

ISSN 1830-7892

eurostat
Pocketbooks

Key figures on Europe

2011 edition

eurostat 
EUROPEAN COMMISSION

Key figures on Europe

2011 edition

*Europe Direct is a service to help you find answers
to your questions about the European Union.*

Freephone number (*):

00 800 6 7 8 9 1 0 1 1

(*). Certain mobile telephone operators do not allow access to 00 800 numbers or these calls may be billed.

More information on the European Union is available on the Internet (<http://europa.eu>).

Cataloguing data can be found at the end of this publication.

Luxembourg: Publications Office of the European Union, 2011

ISBN 978-92-79-18441-3

ISSN 1830-7892

doi:10.2785/6232

Cat. No KS-EI-11-001-EN-C

Theme: General and regional statistics

Collection: Pocketbooks

European Union, 2011

Reproduction of content other than photos is authorized, provided the source is acknowledged.

Copyright for the photos: foreword photo: © European Union; chapters 3, 4, 7 and 10: © Phovoir; all other photos (including cover): © Shutterstock

Reproduction of photos is allowed for non-commercial purposes and within the sole context of this publication.

Printed in Belgium

PRINTED ON ELEMENTAL CHLORINE-FREE BLEACHED PAPER (ECF)

Foreword

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



In 2011, for the first time, you can find the content of this book, in a much richer form, updated online in Statistics Explained. As usual, the latest and most complete versions of all the data can be downloaded from the Eurostat website.

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

I wish you an enjoyable reading experience!

A handwritten signature in blue ink, appearing to read "Radermacher".

Walter Radermacher

Director-General, Eurostat
Chief Statistician of the European Union

Abstract

Key figures on Europe 2011 – presents a comprehensive selection of statistical data on Europe. The pocketbook may be viewed as an introduction to European statistics and provides guidance to the vast range of data freely available from the Eurostat website at: <http://ec.europa.eu/eurostat>.

Most data cover the period 1999-2009 for the European Union and some indicators are provided for other countries, such as members of EFTA, candidate countries to the European Union, Japan or the United States (subject to availability). With just over 130 statistical tables and figures, the pocketbook treats the following areas: economy and finance; population; health; education and training; the labour market; living conditions and social protection; industry, trade and services; agriculture, forestry and fisheries; international trade; transport; the environment; energy; and science and technology.

Editor-in-chief

Jukka Piirto
Eurostat, Unit D4 - Dissemination

Editors

Annika Johansson, Veronika Lang
Eurostat, Unit D4 - Dissemination

Contact details

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

Production

This publication was produced by Informa sàrl

For more information please consult

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

Data extracted

September to December 2010 (unless otherwise noted)

Acknowledgements

The editor-in-chief and the editorial team of the Eurostat pocketbook would like to thank all those who were involved in its preparation. The pocketbook could only be published thanks to the support of the following colleagues:

Eurostat, the statistical office of the European Union

Directorate C: National and European accounts

C2 National accounts – production: Daniela Comini, Christine Gerstberger, Andreas Krüger, Olaf Nowak

C3 Statistics for excessive deficit procedure I: Rasa Jurkonienė

C4 Statistics for excessive deficit procedure II: John Verrinder

C5 Government and sector accounts; financial indicators: Isabel Gancedo Vallina, Boryana Milusheva, Peter Parlasca, Irena Tvarijonavičiūtė, Laura Wahrig, Ismael Ahamdanech Zarco

Directorate D: External cooperation, communication and key indicators

D4 Dissemination: Marc Debusschere, Isabelle Fiasse, Diana Ivan, Ulrich Wieland

D5 Key indicators for European policies: Viktoria Bolla, Rosa Ruggeri Cannata, Graham Lock, Iliyana Savova, Vincent Tronet

Directorate E: Sectoral and regional statistics

E1 Farms, agro-environment and rural development: Ludivine Baudouin, Catherine Coyette, Carla Martins, Anne Miek Kremer

E2 Agriculture and fisheries: Marco Artico, Steffie Bos, Fausto Cardoso, Giovanni Dore, Matthew Elliott, Henri-François Fank, Annabelle Jansen, Jean-Claude Jeanty, Werner Kerschenbauer, Garry Mahon, Pol Marquer, Angelo Milella, Iulia Pop, Henri Risch, Herta Schenk, Sorina Carmen Vâju, Franco Zampogna

E3 Environmental and forestry statistics: David Duquesnes, Manon Elsen, Jürgen Förster, Christian Freudenberger, Christian Heidorn, Jean Klein, Csaba Mózes, Hartmut Schrör, Marilise Wolf-Crowther

E5 Energy: Antigone Gikas, John Görten

E6 Transport: Luciano De Angelis, Jonas Noreland

E7 Environmental accounts and climate change: Velina Pendolovska, Cristina Popescu, Stela Stamatova

Directorate F: Social and information society statistics

F1 Population: Monica Marcu, Fabio Sartori

F2 Labour market: Verónica Álvarez González, Luis Biedma, Simone Casali, Beate Czech, Arturo de la Fuente Nuño, Sabine Gagel, Daniele Giovannola, Hannah Kiiver, Ingo Kuhnert, Hubertus Vreeswijk

F3 Living conditions and social protection: Petrica Badea, Paulina Hojny, Anna Rybkowska

F4 Education, science and culture: Ilcho Bechev, Marta Beck-Domżalska, Sadiq Kwesi Boateng, Silvia Crinetea, Bernard Felix, Dominique Groenez, Ángeles Hermosa-López, Sylvain Jouhette, Lene Mejer, Sergiu Pârvan, Reni Petkova, Fernando Reis, Veijo Ritola, Paolo Turchetti

F5 Health and food safety; crime: Hartmut Buchow, Marta Carvalhido da Silva, Elodie Cayotte, Albane Gourdol, Dorota Kawiorska, Bart De Norre, Jean-Marc Pascal Schaefer, Cynthia Tavares, Geoffrey Thomas

F6 Information society; tourism: Christophe Demunter, Chryssanthi Dimitrakopoulou, Konstantinos Giannakouris, Anna Lööf, Peter Pospíšil, Petronela Reinecke, Heidi Seybert, Maria Smihily, Albrecht Wirthmann

Directorate G: Business statistics

G2 Structural business statistics: Aleksandra Stawińska, Brian Williams

G3 Short-term statistics: Ulrich Eidmann

G4 International transactions: Luis Antonio de la Fuente, Gilberto Gambini, Franca Faes-Cannito

G6 Price statistics; purchasing power parities: Jarko Pasanen, Tatiana Mrlianová, Paul Konijn, Lars Svennebye

European Free Trade Association (EFTA)

Directorate-General for Translation of the European Commission

Publications Office of the European Union

Introduction	8
The Eurostat pocketbook	8
A practical guide to accessing European statistics	10
Abbreviations and acronyms	12
1. Economy and finance	17
1.1 National accounts – GDP	18
1.2 Government finances	20
1.3 Exchange rates and interest rates	22
1.4 Consumer prices - inflation and comparative price levels	24
1.5 Balance of payments - current account	26
1.6 Foreign direct investment	28
2. Population	31
2.1 European population compared with world population	32
2.2 Population structure and ageing	34
2.3 Population and population change	36
2.4 Marriage and divorce	38
2.5 Fertility	40
2.6 Mortality and life expectancy	42
2.7 Migration and migrant population	44
3. Health	47
3.1 Healthy life years	48
3.2 Causes of death	50
3.3 Healthcare	52
3.4 Health and safety at work	54
4. Education and training	57
4.1 School enrolment and levels of education	58
4.2 Foreign language learning	60
4.3 Educational expenditure	62
4.4 Tertiary education	64
4.5 Lifelong learning	66
5. Labour market	69
5.1 Employment	70
5.2 Unemployment	72
5.3 Wages and labour costs	74
5.4 Job vacancies	76
5.5 Labour market policy interventions	78

6. Living conditions and social protection	81
6.1 Living conditions	82
6.2 Housing	84
6.3 Social protection	86
6.4 Crime	88
7. Industry, trade and services	91
7.1 Structural business statistics	92
7.2 Industrial production	94
7.3 Industry and construction - short-term developments	96
7.4 Services - short-term developments	98
7.5 Tourism	100
7.6 Information society	102
7.7 Telecommunications	104
8. Agriculture, forestry and fisheries	107
8.1 Agricultural output, price indices and income	108
8.2 Farm structure	110
8.3 Agricultural products	112
8.4 Agriculture and the environment	114
8.5 Forestry	116
8.6 Fisheries	118
9. International trade	121
9.1 International trade in goods	122
9.2 International trade in services	124
10. Transport	127
10.1 Transport accidents	128
10.2 Passenger transport	130
10.3 Freight transport	132
11. Environment	135
11.1 Air emissions accounts	136
11.2 Waste	138
11.3 Water	140
11.4 Material flow accounts	142
11.5 Chemicals management	144
11.6 Environmental protection expenditure	146
11.7 Environmental taxes	148
11.8 Biodiversity	150

12. Energy	153
12.1 Energy production and imports	154
12.2 Consumption of energy	156
12.3 Electricity production	158
12.4 Renewable energy	160
12.5 Energy prices	162
13. Science and technology	165
13.1 R & D expenditure	166
13.2 R & D personnel	168
13.3 Innovation	170
13.4 Patents	172

Introduction

The Eurostat pocketbook

Key figures on Europe 2011 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 2011 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 2011 is divided into an introduction, and 13 main chapters. The main chapters contain data and / or background information relating to a very wide range of Eurostat data. Users will find a great deal more information when consulting the Eurostat website, which contains subject-specific publications and online databases.

Data extraction, coverage and presentation

The statistical data presented in the pocketbook were extracted between September and December 2010 and represent data availability at that time. The accompanying text was drafted between October and December 2010.

This publication usually presents information for the EU-27 (the 27 Member States of the EU), the euro area (based on 16 members), as well as the individual Member States. The order of the Member States used in the pocketbook generally follows their order of protocol; in other words, the alphabetical order of the countries' names in their respective original languages; in some figures the data are ranked according to the values of a particular indicator.

The EU-27 and euro area (EA-16) 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 partial totals that are created are systematically footnoted. Time-series for these geographical aggregates are based on a consistent set of countries for the whole of the time period (unless otherwise

indicated). In other words, although the EU only had 25 Member States since early 2004 and has only had 27 Member States since the start of 2007, the time-series for EU-27 refer to a sum or an average for all 27 countries for the whole of the period presented, as if all 27 Member States had been part of the EU in earlier periods. In a similar vein, the data for the euro area are consistently presented for the 16 members (as of December 2010), despite the later accessions of Greece, Slovenia, Cyprus and Malta, and Slovakia to the euro area. At the time of writing (late 2010), Estonia had yet to join the euro area. As the data for this publication had already been extracted and the accompanying text had already been drafted before the accession of Estonia to the euro area (1 January 2011), Estonia is excluded from the euro area aggregates presented. Unless otherwise stated, the data for the euro area covers the 16 Member States that shared the euro as a common currency as of December 2010 (Belgium, Germany, Greece, Spain, France, Ireland, Italy, Cyprus, Luxembourg, Malta, the Netherlands, Austria, Portugal, Slovenia, Slovakia and Finland).

In the event that a reference year is not available for a particular country, then efforts have been made to fill tables and figures with previous reference years (these exceptions are footnoted); generally, an effort has been made to go back two reference periods.

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, the majority of this has been omitted when constructing the tables and figures. The following symbols are used, where necessary:

- Italic* value is a forecast, provisional or an estimate and is therefore likely to change
- : not available, confidential or unreliable value
- not applicable or zero by default
- 0 less than half the final digit shown and greater than real zero

Breaks in series are indicated in the footnotes provided under each table and figure.

A practical guide to accessing European statistics

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

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

Eurostat online data codes, such as `tps00001` and `nama_gdp_c`⁽¹⁾, allow the reader to easily access the most recent data on Eurostat's website. In this pocketbook these online data codes are given as part of the source below each table and figure.

In the PDF version of this publication, the reader is led directly to the freshest data when clicking on the hyper-links for Eurostat online data codes. Readers of the paper version can access the freshest data by typing a standardised hyperlink 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 in question. The data is presented either in the TGM or the Data Explorer interface.



Online data codes can also be fed into the 'Search' function on Eurostat's website, which is found in the upper-right corner of the Eurostat homepage, at <http://ec.europa.eu/eurostat>. The results from such a search present related dataset(s) and possibly publication(s) and metadata. By clicking on these hyperlinks users are taken to product page(s)⁽²⁾, which provide some

(1) There are two types of online data codes:

- Tables (accessed using the TGM interface) have 8-character codes, which consist of 3 or 5 letters – the first of which is 't' – followed by 5 or 3 digits, e.g. `tps00001` and `tsdph220`.
 - Databases (accessed using the Data Explorer interface) have codes that use an underscore '_' within the syntax of the code, e.g. `nama_gdp_c` and `proj_10c2150p`.
- (2) 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.

background information about each dataset / publication or set of metadata. For example, it is possible to move directly to the data from the data product page by clicking the TGM or Data Explorer icons presented under the 'View table' sub-heading.

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

Note also that the description above presents the situation as of December 2010.

Statistics Explained

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

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

In December 2010, Statistics Explained contained more than 1 000 articles and glossary items; its content and user-friendliness will be expanded regularly. Users may find articles using a set of navigational features in the left-hand menu; on the top-right menu bar of Statistics Explained it is possible to find options that make it possible, among others, to print, forward, cite, blog or share content easily.

Statistics Explained is not only a tool for presenting statistical analyses, it can also be used to produce analyses. The Eurostat Pocketbook was created using Statistics Explained as a common platform, such that its content could already be consulted in Statistics Explained some time before it was published on paper.

Abbreviations and acronyms

Country codes

EU-27	European Union of 27 Member States
EU-25	European Union of 25 Member States
EU	European Union
EA-16	Euro area of 16 Member States
EA-15	Euro area of 15 Member States
EA-12	Euro area of 12 Member States
EA-11	Euro area of 11 Member States
EA	Euro area
BE	Belgium
BG	Bulgaria
CZ	Czech Republic
DK	Denmark
DE	Germany
EE	Estonia
IE	Ireland
EL	Greece
ES	Spain
FR	France
IT	Italy
CY	Cyprus
LV	Latvia
LT	Lithuania
LU	Luxembourg
HU	Hungary
MT	Malta
NL	Netherlands
AT	Austria
PL	Poland
PT	Portugal
RO	Romania
SI	Slovenia
SK	Slovakia
FI	Finland
SE	Sweden
UK	United Kingdom
IS	Iceland
LI	Liechtenstein
NO	Norway
CH	Switzerland

ME	Montenegro
HR	Croatia
MK ⁽³⁾	the former Yugoslav Republic of Macedonia
TR	Turkey
CA	Canada
JP	Japan
RU	Russia
US	United States

Units of measurement

%	per cent
CHF	Swiss franc
cm ³	cubic centimetre
ESU	European size unit
EUR	euro
FTE	full-time equivalent(s)
GJ	gigajoule
GT	gross tonnage
GWh	gigawatt hour
JPY	Japanese yen
kg	kilogram
kW	kilowatt
kWh	kilowatt hour
LSU	livestock unit(s)
m ³	cubic metre
mm	millimetre
MWh	megawatt hour
p/st	piece/unit
PPS	purchasing power standard
tkm	tonne-kilometre
toe	tonne of oil equivalent
TWh	terawatt hour
UAA	utilised agricultural area
USD	United States dollar

Other abbreviations and acronyms

CH ₄	methane
CO	carbon monoxide
CO ₂	carbon dioxide

⁽³⁾ Provisional ISO code which 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.

ECB	European Central Bank
EFTA	European free trade association
EMU	economic and monetary union
EPO	European Patent Office
ERM	exchange rate mechanism
EU	European Union
Eurostat	statistical office of the European Union
FDI	foreign direct investment
FSS	farm structure survey
GDP	gross domestic product
GERD	gross domestic expenditure on R & D
HICP	harmonised index of consumer prices
ICT	information and communication technology
ISCED	international standard classification of education
LFS	labour force survey
LMP	labour market policy
N ₂ O	nitrous oxide
NACE	statistical classification of economic activities within the European Community
n.e.c.	not elsewhere classified
NH ₃	ammonia
NM VOC	non-methane volatile organic compounds
NO _x	nitrogen oxide(s)
NUTS	hierarchical classification/nomenclature of territorial units for statistics (Eurostat) (NUTS 1, 2 and 3)
OECD	Organisation for Economic Co-operation and Development
R & D	research and development
Rev.	revision
RPI	retail price index
SME	small and medium-sized enterprise
SMS	short message service
SO _x	sulphur oxide(s)
STS	short-term (business) statistics
UN	United Nations
UNESCO	United Nations educational, scientific and cultural organisation
USPTO	United States patent and trademark office
VAT	value added tax

Economy and finance



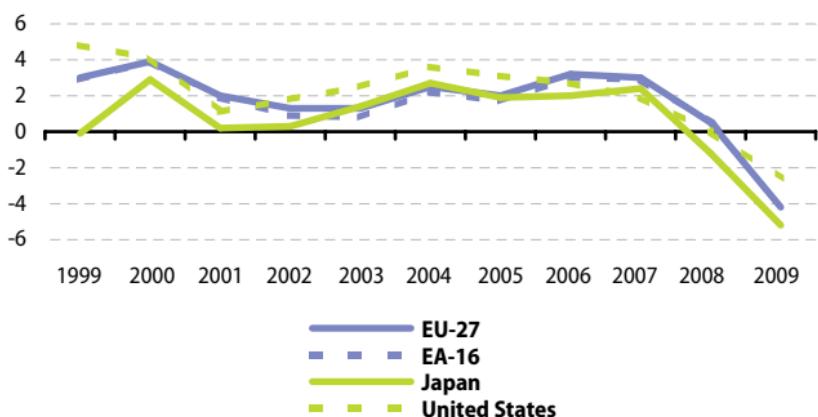
1.1 National accounts – GDP

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

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

Following a general upturn of the business cycle between 2003 and 2007, the impact of the financial and economic crisis resulted in a severe slowdown and recession in most countries. In 2008 real GDP growth in the EU-27 and the euro area slowed to 0.5 % and in 2009 the rate of change turned negative as GDP contracted by 4.2 % in the EU-27 and by 4.1 % in the euro area.

Figure 1.1: Real GDP growth
(% change compared with the previous year)



Source: Eurostat (tsieb020)

Table 1.1: GDP at current market prices

	GDP (EUR 1 000 million)			GDP per capita (PPS, EU-27=100)		
	1999	2008	2009	1999	2008	2009
EU-27	8 589	12 495	11 791	100	100	100
EA-16	6 445	9 252	8 963	113	108	108
BE	239	345	339	123	115	116
BG	12	35	35	27	43	:
CZ	56	148	137	69	80	81
DK	163	233	223	131	120	118
DE	2 012	2 481	2 397	122	115	116
EE	5	16	14	42	68	63
IE	90	180	160	126	134	128
EL	132	236	233	83	93	93
ES	580	1 088	1 054	96	103	104
FR	1 368	1 949	1 907	115	108	107
IT	1 127	1 568	1 521	117	102	102
CY	9	17	17	87	96	98
LV	7	23	19	36	57	49
LT	10	32	27	39	62	53
LU	20	39	38	237	277	267
HU	46	106	93	55	64	63
MT	4	6	6	81	77	78
NL	386	596	572	131	134	130
AT	198	283	274	131	124	122
PL	157	362	310	49	56	61
PT	118	172	168	81	79	78
RO	34	140	116	26	42	:
SI	21	37	35	81	91	87
SK	19	65	63	50	72	72
FI	122	185	171	115	117	111
SE	243	334	293	126	122	120
UK	1 410	1 815	1 563	118	116	116
IS	8	10	9	139	121	120
LI	2	3	3	:	:	:
NO	149	306	273	145	189	176
CH	252	343	354	146	141	144
HR	22	47	45	49	63	:
MK	3	7	:	27	34	:
TR	234	499	440	40	46	:
JP	4 102	3 313	3 639	118	109	:
US	8 776	9 770	10 123	163	147	146

Source: Eurostat ([tec00001](#)), CH: Secrétariat de l'Etat à l'Economie, JP: Bureau of Economic Analysis, US: Economic and Social Research Institute.

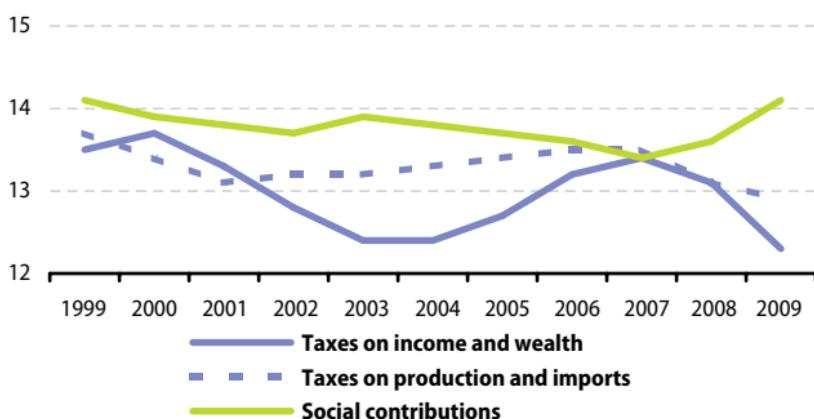
1.2 Government finances

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

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

The main types of government revenue are [taxes on income and wealth](#), [taxes on production and imports](#), and [social contributions](#). In 2009 total receipts from these taxes and social contributions in the EU-27 amounted to 39.3 % of GDP (down from 39.8 % in 2008). Looking more closely at the structure of [revenues](#) within the EU-27 it is possible to observe a relative increase in receipts from social contributions in 2009, while the two other main headings, taxes on income and wealth and taxes on production, decreased (see Figure 1.2).

Figure 1.2: Taxes and social contributions, EU-27 (l)
(% of GDP)



(l) Data extracted on 29.11.2010.

Source: Eurostat ([tec00019](#), [tec00020](#) and [tec00018](#))

Table 1.2: Public balance and general government debt (¹)
 (% of GDP)

	Public balance			General government debt		
	2007	2008	2009	2007	2008	2009
EU-27	-0.9	-2.3	-6.8	58.8	61.8	74.0
EA-16	-0.6	-2.0	-6.3	66.2	69.8	79.2
BE	-0.3	-1.3	-6.0	84.2	89.6	96.2
BG	1.1	1.7	-4.7	17.2	13.7	14.7
CZ	-0.7	-2.7	-5.8	29.0	30.0	35.3
DK	4.8	3.4	-2.7	27.4	34.2	41.4
DE	0.3	0.1	-3.0	64.9	66.3	73.4
EE	2.5	-2.8	-1.7	3.7	4.6	7.2
IE	0.0	-7.3	-14.4	25.0	44.3	65.5
EL	-6.4	-9.4	-15.4	105.0	110.3	126.8
ES	1.9	-4.2	-11.1	36.1	39.8	53.2
FR	-2.7	-3.3	-7.5	63.8	67.5	78.1
IT	-1.5	-2.7	-5.3	103.6	106.3	116.0
CY	3.4	0.9	-6.0	58.3	48.3	58.0
LV	-0.3	-4.2	-10.2	9.0	19.7	36.7
LT	-1.0	-3.3	-9.2	16.9	15.6	29.5
LU	3.7	3.0	-0.7	6.7	13.6	14.5
HU	-5.0	-3.7	-4.4	66.1	72.3	78.4
MT	-2.3	-4.8	-3.8	61.7	63.1	68.6
NL	0.2	0.6	-5.4	45.3	58.2	60.8
AT	-0.4	-0.5	-3.5	59.3	62.5	67.5
PL	-1.9	-3.7	-7.2	45.0	47.1	50.9
PT	-2.8	-2.9	-9.3	62.7	65.3	76.1
RO	-2.6	-5.7	-8.6	12.6	13.4	23.9
SI	0.0	-1.8	-5.8	23.4	22.5	35.4
SK	-1.8	-2.1	-7.9	29.6	27.8	35.4
FI	5.2	4.2	-2.5	35.2	34.1	43.8
SE	3.6	2.2	-0.9	40.0	38.2	41.9
UK	-2.7	-5.0	-11.4	44.5	52.1	68.2
IS	5.4	-13.5	-9.1	29.1	57.4	:
NO	17.7	19.1	9.7	52.4	49.9	43.7
HR	-2.5	-1.4	-4.1	32.9	28.9	35.3
TR	-1.0	-2.2	-6.7	39.4	39.5	45.4

(¹) Public balance: net borrowing/lending of consolidated general government sector;
 general government debt: general government consolidated gross debt; data extracted on
 29.11.2010.

Source: Eurostat ([tsieb080](#) and [tsieb090](#))

1.3 Exchange rates and interest rates

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

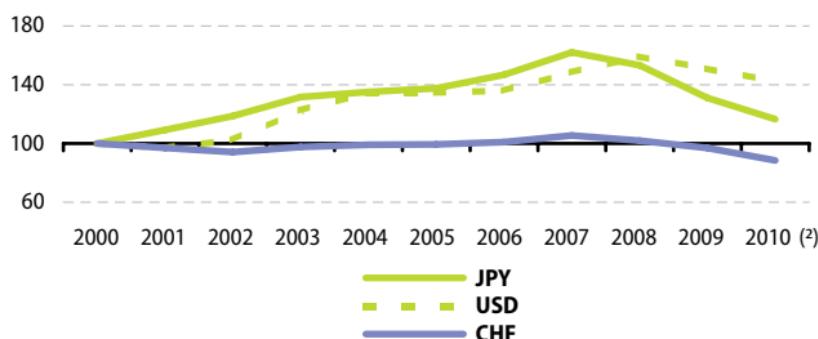
- bilateral exchange rates between currencies, including some special conversion factors for countries that have adopted the euro;
- fluctuations in the exchange rate mechanism (ERM and ERM II) of the EU;
- effective exchange rate indices.

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

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

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

Figure 1.3: Exchange rates against the euro⁽¹⁾
(2000=100)



(1) CHF, Swiss franc; JPY, Japanese Yen; USD, United States Dollar; a reduction in the value of the index shows an appreciation in the value of the foreign currency and a depreciation in the value of the euro.

(2) Forecasts.

Source: Eurostat ([tec00033](#)), ECB

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

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

Table 1.3: Interest rates
(%)

	EMU convergence criterion bond yields (Maastricht criterion) (1)			Short-term interest rates: three-month interbank rates (annual average)		
	1999	2004	2009	1999	2004	2009
EU-27	:	4.38	4.13	:	2.86	1.56
EA (2)	4.66	4.12	3.82	2.96	2.11	1.22
BE	4.75	4.15	3.90	-	-	-
BG	:	5.36	7.22	5.88	3.74	5.72
CZ	:	4.82	4.84	6.85	2.36	2.19
DK	4.91	4.30	3.59	3.44	2.20	2.49
DE	4.49	4.04	3.22	-	-	-
EE	:	:	:	7.81	2.50	5.92
IE	4.71	4.08	5.23	-	-	-
EL	6.30	4.26	5.17	10.09	-	-
ES	4.73	4.10	3.98	-	-	-
FR	4.61	4.10	3.65	-	-	-
IT	4.73	4.26	4.31	-	-	-
CY	:	5.80	4.60	6.25	4.74	-
LV	:	4.86	12.36	8.44	4.23	13.09
LT	:	4.50	14.00	13.89	2.68	7.07
LU	4.66	2.84	4.23	-	:	:
HU	:	8.19	9.12	15.07	11.53	9.14
MT	:	4.69	4.54	5.15	2.94	-
NL	4.63	4.10	3.69	-	-	-
AT	4.68	4.13	3.94	-	-	-
PL	:	6.90	6.12	14.73	6.20	4.42
PT	4.78	4.14	4.21	-	-	-
RO	:	:	9.69	79.63	19.14	11.34
SI	:	4.68	4.38	8.64	4.66	-
SK	:	5.03	4.71	15.67	4.68	-
FI	4.72	4.11	3.74	-	-	-
SE	4.98	4.42	3.25	3.33	2.31	0.92
UK	5.01	4.93	3.36	5.55	4.64	1.21
TR	-	-	-	96.99	23.84	:
JP	-	-	-	0.22	0.05	0.47
US	-	-	-	5.41	1.62	0.69

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

(2) EA-11, 1999; EA-12, 2004; EA-16, 2009.

Source: Eurostat ([tec00097](#) and [tec00035](#)), ECB, national central banks

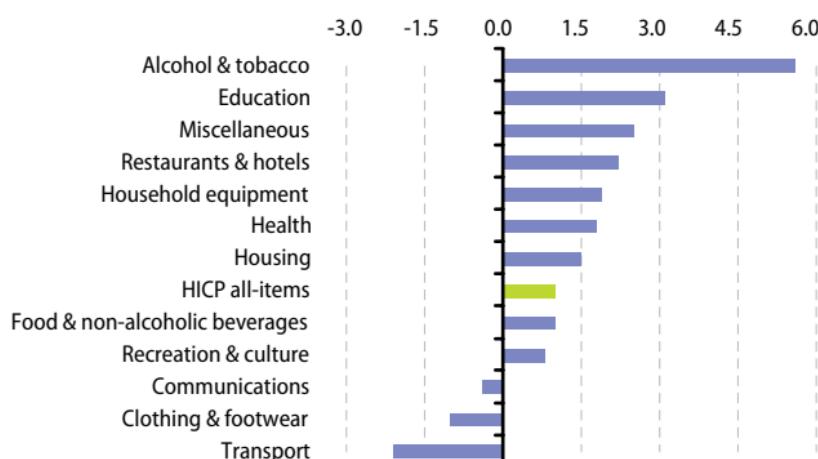
1.4 Consumer prices - inflation and comparative price levels

An increase in the level of prices of goods and services in an economy is called **inflation**; this indicator is usually measured through **consumer price indices (CPIs)** or retail price indices (RPIs). Within the **European Union (EU)** a specific consumer price index for the purpose of tracing price developments has been developed and is called the **harmonised index of consumer prices (HICP)**.

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

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

Figure 1.4: HICP main headings, annual average inflation rates, EU-27, 2009 (%)



Source: Eurostat ([prc_hicp_aind](#))

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

	2004	2005	2006	2007	2008	2009
EU (1)	2.0	2.2	2.2	2.3	3.7	1.0
EA (2)	2.1	2.2	2.2	2.1	3.3	0.3
BE	1.9	2.5	2.3	1.8	4.5	0.0
BG	6.1	6.0	7.4	7.6	12.0	2.5
CZ	2.6	1.6	2.1	3.0	6.3	0.6
DK	0.9	1.7	1.9	1.7	3.6	1.1
DE	1.8	1.9	1.8	2.3	2.8	0.2
EE	3.0	4.1	4.4	6.7	10.6	0.2
IE	2.3	2.2	2.7	2.9	3.1	-1.7
EL	3.0	3.5	3.3	3.0	4.2	1.3
ES	3.1	3.4	3.6	2.8	4.1	-0.2
FR	2.3	1.9	1.9	1.6	3.2	0.1
IT	2.3	2.2	2.2	2.0	3.5	0.8
CY	1.9	2.0	2.2	2.2	4.4	0.2
LV	6.2	6.9	6.6	10.1	15.3	3.3
LT	1.2	2.7	3.8	5.8	11.1	4.2
LU	3.2	3.8	3.0	2.7	4.1	0.0
HU	6.8	3.5	4.0	7.9	6.0	4.0
MT	2.7	2.5	2.6	0.7	4.7	1.8
NL	1.4	1.5	1.7	1.6	2.2	1.0
AT	2.0	2.1	1.7	2.2	3.2	0.4
PL	3.6	2.2	1.3	2.6	4.2	4.0
PT	2.5	2.1	3.0	2.4	2.7	-0.9
RO	11.9	9.1	6.6	4.9	7.9	5.6
SI	3.7	2.5	2.5	3.8	5.5	0.9
SK	7.5	2.8	4.3	1.9	3.9	0.9
FI	0.1	0.8	1.3	1.6	3.9	1.6
SE	1.0	0.8	1.5	1.7	3.3	1.9
UK	1.3	2.1	2.3	2.3	3.6	2.2
IS	2.3	1.4	4.6	3.6	12.8	16.3
NO	0.6	1.5	2.5	0.7	3.4	2.3
CH	:	:	1.0	0.8	2.3	-0.7
HR	2.1	3.0	3.3	2.7	5.8	2.2
TR	10.1	8.1	9.3	8.8	10.4	6.3
JP (3)	0.0	-0.3	0.3	0.0	1.4	-1.4
US (3)	2.7	3.4	3.2	2.8	3.8	-0.4

(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 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 index formula.

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

Source: Eurostat ([prc_hicp_aind](#))

1.5 Balance of payments - current account

The [balance of payments](#) records all economic transactions between [resident](#) and non-resident entities during a given period.

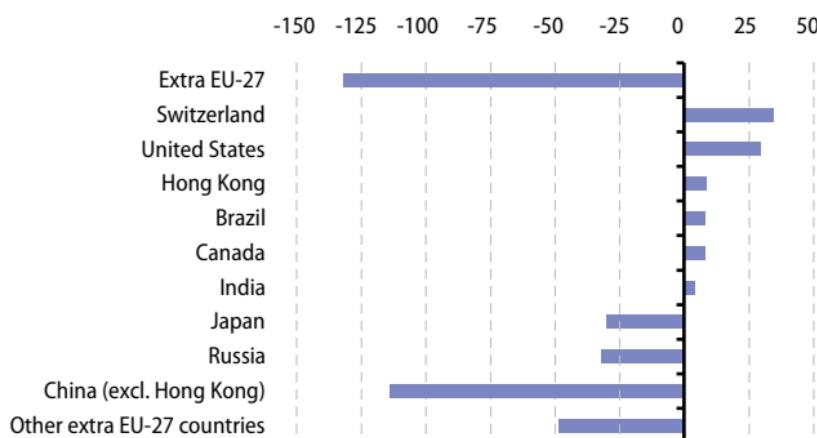
The current account [deficit](#) of the [EU-27](#) was EUR 131 800 million in 2009, corresponding to 1.1 % of [gross domestic product \(GDP\)](#), close to half the level of the deficit in 2008 when it had equalled about 2.0 %.

The EU-27's current account deficit with China was EUR 113 900 million in 2009, three and a half times as large as the next largest deficits, which were with Russia and Japan. A current account surplus was recorded with Switzerland (EUR 34 800 million), about one fifth larger than that with the United States (see Figure 1.5).

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

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

Figure 1.5: Current account balance with selected partners, EU-27, 2009 (EUR 1 000 million)



Source: Eurostat ([bop_q_eu](#))

Table 1.5: Current account, balance by components, 2009 (¹)
(% of GDP)

	Current account	Goods	Services	Income	Current transfers
EU-27	-1.1	-0.7	0.5	-0.4	-0.5
EA-16	-0.6	0.5	0.3	-0.4	-1.0
BE	0.3	0.8	0.1	1.3	-2.0
BG	-9.1	-11.7	4.4	-4.5	2.7
CZ	-1.1	5.0	0.7	-6.4	-0.4
DK	4.0	2.2	1.3	2.5	-1.9
DE	5.0	5.6	-0.7	1.4	-1.3
EE	4.6	-3.8	9.5	-2.9	1.7
IE	-3.0	20.3	-5.3	-17.5	-0.6
EL	-11.4	-13.2	5.4	-4.2	0.6
ES	-5.5	-4.3	2.4	-2.9	-0.8
FR	-1.9	-2.3	0.6	1.2	-1.4
IT	-3.2	0.1	-0.7	-1.8	-0.8
CY	-8.3	-25.0	24.4	-6.5	-1.2
LV	9.5	-6.6	6.3	6.5	3.4
LT	3.8	-2.9	2.2	0.4	4.1
LU	5.7	-8.0	47.8	-31.4	-2.7
HU	0.3	4.3	1.6	-6.0	0.3
MT	-4.1	-13.6	15.6	-6.1	-0.1
NL	5.1	6.1	1.0	-1.0	-1.0
AT (²)	3.5	0.5	4.1	-0.6	-0.5
PL	-1.6	-1.0	1.1	-3.3	1.5
PT	-10.3	-10.4	3.6	-4.7	1.3
RO	-4.5	-5.9	-0.3	-1.8	3.5
SI	-1.5	-2.0	3.2	-2.2	-0.4
SK	-3.2	1.9	-2.0	-2.0	-1.1
FI	1.3	2.1	0.9	-0.7	-1.0
SE	7.4	3.3	3.6	1.8	-1.2
UK	-1.1	-5.9	3.2	2.6	-1.1
IS	-3.5	5.9	2.5	-11.3	-0.6
NO	14.0	14.6	0.1	0.6	-1.2
HR	-5.4	-16.3	12.5	-3.9	2.3
TR	-2.3	-4.0	2.6	-1.3	0.4
JP (³)	3.2	0.8	-0.4	3.1	-0.3
US (³)	-4.9	-5.8	1.0	0.8	-0.9

(¹) EU-27, extra EU-27 flows; euro area, extra EA-16 flows; Member States and other countries, flows with the rest of the world.

(²) 2007.

(³) 2008.

