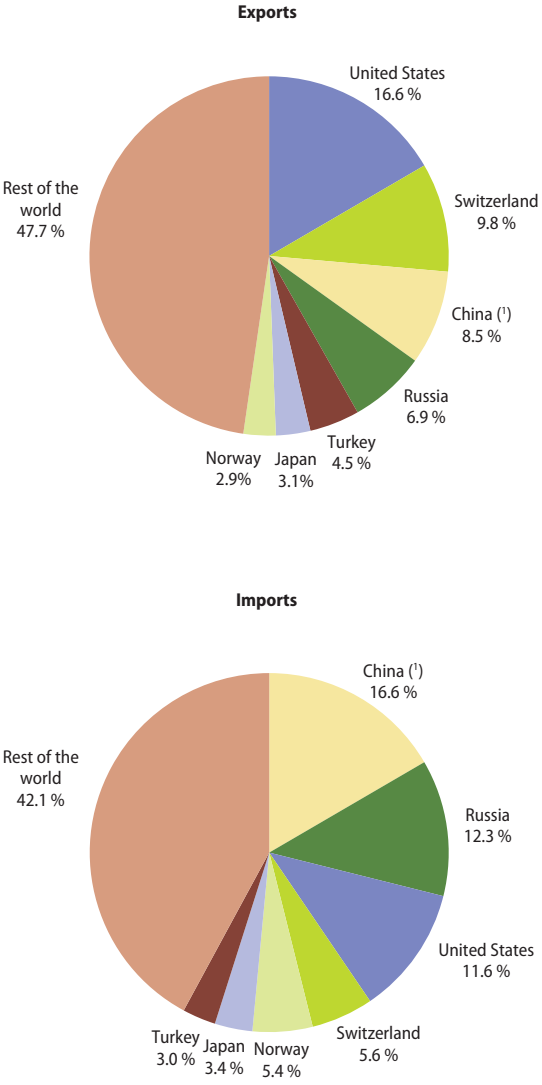
Relatively small increases in the level of exports outside the EU-28 were reported for the two product groups with the highest level of exports in 2013, namely, machinery and transport equipment (up 0.6 %) and other manufactured goods (up 1.0 %). The highest growth rate for EU-28 exports in 2013 was recorded for exports of food, drinks and tobacco, which reached the record value of EUR 104.3 billion.

Table 7.1: Extra EU-28 trade by main products, EU-28, 2008, 2012 and 2013

	2008		2012		2013	
	(billion EUR)	(%)	(billion EUR)	(%)	(billion EUR)	(%)
Exports						
Total	1 309.1	100.0	1 683.1	100.0	1 737.0	100.0
Food, drinks & tobacco	67.8	5.2	99.0	5.9	104.3	6.0
Raw materials	32.0	2.4	47.6	2.8	45.3	2.6
Mineral fuels, lubricants	84.7	6.5	125.6	7.5	120.8	7.0
Chemicals & related prod.	197.5	15.1	275.4	16.4	273.2	15.7
Other manufactured goods	313.5	23.9	379.3	22.5	383.0	22.1
Machinery & transport equip.	570.9	43.6	705.2	41.9	709.2	40.8
Imports						
Total	1 585.2	100.0	1 798.6	100.0	1 682.4	100.0
Food, drinks & tobacco	81.0	5.1	93.1	5.2	93.5	5.6
Raw materials	75.3	4.8	80.7	4.5	76.0	4.5
Mineral fuels, lubricants	460.2	29.0	548.5	30.5	498.7	29.6
Chemicals & related prod.	124.2	7.8	163.3	9.1	157.6	9.4
Other manufactured goods	375.1	23.7	387.9	21.6	381.8	22.7
Machinery & transport equip.	425.8	26.9	452.3	25.1	434.1	25.8
Trade balance						
Total	−276.1	–	−115.5	–	54.6	–
Food, drinks & tobacco	−13.2	–	5.9	–	10.9	–
Raw materials	−43.3	–	−33.2	–	−30.8	–
Mineral fuels, lubricants	−375.4	–	−422.9	–	−377.8	–
Chemicals & related prod.	73.3	–	112.1	–	115.5	–
Other manufactured goods	−61.6	–	−8.5	–	1.3	–
Machinery & transport equip.	145.1	–	252.9	–	275.0	–

Source: Eurostat (online data code: ext_lt_intertrd)

Figure 7.1: Main trading partners for exports and imports, EU-28, 2013
(% share of extra EU-28 exports and imports)



(1) Excluding Hong Kong.
Source: Eurostat (online data code: ext_lt_maineu)

7.2 International trade in services

Services play a major role in all modern economies: an efficient services sector is considered to be crucial for trade and economic growth and for dynamic and resilient economies. Services provide vital support to the economy as a whole and more specifically to industry, for example through finance, logistics and communications. Increased trade in services and the widespread availability of services may boost economic growth by improving the performance of other industries, since services can provide key intermediate inputs, especially in an increasingly interlinked and globalised world.

In 2013 (provisional figures), the EU-28's international trade in services increased, with exports to the rest of the world rising by 3.4 %, from EUR 661.9 billion (= EUR 661 900 million) in 2012 to EUR 684.4 billion in 2013. EU-28 imports from the rest of the world grew by 0.5 %, from EUR 508.5 billion in 2012 to EUR 511.2 billion in 2013. As a result, there was a surplus of EUR 173.2 billion for EU-28 trade in services in 2013, compared with surpluses of EUR 71.3 billion in 2008 and EUR 153.4 billion in 2012.

Regarding transactions for the different service categories, one third of the EU-28's extra EU exports and imports in 2013 were accounted for by other business services — which covers miscellaneous business, professional and technical services — this category contributed EUR 219 billion of EU-28 extra EU exports and EUR 146 billion of EU-28 extra EU imports. It was followed by transport (EUR 140 billion of exports and EUR 116 billion of imports), travel (EUR 101 billion of exports and EUR 87 billion of imports) and financial services (EUR 59 billion of exports and EUR 23 billion of imports). The highest surpluses for the EU-28's extra EU trade in services were recorded for other business services (EUR 73 billion), financial services (EUR 36 billion), computer and information services (EUR 27 billion) and transport (EUR 24 billion). The only extra EU deficit (EUR 9 billion) was registered for royalties and license fees.

Figure 7.2: Extra EU trade in services, by main categories, EU-28, 2013 (1)
(billion EUR)

(1) Preliminary figures based on annualised quarterly data.
Source: Eurostat (online data code: bop_its_det)

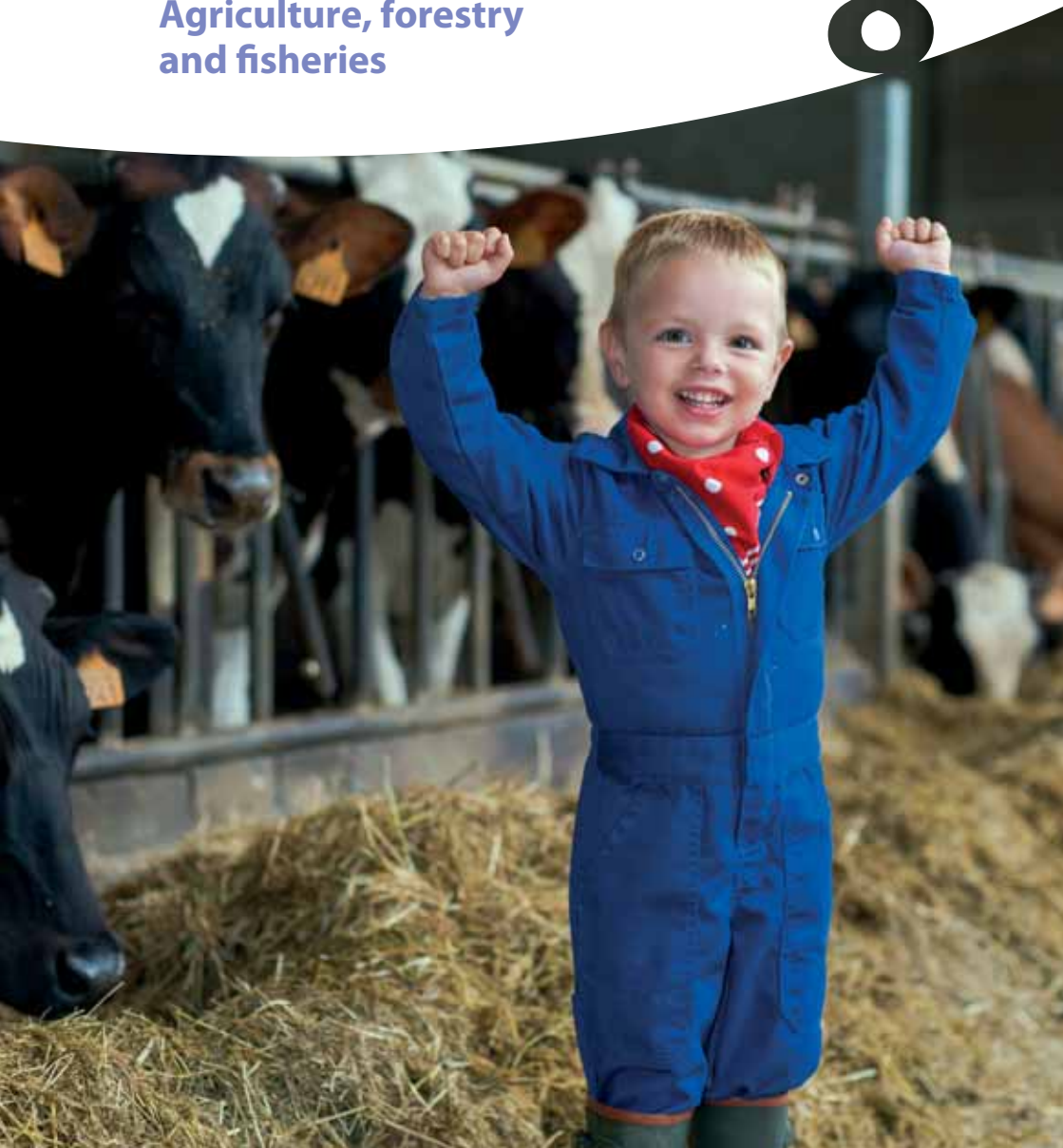
Table 7.2: Trade in services, 2008 and 2013 ([1])
(billion EUR)

	Exports			Imports			Balance	
	2008	2013	2012–13 growth rate (%)	2008	2013	2012–13 growth rate (%)	2008	2013
EU-28 ([2])	525.3	684.4	3.4	454.0	511.2	0.5	71.3	173.2
EA-17	512.9	661.2	5.5	470.0	549.1	2.1	42.9	112.1
Belgium	62.7	*81.4*	*3.0*	58.0	*73.7*	*3.5*	4.7	*7.7*
Bulgaria	5.4	*5.8*	*0.5*	4.0	*3.7*	*7.3*	1.3	*2.1*
Czech Republic	14.9	*16.9*	*– 1.8*	11.9	*14.8*	*– 2.4*	3.0	*2.0*
Denmark	49.6	*52.9*	*2.9*	42.6	*45.0*	*– 0.6*	7.0	*7.8*
Germany	174.7	*226.7*	*7.7*	200.3	*239.9*	*4.2*	– 25.6	*– 13.1*
Estonia	3.6	*4.5*	*5.1*	2.3	*3.2*	*6.8*	1.3	*1.2*
Ireland	67.9	*94.6*	*4.8*	75.6	*88.6*	*1.7*	– 7.7	*6.1*
Greece	34.1	*27.9*	*1.4*	16.9	*11.0*	*– 11.4*	17.1	*16.9*
Spain	97.7	*109.3*	*2.0*	71.9	*68.4*	*– 2.5*	25.8	*40.9*
France	112.9	*178.5*	*6.1*	96.4	*142.3*	*4.9*	16.5	*36.2*
Croatia	10.1	*9.5*	*2.4*	3.1	*2.7*	*– 4.4*	7.0	*6.8*
Italy	78.8	*83.5*	*2.0*	87.4	*80.5*	*– 2.5*	– 8.6	*3.0*
Cyprus	6.5	*5.8*	*– 6.8*	2.9	*2.5*	*– 12.6*	3.6	*3.3*
Latvia	3.1	*3.7*	*4.2*	2.2	*2.0*	*– 0.5*	0.9	*1.7*
Lithuania	3.2	*5.4*	*17.0*	2.8	*3.8*	*12.8*	0.4	*1.6*
Luxembourg	46.5	*60.3*	*7.4*	26.5	*36.5*	*11.0*	20.0	*23.9*
Hungary	13.8	*16.2*	*2.3*	12.3	*12.7*	*2.1*	1.5	*3.5*
Malta	2.9	*3.8*	*0.0*	1.8	*2.4*	*– 0.5*	1.1	*1.4*
Netherlands	85.9	*87.5*	*– 15.7*	76.5	*73.7*	*– 21.2*	9.5	*13.8*
Austria	43.4	*49.1*	*4.3*	29.1	*33.7*	*2.1*	14.2	*15.4*
Poland	24.2	*30.2*	*2.5*	20.7	*25.0*	*0.5*	3.5	*5.3*
Portugal	17.9	*20.6*	*7.7*	11.3	*10.6*	*2.2*	6.6	*9.9*
Romania	8.8	*10.8*	*28.3*	8.1	*8.1*	*10.8*	0.7	*2.7*
Slovenia	5.0	*5.4*	*4.9*	3.5	*3.4*	*1.6*	1.4	*2.0*
Slovakia	5.8	*5.6*	*0.6*	6.3	*5.5*	*3.6*	– 0.5	*0.1*
Finland	21.7	*22.9*	*4.4*	21.0	*22.5*	*– 4.2*	0.7	*0.4*
Sweden	47.2	*57.2*	*3.6*	35.9	*43.9*	*3.6*	11.3	*13.4*
United Kingdom	195.0	*225.4*	*– 1.1*	138.3	*136.4*	*– 3.7*	56.7	*89.0*
Iceland	1.3	*2.6*	*9.1*	1.5	*2.2*	*– 0.3*	– 0.2	*0.4*
Norway	30.8	*30.8*	*– 7.9*	30.6	*37.7*	*– 0.3*	0.2	*– 6.9*
Switzerland	52.7	:	:	21.0	:	:	31.6	:
Montenegro	:	*1.1*	*6.1*	:	*0.4*	*6.7*	:	*0.6*
FYR of Macedonia	0.7	*0.9*	*6.6*	0.7	*0.8*	*3.0*	0.0	*0.1*
Turkey	25.3	:	:	12.5	:	:	12.8	:
Japan	100.8	:	:	114.9	:	:	– 14.0	:
United States	364.2	:	:	274.7	:	:	89.5	:

([1]) 2013: preliminary figures based on annualised quarterly data. Data for the EU and euro area concern extra-EU and extra euro area flows respectively, whereas data for individual countries concern flows with the rest of the world (all partners).
([2]) 2008: EU-27.
Source: Eurostat (online data code: bop_its_det)

8

Agriculture, forestry and fisheries



Introduction

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

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 No 1307/2013);
- measures linked to agricultural products (Regulation No 1308/2013).

The main elements of the CAP post-2013 concern: 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.

While the EU has no separate policy on forestry, forests are affected by a broad array of EU sectoral policies. Environmental forest functions have attracted increasing attention in relation to the protection of biodiversity and in the context of energy policies and the impact of climate change. Furthermore, the EU funds many different measures for rural development that directly benefit forest owners.

The European Commission presented proposals for a reform of the common fisheries policy (CFP) which were adopted in December 2013 and became effective on 1 January 2014. The CFP is designed to conserve fish stocks and to manage them as a common resource; it gives all European fishing fleets equal access to EU waters and fishing grounds. It aims to ensure that the EU's fishing industry is environmentally, economically and socially sustainable, through high long-term fishing yields for all stocks (at the latest by 2020); this is referred to as maximum sustainable yield. Another increasingly important aim of the CFP is to reduce unwanted catches and wasteful practices to the minimum or avoid them altogether.

8.1 Agricultural output, price indices and income

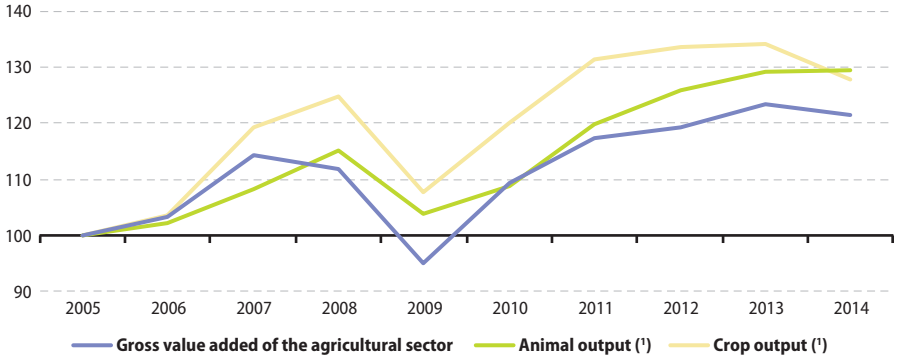
One of the principal objectives of the common agricultural policy (CAP) is to provide farmers with a reasonable standard of living. Although this concept is not defined explicitly within the CAP, a range of indicators including income development from farming activities may be used to determine the progress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

Following the financial and economic crisis, the gross value of EU-28 crop output in producer prices fell to a relative low of EUR 170.3 billion in 2009. This was followed by a rebound and four years of consecutive growth through to 2013 (peaking at EUR 212.1 billion). However, the latest information available reveals that crop output in the EU-28 fell by 4.8 % in 2014 to EUR 201.8 billion.

EU-28 gross animal output in producer prices also recorded a relative low in 2009 (EUR 134.7 billion), but then grew for five consecutive years to 2014, initially at a very rapid pace. The rate of change subsequently slowed and in 2014 there was almost no change (up 0.2 %) in the value of animal output in the EU-28, which reached EUR 167.9 billion.

These increases in the EU-28's gross output during the period 2009–13 were offset to some extent by an increase in the value of intermediate consumption of goods and services at basic prices. Here too there was a period of relatively rapid growth followed by more modest growth rates and then a reduction of 2.7 % in 2014. As a result, from a relative low of EUR 125.0 billion in 2009, the gross value added of the EU-28's agricultural sector at producer prices rose for four consecutive years to reach a relative high of EUR 162.3 billion in 2013, before falling by 1.5 % to EUR 159.8 billion in 2014.

Figure 8.1: Agricultural output and gross value added at producer prices, EU-28, 2005–14 (2005 = 100)



(1) 2014: estimate.
Source: Eurostat (online data code: aact_eaa01)

Table 8.1: Agricultural output and gross value added at producer prices, 2010 and 2014 (million EUR)

	Crop output		Animal output		Gross value added of the agricultural sector	
	2010	2014	2010	2014	2010	2014
EU-28	189685	*201814*	140928	*167878*	143817	159835
Belgium	3618	*3368*	3959	*4577*	2390	2040
Bulgaria	2118	*2485*	1037	*1050*	1277	1564
Czech Republic	2250	*2815*	1571	*1794*	918	1414
Denmark	3474	*3340*	5601	*6605*	2639	2571
Germany	22770	*24040*	21299	*25143*	14278	19492
Estonia	274	*383*	317	*425*	231	332
Ireland	1518	*1811*	3847	*5241*	1382	2103
Greece	6596	*6607*	2770	*2609*	5399	5139
Spain	24587	*24163*	13519	*15846*	21646	21192
France	38809	*39420*	22329	*26116*	26686	25156
Croatia	1541	*1186*	846	*772*	1007	906
Italy	24986	*26438*	14322	*16567*	24197	26894
Cyprus	324	*357*	330	*338*	315	339
Latvia	474	*602*	371	*495*	223	186
Lithuania	924	*1335*	801	*923*	502	775
Luxembourg	133	*191*	166	*220*	86	115
Hungary	3473	*4548*	2111	*2605*	1910	3008
Malta	47	*47*	68	*71*	54	62
Netherlands	12602	*12879*	9361	*11378*	9620	10119
Austria	2765	*2870*	2840	*3420*	2489	2795
Poland	8782	*10842*	9115	*11260*	6498	8702
Portugal	3538	*3595*	2371	*2582*	2378	2242
Romania	10311	*10938*	3592	*3888*	6534	6783
Slovenia	592	*584*	486	*548*	399	449
Slovakia	868	*1166*	744	*824*	300	513
Finland	1377	*1486*	1955	*2189*	1132	844
Sweden	2317	*2652*	2344	*2739*	1488	1571
United Kingdom	8619	*11664*	12857	*17655*	7842	12528
Norway	1419	*1550*	2317	*2526*	1194	1279
Switzerland	3039	*3412*	3436	*4294*	2710	3470
FYR of Macedonia	852	:	291	:	600	:

Source: Eurostat (online data code: aact_eaa01)

8.2 Farm structure

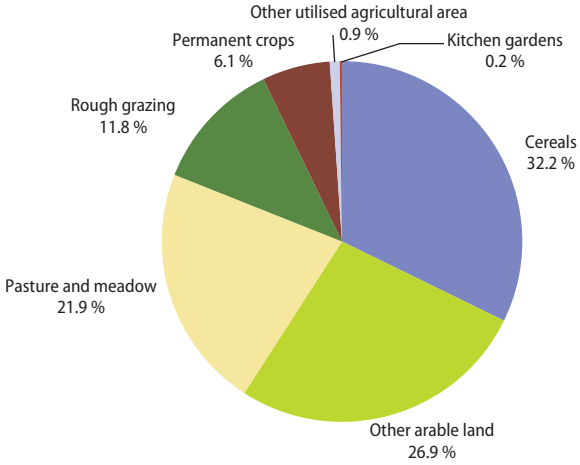
The survey on the structure of agriculturalholdings, also known as the farm structure survey (FSS), helps assess the agricultural situation across the EU, monitoring trends and transitions in the structure of agricultural holdings, while also modelling the impact of external developments or policy proposals.

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 %. Based on the 2010 data, there were around 12.2 million agricultural holdings within the EU-28.

The utilised 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. Between 2000 and 2010, the utilised agricultural area increased 44.5 % in Greece, 25.4 % in Latvia and 12.3 % in Ireland, while it fell 15.1 % in Austria and 12.2 % in Slovakia.

Arable land (which includes cereals and other arable land) accounted for three fifths (59.1 %) of the utilised agricultural area in the EU-28 in 2010, with permanent grassland (which is composed of pasture, meadow and rough grazing) accounting for 33.7 %. Permanent crops, such as vineyards, olive trees and orchards, accounted for a 6.1 % share and kitchen gardens around 0.2 %

Figure 8.2: Utilised agricultural area by land use, EU-28, 2010
(% share of utilised agricultural area)



Source: Eurostat (online data code: ef_oluft)

Table 8.2: Agricultural holdings, 2000 and 2010

	Number of agricultural holdings (1 000)		Utilised agricultural area (UAA) (1 000 ha)		Average UAA per holding (ha)	
	2000	2010	2000	2010	2000	2010
EU-28	:	12 248.0	:	175 815.2	:	14.4
Belgium	61.7	42.9	1 393.8	1 358.0	22.6	31.7
Bulgaria	:	370.5	:	4 475.5	:	12.1
Czech Republic	:	22.9	:	3 483.5	:	152.4
Denmark	57.8	42.1	2 644.6	2 646.9	45.7	62.9
Germany	472.0	299.1	17 151.6	16 704.0	36.3	55.8
Estonia	:	19.6	:	940.9	:	48.0
Ireland	141.5	139.9	4 444.0	4 991.4	31.4	35.7
Greece	817.1	723.1	3 583.2	5 177.5	4.4	7.2
Spain	1 287.4	989.8	26 158.4	23 752.7	20.3	24.0
France	663.8	516.1	27 856.3	27 837.3	42.0	53.9
Croatia	:	233.3	:	1 316.0	:	5.6
Italy	2 153.7	1 620.9	13 062.3	12 856.1	6.1	7.9
Cyprus	:	38.9	:	118.4	:	3.0
Latvia	140.8	83.4	1 432.7	1 796.3	10.2	21.5
Lithuania	:	199.9	:	2 742.6	:	13.7
Luxembourg	2.8	2.2	127.5	131.1	45.4	59.6
Hungary	966.9	576.8	4 555.1	4 686.3	4.7	8.1
Malta	:	12.5	:	11.5	:	0.9
Netherlands	101.6	72.3	2 027.8	1 872.4	20.0	25.9
Austria	199.5	150.2	3 388.2	2 878.2	17.0	19.2
Poland	:	1 506.6	:	14 447.3	:	9.6
Portugal	416.0	305.3	3 863.1	3 668.2	9.3	12.0
Romania	:	3 859.0	:	13 306.1	:	3.4
Slovenia	86.5	74.7	485.9	482.7	5.6	6.5
Slovakia	71.0	24.5	2 159.9	1 895.5	30.4	77.5
Finland	81.2	63.9	2 218.4	2 291.0	27.3	35.9
Sweden	81.4	71.1	3 073.2	3 066.3	37.7	43.1
United Kingdom	233.3	186.8	15 798.5	16 881.7	67.7	90.4
Iceland	:	2.6	:	1 595.7	:	616.1
Norway	70.7	46.6	1 038.2	1 005.9	14.7	21.6
Switzerland	:	59.1	:	1 047.8	:	17.7
Montenegro	:	48.9	:	221.3	:	4.5

Source: Eurostat (online data codes: ef_ov_kvaa and ef_kvaareg)

8.3 Agricultural products

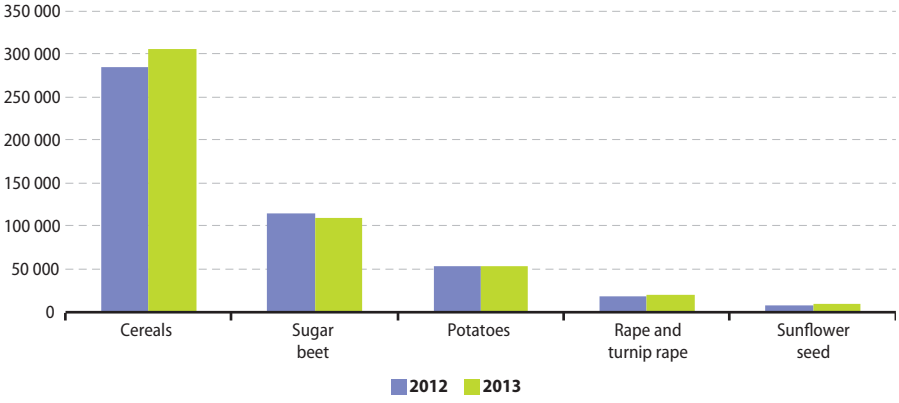
In 2013, the EU-28 produced 306 million tonnes of cereals (including rice). This was the highest level of production since a peak in production in 2008. The EU-28's production of cereals in 2013 was 20.9 million tonnes higher than in 2012 (+ 7.3 %). The EU-28 produced 109.1 million tonnes of sugar beet in 2013, which was 5.7 million tonnes less than in 2012. The production of the other main root crop in the EU-28 — potatoes — was 53.9 million tonnes.