Source: Eurostat ([bop_q_eu](#), [bop_q_euro](#), [bop_q_c](#) and [tec00001](#))

1.6 Foreign direct investment

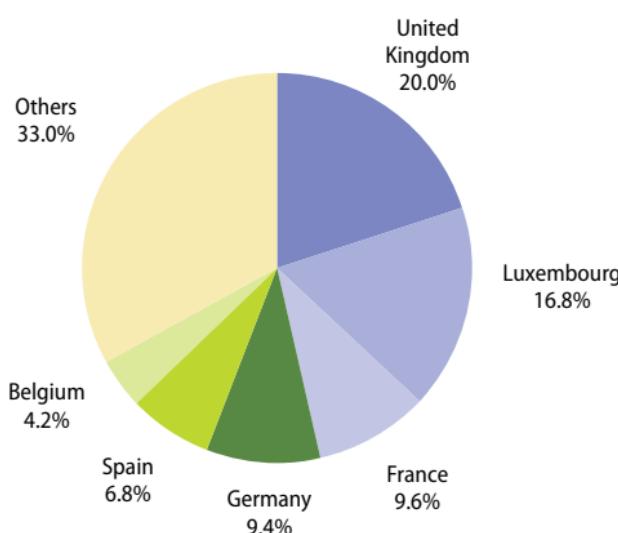
Foreign direct investment (FDI) is the category of international investment made by an entity resident in one economy (direct investor) to acquire a lasting interest in an enterprise operating in another economy (direct investment enterprise). The lasting interest is deemed to exist if the direct investor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

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

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

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

Figure 1.6: FDI outward flows, 2006 to 2008 average
(% of total EU-27 outward flows)



Source: Eurostat ([bop_fdi_main](#))

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

	Outward			Growth rate 2006-2008 (%)
	2006	2007	2008	
Extra EU-27	2 746.0	3 108.2	3 252.9	18.5
United States	949.3	992.4	1 058.1	11.5
Switzerland	364.6	404.6	453.7	24.4
Canada	114.1	141.3	139.9	22.6
Brazil	92.4	114.4	112.5	21.8
Russia	50.5	70.4	92.0	81.9
Hong Kong	86.1	88.8	88.9	3.2
Singapore	52.5	64.2	80.9	54.0
Japan	75.7	72.2	76.1	0.5
Norway	50.2	53.2	67.1	33.8
Australia	53.6	68.2	58.7	9.5
Inward				
Extra EU-27	2 022.7	2 346.1	2 421.4	19.7
	926.1	1 041.5	1 046.2	13.0
United States	282.5	312.1	306.2	8.4
Switzerland	105.2	105.9	105.1	-0.2
Canada	14.6	36.2	42.1	188.3
Brazil	14.6	23.6	28.4	95.0
Russia	17.4	16.2	19.1	9.6
Hong Kong	26.8	41.1	41.1	53.2
Singapore	97.9	120.8	116.9	19.4
Japan	55.6	77.9	89.0	60.2
Australia	18.8	25.2	20.7	10.0

Source: Eurostat ([bop_fdi_pos](#))

2

Population



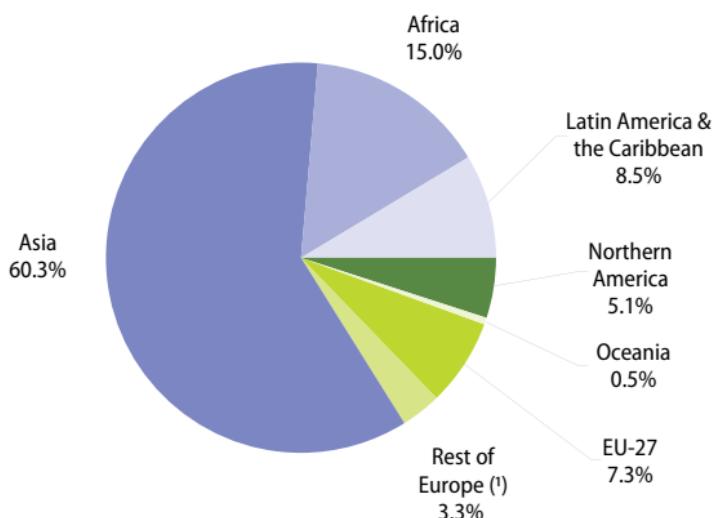
2.1 European population compared with world population

The world's population was approaching 7 000 million inhabitants at the beginning of 2010 and continues to grow. Asia accounted for the majority of the world's population (just over 60 %) with 4 167 million inhabitants, while Africa was the next most populous continent with 1 033 million inhabitants, or 15.0 % of the world total.

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

The latest United Nations (UN) population projections ([world population prospects: the 2008 revision](#)) suggest that the pace at which the world's population is expanding will slow in the coming decades; however, the total number of inhabitants is nevertheless projected to reach more than 9 000 million by 2050. According to these projections, the world's population will also be relatively older in 2050 than it is now.

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



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

Source: United Nations, Population Division of the Department of Economic and Social Affairs

Table 2.1: World population
(million)

	1960	1970	1980	1990	2000	2010
World	3 023	3 686	4 438	5 290	6 115	6 909
Europe (l)	604	656	693	721	727	733
Africa	285	367	482	639	819	1 033
Asia	1 694	2 125	2 623	3 179	3 698	4 167
Latin America & the Caribbean	220	286	363	442	521	589
Northern America	204	231	254	283	319	352
Oceania	16	20	23	27	31	36

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

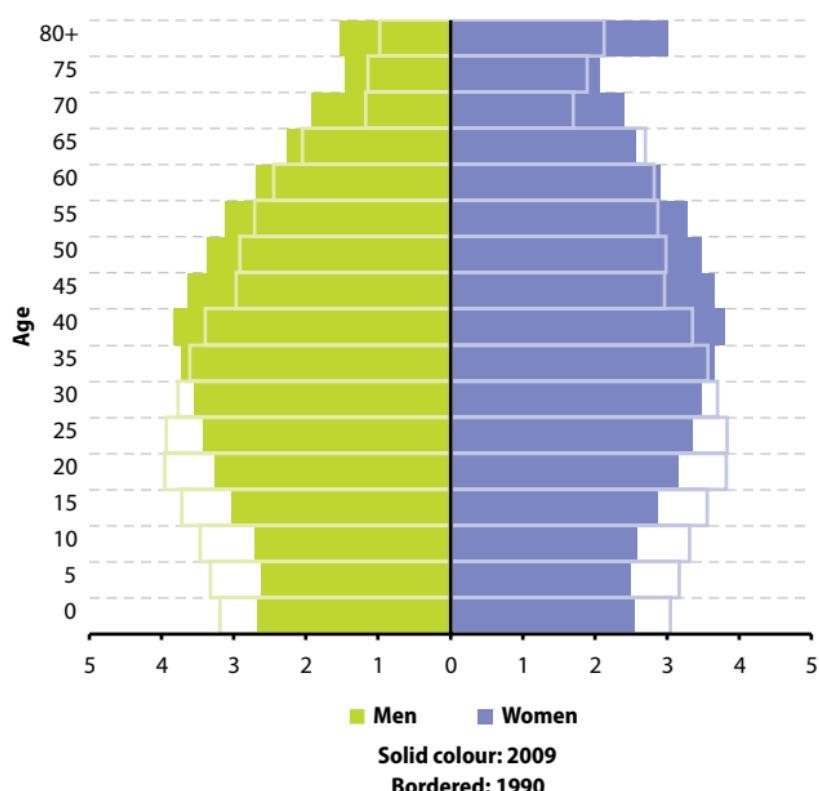
Source: United Nations, Population Division of the Department of Economic and Social Affairs

2.2 Population structure and ageing

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

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

Figure 2.2: Population pyramids, EU-27 (l)
(% of the total population)



(l) Excluding French overseas departments.

Source: Eurostat ([demo_pjangroup](#))

Table 2.2: Population age structure indicators, 2009

	Median age	Young age dependency ratio	Old age dependency ratio
	(years)	(%)	
EU-27 (1)	40.6	23.3	25.6
BE (2)	40.7	25.6	25.8
BG	41.1	19.4	25.2
CZ	39.2	19.9	20.9
DK	40.3	27.8	24.1
DE	43.7	20.6	30.9
EE	39.3	22.0	25.2
IE	33.8	30.8	16.2
EL	41.4	21.4	27.9
ES	39.5	21.5	24.3
FR (1)	39.7	28.2	25.7
IT	42.8	21.4	30.6
CY	35.9	24.4	18.2
LV	39.8	19.9	25.1
LT	38.9	21.9	23.2
LU	38.7	26.4	20.5
HU	39.6	21.6	23.8
MT	39.0	22.6	20.1
NL	40.3	26.4	22.3
AT	41.3	22.4	25.7
PL	37.5	21.5	18.9
PT	40.4	22.8	26.3
RO	38.0	21.7	21.3
SI	41.2	20.1	23.6
SK	36.5	21.3	16.7
FI	41.8	25.2	25.2
SE	40.7	25.4	27.1
UK (2)	39.2	26.5	24.3
IS	34.5	30.9	17.2
LI	40.3	23.2	18.2
NO	38.5	28.7	22.1
CH	41.2	22.5	24.3
HR	41.1	22.8	25.7
MK	35.5	25.7	16.3
TR (2)	28.2	39.3	10.2

(1) Excluding French overseas departments.

(2) 2008 instead of 2009.

Source: Eurostat ([demo_pjanind](#))

2.3 Population and population change

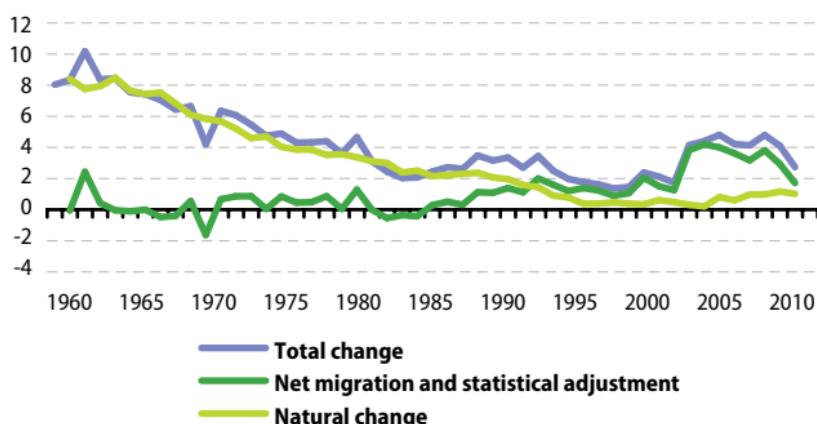
On 1 January 2010 the population of the EU-27 was estimated at 501.1 million; this was 1.4 million people more than the year before and therefore continued a pattern of uninterrupted EU-27 population growth that has been apparent since 1960. The number of inhabitants in the EU-27 grew from 402.6 million in 1960, rising by 98.5 million persons through to 2010.

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

The number of inhabitants in EU Member States on 1 January 2010 ranged from 81.8 million in Germany to 0.4 million in Malta.

Although the population of the EU-27 as a whole still increased in 2009, population growth was unevenly distributed across the Member States. A total of 19 Member States observed an increase in their respective populations, while the number of inhabitants fell in the [Baltic Member States](#), south eastern parts of the EU (Bulgaria and Romania), Germany, Hungary and Malta.

Figure 2.3: Population change by component (annual crude rates), EU-27 (l)
(per 1 000 population)



(l) Before 1998, excluding French overseas departments; includes provisional data.

Source: Eurostat ([demo_gind](#))

Table 2.3: Demographic balance, 2009
(1 000)

	Population 1 January 2009	Live births	Deaths	Net migration & statistical adjustment	Population 1 January 2010
EU-27	499 695.2	5 353.1	4 843.9	857.2	501 061.5
BE	10 750.0	126.0	104.0	55.0	10 827.0
BG	7 606.6	81.0	108.1	-15.7	7 563.7
CZ	10 467.5	118.3	107.4	28.3	10 506.8
DK	5 505.5	62.8	54.9	21.3	5 534.7
DE	82 002.4	651.0	841.0	-12.8	81 799.6
EE	1 340.4	15.8	16.1	0.0	1 340.1
IE	4 450.0	74.8	29.2	-39.9	4 455.8
EL	11 260.4	117.9	110.3	27.0	11 295.0
ES	45 828.2	494.6	391.3	57.6	45 989.0
FR	64 367.0	821.9	546.2	71.1	64 713.8
IT	60 045.1	568.9	591.7	318.1	60 340.3
CY	796.9	9.7	5.4	-3.2	798.1
LV	2 261.3	21.7	29.9	-4.7	2 248.4
LT	3 349.9	36.7	42.0	-15.5	3 329.0
LU	493.5	5.6	3.7	6.6	502.1
HU	10 031.0	96.5	130.4	15.9	10 013.0
MT	413.6	4.1	3.2	-1.6	413.0
NL	16 485.8	184.8	134.2	41.2	16 577.6
AT	8 355.3	76.3	77.4	21.1	8 375.3
PL	38 135.9	417.6	384.9	-1.2	38 167.3
PT	10 627.3	99.5	104.4	15.4	10 637.7
RO	21 498.6	222.4	257.2	-1.6	21 462.2
SI	2 032.4	21.6	18.7	11.7	2 047.0
SK	5 412.3	61.2	52.9	4.4	5 424.9
FI	5 326.3	60.4	49.9	14.6	5 351.4
SE	9 256.3	111.8	90.1	62.6	9 340.7
UK	61 596.0	790.2	559.6	181.5	62 008.1
IS	319.4	5.0	2.0	-4.8	317.6
LI	35.6	0.4	0.2	0.1	35.9
NO	4 799.3	61.8	41.4	38.6	4 858.2
CH	7 701.9	78.2	62.6	65.6	7 783.0
HR	4 435.1	44.6	52.4	-1.5	4 425.7
MK	2 048.6	23.7	19.1	-0.5	2 052.7
TR	71 517.1	1 270.0	461.0	235.2	72 561.3

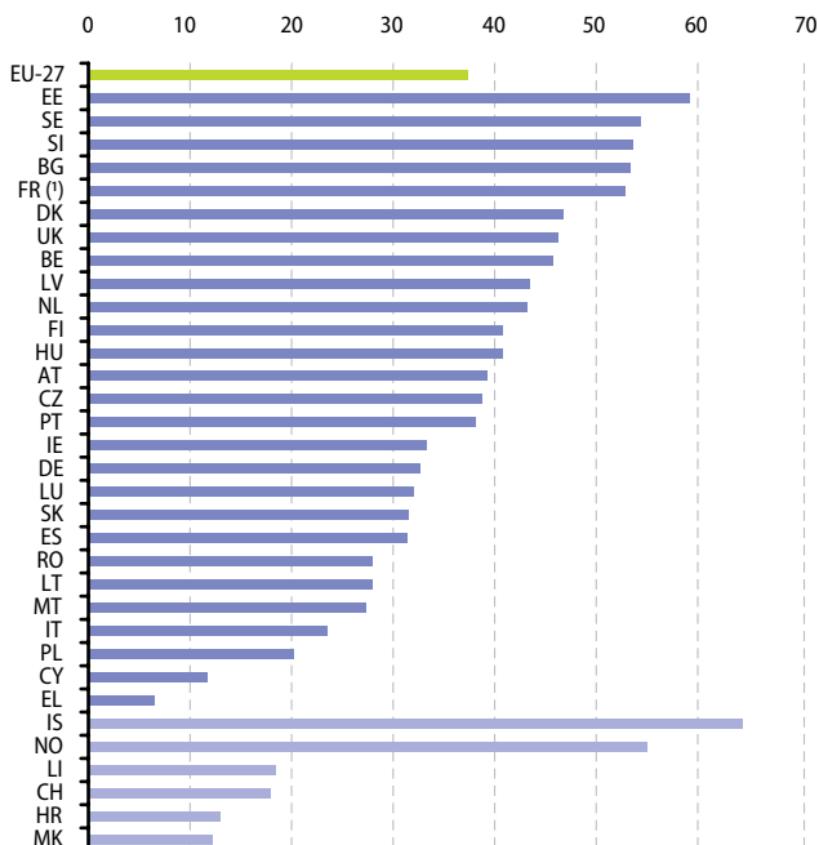
Source: Eurostat ([demo_gind](#))

2.4 Marriage and divorce

The number of marriages that took place in the EU-27 in 2007 was 2.4 million, while around 1.2 million divorces were recorded in the same year. The [crude marriage rate](#), in other words the number of marriages per 1 000 inhabitants, was 4.9, and the [crude divorce rate](#) was 2.1.

In the EU-27 some 37.4 % of children were born outside marriage in 2009, while the corresponding figure for 1990 was 17.4 %. Indeed, extramarital births accounted for the majority of live births in 2009 in Estonia, Sweden, Bulgaria, France and Slovenia. Greece (6.6 %) and Cyprus (11.7 %) were less affected by this trend.

Figure 2.4: Live births outside marriage, as share of total live births, 2009
(% of total live births)



(1) Excluding French overseas departments.

Source: Eurostat ([demo_find](#))

Table 2.4: Crude marriage and divorce rates
(per 1 000 inhabitants)

	Marriages			Divorces (¹)		
	1970	1990	2009	1970	1990	2009
EU-27	7.9	6.3	4.9	0.9	1.6	2.1
BE	7.6	6.5	4.0	0.7	2.0	3.0
BG	8.6	6.9	3.4	1.2	1.3	1.5
CZ	9.2	8.8	4.6	2.2	3.1	2.8
DK	7.4	6.1	6.0	1.9	2.7	2.7
DE	7.4	6.5	4.6	1.3	1.9	2.3
EE	9.1	7.5	4.0	3.2	3.7	2.4
IE (²)	7.0	5.1	5.2	-	-	0.8
EL (³)	7.7	5.8	5.2	0.4	0.6	1.2
ES	7.3	5.7	3.8	-	0.6	2.1
FR (⁴)	7.8	5.1	3.9	0.8	1.9	2.1
IT (⁵)	7.3	5.6	4.0	-	0.5	0.9
CY (⁶)	8.6	9.7	7.9	0.2	0.6	2.2
LV	10.2	8.9	4.4	4.6	4.1	2.3
LT	9.5	9.8	6.2	2.2	3.4	2.8
LU	6.4	6.1	3.5	0.6	2.0	2.1
HU	9.3	6.4	3.7	2.2	2.4	2.4
MT	7.9	7.1	5.7	-	-	-
NL	9.5	6.5	4.4	0.8	1.9	1.9
AT	7.1	5.9	4.2	1.4	2.1	2.2
PL	8.6	6.7	6.6	1.1	1.1	1.7
PT	9.4	7.2	3.8	0.1	0.9	2.5
RO	7.2	8.3	6.3	0.4	1.4	1.5
SI	8.3	4.3	3.2	1.1	0.9	1.1
SK	7.9	7.6	4.9	0.8	1.7	2.3
FI	8.8	5.0	5.6	1.3	2.6	2.5
SE	5.4	4.7	5.1	1.6	2.3	2.4
UK (⁷)	8.5	6.6	4.4	1.1	2.7	2.2
IS	7.8	4.5	4.7	1.2	1.9	1.7
LI	5.9	5.6	4.3	:	:	2.7
NO	7.6	5.2	5.0	0.9	2.4	2.1
CH	7.6	6.9	5.4	1.0	2.0	2.5
HR	8.5	5.8	5.1	1.2	1.1	1.1
MK	9.0	8.3	7.3	0.3	0.4	0.6
TR	:	:	8.2	:	:	1.6

(¹) Divorce was not possible by law in Italy until 1970; in Spain until 1981, in Ireland until 1995; divorce is not possible by law in Malta.

(²) 2007 instead of 2009.

(³) 2008 instead of 2009.

(⁴) Excluding French overseas departments for 1970 and 1990; 2007 instead of 2009.

(⁵) Marriages, 2008 instead of 2009; until 2002, total marriages contracted in the country, including marriages between non-residents; from 2003 onwards, marriages in which at least one spouse was resident in the country.

Source: Eurostat ([demo_nind](#))

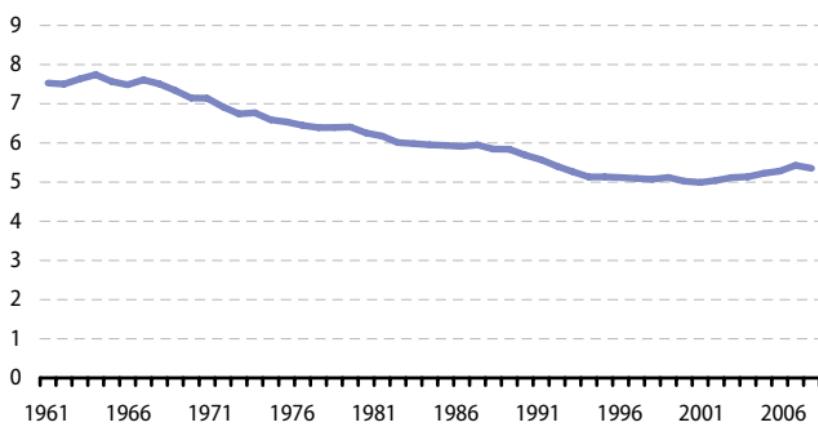
2.5 Fertility

From the 1960s up to the beginning of the 21st century, the number of live births in the EU-27 declined sharply from 7.5 million to around 5.0 million in 2002. Since then there has been a modest rebound in the number of live births, as 5.4 million children were born in the EU-27 in 2008.

A total fertility rate of around 2.1 live births per woman is considered to be the replacement level: in other words, the average number of live births per woman required to keep the population size constant if there were no inward or outward migration. The total fertility rate in the EU-27 declined to a level well below this replacement level in recent decades, falling to 1.47 live births per woman in 2003. A slight recovery in the fertility rate was subsequently observed in most of the Member States, such that the EU-27 average had increased to 1.56 live births per woman by 2008.

Total fertility rates across EU-27 Member States converged during the last few decades. In 1980, the gap between the highest (3.2 in Ireland) and the lowest (1.5 in Luxembourg) fertility rates was 1.7 live births per woman. By 1990 this difference had decreased to 1.1 live births per woman, and by 2008 it had narrowed further to 0.8.

Figure 2.5: Number of live births, EU-27 (l)
(million)



(l) Excluding French overseas departments before 1998.

Source: Eurostat ([demo_gind](#))

Table 2.5: Total fertility rate
(children per woman)

	1960	1970	1980	1990	2000	2008
EU-27 (1)	:	:	:	:	:	1.56
BE (1)	2.54	2.25	1.68	1.62	1.67	1.82
BG	2.31	2.17	2.05	1.82	1.26	1.48
CZ	2.09	1.92	2.08	1.90	1.14	1.50
DK	2.57	1.95	1.55	1.67	1.77	1.89
DE	:	:	:	:	1.38	1.38
EE	:	:	:	2.05	1.38	1.65
IE	3.78	3.85	3.21	2.11	1.89	2.10
EL	2.23	2.40	2.23	1.40	1.26	1.51
ES	:	:	2.20	1.36	1.23	1.46
FR (2)	2.73	2.47	1.95	1.78	1.87	1.99
IT	2.37	2.38	1.64	1.33	1.26	1.41
CY	:	:	:	2.41	1.64	1.46
LV	:	:	:	:	:	1.44
LT	:	2.40	1.99	2.03	1.39	1.47
LU	2.29	1.97	1.50	1.60	1.76	1.61
HU	2.02	1.98	1.91	1.87	1.32	1.35
MT	:	:	1.99	2.04	1.70	1.44
NL	3.12	2.57	1.60	1.62	1.72	1.77
AT	2.69	2.29	1.65	1.46	1.36	1.41
PL	:	:	:	2.06	1.35	1.39
PT	3.16	3.01	2.25	1.56	1.55	1.37
RO	:	:	2.43	1.83	1.31	1.35
SI	:	:	:	1.46	1.26	1.53
SK	3.04	2.41	2.32	2.09	1.30	1.32
FI	2.72	1.83	1.63	1.78	1.73	1.85
SE	:	1.92	1.68	2.13	1.54	1.91
UK (1)	:	:	1.90	1.83	1.64	1.90
IS	:	2.81	2.48	2.30	2.08	2.15
LI	:	:	:	:	1.57	1.43
NO	:	2.50	1.72	1.93	1.85	1.96
CH	2.44	2.10	1.55	1.58	1.50	1.48
HR	:	:	:	:	:	1.46
MK	:	:	:	:	1.88	1.47
TR	:	:	:	:	:	2.10

(1) 2007 instead of 2008.

(2) Excluding French overseas departments.

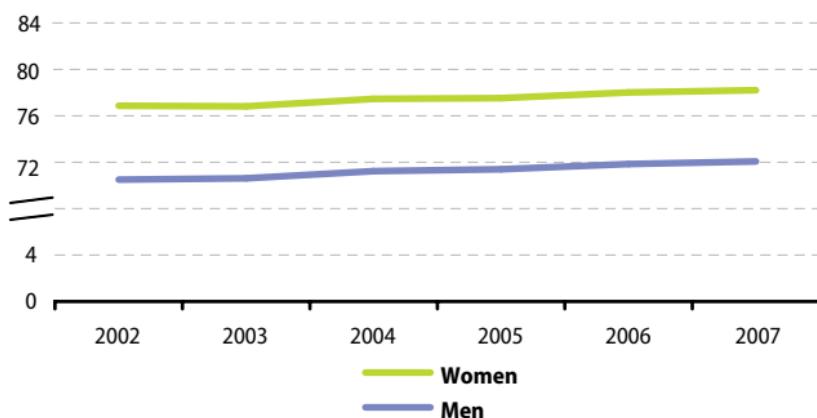
Source: Eurostat ([demo_frate](#))

2.6 Mortality and life expectancy

The most commonly used indicator for analysing mortality is that of life expectancy at birth. Improvements in living standards and to health systems across Europe have led to a continuous increase in life expectancy at birth. In the EU-27 life expectancy at birth increased over the last 50 years by about ten years. Even in the last five years for which data are available (2002 to 2007) it gained 1.5 years. As a result, life expectancy in the EU-27 is generally higher than in most other regions of the world. Based on EU-27 observations for 2007, a new born male is expected to live, on average, to 76.1 years old, while a new born female is expected to live to 82.2 years old.

Significant differences in life expectancy at birth are nevertheless observed between the EU Member States. Looking at the extremes of the ranges, a woman is expected to live 77.0 years in Bulgaria and 84.9 years in France, a range of 7.9 years. A man can be expected to live 66.3 years in Lithuania and 79.2 years in Sweden, a range of 12.9 years.

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



Source: Eurostat ([demo_mlexpec](#))

Table 2.6: Life expectancy at age 65
(years)

	Total		Men		Women	
	1993	2008	1993	2008	1993	2008
EU-27 (1)	:	18.9	:	17.0	:	20.5
BE (1)	16.9	19.3	14.5	17.3	18.9	21.0
BG	14.2	15.3	12.9	13.5	15.5	16.7
CZ	14.5	17.3	12.6	15.3	16.0	18.8
DK	15.9	18.2	14.0	16.6	17.6	19.5
DE	16.8	19.3	14.5	17.5	18.3	20.7
EE	14.2	16.8	11.7	13.6	15.7	18.9
IE	15.2	18.9	13.4	17.2	17.0	20.4
EL	17.1	18.9	15.9	17.8	18.1	19.8
ES	18.1	20.1	15.9	18.0	19.8	21.9
FR (2)	18.5	21.0	16.0	18.5	20.6	23.1
IT (1)	17.7	20.1	15.6	18.0	19.5	21.8
CY	16.9	19.2	15.7	17.9	18.0	20.4
LV	:	16.0	:	13.0	:	17.9
LT	15.1	16.2	12.6	13.4	16.6	18.1
LU	16.8	19.4	14.2	17.4	18.7	21.0
HU	14.0	16.4	11.9	13.9	15.7	18.1
MT	:	18.7	:	17.0	:	20.1
NL	16.8	19.2	14.4	17.4	18.9	20.7
AT	17.0	19.6	14.7	17.7	18.4	21.1
PL	14.6	17.2	12.5	14.8	16.2	19.1
PT	16.0	18.7	14.2	16.9	17.5	20.3
RO	14.1	15.7	12.8	14.0	15.2	17.2
SI	15.5	18.8	13.2	16.4	17.1	20.5
SK	14.5	16.1	12.4	13.8	16.2	17.8
FI	16.4	19.6	14.1	17.5	18.0	21.3
SE	17.5	19.6	15.6	18.0	19.3	20.9
UK (1)	16.2	19.0	14.2	17.5	17.9	20.2
IS	18.0	19.6	16.8	18.4	19.1	20.6
LI	:	20.6	:	18.5	:	22.2
NO	16.9	19.4	14.8	17.6	18.8	21.0
CH	18.3	20.7	15.9	18.9	20.3	22.3
HR	:	16.4	:	14.3	:	18.0
MK	:	14.6	:	13.6	:	15.6

(1) 2007 instead of 2008.

(2) Excluding French overseas departments.

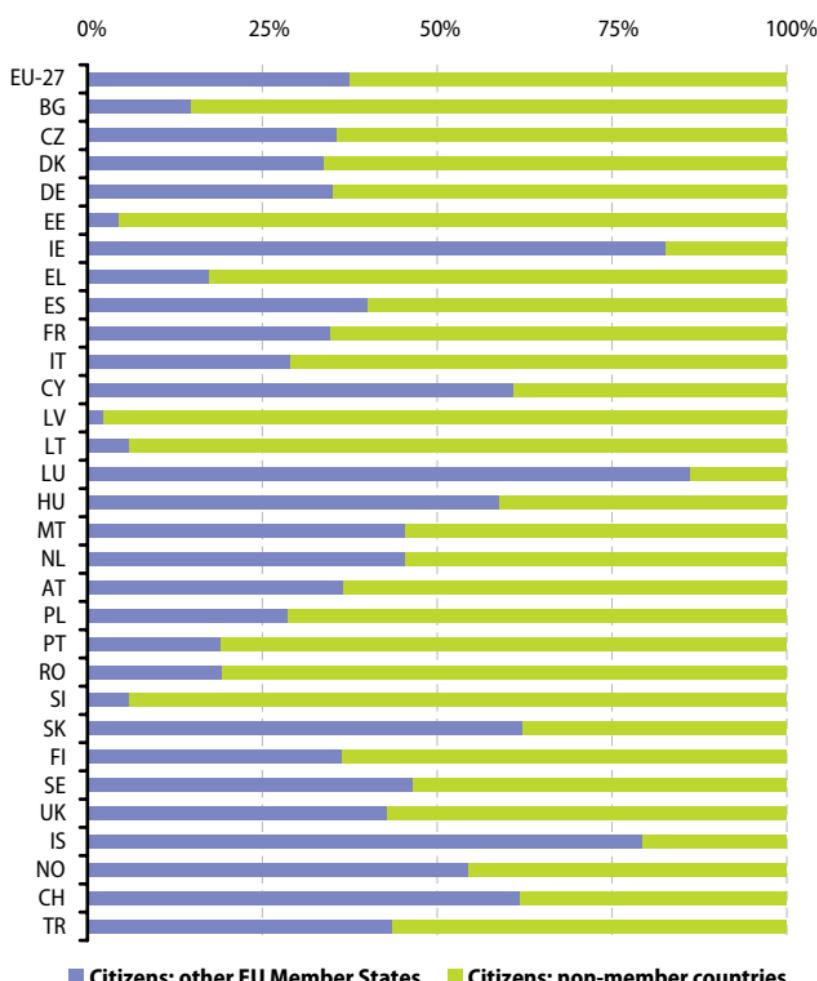
Source: Eurostat ([demo_mlexpec](#))

2.7 Migration and migrant population

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

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

Figure 2.7: Breakdown of non-nationals by citizenship, 2009⁽¹⁾ (% of non-nationals)



(1) Belgium, not available.

Source: Eurostat ([migr_pop1ctz](#))

Table 2.7: Immigration by main citizenship group, 2008
(1 000)

	Nationals	Non-nationals		
		Total	Citizens of other EU Member States	Citizens of non-member countries
EU-27	600.0	3 200.0	1 400.0	1 800.0
BE	:	:	:	:
BG	1.1	0.1	0.0	0.1
CZ	1.7	76.2	17.6	58.5
DK	19.9	37.5	20.0	17.5
DE	108.3	573.8	335.9	237.9
EE	1.7	1.9	1.0	0.9
IE	17.9	45.6	32.1	13.5
EL	:	74.7	25.7	49.0
ES	33.8	692.2	193.3	498.9
FR	64.1	152.9	63.9	89.0
IT	38.2	496.5	212.9	283.7
CY	1.1	9.8	6.5	3.4
LV	0.9	2.5	1.6	0.9
LT	6.3	3.0	0.4	2.6
LU	1.0	16.7	13.9	2.8
HU	2.0	35.5	17.7	17.9
MT	1.2	7.8	4.5	3.3
NL	40.2	94.3	55.4	38.9
AT	15.3	94.4	55.3	39.1
PL	35.9	12.0	3.1	8.9
PT	9.6	20.1	4.1	16.1
RO	:	10.0	:	:
SI	2.6	28.0	2.1	25.9
SK	1.4	16.5	8.5	7.9
FI	9.2	19.7	7.3	12.3
SE	17.9	83.0	30.4	52.6
UK	85.1	505.2	197.7	307.4
IS	2.8	7.5	6.4	1.1
NO	6.4	51.7	32.2	19.5
CH	22.7	161.6	113.6	48.0
HR	12.5	2.0	0.5	1.5
MK	0.2	0.8	0.1	0.7
TR	:	19.7	6.0	13.7

Source: Eurostat ([migr_imm1ctz](#))

Health

3¹

- Z E 0,3

15

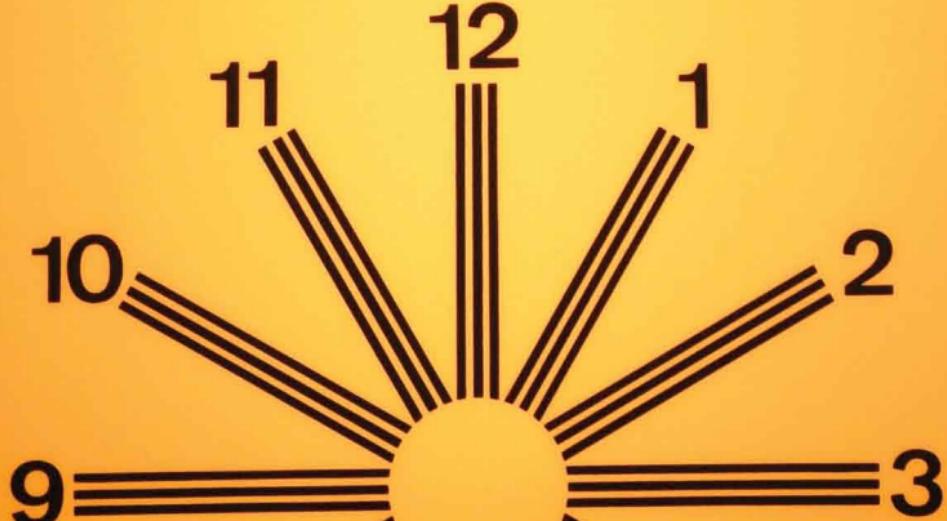
M C T H

0,2

30

N X V

0,1

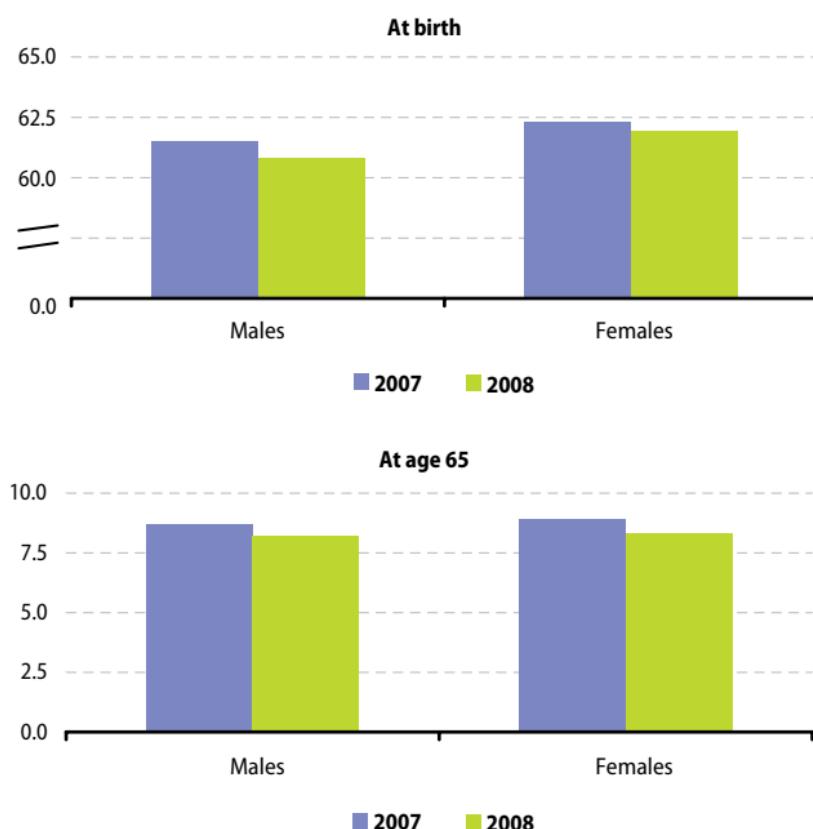


3.1 Healthy life years

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

In 2008 the number of healthy life years at birth in the EU-27 reached 60.8 years for men and 61.9 years for women; this represented 79.9 % and 75.3 % of total life expectancy at birth for men and women. For survivors at the age of 65, the number of remaining healthy life years was 8.2 years for men and 8.3 years for women.

Figure 3.1: Healthy life years, EU-27



Source: Eurostat ([hlth_lyhe](#))

Table 3.1: Healthy life years, 2008
(years)

	Healthy life years			
	At birth		At age 65	
	Males	Females	Males	Females
EU-27	60.8	61.9	8.2	8.3
BE (1)	63.3	63.7	10.1	10.3
BG	61.9	65.5	8.7	9.3
CZ	61.2	63.3	7.4	8.2
DK	62.3	60.7	12.0	12.3
DE	55.8	57.4	6.2	6.6
EE	52.7	57.2	3.9	4.2
IE	63.2	65.0	9.4	10.3
EL	65.4	65.8	8.9	8.1
ES	63.7	63.2	9.8	8.6
FR	62.4	64.2	8.7	9.8
IT (1)	62.8	61.9	7.9	7.2
CY	64.5	65.1	9.3	7.7
LV	51.5	54.1	4.8	4.9
LT	54.6	59.3	5.7	6.3
LU	64.8	64.2	10.8	11.6
HU	54.6	58.0	5.5	6.3
MT	68.7	71.9	10.4	11.4
NL	62.4	59.8	9.7	9.6
AT	58.0	59.5	7.3	7.3
PL	58.4	62.6	6.9	7.5
PT	59.0	57.2	6.6	5.4
RO	60.0	62.6	7.7	7.8
SI	59.4	60.9	9.2	9.3
SK	51.8	52.3	2.9	2.6
FI	58.6	59.4	8.0	8.9
SE	69.2	68.7	12.9	13.8
UK (1)	64.9	66.1	10.3	11.5
IS	70.9	69.5	13.8	14.0
NO	70.0	68.8	14.1	14.8

(1) 2007.

Source: Eurostat ([hlth_hlye](#))

3.2 Causes of death

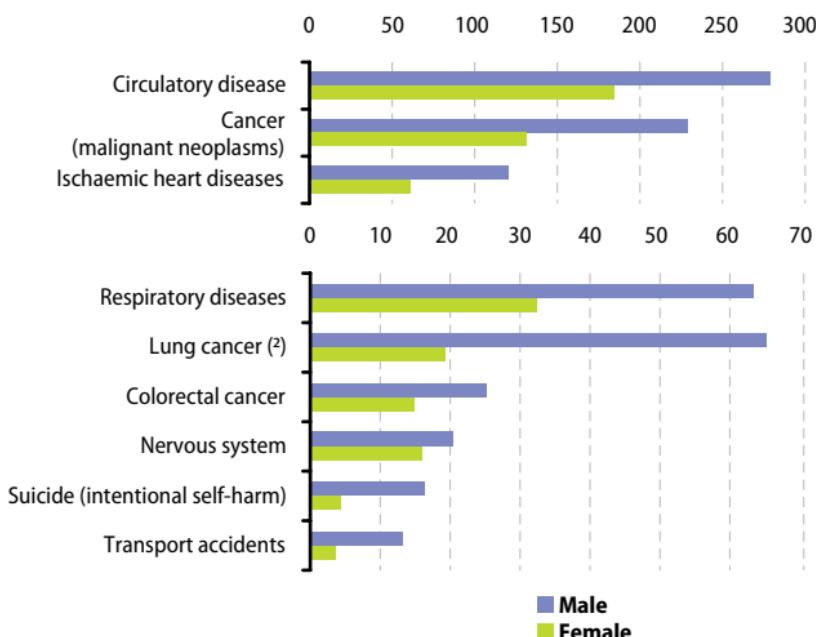
By relating all deaths in the population to an underlying cause of death, the risks associated with death from a range of specific diseases and other causes can be assessed, and these figures can be further broken down by age, gender, nationality and region (NUTS level 2), using [standardised death rates](#).

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

The latest information available for 2008 (⁽⁴⁾) shows that diseases of the circulatory system and cancer were, by far, the leading causes of death in Europe. Between 2000 and 2008 there was a marked

(⁽⁴⁾) Italy, Luxembourg, Malta, Sweden, the United Kingdom and Switzerland, 2007; Denmark, 2006; Belgium, 2005.

Figure 3.2: Causes of death - standardised death rate, EU-27, 2008 (⁽¹⁾)
(per 100 000 inhabitants)



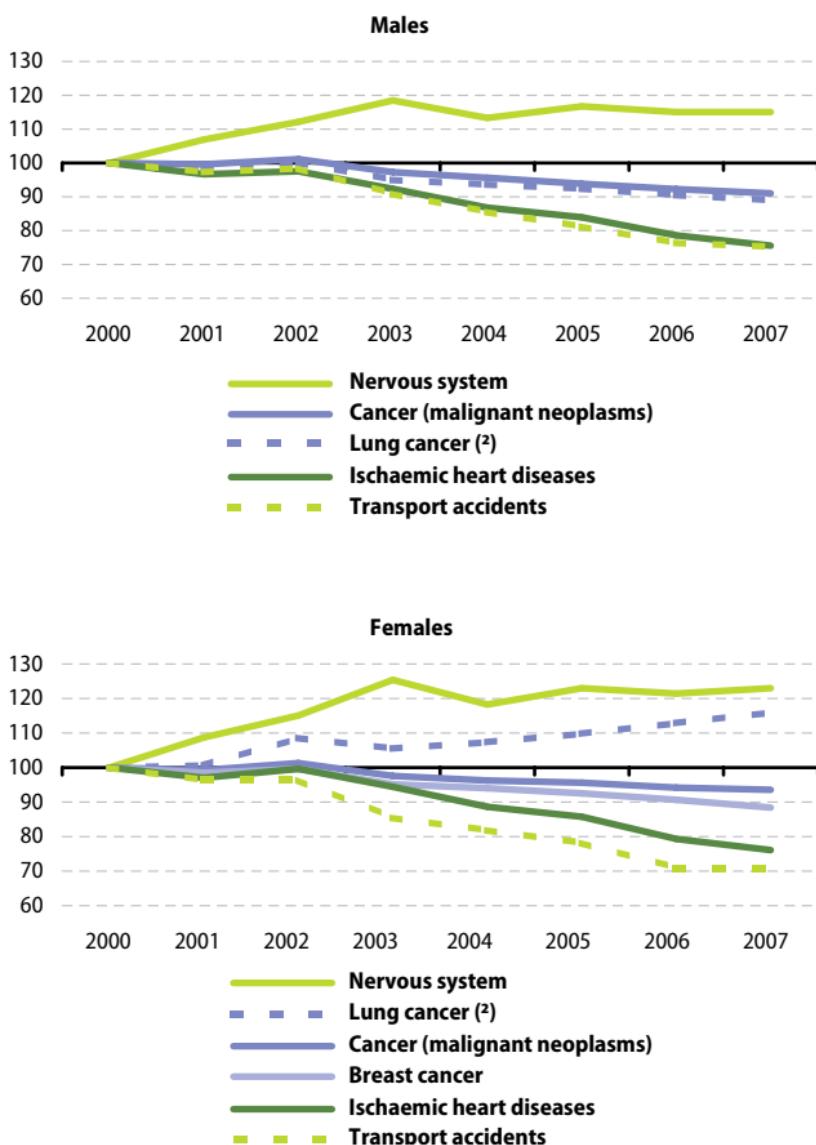
(⁽¹⁾) Provisional; note the differences in the scales employed between the two parts of the figure; the figure is ranked on the average of male and female.

(⁽²⁾) Malignant neoplasms of the larynx, trachea, bronchus and lung.

Source: Eurostat ([hlth_cd_asdr](#))

reduction in EU-27 death rates resulting from ischaemic heart disease and from transport accidents (each falling overall by about 30 %), while there was a reduction of almost 10 % in EU-27 death rates for cancer during the same period.

Figure 3.3: Causes of death - standardised death rate per 100 000 inhabitants, EU-27 (¹)
(2000=100)



(¹) Provisional.

(²) Malignant neoplasms of the larynx, trachea, bronchus and lung.

Source: Eurostat ([hlth_cd_asdr](#))

3.3 Healthcare

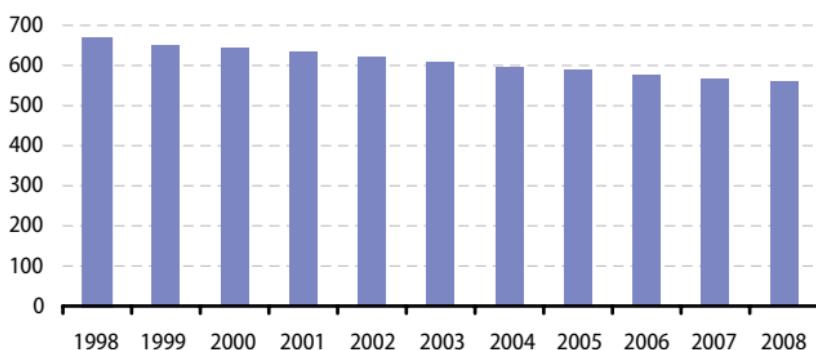
Healthcare systems are organised and financed in different ways across the EU Member States, but most Europeans would agree that universal access to good healthcare, at an affordable cost to both individuals and society at large, is a basic need.

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

During the ten years between 1998 and 2008, the number of hospital beds per 100 000 inhabitants fell in every Member State, except Malta.

The reduction in hospital bed numbers may reflect, among others, economic constraints, increased efficiency through the use of technical resources (for example, imaging equipment), a general shift from inpatient to outpatient operations, and shorter periods spent in hospital following an operation.

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



Source: Eurostat (tps00046)

Table 3.2: Healthcare indicators, 2008
(per 100 000 inhabitants)

	Practising physicians (¹)	Hospital beds (²)	Hospital discharges (³)
BE	293.2	660.1	15 741
BG	361.3	650.8	21 665
CZ	352.7	715.8	20 624
DK	341.0	357.8	16 498
DE	356.2	820.3	22 692
EE	335.0	571.5	:
IE	309.3	519.9	13 501
EL	599.8	478.4	:
ES	354.8	324.5	10 567
FR	332.3	684.8	16 075
IT	414.0	371.4	13 887
CY	285.6	377.2	7 500
LV	298.6	638.3	20 290
LT	370.6	685.3	21 686
LU	282.1	562.4	13 887
HU	309.3	705.0	19 486
MT	303.9	481.9	9 512
NL	369.4	426.3	10 953
AT	468.2	769.2	27 539
PL	216.1	662.1	13 965
PT	377.3	336.8	:
RO	221.5	657.4	22 495
SI	238.8	476.9	16 154
SK	300.0	655.0	18 174
FI	271.4	653.8	18 821
SE	356.6	:	14 910
UK	270.2	336.7	12 248
IS	372.0	585.7	15 018
NO	398.1	354.0	17 214
CH	385.4	524.9	16 217
HR	266.1	547.3	16 259
MK	253.5	516.0	9 876
TR	158.2	243.9	:

(¹) Greece, France, Italy, the former Yugoslav Republic of Macedonia and Turkey, professionally active physicians; Ireland, the Netherlands and Portugal, licensed physicians; Spain, Latvia, Malta, Austria, Portugal, the United Kingdom and Switzerland, 2009; Denmark, Luxembourg, the Netherlands and Slovakia, 2007; Sweden and the former Yugoslav Republic of Macedonia, 2006.

(²) Latvia and Malta, 2009; Ireland and Iceland, 2007; the former Yugoslav Republic of Macedonia, 2006.

(³) Of inpatients (excluding healthy new born babies); Belgium, the Czech Republic, Denmark, Italy, Cyprus, Luxembourg, Poland and the United Kingdom, 2007; Sweden, Iceland and the former Yugoslav Republic of Macedonia, 2006.

Source: Eurostat ([hlth_rs_prs](#), [tps00046](#) and [hlth_co_disch2t](#))

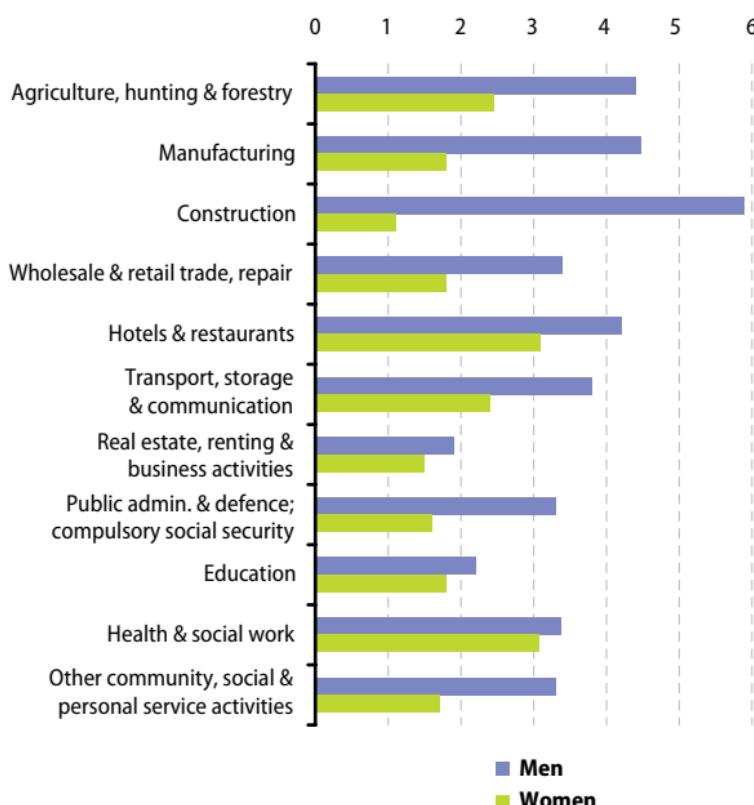
3.4 Health and safety at work

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

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

The labour force survey (LFS) ad-hoc module in 2007 provided data on self-reported occupational accidents in the 12 months prior to the survey, irrespective of whether these accidents resulted in absence from work.

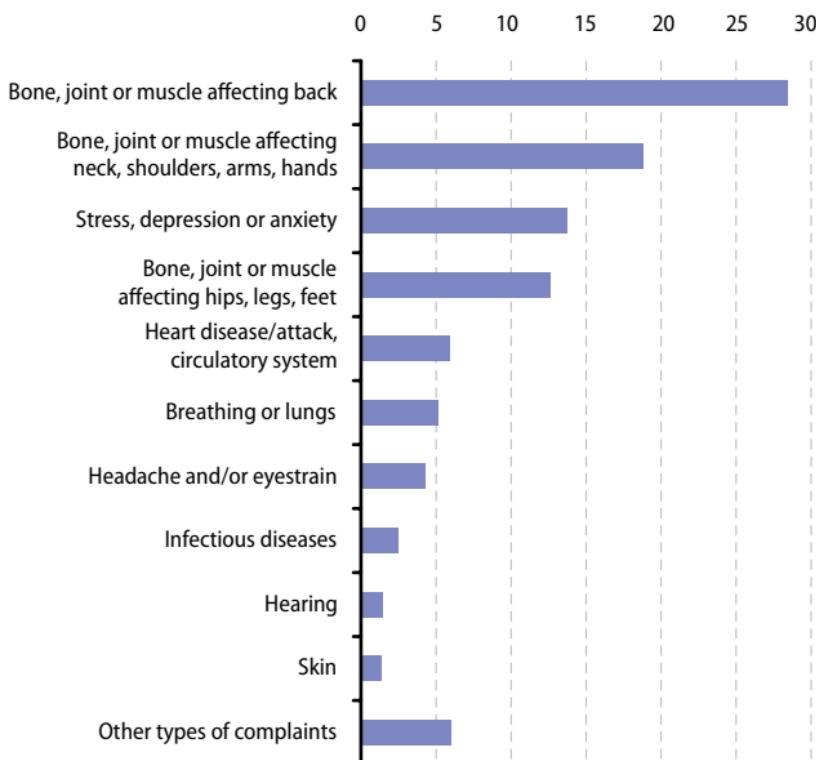
Figure 3.5: Workers reporting one or more accidental injuries at work, EU-27, 2007 (1)
(% of male and female persons employed aged 15-64 years old)



(1) At work or in the course of work in their main job during the 12 months prior to the survey.

Source: Eurostat ([hsw_ac5](#))

Figure 3.6: Type of work-related health problem indicated as the most serious among persons with a work-related health problem, EU-27, 2007 (1)
(%)

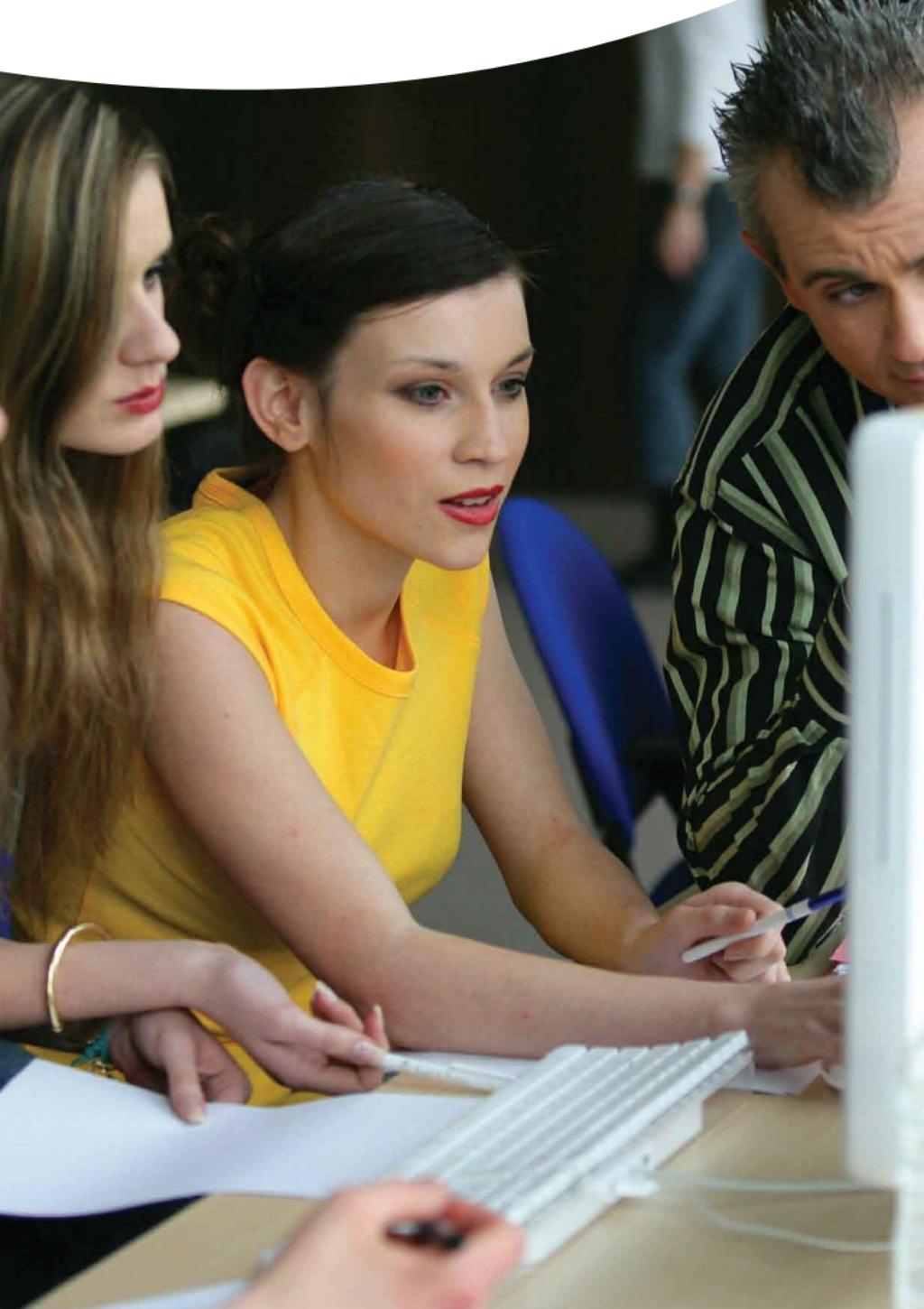


(1) Excluding France.

Source: Eurostat ([hsw_pb5](#))

Education and training

4

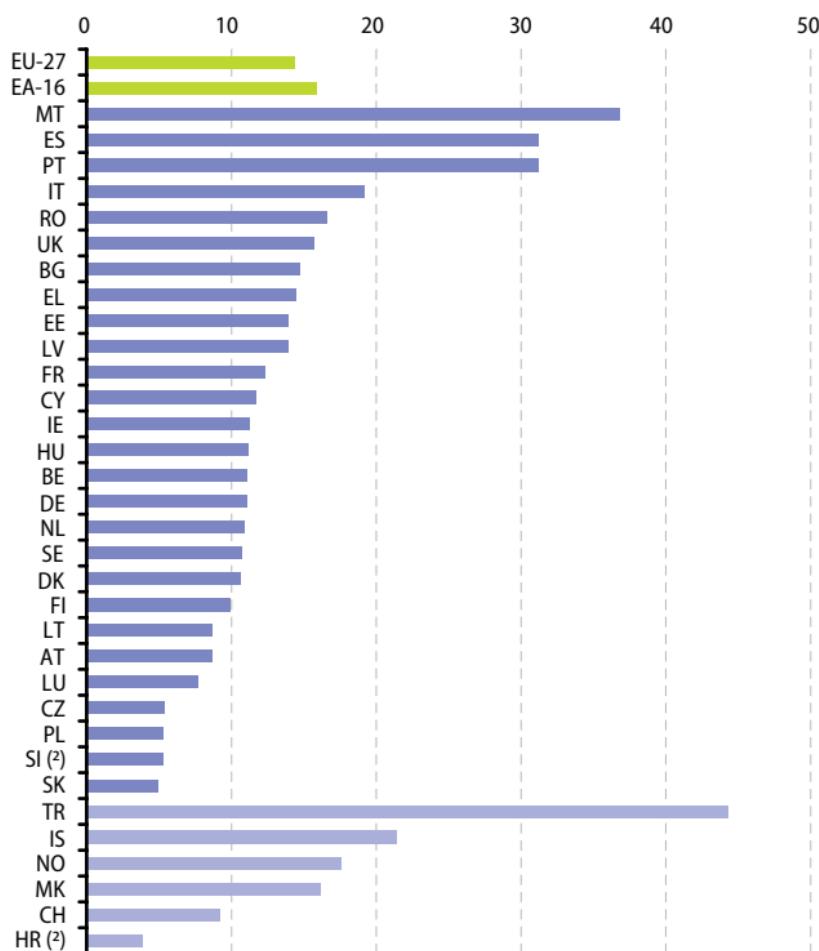


4.1 School enrolment and levels of education

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

The indicator for early leavers from education and training is defined as the proportion of the population aged 18 to 24 with at most a lower secondary level of education (ISCED levels 1, 2 or 3c short), who are no longer in further education or training;

Figure 4.1: Early leavers from education and training, 2009 (¹) (%)



(¹) Refer to the Internet metadata file (http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/lfsi_edu_a_esms.htm); based on annual averages of quarterly data.

(²) Unreliable or uncertain data.

Source: Eurostat (tsiir110 and tsisc060)

respondents declared not having received any education or training in the four weeks preceding the survey.

Table 4.1: Pupils and students, 2008⁽¹⁾

	Pupils and students (1 000)	Proportion of four-year olds in education (%)	Pupil/teacher ratio in primary education ⁽²⁾	Proportion of 18-year olds in education (%)
EU-27	93 116	90.1	:	77.0
BE	2 428	99.6	12.6	82.7
BG	1 142	71.7	16.1	76.4
CZ	1 855	86.8	18.1	88.1
DK	1 152	95.3	10.1	80.2
DE	14 065	95.4	18.0	87.1
EE	258	91.2	16.4	80.4
IE	1 053	44.0	17.8	90.2
EL	2 009	52.4	10.1	70.2
ES	7 615	98.7	13.1	70.2
FR	12 265	100.0	19.9	76.6
IT	9 510	98.6	10.6	76.9
CY	148	75.3	15.0	36.2
LV	431	78.6	12.8	80.4
LT	738	65.0	9.7	91.9
LU	80	95.2	12.1	70.6
HU	1 873	92.5	10.6	83.8
MT	74	97.8	10.6	50.4
NL	3 380	99.5	15.8	82.7
AT	1 468	85.6	12.9	72.5
PL	8 168	48.1	10.5	91.6
PT	2 109	81.3	11.3	68.1
RO	3 904	79.0	16.3	75.4
SI	388	83.2	15.8	89.1
SK	1 059	74.8	18.6	81.9
FI	1 251	52.5	14.4	93.5
SE	2 023	91.8	12.2	95.4
UK	12 671	97.3	20.2	51.1
IS	87	95.6	10.0	77.0
LI	6	51.0	9.1	85.7
NO	1 078	95.3	10.8	87.7
CH	1 355	39.5	:	83.2
HR	722	54.0	16.6	64.7
MK	385	20.6	17.4	59.5
TR	16 649	13.0	24.4	38.4
JP	18 658	95.7	18.8	:
US	68 041	57.5	14.3	65.0

(1) Refer to the Internet metadata file (http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/educ_esms.htm).

(2) Greece, 2007.

Source: Eurostat ([tps00051](http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/tps00051), [tps00053](http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/tps00053), [tps00054](http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/tps00054) and [tps00060](http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/tps00060))

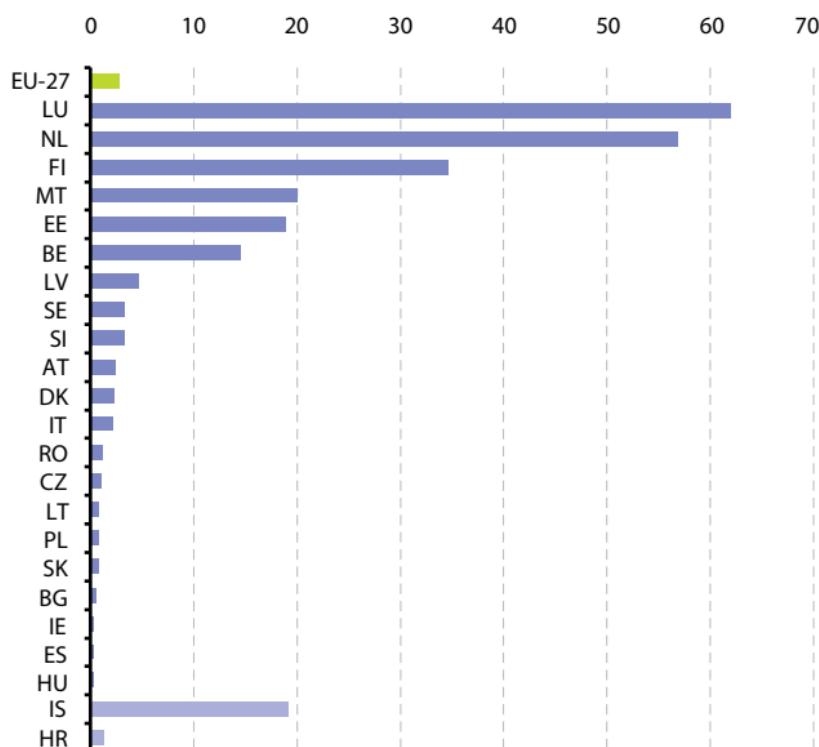
4.2 Foreign language learning

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

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

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

Figure 4.2: Proportion of students learning 3 or more languages (at ISCED level 2 or 3), 2007 (¹)
(%)



(¹) Germany, Greece, France, Cyprus, Portugal and the United Kingdom, not available; refer to the Internet metadata file (http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/educ_esms.htm).

Source: Eurostat (educ_thrlan)

making it mandatory to teach a second language, or ensuring that pupils have the possibility to study a second foreign language as part of their curriculum.

Table 4.2: Foreign languages learnt per pupil in upper secondary education (ISCED 3) (¹) (%)

	Pupils learning English in general programmes		Pupils learning French in general programmes		Pupils learning German in general programmes	
	2002	2007	2002	2007	2002	2007
EU-27	69.7	83.5	17.7	21.8	17.7	22.5
BE	94.1	94.1	47.7	48.1	30.1	28.5
BG	80.8	86.2	18.7	15.0	39.3	38.5
CZ	98.9	100.0	17.3	24.5	73.5	65.8
DK	:	91.8	:	10.7	:	35.6
DE	90.9	91.0	27.1	27.4	-	-
EE	91.2	95.0	4.7	6.7	45.6	41.6
IE	-	-	65.7	59.6	18.7	18.3
EL (²)	95.2	94.0	10.3	8.6	2.1	2.9
ES	95.9	95.3	27.7	27.7	1.1	1.1
FR	99.4	99.4	-	-	30.5	21.8
IT	85.9	95.3	27.2	20.5	8.2	7.2
CY	100.0	78.5	60.4	32.2	1.0	2.4
LV	89.3	96.0	3.1	4.1	48.1	32.2
LT	76.5	85.1	6.8	4.9	35.1	25.4
LU	96.3	96.5	96.3	96.5	96.3	96.5
HU	57.6	76.4	6.3	6.5	49.3	50.1
MT	78.5	70.2	8.3	9.6	0.8	2.2
NL	99.9	100.0	22.7	70.3	23.3	86.3
AT	96.9	96.9	42.8	54.1	-	-
PL	90.6	91.2	14.1	9.8	61.5	62.7
PT (²)	:	50.7	:	15.1	:	1.6
RO (³)	87.8	95.9	85.1	83.0	10.7	11.6
SI	98.2	98.3	9.1	10.8	83.0	76.0
SK	96.0	97.9	12.4	16.0	78.2	71.2
FI	99.7	99.3	21.9	19.3	41.5	33.2
SE	99.8	99.9	25.8	21.1	48.9	29.6
UK	-	-	:	32.0	:	11.7
IS (⁴)	66.2	76.1	14.7	17.1	32.1	30.7
NO (²)	:	100.0	:	20.3	:	31.3
HR (²)	:	98.3	:	3.4	:	65.6
TR (²)	:	67.3	:	0.7	:	6.5

(¹) Refer to the Internet metadata file (http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/educ_esms.htm).

(²) 2006 instead of 2007.

(³) Pupils learning German: 2006 instead of 2007.

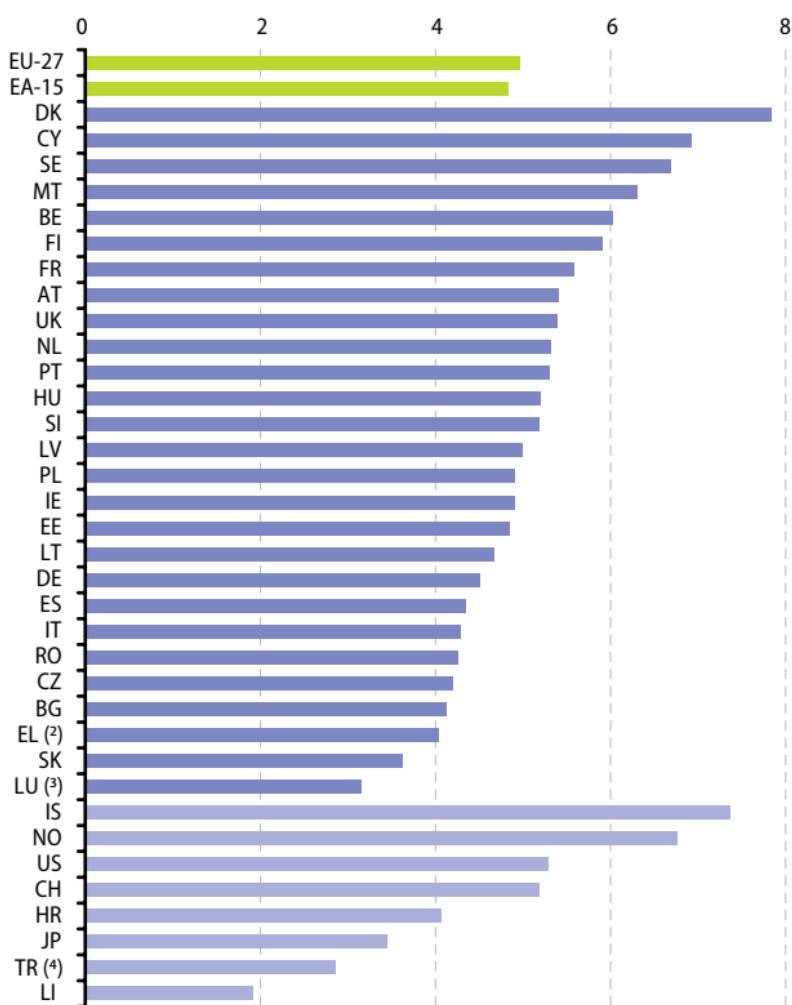
(⁴) Pupils learning English, French or German: 2006 instead of 2007.

Source: Eurostat ([educ_thrlan](#), [tps00057](#), [tps00058](#) and [tps00059](#)), Unesco, OECD

4.3 Educational expenditure

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

Figure 4.3: Public expenditure on education, 2007 (¹)
(% of GDP)



(¹) Refer to the Internet metadata file (http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en_tsiir010_esms.htm).

(²) 2005.

(³) Excludes tertiary education.

(⁴) 2006.

Source: Eurostat (tsiir010)

Table 4.3: Education expenditure, for all levels of education combined (%)

	Public expenditure (% of GDP)		Private expenditure (% of GDP)		Expenditure on public and private educational institutions per pupil/student (PPS for full-time equivalents)	
	2002	2007	2002	2007	2002	2007
EU-27	5.10	4.96	0.60	0.72	5 307	6 251
EA-15	5.00	4.83	0.58	0.56	5 798	6 709
BE	6.10	6.02	0.36	0.34	6 574	7 264
BG	4.03	4.13	0.69	0.62	1 575	2 290
CZ	4.32	4.20	0.24	0.51	2 947	4 452
DK	8.44	7.83	0.28	0.53	7 379	8 595
DE	4.70	4.50	0.87	0.69	6 058	6 752
EE	5.48	4.85	:	0.32	:	3 675
IE	4.29	4.90	0.28	0.24	4 940	7 172
EL ⁽²⁾	3.57	:	0.17	0.26	3 549	4 485
ES	4.25	4.35	0.54	0.61	4 850	6 773
FR	5.88	5.59	0.56	0.53	6 161	6 928
IT	4.62	4.29	0.35	0.40	5 736	6 205
CY	6.55	6.93	1.40	1.27	5 495	7 708
LV	5.71	5.00	0.82	0.56	2 267	3 666
LT	5.84	4.67	:	0.45	2 012	3 174
LU ⁽³⁾	3.79	3.15	:	:	:	:
HU ⁽⁴⁾	5.38	5.20	0.55	0.54	:	3 995
MT ⁽⁵⁾	4.38	6.31	0.61	0.38	3 448	6 437
NL	5.15	5.32	0.89	0.90	6 780	7 891
AT	5.72	5.40	0.38	0.48	7 692	8 695
PL	5.41	4.91	0.64	0.50	2 507	3 226
PT	5.54	5.30	0.09	0.46	4 191	5 125
RO ⁽⁶⁾	3.51	4.25	0.16	0.50	:	1 438
SI	5.78	5.19	0.83	0.73	4 930	6 055
SK	4.30	3.62	0.20	0.53	2 032	3 122
FI	6.21	5.91	0.13	0.14	5 707	6 682
SE	7.43	6.69	0.17	0.16	6 743	7 907
UK	5.11	5.39	0.89	1.75	5 708	7 972
IS	6.79	7.36	0.57	0.77	13 162	8 172
LI	2.96	1.92	:	:	8 470	7 788
NO	7.58	6.76	0.26	:	8 555	9 708
CH	5.75	5.18	0.61	0.55	:	:
HR	3.72	4.07	0.13	0.35	:	3 742
MK	3.35	:	:	:	:	:
TR ⁽⁷⁾	2.82	2.86	0.33	:	:	:
JP	3.65	3.45	1.21	1.64	6 446	7 752
US	5.58	5.29	1.90	2.58	9 335	11 785

(l) Refer to the Internet metadata file (http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/edu_esms.htm)

⁽²⁾ 2005 instead of 2007

⁽³⁾ Excludes tertiary education.

(⁴) Private expenditure and expenditure per pupil/student, 2006 instead of 2007.

⁽⁵⁾ Private expenditure and expenditure per pupil/student, break in series

(6) Expenditure per pupil/student, 2005 instead of 2007

(⁷) 2006 instead of 2007.