Oilseeds production has followed an upward pattern in recent years mainly due to the increased use of oilseeds for bioenergy production. Rape and turnip rape, and sunflower seeds are the main types of oilseeds produced in the EU-28. In 2013, 21.0 million tonnes of rape and turnip rape were produced, a much larger volume than in 2012 (+ 9.2 %). By comparison, an estimated 9.2 million tonnes of sunflower seeds were produced across the EU-28 in 2013.

The total collection of cows' milk in the EU-28 in 2013 amounted to an estimated 141 million tonnes. Germany and France recorded the highest quantities of cows' milk collected in 2013 and they also accounted for the highest levels of production for butter and cheese; together they contributed between 38 % and 46 % of the EU-28's total production for each of these three dairy products.

The principal meat product in the EU-28 was pig meat (21.9 million tonnes in 2013), with the weight of production almost three times as high as that for beef / veal (7.3 million tonnes); the production of sheep meat in the EU-28 was relatively modest (0.7 million tonnes).

Figure 8.3: Production of main agricultural crops, EU-28, 2012 and 2013 ([1])
(1 000 tonnes)



([1]) Includes Eurostat estimates made for the purpose of this publication.
Source: Eurostat (online data code: apro_cpp_crop)

Table 8.3: Agricultural production related to animals, 2013
(1 000 tonnes)

	Collection of cows' milk	Butter	Cheese	Bovine meat	Pig meat	Sheep meat
EU-28 (1)	*141 243*	1 675	*9 280*	7 272	21 940	*713*
Belgium	3 474	13	79	250	1 131	2
Bulgaria	511	1	68	6	52	*2*
Czech Republic	2 358	24	118	65	234	0
Denmark	5 026	43	325	125	1 589	2
Germany	30 301	424	2 182	1 106	5 474	20
Estonia	706	3	44	8	35	0
Ireland	5 581	152	183	518	239	57
Greece	607	1	187	50	109	61
Spain	*5 949*	*34*	*315*	581	3 431	118
France	23 991	342	1 936	1 408	1 939	80
Croatia	504	4	33	47	80	1
Italy	10 397	97	1 158	855	1 625	35
Cyprus	157	0	20	5	49	3
Latvia	736	6	33	16	26	0
Lithuania	1 339	11	113	37	67	0
Luxembourg	287	:	:	8	11	0
Hungary	1 364	4	68	23	337	0
Malta	41	:	:	1	6	0
Netherlands	12 213	:	793	379	1 307	12
Austria	2 933	0	158	227	528	8
Poland	9 922	143	732	339	1 684	1
Portugal	1 777	26	70	84	346	10
Romania	882	10	70	29	308	3
Slovenia	517	:	16	32	19	0
Slovakia	827	7	33	10	52	1
Finland	2 287	44	102	80	194	1
Sweden	2 870	17	89	136	234	5
United Kingdom	13 687	:	349	848	833	290
Iceland	:	:	:	4	6	10
Switzerland (2)	3 400	41	183	145	248	5
Montenegro	25	:	1	:	:	:
Serbia	:	:	:	35	132	1
Turkey (2)	7 939	42	599	645	:	107

(1) Includes Eurostat estimates made for the purpose of this publication.
(2) Meat products: 2011.
Source: Eurostat (online data codes: apro_mk_pobta and apro_mt_pann)

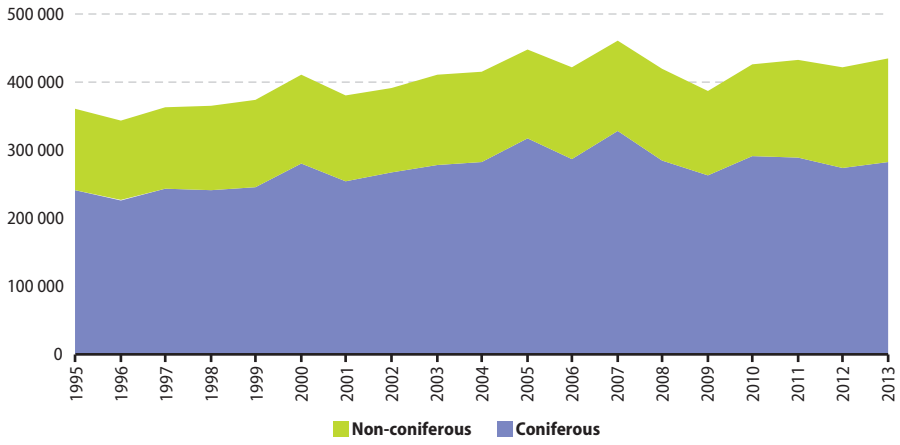
8.4 Forestry

The level of roundwood production in the EU-28 in 2013 reached 435 million m³, almost 28 million m³ (or 5.9 %) lower than its peak level in 2007. A comparison of production levels in 2013 with those before the crisis shows roundwood production from coniferous species remained 13.9 % lower in 2013 than it was in 2007. Among the EU Member States, Sweden produced the most roundwood (70.4 million m³) in 2013, followed by Finland, Germany and France (each producing between 52 million and 55 million m³).

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 (m³) 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.

Some 101 million m³ of sawnwood were produced in the EU-28 in 2013, close to two thirds of which came from the five largest producing EU Member States, namely, Germany (21.3 %), Sweden (16.2 %, 2012 data), Finland (10.1 %), Austria (8.8 %) and France (8.0 %). The level of sawnwood production in the EU-28 increased by 2.4 % in 2013, having decreased by 3.6 % in 2012.

Figure 8.4: Annual production of roundwood, EU-28, 1995–2013 (1)
(1 000 m³)



(1) Estimates. 2011: provisional.
Source: Eurostat (online data code: for_remov)

Table 8.4: Wood production, 2000–13
(1 000 m³)

	Roundwood production			Sawnwood production		
	2000	2010	2013	2000	2010	2013
EU-28	*411 764*	*427 611*	*434 998*	*100 706*	*100 815*	*100 682*
EA (1)	*236 540*	*234 993*	*235 252*	*61 337*	*59 673*	*57 996*
Belgium	4 510	4 827	:	*1 150*	1 383	:
Bulgaria	4 784	5 668	6 155	312	554	716
Czech Republic	14 441	16 736	15 331	4 106	4 744	4 037
Denmark	2 952	2 669	:	364	448	:
Germany	53 710	54 418	53 207	16 340	22 059	21 478
Estonia	8 910	7 200	7 488	1 436	1 771	1 540
Ireland	2 673	2 618	2 760	888	772	825
Greece	2 245	1 048	:	123	118	:
Spain	14 321	16 089	15 600	3 760	2 038	1 971
France	65 865	55 808	52 371	10 536	8 316	8 067
Croatia	3 669	*4 477*	:	642	*677*	:
Italy	9 329	7 844	:	1 630	1 200	1 360
Cyprus	21	9	9	9	4	2
Latvia	14 304	12 534	12 708	3 900	3 150	3 367
Lithuania	5 500	7 097	7 053	1 300	1 272	1 120
Luxembourg	*260*	275	:	*133*	94	:
Hungary	5 902	5 740	6 027	291	133	109
Malta	0	0	0	0	0	0
Netherlands	1 039	1 081	1 022	389	231	211
Austria	13 276	17 831	17 390	10 390	9 603	8 850
Poland	26 025	35 467	38 058	4 262	4 220	4 515
Portugal	10 831	9 648	11 231	1 427	1 045	1 085
Romania	13 148	13 112	17 700	3 396	4 323	5 532
Slovenia	2 253	2 945	3 415	439	760	660
Slovakia	6 163	9 599	8 063	1 265	2 576	1 430
Finland	54 542	50 952	55 087	13 420	9 473	10 140
Sweden	63 300	72 200	70 436	16 176	16 750	:
United Kingdom	7 791	9 718	10 780	2 622	3 101	3 571
Iceland	0	:	:	0	:	:
Liechtenstein	:	25	19	:	4	0
Norway	8 156	10 443	11 598	2 280	2 118	2 206
Switzerland	9 238	4 938	4 568	1 625	1 457	1 093
Montenegro	:	364	:	:	50	:
FYR of Macedonia	:	631	:	:	5	:
Turkey	15 939	20 554	:	5 528	6 243	:
Brazil	:	*271 501*	:	:	*25 080*	:
Canada	201 845	142 013	:	50 465	38 667	:
China	:	*291 251*	:	:	*37 231*	:
India	:	*332 499*	:	:	*6 889*	:
Indonesia	:	*113 849*	:	:	*4 169*	:
Russia	158 100	175 000	:	20 000	28 870	:
United States	466 549	*323 986*	:	91 076	*57 629*	:

(1) EA-11 for 2000. EA-16 for 2010. EA-17 for 2013.
Source: Eurostat (online data codes: for_remov and for_swpan)

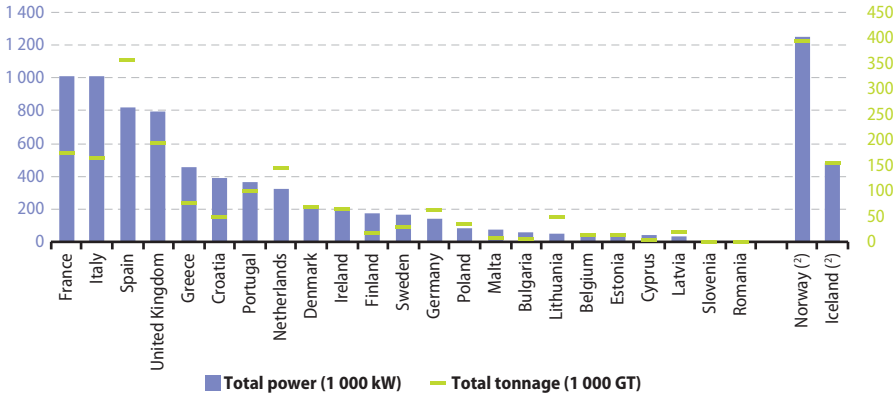
8.5 Fisheries

The EU-28's fishing fleet in 2014 had a combined capacity of 1.6 million gross tonnes and a total engine power of 6.5 million kilowatts (kW). By far, the largest fishing fleets among the EU Member States, in terms of power, were those from France, Italy, Spain and the United Kingdom. In 2014, 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 gross tonnage (an indicator of fish-holding capacity), however, the Spanish fishing fleet was by far the largest (358 thousand gross tonnes); this was close to twice as high as the next largest fleet, that of the United Kingdom (196 thousand gross tonnes).

Having peaked in 1995 at 7.6 million tonnes of live weight, the total EU-28 catch fell almost every year, although it was relatively stable between 2007 and 2011. The total catch in 2013 was 15.8 % less than 10 years earlier and 37.1 % lower than in 1995. Total catches by the fishing fleets of Denmark, Spain, the United Kingdom and France accounted for more than half (56.1 %) of all the catches made by the fishing fleets of the EU Member States in 2013. Some 75 % of the catches made by the EU-28 in 2013 were in the north-east Atlantic, with the Mediterranean and Black Sea the second largest fishing area, closely followed by the eastern central Atlantic area.

The level of aquaculture production in tonnage in the EU-28 remained relatively stable during the period from 2002 to 2012, with output within the range of 1.23 and 1.36 million tonnes. The five largest aquaculture producers among the EU Member States were Spain, the United Kingdom, France, Italy and Greece, which together accounted for just over three quarters (75.4 %) of the EU-28 total in 2012.

Figure 8.5: Fishing fleet, 2014 ([1])



([1]) The Czech Republic, Luxembourg, Hungary, Austria and Slovakia: landlocked countries without a marine fishing fleet.
([2]) 2013.
Source: Eurostat (online data code: fish_fleet)

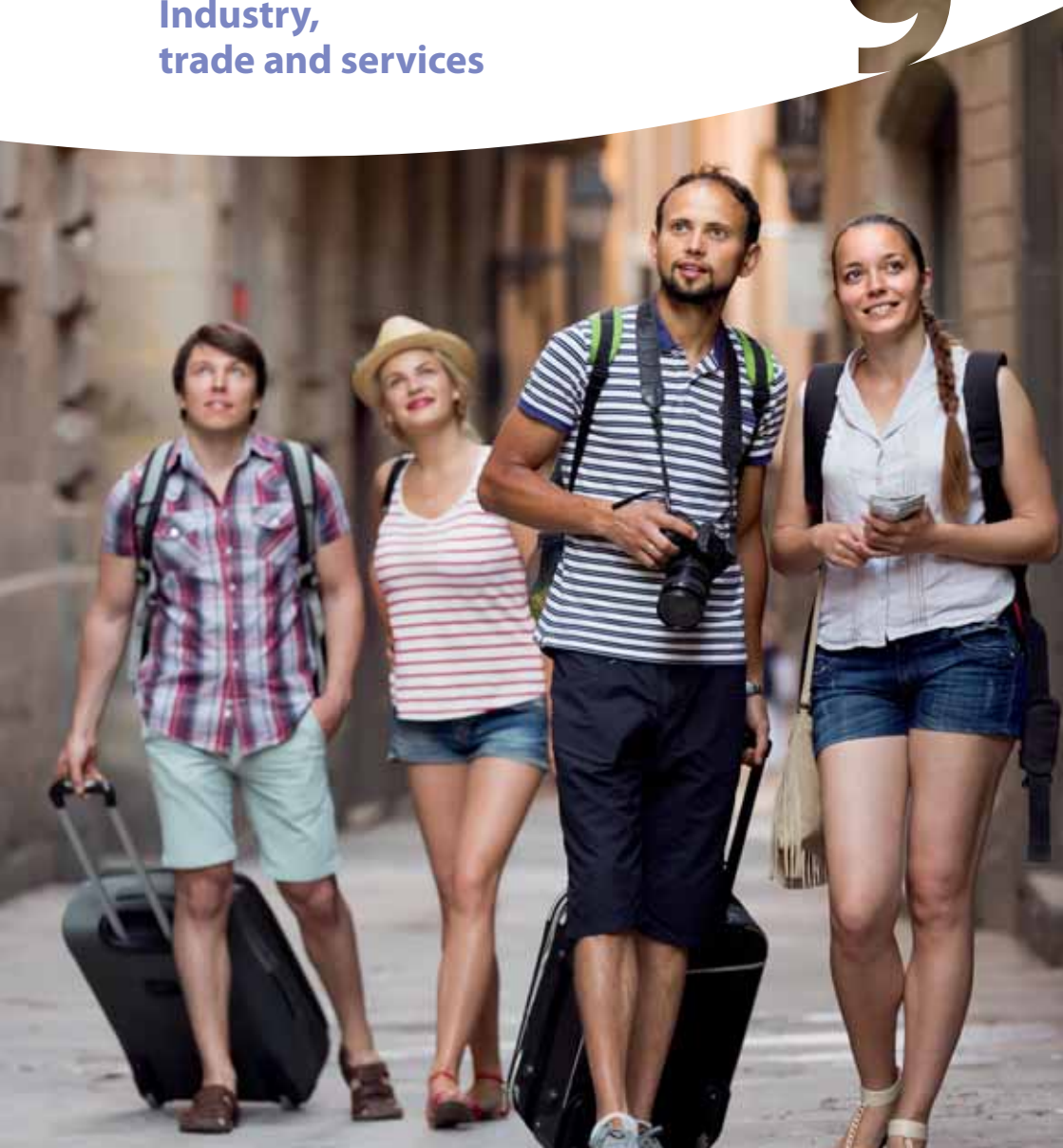
Table 8.5: Fishery indicators
(1 000 tonnes live weight)

	Total catches in selected fishing regions (1)			Aquaculture production (2)(3)		
	2003	2012	2013	2002	2011	2012
EU-28	5 707	4 419	4 806	1 285	1 249	1 225
Belgium	26	24	25	2	0	0
Bulgaria	10	8	10	2	7	7
Czech Republic (4)	–	–	–	19	21	21
Denmark	1 031	503	668	32	32	34
Germany	238	205	219	50	39	27
Estonia	75	63	67	0	0	0
Ireland	266	276	246	63	44	36
Greece	90	61	64	88	111	109
Spain	798	758	882	259	274	267
France	699	461	529	252	194	205
Croatia	20	64	75	9	17	14
Italy	291	196	173	184	164	137
Cyprus	2	1	1	2	5	4
Latvia	114	90	116	0	1	1
Lithuania	155	70	75	2	3	4
Luxembourg (4)	–	–	–	:	0	:
Hungary (4)	–	–	–	12	16	15
Malta	1	2	2	1	4	7
Netherlands	524	345	324	54	44	46
Austria (4)	–	–	–	2	3	3
Poland	152	180	195	33	26	33
Portugal	209	196	194	8	9	10
Romania	2	1	2	9	8	10
Slovenia	1	0	0	1	1	1
Slovakia (4)	–	–	–	1	1	1
Finland	86	138	144	15	11	13
Sweden	285	150	177	6	13	14
United Kingdom	631	626	618	179	199	206
Iceland	2 002	1 452	1 384	4	5	7
Liechtenstein (4)	–	–	–	–	–	–
Norway	2 549	2 047	1 944	551	1 145	1 321
Switzerland (4)	–	–	–	1	:	:
Montenegro	0	:	:	:	:	:
FYR of Macedonia (4)	–	–	–	1	:	:
Albania	2	:	:	1	:	:
Serbia (4)	–	–	–	:	:	:
Turkey	463	396	339	61	189	212
Bosnia and Herzegovina	0	:	:	5	:	:

(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) Excluding production from hatcheries and nurseries, fish eggs for human consumption, ornamental and aquarium species.
(3) Differences between the EU-28 totals and the sums for the EU Member States are due to rounding.
(4) Landlocked countries without a marine fishing fleet.
Source: Eurostat (online data codes: fish_ca_main, fish_aq_q and fish_aq_2a)

9

Industry, trade and services



Introduction

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

In April 2011, leading up to the 20th anniversary of the beginning of the single market, the European Commission released a Communication titled 'Single Market Act — twelve levers to boost growth and strengthen 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 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). This Communication stresses the importance of full and effective implementation of industrial policy in the EU and aims to facilitate this. Examples of the initiatives put forward include investing in innovation, resource efficiency, new technologies and skills, simplifying legislation, updating the Small business act (SBA), and reinforcing the Entrepreneurship action plan. Please refer to the website of the European Commission's Directorate-General for the Internal Market, Industry, Entrepreneurship and SMEs for further information on the work being done in relation to specific actions for industrial renaissance.

9.1 Structural business statistics

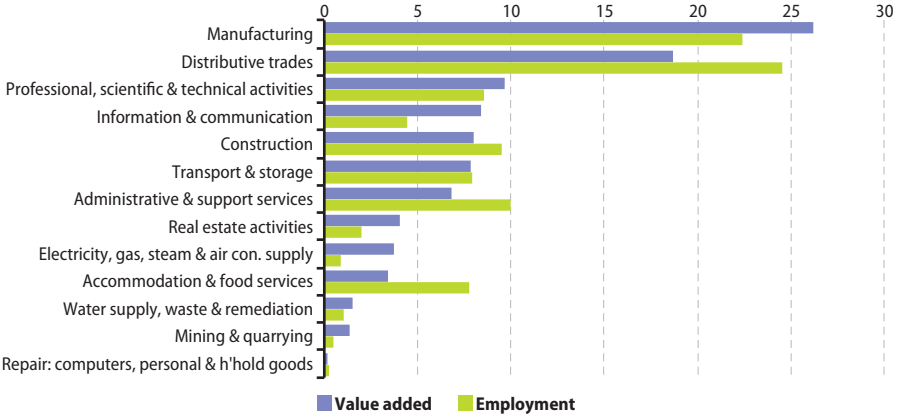
Structural business statistics can provide answers to questions on the wealth creation (value added), investment and labour input of different economic activities. The data can be used to analyse structural shifts, for example between industry and services, country specialisations in particular activities,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

In 2012, a total of EUR 6 180 billion of gross value added at factor cost was generated in the EU-28's non-financial business economy; the non-financial business economy (excluding the repair of computer, personal and household goods) accounted for 69.9 % of the whole economy's value added at basic prices in 2012. The non-financial business economy workforce reached 133.5 million persons employed, around three fifths (62.6 %) of those employed in the EU-28.

Among the NACE Rev. 2 sections in the non-financial business economy, manufacturing was the largest in terms of value added: 2.1 million manufacturing enterprises generated EUR 1 620 billion of value added in 2012, while providing employment for about 30 million persons. Distributive trades enterprises had the largest share of employment: these enterprises provided employment to 32.7 million persons and generated EUR 1 155 billion of value added. Professional, scientific and technical activities had the third highest value added but only the fifth largest workforce, behind administrative and support services as well as construction. The industrial activities of mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply; water supply, waste and remediation contributed more in terms of value added than employment to the overall non-financial business economy, indicating an above average apparent labour productivity. This was also the case in some of the service activities, namely information and communication services, real estate activities, as well as professional, scientific and technical activities. By contrast, the construction sector and a number of services, notably accommodation and food services, administrative and support services and distributive trades reported relatively low levels of apparent labour productivity. It should be noted that the employment data presented are in terms of head counts and not, for example, full-time equivalents, and there may be a significant proportion of persons working part-time in some of the activities covered; this may explain, at least to some degree, the relatively low levels of apparent labour productivity for some activities.

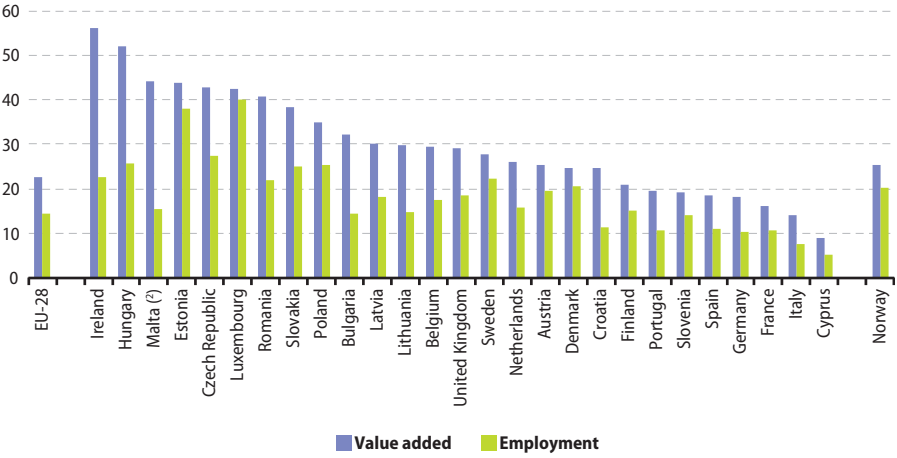
In general, foreign-controlled enterprises are few in number, but have a significant economic impact due to their larger than average size. Foreign-controlled enterprises generated substantial shares of value added in the non-financial business economy in many EU Member States. The highest percentage contributions of foreign-controlled enterprises to non-financial business economy value added in 2011 were registered in Ireland and Hungary (in excess of 50 %), while shares in excess of 40 % were also recorded for Malta (2008 data), Estonia, the Czech Republic, Luxembourg and Romania. Employment shares of foreign-controlled enterprises were generally lower than their value added shares, but nevertheless exceeded one quarter in Slovakia, Poland, Hungary and the Czech Republic, reaching approximately two fifths in Estonia and Luxembourg.

Figure 9.1: Analysis of non-financial business economy value added and employment, EU-28, 2012 (1)
(% 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)

Figure 9.2: Share of value added and employment accounted for by foreign-controlled enterprises, non-financial business economy, 2011 (1)
(%)



(1) Greece: not available.
(2) 2008.
Source: Eurostat (online data code: fats_g1a_08)

9.2 Industrial production

The Prodcom survey covers the mining, quarrying and manufacturing sectors, in other words, NACE Rev. 2 Sections B and C. Prodcom statistics are based on a list of products (not to activities) and are therefore not strictly comparable with activity-based statistics such as structural business statistics.

Prodcom information is currently requested for each heading in terms of the value of production sold during the survey period. Transport equipment products (within Divisions 29 and 30) dominated the list of the most sold manufacturing products in the EU-28 in value terms in 2013. It can be noted that several manufactured food and beverage products (within Divisions 10 and 11) and a couple of fabricated metal products (Division 25) also registered high values of production sold.

Information on the physical quantity (also referred to as volume) of production sold during the survey period is also requested. In certain circumstances this information can be supplemented by the physical quantity of actual (total) production during the survey period, including therefore any production which is used (as an intermediate product) by the enterprise in the manufacture of other products in the list.

Table 9.1: Production sold in value terms, selected products, EU-28, 2013

Prodcom code	Product	Value (EUR million)	Rounding base (million) (1)
29.10.22.30	Motor vehicles with a petrol engine > 1 500 cm³	150 000	30 000
29.10.23.30	Motor vehicles with a diesel or semi-diesel engine > 1 500 cm³ but <= 2 500 cm³	99 271	:
21.20.13.80	Other medicaments of mixed or unmixed products, packaged for retail sale, not elsewhere classified (n.e.c.)	68 491	:
10.00.00.Z1	Prepared and preserved meat, meat offal or blood, including prepared meat and offal dishes	53 263	:
10.90.10.Z0	Preparations for animal feeds other than dog and cat food	52 324	:
29.32.30.90	Other parts and accessories, n.e.c., for vehicles of Harmonised System codes 87.01 to 87.05	42 000	7 000
29.10.21.00	New vehicles with spark-ignition engine of a cylinder capacity <= 1 500 cm³	39 493	:
29.32.20.90	Parts and accessories of bodies (including cabs), n.e.c.	36 640	:
30.30.50.90	Parts for all types of aircraft excluding propellers, rotors, under carriages, for civil use	33 211	:
10.71.11.00	Fresh bread	*29 573*	:
11.05.10.00	Beer from malt other than non-alcoholic and low-alcohol beer, excluding alcohol duty	28 942	:
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, not elsewhere specified (excluding 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)	28 000	7 000
10.51.40.50	Grated, powdered, blue-veined and other non-processed cheese	27 300	700
27.90.60.37	Fixed electrical resistors for a power handling capacity > 20 W (excluding heating resistors and fixed carbon resistors, composition or film types)	*27 011*	:
25.62.20.00	Metal parts (excluding turned metal parts)	25 242	2
11.07.19.30	Waters, with added sugar, other sweetening matter or flavoured, in other words soft drinks (including mineral and aerated)	22 800	600

(1) Indicates the magnitude of the rounding employed to protect confidential cell (in the case of Prodcom code 11.07.19.30, the confidential value lies within the range + / - EUR 600 million of the reported value).

Source: Eurostat, from http://ec.europa.eu/eurostat/data/database go to Database by themes/Industry, trade and services/ Statistics on the production of manufactured goods (prom)/ Detailed data by Prodcom list (NACE Rev. 2) (prom2)/Sold production, exports and imports by Prodcom list (NACE Rev. 2) - annual data (DS_066341)

Table 9.2: Quantity of production sold, selected products, EU-28, 2013

Prodcom code	Product	Quantity (thousand)	Rounding base (1 000) (1)	Unit
08.11.11.33	Marble and travertine, crude or roughly trimmed	*5 553 511*	:	kg
08.11.30.10	Chalk	*11 257 728*	:	kg
10.51.52.45	Flavoured liquid yoghurt or acidified milk (curdled milk; cream; yoghurt and other fermented products flavoured or containing added fruit; nuts or cocoa)	*5 650 553*	:	kg
10.73.11.30	Uncooked pasta, containing eggs (excluding stuffed or otherwise prepared)	1 391 195	:	kg
11.07.11.30	Mineral waters and aerated waters, unsweetened	57 000 000	3 000 000	l
16.10.23.03	Coniferous wood in chips or particles	40 520 000	40 000	kg
17.12.11.00	Newsprint in rolls or sheets	8 268 852	:	kg
20.11.11.70	Oxygen	*34 120 914*	:	m^3
20.15.80.00	Animal or vegetable fertilizers	5 730 749	:	kg
20.41.32.50	Washing preparations and cleaning preparations, with or without soap, packaged for retail sale including auxiliary washing preparations excluding those for use as soap, surface-active preparations	8 003 409	:	kg
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)	16 699 034	:	pieces
23.61.11.30	Building blocks and bricks of cement, concrete or artificial stone	59 200 000	800 000	kg
23.61.11.50	Tiles, flagstones and similar articles of cement, concrete or artificial stone (excluding building blocks and bricks)	*66 137 074*	:	kg
25.92.11.33	Cans used for preserving food and drink of iron or steel, < 50 litres, food cans	49 101 024	:	pieces
27.20.11.00	Primary cells and primary batteries	*5 085 344*	:	pieces

(1) Indicates the magnitude of the rounding employed to protect confidential cell (in the case of Prodcom code 16.10.23.03, the confidential value lies within the range +/- 40 million kg of the reported value).

Source: Eurostat, from http://ec.europa.eu/eurostat/data/database go to Database by themes/Industry, trade and services/ Statistics on the production of manufactured goods (prom)/ Detailed data by Prodcom list (NACE Rev. 2) (prom2)/Sold production, exports and imports by Prodcom list (NACE Rev. 2) - annual data (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.

Industrial output in the EU-28 recovered during a period of slightly more than two years from its relative low in April 2009, recording positive month-on-month rates of change for 19 out of 25 months through to a peak in May 2011: this peak was 13.8 % above the April 2009 low but nevertheless 8.4 % below the pre-crisis peak of April 2008. Thereafter, there was a gradual decline in EU-28 industrial output observed through until November 2012 during which time output contracted by 4.7 %; subsequently industrial output grew at a relatively slow pace to April 2014, after which there was a mixed pattern of development through to August 2014.

By contrast, the return to positive rates of change for EU-28 industrial output prices in August 2009 heralded a more sustained and longer period of price growth. The industrial output price index passed its pre-crisis peak in February 2011 and continued an almost unbroken climb until April 2012 when it

stood some 13.5% above the low recorded during the crisis and 4.9% above the pre-crisis peak (nearly four years earlier). From April 2012 onwards, the development of industrial output prices in the EU-28 followed an irregular pattern with almost no overall change in prices through to the autumn of 2013. Thereafter, industrial output prices fell at a relatively modest pace during a period of almost one year to August 2014.

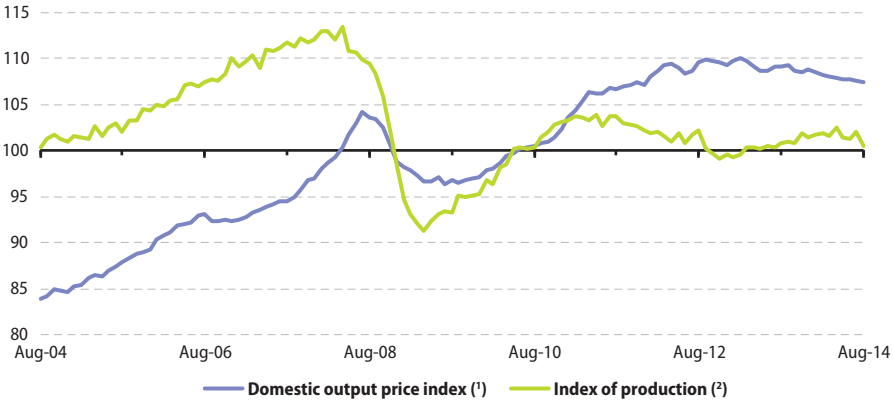
The downturn in activity for construction within the EU-28 lasted longer than for industry. Despite a period of relatively unchanged levels of activity during most of 2010 and 2011, the EU-28 index of production for construction fell during most of 2012 and up until March 2013. During the remainder of 2013 and the first eight months of 2014 there followed a period where construction activity in the EU-28 fluctuated but followed a generally upward path.

Table 9.3: Annual growth rates for construction, 2009–13
(%)

	Index of production (1)					Construction costs index (2)				
	2009	2010	2011	2012	2013	2009	2010	2011	2012	2013
EU-28	−7.7	−4.2	−1.2	−5.2	−2.3	0.8	1.5	3.0	1.8	0.8
EA-18	−7.0	−6.7	−3.0	−4.8	−2.8	0.4	2.0	3.3	1.7	0.6
Belgium	*−3.3*	*−1.5*	*5.7*	*−0.7*	*−3.9*	−1.1	0.0	3.9	1.9	0.3
Bulgaria	−14.8	−14.6	−12.9	−0.5	*−5.2*	8.2	−0.8	0.8	*−0.3*	*1.2*
Czech Republic	−0.5	−7.6	−3.6	−7.4	−6.8	−0.3	1.2	1.7	0.5	−0.4
Denmark	−12.2	−10.4	10.4	−3.1	−6.1	−0.4	1.2	3.6	2.6	1.4
Germany	0.0	−0.5	7.8	−1.1	−0.2	0.3	2.1	3.7	2.2	0.9
Estonia	−29.8	−8.5	27.3	16.5	0.8	−8.4	−2.6	3.4	4.3	5.0
Ireland	−36.9	−29.7	−16.6	−2.5	11.4	−9.9	0.5	−2.2	1.1	0.8
Greece	−17.5	−29.2	−41.3	−33.5	−8.1	−0.3	1.8	1.1	−0.1	−1.4
Spain	−11.2	−20.4	−19.6	−5.4	1.4	1.0	*2.5*	*3.8*	*−0.3*	*0.3*
France	−5.7	−2.4	−1.8	−1.7	−1.5	*0.4*	*2.7*	4.0	2.2	0.8
Croatia	−6.5	−15.7	−8.6	−10.9	−4.3	−8.2	−5.3	1.4	−2.5	−5.7
Italy	−11.5	−3.5	−4.1	−13.7	−10.9	0.9	1.5	3.0	2.3	0.6
Cyprus	−10.6	−8.0	−9.0	−20.2	−29.8	0.8	3.2	3.4	0.9	−4.1
Latvia	−34.9	−23.4	12.5	14.1	7.6	−7.8	−7.4	2.6	3.0	4.1
Lithuania	−48.3	−7.5	22.7	−7.4	12.1	−14.5	−4.8	3.8	3.0	4.5
Luxembourg	0.2	0.2	1.1	−3.1	−4.5	1.4	*0.8*	*2.6*	*2.9*	*2.0*
Hungary	−4.3	−10.4	−8.0	−6.7	8.5	3.0	*−0.4*	*0.9*	*4.5*	*4.7*
Malta	3.4	1.7	−1.2	−2.6	*−3.4*	1.6	−2.5	1.5	2.2	1.3
Netherlands	−4.5	−9.9	*0.9*	*−8.2*	*−4.4*	0.3	0.4	1.9	1.8	0.2
Austria	−1.7	−4.0	2.0	3.4	0.5	*0.6*	*3.2*	*2.3*	*2.2*	*1.7*
Poland	4.0	4.4	15.3	−5.1	−10.1	0.2	−0.1	1.1	0.3	−1.6
Portugal	−9.9	−10.9	−12.7	−16.2	−15.9	−0.6	1.8	1.6	2.0	1.9
Romania	−15.1	−13.3	2.9	1.2	−0.5	1.6	1.9	9.0	6.4	−4.3
Slovenia	−20.9	−16.9	−24.9	−16.9	−2.4	−3.1	5.7	4.6	−1.2	−1.1
Slovakia	−10.9	−4.8	−2.1	−12.1	−5.4	2.1	−0.1	0.7	0.1	0.4
Finland	*−13.1*	*6.9*	*9.1*	*−1.5*	*−2.9*	−1.1	1.1	3.3	2.4	1.0
Sweden	−12.2	7.8	2.4	−4.0	0.0	2.0	2.5	3.0	2.5	1.7
United Kingdom	−11.6	7.3	2.2	*−7.6*	*1.5*	2.7	−0.4	1.4	*2.4*	*2.4*
Norway	−8.2	0.0	3.3	7.1	6.6	2.3	3.2	3.6	3.1	2.9
Switzerland	1.4	1.9	1.8	−1.2	1.6	*0.0*	*0.2*	*2.0*	*0.2*	*0.2*
Montenegro	−19.2	−0.7	18.6	7.6	41.6	−14.9	−4.2	6.5	−14.7	3.0
FYR of Macedonia	*11.8*	*15.3*	28.1	8.3	43.2	6.0	−2.2	5.1	1.6	1.9
Turkey	−16.2	18.6	11.4	0.6	7.5	−4.1	5.7	12.4	5.5	5.1

(1) Calendar adjusted.
(2) Unadjusted series for new residential buildings.
Source: Eurostat (online data codes: sts_coprgr_a and sts_copigr_a)

Figure 9.3: Production and domestic output price indices for industry (excluding construction), EU-28, 2004–14
(2010 = 100)



(1) Unadjusted series. August 2014: estimate.
(2) Seasonally adjusted. August 2014: estimate.
Source: Eurostat (online data codes: sts_inppd_m and sts_inpr_m)

9.4 Services — short-term indicators

Traditionally, short-term business statistics were concentrated on industrial and construction activities, and to a lesser extent retail trade. Since the middle of the 1990s, major developments in official statistics within the EU have seen short-term data collection efforts focus increasingly on services.

Services turnover fell by 10.1 % in the EU-28 in 2009 compared with the year before, but rebounded in 2010 and 2011 increasing by 5.4 % and 5.6 % respectively. Growth continued in 2012 and 2013, but at a more modest pace (rising by 0.3 % and 1.0 %).

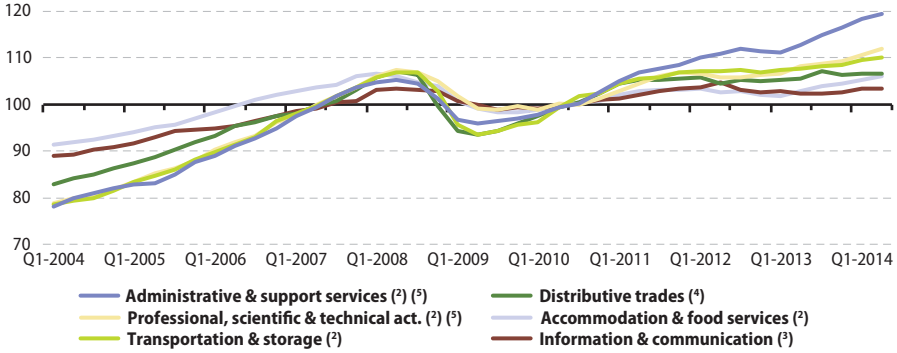
Having peaked in various quarters of 2008, EU-28 turnover for all six services reached a low point in the second or third quarter of 2009, or the first quarter of 2010. From these lows, the strongest growth in turnover across the different services through to the second quarter of 2014 was recorded for administrative and support services (24.4 %), followed by transportation and storage services (17.8 %). Distributive trades as well as professional, scientific and technical activities also recorded double-digit growth between their mid-crisis lows and their latest levels (second quarter of 2014), with turnover rising by 13.9 % and 13.3 % respectively. The rates of change for the other services were more modest: compared with the most recent low points at the height of the crisis, EU-28 turnover in the second quarter of 2014 was 8.1 % higher for accommodation and food services and 4.4 % higher for information and communication services.

Table 9.4: Annual growth rates for the index of turnover, selected services, 2012–13 ([1])
(%)

	Distributive trades		Transportation and storage		Accommodation and food services		Information and communication activities		Professional, scientific and technical activities ([2])		Administrative and support services ([2])	
	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013
EU-28	0.4	2.0	1.2	0.8	−0.4	0.6	1.1	−1.0	1.0	1.9	3.8	2.4
EA-18	−0.2	−0.4	0.9	0.0	−1.8	0.1	0.8	−2.3	−0.1	−0.2	1.2	0.3
Belgium	*2.0*	*0.8*	*−1.8*	*−7.9*	*1.3*	*3.3*	*6.3*	*0.6*	*3.2*	*5.6*	*1.8*	*8.8*
Bulgaria	5.1	6.3	2.4	*−4.0*	4.1	−5.2	2.6	−4.4	8.2	−8.2	6.7	2.6
Czech Republic	*0.8*	*−0.2*	*2.5*	*3.0*	*−0.7*	*1.1*	*−0.1*	*−3.6*	*−3.8*	*−6.4*	*2.4*	*2.4*
Denmark	*−0.2*	*−1.1*	:	:	:	:	:	:	:	:	:	:
Germany	*1.1*	*0.0*	1.4	0.3	*1.5*	*1.2*	2.2	−0.4	3.3	2.2	3.8	0.5
Estonia	*9.7*	*15.2*	*10.2*	*−5.9*	14.9	8.1	*8.7*	*3.1*	*21.9*	*−9.0*	*16.0*	*−6.7*
Ireland	*1.1*	*−4.0*	*12.6*	*12.1*	−4.0	−3.1	*13.5*	*−6.0*	*1.5*	*−21.9*	*34.5*	*27.4*
Greece	*−13.1*	*−10.1*	*−6.1*	*−3.3*	−17.3	5.0	*−8.4*	*−9.2*	*−8.2*	*−8.9*	*−13.2*	*−3.5*
Spain	*−6.2*	*−1.8*	*−3.6*	*−0.4*	*−6.6*	*0.1*	*−5.0*	*−5.1*	*−9.1*	*−3.7*	*−5.5*	*−3.1*
France	*1.5*	*0.0*	*1.7*	*0.5*	−0.5	−0.8	*2.4*	*−1.7*	*1.7*	*0.0*	*1.9*	*0.0*
Croatia	*−3.4*	*1.5*	*2.6*	*0.2*	4.5	20.1	*−2.2*	*−4.4*	*−4.8*	*0.0*	*1.0*	*2.5*
Italy	*−4.2*	*−2.5*	*−0.2*	*0.1*	1.1	−2.3	−3.8	−5.7	−3.2	−2.2	−2.6	−4.2
Cyprus	*−6.8*	*−10.0*	−5.8	−2.1	3.0	−1.8	−0.5	−8.2	*−1.6*	*−9.5*	2.2	−12.1
Latvia	11.9	4.8	11.4	−1.9	12.8	7.1	11.4	7.6	8.5	6.2	8.9	14.3
Lithuania	*13.3*	*6.9*	*20.3*	*8.2*	*7.9*	*7.8*	*3.1*	*2.1*	*−4.2*	*10.3*	*10.0*	*13.2*
Luxembourg	*−1.2*	*4.5*	*−0.4*	*2.3*	2.1	5.3	*9.6*	*5.1*	*6.9*	*8.6*	*−0.7*	*9.5*
Hungary	*0.6*	*4.8*	*5.0*	*10.7*	1.8	15.0	*14.7*	*17.0*	*−11.0*	*10.7*	*−2.0*	*18.6*
Malta	*2.5*	*0.4*	*1.3*	*6.2*	*3.8*	*0.7*	*−4.3*	*1.7*	*5.7*	*6.4*	*12.7*	*−2.7*
Netherlands	*−1.4*	*−3.1*	*3.0*	*0.6*	*1.5*	*0.6*	*−3.0*	*−2.4*	*−0.5*	*−0.5*	*2.0*	*1.1*
Austria	*0.3*	*−2.3*	*2.5*	*1.1*	3.3	3.9	*0.8*	*0.2*	*2.0*	*1.2*	*2.8*	*2.8*
Poland	*5.1*	*3.8*	*10.3*	*5.0*	1.6	5.9	*3.0*	*2.6*	*3.1*	*6.0*	*8.3*	*9.0*
Portugal	*−8.9*	*−3.5*	0.3	1.0	−12.4	−3.3	−6.9	−5.5	−10.2	−7.7	−9.3	−5.0
Romania	*6.9*	*2.7*	*3.8*	*9.9*	0.4	2.8	*1.4*	*4.6*	*5.6*	*4.2*	*15.8*	*14.7*
Slovenia	*1.0*	*−0.7*	*−0.2*	*0.7*	−1.1	−1.2	*−2.7*	*−0.1*	*−6.3*	*−2.5*	*−4.9*	*3.1*
Slovakia	*3.2*	*2.7*	*7.3*	*10.8*	2.6	3.2	*5.9*	*4.3*	*20.2*	*19.0*	*22.4*	*15.2*
Finland	*2.3*	*−3.4*	*3.3*	*−1.5*	4.1	0.6	*1.7*	*2.7*	*5.3*	*1.0*	*4.5*	*−0.1*
Sweden	*−1.8*	*−0.6*	*−0.5*	*−1.5*	3.4	5.3	*4.5*	*−1.2*	*4.6*	*−0.1*	*2.9*	*0.5*
United Kingdom	*2.1*	*9.0*	*−0.6*	*3.5*	2.6	0.9	*0.6*	*2.7*	*4.2*	*7.9*	*10.4*	*7.9*
Turkey	10.9	9.1	8.3	11.1	7.8	15.5	3.7	8.8	0.9	9.5	4.1	11.1

([1]) Working day adjusted.
([2]) As required by the STS Regulation.
Source: Eurostat (online data codes: sts_trtu_a and sts_setu_a)

Figure 9.4: Index of turnover, selected service activities, EU-28, 2004–14 (1)
(2010 = 100)



(1) Seasonally adjusted.
(2) 2004–09: estimates. Q2-2013–Q4-2014: estimates.
(3) 2004: estimates.
(4) Q2-2013–Q4-2014: estimates.
(5) As required by the STS Regulation.
Source: Eurostat (online data codes: sts_trtu_q and sts_setu_q)

9.5 Tourism

Residents (aged 15 and above) from within the EU-28 made 1.1 billion tourism trips in 2013, for personal or business purposes. Short trips (of one to three nights) accounted for more than half (57.5 %) of the total number of trips made, while three quarters (75.3 %) of all trips made were to domestic destinations, with the remainder abroad.

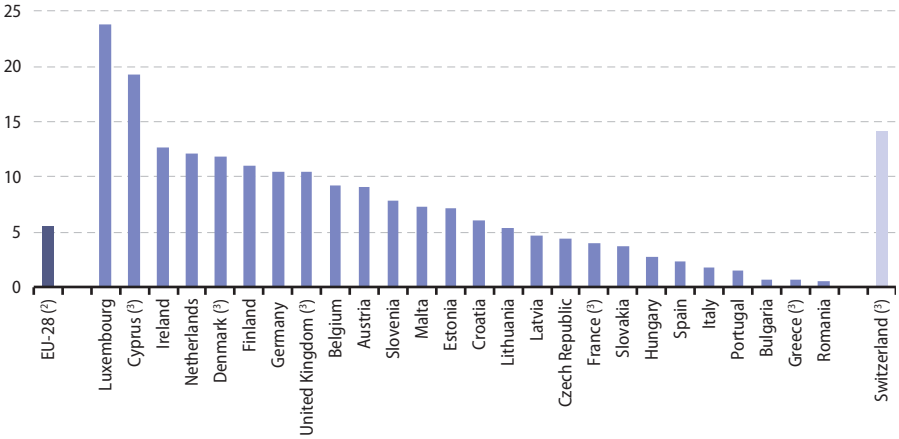
In some EU Member States, over half of the total number of tourism trips made in 2013 were to destinations abroad; this was the case for Luxembourg, Belgium, Malta and Slovenia (as well as Switzerland). However, less than 10 % of the trips taken by residents of Romania, Spain, Greece (data are for 2012) and Portugal were abroad. These figures appear to be influenced by both the size of the EU Member States and their geographical location (smaller and more northerly countries tended to report a higher propensity for their residents to travel abroad).

When taking into account a country's size in terms of its population, Luxembourg was the EU Member State whose residents spent the most nights abroad per inhabitant (an average of 23.8 nights in 2013), followed by Cyprus (19.3, data are for 2012), Ireland (12.6) and the Netherlands (12.1). At the other end of the spectrum, residents of Romania, Greece (data are for 2012) and Bulgaria spent, on average, less than one night abroad in 2013.

In 2013, Spain was the most common tourism destination in the EU for non-residents (people coming from abroad), with 252 million nights spent in tourist accommodation establishments, or 21.2 % of the EU-28 total. Across the EU, the top three most popular destinations for non-residents were Spain, Italy (185 million nights) and France (131 million nights), which together accounted for nearly half (47.7 %) of the

total nights spent by non-residents in the EU-28. The least common destinations were Luxembourg, Latvia and Lithuania; the effect of the size of these EU Member States should be considered when interpreting these values.

Figure 9.5: Country of origin for outbound tourism trips, 2013 (1)
(average nights spent abroad per inhabitant aged 15 years or more)



(1) Poland and Sweden: not available.
(2) Estimate made for the purpose of this publication, using the latest available data for the EU Member States.
(3) 2012.
Source: Eurostat (online data codes: tour_dem_tntot and demo_pjanbroad)

Table 9.5: Top 10 tourism destinations — nights spent at tourist accommodation establishments, 2013
(million nights spent in the country by non-residents)

	Nights in country	Share (%)
EU-28	*1 192.2*	*100.0*
Top 10	*1 018.3*	*85.4*
1 Spain	252.4	*21.2*
2 Italy	184.8	*15.5*
3 France	131.3	*11.0*
4 United Kingdom (1)	105.5	*8.8*
5 Austria	78.4	*6.6*
6 Greece	71.5	*6.0*
7 Germany	71.2	*6.0*
8 Croatia	59.4	*5.0*
9 Portugal	32.1	*2.7*
10 Netherlands	31.8	*2.7*

(1) 2012.
Source: Eurostat (online data code: tour_occ_ninat)

10

Innovation and information society

Introduction

While most research within the EU is funded on a national level by private and public sources, since their launch in 1984, the EU's framework programmes for research have played a leading role in multidisciplinary research activities.

Horizon 2020 is the framework programme for research and innovation for the period running from 2014 through to 2020, building upon the seventh framework programme for research and technological development (FP7), the competitiveness and innovation framework programme (CIP) and the European institute of innovation and technology (EIT). By coupling research and innovation, Horizon 2020 emphasises excellent science, industrial leadership and tackling societal challenges. The goal is to ensure Europe produces world-class science, removes barriers to innovation and makes it easier for the public and private sectors to work together to deliver innovation. This framework programme will be complemented by further measures to complete and further develop the ERA. These measures will aim to break down barriers to create a genuine single market for knowledge, research and innovation. 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. These were accompanied by further legislation concerning, for example:

- the rules for participation;
- the specific programme (setting out objectives and implementation rules, the duration of the programme and the means deemed necessary) for Horizon 2020;
- and amendments concerning the European Institute of Innovation and Technology.

The policy context for information and communication technologies (ICT) is a European Commission Communication concerning 'A digital agenda for Europe' (COM(2010) 245 final/2), which presented a strategy to promote a thriving digital economy in the EU by 2020. The digital agenda for Europe is one of seven flagships initiatives under the Europe 2020 strategy for smart, sustainable and inclusive growth. The agenda outlines seven priority areas for action including the creation of a digital single market.

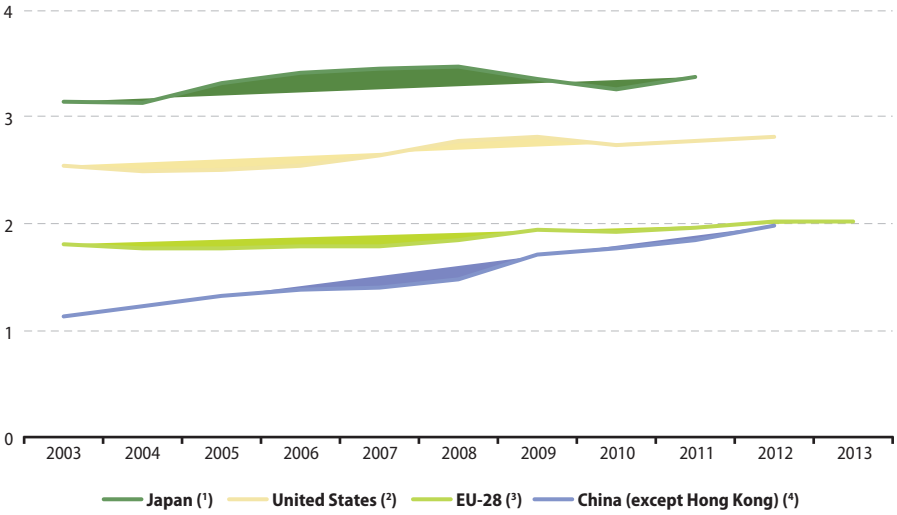
10.1 R & D expenditure

One of the key objectives of the EU during the last decade has been to encourage increasing levels of investment, in order to provide a stimulus to the EU's competitiveness. The Lisbon strategy set the EU an objective of devoting 3 % of its 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.