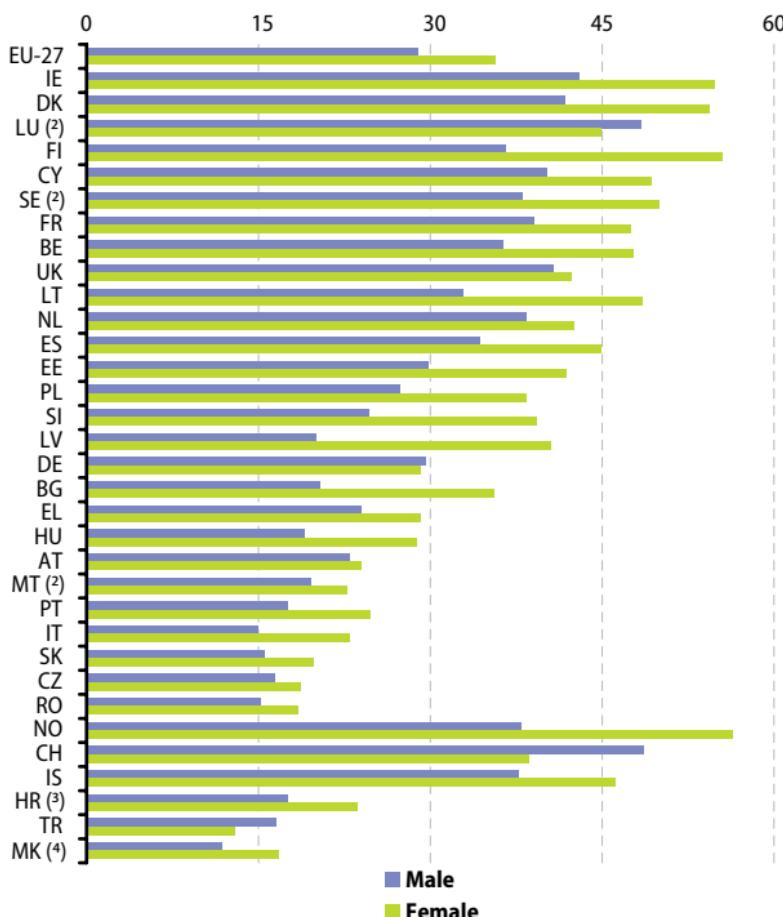
Source: Eurostat ([educ_fiqdp](#), [tps00068](#) and [tps00067](#)), UNESCO, OECD

4.4 Tertiary education

The decade since the introduction of the Bologna process has brought about a major expansion in higher education systems, accompanied by significant reforms in degree structures and quality assurance systems. However, the financial and economic crisis has affected higher education in different ways, with some countries investing more and others making radical cutbacks in spending.

Just under one third (32.3 %) of the population aged 30 to 34 in the EU-27 had a tertiary education in 2009, rising to over one third (35.7 %) among women, and falling to 28.9 % among men.

Figure 4.4: Proportion of the population aged 30 to 34 having a tertiary educational attainment, 2009⁽¹⁾ (%)



(1) Refer to the Internet metadata file (http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/educ_esms.htm).

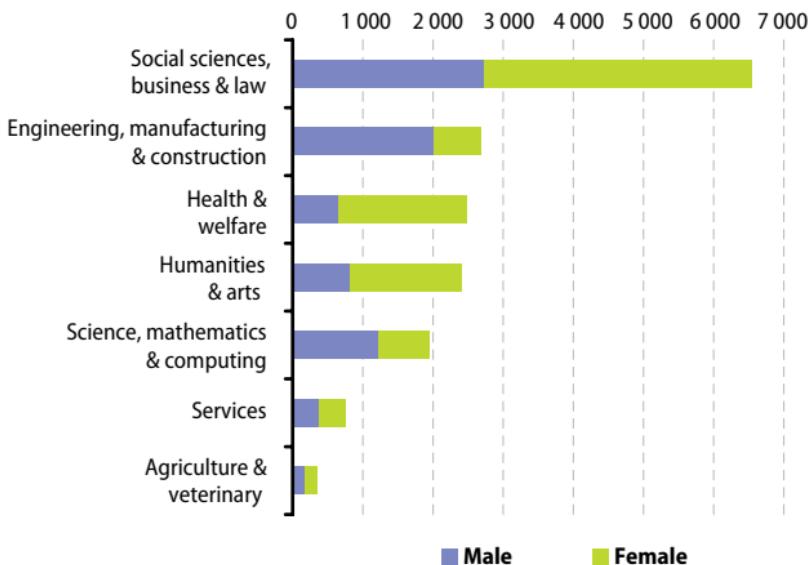
(2) Provisional.

(3) Unreliable or uncertain data.

(4) Male proportion: unreliable or uncertain data.

Source: Eurostat (t2020_41)

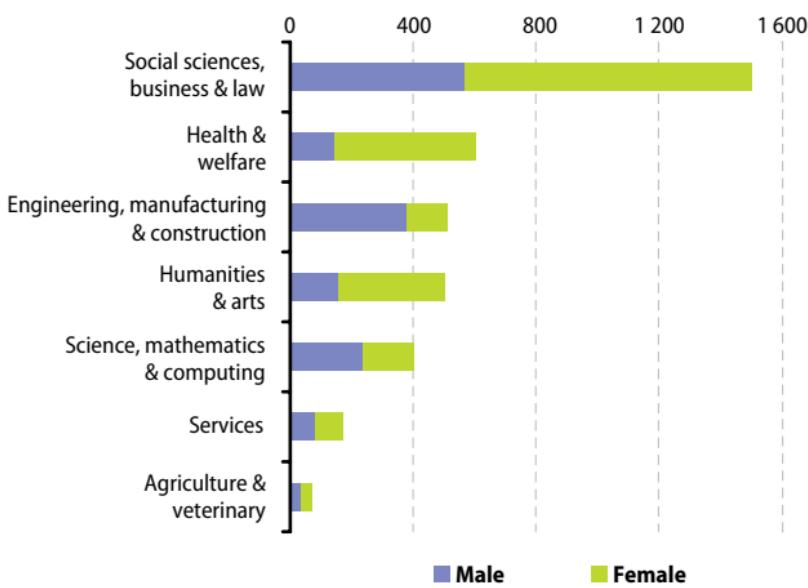
Figure 4.5: Students in tertiary education, by field of education and gender, EU-27, 2008 (1)
(1 000)



(1) Refer to the Internet metadata file (http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/educ_esms.htm).

Source: Eurostat (educ_enrl5)

Figure 4.6: Graduates from tertiary education, by field of education and gender, EU-27, 2008 (1)
(1 000)



(1) Refer to the Internet metadata file (http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/educ_esms.htm).

Source: Eurostat (educ_grad5)

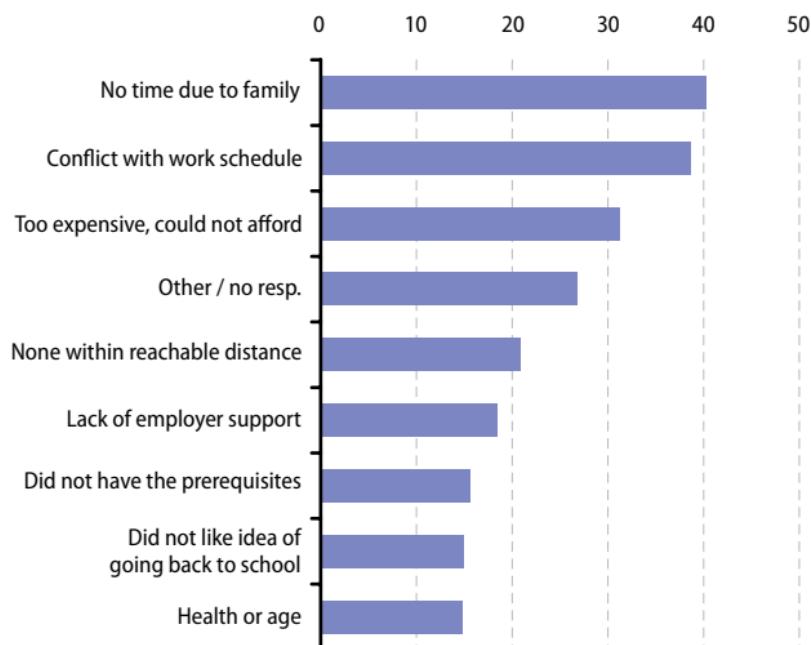
4.5 Lifelong learning

In 2009, the proportion of persons aged 25 to 64 in the EU receiving some form of education or training in the four weeks preceding the labour force survey was 9.3 %; a share that was unchanged compared with the corresponding share for 2004.

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

Lifelong learning can take place in a variety of environments, both inside and outside formal education and training systems. Lifelong learning implies investing in people and knowledge; promoting the acquisition of basic skills, including [digital literacy](#) and broadening opportunities for innovative, more

Figure 4.7: Obstacles to participation in education and training, EU, 2007⁽¹⁾
(%)



(1) Multiple answers allowed; Denmark, Ireland, France, Luxembourg, Malta and Romania are not included in the EU average; refer to the Internet metadata file (http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/trng_aes_esms.htm).

Source: Eurostat (trng_aes_176)

flexible forms of learning. The aim is to provide people of all ages with equal and open access to high-quality learning opportunities, and to a variety of learning experiences.

Table 4.4: Lifelong learning (1)
(% of population aged 25 to 64 participating in education and training)

	Total		Male		Female	
	2004	2009	2004	2009	2004	2009
EU-27	9.3	9.3	8.7	8.5	10.0	10.2
EA-16	7.3	8.1	7.2	7.7	7.5	8.5
BE	8.6	6.8	8.7	6.4	8.5	7.2
BG	1.3	1.4	1.2	1.3	1.3	1.5
CZ	5.8	6.8	5.5	6.5	6.0	7.0
DK	25.6	31.6	22.1	25.6	29.1	37.6
DE	7.4	7.8	7.8	7.8	7.0	7.7
EE	6.4	10.5	5.1	7.6	7.5	13.2
IE	6.1	6.3	5.1	5.7	7.1	7.0
EL	1.8	3.3	1.8	3.2	1.8	3.3
ES (2)	4.7	10.4	4.2	9.6	5.1	11.3
FR	7.1	6.0	7.0	5.6	7.1	6.4
IT	6.3	6.0	5.9	5.6	6.7	6.4
CY (2)	9.3	7.8	9.0	7.8	9.6	7.8
LV	8.4	5.3	5.7	3.6	10.8	6.9
LT	5.9	4.5	4.2	3.6	7.4	5.4
LU (2)	9.8	13.4	9.5	13.4	10.1	13.5
HU	4.0	2.7	3.4	2.5	4.6	3.0
MT	4.3	5.8	4.8	5.6	3.8	6.0
NL	16.4	17.0	16.1	16.5	16.8	17.5
AT	11.6	13.8	10.9	12.8	12.2	14.7
PL	5.0	4.7	4.3	4.3	5.7	5.1
PT	4.3	6.5	4.1	6.2	4.4	6.8
RO	1.4	1.5	1.3	1.3	1.4	1.6
SI	16.2	14.6	14.8	12.9	17.6	16.4
SK	4.3	2.8	3.8	2.2	4.8	3.3
FI	22.8	22.1	19.2	18.5	26.4	25.9
SE (2)	:	22.2	:	16.1	:	28.5
UK (2)	29.0	20.1	24.9	16.8	33.1	23.3
IS	24.2	25.1	19.6	20.4	28.9	30.0
NO	17.4	18.1	16.3	16.8	18.6	19.5
CH	28.6	24.0	29.7	22.8	27.4	25.2
HR (3)	1.9	2.3	1.8	2.4	2.0	2.1
MK	:	3.3	:	3.2	:	3.4
TR	1.1	2.3	1.5	2.4	0.8	2.1

(1) Refer to the Internet metadata file (http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/lfsi_edu_a_esms.htm).

(2) Break in series, 2007.

(3) 2009 male and female rates, unreliable or uncertain data.

Source: Eurostat (tsiem080)

5

Labour market



5.1 Employment

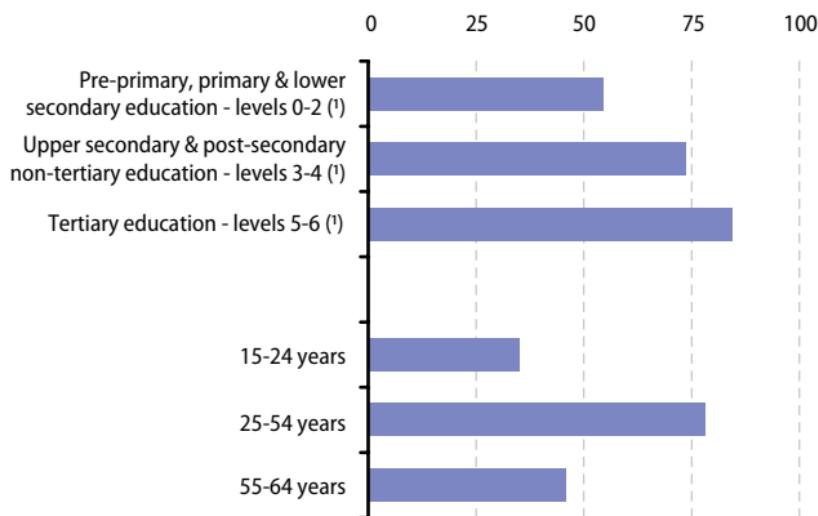
The [employment rate](#), in other words the proportion of working age population in employment, is a key social indicator.

The EU-27 employment rate for older workers (aged between 55 and 64) reached 46.0 % in 2009, compared with 45.6 % in 2008; it was considerably higher than its corresponding rate for 2001 (40.0 %).

Employment rates vary considerably according to levels of educational attainment. The employment rate of those aged 25 to 64 who had completed a [tertiary education](#) was 84.5 % across the EU-27 in 2009, much higher than the rate (54.7 %) for those who had attained a [primary or lower secondary education](#). The EU-27 employment rate of persons with a medium level of educational attainment was 73.7 %.

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

Figure 5.1: Employment rate - by highest level of education attained (ISCED 1997) and age, EU-27, 2009 (%)



(1) Excludes persons for which the level of education attained is unknown; covers all persons aged 25 to 64 years.

Source: Eurostat ([lfsa_ergaed](#) and [lfsi_emp_a](#))

Table 5.1: Employment rates, 2009
(%)

	Employment rate (age group 15-64)			Employment rates by age group		
	Total	Male	Female	15-24	25-54	55-64
EU-27	64.6	70.7	58.6	35.2	78.2	46.0
EA-16	64.7	71.2	58.3	35.2	78.0	45.1
BE	61.6	67.2	56.0	25.3	79.8	35.3
BG	62.6	66.9	58.3	24.8	79.2	46.1
CZ	65.4	73.8	56.7	26.5	82.5	46.8
DK	75.7	78.3	73.1	63.6	85.1	57.5
DE	70.9	75.6	66.2	46.2	81.6	56.2
EE	63.5	64.1	63.0	28.9	76.4	60.4
IE	61.8	66.3	57.4	35.4	72.0	51.0
EL	61.2	73.5	48.9	22.9	75.4	42.2
ES	59.8	66.6	52.8	28.0	70.7	44.1
FR	64.2	68.5	60.1	31.4	82.1	38.9
IT	57.5	68.6	46.4	21.7	71.9	35.7
CY	69.9	77.6	62.5	35.5	82.6	56.0
LV	60.9	61.0	60.9	27.7	74.7	53.2
LT	60.1	59.5	60.7	21.5	76.3	51.6
LU	65.2	73.2	57.0	26.7	81.2	38.2
HU	55.4	61.1	49.9	18.1	72.9	32.8
MT	54.9	71.5	37.7	44.1	68.0	28.1
NL	77.0	82.4	71.5	68.0	86.3	55.1
AT	71.6	76.9	66.4	54.5	84.0	41.1
PL	59.3	66.1	52.8	26.8	77.6	32.3
PT	66.3	71.1	61.6	31.3	79.7	49.7
RO	58.6	65.2	52.0	24.5	73.7	42.6
SI	67.5	71.0	63.8	35.3	84.8	35.6
SK	60.2	67.6	52.8	22.8	77.8	39.5
FI	68.7	69.5	67.9	39.6	82.4	55.5
SE	72.2	74.2	70.2	38.3	84.5	70.0
UK	69.9	74.8	65.0	48.4	80.2	57.5
IS	78.3	80.0	76.5	61.5	83.0	80.2
NO	76.4	78.3	74.4	52.6	86.0	68.7
CH	79.2	84.5	73.8	61.9	86.8	68.4
HR	56.6	62.4	51.0	25.7	73.6	38.4
MK	43.3	52.8	33.5	15.7	55.3	34.6
TR	44.3	64.5	24.2	28.9	52.8	28.2
JP	70.0	80.2	59.8	:	:	:
US	67.6	72.0	63.4	:	:	:

Source: Eurostat ([lfsi_emp_a](#))

5.2 Unemployment

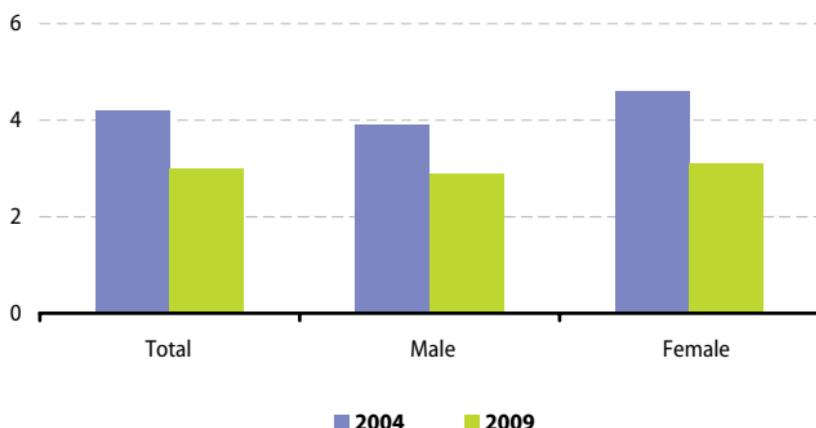
In recent years, most markedly since the first quarter of 2008, male and female unemployment rates in the EU-27 have converged and by the second quarter of 2009 the male unemployment rate was higher.

The overall unemployment rate in the EU-27 reached 8.9 % in 2009. After four consecutive years of declining unemployment, there was a steep rise in the unemployment rate, which gained 1.9 percentage points compared with 2008.

Long-term unemployment is one of the main concerns of policy-makers. Apart from its financial and social effects on personal life, long-term unemployment negatively affects social cohesion and, ultimately, may hinder economic growth. Some 3.0 % of the labour force in the EU-27 in 2009 had been unemployed for more than one year; half of these, 1.5 % of the labour force, had been unemployed for more than two years.

The youth unemployment rate in the EU-27 was more than double the overall unemployment rate in 2009. At 19.6 %, almost one out of every five young persons (under 25 years of age) in the labour force was not employed, but looking and available for a job.

Figure 5.2: Long-term unemployment rate, EU-27 (%)



Source: Eurostat ([une_ltu_a](#))

Table 5.2: Unemployment rate (%)

	Total		Male		Female		Less than 25 years, 2009
	2004	2009	2004	2009	2004	2009	
EU-27	9.1	8.9	8.5	9.0	9.8	8.8	19.6
EA-16	9.0	9.4	8.1	9.3	10.1	9.6	19.4
BE	8.4	7.9	7.5	7.8	9.5	8.1	21.9
BG	12.1	6.8	12.6	7.0	11.5	6.6	16.2
CZ	8.3	6.7	7.1	5.9	9.9	7.7	16.6
DK	5.5	6.0	5.1	6.5	6.0	5.4	11.2
DE	9.8	7.5	10.3	8.0	9.1	6.9	10.4
EE	9.7	13.8	10.4	16.9	8.9	10.6	27.5
IE	4.5	11.9	4.8	14.9	4.0	8.0	24.4
EL	10.5	9.5	6.6	6.9	16.2	13.2	25.8
ES	10.6	18.0	8.0	17.7	14.3	18.4	37.8
FR	9.3	9.5	8.4	9.2	10.3	9.8	23.3
IT	8.0	7.8	6.4	6.8	10.5	9.3	25.3
CY	4.7	5.3	3.6	5.2	6.0	5.5	14.0
LV	10.4	17.1	10.6	20.3	10.2	13.9	33.6
LT	11.4	13.7	11.0	17.1	11.8	10.4	29.2
LU	5.0	5.2	3.6	4.6	6.8	6.0	16.9
HU	6.1	10.0	6.1	10.3	6.1	9.7	26.5
MT	7.4	7.0	6.6	6.7	9.0	7.6	14.3
NL	4.6	3.4	4.3	3.4	4.8	3.5	6.6
AT	4.9	4.8	4.5	5.0	5.4	4.6	10.0
PL	19.0	8.2	18.2	7.8	20.0	8.7	20.6
PT	6.7	9.6	5.9	9.0	7.7	10.3	20.0
RO	8.1	6.9	9.1	7.7	6.9	5.8	20.8
SI	6.3	5.9	5.9	5.9	6.9	5.8	13.6
SK	18.2	12.0	17.4	11.4	19.2	12.8	27.3
FI	8.8	8.2	8.7	8.9	8.9	7.6	21.5
SE	7.4	8.3	7.6	8.6	7.1	8.0	25.0
UK	4.7	7.6	5.1	8.6	4.2	6.4	19.1
NO	4.3	3.1	4.6	3.6	3.9	2.6	8.9
HR	13.7	9.1	12.1	8.0	15.7	10.3	25.0
TR	:	12.5	:	12.5	:	12.6	22.7
JP	4.7	5.1	4.9	5.3	4.4	4.8	9.1
US	5.5	9.3	5.6	10.3	5.4	8.1	17.6

Source: Eurostat ([une_rt_a](#))

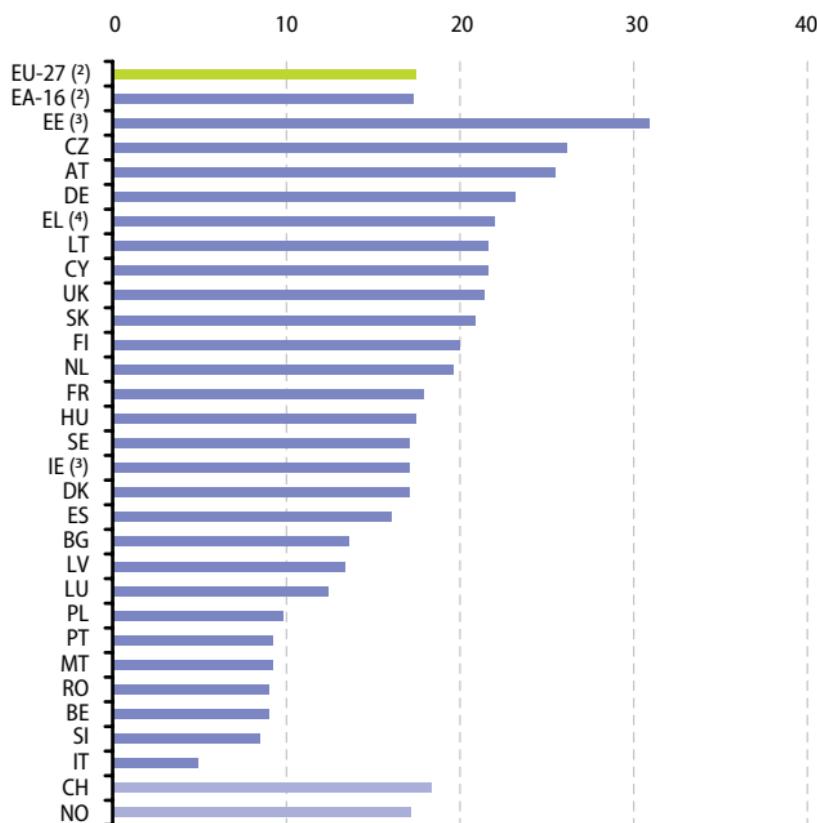
5.3 Wages and labour costs

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

Despite some progress, there remains an important gap between the average earnings of men and women in the EU-27. Various effects may contribute to these **gender pay gaps**, such as: differences in **labour force** participation rates, differences in the occupations and activities that tend to be male- or female-dominated,

Figure 5.3: Gender pay gap, 2008⁽¹⁾

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



(1) Enterprises employing ten or more employees; NACE Rev. 2 Sections B to N and P to S.

(?) Provisional.

(2) 2007 data; NACE Rev. 1.1 Sections C to K and M to O.

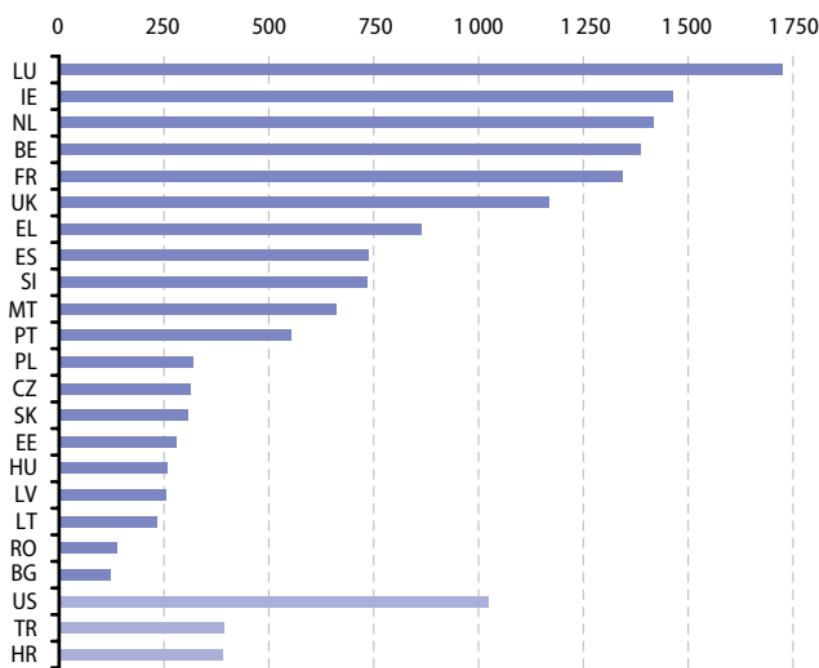
(3) NACE Rev. 1.1 Sections C to K and M to O.

Source: Eurostat ([tsiem040](#))

differences in the degrees to which men and women work on a part-time basis, as well as the attitudes of personnel departments within private and public bodies towards career development and unpaid/maternity leave.

In July 2010, a total of 20 of the 27 EU Member States (all except Denmark, Germany, Italy, Cyprus, Austria, Finland and Sweden) and two [candidate countries](#) (Croatia and Turkey) had national legislation setting a [minimum wage](#) by statute or by national inter-sectoral agreement.

Figure 5.4: Minimum wage (⁽¹⁾)
(EUR per month, as of 1 July 2010)



(¹⁾ Member States not shown: not applicable.

Source: Eurostat ([earn_mw_cur](#))

5.4 Job vacancies

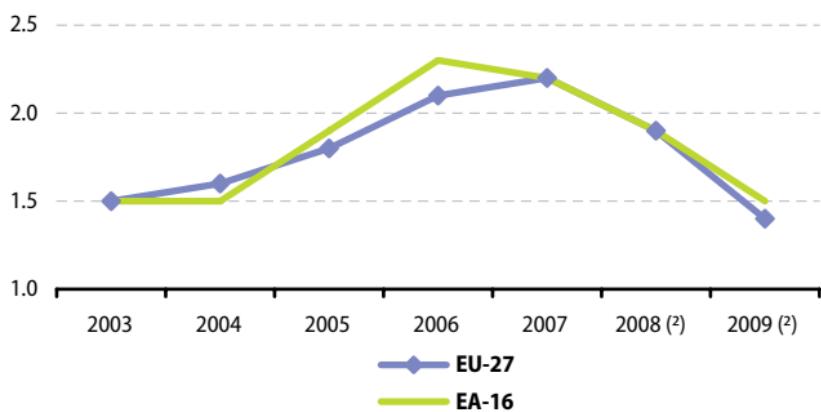
The job vacancy rate, in part, reflects the unmet demand for labour, as well as potential mismatches between the skills and availability of those who are **unemployed** and those sought by employers. Job vacancy statistics are used by the **European Commission** and the **European Central Bank (ECB)**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

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

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

Figure 5.5: Job vacancy rate (¹)

(%)

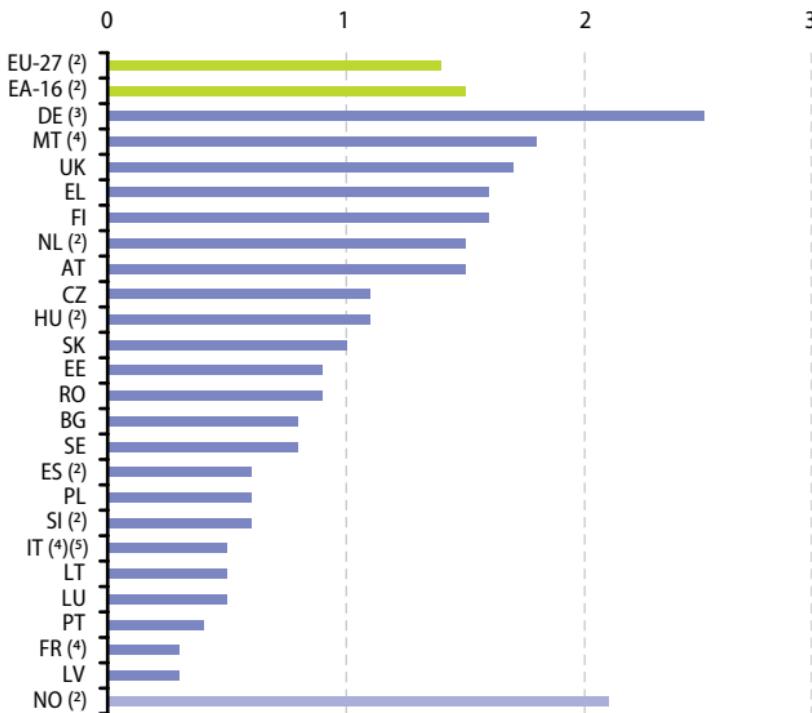


(¹) Data from 2003 to 2008 cover NACE Rev. 1.1 Sections A to O; data for 2009 cover NACE Rev. 2 Sections B to S.

(²) Provisional.

Source: Eurostat ([jvs_a_nace1](#) and [jvs_a_nace2](#))

**Figure 5.6: Job vacancy rate, 2009 (1)
(%)**



(1) NACE Rev. 2 Sections B to S; Belgium, Denmark and Ireland, not available; Cyprus, confidential.

(2) Provisional.

(3) NACE Rev. 1.1 Sections A to O.

(4) Job vacancy rate for enterprises with 10 or more employees.

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

Source: Eurostat ([jvs_a_nace1](#), [jvs_a_nace2](#), [jvs_q_nace1](#) and [jvs_q_nace2](#))

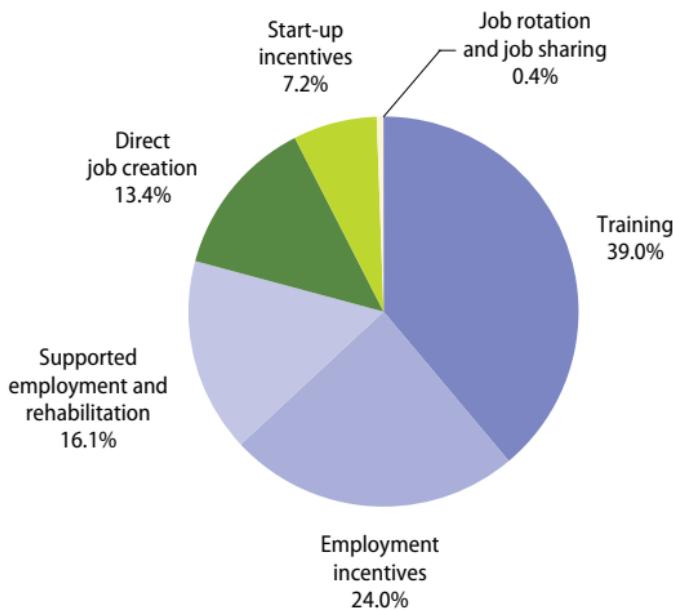
5.5 Labour market policy interventions

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

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

Across the EU-27 there was an average of 10.3 million people participating in LMP measures at any point during 2008. Of these, just less than 4 million received employment incentives,

Figure 5.7: Public expenditure on labour market policy measures, EU-27, 2008 (¹)
(% of total)



(¹) Estimates; figures do not sum to 100 % due to rounding.

Source: Eurostat ([tps00077](#))

which mostly involve the use of public funds to provide a fixed-term subsidy to employers who take on people from selected target groups, either into a regular job or into a specially arranged placement for work experience.

Table 5.3: Selected labour market policy measures, participants by type of action, 2008
(annual average stock in 1 000)

	Training	Employ- ment incentives	Supported employ- ment & rehabili- tation	Direct job creation	Start-up incentives
EU-27 (1)	3 181.9	3 986.1	1 220.3	983.6	772.5
BE (2)	109.4	216.3	37.7	152.1	1.3
BG (2)	8.2	10.6	1.4	65.8	3.9
CZ	4.8	7.4	28.8	4.3	3.4
DK	61.4	22.9	65.7	-	-
DE	828.5	187.3	45.1	331.1	180.5
EE	1.0	0.0	0.0	0.0	0.2
IE (2)	34.5	4.5	3.2	24.4	4.6
EL (2)	14.5	22.7	0.0	0.9	4.7
ES (1)	199.3	1 976.8	54.5	:	392.0
FR (1)	587.6	:	134.4	233.1	130.0
IT (1)	799.8	612.7	-	23.2	5.1
CY (1)	0.3	1.0	0.3	-	0.1
LV	1.5	2.3	0.0	1.6	:
LT	4.1	:	4.5	2.4	0.1
LU (1)	0.8	12.0	0.1	0.7	-
HU	16.4	35.3	-	13.6	3.0
MT (1)	0.4	0.1	-	0.0	:
NL (2)	142.8	32.2	150.9	-	-
AT (2)	103.9	63.3	2.0	6.8	2.6
PL (1)	95.7	45.5	620.9	11.3	6.1
PT	50.0	83.1	6.1	21.1	6.1
RO	34.6	39.0	-	11.9	:
SI	3.4	0.6	-	2.3	0.8
SK (2)	1.3	10.1	2.0	57.2	21.0
FI (2)	45.7	13.8	8.2	11.7	4.4
SE	10.4	83.4	38.4	-	2.7
UK (1)	21.7	46.7	16.2	8.3	-
NO	29.5	5.0	13.9	6.7	0.3

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

(2) Includes estimates.

Source: Eurostat ([Imp_partsumm](#))

Living conditions and social protection

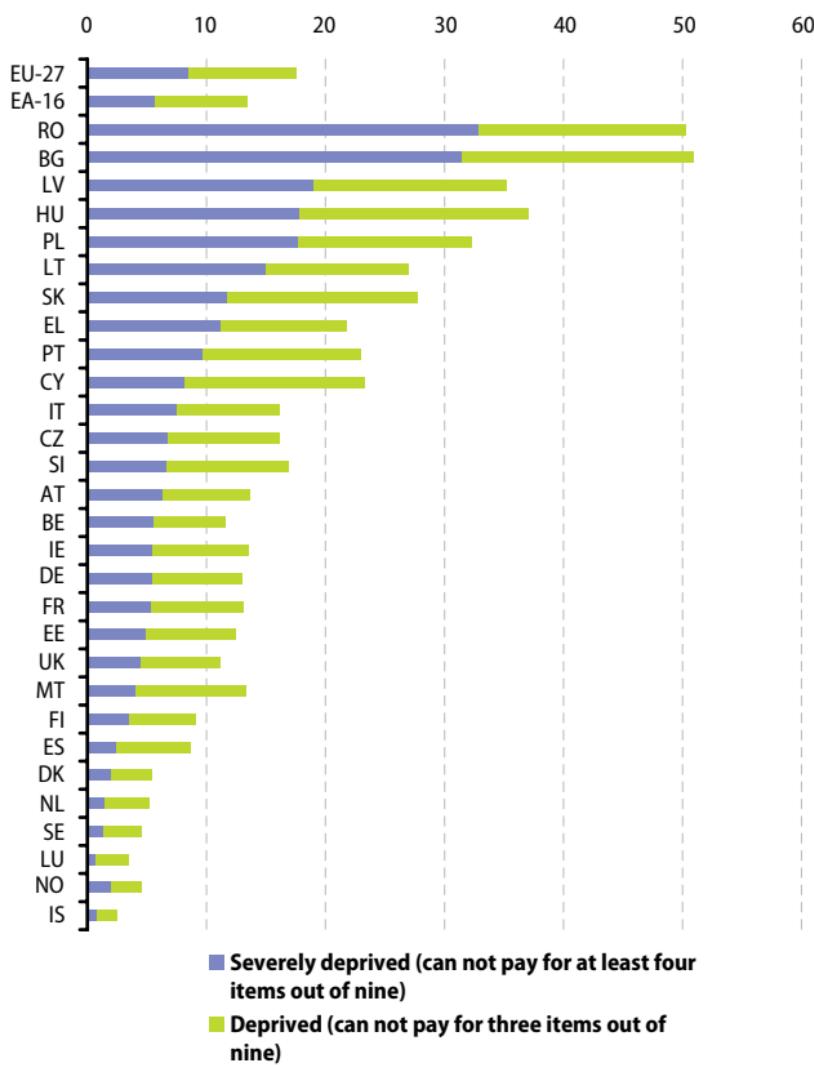


6.1 Living conditions

The [at-risk-of-poverty threshold](#) is set at 60 % of the national median equivalised disposable income. It is often expressed in [purchasing power standards \(PPS\)](#) in order to take account of the differences in the cost of living across countries.