Gross domestic expenditure on R & D (GERD) stood at EUR 272 billion in the

EU-28 in 2013, which was a 0.7 % increase on the year before, and 43.8 % higher than 10 years earlier (in 2003) — note that these rates of change are in current prices and so reflect price changes as well as real changes in the level of expenditure. In order to make figures more comparable, GERD is often expressed relative to GDP or in relation to population. The ratio of GERD to GDP, one of five key Europe 2020 strategy indicators, is also known as R & D intensity. This ratio declined modestly in the EU-28 during the period from 2003 to 2005, falling from 1.80 % to 1.76 %. From 2006 it started to climb, reaching 2.01 % in 2012, despite a small decline in 2010; it remained unchanged in 2013 at 2.01 %. Despite the recent increase, the EU-28's R & D expenditure relative to GDP remained well below the corresponding ratios recorded in Japan (3.38 %, 2011 data) and the United States (2.81 %, 2012 data), as it has for a lengthy period of time; by 2012 the R&D intensity in China had almost matched the level in the EU-28. Among the EU Member States, the highest R & D intensities in 2013 were recorded in Finland (3.31 %), Sweden (3.30 %) and Denmark (3.06 %).

Figure 10.1: Gross domestic expenditure on R & D in the Triad and China, 2003–13
(% of GDP)



(1) 2008: break in series.
(2) Excludes most or all capital expenditure. 2012: provisional.
(3) 2003 and 2013: estimates.
(4) 2009: break in series.
Source: Eurostat (online data code: tsc00001)

Table 10.1: Gross domestic expenditure on R & D by source of funds, 2012–13

	Gross domestic expenditure on R & D (% of GDP)		By source of funds (% of total gross expenditure on R & D)		
			Business enterprises	Government	Abroad
	2012	2013	2013		
EU-28 (1)	2.01	*2.01*	*55.0*	*32.8*	*9.7*
EA-19 (1)	2.09	*2.09*	*56.9*	*33.4*	*7.8*
Belgium (2)	*2.24*	*2.28*	60.2	23.4	13.0
Bulgaria	0.62	0.65	19.5	31.6	48.3
Czech Republic	1.79	1.91	37.6	34.7	27.2
Denmark	3.02	*3.06*	*59.8*	*29.3*	*7.2*
Germany (1)	2.88	*2.85*	66.1	29.2	4.3
Estonia	2.16	1.74	42.1	47.2	10.3
Ireland (1)	*1.58*	:	*50.3*	*27.3*	*21.4*
Greece	0.69	0.80	30.3	52.3	14.0
Spain	1.27	1.24	46.3	41.6	7.4
France (1)	2.23	*2.23*	55.4	35.0	7.6
Croatia	0.75	0.81	42.8	39.7	15.5
Italy (1)	1.27	*1.26*	44.3	42.5	9.5
Cyprus (1)	0.43	*0.48*	10.9	66.4	17.5
Latvia	0.66	0.60	21.8	23.9	51.6
Lithuania	0.90	0.95	27.5	34.5	37.1
Luxembourg (2)	1.16	*1.16*	47.8	30.5	20.4
Hungary	1.27	1.41	46.8	35.9	16.6
Malta	0.86	*0.85*	*44.3*	*33.9*	*20.3*
Netherlands	1.97	*1.98*	*47.1*	*34.3*	*14.3*
Austria (3)	*2.81*	*2.81*	*44.1*	*39.1*	*16.4*
Poland	0.89	0.87	37.3	47.2	13.1
Portugal (1)	1.37	*1.36*	46.0	43.1	5.2
Romania	0.48	0.39	31.0	52.3	15.5
Slovenia	2.58	2.59	63.8	26.9	8.9
Slovakia	0.81	0.83	40.2	*38.9*	18.0
Finland (4)	3.42	3.31	60.8	26.0	11.5
Sweden	*3.28*	*3.30*	*61.0*	*28.2*	*6.8*
United Kingdom	*1.63*	*1.63*	*46.5*	*27.0*	*20.6*
Iceland (2)	:	:	49.8	40.0	8.2
Norway	1.62	1.66	43.1	45.8	9.5
Switzerland (1)	2.96	:	60.8	25.4	12.1
Montenegro	:	0.38	42.3	31.7	22.5
Serbia	0.91	0.73	7.5	59.5	7.8
Turkey	0.92	0.95	48.9	26.6	0.8
China (except Hong Kong) (1)	1.98	:	74.0	21.6	1.0
Japan (2)(3)	:	:	76.5	16.4	0.5
Russia	1.13	1.11	28.2	67.6	3.0
South Korea (2)	:	:	73.7	24.9	0.2
United States (1)(5)(6)	*2.81*	:	*59.1*	*30.8*	3.8

(1) Business enterprises, government and abroad: 2012 instead of 2013.
(2) Business enterprises, government and abroad: 2011 instead of 2013.
(3) Government: definition differs.
(4) Government: break in series.
(5) Gross domestic expenditure on R & D: definition differs.
(6) Definition differs. Business enterprise sector: break in series.
Note: when definitions differ, see http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/EN/rd_esms.htm.
Source: Eurostat (online data codes: t2020_20, rd_e_gerdtot and tsc00031)

10.2 R & D personnel

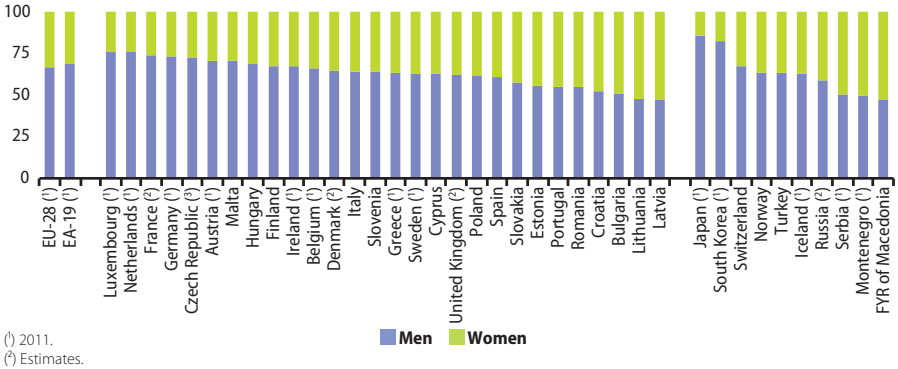
The number of researchers in the EU-28 has increased in recent years: there were 1.73 million researchers (in full-time equivalents) employed in the EU-28 in 2013, which marked an increase of 501.7 thousand (or 41.0 %) when compared with 2003.

An analysis of R & D personnel in the EU-28 by sector in 2013 shows that there was a high concentration of researchers in the business enterprise sector (48 %) and the higher education sector (39 %), while 12 % of the total number of researchers were working in the government sector. The relative importance of the different sectors varied considerably across the EU Member States, with business enterprises accounting for three fifths or more of all researchers in Sweden, Malta, Austria, Ireland (2012 data), Denmark, France and the Netherlands. By contrast, the government sector employed the highest share of researchers in Bulgaria (43 %). Around two thirds of all researchers working in Slovakia, Greece and Latvia were employed within the higher education sector, and more than half of the total number of researchers also worked in the higher education sector in Lithuania, Cyprus, the United Kingdom, Portugal, Estonia, Croatia and Poland.

R & D personnel from all sectors together made up 2.0 % of the labour force in Denmark, Finland and Luxembourg in 2013, compared with an EU-28 average of 1.1 %. Aside from these three EU Member States, this share ranged from 0.3 % in Romania and Cyprus to 1.6 % in Sweden.

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 2012 in Latvia and Lithuania, and their share was very close to parity in Bulgaria and Croatia.

Figure 10.2: Gender analysis of researchers, 2012
(% of total researchers, based on head count)



(1) 2011.
(2) Estimates.
(3) Provisional.
Source: Eurostat (online data code: rd_p_femres)

Table 10.2: Researchers in full-time equivalents (FTE), by sector, 2013 ([1])

	Total	Business enterprise sector		Government sector		Higher education sector	
	(1 000 FTE)	(1 000 FTE)	(% of total)	(1 000 FTE)	(% of total)	(1 000 FTE)	(% of total)
EU-28	*1 726.1*	*830.1*	*48*	209.0	*12*	667.8	*39*
EA-19	*1 195.3*	*607.4*	*51*	159.2	*13*	414.9	*35*
Belgium	*44.6*	*22.4*	*50*	*3.3*	*7*	*18.7*	*42*
Bulgaria	12.3	2.8	22	5.3	43	4.0	33
Czech Republic	34.3	16.8	49	6.3	18	11.0	32
Denmark	*40.9*	*25.2*	*62*	*1.2*	*3*	*14.3*	*35*
Germany	*360.3*	*203.1*	*56*	*56.7*	*16*	*100.5*	*28*
Estonia	4.4	1.4	31	0.6	13	2.4	54
Ireland ([2])	*15.7*	*9.8*	*62*	0.5	*3*	*5.5*	*35*
Greece	29.1	4.1	14	5.8	20	18.9	65
Spain	123.2	44.7	36	20.7	17	57.6	47
France	*265.2*	*159.9*	*60*	*28.1*	*11*	*74.1*	*28*
Croatia ([3])	6.5	1.1	16	1.9	30	3.5	54
Italy	*118.0*	*47.8*	*41*	*20.5*	*17*	45.8	*39*
Cyprus	*0.9*	*0.2*	*20*	*0.1*	*10*	*0.5*	*62*
Latvia	3.6	0.6	16	0.7	20	2.3	65
Lithuania	8.6	1.8	21	1.4	16	5.4	63
Luxembourg	*2.6*	*1.0*	*38*	*0.7*	*28*	*0.9*	*34*
Hungary	25.0	14.3	57	4.8	19	5.9	24
Malta	*0.9*	0.6	*63*	*0.0*	*4*	*0.3*	*33*
Netherlands ([3])	*72.3*	*43.2*	*60*	*7.9*	*11*	*21.2*	*29*
Austria	*39.9*	*24.9*	*62*	*1.6*	*4*	*13.1*	*33*
Poland	71.5	20.6	29	13.6	19	37.2	52
Portugal	*43.3*	*12.5*	*29*	*1.6*	*4*	*23.8*	*55*
Romania	18.7	5.3	29	6.6	35	6.7	36
Slovenia	8.7	4.7	54	1.8	21	2.2	25
Slovakia ([3])	14.7	2.4	17	2.6	18	9.6	65
Finland	39.2	22.3	57	4.5	11	12.1	31
Sweden	*62.3*	43.1	*69*	*2.4*	*4*	16.5	*26*
United Kingdom	*259.3*	*93.6*	*36*	*7.7*	*3*	*153.8*	*59*
Iceland ([4])	2.3	1.1	47	0.4	18	0.7	32
Norway ([5])	28.3	13.6	48	4.7	17	10.1	35
Switzerland ([2])([3])	36.0	16.8	47	0.4	1	18.8	52
Montenegro	0.4	0.1	21	0.1	24	0.2	51
FYR of Macedonia	1.4	0.1	9	0.3	25	0.9	66
Serbia	12.3	0.4	3	3.1	25	8.9	72
Turkey	89.1	40.2	45	6.3	7	42.6	48
China ([2])	1 404.0	872.4	62	269.6	19	262.1	19
Japan ([4])	656.7	490.9	75	32.2	5	126.1	19
Russia	440.6	205.5	47	144.8	33	89.1	20
South Korea ([4])	288.9	223.5	77	21.2	7	40.8	14
United States ([4])	*1 252.9*	853.0	68	:	:	:	:

([1]) Shares do not sum to 100 % due to estimates and the exclusion of private non-profit sector data from the table.
([2]) 2012.
([3]) Government sector: definition differs.
([4]) 2011.
([5]) Business enterprise sector: definition differs.
Note: when definitions differ, see http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/EN/rd_esms.htm.
Source: Eurostat (online data code: tsc00004)

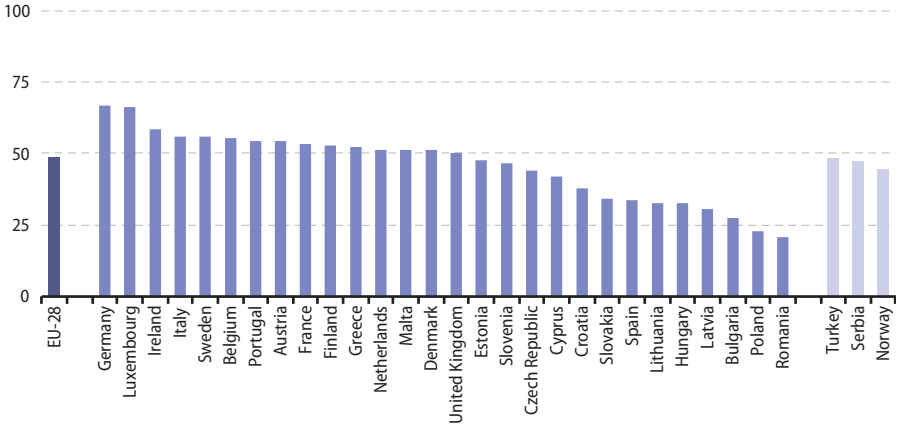
10.3 Innovation

Innovation forms part of the Europe 2020 strategy for its role in creating job opportunities, making enterprises more competitive in the global market, improving the quality of life and in contributing to a more sustainable growth. Encouraging and stimulating innovation is one of the main objectives of European policies. The Community Innovation Survey (CIS) provides statistics analysed by types of innovators, economic activities and size classes.

Almost half of all enterprises in the EU-28 reported innovation activity (48.9 %) during the period 2010-12. Compared with the period 2008-10, the share of innovative enterprises decreased by 3.9 percentage points. Among the EU Member States, the highest shares of innovative enterprises during the period 2010–12 were observed in Germany (66.9 % of all enterprises), Luxembourg (66.1 %), Ireland (58.7 %) and Italy (56.1 %). The lowest shares were recorded in Bulgaria (27.4 %), Poland (23.0 %) and Romania (20.7 %).

For the EU-28 as a whole, more than one quarter (27.5 %) of enterprises reported organisational innovation. Marketing innovation ranked second, being implemented in 24.3 % of all enterprises. Product innovation (innovation that encompasses new or significantly improved goods or services) was introduced in 23.7 % of enterprises. Relatively few enterprises (21.4 %) implemented process innovations. It is important to note that individual enterprises may have introduced more than one type of innovation.

Figure 10.3: Share of innovative enterprises, 2010–12 ([1])
(% of all enterprises)



([1]) The survey reference period covers the three years from 2010 to 2012.
Source: Eurostat (online data code: inn_cis8_type)

Table 10.3: Share of innovative enterprises by main type of innovation, 2010–12 ([1])
(% of all enterprises)

	Innovative enterprises ([2])	Product innovative enterprises	Process innovative enterprises	Organisation innovative enterprises	Marketing innovative enterprises
EU-28	48.9	23.7	21.4	27.5	24.3
Belgium	55.6	31.5	31.1	29.3	21.9
Bulgaria	27.4	10.8	9.3	12.4	14.2
Czech Republic	43.9	25.3	24.0	20.5	22.4
Denmark	51.1	24.8	22.9	32.2	29.4
Germany	66.9	35.8	25.5	32.2	34.4
Estonia	47.6	20.7	23.8	21.7	21.9
Ireland	58.7	27.8	25.9	21.8	35.7
Greece	52.3	19.5	25.6	30.2	36.8
Spain	33.6	10.5	15.1	19.4	13.2
France	53.4	24.2	24.1	34.2	25.4
Croatia	37.9	16.4	19.0	22.9	23.5
Italy	56.1	29.1	30.4	33.5	31.0
Cyprus	42.1	20.9	28.2	26.2	29.5
Latvia	30.4	10.4	12.7	16.9	16.5
Lithuania	32.9	11.6	13.1	17.5	19.3
Luxembourg	66.1	30.3	32.8	46.8	32.4
Hungary	32.5	10.6	8.3	16.5	19.7
Malta	51.1	23.9	26.4	34.7	32.6
Netherlands	51.4	31.9	25.9	27.3	23.2
Austria	54.4	26.6	28.7	36.4	29.5
Poland	23.0	9.4	11.0	10.4	10.6
Portugal	54.6	26.0	33.5	32.8	32.8
Romania	20.7	3.4	4.6	14.1	13.8
Slovenia	46.5	23.6	22.5	26.3	28.5
Slovakia	34.0	14.4	13.5	18.6	19.3
Finland	52.6	31.0	29.3	29.7	26.5
Sweden	55.9	31.5	23.9	25.3	30.4
United Kingdom	50.3	24.0	14.1	34.2	16.8
Norway	44.7	19.1	11.9	21.7	23.2
Serbia	47.5	24.5	22.0	32.6	32.2
Turkey	48.5	17.7	20.4	31.7	34.7

([1]) The survey reference period covers the three years from 2010 to 2012.
([2]) Including enterprises with abandoned / suspended or on-going innovation activities.
Source: Eurostat (online data code: inn_cis8_type)

In general, EU Member States with high overall shares of innovative enterprises reported higher shares for most types of innovation. In particular, EU Member States with a high share of product innovative enterprises also reported a high share of with process innovative enterprises, with the notable exception of the United Kingdom. Regarding the specific types of innovation, Germany, the Netherlands, Belgium, Sweden, Finland and Luxembourg presented the highest shares of product innovative enterprises, all over 30.0 % of all enterprises. A greater share of enterprises implemented process innovation in Portugal, Luxembourg, Belgium and Italy, again all in excess of 30.0 %. As regards the introduction of new organisational methods — introducing new practices or methods for organising procedures, external relations or for organising work responsibilities and decision making — the highest shares were reported for enterprises in Luxembourg, Austria, Malta, the United Kingdom and France, all over 34.0 %; the share in Luxembourg was 46.8 %, considerably higher than in any other EU Member State. As concerns marketing innovations, the highest shares of enterprises with such innovations were observed in Greece, Ireland and Germany, all in excess of 34.0 %.

10.4 Patents

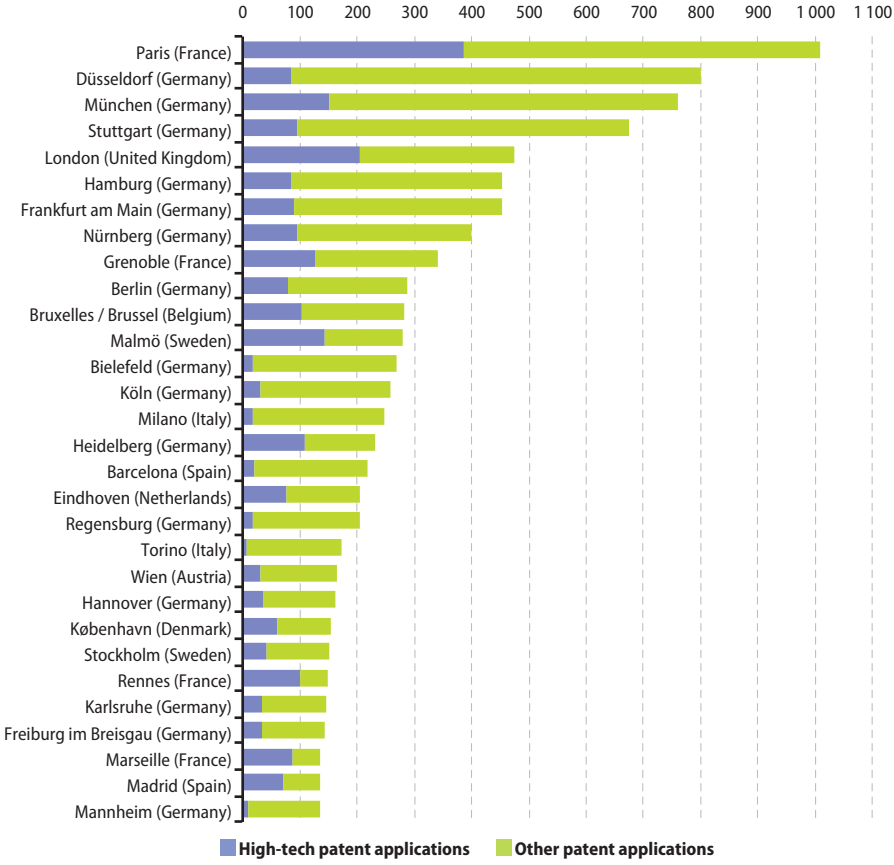
Patents reflect inventive activity and they also show the capacity to exploit knowledge and translate it into potential economic gains. In this context, indicators based on patent statistics are widely used to assess the inventive performance of countries or regions.

The number of patent applications to the European Patent Office (EPO) from EU-28 Member States reached 54.9 thousand in 2012, a fall of 2.1 thousand compared with 2005, or a reduction of 3.7 % in relative terms, equivalent to – 0.5 % per year. Among the EU Member States, Germany had by far the highest number of patent applications to the EPO in 2012, some 22.8 thousand (41.4 % of the EU-28 total), followed by France (8.3 thousand), the United Kingdom (5.1 thousand), Italy (4.2 thousand) and the Netherlands (2.8 thousand). From non-member countries, the highest numbers of patent applications were recorded from the United States (28.5 thousand) and Japan (22.7 thousand), followed by South Korea (5.9 thousand) and China (5.5 thousand).

Relative to its population, Sweden reported the highest number of patent applications, some 290 per million inhabitants, followed by Germany (278) and Finland (271). With the exception of Italy (70 patent applications per million inhabitants), all of the southern and eastern EU Member States as well as the Baltic EU Member States reported less than 50 patent applications per million inhabitants in 2012.

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. The top 30 includes 15 German metropolitan areas, with 7 of these in the top 10. In France, the traditionally high concentration of research centres in the metropolitan area of Paris is reflected through the 1 010 patent applications that were registered here, the highest among all metropolitan areas of the EU. Three other French metropolitan areas, Grenoble, Rennes and Marseille, appeared in the top 30. Two metropolitan areas from each of Spain, Italy and Sweden ranked in the top 30, namely Barcelona and Madrid, Milano and Torino, and Stockholm and Malmö.

Figure 10.4: Top 30 metropolitan areas in terms of total patent applications to the EPO, 2012 (1) (number)



(1) Provisional.
Source: Eurostat (online data codes: pat_ep_mtot and pat_ep_mtec)

Table 10.4: Patent applications to the EPO, 2005 and 2012

	Number of applications		Per million inhabitants		Annual average growth rate, 2005–12 (%) (2)
	2005	2012 (1)	2005	2012 (1)	
EU-28	57 034	54 935	115	109	– 0.5
Belgium	1 508	1 477	144	133	– 0.3
Bulgaria	23	22	3	3	– 0.7
Czech Republic	108	188	11	18	8.3
Denmark	1 189	1 246	220	223	0.7
Germany	24 011	22 766	291	278	– 0.8
Estonia	6	42	5	32	31.0
Ireland	275	303	67	66	1.4
Greece	111	59	10	5	– 8.7
Spain	1 359	1 560	31	33	2.0
France	8 380	8 252	133	126	– 0.2
Croatia	33	29	8	7	– 2.0
Italy	4 908	4 159	85	70	– 2.3
Cyprus	17	5	23	6	– 15.2
Latvia	18	14	8	7	– 3.1
Lithuania	9	18	3	6	11.0
Luxembourg	98	70	213	133	– 4.8
Hungary	135	198	13	20	5.6
Malta	11	2	28	4	– 25.0
Netherlands	3 497	2 752	214	165	– 3.4
Austria	1 518	1 804	185	215	2.5
Poland	128	469	3	12	20.4
Portugal	123	78	12	7	– 6.3
Romania	29	56	1	3	10.0
Slovenia	108	86	54	42	– 3.3
Slovakia	31	53	6	10	7.9
Finland	1 339	1 461	256	271	1.3
Sweden	2 433	2 749	270	290	1.8
United Kingdom	5 628	5 063	94	80	– 1.5
Iceland	34	15	116	47	– 11.0
Liechtenstein	26	50	738	1 382	10.2
Norway	495	557	107	112	1.7
Switzerland	3 207	3 389	432	426	0.8
Turkey	165	661	2	9	21.9
Australia	1 138	729	56	32	– 6.2
Brazil	206	179	1	1	– 2.0
Canada	2 478	2 395	77	69	– 0.5
China	1 661	5 521	1	:	18.7
India	583	1 221	1	1	11.1
Israel	1 424	1 055	205	133	– 4.2
Japan	22 074	22 733	173	178	0.4
Russia	303	391	2	3	3.7
South Africa	138	114	3	2	– 2.6
South Korea	5 177	5 938	108	119	2.0
Taiwan	746	1 572	33	:	11.2
United States	37 297	28 456	126	91	– 3.8

(1) Estimates.
(2) Estimates. Based on the total number of patent applications to the EPO.
Source: Eurostat (online data code: pat_ep_ntot)

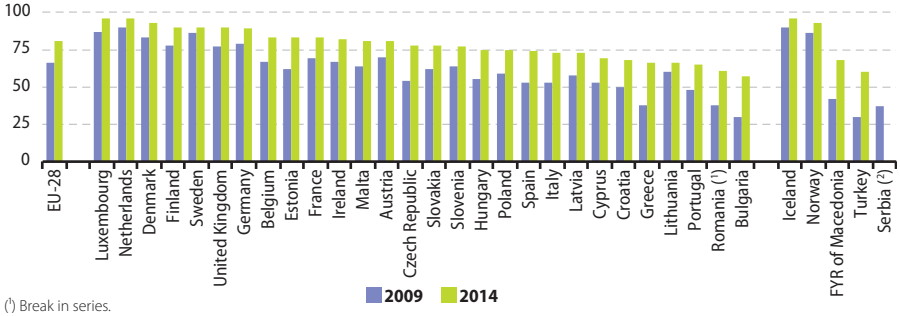
10.5 Information society — households and individuals

The development of the information society is regarded as critical to meet the demands of society and the EU economy. Information and communication technologies (ICT) affect people's everyday lives in many ways, both at work and in the home, for example, when communicating or buying online. EU policies range from regulating entire areas such as e-commerce to trying to protect an individual's privacy.