The [material deprivation rate](#) provides a headcount of the number of people who cannot afford to pay for at least three from a list of nine items, while those who lack four or more items are considered to be [severely deprived](#).

Figure 6.1: Material deprivation rate - proportion of persons who cannot afford to pay for selected items, 2008 (%)



Source: Eurostat ([ilc_sip8](#))

People living in households with a low work intensity (people aged 0 to 59 living in **households** where the adults worked less than 20 % of their total work potential during the year prior to the survey) were more likely to be exposed to social exclusion.

Table 6.1: Living conditions, 2008
(%)

	Persons at-risk-of-poverty after social transfers			People living in households with very low work intensity
	Total	Male	Female	
EU-27	16.5	15.4	17.4	9.0
EA-16	15.8	14.8	16.8	:
BE	14.7	13.6	15.9	11.7
BG	21.4	19.8	22.9	8.1
CZ	9.0	8.0	10.1	7.2
DK	11.8	11.7	12.0	8.3
DE	15.2	14.2	16.2	11.6
EE	19.5	16.5	22.0	5.3
IE	15.5	14.5	16.4	13.6
EL	20.1	19.6	20.7	7.4
ES	19.6	18.3	21.0	6.2
FR	12.7	11.9	13.4	8.8
IT	18.8	17.1	20.1	9.8
CY	16.2	14.0	18.3	4.1
LV	25.6	23.1	27.7	5.1
LT	20.0	17.6	22.0	5.1
LU	13.4	12.5	14.3	4.7
HU	12.4	12.4	12.4	12.0
MT	14.6	13.7	15.5	8.2
NL	10.5	10.5	10.4	8.1
AT	12.4	11.2	13.5	7.8
PL	16.9	17.0	16.7	7.9
PT	18.5	17.9	19.1	6.3
RO	23.4	22.4	24.3	8.2
SI	12.3	11.0	13.6	6.7
SK	10.9	10.1	11.5	5.2
FI	13.6	12.7	14.5	7.3
SE	12.1	11.3	13.0	5.4
UK	18.8	17.5	20.1	10.2
IS	10.1	9.5	10.7	2.6
NO	11.3	9.8	12.9	6.3

Source: Eurostat ([ilc_li02](#) and [t2020_51](#))

6.2 Housing

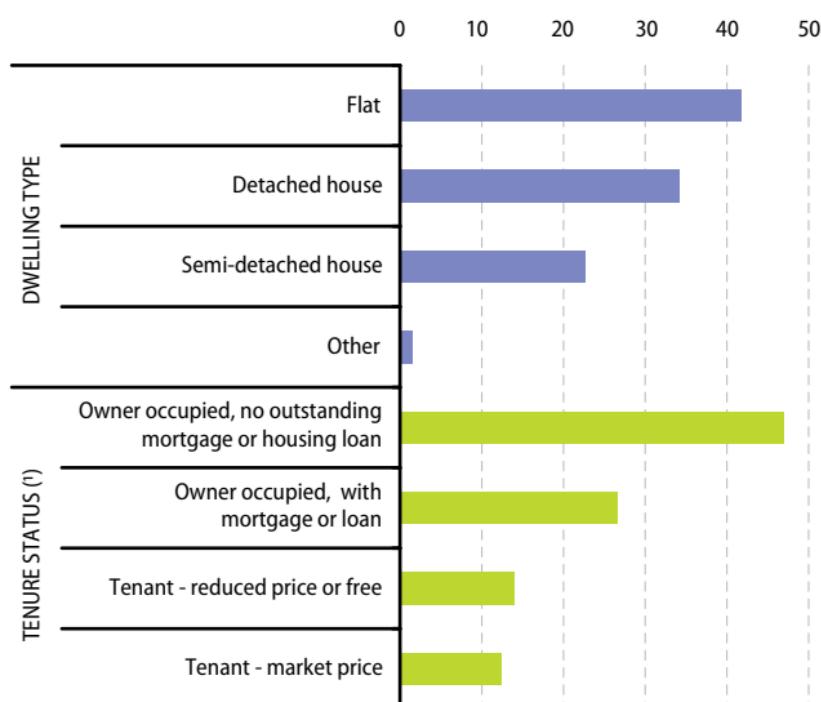
In 2008, 41.8 % of the EU-27 population lived in flats, 34.1 % in detached houses and 22.6 % in semi-detached houses.

In 2008, just over one quarter of the EU-27 population lived in an owner-occupied home for which there was an outstanding loan or mortgage, while close to half of the population lived in an owner-occupied home without a loan or mortgage. As such, a total of nearly three quarters (73.6 %) of the population lived in owner-occupied dwellings, while 12.5 % lived in dwellings with a market price rent, and 13.9 % in reduced-rent or free accommodation.

One of the key dimensions in assessing the quality of housing conditions is the availability of sufficient space in the dwelling. The **overcrowding rate** describes the share of people living in a dwelling considered as overcrowded. Based on the number of rooms available to the **household**, this indicator depends on the household's size, as well as its members' ages and family situation.

Some 18.2 % of the EU-27 population lived in overcrowded dwellings in 2008.

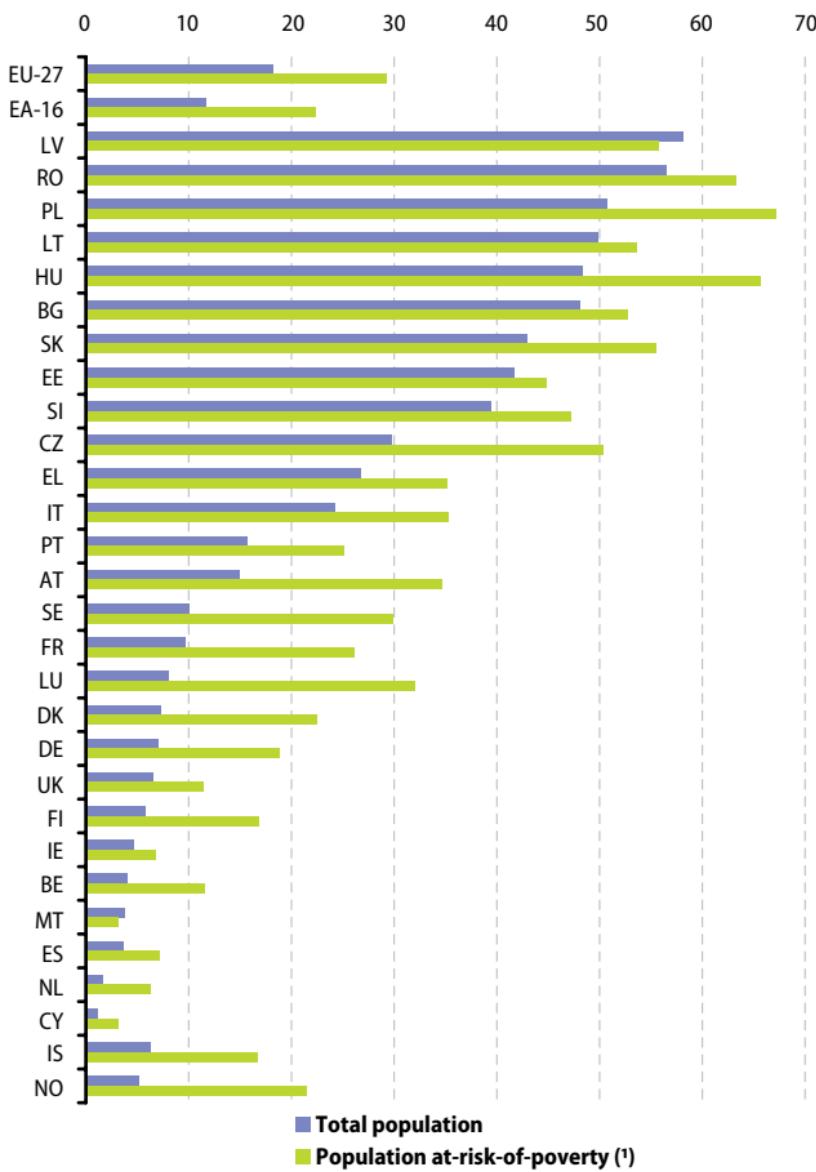
Figure 6.2: Dwelling type and tenure status, EU-27, 2008 (%)



(l) Germany, not available.

Source: Eurostat ([ilc_lvho01](#) and [ilc_lvho02](#))

Figure 6.3: Overcrowding rate, 2008
(% of specified population)



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

Source: Eurostat ([ilc_lvho05a](#))

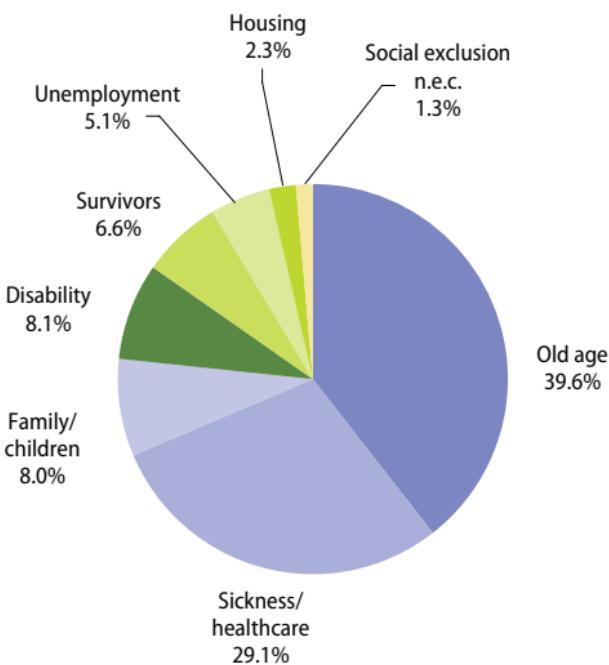
6.3 Social protection

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

Among social protection benefits (the largest component of total expenditure), a majority of the EU-27's expenditure was directed towards old age benefits (for example, pensions) or to sickness and healthcare benefits; together these two items accounted for close to 70 % of total EU-27 benefits in 2007. Benefits related to family/children, disabilities, survivors and unemployment each accounted for shares of between 5 % and 8 % of total expenditure in the EU-27, while housing accounted for 2.3 %.

Expenditure on pensions across the EU-27 was equivalent to 11.8 % of GDP in 2007, ranging from 14.6 % in Italy to 5.2 % in Ireland (see Table 6.2). Expenditure on care for the elderly accounted

Figure 6.4: Social benefits, EU-27, 2007⁽¹⁾
(%, based on PPS)



(1) Provisional; figures do not sum to 100 % due to rounding.

Source: Eurostat (tps00107)

for 0.5 % of GDP in the same year, although Sweden reported a rate that was almost five times as high; expenditure on the elderly fell to less than 0.1 % of GDP in Greece, Estonia, Belgium, Bulgaria, Romania and Cyprus.

Table 6.2: Expenditure on social protection, 2007

	Social protection		Expenditure on care for the elderly (% of GDP)	Expenditure on pensions (% of GDP)
	(PPS per inhabi- tant)	(% of GDP)		
EU-27	6 522	26.2	0.5	11.8
EA-16⁽¹⁾	7 312	27.0	:	12.3
BE	8 658	29.5	0.1	10.7
BG	1 405	15.1	0.0	7.3
CZ	3 718	18.6	0.5	8.2
DK	8 630	28.9	1.6	10.8
DE	7 943	27.7	0.1	12.4
EE	2 156	12.5	0.1	5.9
IE	7 054	18.9	0.2	5.2
EL	5 720	24.4	0.1	12.1
ES	5 526	21.0	0.4	9.0
FR	8 264	30.5	0.3	13.3
IT	6 773	26.7	0.1	14.6
CY	4 176	18.5	0.0	6.8
LV	1 580	11.0	0.1	5.3
LT	2 136	14.3	0.3	6.6
LU ⁽²⁾	13 231	19.3	:	8.2
HU	3 478	22.3	0.3	10.4
MT	3 501	18.1	0.6	9.1
NL	9 293	28.4	0.8	12.1
AT	8 640	28.0	0.9	13.8
PL	2 429	18.1	0.2	11.6
PT	4 701	24.8	0.2	13.1
RO	1 352	12.8	0.0	6.4
SI	4 761	21.4	0.1	9.7
SK	2 675	16.0	0.4	7.3
FI	7 321	25.4	0.7	10.8
SE	9 028	29.7	2.3	11.8
UK	7 455	25.3	0.9	10.5
IS	6 497	21.5	0.3	7.0
NO	10 141	22.8	1.6	7.8
CH	9 449	27.3	0.3	12.4

(¹) Social protection, EA-15 instead of EA-16.

(²) Expenditure on care for the elderly: not available as expenditure was recorded together with similar benefits under the disability function (the split between old-age and disability was not available).

Source: Eurostat ([tps00100](https://ec.europa.eu/eurostat/), [tps00098](https://ec.europa.eu/eurostat/), [tsdde530](https://ec.europa.eu/eurostat/) and [tps00103](https://ec.europa.eu/eurostat/))

6.4 Crime

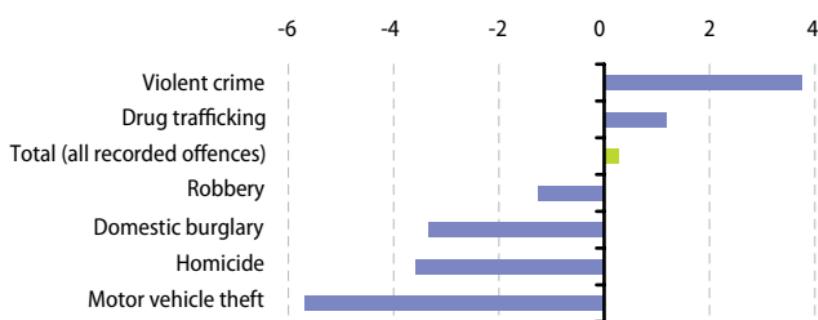
Comparisons of crime statistics between Member States should ideally be based on trends over time, rather than direct comparisons of levels between countries, given that the data presented can be affected by a range of issues, including different levels of criminalisation, the efficiency of criminal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

There were an estimated 29 million crimes recorded by the police within the EU-27 in 2007. From 1999, the number of recorded crimes in the EU-27 rose to a peak around 2002, but subsequently fell each year through to 2007. In recent years (from the peak in recorded crime in the EU in 2003 through to 2007), the number of recorded crimes has fallen in a number of Member States.

The EU-27 [prison population](#) rose by 1.3 % per year during the period 1997 to 2006 to reach a total of almost 600 000, which equated to 0.12 % of the EU's population.

Figures for the United Kingdom are reported separately (as there are three separate jurisdictions for England and Wales, Scotland, and Northern Ireland); these have been summed together.

Figure 6.5: Recorded crimes, EU-27, 2000-2007 (()
(%, average annual change)



(^l) EU-27 excluding French overseas departments and territories; total recorded crimes including data for Ireland for 2006 instead of 2007; drug trafficking, also excluding Malta; violent crime, also excluding Cyprus and Malta; care should be taken in interpreting the time-series due to a large number of breaks in series.

Source: Eurostat ([crim_gen](#))

Table 6.3: Crime indicators, 2007

	Police officers (units)	Police officers (per 100 000 inhabitants)	Crimes recorded by the police (1 000)	Prison population (units)	Prison population (per 100 000 inhabitants)
EU-27 (1)	1 703 982	352.3	29 172	599 829	122.1
BE	38 718	365.8	1 003	9 950	94.0
BG	:	:	135	10 792	140.5
CZ	44 101	428.7	357	19 110	185.8
DK	10 620	195.0	445	3 646	66.9
DE	250 353	304.1	6 285	73 319	89.1
EE	3 247	241.9	50	3 486	259.7
IE (2)	12 954	307.8	103	3 053	72.5
EL	51 152	457.9	423	10 280	92.4
ES	214 935	483.3	2 310	67 100	150.9
FR (3)	238 478	385.9	3 589	60 403	97.7
IT (4)	324 339	552.1	2 933	48 693	82.3
CY	5 139	660.0	8	671	86.2
LV	8 222	360.4	56	6 548	287.0
LT	11 173	330.1	68	7 770	229.6
LU	1 519	319.0	28	666	139.9
HU	26 334	261.6	427	14 743	146.5
MT	1 933	474.0	15	382	93.7
NL	35 923	219.6	1 215	14 450	88.3
AT	26 623	321.4	594	8 887	107.3
PL	98 337	257.9	1 153	90 199	236.6
PT	51 779	488.5	400	11 587	109.3
RO	45 391	210.5	281	29 390	136.3
SI	7 971	396.5	88	1 336	66.5
SK	14 134	262.1	111	8 235	152.7
FI	8 156	154.6	344	3 370	63.9
SE	17 866	196.0	1 306	6 740	74.0
UK	156 735	257.9	5 445	88 590	145.8
IS	683	222.0	13	115	37.4
LI	93	264.4	1	38	108.1
NO	7 453	159.2	272	3 420	73.1
CH	16 808	223.8	326	5 715	76.1
HR	20 424	459.9	76	4 290	96.6
MK (5)	9 599	470.1	26	2 090	102.5
TR	329 533	472.9	963	90 732	130.2
JP	:	:	:	77 932	:
US	699 850	:	11 252	2 375 615	:

(1) Excluding French overseas departments and territories; all data refer to 2006 except for the figure for crimes recorded by the police which is calculated using data for 2007 (other than Ireland, 2006).

(2) 2006.

(3) Excluding overseas departments and territories.

(4) Police officers, 2006.

(5) Prison population, 2006.

Source: Eurostat ([crim_plce](#), [tps00001](#), [crim_gen](#) and [crim_pris](#))

**Industry, trade
and services**

7



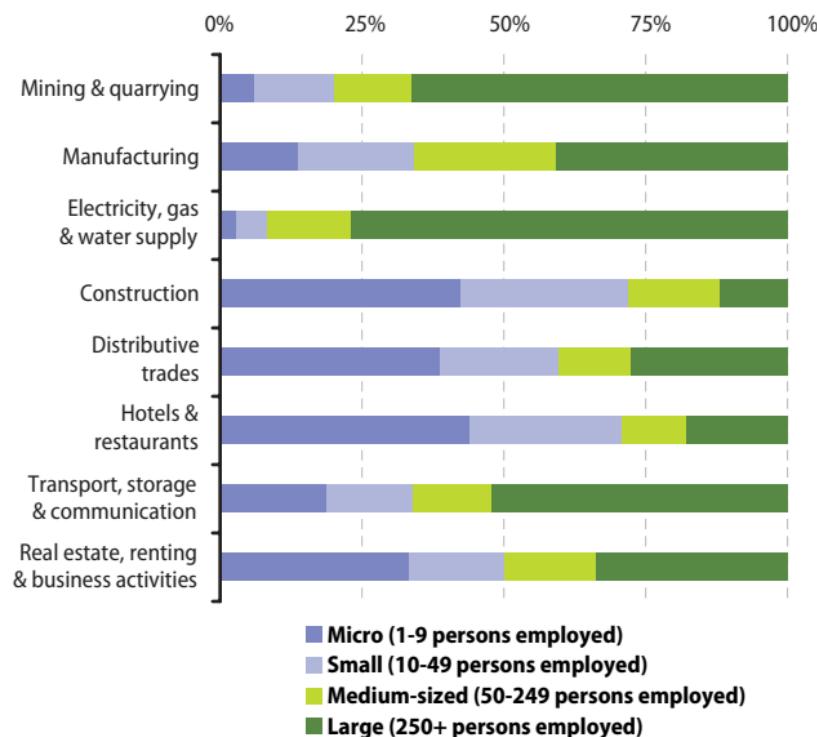
7.1 Structural business statistics

Structural business statistics can provide answers to questions on the wealth creation and number of jobs in different activities, the structural shift from industry to services and where this trend is most notable, country specialisations, sectoral **productivity**, **profitability** and average wages, as well as many other topics.

In 2007 there were an estimated 20.9 million enterprises within the EU-27's **non-financial business economy** which covers industry, construction, **distributive trades** and **non-financial services**. Collectively these enterprises employed 133.8 million persons in 2007 and generated EUR 6 146 thousand million of **value added** in 2007.

Among the eight NACE Rev. 1.1 sections in the non-financial business economy, manufacturing was the largest in terms of employment and value added. Some 2.3 million manufacturing enterprises generated EUR 1 813 thousand million of **value added** in 2007, whilst providing employment for about 34.5 million persons.

Figure 7.1: Employment breakdown by enterprise size-class, EU-27, 2007⁽¹⁾
(% of sectoral total)

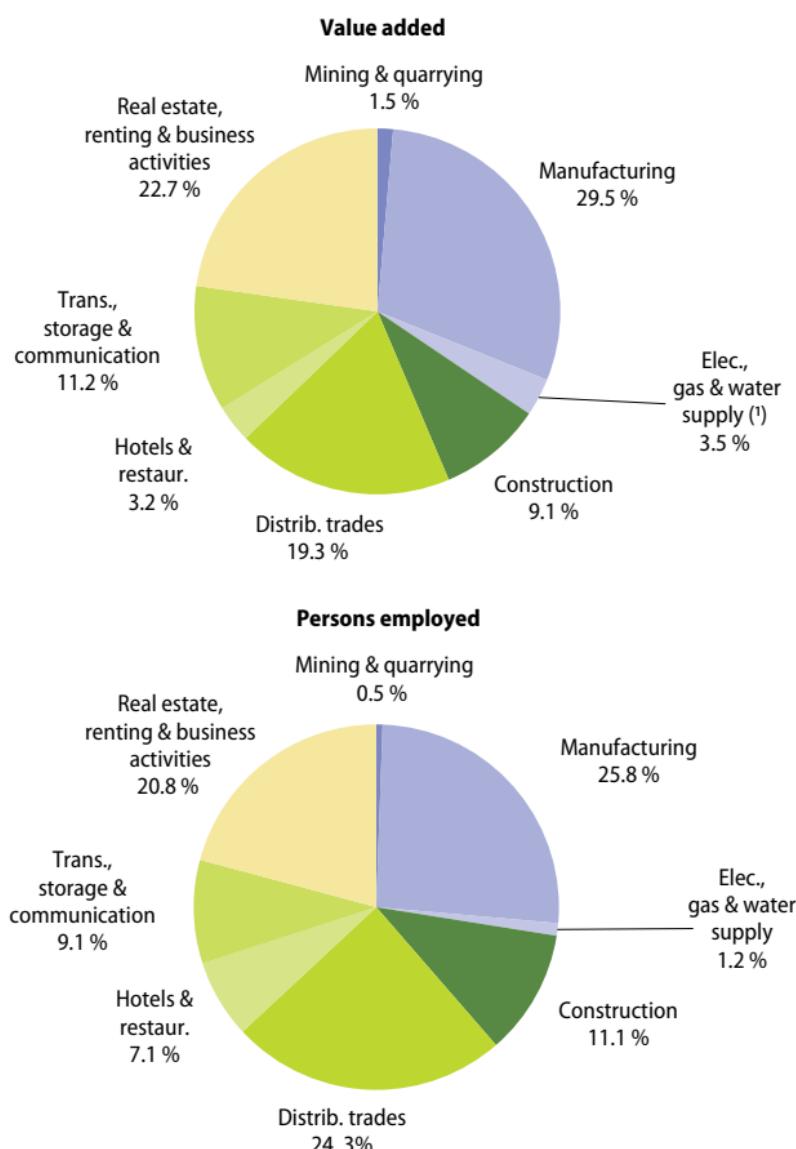


(1) Estimates.

Source: Eurostat ([sbs_sc_2d_mi02](#), [sbs_sc_2d_dade02](#), [sbs_sc_2d_el02](#), [sbs_sc_4d_co02](#), [sbs_sc_3ce_tr02](#) and [sbs_sc_1b_se02](#))

Structural business statistics broken down by enterprise size-class (defined in terms of the number of persons employed) show that less than one enterprise in 400 within the EU-27's non-financial business economy employed 250 or more persons (and was therefore considered as large) in 2007, but these enterprises accounted for approximately one third of employment and more than two fifths of value added.

Figure 7.2: Breakdown of non-financial business economy value added and employment, EU-27, 2007
(% of non-financial business economy value added and employment)



(1) Estimate made for the purpose of this publication.

Source: Eurostat ([ebd_all](#))

7.2 Industrial production

Prodcom is the name given to the system of industrial production statistics which covers mining and quarrying and manufactured products.

Prodcom covers mining and quarrying as well as manufacturing, in other words, **NACE** Rev. 2 Sections B and C. Prodcom statistics are based on a list of products called the Prodcom List which consists of about 4 000 headings and is revised every year. Products are detailed at an 8-digit level – only information at this level can be found in the Prodcom database, as production data for different products cannot be meaningfully aggregated.

Table 7.1 shows the level of production in the EU-27 for a selection of products. As can be seen, transport equipment products dominated the list of the most sold manufacturing products in the EU-27 in value terms in 2009, occupying the top place with a number of further products among the top 15 shown.

Table 7.1: Quantity of production sold, selected products, EU-27, 2009

PRODCOM code	Product	Quantity (1 000)	Rounding base (1 000) (1)	Unit
24.10.22.10	Flat semi-finished products (slabs) (of stainless steel)	89 764		kg
23.51.12.10	Portland cement	170 710 000		kg
11.02.11.30	Champagne (important: excluding alcohol duty)	165 128		l
20.42.11.50	Perfumes	12 303		l
20.11.11.70	Oxygen	23 723 810		m ³
16.10.23.03	Coniferous wood in chips or particles	34 483 920	60	kg
12.00.11.50	Cigarettes (excluding tobacco duty)	705 113 340		p/st
27.90.52.20	Fixed electrical capacitors, tantalum or aluminium electrolytic (excluding power capacitors)	6 643 576		p/st

(1) Indicates the magnitude of the rounding employed to protect confidential cell (in the case of PRODCOM code 16.10.10.33, the confidential value lies within the range +/- 60 000 m³ of the reported value).

Source: Eurostat, from http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database go to Data Navigation Tree/Database by themes/Industry, trade and services/Statistics on the production of manufactured goods (prodcom)/NACE Rev. 2 (prodcom_n2)/Prodcom Annual Sold (NACE Rev. 2) (DS056120)

As well as data by value, information on the physical quantity (also referred to as volume) of production sold during the survey period is also requested. Table 7.2 shows the quantity of production for a selection of products.

Table 7.2: Production sold in value terms, selected products, EU-27, 2009

PRODCOM code	Product	Value (EUR million)	Rounding base (million) (1)
29.10.22.30	Motor vehicles with a petrol engine > 1 500 cm ³	83 753	
21.20.13.80	Other medicaments of mixed or unmixed products, p.r.s., n.e.c.	60 154	
29.10.23.30	Motor vehicles with a diesel or semi-diesel engine > 1 500 cm ³ but <= 2 500 cm ³	60 000	20 000
10.00.00.Z1	Prepared and preserved meat, meat offal or blood, including prepared meat and offal dishes	46 965	
29.32.30.90	Other parts and accessories, n.e.c., for vehicles of HS 87.01 to 87.05; parts thereof	42 000	6 000
29.10.21.00	Motor vehicles with a petrol engine <= 1 500 cm ³	36 262	
10.90.10.Z0	Preparations for animal feeds other than dog and cat food	35 618	
25.11.23.60	Other structures of iron or steel	32 667	
11.05.10.00	Beer other than non-alcoholic and low-alcohol beer, excluding alcohol duty	29 944	
10.71.11.00	Fresh bread	26 949	
29.32.20.90	Parts and accessories of bodies (including cabs), n.e.c.	24 744	
10.51.40.50	Grated, powdered, blue-veined and other non-processed cheese	24 000	3 000
30.30.50.90	Parts for all types of aircraft excluding propellers, rotors, under carriages, for civil use	21 607	
17.21.13.00	Cartons, boxes and cases, of corrugated paper or paperboard	21 213	
23.63.10.00	Ready-mixed concrete	20 742	

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

Source: Eurostat, from http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database go to Data Navigation Tree/Database by themes/Industry, trade and services/Statistics on the production of manufactured goods (prom)/NACE Rev. 2 (prodcom_n2)/Prodcom Annual Sold (NACE Rev. 2) (DS056120)

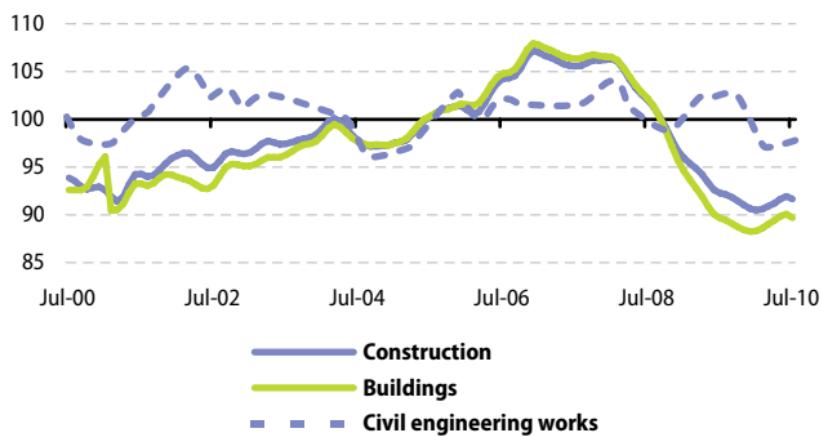
7.3 Industry and construction - short-term developments

Short-term business statistics (STS) are provided in the form of indices that allow the rapid assessment of the economic climate within an economy. STS are presented as indices showing developments over time, and also as rates of change typically showing comparisons of a month or quarter with the preceding period, or the same period of the previous year.

The EU-27's indices of industrial production and industrial output prices (based on the NACE Rev. 2 classification) show clearly the impact of the economic and financial crisis. The downturn was so severe that, despite the output growth that most activities had experienced leading up to the crisis, average annual growth between 2004 and 2009 was negative for most activities.

Although slightly less in magnitude, the length of the downturn in activity for construction within the EU was greater than in industry. The EU-27 index of production for construction peaked in December 2006 and fell gradually for seven months. This initial downturn was followed by a slight, temporary recovery until January 2008, after which the index fell substantially, reaching a

Figure 7.3: Index of production, construction, EU-27 (I)
(2005=100)

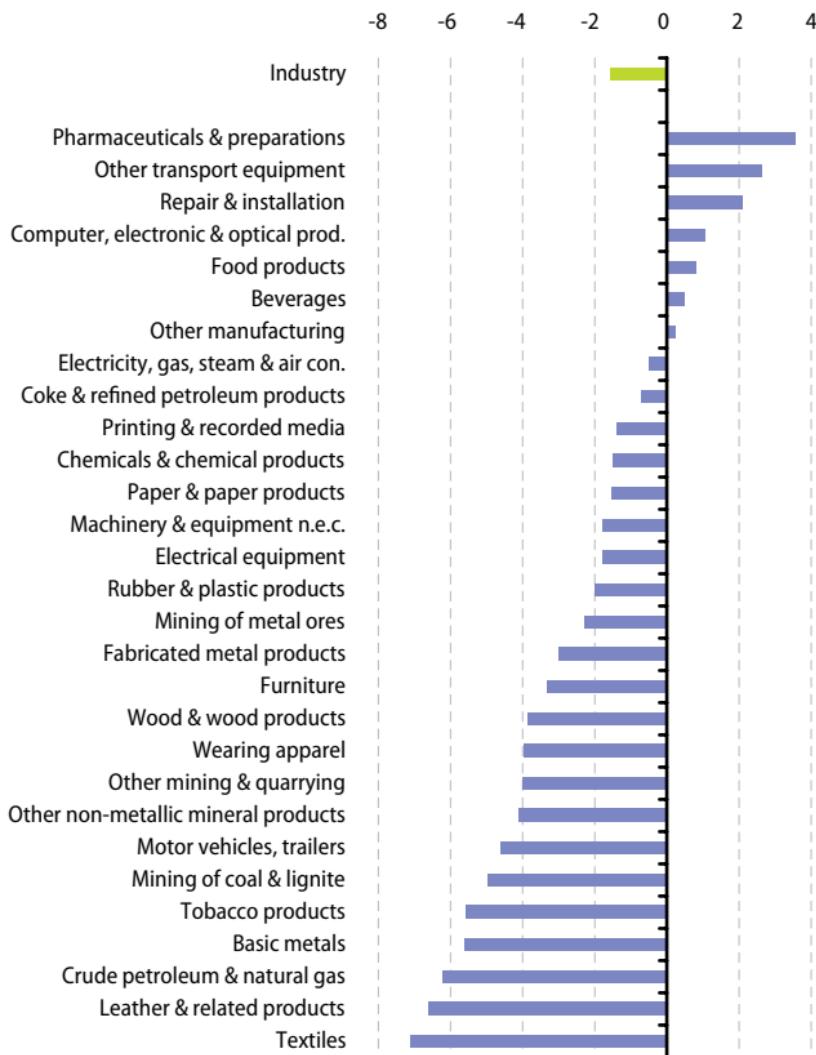


(I) Trend-cycle; estimates.

Source: Eurostat ([sts_copr_m](#))

low in January 2010, just over three years after the initial downturn. Over this period the index of production for construction fell by a total of 15.6 % in the EU-27, deteriorating to a level not seen since May 1999.

Figure 7.4: Average annual growth rate for the index of production, EU-27, 2004-2009⁽¹⁾ (%)



(1) Working day adjusted; mining support service activities, not available.

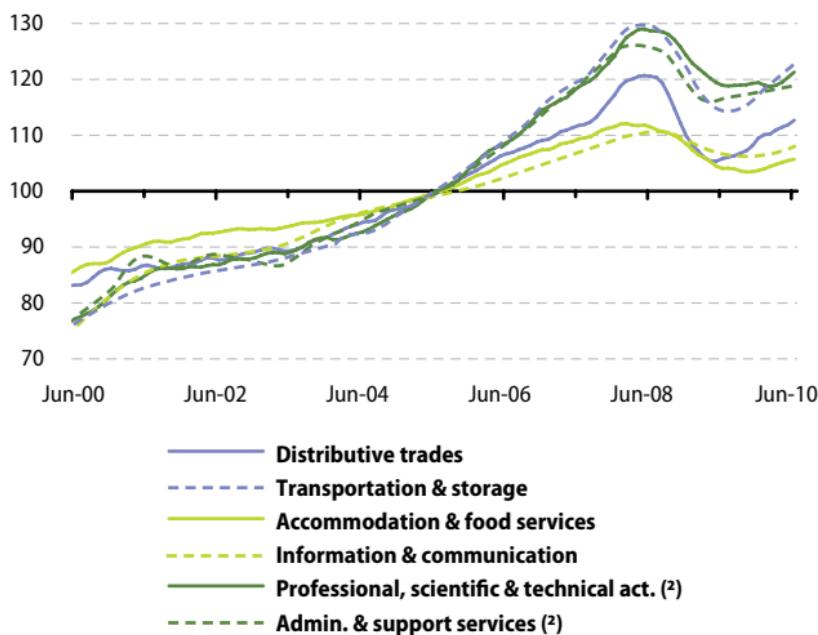
Source: Eurostat ([sts_inprgr_a](#))

7.4 Services - short-term developments

The EU-27 services turnover index grew at an average rate of 2.7 % between 2004 and 2009 (see Figure 7.6). It should be noted, however, that this five-year range covers a period of relatively steady growth in turnover which came to an abrupt end in mid-2008, followed by a period of slower growth and in some cases falling turnover. In fact the services turnover index fell by 8.5 % in the EU-27 in 2009 compared with the year before.

Among service activities (at the NACE Rev. 2 division level), the fastest rate of turnover growth in the five-year period between 2004 and 2009 was for employment activities, where sales grew at an average rate of 7.1 % per annum, followed by air transport (6.8 % per annum). In contrast, there was a negative rate of change for motor trades (-0.7 % per annum) and almost no growth for cinema, video and TV production activities (0.1 % per annum). In 2009 (compared with the year before) the EU-27 turnover index fell for all six NACE Rev. 2 service sections covered by STS, ranging from a 3.2 % reduction for information and communication to losses of nearly 10 % for distributive trades and for transport and storage.