The highest proportion (96 %) of households with internet access in 2014 was recorded in Luxembourg and the Netherlands, while Denmark, Finland, Sweden and the United Kingdom also reported that at least 9 out of every 10 households had internet access in 2014. The lowest rate of internet access among the EU Member States was recorded in Bulgaria (57 %). However, there was a rapid expansion in household access to the internet in Bulgaria, as the proportion of households with internet access rose by 27 percentage points between 2009 and 2014, an increase exceeded, among the EU Member States, only in Greece (28 percentage points); the increase in Turkey was slightly larger, at 30 percentage points. The Czech Republic, Romania, Estonia, Spain, Hungary and Italy also recorded increases of 20 percentage points or more over the same period. Unsurprisingly, relatively small increases were recorded in several EU Member States that were already close to saturation, such as Sweden and the Netherlands, although Lithuania reported the second lowest increase (6 percentage points), despite having a relatively low proportion of internet access (66 % in 2014).

In 2014, nearly two thirds (65 %) of individuals accessed the internet on a daily basis with a further 10 % using it at least once a week (but not daily). As such, 75 % of individuals were regular users (at least weekly) of the internet, a level of use meeting — a year ahead of schedule — the digital agenda target of 75 % (that was set for 2015). When looking at internet users in the EU, the proportion of daily users ranged from 60 % in Romania and 76 % in the Czech Republic and Poland to 90 % in the Netherlands, Luxembourg (92 %) and Italy (94 %). Norway (93 %) and Iceland (95 %) also reported a high share of daily internet users among all internet users.

Figure 10.5: Internet access of households, 2009 and 2014
(% of all households)



(1) Break in series.
(2) 2014: not available.
Source: Eurostat (online data code: isoc_ci_in_h)

Table 10.5: Frequency of internet use, 2014
(% of individuals aged 16 to 74)

	Used in the last three months	At least once a week (but not every day)	Daily use
EU-28	78	10	65
Belgium	85	12	71
Bulgaria	55	8	46
Czech Republic	80	15	60
Denmark	96	7	85
Germany	86	10	72
Estonia	84	9	73
Ireland	80	12	65
Greece	63	10	49
Spain	76	11	60
France	84	12	68
Croatia	69	10	56
Italy	62	1	58
Cyprus	69	9	56
Latvia	76	10	61
Lithuania	72	12	57
Luxembourg	95	6	87
Hungary	76	8	66
Malta	73	7	63
Netherlands	93	7	84
Austria	81	13	64
Poland	67	12	51
Portugal	65	10	51
Romania	54	15	32
Slovenia	72	10	58
Slovakia	80	14	62
Finland	92	9	81
Sweden	93	8	83
United Kingdom	92	8	81
Iceland	98	3	94
Norway	96	5	89
Switzerland	90	11	76
Montenegro (1)	57	9	46
FYR of Macedonia	68	11	53
Turkey	48	10	35

(1) 2012.
Source: Eurostat (online data codes: isoc_ci_ifp_iu and isoc_ci_ifp_fu)

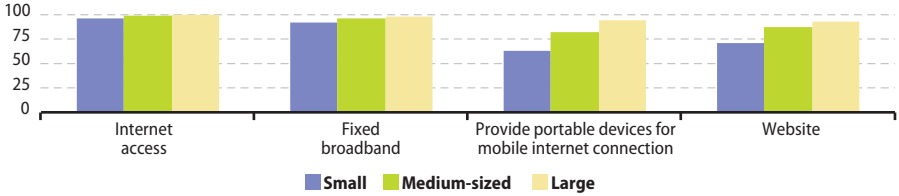
10.6 Information society — enterprises

Just 3 % of enterprises in the EU-28 (covered by the survey on ICT usage in enterprises) did not have internet access as of the beginning of 2014, while the vast majority (92 %) made use of a fixed broadband connection to access the internet. There was a rapid uptake in the use of mobile internet connections for business purposes, in part fuelled by enterprises equipping their staff with portable computers, smart phones and other mobile devices, something that was done by two thirds (66 %) of all enterprises in the EU-28. Close to three quarters (74 %) of all enterprises in the EU-28 had a website in 2014. Generally, large enterprises in the EU-28 made greater use of information technology in 2014 than smaller enterprises, with all large enterprises having internet access, 98 % a fixed broadband access, 94 % providing employees with portable devices for mobile internet connections for business purposes, and 93 % having a website.

Instead of building their own IT infrastructure (which would include hardware and involve developing and maintaining software applications and databases), enterprises can access computing resources hosted by third parties (service providers) on the internet, in other words, the cloud. One in five (19 %) enterprises in the EU-28 reported that they used cloud computing services in 2014. Substantial differences could be observed between EU Member States: in Finland, Italy, Sweden and Denmark, over 35 % of enterprises used cloud computing, as was also the case in Iceland. By contrast, less than 10 % did so in Hungary, Bulgaria, Greece, Poland, Latvia and Romania.

Of the enterprises in the EU-28 that reported using cloud computing in 2014, some 66 % relied on a cloud solution for their e-mail. Over half (53 %) of all enterprises in the EU-28 that were using cloud computing in 2014 did so for storing electronic files, while 39 % used it to host their database(s), and 34 % for office software (such as for word processing or spreadsheets). Enterprises may also access relatively more advanced customer-oriented software applications through the cloud, such as for finance/accounting and managing information about their customers (customer relationship management — CRM). Such cloud-based services were used by 31 % and 21 % respectively of those EU-28 enterprises that reported using cloud computing in 2014. In addition, 17 % of enterprises using cloud computing reported that they made use of the cloud to access computers for running their own business software applications.

Figure 10.6: Enterprise use of information technology, by size class, EU-28, 2014
(% of enterprises)



Source: Eurostat (online data code: isoc_ci_eu_en2)

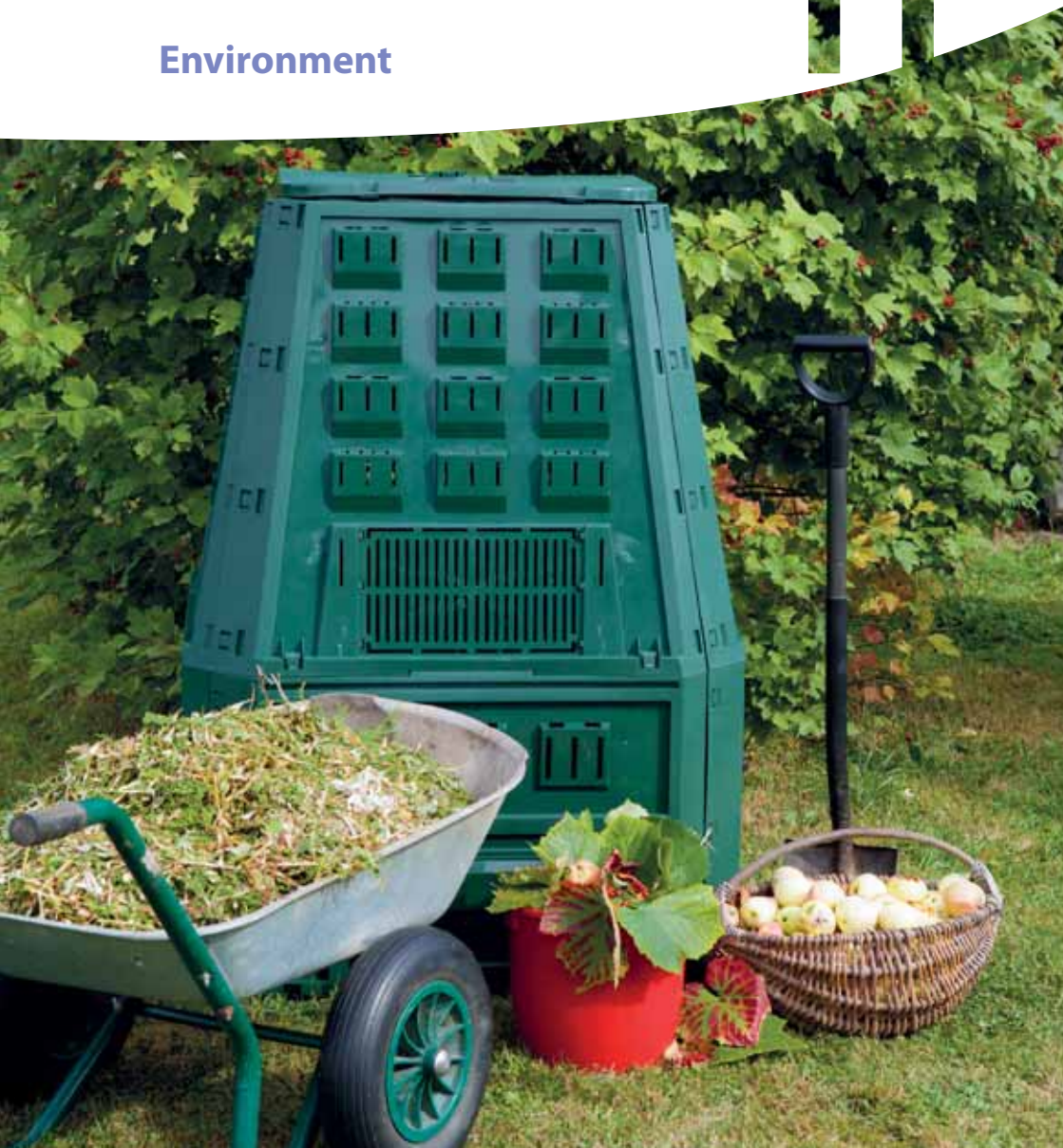
Table 10.6: Use of cloud computing services in enterprises, 2014

	Use of cloud computing	E-mail	Storage of files	Hosting the enterprise's database(s)	Office software	Financial or accounting software applications	CRM software applications	Computing power for enterprise's own software
	(% of enterprises)	(% of enterprises using the cloud)						
EU-28	19	66	53	39	34	31	21	17
Belgium	21	52	62	45	31	33	26	23
Bulgaria	8	74	50	53	58	50	24	16
Czech Republic	15	79	41	34	38	35	18	20
Denmark	38	63	70	55	42	49	34	34
Germany	11	46	56	33	21	25	18	20
Estonia	15	58	41	18	41	47	17	7
Ireland	28	57	74	37	36	25	23	17
Greece	8	67	50	36	31	32	25	26
Spain	14	61	69	54	28	21	24	25
France	12	62	61	49	32	26	23	14
Croatia	22	85	49	46	52	50	13	26
Italy	40	86	32	28	41	33	14	8
Cyprus	10	68	70	26	39	23	29	16
Latvia	6	58	58	55	42	47	19	26
Lithuania	13	70	50	47	34	45	33	38
Luxembourg	13	46	61	41	32	19	18	14
Hungary	8	64	46	33	43	35	25	20
Malta	17	60	57	44	31	17	19	19
Netherlands	28	55	63	64	40	52	37	18
Austria	12	51	54	31	33	23	23	16
Poland	6	69	54	41	31	27	22	19
Portugal	13	78	49	31	36	31	18	30
Romania	5	76	36	37	37	33	0	19
Slovenia	15	67	44	39	35	33	20	29
Slovakia	19	84	34	31	46	54	13	22
Finland	51	66	54	38	39	39	29	13
Sweden	39	55	65	43	32	37	26	25
United Kingdom	24	51	71	44	29	25	24	22
Iceland	43	69	74	73	45	62	25	26
Norway	29	63	66	54	41	41	33	31
FYR of Macedonia	12	74	48	47	57	63	27	31

Source: Eurostat (online data code: isoc_cicce_use)

11

Environment



Introduction

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 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. The legal basis for European environmental accounts is Regulation 691/2011 on European environmental economic accounts, which so far includes six modules, namely air emissions accounts, environmental taxes, material flow accounts, energy accounts, environmental protection expenditure and the environmental goods and services sector.

Several environmental indicators have been chosen as sustainable development indicators for an assessment of the progress achieved towards the goals of the sustainable development strategy. Examples of environmental headline indicators managed by Eurostat include resource productivity (as an indicator for sustainable consumption and production) and greenhouse gas emissions by sector (as an indicator for climate change). Several other environmental indicators are used to monitor progress in relation to an efficient use of natural resources, environmental impacts on public health and the impact of transport and energy on climate change.

The current EU environment action programme — referred to as the 7th EAP — was adopted by Decision 1386/2013 of the European Parliament and Council in November 2013 under the title 'Living well, within the limits of our planet'; it guides the EU's environment policy up to 2020. The programme draws on a number of recent strategic initiatives, including the resource efficiency roadmap, the 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 EU 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.

Eurostat's environment statistics and accounts will accompany the Europe 2020 strategy and contribute to help monitor its success through a set of statistics and indicators, in particular for the areas of the sustainable use of natural resources and resource efficiency.

11.1 Land cover, land use and landscape

Land is an integral part of ecosystems and indispensable for biodiversity and the carbon cycle; it can be divided into two interlinked concepts: land cover refers to the bio-physical coverage of land (for example, crops, grass, broad-leaved forest, or built-up area); while land use indicates the socioeconomic use of land (for example, agriculture, forestry, recreation or residential use).

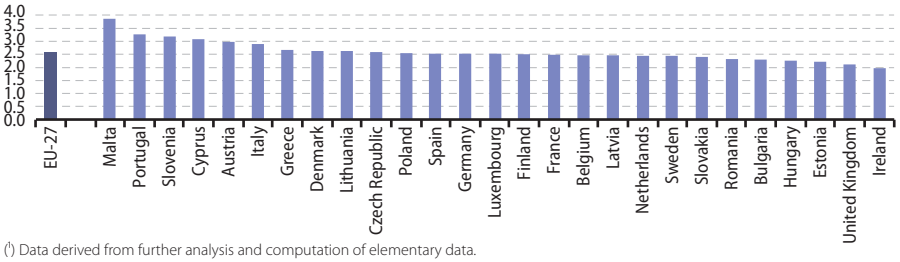
Land cover and land use data forms the basis for spatial and territorial analyses which are increasingly important for:

- the planning and management of agricultural, forest, wetland, water and urban areas;
- nature, biodiversity and soil protection, and;
- the prevention and mitigation of natural hazards and climate change.

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 typography is dominated by mountains and hilly areas. Denmark and Hungary were the EU Member States that reported the highest proportion of their total area covered by cropland, its share rising close to 50 %. Natural and agricultural grasslands dominate the landscape in Ireland, the United Kingdom, the Netherlands and Luxembourg. Shrubland is a typical land cover feature of hot and arid EU Member States 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 ([1]) countries had the highest proportions of built-up areas.

The heterogeneity of land cover and the presence of linear features such as hedges, lines of trees, roads, railways, rivers and irrigation channels are two important elements characterising landscape structures. Some EU Member States have large continuous areas of the same land cover, while others have a diversified mosaic of land cover elements. Malta, Portugal, Slovenia, Cyprus, Austria and Italy had a relatively high level of land cover diversity, characterised by a varied land cover mosaic composed of different small land cover patches. In Ireland, the United Kingdom and Estonia the landscape was dominated by larger areas composed of the same land cover type.

Figure 11.1: Land cover richness indicator — average number of different land cover types in a 250 m transect, by country, 2012 ([1])
(number)



([1]) Data derived from further analysis and computation of elementary data.
Source: Eurostat

([1]) The Benelux Member States of the EU are Belgium, the Netherlands and Luxembourg. The term Benelux, formed from the first two letters of each country's name, originally referred to a customs union established in 1948. Today, the term is used as a generic grouping of the three countries.

Table 11.1: Main land cover by land cover type, 2012 ([1])
(% of total area)

	Woodland	Cropland	Grassland	Artificial land	Water areas and wetland	Shrubland	Bare land
EU-27	41.2	24.7	19.5	4.6	4.6	4.0	1.5
Belgium	24.7	27.5	32.3	13.4	1.4	0.2	0.4
Bulgaria	42.5	32.2	16.8	2.3	1.1	4.0	1.1
Czech Republic	38.5	34.1	20.3	4.0	1.6	0.8	0.7
Denmark	18.3	48.5	21.1	7.1	2.4	1.2	1.3
Germany	32.9	33.1	22.5	7.7	2.1	0.9	0.8
Estonia	60.6	11.2	16.2	1.8	7.3	2.0	0.9
Ireland	13.2	4.7	67.1	3.9	7.0	2.0	2.2
Greece	37.4	23.2	11.4	3.8	2.4	19.1	2.7
Spain	36.7	28.0	13.9	3.9	1.0	11.7	4.7
France	31.8	30.6	26.9	5.8	1.6	2.4	0.8
Italy	34.5	32.2	15.4	7.8	3.1	5.1	1.9
Cyprus	29.6	19.0	14.7	7.4	0.8	21.2	7.4
Latvia	55.5	14.0	21.0	1.6	6.1	1.0	0.9
Lithuania	38.7	26.7	27.2	2.6	3.6	0.2	0.8
Luxembourg	30.5	18.3	37.1	11.9	0.7	0.3	1.2
Hungary	24.1	46.9	18.8	3.7	3.2	2.2	1.1
Malta	5.1	26.6	11.4	32.9	1.3	15.2	7.6
Netherlands	12.6	23.1	38.0	12.2	11.0	1.8	1.3
Austria	47.5	17.7	22.9	5.8	2.3	1.2	2.6
Poland	36.2	34.1	21.6	3.9	2.3	1.0	0.8
Portugal	44.2	17.6	15.1	6.2	1.9	11.6	3.4
Romania	31.3	36.0	25.0	2.4	2.9	1.7	0.7
Slovenia	60.2	11.5	20.5	3.7	1.4	1.4	1.4
Slovakia	46.4	27.6	19.3	3.2	1.2	1.7	0.5
Finland	71.8	4.9	4.4	1.6	15.6	1.1	0.7
Sweden	75.6	4.3	4.6	1.8	12.1	1.0	0.6
United Kingdom	19.8	21.7	40.1	6.5	5.3	5.6	1.0

([1]) Croatia: not available.
Source: Eurostat (online data code: lan_lcv_ovw)

11.2 Greenhouse gas emissions by industries and households

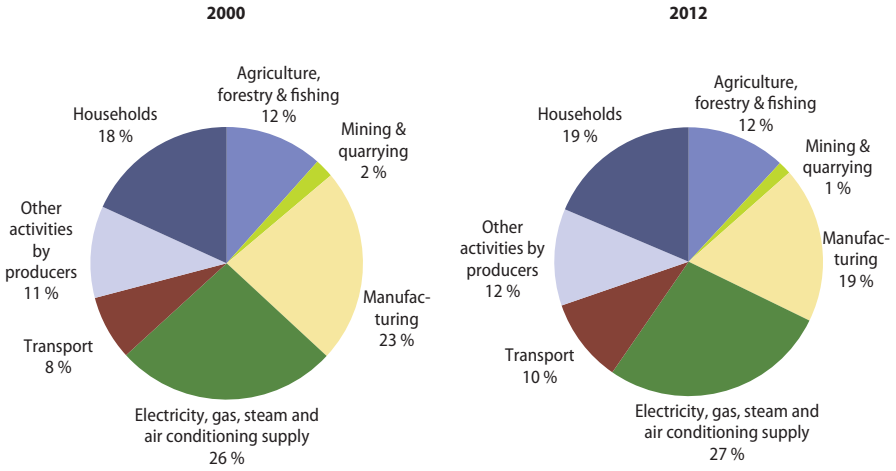
This section analyses the emissions of three greenhouse gases (GHGs) in the European Union (EU) by the industries and households that are responsible for their generation. These gases are carbon dioxide (CO_2), nitrous oxide (N_2O) and methane (CH_4).

In 2012, GHG emissions generated by industries and households stood in the EU-27 and EU-28 at 4.65 billion tonnes and 4.67 billion tonnes of CO_2 equivalents respectively. The activity NACE D 'electricity, gas, steam and air conditioning supply' had the largest share of the

EU-27's greenhouse gas emissions, accounting for 27 % of the total. Emissions from the suppliers 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. The share of manufacturing (NACE C) in all emissions was 19 %, meaning that producers engaged in activities NACE C and D together contributed nearly half (46 %) of all greenhouse gas emissions in the EU-27 in 2012. Households accounted for 19 % of greenhouse gas emissions, while producers in agriculture, forestry and fishing (NACE A) were responsible for a further 12 %. This was the same share as all remaining activities combined (NACE E to U which includes construction and services but excludes transport). The remaining 1 % share was for mining and quarrying (NACE B).

Among the EU Member States, the greenhouse gases emitted by the various producers and households varied. These differences are, in part, due to different economic structures and different mixes of renewable and non-renewable energy sources. In most EU Member States businesses supplying energy, gas, steam and air conditioning were the main producers of greenhouse gases in 2012, followed by manufacturing. The most notable exceptions were: Ireland and Latvia where agriculture, forestry and fishing were the main emitters; Denmark, Luxembourg and Malta where transport was the main source; and France where households were the main source.

Figure 11.2: Greenhouse gas emission by economic activity, EU-27, 2000 and 2012
(% of total emissions in CO_2 equivalents)



Source: Eurostat (online data code: env_ac_ainah_r1 and env_ac_ainah_r2)

Table 11.2: Greenhouse gas emissions by country and economic activity, 2012
(1 000 tonnes of CO_2 equivalents of CO_2, CH4 and N_2O)

	All NACE activities excluding house-holds	Agri-culture, forestry & fishing	Mining & quarrying	Manufac-turing	Electricity, gas, steam and air condition-ing supply	Transport-ation and storage	Other sectors	House-holds
EU-28	3 802 402	556 596	73 571	877 818	1 278 293	501 509	514 614	870 641
EU-27	3 781 388	552 513	73 041	871 553	1 273 004	499 225	512 051	865 526
Belgium	88 931	11 505	32	31 008	18 479	9 633	18 274	26 738
Bulgaria	53 659	5 208	461	6 063	33 678	6 344	1 906	6 918
Czech Republic	107 813	9 203	7 567	18 037	53 459	8 803	10 744	8 140
Denmark	82 176	11 913	1 845	5 887	13 699	42 495	6 337	8 137
Germany	811 653	77 135	11 495	179 908	356 855	83 167	103 093	183 833
Estonia	18 169	1 392	107	1 577	12 696	1 479	918	1 163
Ireland	45 755	18 907	169	5 202	12 381	3 034	6 061	11 788
Greece	90 741	13 230	63	10 012	52 077	7 941	7 418	14 575
Spain	270 941	43 590	3 106	78 989	77 509	38 422	29 325	61 699
France	341 250	101 623	1 058	98 058	32 157	40 141	68 212	126 576
Croatia	21 014	4 083	530	6 264	5 289	2 284	2 563	5 115
Italy	356 607	41 997	2 177	100 352	112 451	51 068	48 563	101 845
Cyprus	7 397	900	41	1 024	3 560	539	1 333	1 944
Latvia	10 365	2 904	40	1 589	2 023	2 261	1 548	1 859
Lithuania	21 702	5 221	28	6 137	3 449	5 449	1 417	3 696
Luxembourg	7 512	723	7	1 426	1 183	3 049	1 122	1 537
Hungary	48 870	9 972	414	9 184	17 128	2 649	9 524	14 559
Malta	5 586	107	11	71	2 065	3 149	182	349
Netherlands	185 568	25 692	3 135	43 911	49 220	31 442	32 168	40 362
Austria	60 440	9 015	1 356	27 192	9 253	6 453	7 171	15 424
Poland	352 093	53 026	13 985	65 961	156 210	24 588	38 322	47 102
Portugal	55 530	8 923	197	16 137	15 083	3 862	11 328	13 041
Romania	105 512	19 496	2 965	27 404	35 201	9 502	10 944	14 943
Slovenia	16 000	2 106	339	2 173	6 108	4 268	1 007	3 499
Slovakia	37 105	3 201	976	17 954	6 121	4 332	4 521	5 105
Finland	57 028	7 692	200	14 264	17 741	10 006	7 125	5 893
Sweden	55 106	10 007	878	15 582	7 497	12 836	8 306	9 652
United Kingdom	487 876	57 825	20 385	86 450	165 721	82 314	75 181	135 149
Norway	57 494	6 608	14 161	11 963	1 565	19 706	3 492	5 249
Switzerland	34 589	6 318	102	8 687	600	7 833	11 049	19 549
Turkey	334 862	36 160	3 554	101 210	121 902	20 140	51 896	99 047

Source: Eurostat (online data code: env_ac_ainah_r2)

11.3 Carbon dioxide emissions from final use of products

The air emission accounts attribute carbon dioxide (CO_2) emissions to the production industries actually emitting them. Alternatively, emissions can be attributed to the final users who demand the products and thus trigger the emissions. The approach is often referred to as consumption-based accounting of CO_2 emissions and the results are also known as carbon footprints. In this approach, the CO_2 emissions are reattributed from the production industries to consumed products by final demand categories using information from input-output tables. It also takes into account the CO_2 emissions that are 'embedded' in EU's imports, i.e. emissions along the worldwide production chains before the products are imported. Carbon footprints can be used for designing strategies that monitor and reduce emissions from a consumption perspective.

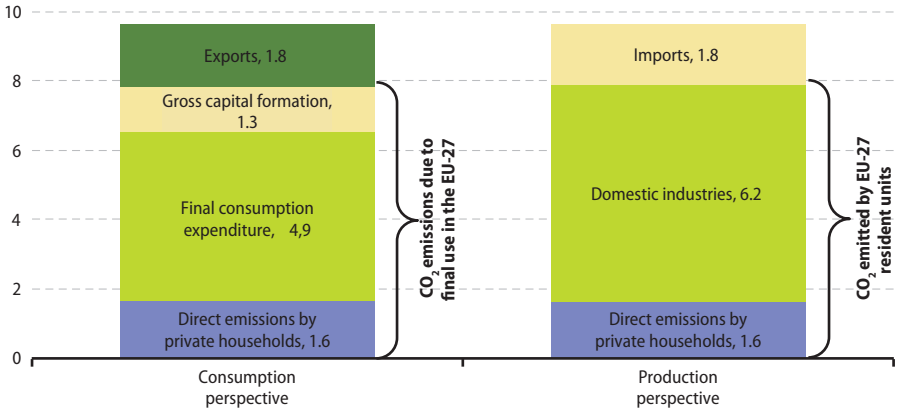
The global CO_2 emissions induced by EU-27 final use were 7.8 tonnes CO_2 per capita in 2011, according to Eurostat estimates. This is the final use by EU-27 households and production units, irrespective of whether the production and emissions occurred inside or outside the EU, and excluding emissions in the EU embodied in exports. The following are three main components:

- some 4.9 tonnes CO_2 per inhabitant were due to demand for products by households, i.e. emissions during the production of goods and services eventually consumed by households, and collective consumption attributed to governments ;
- another 1.6 tonnes CO_2 per inhabitant resulted from direct emissions by households, e.g. through the burning of fossil fuels for private vehicles or for household heating;
- finally 1.3 tonnes CO_2 per inhabitant were due to demand by businesses for capital goods, i.e. emissions during the production of capital goods acquired by businesses as investment, and changes in inventories (gross capital formation).