Figure 7.5: Index of turnover, selected service activities, EU-27⁽¹⁾
(2005=100)

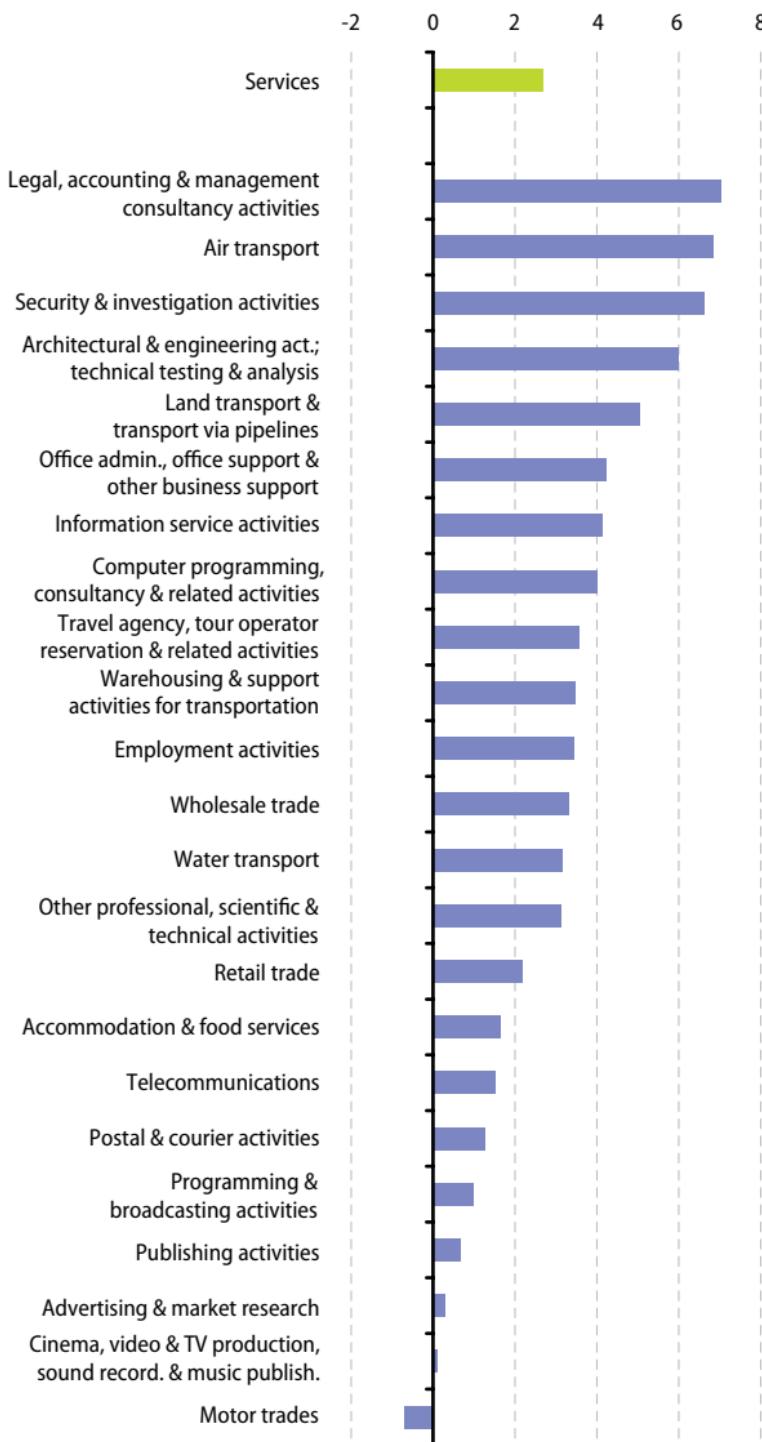


(1) Trend-cycle; estimates.

(2) As required by the STS Regulation.

Source: Eurostat ([sts_trtu_m](#) and [sts_setu_m](#))

Figure 7.6: Average annual growth rate of turnover, selected services, EU-27, 2004-2009⁽¹⁾
(%)



(¹) Working day adjusted.

(²) As required by the STS Regulation.

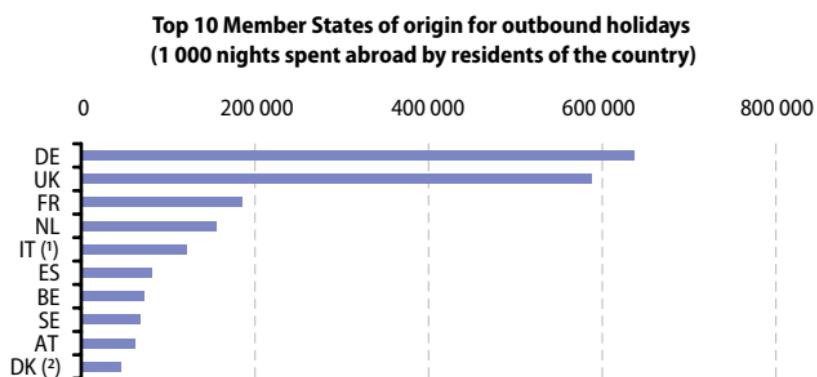
Source: Eurostat ([sts_setu_a](#) and [sts_trtu_a](#))

7.5 Tourism

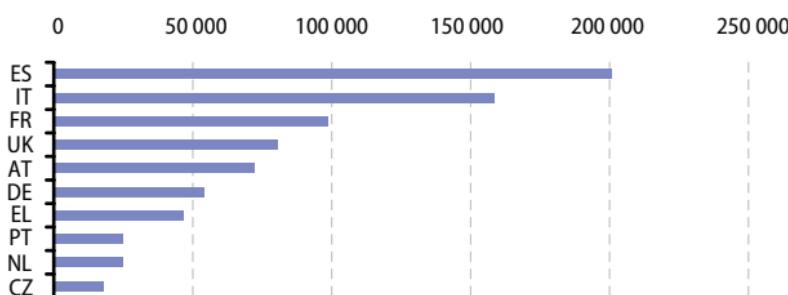
Germans spent nearly 640 million nights in collective accommodation establishments outside of Germany in 2009, while residents of the United Kingdom spent 587 million nights abroad; these two Member States accounted for more than half of the total number of nights spent abroad by EU-27 residents.

The number of nights spent (by residents and non-residents) can be put into perspective by making a comparison with the size of the country in population terms, providing an indicator of **tourism intensity**. In 2009, using this measure, the Mediterranean island destinations of Cyprus and Malta, as well as the alpine and city trip destination of Austria were the most popular tourist destinations in the EU.

Figure 7.7: Top ten Member States for outbound and for inbound tourism, 2009



**Top 10 tourism destinations - nights spent in collective tourist accommodation
(1 000 nights spent in the country by non-residents)**



(1) 2008.

(2) 2007.

Source: Eurostat ([tour_dem_tnw](#) and [tour_occ_ninat](#))

The economic importance of tourism can be measured by looking at the ratio of international tourism receipts relative to GDP. In 2009, this was highest in Malta (10.2 %) and Cyprus (9.2 %), confirming the importance of tourism to these island nations.

Table 7.3: Tourism indicators, 2009

	Nights spent in hotels and similar establishments (1 000) (¹)	Tourism intensity (nights spent per inhabitant) (²)	Tourism receipts relative to GDP (%) (³)
EU-27	1 512 035	4.5	0.6
EA-16	1 203 019	5.3	0.9
BE	15 937	2.7	2.1
BG	14 054	2.0	7.6
CZ	25 341	3.5	3.4
DK	9 966	4.8	2.0
DE	216 228	3.8	1.0
EE	3 499	3.1	5.6
IE	23 699	6.8	2.2
EL	64 292	5.9	4.5
ES	250 985	7.6	3.6
FR	191 741	4.6	1.8
IT	244 385	6.1	1.9
CY	12 808	16.3	9.2
LV	2 187	1.1	2.8
LT	2 078	0.8	2.9
LU	1 282	4.6	7.7
HU	14 975	1.9	4.4
MT	6 740	16.7	10.2
NL	31 481	5.1	1.6
AT	80 071	12.3	5.1
PL	24 514	1.4	2.1
PT	36 457	4.2	4.1
RO	16 514	0.8	0.8
SI	5 450	4.0	5.1
SK	6 335	1.9	2.6
FI	15 127	3.5	1.2
SE	25 958	5.1	3.0
UK	169 930	4.4	1.4

(¹) Nights spent by residents and non-residents; Ireland, United Kingdom and Norway, monthly data was used to calculate the annual figures; Turkey, 2007.

(²) Ratio of nights spent by residents and non-residents in hotels and similar establishments and other collective accommodation establishments per inhabitant; EU-27 and EA-16 estimates made for the purpose of this publication, based on annual and monthly data.

(³) EU-27, flows with extra-EU-27; euro area, flows with extra EA-16.

Source: Eurostat ([tin00043](#), [tps00001](#), [bop_its_det](#) and [nama_gdp_c](#))

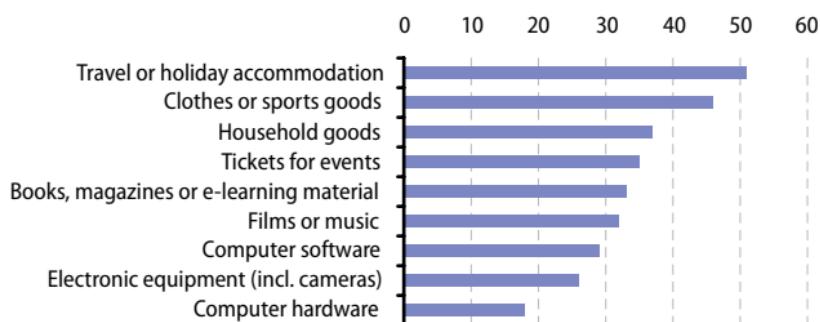
7.6 Information society

During the last decade, ICT have become widely available to the general public, both in terms of accessibility as well as cost. A boundary was crossed in 2007, when a majority (54 %) of households across the EU-27 had Internet access. This proportion has continued to increase and in 2009 reached 65 %. The highest proportion (90 %) of households with Internet access in 2009 was recorded in the Netherlands, the lowest (30 %) in Bulgaria.

Just over one third (37 %) of individuals in the EU-27 ordered goods or services over the Internet for private use during the year prior to the 2009 survey, an increase of 5 percentage points compared with the year before.

Included are households having at least one member in the age group 16 to 74 years old. Internet access of households refers to the percentage of households that have an Internet access, so that anyone in the household could use the Internet at home, if so desired, even simply to send an e-mail. Internet users are defined as all individuals aged 16-74 who had used the Internet in the three months prior to the survey.

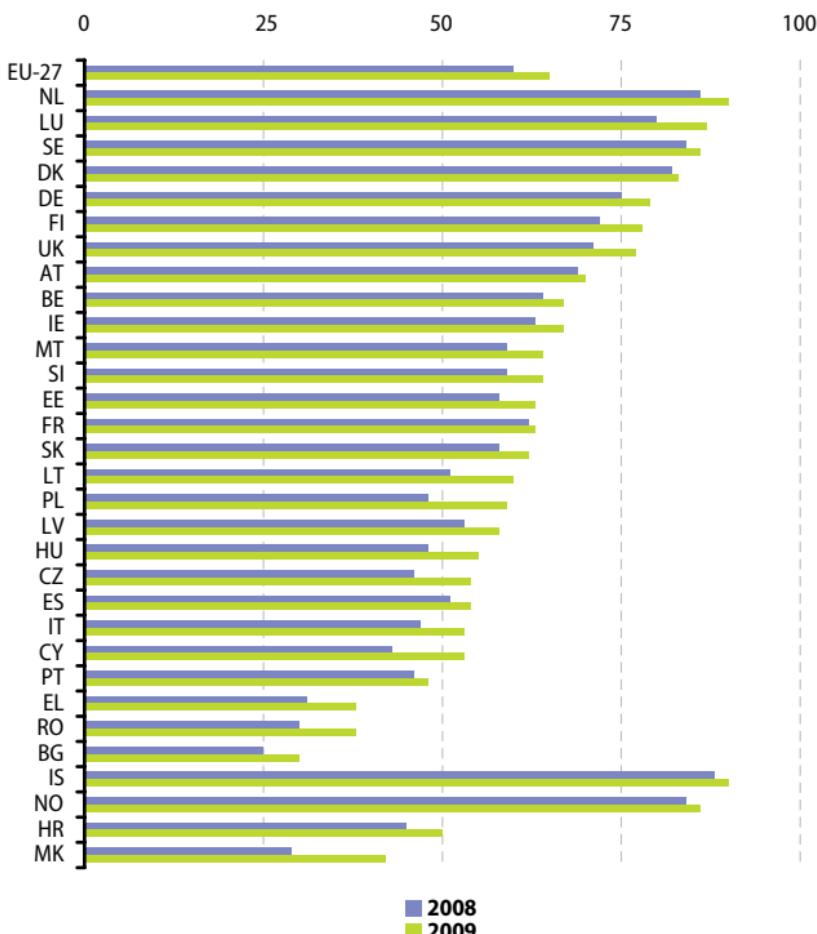
Figure 7.8: Goods or services bought or ordered over the Internet for private use, EU-27, 2009⁽¹⁾
(% of individuals buying or ordering over the Internet)



(1) During the 12 months prior to the survey.

Source: Eurostat ([isoc_ec_ibuy](#))

**Figure 7.9: Internet access of households
(% of all households)**



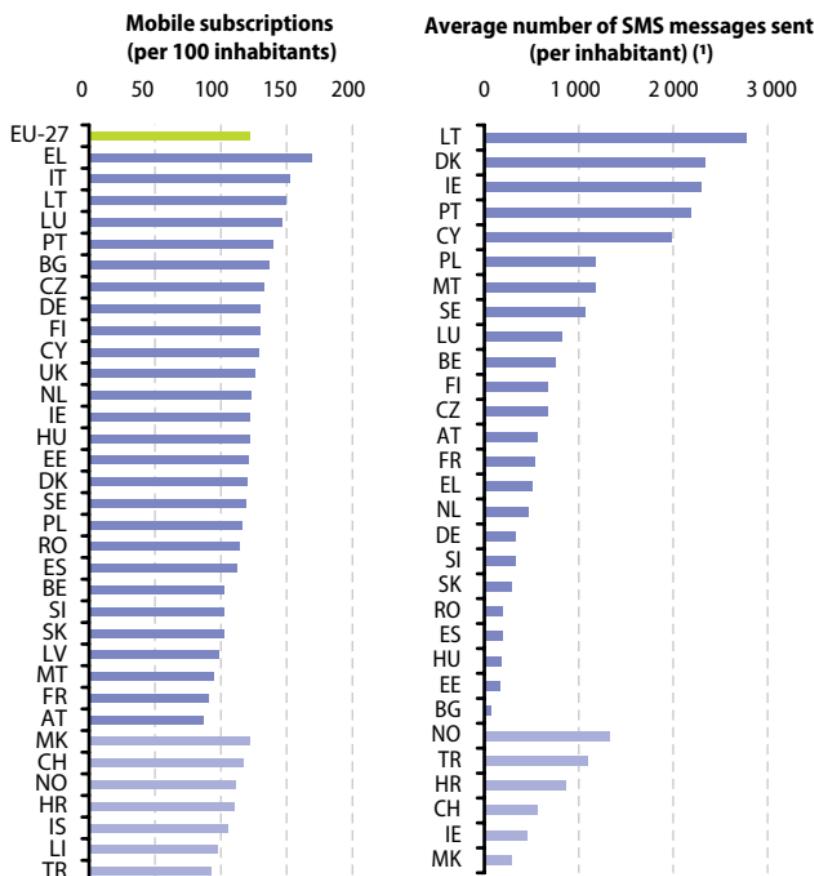
Source: Eurostat ([tsiir040](#))

7.7 Telecommunications

Although overall expenditure on telephony has increased, the proportion accounted for by ex-monopoly service providers has generally fallen, as the share of the total telecommunication market accounted for by fixed-line voice operations has shrunk. Growth has been concentrated in mobile telephony markets and other data services. The share of the leading operator in the mobile market was relatively low at 38 % in the EU-27 in 2009, varying between 21 % in the United Kingdom and 82 % in Cyprus.

The average number of mobile phone subscriptions per 100 inhabitants stood at 122 in the EU-27 in 2008. It surpassed parity (100) in 23 of the Member States, where there were more subscriptions than inhabitants.

Figure 7.10: Mobile phone subscriptions and the use of SMS, 2008



(l) Italy, Latvia and the United Kingdom, not available.

Source: Eurostat ([tin00060](#), [isoc_tc_sms](#) and [tps00001](#))

Table 7.4: Market share of incumbents in fixed telecommunications and leading operators in mobile telecommunications
(% of total market)

	Fixed telecommunications: international calls		Leading operator in mobile telecommunications		
	2007	2008	2007	2008	2009
EU-27	:	:	40	39	38
BE	62	62	45	43	44
BG	86	82	53	49	49
CZ	50	52	42	40	39
DK	:	:	40	46	30
DE	:	:	37	36	37
EE	:	:	45	47	47
IE	56	54	45	42	40
EL	74	:	38	43	48
ES	68	55	46	45	44
FR	57	56	43	44	41
IT	44	47	40	39	36
CY	79	69	89	85	82
LV	65	69	35	53	46
LT	77	79	41	39	40
LU	:	:	57	54	53
HU	:	:	44	44	45
MT	92	85	47	53	50
NL	:	:	48	38	50
AT	58	52	40	42	43
PL	66	63	36	33	33
PT	:	:	46	48	47
RO	69	62	44	45	43
SI	79	75	67	72	57
SK	89	80	51	55	53
FI	:	:	41	40	38
SE	43	48	43	43	42
UK	48	44	24	25	21

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

8

Agriculture, forestry and fisheries



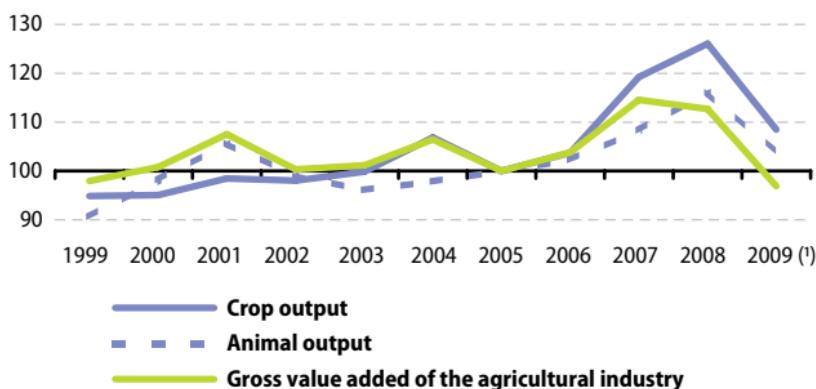
8.1 Agricultural output, price indices and income

The EU-27's agricultural industry generated EUR 125 400 million of gross value added at producer prices in 2009, which represented a 14.0 % reduction in relation to the previous year. There were large decreases in both the value of **crop output** (down 13.9 % to EUR 171 000 million in 2009) and **animal output** (down 10.9 % to EUR 133 000 million).

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

Significant reforms of the common agricultural policy have taken place in recent years, most notably in 2003 and 2008, with the aim of making the agricultural sector more market-oriented. The 2003 reform introduced a new system of direct payments, known as the single payment scheme, under which aid is no longer linked

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



(!) Crop output and animal output, estimates.

Source: Eurostat (aact_eaa01)

to production (decoupling); the single payment scheme aims to guarantee farmers more stable incomes. In 2008 further changes were made, building on the reform package from 2003, such that all aid to the agricultural sector will be decoupled by 2012.

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

	Gross value added of the agricultural industry		Crop output		Animal output	
	1999	2009	1999	2009	1999	2009
EU-27	126 779	125 409	149 595	171 049	116 391	133 009
BE	2 158	1 914	2 994	3 019	3 190	3 764
BG	1 679	1 465	1 429	1 941	1 338	1 163
CZ	731	629	1 218	1 930	1 292	1 595
DK	1 985	1 571	2 579	2 988	4 194	4 673
DE	12 099	12 924	18 492	21 204	17 747	19 800
EE	87	157	111	203	136	270
IE	1 825	937	1 184	1 340	3 506	3 393
EL	6 209	5 801	6 498	6 598	2 398	2 792
ES	18 193	21 277	18 377	22 593	10 469	12 976
FR	23 756	20 586	30 608	34 109	21 211	22 057
IT	25 470	22 075	25 300	24 236	12 818	14 129
CY	-256	302	0	316	0	309
LV	169	141	178	387	173	302
LT	402	427	583	868	457	667
LU	114	87	77	116	148	153
HU	1 862	1 551	2 301	3 087	1 795	2 085
MT	65	52	54	48	74	67
NL	8 452	7 396	9 253	11 188	7 872	8 659
AT	2 096	2 338	2 272	2 675	2 323	2 726
PL	4 126	5 651	5 439	7 753	4 878	8 137
PT	2 240	1 846	3 843	3 762	2 052	2 420
RO	4 140	5 999	4 901	8 569	2 683	3 955
SI	417	344	435	453	485	470
SK	372	393	551	824	643	747
FI	798	699	1 360	1 550	1 567	1 766
SE	979	1 200	1 644	1 677	2 185	2 076
UK	6 612	7 646	7 917	7 612	10 758	11 861
NO	935	878	1 190	1 303	1 631	1 983
CH	2 895	2 657	3 030	2 996	3 093	3 369
MK	365	:	563	:	187	:

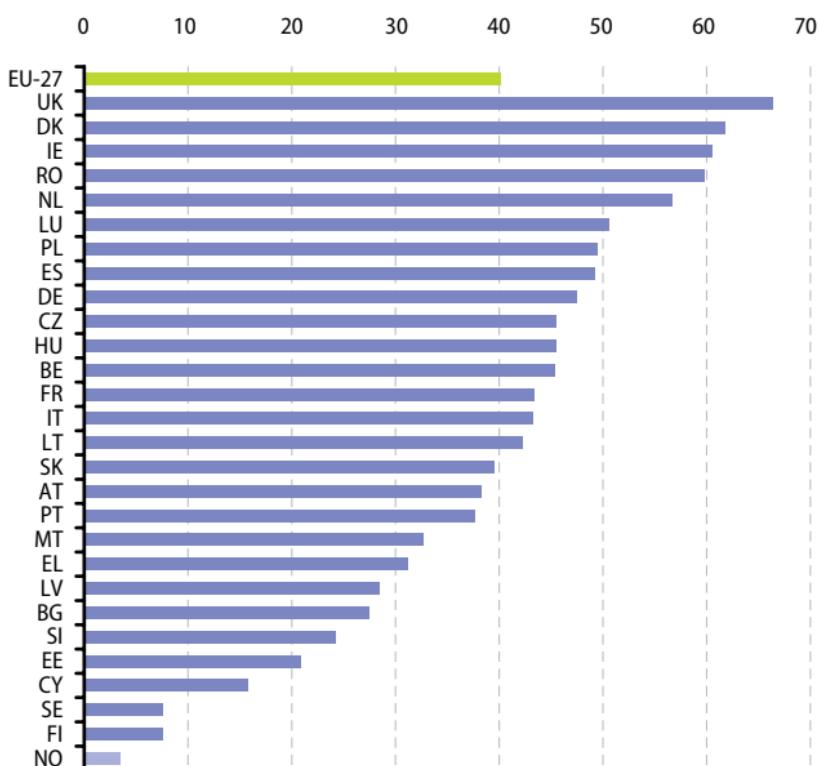
Source: Eurostat ([aact_eaa01](#))

8.2 Farm structure

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

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

Figure 8.2: Utilised agricultural area, 2007⁽¹⁾
(% share of total land area)



(1) Areas belonging to agricultural holdings.

Source: Eurostat ([demo_r_d3area](#) and [ef_lu_ovcropsu](#))

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

Table 8.2: Agricultural holdings

	Number of agricultural holdings (1 000)		Holdings with dairy cows (1 000)		Holdings with irrigable area (% of holdings)	
	2003	2007	2003	2007	2003	2007
EU-27	15 021.0	13 700.4	3 199.4	2 486.7	:	:
BE	54.9	48.0	16.6	13.3	4.2	4.6
BG	665.6	493.1	195.0	120.8	20.5	14.8
CZ	45.8	39.4	8.5	5.6	4.5	5.2
DK	48.6	44.6	8.0	5.4	19.4	15.0
DE	412.3	370.5	121.8	101.1	:	:
EE	36.9	23.3	12.4	6.1	:	:
IE	135.6	128.2	28.1	21.3	0.0	0.0
EL	824.5	860.2	11.6	8.0	64.1	62.3
ES	1 140.7	1 043.9	51.0	37.3	47.5	45.3
FR	614.0	527.4	113.9	93.1	17.3	18.0
IT	1 963.8	1 679.4	67.5	62.8	36.2	40.4
CY	45.2	40.1	0.3	0.2	74.5	78.0
LV	126.6	107.8	63.7	43.7	0.1	0.2
LT	272.1	230.3	193.4	123.2	0.0	0.0
LU	2.5	2.3	1.0	1.1	0.0	0.0
HU	773.4	626.3	22.0	12.2	4.0	0.2
MT	11.0	11.0	0.2	0.2	34.2	25.0
NL	85.5	76.7	25.0	24.5	22.2	25.5
AT	173.8	165.4	65.1	49.5	3.6	4.4
PL	2 172.2	2 391.0	873.8	651.1	0.7	1.1
PT	359.3	275.1	27.1	13.5	62.1	62.0
RO	4 484.9	3 931.4	1 204.9	1 012.4	5.6	2.6
SI	77.2	75.3	17.2	19.2	1.5	2.3
SK	71.7	69.0	14.2	11.5	5.9	2.2
FI	75.0	68.2	19.4	14.4	10.6	8.5
SE	67.9	72.6	9.7	7.1	7.7	5.2
UK	280.6	299.8	28.2	28.1	1.7	13.5
NO	58.2	49.9	17.5	13.7	16.5	17.4

Source: Eurostat ([tag00001](#), [ef_r_nuts](#) and [ef_ov_lusum](#))

8.3 Agricultural products

In 2009, the EU-27 produced 295.8 million tonnes of **cereals** (including rice). Despite the vagaries of the weather, cereal production in the EU-27 was relatively stable between 2000 and 2007, albeit with notably higher harvests in 2004.

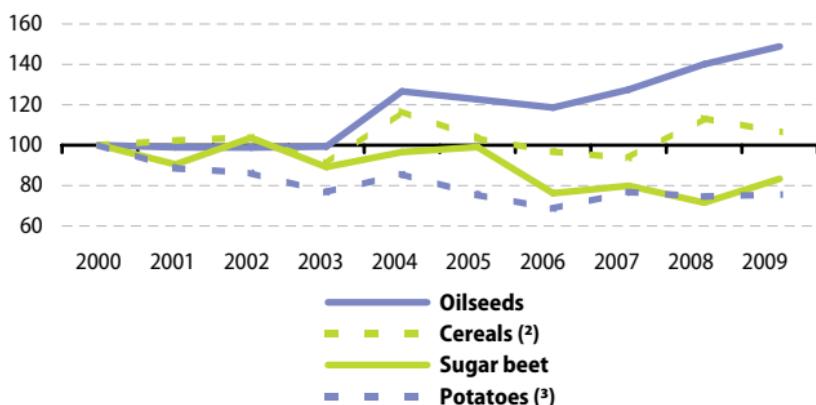
There was a strong rise (48.9 %) in the production of oilseeds between 2000 and 2009, which could be contrasted with a relatively steady decline in the production of potatoes (down by 24.4 % between 2000 and 2009) and a fall in the production of sugar beet (-16.7 % over the same period, with a marked reduction in 2006).

The principal meat product in the EU-27 is **pig** meat (21.3 million tonnes in 2009), where the weight of production was almost three times as high as for **beef/veal** (7.7 million tonnes).

Dairy production has a diverse structure across the Member States, in terms of farm and **dairy herd** sizes, as well as milk yields. The total collection of cows' milk in the EU-27 in 2009 amounted to 133.5 million tonnes.

The harvested production includes marketed quantities, as well as quantities consumed directly on the farm, losses and waste on the **holding**, and losses during transport, storage and packaging.

Figure 8.3: Indices of the agricultural production of crops, EU-27 (¹)
(2000=100)



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

(²) Estimates, 2004 and 2005; provisional, 2008 and 2009.

(³) Provisional, 2007-2009.

Source: Eurostat ([apro_cpp_crop](#))

Milk collection is only a part of the total use of milk production on the farm, the remainder generally includes own consumption, direct sale and cattle feed.

Meat production is based on the **carcass weight** of meat fit for human consumption. The concept of carcass weight is generally the weight of the slaughtered animal's cold body, although the precise definition varies according to the animal under consideration.

Table 8.3: Agricultural production, 2009 (¹)
(1 000 tonnes)

	Cereals	Sugar beet	Potatoes	Cows' milk	Cattle meat	Pigs meat
EU-27 (¹)	295 842	114 138	62 595	133 545	7 720	21 292
BE	3 324	5 185	3 296	2 954	255	1 082
BG	5 273	0	353	600	5	38
CZ	7 832	3 038	753	2 354	77	285
DK	10 117	2 011	1 417	4 734	126	1 583
DE	49 748	25 550	11 683	28 248	1 178	5 254
EE	879	:	139	612	10	31
IE	2 384	45	363	4 944	514	196
EL	4 814	1 600	848	685	57	118
ES	17 833	4 154	2 481	5 742	598	3 291
FR	70 000	34 913	7 164	22 898	1 467	2 004
IT	15 892	3 308	1 753	10 415	1 055	1 588
CY	57	0	107	152	4	58
LV	1 663	0	525	595	19	25
LT	3 807	682	656	1 274	44	41
LU	189	0	20	271	9	9
HU	13 571	708	536	1 407	30	389
MT	0	0	10	:	2	7
NL	2 089	5 735	7 181	11 085	402	1 275
AT	5 144	3 083	722	2 716	224	533
PL	29 827	10 849	9 703	9 140	385	1 608
PT	1 057	137	519	1 868	103	373
RO	14 934	685	4 011	992	25	222
SI	533	262	103	517	35	24
SK	3 330	899	216	852	16	70
FI	4 261	559	755	2 281	81	206
SE	5 249	2 406	854	2 933	150	261
UK	22 036	8 330	6 423	13 237	850	720
HR	3 407	1 111	230	675	49	78
MK	567	:	:	:	:	:
TR	33 373	16 300	4 328	:	:	:

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

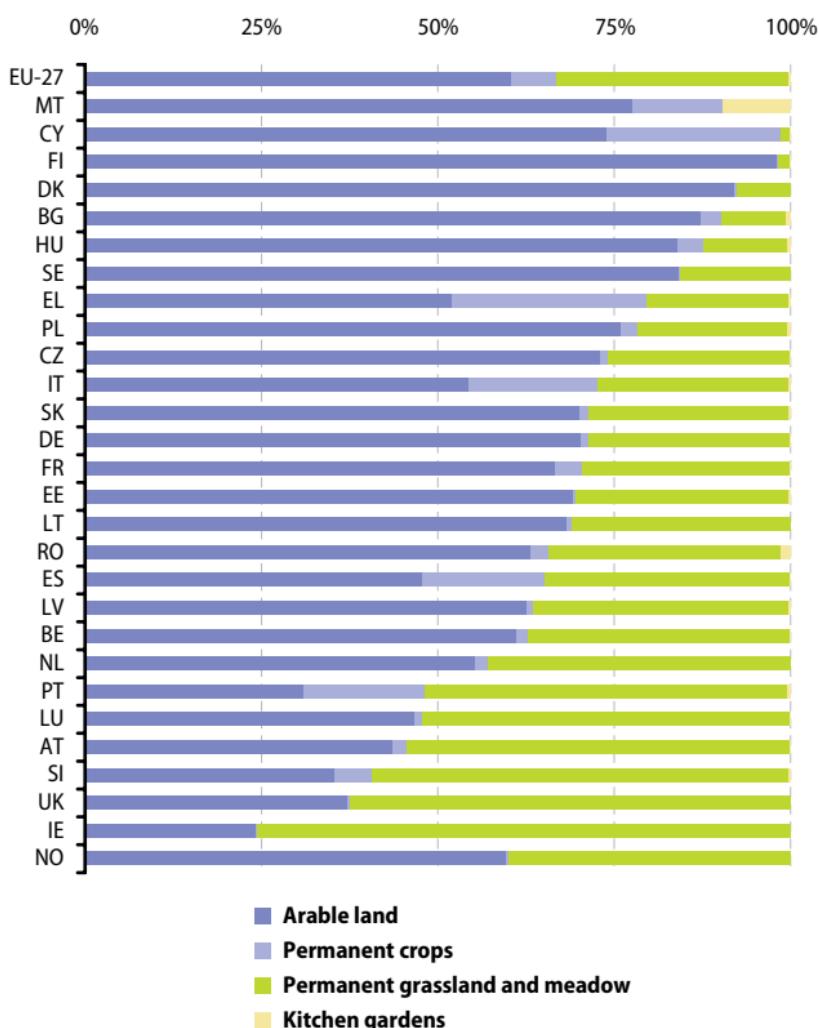
Source: Eurostat ([apro_cpp_crop](#), [apro_mt_pann](#) and [apro_mk_pobta](#))

8.4 Agriculture and the environment

In 2007, the total [utilised agricultural area](#) covered 172 million hectares in the EU-27, of which 60.5 % was composed of [arableland](#), while 32.9 % of the area was accounted for by [permanent grassland](#), and 6.4 % by [permanent crops](#); [kitchen gardens](#) covered just 0.2 % of the utilised agricultural area in the EU-27.

In 2007, the total livestock population in the EU-27 amounted to 136 million [livestock units \(LSU\)](#), of which [cattle](#) represented 47.7 %, followed by [pigs](#) (27.6 %), [poultry](#) (13.8 %) and [sheep](#) (7.6 %).

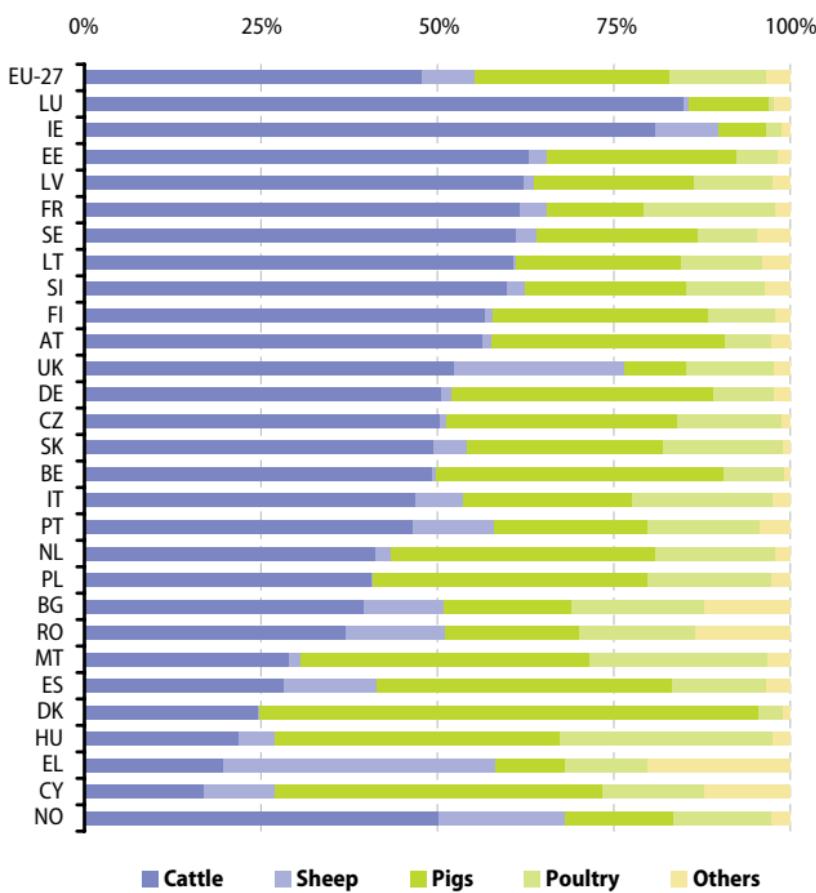
Figure 8.4: Cropping pattern - utilised agricultural area (UAA) by crop type, 2007
(% of total UAA)



Source: Eurostat ([ef_lu_ocropaa](#))

Cropping patterns provide an insight into the relationship between the environment and farming developments within the EU. Permanent grasslands (when extensively managed) are generally considered as the most important crop from a nature conservation perspective, providing habitats for many wild plants and animal species. The grazing of animals on grassland, if not too heavy, can contribute to conservation in semi-natural habitats – as plants and animals benefit from lightly or moderately grazed pastures, whereas heavy grazing is likely to reduce biodiversity.

Figure 8.5: Livestock pattern - number of livestock units (LSU) by type, 2007 (')
(% of total number of LSU)



(¹) The LSU is related to the feed requirements of each individual animal category - for example, 1 LSU corresponds to one dairy cow or 10 sheep.

Source: Eurostat ([ef_ov_lssum](#))

8.5 Forestry

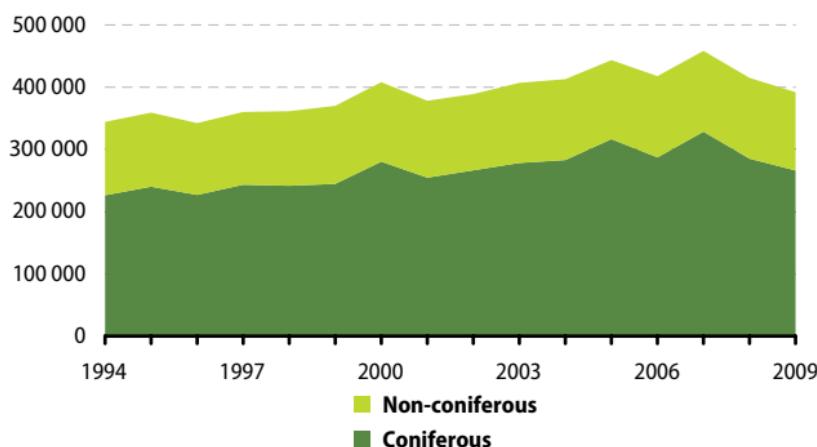
The EU-27 has approximately 178 million hectares of forests and other wooded land, corresponding to 42 % of its land area, and forest cover is gradually increasing.

From 1994 to 2007, there was a relatively steady rise in the level of roundwood production in the EU-27, both for coniferous (softwood) and non-coniferous (broadleaved or hardwood) species. However, the effects of the economic and financial crisis led to the level of coniferous production falling in 2008 and this was confirmed with a further reduction in 2009, when non-coniferous production also fell.

Some 91.0 million m³ of sawnwood were produced in the EU-27 in 2009, 40 % of which came from the two largest producing Member States namely Germany (22.7 %) and Sweden (17.8 %); Austria, Finland and France each accounted for around 9 % of the EU-27 total.

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; it includes for example planks, beams,

Figure 8.6: Annual production of roundwood, EU-27 (¹)
(1 000 m³)



(¹) 2000, 2001, 2007 and 2009, estimates.

Source: Eurostat ([for_remov](#))

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

Table 8.5: Wood production
(1 000 m³)

	Roundwood		Sawnwood	
	1999	2009	1999	2009
EU-27	370 044	391 897	94 152	91 011
BE	4 400	4 395	1 056	1 255
BG	4 352	4 599	325	447
CZ	14 203	16 187	3 584	4 636
DK	1 538	2 786	344	300
DE	37 634	56 634	16 110	20 674
EE	6 704	4 860	1 200	1 150
IE	2 593	2 349	811	774
EL	2 215	1 261	140	106
ES	14 810	13 980	3 102	2 072
FR	56 948	54 108	10 236	7 886
IT	11 138	7 581	1 630	1 220
CY	36	10	12	5
LV	14 008	10 409	3 640	2 500
LT	4 924	5 460	1 150	1 011
LU	260	274	133	129
HU	5 231	5 244	308	102
MT	0	0	0	0
NL	1 044	1 016	362	210
AT	14 083	16 727	9 628	8 455
PL	24 268	34 629	4 137	3 594
PT	8 978	9 564	1 430	1 093
RO	12 704	12 557	2 818	3 598
SI	2 068	2 930	455	397
SK	5 795	9 087	1 265	2 254
FI	53 637	41 653	12 768	8 072
SE	58 700	65 100	14 858	16 200
UK	7 774	8 497	2 650	2 871
LI	:	25	:	4
NO	8 424	8 884	2 336	1 850
CH	4 737	4 577	1 525	1 481
HR	3 486	4 242	685	653
MK	:	639	:	2
TR	16 608	19 430	5 039	5 853
CA	193 890	107 266	50 412	32 820
RU	143 600	151 400	19 100	18 974
US	469 313	344 835	92 615	61 998

Source: Eurostat ([for_remov](#) and [for_swpan](#))

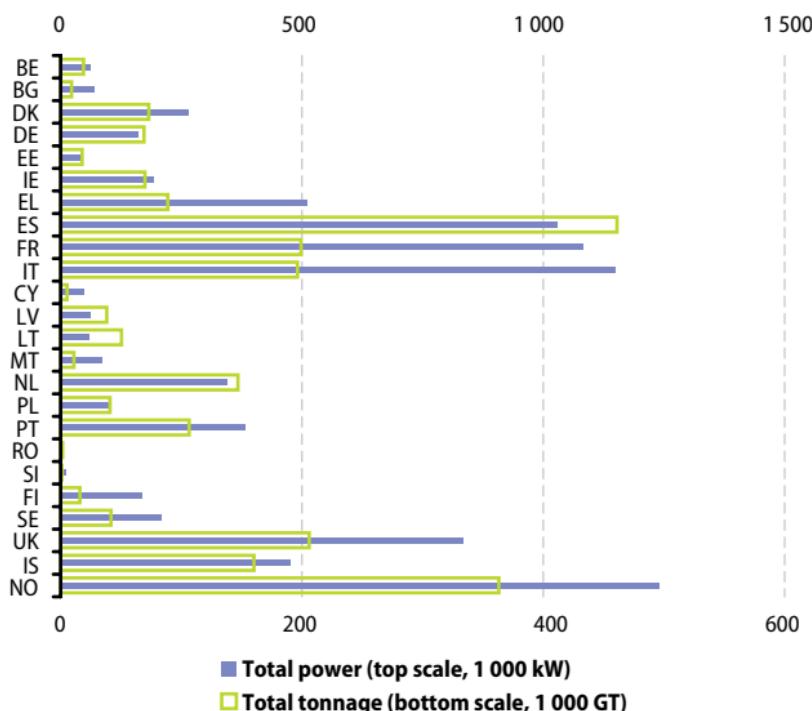
8.6 Fisheries

By far the largest fishing fleets among the EU Member States, in terms of power, were those from Italy, France, Spain and the United Kingdom. In terms of tonnage, however, the Spanish fishing fleet was by far the largest, being about two and a half times the size of the fleets in the United Kingdom, France or Italy.

Total catches by the fishing fleets of Spain, Denmark, the United Kingdom and France accounted for more than half of all the catches made by EU-27 fishing fleets in 2008. Around 70 % of the catches made by the EU-27 in 2008 were in the north east Atlantic, with the Mediterranean the second largest [fishing area](#).

The five largest aquaculture producers among the EU Member States were Spain, France, Italy, the United Kingdom and Greece, which together accounted for around three quarters of total aquaculture production in 2007.

Figure 8.7: Fishing fleet, 2008 (1)



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

Source: Eurostat ([fish_fleet](#))

Table 8.6: Fishery indicators

	Total catches in all fishing regions (1 000 tonnes live weight)		Aquaculture production (1 000 tonnes live weight)		Fishing fleet, 2008 (1 000 GT)
	1998	2008	1998	2007	
EU-27	7 253	5 148	1 376	1 307	:
BE	31	23	1	0	19
BG	19	9	4	4	9
CZ	4	4	17	20	-
DK	1 557	691	42	31	73
DE	267	229	73	45	69
EE	119	101	0	1	18
IE	327	205	42	53	70
EL	110	89	60	113	89
ES	1 210	919	314	285	461
FR	599	499	268	237	199
IT	306	236	209	181	196
CY	19	2	1	3	5
LV	102	158	0	1	38
LT	67	183	2	3	50
LU	0	-		0	-
HU	7	7	10	16	-
MT	1	1	2	9	11
NL	533	417	120	53	147
AT	0	0	3	3	-
PL	242	143	30	35	41
PT	230	240	8	7	107
RO	9	5	10	10	2
SI	2	1	1	1	1
SK	1	2	1	1	-
FI	156	158	16	13	16
SE	411	231	5	5	42
UK	923	594	137	174	206
IS	1 700	1 307	4	5	160
NO	2 861	2 436	411	830	363
CH	2	2	1	1	-
HR	22	49	6	13	:
MK	0	0	1	1	-
TR	487	494	57	140	:

Source: Eurostat ([fish_ca_00](#), [fish_aq_q](#) and [fish_fleet](#))

International trade



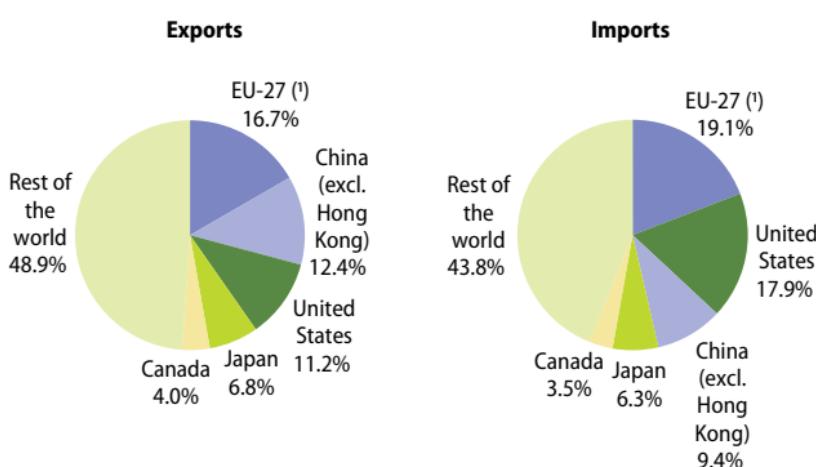
9.1 International trade in goods

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

External trade forms an increasing part of the world economy, through the influence of globalisation, as well as rapidly growing exchanges with developing economies such as China and India, and some of the countries formed out of the Soviet Union – in particular those where indigenous energy supplies are of particular importance.

The overall fall of EUR 215 407 million in EU-27 exports was overwhelmingly due to declines in the two largest product groups, machinery and vehicles and other manufactured goods, which fell by EUR 114 484 million and EUR 58 407 million respectively. In contrast, exports of the next largest product group, chemicals, fell by only EUR 3 279 million. Machinery and transport equipment also recorded the largest trade surplus (EUR 112 552 million) in 2009. Of the main product groups, raw materials experienced the largest fall in imports in relative terms (-37.5 %). Imports of energy products fell by EUR 166 281 million, or 36.4 %. It should be noted that comparisons over time reflect both changes in quantity and price levels.

Figure 9.1: External trade, shares in the world market, 2008
(% share of world total)



(1) External trade flows with extra EU-27.

Source: Eurostat ([ext_lt_intro](#))

Table 9.1: Extra EU-27 trade by main products, EU-27

	2004		2009	
	(EUR 1 000 million)	(%)	(EUR 1 000 million)	(%)
EXPORTS				
Total	953.0	100.0	1 094.4	100.0
Food, drinks & tobacco	48.6	5.1	62.6	5.7
Raw materials	21.0	2.2	27.8	2.5
Mineral fuels, lubricants	32.9	3.5	57.2	5.2
Chemicals & related prod.	152.6	16.0	195.5	17.9
Other manufactured goods	246.2	25.8	258.4	23.6
Machinery & transport equip.	430.1	45.1	454.7	41.5
IMPORTS				
Total	1 027.5	100.0	1 199.2	100.0
Food, drinks & tobacco	58.8	5.7	73.7	6.1
Raw materials	48.5	4.7	47.2	3.9
Mineral fuels, lubricants	183.4	17.9	290.1	24.2
Chemicals & related prod.	88.5	8.6	112.4	9.4
Other manufactured goods	262.3	25.5	295.4	24.6
Machinery & transport equip.	354.5	34.5	342.2	28.5
TRADE BALANCE				
Total	-74.6	-	-104.8	-
Food, drinks & tobacco	-10.3	-	-11.1	-
Raw materials	-27.4	-	-19.5	-
Mineral fuels, lubricants	-150.5	-	-232.9	-
Chemicals & related prod.	64.1	-	83.1	-
Other manufactured goods	-16.1	-	-37.0	-
Machinery & transport equip.	75.6	-	112.6	-

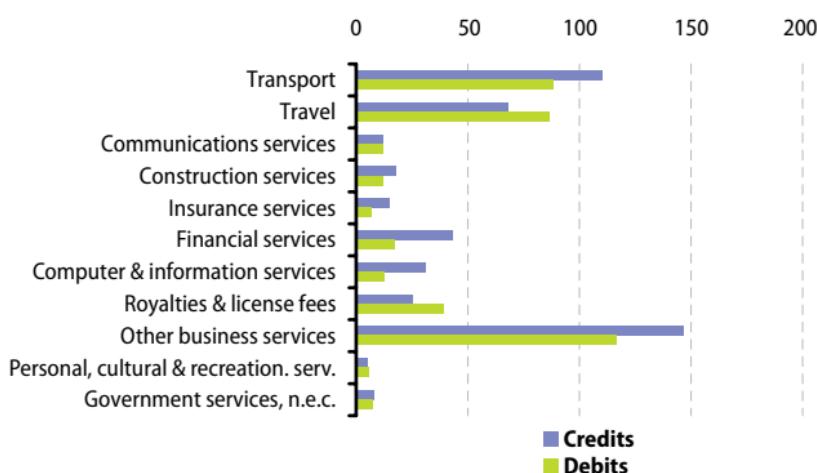
Source: Eurostat ([ext_lt_intertrd](#))

9.2 International trade in services

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

More than two thirds of the EU-27's credits (67.7 %) and almost three quarters of its debits (70.2 %) in the international trade of services in 2009 were accounted for by three categories: transport, travel and other business services (see Figure 9.2). The surplus of EUR 29 800 million for other business services was the highest among services, followed by a surplus of EUR 26 200 million for financial services, EUR 21 500 million for transport and EUR 17 900 million for computer and information services. In contrast, the largest deficits were EUR 18 300 million for travel and EUR 13 900 million for royalties and license fees.

Figure 9.2: Extra-EU trade in services, by main categories, EU-27, 2009 (1)
(EUR 1 000 million)



(1) Provisional.

Source: Eurostat ([bop_its_det](#))

Table 9.2: Trade in services (¹)
(EUR 1 000 million)

	Credits		Debits		Net	
	2004	2009	2004	2009	2004	2009
EU-27	366.7	479.0	321.6	415.0	45.1	64.0
EA-16	494.9	469.8	445.3	439.9	49.6	29.9
BE	42.4	58.3	39.5	57.9	2.9	0.4
BG	3.3	4.9	2.6	3.3	0.7	1.6
CZ	7.8	14.6	7.2	13.6	0.5	1.0
DK	29.4	39.5	26.8	36.7	2.7	2.9
DE	118.7	165.8	158.4	182.6	-39.7	-16.7
EE	2.3	3.2	1.4	1.8	0.9	1.3
IE	42.4	66.6	52.6	75.1	-10.2	-8.4
EL	26.7	27.0	11.3	14.3	15.5	12.6
ES	69.4	88.1	47.6	62.7	21.8	25.3
FR	92.4	102.9	79.2	91.4	13.2	11.5
IT	68.2	73.4	67.0	83.6	1.2	-10.1
CY	5.0	7.1	2.1	2.9	2.9	4.1
LV	1.4	2.7	1.0	1.6	0.5	1.2
LT	2.0	2.7	1.3	2.1	0.7	0.6
LU	27.3	43.8	16.8	25.8	10.5	18.0
HU	8.7	13.1	8.2	11.6	0.5	1.5
MT	1.3	2.4	0.8	1.5	0.5	0.9
NL	59.3	66.9	55.9	61.3	3.4	5.6
AT	30.5	38.2	22.5	26.6	8.0	11.6
PL	10.8	20.7	10.8	17.2	0.0	3.5
PT	11.8	16.3	7.8	10.3	4.1	6.0
RO	2.9	7.0	3.1	7.4	-0.2	-0.4
SI	2.8	4.3	2.1	3.2	0.7	1.1
SK	3.0	4.5	2.8	5.8	0.2	-1.2
FI	12.2	18.3	11.7	16.8	0.5	1.5
SE	31.4	43.8	26.6	33.3	4.7	10.5
UK	159.2	167.5	120.7	118.1	38.4	49.5
IS	1.3	1.6	1.5	1.4	-0.2	0.2
NO	25.9	27.4	23.6	27.2	2.3	0.1
HR	7.6	8.5	2.9	2.8	4.8	5.7
TR	18.5	23.6	8.2	12.1	10.4	11.5
JP (²)	78.5	101.6	109.0	115.9	-30.5	-14.3
US (²)	281.2	372.0	234.4	276.2	46.7	95.8

(¹) EU-27, extra EU-27 flows; euro area, extra EA-16 flows; Member States and other countries, flows with the rest of the world.

(²) 2008 instead of 2009.

Source: Eurostat ([bop_q_eu](#), [bop_q_euro](#) and [bop_q_c](#))

10

Transport

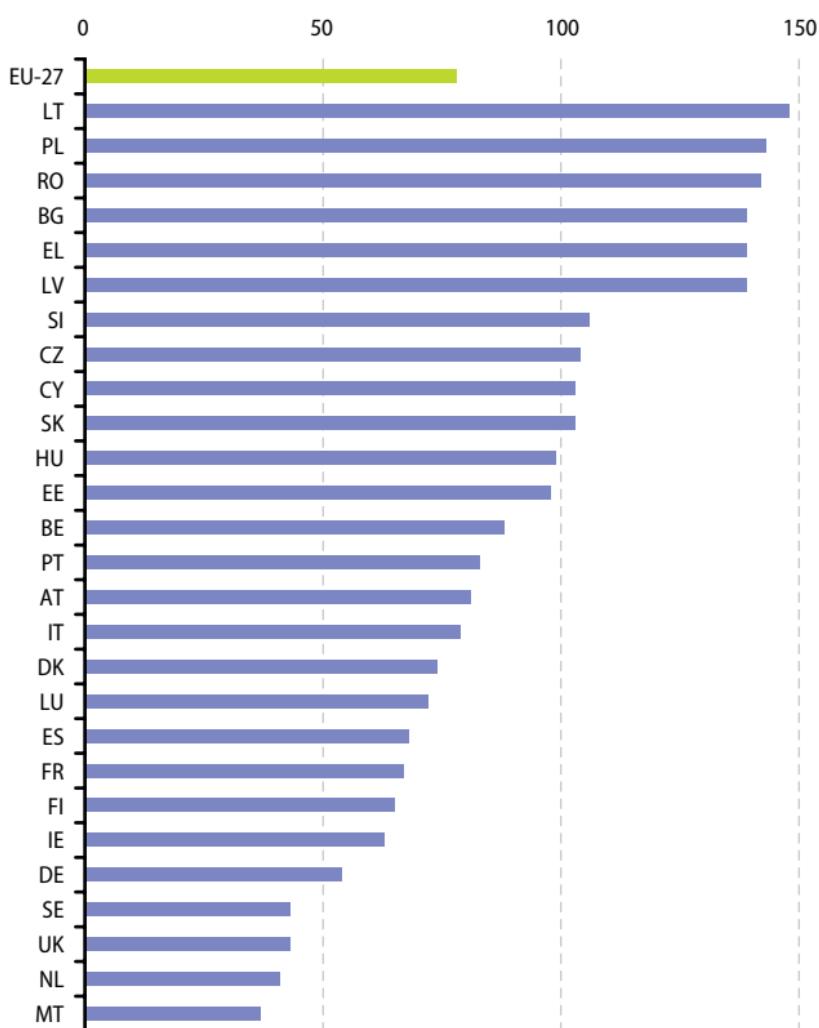


10.1 Transport accidents

While rail, air, or sea transport incidents often receive considerable media coverage as they generally involve larger numbers of people, road accidents are often treated in a more mundane manner by the media, despite the fact that Europe's roads account for the vast majority of transport accidents and deaths.

The annual number of road fatalities in the EU is falling, despite the growth (prior to the economic and financial crisis) in passenger and freight transport.

Figure 10.1: People killed in road accidents, 2008⁽¹⁾
(persons killed per million inhabitants)



(1) Italy, 2006.

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

Nevertheless, the number of people killed on Europe's roads still accounted for almost nine out of every ten deaths resulting from transport accidents in 2009. Road accidents remain the largest single cause of death among people under 45 years of age.

The road fatality rate, expressed as the number of deaths per million inhabitants, averaged 78 across the EU-27 in 2008, although there were stark contrasts between Member States.

Of the total number of victims seriously injured or killed in railway accidents in the EU-27 in 2008, a little over one sixth (17.4 %) were either train passengers or railway employees. Approximately two thirds (68.6 %) of the lives lost in rail accidents were from incidents involving rolling stock in motion, with almost all the others (26.6 %) from incidents at level-crossings.

Table 10.1: Rail accidents by type of victim and accident, EU-27, 2008 (1)
(number of persons)

	Collisions (excluding level- crossing accidents)	Derail- ments	Accidents involving level- crossings	Accidents to persons caused by rolling stock in motion	Fire in rolling stock
Total					
Killed	23	3	399	1 028	9
Seriously injured	92	15	458	684	5
Passengers					
Killed	12	2	0	53	9
Seriously injured	64	12	9	115	5
Railway employees					
Killed	6	1	2	25	0
Seriously injured	20	3	14	48	0
Others					
Killed	5	0	397	950	0
Seriously injured	8	0	435	521	0

(1) Slightly injured persons are not included in rail accident statistics.

Source: Eurostat ([rail_ac_catvict](#))

10.2 Passenger transport

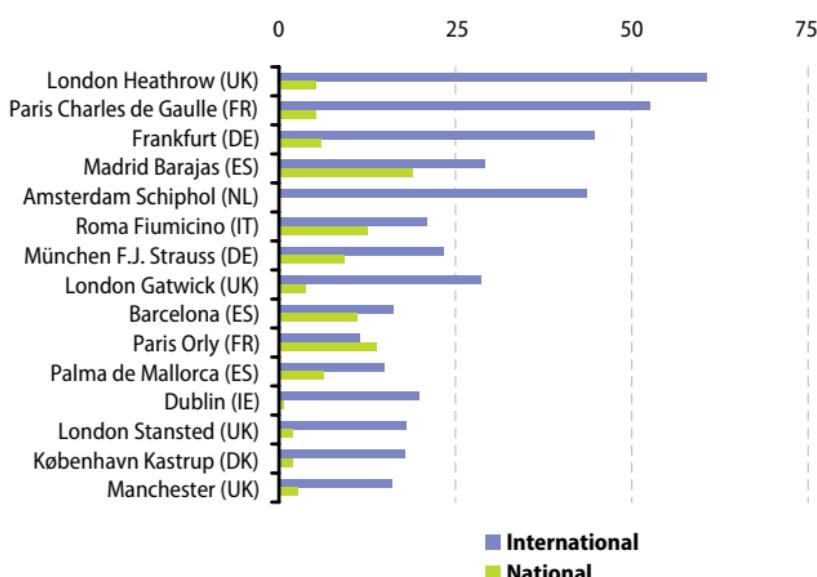
London Heathrow was the busiest airport in the EU-27 in terms of passenger numbers in 2009 (65.9 million), followed by Paris' Charles de Gaulle airport (57.7 million), and then Frankfurt airport, Madrid's Barajas airport and Amsterdam's Schiphol airport (all with between 50.6 million and 43.5 million passengers).

Just over 750 million passengers were carried by air in 2009 in the EU-27; the number of air passengers had stagnated in 2008, while the number of air passengers fell by 5.9 % in 2009.

Table 10.2 shows the number of maritime passengers, with ports in the EU-27 handling 413 million passengers in 2008; this marked a slight reduction of 0.3 % compared with 2007. Greek and Italian ports handled more passengers in 2008 than those of any other Member State (accounting for 22.1 % and 21.8 % of the EU-27 total respectively).

Relative to national population, the importance of maritime passenger transport was particularly high in Malta (18.9 passengers per inhabitant in 2009), followed by Greece (8.1), Denmark (7.9, 2009) and Estonia (6.9).

Figure 10.2: Top 15 airports, passengers carried (embarked and disembarked), EU-27, 2009
(million passengers)



Source: Eurostat ([avia_paoa](#))

Table 10.2: Air and sea passenger transport ⁽¹⁾

	Air passengers, 2009 ⁽²⁾		Maritime passengers, 2008 ⁽³⁾	
	(1 000)	(passengers per inhabitant)	(1 000)	(passengers per inhabitant)
EU-27	751 401	1.5	412 877	0.8
BE	21 314	2.0	799	0.1
BG	5 839	0.8	0	0.0
CZ	12 367	1.2	-	-
DK	20 860	3.8	43 561	7.9
DE	158 150	1.9	28 945	0.4
EE	1 341	1.0	9 190	6.9
IE	26 277	5.9	3 108	0.7
EL	32 882	2.9	91 101	8.1
ES	148 318	3.2	22 478	0.5
FR	117 557	1.8	26 813	0.4
IT	102 167	1.7	90 156	1.5
CY	6 730	8.4	150	0.2
LV	4 063	1.8	437	0.2
LT	1 867	0.6	205	0.1
LU	1 535	3.1	-	-
HU	8 081	0.8	-	-
MT	2 919	7.1	7 799	18.9
NL	46 479	2.8	1 959	0.1
AT	21 817	2.6	-	-
PL	17 046	0.4	2 647	0.1
PT	24 104	2.3	762	0.1
RO	7 984	0.4	0	0.0
SI	1 423	0.7	50	0.0
SK	1 948	0.4	-	-
FI	13 829	2.6	17 226	3.2
SE	25 219	2.7	32 745	3.6
UK	198 532	3.2	29 555	0.5
IS	1 837	5.8	433	1.4
NO	27 717	5.9	6 208	1.3
CH	35 928	4.7	-	-
HR	4 335	1.0	26 037	5.9

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

(²) Total passengers carried (arrivals and departures for national and international); Norway, 2008.

(³) Bulgaria, Denmark, Lithuania, Malta, Romania, Finland and Croatia, 2009; Iceland, 2006.

Source: Eurostat ([ttr00012](#), [tps00001](#) and [mar_pa_aa](#))

10.3 Freight transport

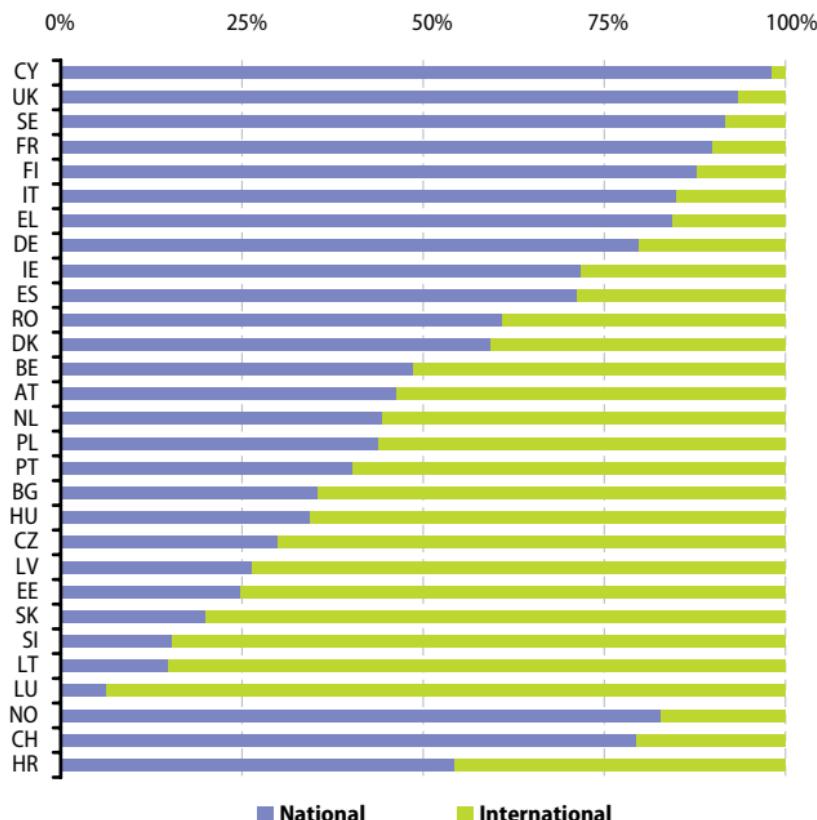
Total inland freight transport in the EU-27 was estimated to be close to 2 400 000 million tonne-kilometres (tkm) in 2008; a little over three quarters (76.4 %) of this freight total was transported over roads in 2008.

Slightly more than two thirds of the goods transported on the EU-27's roads in 2009 related to the transportation of goods on national road networks (see Figure 10.3).

About 12.3 million tonnes of air freight (both national and international) was carried through airports within the EU-27 in 2009 (see Table 10.3). Airports in Germany dealt with 3.3 million tonnes of air freight, considerably more than in any other EU Member State.

Maritime ports in the EU-27 handled 3 919 million tonnes of sea-borne goods in 2008, which marked a modest reduction of 0.4 %

Figure 10.3: National and international road transport of goods, 2009⁽¹⁾
(% based on million tkm of laden transport)



⁽¹⁾ Greece, 2008; Italy and the United Kingdom, 2007; Malta, not available.

Source: Eurostat ([road_go_ta_tott](#))

when compared with 2007. Sea ports in the United Kingdom handled 562 million tonnes of goods in 2008, more than any other Member State and equivalent to 14.3 % of the EU-27 total.

Table 10.3: Freight transport, 2009

	Inland freight transport (million tkm)		Air freight transport (1 000 tonnes) (³)	Gross weight of seaborne goods handled in ports (million tonnes) (⁴)
	Road (¹)	Rail (²)		
EU-27	:	442 738	:	:
BE	36 174	8 572	836.4	243.8
BG	17 742	4 693	17.5	21.9
CZ	44 955	15 437	53.9	:
DK	16 876	1 866	155.4	90.6
DE	307 547	115 652	3 341.2	320.6
EE	5 340	5 943	20.5	36.2
IE	12 668	103	111.4	51.1
EL	28 850	786	95.2	152.5
ES	211 895	10 475	502.6	416.2
FR	173 621	40 627	1 436.3	352.0
IT	179 411	23 831	708.6	526.2
CY	963	-	38.6	7.9
LV	8 115	19 581	8.6	61.4
LT	17 757	14 748	6.5	34.3
LU	8 400	279	627.3	:
HU	35 373	9 874	54.1	:
MT	:	-	17.5	5.5
NL	71 566	6 984	1 371.2	530.4
AT	29 075	21 915	202.6	48.8
PL	180 742	52 043	53.5	65.3
PT	35 808	2 549	125.5	36.1
RO	34 269	15 236	23.5	16.6
SI	14 762	3 520	5.6	93.2
SK	27 705	9 299	12.2	187.8
FI	27 805	10 777	126.9	193.4
SE	35 047	23 116	161.2	23.4
UK	171 477	24 831	2 156.2	562.2
IS	:	:	38.8	5.9
LI	263	17	:	-
NO	18 447	3 621	3.5	198.5
CH	11 882	12 265	315.7	-
HR	9 426	3 312	8.7	29.2
TR	:	10 552	:	:

(¹) Greece, 2008; Italy and the United Kingdom, 2007; road transport is based on movements all over the world of vehicles registered in the reporting country.

(²) 2008.

(³) France, underestimated: freight transport at Paris Charles-de-Gaulle and Paris Orly is incomplete; Norway, 2008.

(⁴) 2008, except Bulgaria, Denmark, Lithuania, Malta, Romania, Finland and Croatia, 2009; the Czech Republic, Luxembourg, Hungary, Austria and Slovakia, not applicable.

Source: Eurostat ([road_go_ta_tott](#), [rail_go_typeall](#), [ttr00011](#) and [mar_go_aa](#))

11

Environment



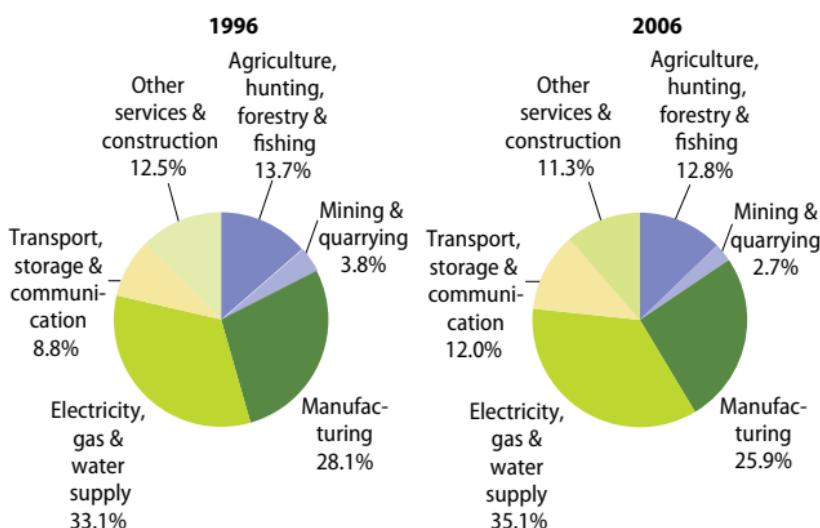
11.1 Air emissions accounts

Examining environmental variables together with economic ones can help identify which economic activity contributes to which environmental pressure and thus be helpful in devising specific policy measures where most needed.

The main emitting activities in the EU-27 in 2006 were agriculture, hunting, forestry and fishing, electricity, gas and water supply, and transport services (which are reported together with storage and communications but exclude the use of private cars, reported under households). These three activity groupings together contributed the majority of the EU-27's greenhouse gas emissions (59.9 %), acidifying emissions (78.7 %), and ground ozone precursors (58.4 %), while their share of EU-25 monetary output was 12.5 %.

There was a rapid increase in the relative importance of emissions from transport, storage and communication activities between 1996 and 2006, its share of acidifying emissions rising by 8.2 percentage points. The share of transport, storage and communication activities in EU-27 ground ozone precursors rose by 4.7 points between 1996 and 2006, and its share of greenhouse gases rose by 3.2 points (note that the figures presented do not include greenhouse gas emissions from private transport, principally passenger cars as these emissions are produced by households).

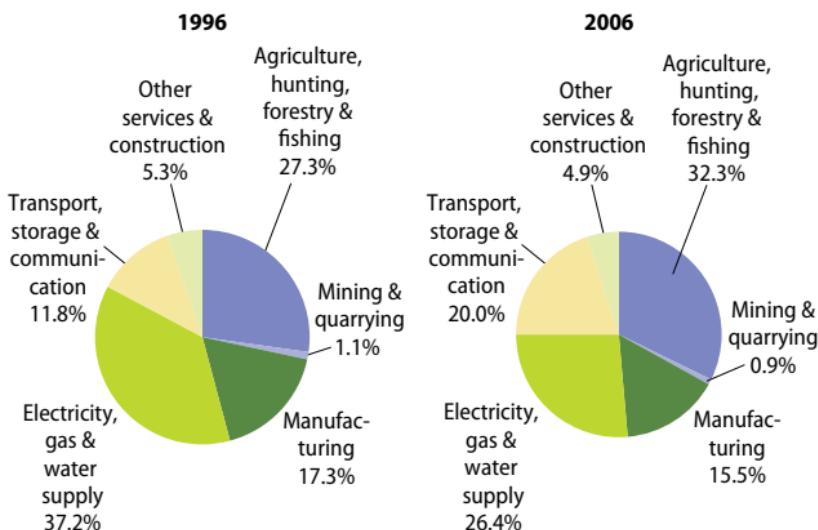
Figure 11.1: Greenhouse gas emissions, analysis by activity (excluding households), EU-27⁽¹⁾
(% of total, based on CO₂, CH₄ and N₂O)



(1) Estimates.

Source: Eurostat ([env_ac_ainacehh](#))

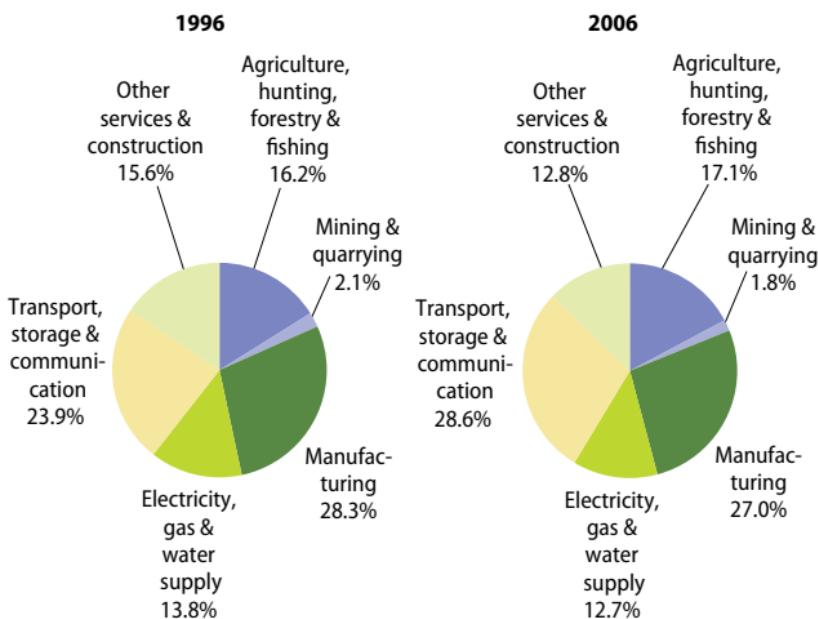
Figure 11.2: Emissions of acidifying substances, analysis by activity (excluding households), EU-27 (¹)
(% of total, based on acid equivalents of SO_x , NH_3 and NO_x)



(¹) Estimates.

Source: Eurostat ([env_ac_ainacehh](#))

Figure 11.3: Emissions of ground level ozone precursors, analysis by activity (excluding households), EU-27 (¹)
(% of total)



(¹) Estimates; values are based on tropospheric ozone formation equivalents of NO_x , NMVOC, CO, CH_4 .