A further 1.8 tonnes correspond to exports, i.e. global emissions induced by demand abroad for EU-27 products.

Table 11.3 presents a range of different product groups broken down by the final use category inducing the global CO_2 emissions. The products with the highest shares of emissions are: electricity, gas, steam and air-conditioning; constructions and construction works; food products, beverages and tobacco products; and coke and refined petroleum products.

Figure 11.3: Global CO_2 emissions due to EU-27 consumption and production, 2011 (1) (tonnes CO_2 per inhabitant)



(1) Eurostat estimates.
Source: Eurostat (online data codes: env_ac_ainah_r2, env_ac_io2 and demo_gind)

Table 11.3: Global and domestic CO_2 emissions induced by final use of products in the EU-27 and EU-27 exports, 2011 (1)

Product group	Final consumption expenditure	Gross capital formation	Exports	Final use, total	
	(kg of CO2 per inhabitant)				(%)
Electricity, gas, steam and air-conditioning	998	– 15	92	1 075	11.2
Constructions and construction works	31	663	4	698	7.2
Food products, beverages and tobacco products	436	– 2	54	488	5.1
Coke and refined petroleum products	238	13	122	373	3.9
Motor vehicles, trailers and semi-trailers	127	72	105	304	3.2
Chemicals and chemical products	81	21	199	301	3.1
Public administration and defence services; compulsory social security services	262	2	1	265	2.7
Air transport services	156	0	96	252	2.6
Retail trade services, except of motor vehicles and motorcycles	225	14	12	251	2.6
Machinery and equipment n.e.c.	5	119	124	248	2.6
Accommodation and food services	238	0	5	243	2.5
Land transport services and transport services via pipelines	204	8	28	240	2.5
Wholesale trade services, except of motor vehicles and motorcycles	154	32	51	237	2.5
Human health services	196	0	0	197	2.0
Water transport services	57	1	122	180	1.9
Textiles, wearing apparel and leather products	109	2	29	140	1.4
Products of agriculture, hunting and related services	95	19	16	129	1.3
Education services	124	0	1	125	1.3
Other products	1 151	376	725	2 252	23.4
Total products	4 886	1 326	1 786	7 998	83.1
Direct emissions by private households	1 629	0	0	1 629	16.9
Total products plus direct emissions by private households	6 515	1 326	1 786	9 627	100.0

(1) Eurostat estimates.
Source: Eurostat (online data codes: env_ac_io2 and demo_gind)

11.4 Material flow accounts and resource productivity

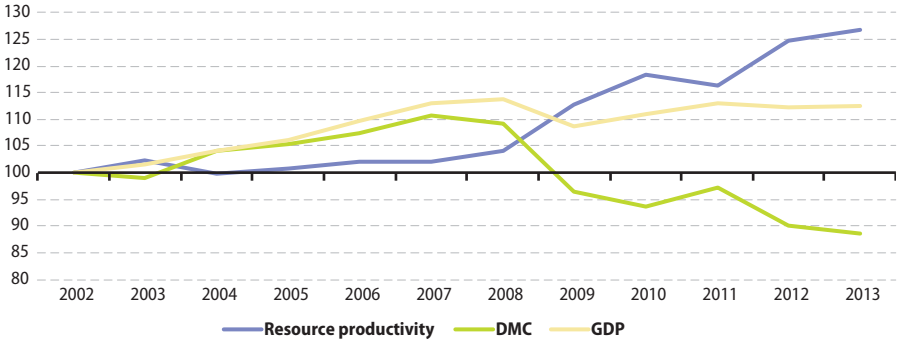
Eurostat's material flow accounts are a comprehensive data framework that systematically records the inputs of materials to European economies. Resource productivity quantifies the relation between economic growth and the depletion of natural resources, and sheds light on whether they go hand-in-hand or the extent to which they are decoupled. Natural resources include biomass, metal ores, non-metallic minerals and fossil energy materials.

The resource productivity components are GDP in chain linked volumes and domestic material consumption (DMC). The latter measures the total amount of materials directly consumed in an economy, either by businesses for economic production or by households.

EU-28 resource productivity increased from 1.52 EUR/kg in 2002 to 1.93 EUR/kg in 2013, an increase of 26.9 %. This was not a steady increase: in particular the financial and economic crisis marked a change in 2008. After positive and negative changes of 2 to 3 % in 2003 and 2004, resource productivity reported a steady but modest increase from 2004 to 2008, with annual increases below 2 %. From 2008 to 2013 resource productivity surged from 1.59 to 1.93 EUR/kg, despite a dip (– 1.8 %) in 2011. During this period annual growth was highest in 2009 (8.2 %) and 2012 (7.3 %).

The level of DMC differed greatly among the EU Member States, ranging from 8.4 tonnes per capita in Spain to 34.5 tonnes per capita in Finland in 2013. Furthermore, the structure of DMC — by main material category — varies between the EU Member States. The composition of DMC in each EU Member State is influenced by domestic extraction and by natural endowments with material resources, and the latter may form an important structural element of each economy.

Figure 11.4: Resource productivity in comparison to GDP (1) and DMC, EU-28, 2002–13
(2002 = 100)



(1) GDP in chain-linked volumes, 2007 and 2008: break in series
Source: Eurostat (online data codes: nama_10_gdp and env_ac_mfa)

Table 11.4: DMC by country and main material category, 2013
(tonnes per capita)

	Total	Biomass	Metal ores	Non-metallic minerals	Fossil energy materials
EU-28	13.2	3.4	0.5	6.2	3.1
Belgium	13.6	4.2	0.4	5.8	3.3
Bulgaria	17.6	2.4	4.0	6.4	5.0
Czech Republic	14.7	1.9	0.4	6.5	5.9
Denmark	20.8	5.1	0.1	11.1	4.4
Germany	16.1	3.4	0.5	6.9	5.3
Estonia	30.9	4.1	0.0	12.2	14.7
Ireland	26.2	9.1	1.5	11.3	4.2
Greece	12.4	2.2	0.3	3.7	6.2
Spain	8.4	2.9	0.4	3.2	1.9
France	11.9	3.6	0.3	5.9	2.0
Croatia	10.0	2.9	0.1	5.3	1.6
Italy	9.0	2.1	0.2	4.4	2.3
Cyprus	15.3	1.9	4.3	6.7	2.3
Latvia	20.8	10.7	–	8.9	1.4
Lithuania	15.7	7.1	0.0	7.0	1.8
Luxembourg	19.4	4.0	1.6	9.7	3.4
Hungary	10.2	3.3	0.1	4.4	2.4
Malta	10.1	1.4	0.3	5.6	2.6
Netherlands	9.4	2.8	0.2	2.2	4.4
Austria	21.5	4.8	1.0	12.5	3.0
Poland	17.3	4.6	1.0	7.7	4.1
Portugal	14.1	2.9	1.1	8.6	1.4
Romania	21.7	3.1	0.2	16.2	2.3
Slovenia	12.2	1.9	0.3	6.3	3.8
Slovakia	11.4	3.0	0.8	4.9	2.6
Finland	34.5	6.9	4.0	19.0	4.3
Sweden	22.7	5.6	5.7	9.1	1.8
United Kingdom	9.2	3.2	0.2	3.0	2.7

Source: Eurostat (online data code: env_ac_mfa)

11.5 Waste

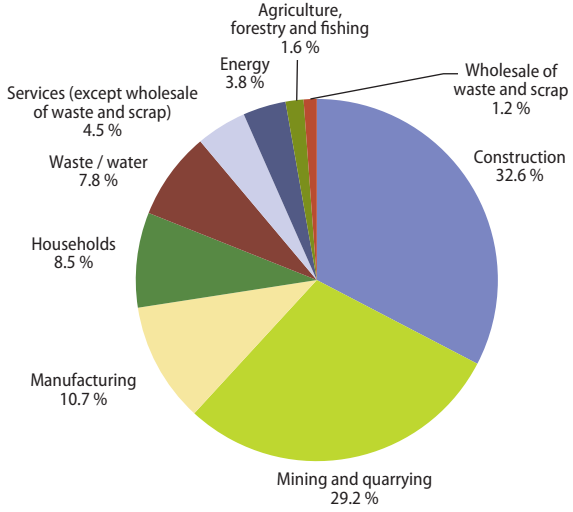
Waste, defined by Directive 2008/98/EC Article 3(1) as 'any substance or object which the holder discards or intends or is required to discard', potentially represents an enormous loss of resources in the form of both materials and energy; in addition, the management and disposal of waste can have serious environmental impacts.

In 2012, the total waste generated in the EU-28 by all economic activities and households amounted to 2515 million tonnes. The average amount of waste generated across the EU-28 in 2012 was equivalent to almost five tonnes (4984 kg) per inhabitant.

Construction contributed 33 % of the total (with 821 million tonnes) and was followed by mining and quarrying (29 % or 734 million tonnes), manufacturing (11 % or 270 million tonnes), households (8 % or 213 million tonnes) and energy (4 % or 96 million tonnes); the remaining 15 % was waste generated from other economic activities. A majority (63 %) of the total waste generated in the EU-28 was mineral waste.

Waste disposal of 35.9 million tonnes accounted for almost half (47.8 %) of the hazardous waste that was treated in the EU-28 in 2012. Some 10.5 million tonnes (or 13.9 %) of all hazardous waste was incinerated or used for energy recovery, and 28.8 million tonnes (or 38.3 %) was recovered. The quantity of waste recovered (excluding energy recovery) grew from 890 million tonnes in 2004 to 1053 million tonnes in 2012, and increased by 18.3 %. As a result, the share of recovery in total waste treatment rose from 42.1 % in 2004 to 45.7 % by 2012. Waste incineration (including energy recovery) saw an overall increase between 2004 and 2012 of 27.4 %.

Figure 11.5: Waste generation by economic activities and households, EU-28, 2012
(%)



Source: Eurostat (online data code: env_wasgen)

Table 11.5: Waste treatment, 2012
(1 000 tonnes)

	Total	Recycling	Energy recovery	Backfilling	Incineration	Landfilling
EU-28	2 302 560	838 960	101 140	213 790	36 650	1 112 020
Belgium	41 328	30 237	4 612	0	3 331	3 148
Bulgaria	158 752	1 789	172	0	14	156 777
Czech Republic	18 263	8 420	959	5 137	76	3 670
Denmark	14 070	8 147	3 255	0	0	2 668
Germany	352 996	152 807	33 953	91 469	11 017	63 750
Estonia	20 610	7 903	349	4 196	0	8 162
Ireland	8 033	827	403	1 985	13	4 805
Greece	71 334	2 928	118	5 440	21	62 827
Spain	108 475	48 745	3 269	8 194	7	48 259
France	315 147	151 724	11 637	39 591	7 153	105 042
Croatia	2 999	994	39	42	0	1 923
Italy	130 460	98 809	2 593	160	5 814	23 084
Cyprus	2 077	409	2	232	7	1 429
Latvia	1 573	808	153	0	1	612
Lithuania	4 221	999	106	0	1	3 115
Luxembourg	10 302	4 691	36	1 934	134	3 507
Hungary	12 964	4 637	960	436	90	6 842
Malta	1 351	116	0	46	6	1 183
Netherlands	119 962	61 796	8 997	0	1 612	47 556
Austria	32 122	14 272	3 305	2 795	75	11 675
Poland	160 697	80 941	3 567	35 103	328	40 757
Portugal	10 188	4 598	1 735	0	70	3 785
Romania	264 647	18 849	1 708	1 037	182	242 871
Slovenia	5 068	2 965	326	1 102	36	639
Slovakia	7 052	2 651	270	0	71	4 059
Finland	90 478	31 700	10 317	0	445	48 015
Sweden	151 225	18 732	6 712	774	43	124 964
United Kingdom	186 163	77 467	1 585	14 114	6 102	86 895
Iceland	521	344	14	3	0	160
Norway	10 103	4 303	4 271	143	86	1 300
FYR of Macedonia	9 023	68	19	0	41	8 896
Serbia	55 023	793	49	0	0	54 180
Turkey	983 046	307 467	440	0	44	675 095

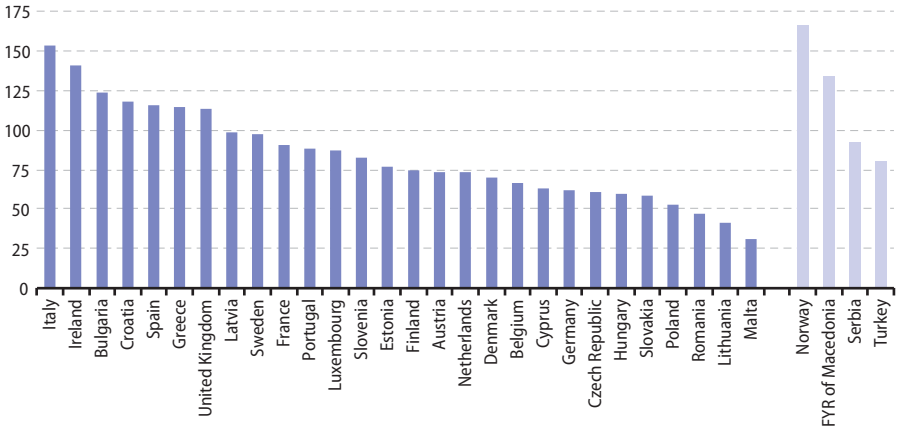
Source: Eurostat (online data code: env_wastrt)

11.6 Water

Water resources refer to the water available for use in a territory and include surface waters (i.e. coastal bays, lakes, rivers, and streams) and groundwater. Renewable water resources are calculated as the sum of internal flow (which is precipitation minus actual evapotranspiration) and external inflow. Freshwater availability in a country is determined by climate conditions, geomorphology, land uses 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 EU Member States with the highest amount of freshwater resources, with a long-term annual average between 164 300 and 188 000 million m^3.

In terms of water abstractions per inhabitant, EU Member States had annual rates of freshwater abstraction between 30 m^3 and 150 m^3. The extremes of freshwater abstraction reflect specific conditions: for example, in Ireland (141 m^3 per inhabitant) the use of water from the public supply was still free of charge in 2011; while in Bulgaria (124 m^3 per inhabitant) there are particularly high losses from the public network. Abstraction rates were also rather high in some non-EU Member States, notably Norway and the former Yugoslav Republic of Macedonia. At the other end of the scale, Lithuania and Malta reported low abstraction rates.

Figure 11.6: Total freshwater abstraction by public water supply, 2011 (1)
(m^3 per inhabitant)



(1) Ireland, 2007; Italy, Austria and the United Kingdom, 2008; Portugal, Belgium and FYR of Macedonia, 2009; Spain, Sweden, France, Netherlands, Denmark, Germany, Turkey and Latvia, 2010.
Source: Eurostat (online data code: env_wat_abs)

Table 11.6: Freshwater resources — long-term annual average ([1])
(1 000 million m^3)

	Precipitation	Evapo-transpiration	Internal flow	External inflow	Outflow	Freshwater resources
Belgium	28.9	16.6	12.3	7.6	15.6	19.9
Bulgaria	69.8	52.3	18.1	89.1	108.5	107.2
Czech Republic	54.7	39.4	15.2	0.7	16.0	16.0
Denmark	38.5	22.1	16.3	0.0	1.9	16.3
Germany	307.0	190.0	117.0	75.0	182.0	188.0
Estonia	29.0	:	:	:	:	:
Ireland	80.0	32.5	47.5	3.5	:	51.0
Greece	115.0	55.0	60.0	12.0	:	72.0
Spain	346.5	235.4	111.1	0.0	111.1	111.1
France	500.8	320.8	175.3	11.0	168.0	186.3
Croatia	65.7	40.1	23.0	:	:	:
Italy	241.1	155.8	167.0	8.0	155.0	175.0
Cyprus	3.0	2.7	0.3	-	0.1	0.3
Latvia	42.7	25.8	16.9	16.8	32.9	33.7
Lithuania	44.0	28.5	15.5	9.0	25.9	24.5
Luxembourg	2.0	1.1	0.9	0.7	1.6	1.6
Hungary	55.7	48.2	7.5	108.9	115.7	116.4
Malta	150.4	72.5	0.1	-	:	0.1
Netherlands	31.6	21.3	8.5	81.2	86.3	89.7
Austria	98.0	43.0	55.0	29.0	84.0	84.0
Poland	193.1	138.3	54.8	8.3	63.1	63.1
Portugal	82.2	43.6	38.6	35.0	34.0	73.6
Romania	154.0	114.6	39.4	2.9	17.9	42.3
Slovenia	31.7	13.2	18.6	13.5	32.3	32.1
Slovakia	37.4	24.3	13.1	67.3	81.7	80.3
Finland	222.0	115.0	107.0	3.2	110.0	110.0
Sweden	342.2	169.4	172.5	13.7	186.2	186.2
United Kingdom	275.0	117.2	157.9	6.4	164.3	164.3
Iceland	200.0	30.0	170.0	-	170.0	170.0
Norway	470.7	112.0	371.8	12.2	384.0	384.0
Switzerland	61.6	21.6	40.7	12.8	53.5	53.5
FYR of Macedonia	19.5	:	:	1.0	6.3	:
Serbia	56.1	43.3	12.8	162.6	175.4	175.4
Turkey	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)

11.7 Environmental economy — employment and growth

The environmental economy encompasses two broad groups of activities and / or products: all activities related to preventing, reducing and eliminating pollution and any other degradation of the environment ('environmental protection'); and preserving and maintaining the stock of natural resources and hence safeguarding against depletion ('resource management').

According to Eurostat estimates, employment in the EU-28's environmental economy rose from 2.9 million full-time equivalents in 2000 to 4.3 million full-time equivalents in 2012. The environmental economy in the EU-28 generated EUR 671 billion of output and EUR 271 billion of value added in 2012. With the exception of 2006, between 2000 and 2012 the environmental economy consistently outperformed the overall economy in terms of the growth of its employment and value added / gross domestic product (GDP).

The growing number of persons employed within the environmental economy since 2000 was mainly due to growth in the management of energy resources, especially those concerning the production of energy from renewable sources (such as wind and solar power) and the production of equipment and installations for heat and energy saving. Employment in this environmental domain increased from 475 thousand full-time equivalents in 2000 to 1.4 million full-time equivalents in 2012, in other words an increase of almost 1 million full-time equivalents. The second most important contribution to employment growth in the environmental economy came from the domain of waste management, with employment rising from 855 thousand full-time equivalents in 2000 to 1.1 million full-time equivalents in 2012.

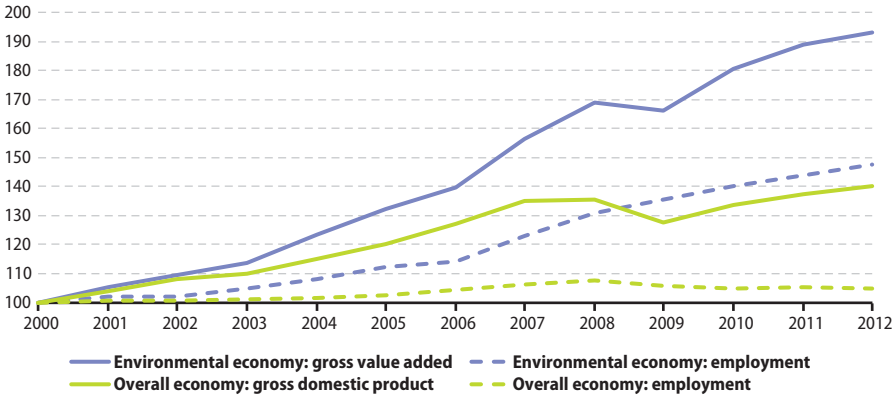
The development of the gross value added of the environmental economy increased from EUR 140 billion in 2000 to EUR 271 billion in 2012 in current price terms and the environmental economy's contribution to overall GDP increased from 1.5 % to 2.1 % during this period. Gross value added of the environmental economy rose steadily between 2000 and 2008 to reach EUR 238 billion. During the financial and economic crisis it decreased to EUR 233 billion in 2009, only to recover again in the following years.

Table 11.7: Gross value added of the environmental economy, by domain, EU-28, 2000–12 ([1])
(EUR billion)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total	140.4	148.1	153.8	159.6	173.5	185.6	195.9	219.9	237.5	233.4	253.3	265.2	271.3
Waste management	44.8	45.4	48.2	49.6	52.5	55.9	59.5	64.3	67.1	64.6	71.9	73.7	75.4
Wastewater management	34.8	35.0	35.5	36.3	37.9	39.0	34.9	41.2	42.4	40.7	41.0	41.6	41.9
Other environmental protection	28.4	32.0	30.8	31.1	33.4	34.4	36.7	39.9	41.3	40.8	42.8	44.7	45.3
Management of energy resources	24.8	28.0	31.4	34.6	41.7	47.5	55.5	64.9	76.7	77.7	88.4	95.5	98.8
Management of waters	7.6	7.6	7.9	8.0	8.1	8.7	9.3	9.6	10.1	9.6	9.3	9.7	9.9

([1]) Estimates.
Source: Eurostat (online data code: env_ac_egss2)

Figure 11.7: Development of key indicators for the environmental economy and the overall economy, EU-28, 2000–12
(2000 = 100)



(1) Estimates.
Source: Eurostat (online data codes: env_ac_egss1, env_ac_egss3, nama_10_pe and nama_gdp_c)

11.8 Environmental protection expenditure

Environmental protection expenditure can be analysed by the type of provider of environmental protection services. There are three main providers: the public sector, industry (mining and quarrying; manufacturing; and electricity, gas and water supply), and specialised producers of environmental services (such as waste collection); the latter can be private or public enterprises.

Specialised producers accounted for most environmental protection expenditure in the EU-28 in 2013, some EUR 145 billion, which was just over half (51.1 %) the total level of expenditure. The rest was split between expenditure by the public sector (EUR 87.2 billion) and that by industry (EUR 51.6 billion).

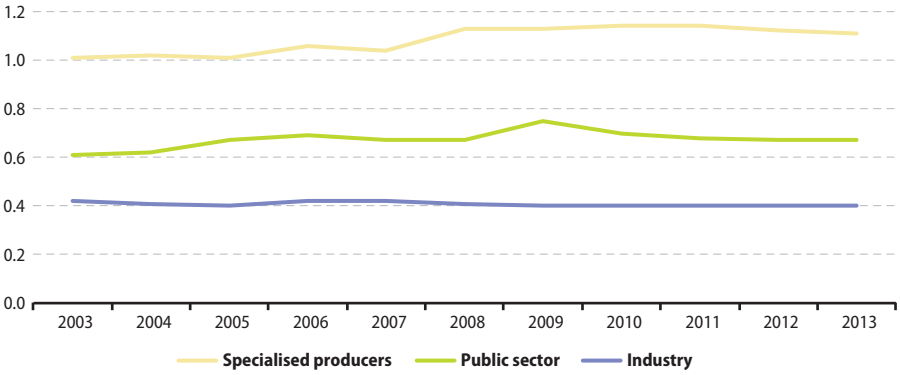
In most EU Member States, environmental protection expenditure by the public sector ranged in 2013 between 0.31 % and 1.06 % of GDP. Public sector expenditure was mostly concentrated in waste management and wastewater treatment. Spain was an exception as the public sector directed its expenditure towards other domains, like biodiversity and landscape protection, protection against radiation, research and development (R & D) and other environmental protection activities. Denmark and France were also exceptions as more than 80 % and 60 % of their expenditure by the public sector was reported in the miscellaneous category.

Table 11.8: Public sector environmental protection expenditure by environmental domain, 2013
(million EUR)

	Air	Wastewater	Waste	Other domains
EU-28	*3 793.7*	*14 133.5*	*35 888.6*	*33 368.3*
Belgium (1)	115.2	261.2	964.2	1 014.8
Bulgaria	1.1	147.3	241.4	35.5
Czech Republic	19.7	291.6	350.8	62.7
Denmark	242.9	0.0	52.0	1 302.8
Germany (2)	:	3 280.0	3 040.0	1 950.0
Estonia (3)	0.2	37.9	8.5	4.2
Ireland (4)	0.0	192.5	129.4	287.0
Greece (5)	0.7	215.8	429.5	214.7
Spain (1)	:	:	:	2 298.0
France (1)	503.1	1 760.6	2 068.8	7 732.8
Croatia	11.8	0.0	93.6	34.0
Italy (3)	:	732.4	7 312.3	5 815.4
Cyprus	– 1.4	30.1	9.3	46.5
Latvia (1)	39.9	9.4	94.6	19.4
Lithuania	30.2	22.0	75.9	67.1
Luxembourg	– 47.1	254.8	1.2	50.7
Hungary (1)	1.1	227.3	47.1	41.5
Malta (1)	0.0	27.4	51.1	16.9
Netherlands (3)	791.2	2 945.8	2 323.2	2 566.0
Austria (1)	221.5	230.1	466.3	440.6
Poland	39.1	917.3	261.1	661.5
Portugal	12.4	0.8	410.5	299.9
Romania	31.3	148.2	442.3	25.8
Slovenia (1)	10.4	126.2	37.2	73.0
Slovakia (6)	12.3	31.1	155.5	:
Finland (1)	:	503.1	144.7	583.4
Sweden	34.1	1.9	789.9	571.8
United Kingdom (1)	203.5	17.3	14 190.9	3 053.5
Iceland (7)	:	5.6	28.0	0.3
Norway (1)	234.9	1 210.7	701.9	922.7
Switzerland (8)	49.6	1 179.1	716.2	500.2
FYR of Macedonia	0.1	4.1	1.0	19.9
Serbia	0.6	1.1	6.0	15.8
Turkey (1)	7.7	351.1	1 616.6	649.8

(1) 2012.
(2) 2010.
(3) 2011.
(4) 1998.
(5) 1999.
(6) Other domains: confidential.
(7) 2002.
(8) 2003.
Source: Eurostat (online data code: env_ac_exp1r2)

Figure 11.8: Total environmental protection expenditure, EU-28, 2003–13 ([1])
(% of GDP)



([1]) Estimates.
Source: Eurostat (online data codes: env_ac_exp1r2 and env_ac_exp2)

11.9 Environmental taxes

According to Regulation (EU) N° 691/2011 on environmental economic accounts, an environmental tax is a tax whose tax base is a physical unit (or a proxy of it) of something that has a proven, specific negative impact on the environment and which is defined in the European system of accounts (ESA 2010) as a tax. European statistics distinguish four different categories of environmental taxes relating to energy, transport, pollution and resources; value added tax (VAT) is excluded from the scope of environmental taxes.

The total revenue from environmental taxes in the EU-28 in 2013 was EUR 331 billion; this figure equates to 2.5 % of GDP and to 6.3 % of the total revenues derived from all taxes and social contributions.

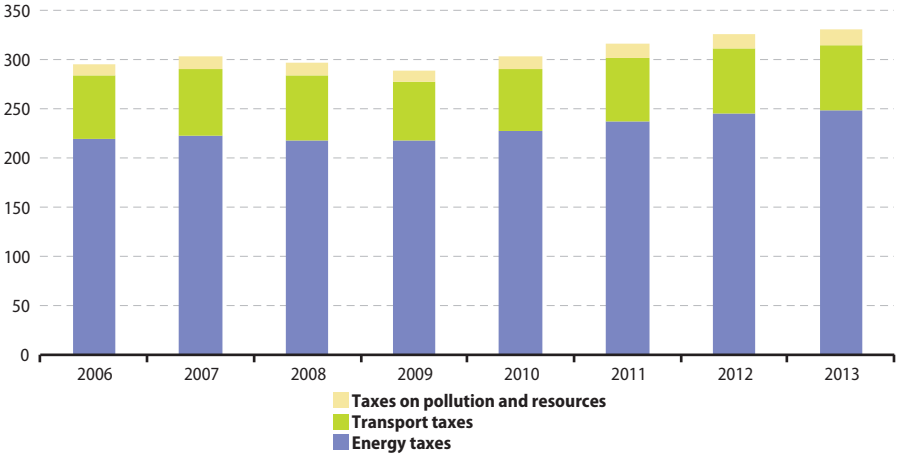
Energy taxes (which include taxes on transport fuels) represented by far the highest share of overall environmental tax revenue, accounting for 75.0 % of the EU-28 total in 2013. These taxes were particularly prominent in Lithuania, Luxembourg and the Czech Republic, where they accounted for more than nine tenths of total environmental tax revenues. By contrast, energy taxes slightly exceeded 50 % of the revenues from environmental taxes in Malta and Norway.

Transport taxes represented the second most important contribution to total environmental tax revenues, with 20.1 % of the EU-28 total in 2013. Their relative significance was considerably higher in Norway (44.6 % of all revenues from environmental taxes) and Malta (43.6 %); the smallest shares of transport taxes in total revenues from environmental taxes (less than 3.0 %) were in Lithuania and in Estonia.

Pollution and resource taxes represented a relatively small share (4.9 %) of total

environmental tax revenues in the EU-28 in 2013. This category of taxes was implemented more recently in most European countries. However, a much higher share for pollution and resource taxes was observed in Croatia (18.5 %), in Slovakia (15.3 %) and in the Netherlands (13.0 %). In contrast, in some EU Member States no taxes of this category have been levied. This can be due to specificities in the management of water and waste charges which may be collected by schemes other than taxes.

Figure 11.9: Total environmental tax revenue by type of tax, EU-28, 2006–13 (1) (billion EUR)



(1) Provisional.
Source: Eurostat (online data code: env_ac_tax)

Table 11.9: Environmental taxes by tax category, 2013 ([1])
(% of total environmental taxes)

	Energy taxes	Transport taxes	Taxes on pollution and resources
EU-28	75.0	20.1	4.9
Belgium	58.5	35.1	6.4
Bulgaria	87.6	9.6	2.7
Czech Republic	92.7	6.7	0.6
Denmark	58.4	35.4	6.1
Germany	81.3	16.4	2.3
Estonia	86.7	2.3	11.1
Ireland	60.1	38.3	1.6
Greece	67.8	21.6	10.6
Spain	76.2	13.8	9.9
France	79.0	14.0	7.0
Croatia	58.6	22.8	18.5
Italy	81.4	17.8	0.8
Latvia	77.9	18.4	3.6
Lithuania	93.9	2.7	3.3
Luxembourg	92.2	6.9	0.9
Malta	51.1	43.6	5.3
Netherlands	58.5	28.5	13.0
Austria	65.1	34.0	0.9
Poland	87.6	8.1	4.3
Romania	86.2	13.5	0.4
Slovenia	77.0	11.7	11.3
Slovakia	74.3	10.4	15.3
Finland	66.6	31.3	2.1
Sweden	80.3	18.5	1.2
United Kingdom	72.0	24.5	3.5
Norway	50.7	44.6	4.7

([1]) Provisional. Cyprus, Hungary and Portugal: not available.
Source: Eurostat (online data code: env_ac_tax)

12

Energy

Introduction

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 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 EU is dependent on imports for more than half of its energy needs and there is a strong concentration in the origin of imports, particularly for some of the EU Member States. This dependency results in vulnerabilities to supply disruptions and / or infrastructure failure. In response to these concerns, in May 2014 the European Commission released its Energy Security Strategy (COM(2014) 330) which aims to ensure a stable and abundant supply of energy.

In February 2015 the European Commission set out its plans for a framework strategy for a resilient energy union with a forward-looking climate change policy in a Communication (COM(2015) 80). The Communication proposes five dimensions for the strategy: energy security, solidarity and trust; a fully integrated European energy market; energy efficiency contributing to moderation of demand; decarbonising the economy, and research, innovation and competitiveness.

12.1 Energy production and imports

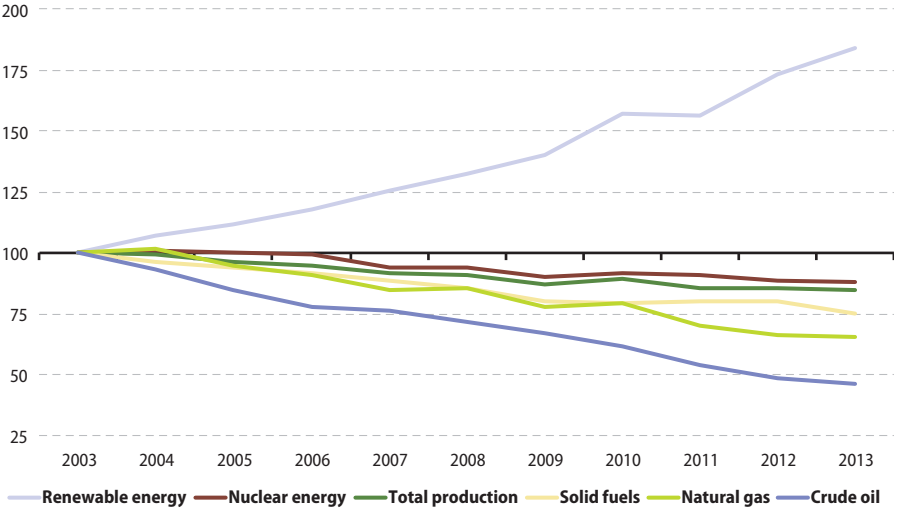
Production of primary energy in the EU-28 totalled 790 million tonnes of oil equivalent (toe) in 2013. This continued the generally downward development observed in recent years, with 2010 the main exception as production rebounded after a relatively strong fall in 2009 that coincided with the financial and economic crisis. When viewed over a longer period, the production of primary energy in the EU-28 was 15.4 % lower in 2013 than it had been a decade earlier.

Primary energy production in the EU-28 in 2013 was spread across a range of different energy sources, the most important of which in terms of the size of its contribution was nuclear energy (28.7 % of the total). Close to one quarter of the EU-28's total production of primary energy was accounted for by renewable energy sources (24.3 %), while the share for solid fuels (19.7 %, largely coal) was just below one fifth and the share for natural gas was somewhat lower (16.7 %). Crude oil (9.1 %) was the only other major source of

primary energy production. The growth of primary production from renewable energy sources exceeded that of all the other energy types; this growth was relatively constant most years from 2003 to 2013, with a slight dip in 2011. Over this 10-year period the production of renewables increased in total by 88.4 %. By contrast, the production levels for the other primary sources of energy generally fell over this period.

The EU-28's imports of primary energy exceeded exports by some 909 million toe in 2013. The largest net importers of primary energy were generally the most populous EU Member States, with the exception of Poland (where indigenous reserves of coal remain). Since 2004, Denmark had been the only net exporter of primary energy among the EU Member States, but in 2013 Danish energy imports exceeded exports such that there were no longer any EU Member States that were net exporters of energy. Relative to population size, the largest net importers in 2013 were Luxembourg, Malta and Belgium.

Figure 12.1: Development of the production of primary energy (by fuel type), EU-28, 2003–13
(2003 = 100, based on tonnes of oil equivalent)



Source: Eurostat (online data code: nrg_100a)

Table 12.1: Energy production, 2003 and 2013
(million tonnes of oil equivalent)

	Total production of primary energy	Share of total production, 2013 (%)				
		Nuclear energy	Solid fuels	Natural gas	Crude oil	Renewable energy
EU-28	789.8	28.7	19.7	16.7	9.1	24.3
Belgium	14.6	75.2	0.0	0.0	0.0	20.0
Bulgaria	10.5	34.8	45.4	2.1	0.3	17.3
Czech Republic	29.9	26.6	59.0	0.7	0.9	12.2
Denmark	16.6	0.0	0.0	25.8	52.3	19.5
Germany	120.6	20.8	37.4	7.4	3.1	27.9
Estonia	5.7	0.0	78.3	0.0	0.0	19.9
Ireland	2.3	0.0	56.9	6.8	0.0	33.7
Greece	9.3	0.0	72.3	0.1	0.8	26.7
Spain	34.3	42.6	5.1	0.1	1.1	50.6
France	135.1	80.9	0.0	0.2	0.9	17.1
Croatia	3.6	0.0	0.0	41.6	16.8	41.4
Italy	36.9	0.0	0.1	17.2	15.9	63.7
Cyprus	0.1	0.0	0.0	0	0.0	100.0
Latvia	2.1	0.0	0.1	0.0	0.0	99.7
Lithuania	1.4	0.0	1.7	0.0	6.2	91.1
Luxembourg	0.1	0.0	0.0	0.0	0.0	76.4
Hungary	10.1	39.3	15.9	15.3	8.5	20.5
Malta	0.0	0.0	0.0	0.0	0.0	100.0
Netherlands	69.7	1.1	0.0	88.7	3.1	6.2
Austria	12.1	0.0	0.0	9.3	7.2	78.2
Poland	70.6	0.0	80.5	5.4	1.4	12.1
Portugal	5.8	0.0	0.0	0.0	0.0	97.5
Romania	26.1	11.5	17.8	32.9	16.3	21.3
Slovenia	3.6	38.5	30.3	0.1	0.0	30.2
Slovakia	6.4	64.1	9.1	1.6	0.2	22.9
Finland	18.0	33.8	9.4	0.0	0.4	55.2
Sweden	34.7	49.4	0.5	0.0	0.0	48.4
United Kingdom	109.5	16.6	6.7	30.0	38.3	7.7
Norway	193.9	0.0	0.6	49.3	43.5	6.4
Montenegro	0.8	0.0	48.9	0.0	0.0	51.1
FYR of Macedonia	1.4	0.0	77.9	0.0	0.0	22.1
Albania	2.0	0.0	0.0	0.7	57.9	41.4
Serbia	11.3	0.0	67.8	3.7	10.9	17.6
Turkey	32.3	0.0	48.5	1.4	7.7	42.4

Source: Eurostat (online data code: nrg_100a)

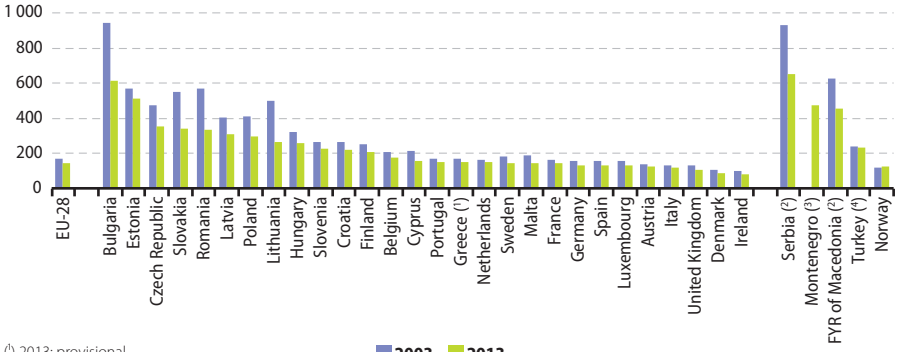
12.2 Consumption of energy

Gross inland consumption of energy within the EU-28 in 2013 was 1 666 million tonnes of oil equivalent (toe). Having remained relatively unchanged during the period from 2003 to 2008, gross inland consumption of energy decreased by 5.7 % 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 energy in the EU-28 although this was followed by a similarly large (3.6 %) fall in 2011. After these three years of relatively large changes, 2012 and 2013 saw more modest rates of change as consumption fell by 0.7 % and 1.2 %.

The gross inland consumption of each EU 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.

Energy intensity is a measure of an economy's energy efficiency. The least intensive economies in the EU in 2013 were Ireland, Denmark, the United Kingdom and Italy, which used the least amount of energy relative to their overall economic size (based on GDP). The most energy-intensive EU 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 intensities, while economies with heavy 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: Energy intensity of the economy, 2003 and 2013
(kg of oil equivalent per thousand EUR of GDP)



(1) 2013: provisional.
(2) 2013: estimate.
(3) 2012 instead of 2013. 2003: not available.
(4) 2010 instead of 2013.
Source: Eurostat (online data code: tsdec360)

Table 12.2: Gross inland consumption of energy, 1990–2013
(million tonnes of oil equivalent)

	1990	2000	2010	2011	2012	2013	Share in EU-28, 2013 (%)
EU-28	1 667.3	1 726.8	1 760.6	1 698.1	1 686.1	1 666.3	100.0
Belgium	48.7	59.3	61.3	57.8	54.8	56.7	3.4
Bulgaria	27.6	18.5	17.8	19.1	18.2	16.8	1.0
Czech Republic	49.9	41.1	44.7	43.0	42.8	42.2	2.5
Denmark	17.9	19.7	20.0	18.6	18.0	18.1	1.1
Germany	356.3	342.3	333.0	316.7	318.6	324.3	19.5
Estonia	9.9	5.0	6.2	6.2	6.1	6.7	0.4
Ireland	10.3	14.4	15.2	13.9	13.8	13.7	0.8
Greece	22.3	28.3	28.7	27.8	27.7	24.4	1.5
Spain	90.1	123.6	130.0	128.3	127.8	118.8	7.1
France	227.8	257.5	267.6	258.0	258.3	259.3	15.6
Croatia	9.0	7.8	8.6	8.5	8.1	7.8	0.5
Italy	153.5	174.2	174.8	172.0	166.3	160.0	9.6
Cyprus	1.6	2.4	2.7	2.7	2.5	2.2	0.1
Latvia	7.9	3.9	4.6	4.4	4.5	4.5	0.3
Lithuania	15.9	7.1	6.8	7.0	7.1	6.7	0.4
Luxembourg	3.5	3.7	4.6	4.6	4.5	4.3	0.3
Hungary	28.8	25.3	25.8	25.1	23.6	22.7	1.4
Malta	0.6	0.8	0.9	0.9	1.0	0.8	0.1
Netherlands	66.7	75.6	86.6	80.2	81.8	81.2	4.9
Austria	25.0	29.0	34.6	33.6	33.7	33.8	2.0
Poland	103.3	88.6	100.7	101.0	97.8	98.2	5.9
Portugal	18.2	25.3	24.3	23.6	22.5	22.6	1.4
Romania	58.1	36.6	35.8	36.6	35.4	32.3	1.9
Slovenia	5.7	6.5	7.2	7.3	7.0	6.9	0.4
Slovakia	21.8	18.3	17.9	17.4	16.7	17.3	1.0
Finland	28.7	32.5	37.1	35.8	34.7	33.9	2.0
Sweden	47.4	48.9	50.8	49.7	49.8	49.1	2.9
United Kingdom	210.6	230.6	212.2	198.1	203.0	201.1	12.1
Norway	21.4	26.4	34.4	28.4	30.1	33.7	–
Montenegro	0.0	0.0	1.2	1.1	1.1	1.0	–
FYR of Macedonia	2.4	2.7	2.8	3.1	3.0	2.7	–
Albania	2.6	1.8	2.1	2.3	2.1	2.6	–
Serbia	19.6	13.7	15.6	16.2	14.5	15.0	–
Turkey	52.3	76.7	106.9	113.9	119.8	118.8	–

Source: Eurostat (online data code: nrg_100a)

12.3 Electricity production, consumption and market overview

Total net electricity generation in the EU-28 was 3.10 million gigawatt hours (GWh) in 2013 — which was slightly less (– 0.9 %) than the year before. This was the third consecutive fall in output, following on from a 0.1 % fall in 2012 and a reduction of 2.2 % in 2011. As such, the level of net electricity generation in 2012 remained 3.6 % below its peak level of 2008 (3.22 million GWh). The pattern observed for the EU-28 of falling electricity generation in 2011, 2012 and 2013 was reproduced in only four EU Member States, namely Cyprus, Hungary, the Netherlands and the United Kingdom. By contrast, Slovakia was the only EU Member State to report growth in all three of these years.

More than one quarter of the net electricity generated in the EU-28 in 2013 came from nuclear power plants (26.8 %), while almost double this share (49.8 %) came from power stations using combustible fuels (such as natural gas, coal and oil). Among the renewable energy sources, the highest share of net electricity generation in 2013 was from hydropower plants (12.8 %), followed by wind turbines (7.5 %) and solar power (2.7 %).

One measure that is used to monitor the extent of electricity market liberalisation is the market share of the largest generator in each country. Cyprus and Malta were both characterised by a complete monopoly in 2013, with 100 % of their electricity being generated by the largest (sole) generator. Five other EU Member States — Estonia, Croatia, France, Slovakia and Latvia — reported shares of at least 80 %. In 11 EU Member States the largest generator provided less than 50 % of the total electricity generated, with the lowest share (17 %) being recorded in Poland.

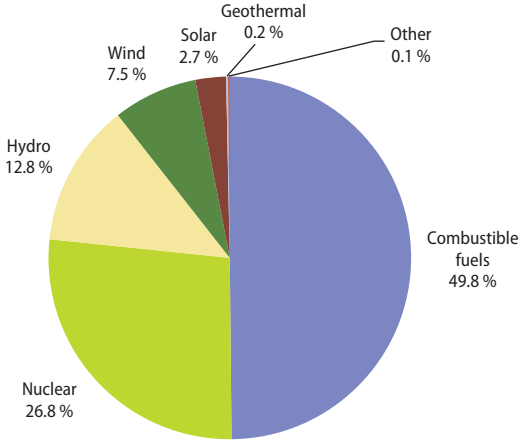
During the 10-year period from 2003 to 2013, the consumption of electricity by households rose in the EU-28 by 5.1 %. There was much faster growth in a number of EU Member States, in particular Romania, Lithuania, Spain and Latvia where growth was at least 25.0 %. At the other end of the range, household electricity consumption fell in seven EU Member States, generally by less than 10.0 %, but in Belgium the reduction in electricity consumption by households was almost one quarter (23.9 %).

Table 12.3: Electricity, 2000-13

	Net electricity generation (1 000 GWh)					Market share of the largest generator in the electricity market (% of total generation)	Electricity consumption by households (2003 = 100)
	2000	2010	2011	2012	2013	2013	2013
EU-28	2 872.9	3 199.3	3 130.2	3 128.1	3 101.3	:	105.1
Belgium	80.3	91.4	86.7	79.9	80.2	67.0	76.1
Bulgaria	36.9	42.2	45.8	42.9	39.8	:	113.2
Czech Republic	68.0	79.5	81.0	81.1	80.9	58.2	101.4
Denmark	34.4	36.9	33.5	29.2	33.1	41.0	100.4
Germany	538.5	594.8	576.9	592.7	596.7	32.0	97.8
Estonia	7.6	11.7	11.7	10.5	11.8	87.0	117.0
Ireland	22.7	27.4	26.4	26.5	25.1	54.0	114.1
Greece	49.9	53.4	53.9	53.7	52.6	70.0	106.1
Spain	214.4	291.0	283.3	286.6	274.5	24.5	133.7
France	516.1	544.3	536.5	541.3	548.7	83.8	118.6
Croatia	10.3	13.6	10.4	10.2	13.0	84.0	109.4
Italy	263.3	290.7	291.4	287.8	278.8	27.0	103.0
Cyprus	3.2	5.1	4.7	4.5	4.1	100.0	111.1
Latvia	3.7	6.1	5.6	5.7	5.8	79.8	125.5
Lithuania	10.0	5.3	4.4	4.7	4.5	24.4	135.1
Luxembourg	1.1	4.6	3.7	3.8	2.9	70.4	106.6
Hungary	32.3	34.6	33.5	32.3	28.0	51.9	95.6
Malta	1.8	2.0	2.1	2.2	2.1	100.0	96.7
Netherlands	86.0	114.3	109.0	98.6	96.8	:	107.7
Austria	59.1	69.3	63.8	70.5	65.9	55.5	102.4
Poland	132.2	143.5	148.9	147.6	150.0	17.3	114.4
Portugal	42.2	52.8	51.1	45.3	50.4	45.8	104.0
Romania	48.6	55.9	56.5	53.7	54.1	26.8	144.3
Slovenia	12.8	15.4	15.0	14.7	15.1	57.1	107.3
Slovakia	27.7	25.4	26.1	26.1	27.2	83.8	97.8
Finland	67.3	77.2	70.4	67.7	68.3	25.3	105.4
Sweden	141.6	145.3	146.9	162.8	149.5	44.8	91.0
United Kingdom	360.8	365.6	350.8	345.5	341.3	29.3	92.2
Norway	142.3	123.1	127.1	147.2	133.6	31.2	115.7
Montenegro	0.0	3.9	2.5	2.7	3.8	100.0	:
FYR of Macedonia	6.3	6.8	6.3	5.8	5.7	90.0	105.7
Albania	4.7	7.6	4.2	4.7	7.0	:	186.1
Serbia	31.3	35.7	35.8	34.2	37.2	53.5	86.8
Turkey	118.7	203.0	217.6	227.7	229.0	:	178.5

Source: Eurostat (online data codes: nrg_105a, ten00119 and tsdpc310)

Figure 12.3: Net electricity generation, EU-28, 2013 ([1])
(% of total, based on GWh)



([1]) Figures do not sum to 100 % due to rounding.
Source: Eurostat (online data code: nrg_105a)

12.4 Renewable energy

The primary production of renewable energy within the EU-28 in 2013 was 192 million tonnes of oil equivalent (toe) — a 24.3 % share of total primary energy production from all sources. The quantity of renewable energy produced within the EU-28 increased overall by 84.4 % between 2003 and 2013, equivalent to an average increase of 6.3 % per year.

Renewable energy sources accounted for an 11.8 % share of the EU-28's gross inland energy consumption in 2013. The relative importance of renewables in gross inland consumption was relatively high in Portugal (23.5 %), Denmark (24.2 %), Finland (29.2 %) and Austria (29.6 %) and exceeded 30 % of the energy consumed in Sweden (34.8 %) and Latvia (36.1 %), as was the case in Albania (31.0 %), Montenegro (36.9 %) and Norway (37.4 %).

The latest information available for 2013 shows that electricity generated from renewable energy sources contributed more than one quarter (25.4 %) of the EU-28's gross electricity consumption. The growth in electricity generated from renewable energy sources during the period 2003 to 2013 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 2013 (45.5 % of the total), the amount of electricity generated in this way in 2013 was relatively similar to that recorded a decade earlier,

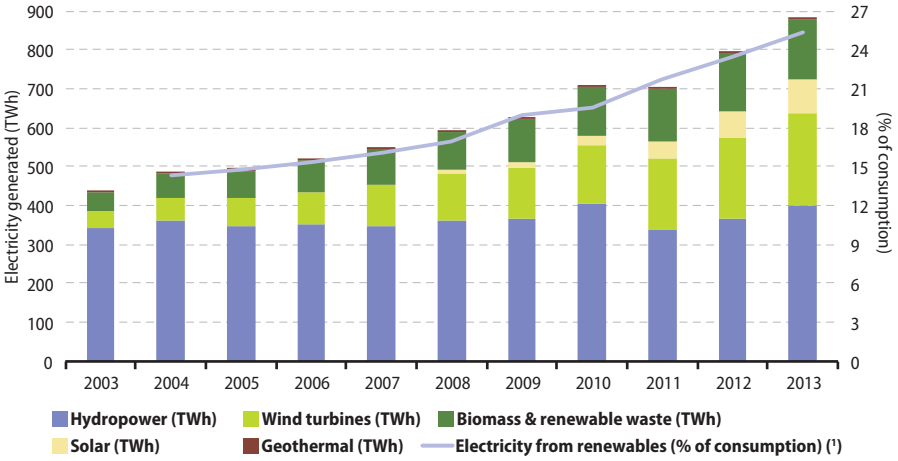
rising by just 17.9 % overall. By contrast, the quantity of electricity generated from biomass (including renewable waste) more than trebled, while that from wind turbines increased more than fivefold between 2003 and 2013. Over this 10-year period, the contribution of solar power to all electricity generated from renewable energy sources rose from 0.1 % to 9.6 %.

Table 12.4: Primary production and share of renewables in gross inland energy consumption, 2003 and 2013

	Primary production		Renewable energy total	Biomass & renewable wastes	Hydro-power	Geother-mal	Wind	Solar
	2003	2013	2013					
	(1 000 toe)		(%)					
EU-28	104 094	191 961	11.8	7.7	1.9	0.4	1.2	0.6
Belgium	708	2 929	6.2	5.1	0.1	0.0	0.6	0.4
Bulgaria	952	1 826	10.8	7.0	2.1	0.2	0.7	0.8
Czech Republic	1 663	3 640	8.5	7.4	0.6	0.0	0.1	0.4
Denmark	2 252	3 240	24.2	18.5	0.0	0.0	5.3	0.4
Germany	12 614	33 680	10.3	7.3	0.6	0.0	1.4	1.0
Estonia	667	1 122	12.7	12.0	0.0	0.0	0.7	0.0
Ireland	235	766	6.2	2.9	0.4	0.0	2.8	0.1
Greece	1 538	2 487	10.7	4.9	2.2	0.0	1.5	2.1
Spain	9 196	17 377	14.7	5.8	2.7	0.0	3.9	2.3
France	15 521	23 073	9.0	5.8	2.3	0.1	0.5	0.2
Croatia	800	1 499	16.2	6.6	8.8	0.1	0.6	0.1
Italy	9 999	23 500	16.5	8.4	2.8	3.1	0.8	1.3
Cyprus	48	109	6.1	2.0	0.0	0.1	0.9	3.2
Latvia	1 728	2 137	36.1	30.2	5.6	0.0	0.2	0.0
Lithuania	794	1 288	18.1	16.6	0.7	0.0	0.8	0.1
Luxembourg	41	107	3.6	3.0	0.2	0.0	0.2	0.2
Hungary	906	2 074	8.3	7.4	0.1	0.5	0.3	0.0
Malta	0	10	1.5	0.7	0.0	0.0	0.0	0.8
Netherlands	1 625	4 294	4.2	3.4	0.0	0.0	0.6	0.1
Austria	6 130	9 466	29.6	17.3	10.7	0.1	0.8	0.7
Poland	4 150	8 512	8.7	7.9	0.2	0.0	0.5	0.0
Portugal	4 241	5 621	23.5	12.4	5.2	0.8	4.6	0.5
Romania	4 002	5 561	17.2	11.8	4.0	0.1	1.2	0.1
Slovenia	714	1 071	16.5	9.7	5.8	0.6	0.0	0.4
Slovakia	651	1 467	8.2	5.4	2.4	0.0	0.0	0.3
Finland	7 887	9 934	29.2	25.8	3.3	0.0	0.2	0.0
Sweden	12 389	16 770	34.8	22.3	10.7	0.0	1.7	0.0
United Kingdom	2 642	8 404	5.0	3.4	0.2	0.0	1.2	0.2
Norway	10 277	12 458	37.4	4.1	32.8	0.0	0.5	0.0
Montenegro	0	389	36.9	16.1	20.8	0.0	0.0	0.0
FYR of Macedonia	313	304	10.7	5.4	5.0	0.3	0.0	0.0
Albania	620	812	31.0	7.7	22.8	0.0	0.0	0.5
Serbia	1 750	1 989	12.8	6.9	5.9	0.0	0.0	0.0
Turkey	10 021	13 718	11.8	4.1	4.3	2.2	0.5	0.7

Source: Eurostat (online data codes: ten00081, nrg_107a and nrg_100a)

Figure 12.4: Electricity generated from renewable energy sources, EU-28, 2003–13



(1) 2003: not available.
Source: Eurostat (online data codes: nrg_105a and tsdcc330)

12.5 Energy prices

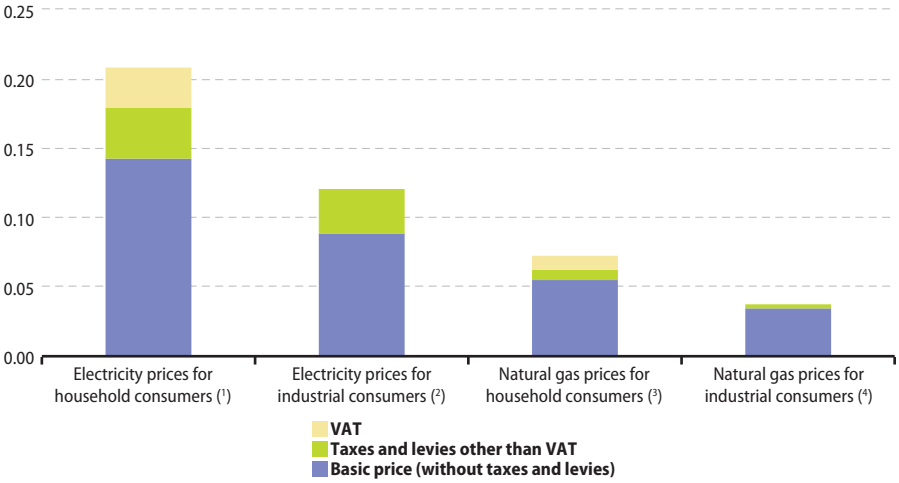
Electricity prices for a medium-sized household were highest during the second half of 2014 in Denmark, Germany and Ireland. By far the lowest electricity prices for household consumers were found in Bulgaria, with the next lowest prices reported for Hungary. The average price of electricity for household consumers in the EU-28 (the prices for each EU Member State are weighted according to their consumption by the household sector) was EUR 0.208 per kWh in the second half of 2014. The price of electricity for household consumers in Denmark (EUR 0.304 per kWh) was 3.4 times as high as in Bulgaria (EUR 0.090 per kWh).

EU-28 electricity prices for industrial consumers during the second half of 2014 averaged EUR 0.120 per kWh. The price of electricity for this category of consumers was highest in Cyprus, Malta and Italy, while relatively low prices were recorded for Finland and Sweden (which had the lowest price level, EUR 0.067 per kWh).

In the second half of 2014, the price of natural gas to a medium-sized household within the EU-28 was EUR 0.072 per kWh. Natural gas prices were highest in Sweden (EUR 0.114 per kWh) and Portugal (EUR 0.104 per kWh). By far the lowest natural gas prices for households were found in Romania (EUR 0.032 per kWh) and Hungary (EUR 0.035 per kWh), while Poland, the Baltic EU Member States, Croatia and Bulgaria also reported prices that were no higher than EUR 0.050 per kWh. The price of natural gas for households in the most expensive country — Sweden — was 3.6 times as high as the price charged in the cheapest country — Romania.

Across the EU-28, the price of natural gas for a medium-sized industrial consumer averaged EUR 0.037 per kWh in the second half of 2014. Natural gas prices during the second half of 2014 were highest in Finland, Portugal and Greece. However, the difference in prices across the EU Member States was far less than that observed for household consumers. The lowest natural gas price for industrial consumers among the EU Member States was recorded in Belgium.

Figure 12.5: Half-yearly electricity and gas prices, EU-28, second half of 2014
(EUR per kWh)



(1) Annual consumption: 2 500 kWh < consumption < 5 000 kWh.
(2) Annual consumption: 500 MWh < consumption < 2 000 MWh. Excluding VAT.
(3) Annual consumption: 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)

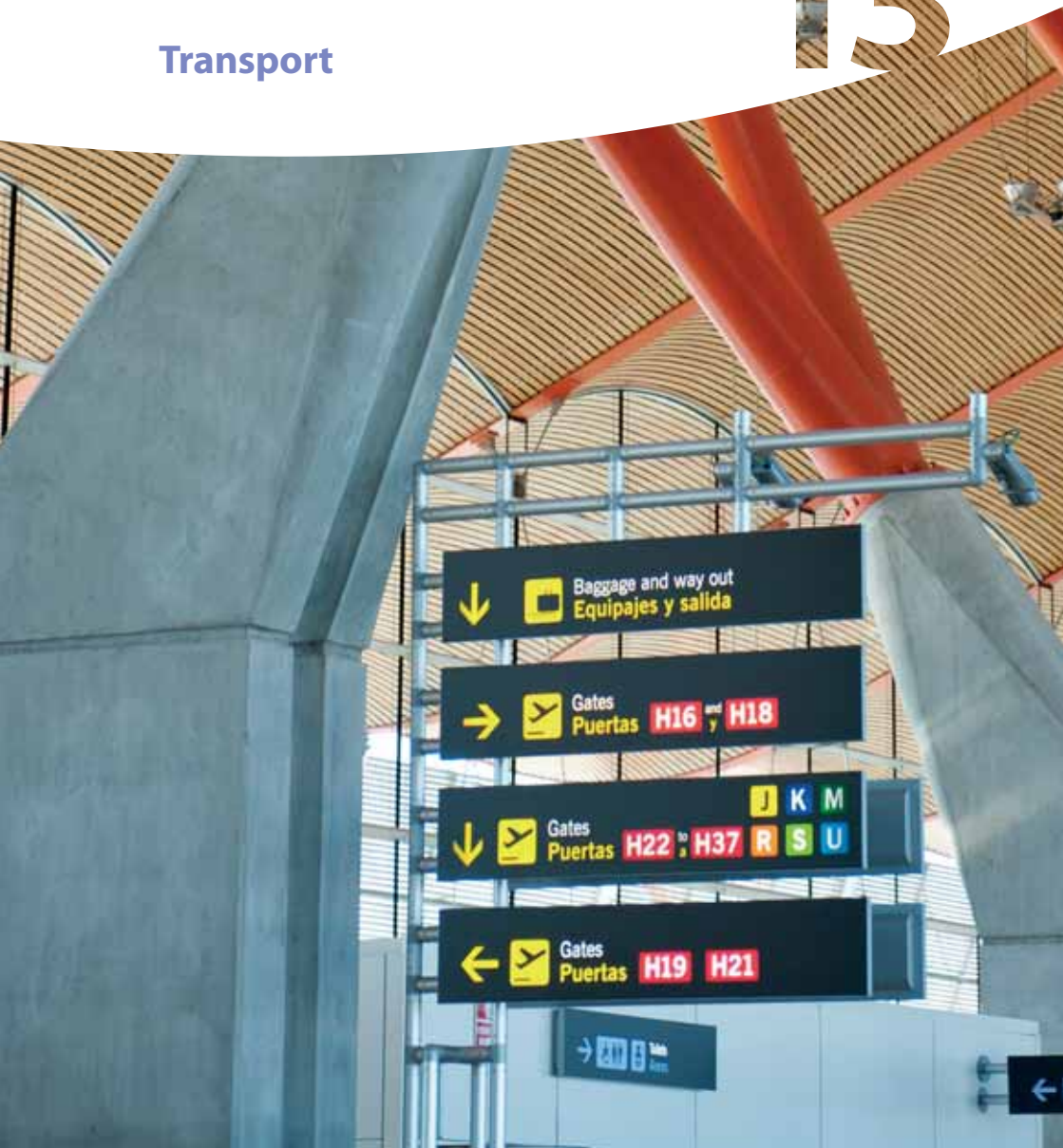
Table 12.5: Half-yearly electricity and gas prices, second half of year, 2014
(EUR per kWh)

	Electricity prices		Gas prices	
	Households (1)	Industry (2)	Households (3)	Industry (4)
EU-28	0.208	0.120	0.072	0.037
EA-18	0.221	0.128	0.079	0.038
Belgium	0.204	0.109	0.065	0.029
Bulgaria	0.090	*0.084*	0.047	0.034
Czech Republic	0.127	0.082	0.056	0.030
Denmark	0.304	0.088	0.088	0.036
Germany	0.297	0.152	0.068	0.040
Estonia	0.133	0.093	0.049	0.037
Ireland	0.254	0.131	0.075	0.042
Greece	0.179	0.130	0.080	0.047
Spain	0.237	0.117	0.096	0.037
France	0.175	0.091	0.076	0.038
Croatia	0.132	0.092	0.048	0.040
Italy	0.234	0.174	0.095	0.035
Cyprus	0.236	0.190	–	–
Latvia	0.130	0.118	0.049	0.036
Lithuania	0.132	0.117	0.050	0.037
Luxembourg	0.174	0.099	0.051	0.039
Hungary	0.115	0.090	0.035	0.039
Malta	0.125	0.186	–	–
Netherlands	0.173	0.089	0.082	0.033
Austria	0.199	0.106	0.073	0.040
Poland	0.141	0.083	0.050	0.036
Portugal	0.223	0.119	0.104	0.047
Romania	0.125	0.081	0.032	0.031
Slovenia	0.163	0.085	0.063	0.044
Slovakia	0.152	0.117	0.052	0.038
Finland	0.154	0.072	:	0.056
Sweden	0.187	0.067	0.114	0.044
United Kingdom	0.201	0.134	0.065	0.035
Iceland	0.116	:	–	–
Liechtenstein	0.155	0.140	0.086	0.056
Norway	0.166	0.081	:	:
Montenegro	0.099	0.075	–	–
FYR of Macedonia	0.082	0.078	:	0.042
Albania	0.116	:	–	–
Serbia	0.060	0.067	0.045	0.038
Turkey	0.131	0.081	0.037	0.027
Bosnia and Herzegovina	0.081	0.062	0.051	0.053
Kosovo	*0.059*	*0.079*	–	–

(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)

13

Transport



Introduction

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 strategy contains 40 specific initiatives to build a competitive transport system that aims to increase mobility, remove major barriers, and stimulate growth and employment.

In October 2012, the European Commission proposed a second set of actions to further develop the single market within the EU: the Single Market Act II, titled 'Together for new growth' (COM(2012) 573 final). This focused on the role of networks as the backbone of the EU economy and promoted, among others, the benefits that may be derived from single transport, energy and digital markets, highlighting measures most likely to foster growth and employment by helping people, goods, services and capital to move more easily throughout the EU.

Eurostat's 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 EU Member States to report statistical data, as well as voluntary agreements to supply additional data.

13.1 Passenger transport

Passenger cars accounted for 83.3 % of inland passenger transport in the EU-28 in 2012, with motor coaches, buses and trolley buses (9.2 %) and trains (7.4 %) 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-28 in terms of passenger numbers in 2013 (72.3 million), followed — at some distance — by Paris' Charles de Gaulle airport (61.9 million), Frankfurt airport (57.9 million) and Amsterdam's Schiphol airport (52.5 million). The overwhelming majority (at least 89 %) of passengers through the four largest airports in the EU were on international flights. By contrast, national (domestic) flights accounted for 30.1 % of the 39.7 million passengers carried through the EU's fifth busiest passenger airport in 2013, namely Madrid Barajas. There were also relatively high proportions of passengers on national flights to and from Paris Orly (50.2 %), Roma Fiumicino (30.2 %) and Barcelona airport (28.9 %).

Ports in the EU-28 handled almost 400 million maritime passengers in 2012, which was a reduction of 3.6 % compared with 2011. Indeed, from its pre-financial and economic crisis high of 439 million passengers in 2008, the number of maritime passengers carried in the EU-28 fell for four consecutive years, with passenger numbers down overall by 9.4 % between 2008 and 2012. Italian and Greek ports each handled roughly twice as many maritime passengers in 2012 as in any other EU Member

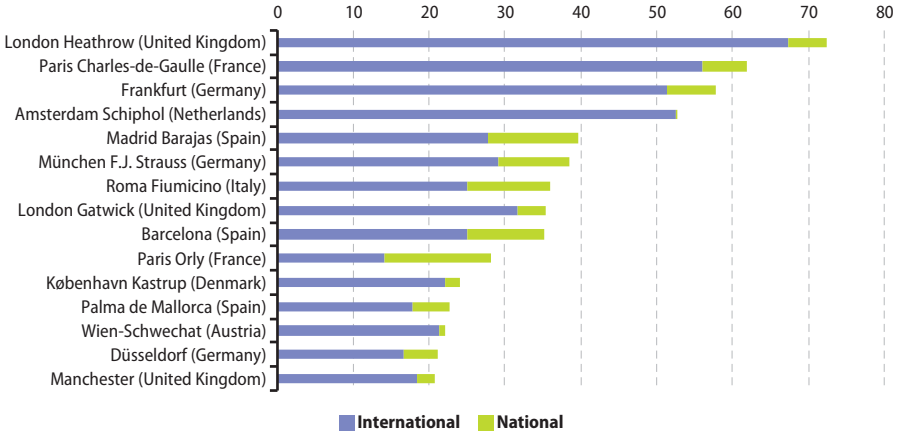
State, there 76.7 million and 72.8 million passengers accounting for 19.3 % and 18.3 % of the EU-28 total respectively. Relative to national population, the importance of maritime passenger transport was particularly high in Malta (20.8 passengers per inhabitant in 2013), followed by Estonia (9.8), Denmark (7.3), Greece (6.6, data are for 2012) and Croatia (6.4).

Table 13.1: Modal split of inland passenger transport, 2002 and 2012 (1)
(% of total inland passenger-km)

	2002			2012		
	Passenger cars	Motor coaches, buses and trolley buses	Trains	Passenger cars	Motor coaches, buses and trolley buses	Trains
EU-28	83.6	9.6	6.8	83.3	9.2	7.4
Belgium (2)	82.3	11.4	6.3	80.4	12.4	7.1
Bulgaria	*61.2*	33.4	5.4	*80.1*	16.9	3.0
Czech Republic (2)	73.8	18.7	7.5	*74.8*	16.8	*8.4*
Denmark	79.1	11.7	9.2	80.2	9.7	10.1
Germany	86.2	6.7	7.1	85.4	5.7	9.0
Estonia	*71.7*	26.5	1.8	*83.6*	14.6	1.8
Ireland	*81.0*	*15.6*	3.5	*82.8*	*14.4*	2.8
Greece	*75.1*	*23.0*	1.9	*81.6*	*17.7*	0.7
Spain	82.5	12.3	5.2	80.7	13.7	5.6
France	86.4	5.0	8.7	85.1	5.4	9.5
Croatia	*82.2*	13.3	4.5	85.8	10.7	3.5
Italy	83.3	11.1	5.6	78.9	15.0	6.1
Cyprus	*77.4*	*22.6*	–	*81.3*	*18.7*	–
Latvia	*76.6*	18.6	4.8	76.9	18.3	4.8
Lithuania	82.0	15.4	2.5	*91.0*	8.2	0.8
Luxembourg	*85.7*	10.5	3.9	*83.0*	*12.4*	4.6
Hungary (2)	61.1	25.0	13.9	*67.7*	22.2	10.1
Malta	*79.4*	*20.6*	–	*82.5*	17.5	–
Netherlands	86.4	4.3	9.3	88.2	3.0	8.8
Austria (3)	79.4	10.9	9.7	78.5	10.0	11.5
Poland (4)	*77.0*	13.5	9.5	*84.6*	*10.7*	4.8
Portugal (4)	*84.9*	10.9	4.3	*89.3*	*6.6*	4.1
Romania (4)	*75.8*	12.3	11.9	*82.2*	*12.9*	4.9
Slovenia	83.9	13.2	3.0	86.7	*11.1*	2.3
Slovakia	66.8	26.0	7.2	77.8	15.1	7.1
Finland	84.1	11.1	4.8	84.9	9.8	5.3
Sweden (2)	84.0	8.2	7.8	84.3	6.7	9.1
United Kingdom (4)	88.4	*6.4*	5.2	86.0	*5.8*	8.2
Iceland	88.6	11.4	–	*88.5*	11.5	–
Norway	89.0	6.9	4.1	89.7	5.6	*4.7*
Switzerland	80.1	5.1	14.8	77.7	5.1	17.2
FYR of Macedonia	*81.3*	16.7	1.9	*77.8*	20.7	1.5
Turkey (2)	*49.0*	*47.8*	3.1	61.6	36.6	1.7

(1) Excluding powered two-wheelers.
(2) Passenger cars: break in series.
(3) The railway in Liechtenstein is owned and operated by the Austrian ÖBB and included in their statistics.
(4) Motor coaches, buses and trolley buses: break in series.
Source: Eurostat (online data code: tran_hv_psmod)

Figure 13.1: Top 15 airports, passengers carried (embarked and disembarked), EU-28, 2013
(Million passengers)



Source: Eurostat (online data code: avia_paoa)

13.2 Freight transport

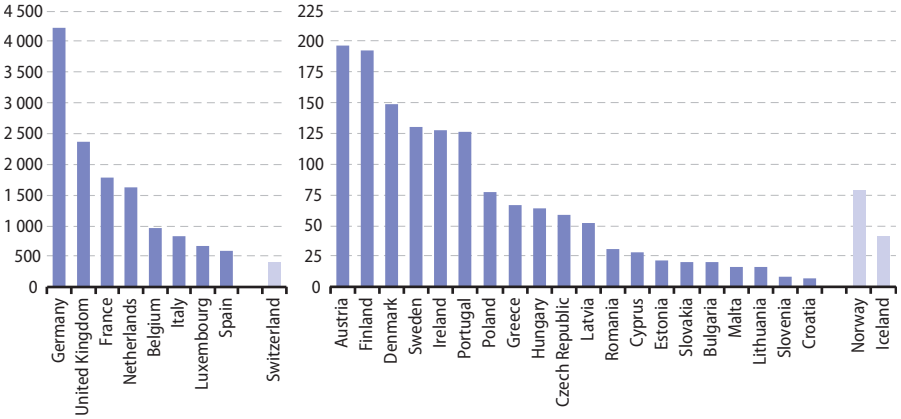
Total inland freight transport in the EU-28 was estimated to be more than 2 100 billion tonne-kilometres (tkm) in 2013; some three quarters (75.4 %) of this freight total was transported over roads. The share of EU-28 inland freight that was transported by road was more than four times as high as the share transported by rail (17.8 %), while the remainder (6.7 %) of the freight transported in the EU-28 in 2013 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 2013, this marked a slight increase of 0.4 % when compared with 2012. Airports in Germany dealt with 4.2 million tonnes of air freight in 2013, considerably more than in any other EU Member States; the United Kingdom had the second highest amount of air freight, at 2.4 million tonnes. Some of the smaller EU Member States are relatively specialised 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-28 Member States).

Maritime ports in the EU-28 handled 3 739 million tonnes of seaborne goods in 2012, which marked a slight reduction of 0.8 % when compared with 2011. Having risen during the period 2002–07, the quantity of freight transported by sea peaked at 3 968 million tonnes before the financial and economic crisis. There was little change in 2008, before a reduction of 12.1 % in 2009, which was, to some degree, reversed in 2010 and 2011, when the EU-28's

quantity of seaborne goods rose by 5.8 % and 2.7 %. Nevertheless, in 2012, the quantity of goods transported by sea remained almost 6 % below its pre-financial and economic crisis peak. Sea ports in the Netherlands and the United Kingdom each handled more than 500 million tonnes of goods in 2013, while in Italy the level was slightly lower. These three EU Member States collectively handled about 40 % of the EU-28's seaborne freight.

Figure 13.2: Air freight transport, 2013 ([1])
(1 000 tonnes)



([1]) Note the different scales used in the two parts of the figure. Norway and Switzerland: 2012.
Source: Eurostat (online data code: ttr00011)

Table 13.2: Inland freight transport and modal split, by country, 2013

	Inland freight transport (million tkm)			Modal split (% of total inland tkm)		
	Road ([1])	Rail ([2])	Inland waterways	Road	Rail	Inland waterways
EU-28	1 572 238	422 594	152 431	75.4	17.8	6.7
Belgium	32 796	7 593	10 365	64.5	15.1	20.4
Bulgaria	27 097	3 246	5 374	75.9	9.1	15.0
Czech Republic	54 893	13 965	25	79.7	20.3	0.0
Denmark	16 072	2 278	–	86.8	13.2	–
Germany	305 744	110 065	60 070	63.9	23.5	12.6
Estonia	5 986	4 722	–	55.9	44.1	–
Ireland	9 215	99	–	98.9	1.1	–
Greece	19 198	283	–	98.8	1.2	–
Spain	192 597	10 405	–	95.4	4.6	–
France	171 472	32 010	9 201	80.6	15.0	4.3
Croatia	9 133	2 086	771	76.2	17.4	6.4
Italy	127 241	19 037	:	86.9	13.0	0.1
Cyprus	634	–	–	100.0	–	–
Latvia	12 816	19 532	–	39.6	60.4	–
Lithuania	26 338	13 344	–	66.4	33.6	0.0
Luxembourg	8 606	288	313	94.2	2.4	3.4
Hungary	35 818	9 230	1 924	75.5	20.5	4.1
Malta	:	–	–	100.0	–	–
Netherlands	70 184	6 078	48 641	56.2	4.9	38.9
Austria	24 213	19 278	2 406	52.8	42.1	5.1
Poland	247 594	50 881	91	82.9	17.0	0.0
Portugal	36 555	2 290	–	94.1	5.9	–
Romania	34 026	12 941	12 242	57.5	21.9	20.7
Slovenia	15 905	3 799	–	80.7	19.3	–
Slovakia	30 147	8 494	1 006	76.0	21.4	2.5
Finland	24 429	9 470	:	71.8	27.8	0.4
Sweden	33 529	20 763	–	61.8	38.2	–
United Kingdom	158 527	21 444	:	86.7	13.2	0.1
Iceland	:	–	–	100.0	–	–
Liechtenstein	317	9	–	97.2	2.8	–
Norway	21 317	3 383	–	86.3	13.7	–
Switzerland	12 817	11 812	–	52.0	48.0	–
Montenegro	:	105	:	:	:	:
FYR of Macedonia	:	421	–	94.7	5.3	–
Turkey	:	10 750	–	95.4	4.6	–

([1]) Road transport is based on movements all over the world of vehicles registered in the reporting country.
([2]) EU-28, Belgium and Luxembourg: 2011. Denmark, Germany, Greece, Hungary and the United Kingdom: 2012.
Source: Eurostat (online data codes: road_go_ta_tott, rail_go_typeall, ttr00007 and tran_hv_frmod) and Directorate-General for Mobility and Transport

Annexes

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

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

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.

Units of measurement

%	per cent
CHF	Swiss franc
cm^3	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^2	square kilometre
kW	kilowatt
kWh	kilowatt hour
m^3	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_2	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_2O	nitrous oxide
NACE	statistical classification of economic activities within the European Community
n.e.c.	not elsewhere classified
NUTS	classification of territorial units for statistics (NUTS levels 1, 2 and 3 regions)
OECD	Organisation for Economic Co-operation and Development
PDF	portable document format
PEEI(s)	Principal European Economic Indicator(s)
p.r.s.	packaged for retail sale
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 cultural organisation
USB	universal serial bus
VAT	value added tax
WTO	World Trade Organisation
3G	third generation

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2015 edition

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