Source: Eurostat ([env_ac_ainacehh](#))

11.2 Waste

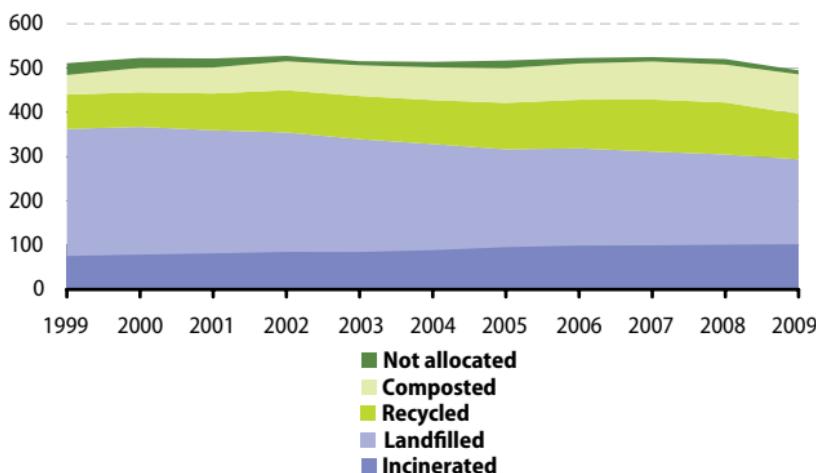
Waste refers to materials for which the generator has no further use for its own purpose of production, transformation or consumption. The large majority of waste in the European Union (EU) is **landfilled**, **incinerated** or recycled. Unless properly regulated, the disposal of waste may have a serious environmental impact: landfills, for example, can take up land space and may cause air, water and soil pollution, while incineration might result in emissions of dangerous air pollutants.

A time series for municipal waste is available from 1999 to 2009. The quantity of municipal waste generated per inhabitant in the EU-27 grew by 0.4 % overall between 1999 and 2009 to reach 513 kg. There was a significant change in the way municipal waste was treated during this period. Landfilling was the most common option at the start of the period under consideration, with a 59 % share of municipal waste treatment within the EU-27 in 1999; in 2004 the share of landfilling fell below 50 %, and by 2009 it had fallen still further to 38 %.

The treatment of municipal waste can be classified into its principal categories:

- landfill, which is defined as the depositing of waste into or onto land, including specially engineered landfills, and temporary storage of over one year on permanent sites;
- incineration, which refers to the thermal treatment of waste in a specifically designed plant;

Figure 11.4: Municipal waste, EU-27
(kg per inhabitant)



Source: Eurostat ([tsien120](#) and [tsien130](#))

- recycling, which refers to any reprocessing of material in a production process that diverts it from the waste stream, except reuse as fuel;
- composting, which is defined as a biological process that submits biodegradable waste to anaerobic or aerobic decomposition, and that results in a product that is recovered.

Table 11.1: Municipal waste
(kg per inhabitant)

	Generated (¹)			Landfilled (²)		
	1999	2004	2009	1999	2004	2009
EU-27	511	514	514	287	240	192
BE	463	487	491	91	35	25
BG	503	490	468	388	396	450
CZ	327	278	316	277	222	228
DK	627	696	822	68	31	29
DE	638	587	587	180	104	2
EE	413	449	346	412	283	214
IE	581	745	742	517	452	449
EL	393	433	478	358	389	389
ES	615	608	547	331	309	285
FR	509	521	536	224	189	173
IT	498	538	541	382	306	267
CY	670	739	778	605	659	671
LV	256	311	333	236	259	307
LT	650	366	360	350	334	326
LU	650	683	707	140	132	122
HU	482	454	430	404	381	320
MT	477	625	647	410	540	617
NL	599	625	616	40	11	4
AT	563	620	591	195	46	4
PL	319	256	316	312	241	206
PT	442	436	488	303	291	301
RO	314	345	396	255	273	304
SI	551	417	449	455	313	309
SK	261	274	339	185	222	256
FI	485	470	481	208	273	222
SE	428	464	485	108	42	7
UK	570	605	529	469	419	260
IS	457	506	554	345	365	379
NO	596	416	473	328	82	67
CH	637	662	706	66	3	0
TR	463	421	392	354	345	332

(¹) Breaks in series: between 1998 and 2003 for Estonia, Latvia, Lithuania, Hungary, Portugal, Slovenia, Slovakia and Norway; between 2003 and 2008 for Spain, Turkey and Switzerland.

(²) Breaks in series: between 1998 and 2003 for Estonia, Latvia, Lithuania, Hungary, Malta, Portugal and Norway; between 2003 and 2008 for Austria and Turkey.

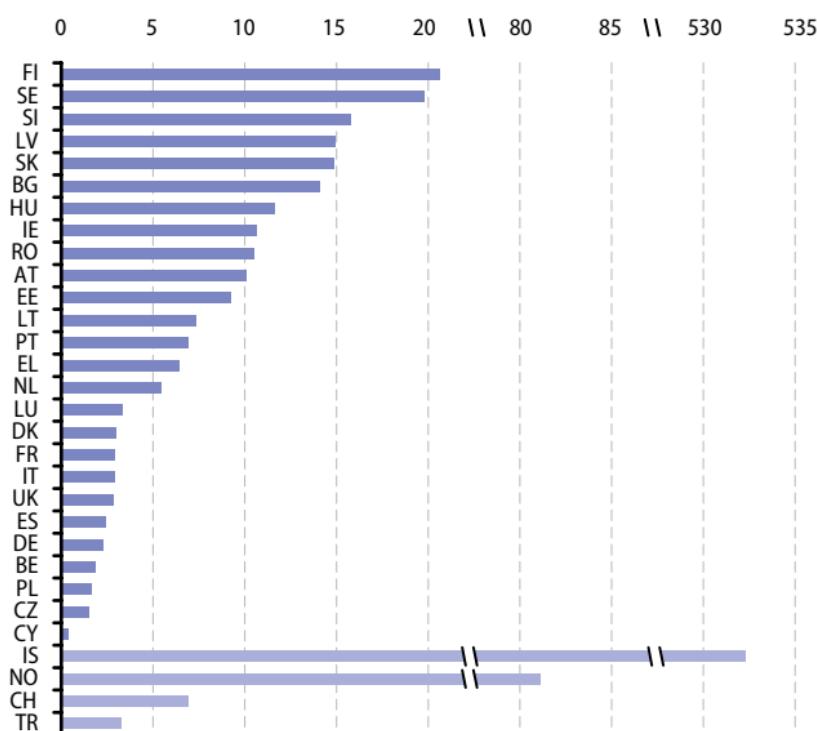
Source: Eurostat ([tsien120](#) and [tsien130](#))

11.3 Water

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

When expressed in relation to population size (see Figure 11.5), Finland and Sweden recorded the highest freshwater annual resources *per capita* ($20\,000\text{ m}^3$ per inhabitant or more). In contrast, relatively low levels (below $3\,000\text{ m}^3$ per capita) were recorded in the six largest Member States (Germany, Spain, France, Italy, Poland and the United Kingdom), as well as Belgium, Denmark and the Czech Republic, with the lowest level in Cyprus (410 m^3 per inhabitant).

Figure 11.5: Freshwater resources per capita - long-term average (l)
($1\,000\text{ m}^3$ per inhabitant)



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

Source: Eurostat ([env_watq1a](#))

Table 11.2: Water resources, long-term annual average (¹)
(1 000 million m³)

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

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

Source: Eurostat ([env_watq1a](#))

11.4 Material flow accounts

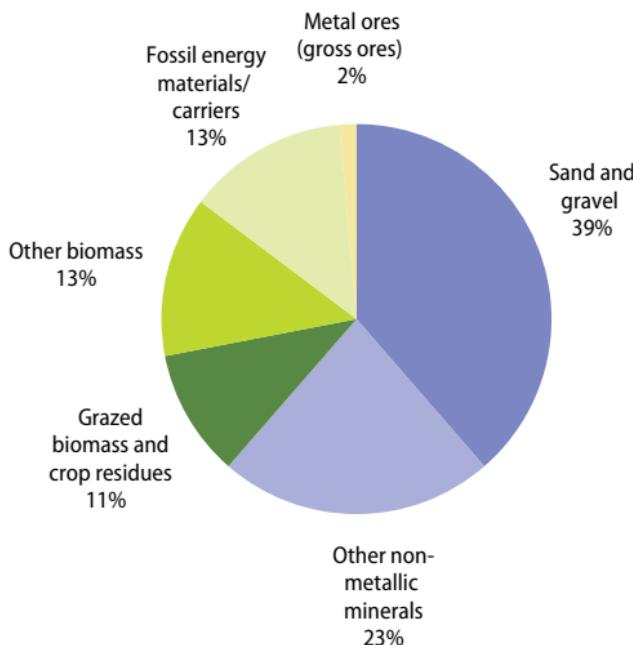
Economy-wide material flow accounts provide information about the physical flows of materials through economies. The accounts provide an aggregate overview of the annual extraction of raw materials as well as of the physical amounts of imports and exports.

Typically as economies grow, more materials such as fossil fuels, biomass, construction materials and metals are needed, but the rate of increase is less than that of GDP, a phenomenon known as 'decoupling' which can also be observed for the EU-27.

Domestic material consumption is composed of two elements, namely the **domestic extraction** and the **physical trade balance** (equal to imports less exports).

The main materials extracted from the national territories of the EU-27 Member States were non-metallic minerals including sand and gravel (61 %), fossil energy materials/carriers (13 %), other biomass (13 %), grazed biomass and crop residues (11 %) and metal ores (2 %).

Figure 11.6: Domestic extraction used by materials, EU-27, 2007⁽¹⁾
(% of total)

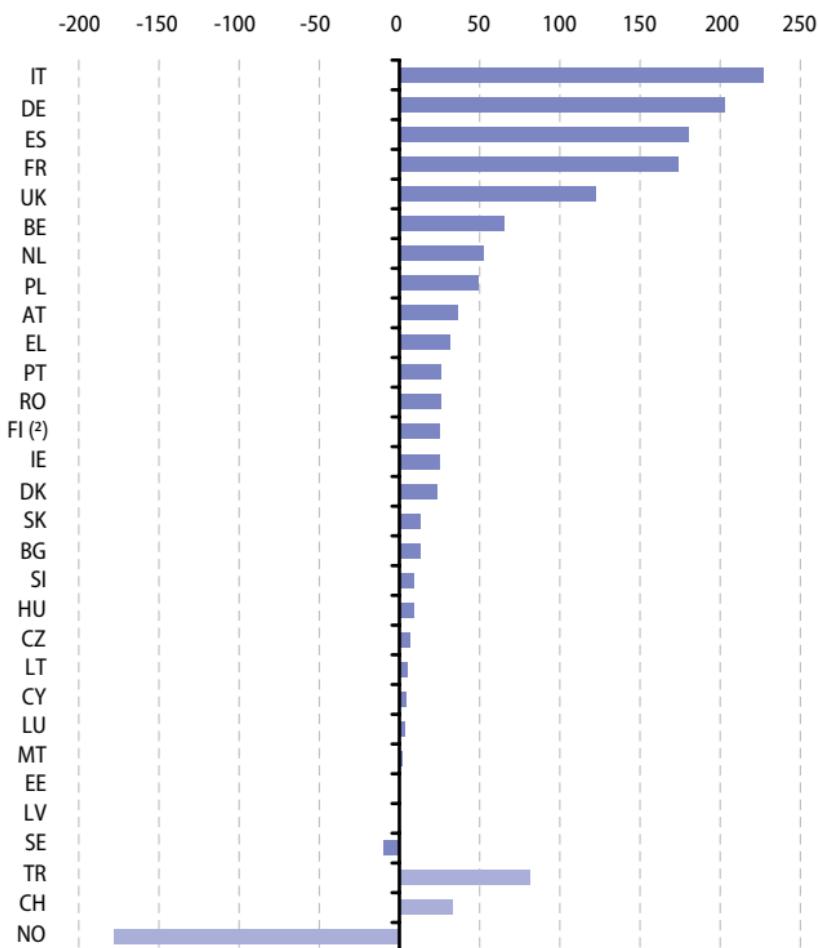


(1) Estimates; figures do not sum to 100 % due to rounding.

Source: Eurostat ([env_ac_mfa](#))

From 2000 to 2003, the domestic extraction decreased from 6 600 million tonnes to 6 300 million tonnes but then increased to 6 900 million tonnes by 2007, which was 5 % higher than in 2000. In contrast, the physical trade balance rose almost constantly during the period 2000-2007, rising from 1 000 million tonnes to 1 300 million tonnes, an overall increase of 27 %.

Figure 11.7: Physical trade balances, 2007 (¹)
(million tonnes)



(¹) Negative values indicate net exporters, positive values indicate net importers.

(²) Trade data are estimated using external trade statistics.

Source: Eurostat ([env_ac_mfa](#))

11.5 Chemicals management

The production of chemicals is largely concentrated in western Europe: Germany is the largest producer in the EU, followed by France, Italy and the United Kingdom and these four Member States collectively generated two thirds of the EU-27's chemical production in 2009; adding Spain, the Netherlands, Belgium and Ireland, the overall share was raised to 88 %.

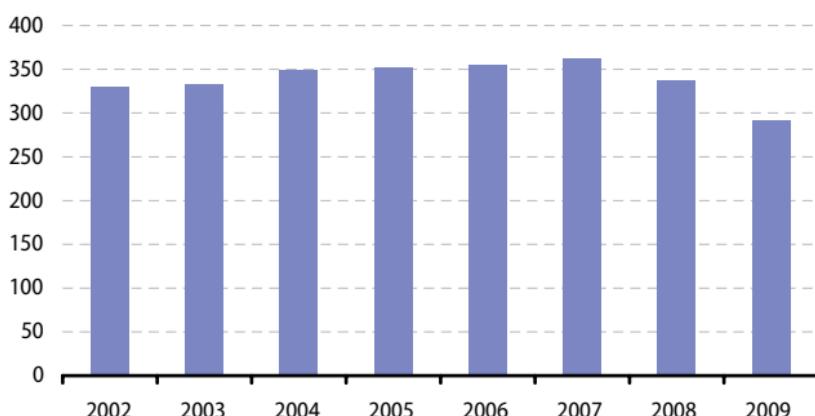
Figure 11.9 presents the development of production of environmentally harmful chemicals. Aggregated production of these environmentally harmful chemicals in the EU-27 grew from 2002 to 2007 by 10.1 % overall to a peak of 194 million tonnes. Production fell by 31 million tonnes (-16.5 %) over the next two years to a level of 162 million tonnes, which was 8.1 % lower than in 2002.

The share of environmentally harmful chemicals in total EU-27 chemical output was 53.3 % in 2002 and 55.7 % in 2009.

The EU-27's production of toxic chemicals increased by 6.8 % overall between 2002 and 2007 to reach a peak of 218 million tonnes. Production fell by 17 million tonnes in 2008 (-7.9 %) and by a further 21 million tonnes (-10.4 %) in 2009 to reach a level of 180 million tonnes.

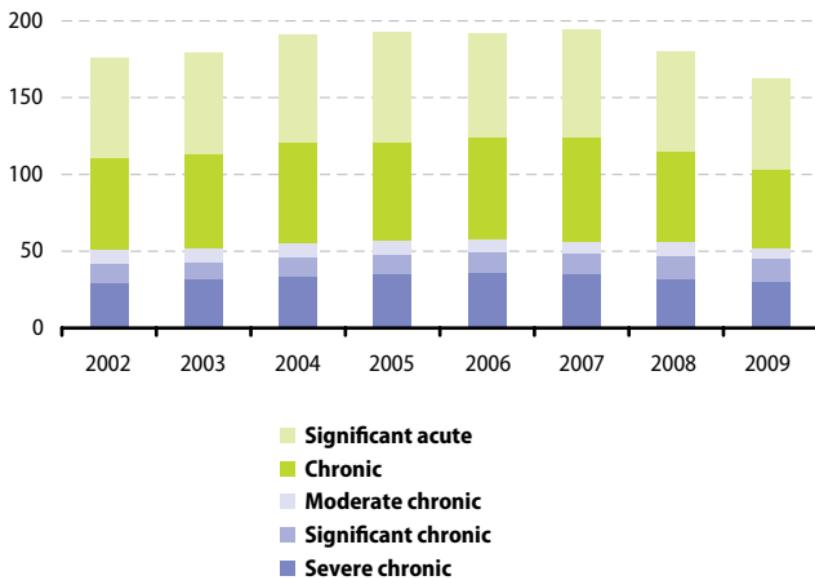
The overall share of chemicals classified as toxic in total EU-27 chemicals production was 62 % in 2009 – which was the same ratio that had been recorded in 2002.

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



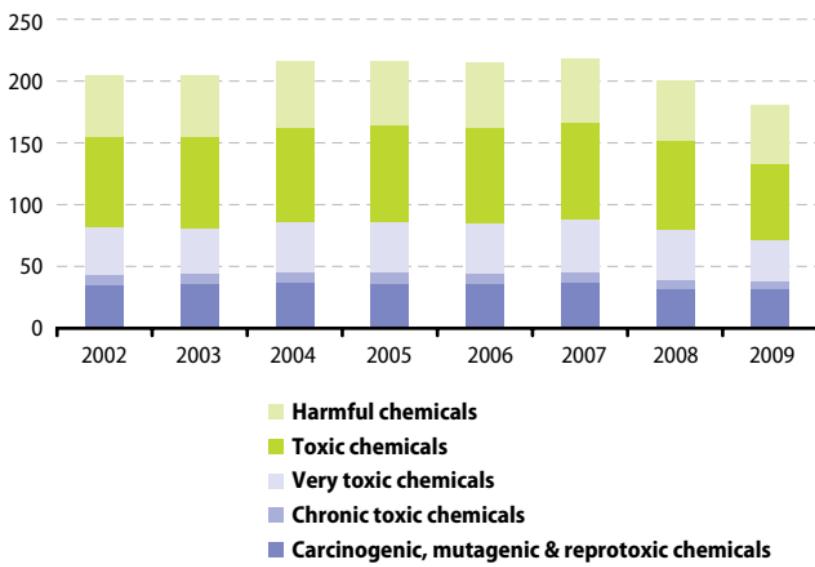
Source: Eurostat ([tsdph320](#))

Figure 11.9: Production of environmentally harmful chemicals, EU-27
(million tonnes)



Source: Eurostat ([tsdph330](#))

Figure 11.10: Production of toxic chemicals, EU-27
(million tonnes)



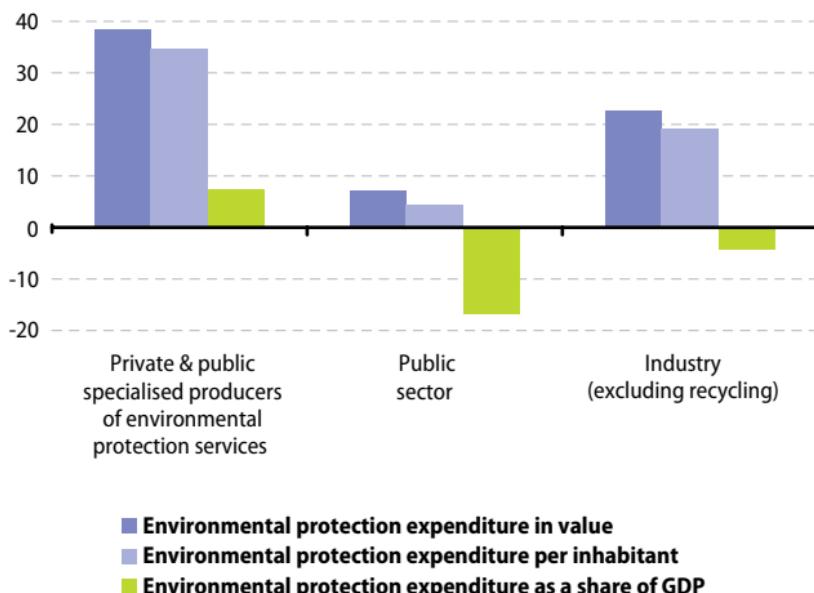
Source: Eurostat ([tsdph320](#))

11.6 Environmental protection expenditure

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

Figure 11.11 shows that in 2006, private and public specialised producers (providing environmental protection services) had the highest environmental protection expenditure within the EU-25. Their expenditure accounted for 0.86 % of **gross domestic product (GDP)**, which was equal to EUR 214 per inhabitant. The public sector and industry spent roughly similar amounts on environmental protection (0.47 % and 0.44 % of GDP respectively), or EUR 116 and EUR 109 per inhabitant respectively. Combining the expenditure of these three activities gives a total of 1.76 % of the EU-25's GDP allocated to protecting the environment in 2006.

Figure 11.11: Environmental protection expenditure, rate of change between 2000 and 2006, EU-25 (')
(%)



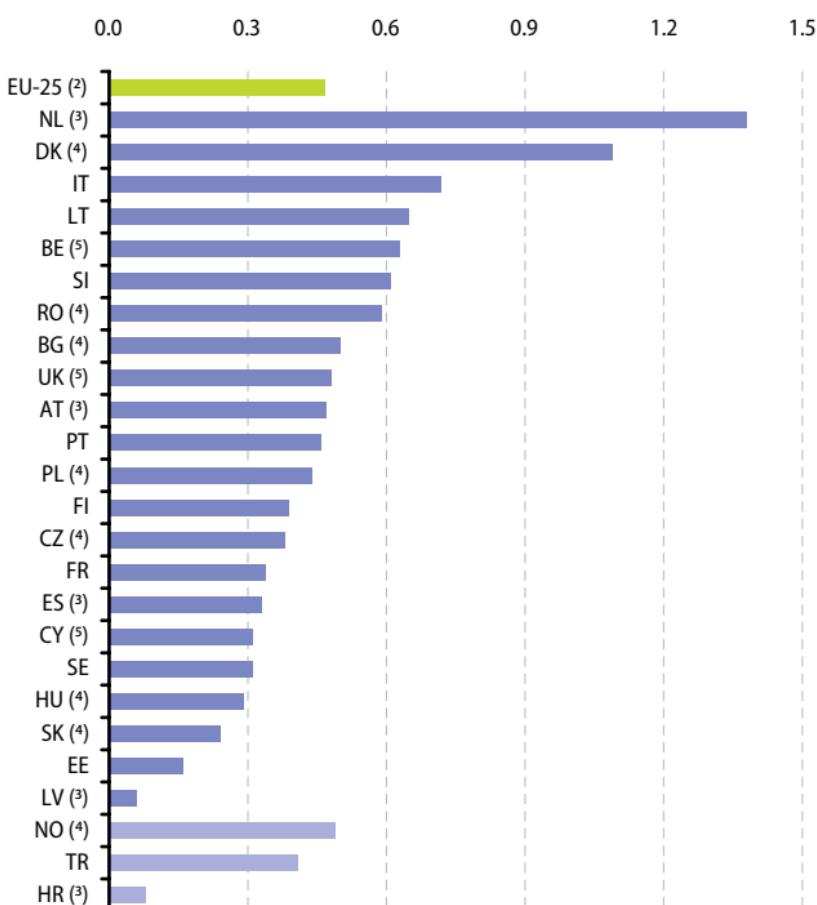
(') Including estimates made for the purpose of this publication.

Source: Eurostat ([env_ac_exp1](#) and [env_ac_exp2](#))

In most EU Member States public sector environmental protection expenditure ranged between 0.3 % and 0.7 % of GDP (see Figure 11.12). The Netherlands (2005 data) devoted 1.4 % of its GDP to such expenditure and Denmark 1.1 % (2007 data), while Latvia (2005 data) and Estonia allocated less than 0.2 %.

A low level of expenditure does not necessarily mean that a country is not effectively protecting its environment. Indeed, information on expenditure tends to emphasise clean-up costs at the expense of cost reductions which may have resulted from lower emissions or more effective protection measures.

Figure 11.12: Public sector environmental protection expenditure, 2006 (1)
(% of GDP)



(1) Germany, Greece, Ireland, Luxembourg and Malta, not available.

(2) Estimate made for the purpose of this publication.

(3) 2005.

(4) 2007.

(5) 2004.

Source: Eurostat ([env_ac_exp1](#) and [tec00001](#))

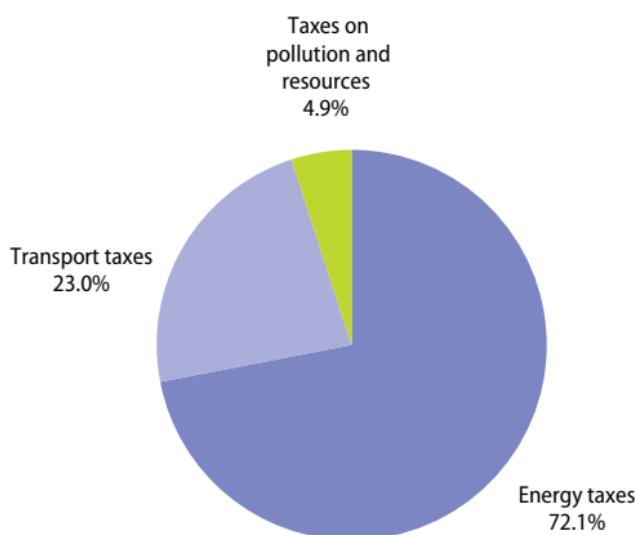
11.7 Environmental taxes

Environmentally related taxes can be used as an economic instrument to discourage behaviour that is potentially harmful to the environment, by integrating the cost of adverse environmental impacts into prices, thereby lessening the impact of polluting substances on the environment. Taxes may be used as a tool for implementing the ‘polluter pays’ principle, as they allow the pricing-in of environmental externalities. Environmental taxes on polluters may provide incentives for them to innovate, thereby improving the performance of products and processes.

Energy taxes represented almost three quarters (72.1 %) of environmental taxes within the EU-27 in 2008 (see Figure 11.13); this share was above 50 % in the vast majority of European countries.

EU-27 transport taxes accounted for 23.0 % of environmental taxes in 2008. There was a wide variation in the contribution of transport taxes across the Member States, with Malta, Cyprus and Ireland reporting that more than 40 % of their environmental taxes were raised from transport taxes, as did Norway.

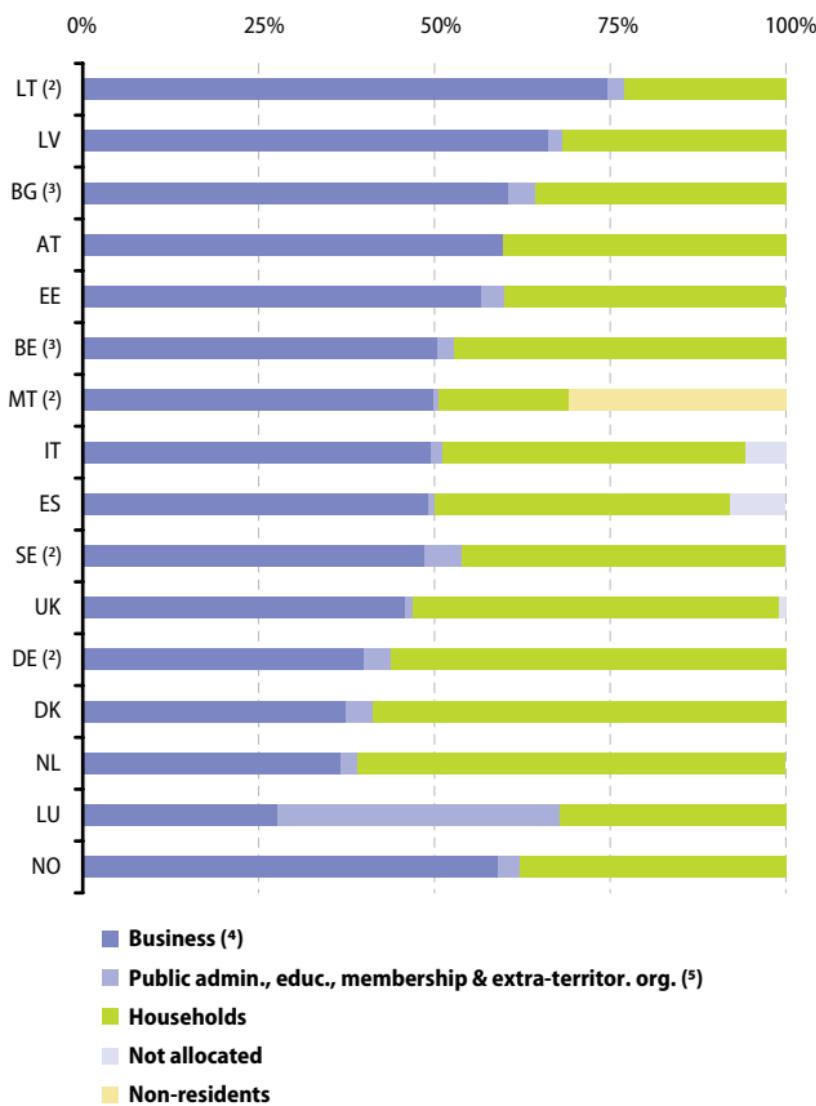
Figure 11.13: Environmental taxes by tax category, EU-27, 2008 (% of total)



Source: Eurostat ([env_ac_tax](#))

Resource and pollution taxes represent a small share of total environmental tax revenue in most European countries, although their share rose to more than 10 % of the total environmental tax revenue in Estonia, Slovakia, the Netherlands and Denmark, as well as in Norway; the EU-27 average was 4.9 %.

Figure 11.14: Energy taxes by economic activity, 2007⁽¹⁾
(% of energy tax revenue)



(1) No data available for Member States that are not shown.

(2) 2006.

(3) 2005.

(4) NACE Rev. 1.1 Sections A to K and N and Divisions 90, 92 and 93.

(5) NACE Rev. 1.1 Sections L, M, P and Q and Division 91.

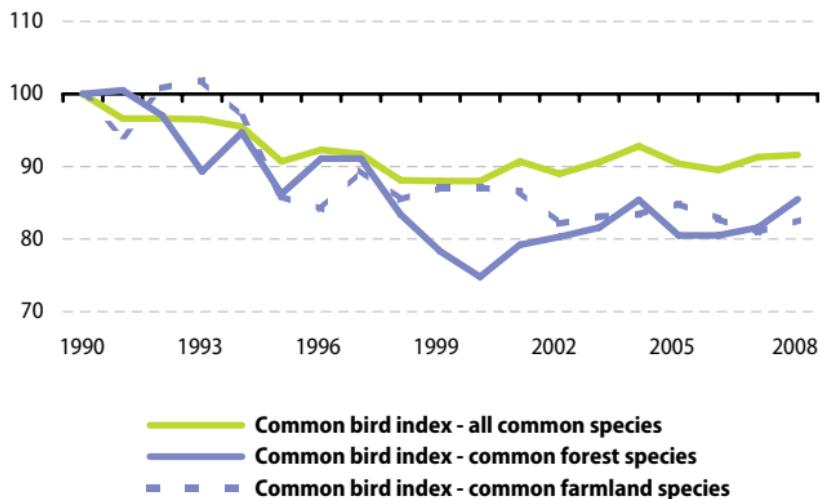
Source: Eurostat ([env_ac_taxind](#))

11.8 Biodiversity

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

Areas protected for the preservation of biodiversity are proposed by the Member States under the EU's **Habitats Directive**; they are indicated as a percentage of the total area of each country. About 14 % of the **EU-27**'s territory was proposed for protection under the Habitats Directive as of 2008. In general, these protected areas adequately cover the biogeographical regions present in the Member State, with an EU-27 average of 84 % of sufficiently covered species and habitats in 2008; only Poland and Cyprus reported less than 50 % sufficiency.

Figure 11.15: Common bird indices, EU ⁽¹⁾
(aggregated index of population estimates of selected groups of breeding bird species, 1990=100)

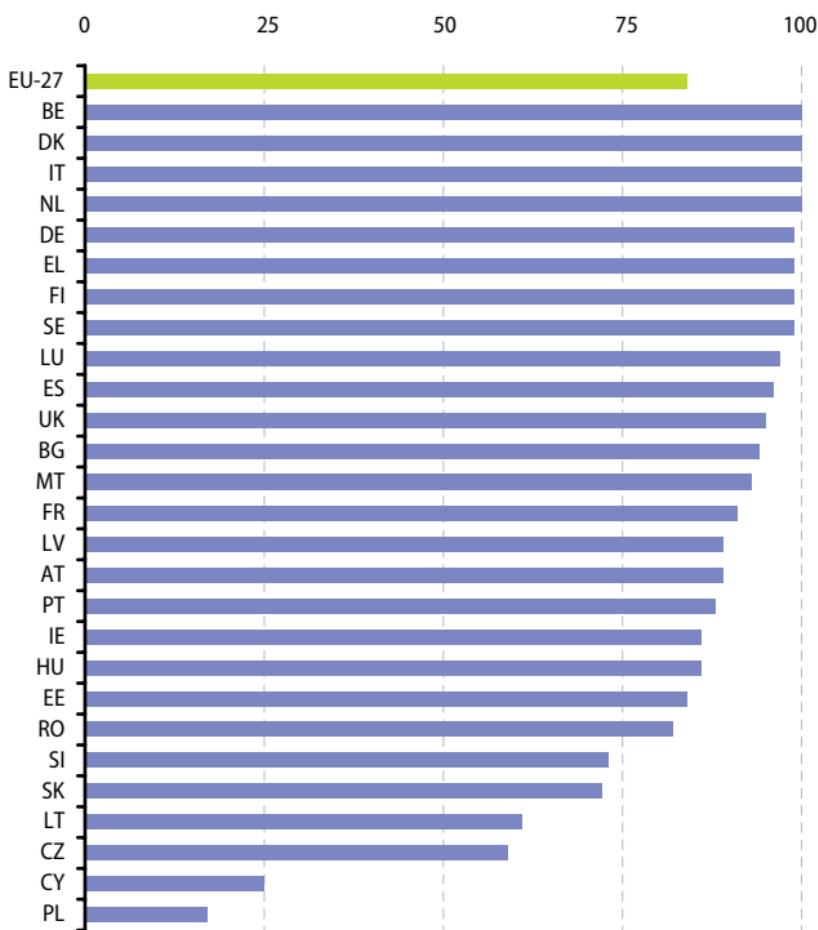


(1) Estimates; 'all common species' covers information on 135 different bird species; 'common farmland species' covers 36 bird species; 'common forest species' covers 29 bird species.

Source: EBCC/RSPB/BirdLife/Statistics Netherlands, Eurostat ([env_bio2](#))

Since 1990 there has been a general downward trend in the abundance of both common farmland and forest species of birds, as measured by common bird indices. Part of the relatively steep decline (-17 % between 1990 and 2008) in numbers of common farmland birds may be attributed to changes in land use and agricultural practices.

Figure 11.16: Protected areas for biodiversity - sufficiency of sites, 2008 (%)



Source: EEA/European topic centre on biodiversity, Eurostat ([env_bio1](#))

12

Energy



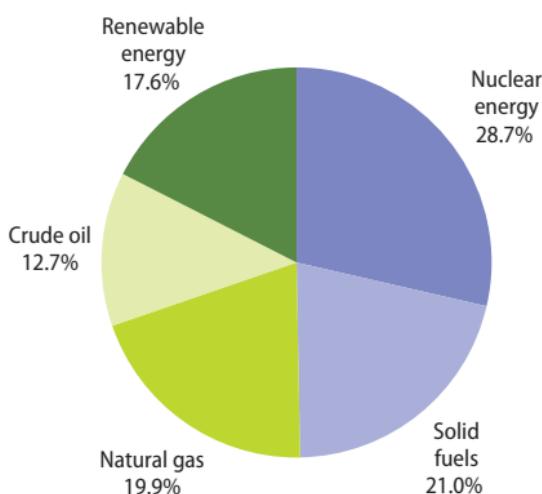
12.1 Energy production and imports

Production of primary energy in the EU-27 totalled 842.7 million tonnes of oil equivalent in 2008. This continued the generally downward trend of EU-27 production, as supplies of raw materials become exhausted and/or producers considered the exploitation of limited resources uneconomical.

Primary energy production in the EU-27 in 2008 was spread across a range of different energy sources, the most important of which was nuclear energy (28.7 % of the total); the significance of nuclear fuel was particularly high in Belgium, Spain, France, Lithuania, Slovakia and Sweden – where it accounted for more than half of the national production of primary energy. Around one fifth of the EU-27's total production of primary energy was accounted for by solid fuels (largely coal) and by natural gas, with shares of 21.0 % and 19.9 % respectively, while renewable energy sources (17.6 %) and crude oil (12.7 %) made up the remainder of the total (see Figure 12.1).

The downturn in the primary production of hard coal, lignite, crude oil and natural gas has led to a situation where the EU is increasingly reliant on primary energy imports in order to satisfy demand. The EU-27's imports of primary energy exceeded exports by some 1 015.0 million toe in 2008.

Figure 12.1: Production of primary energy, EU-27, 2008
(% of total, based on tonnes of oil equivalent)



Source: Eurostat ([ten00080](#), [ten00077](#), [ten00079](#), [ten00078](#) and [ten00081](#))

Table 12.1: Energy production, 2008

	Production of primary energy (million toe)	Share of total production, 2008 (%)				
		2008	Nuclear energy	Solid fuels	Natural gas	Crude oil
EU-27	842.7	28.7	21.0	19.9	12.7	17.6
EA-16	456.8	41.9	14.5	17.8	2.8	22.9
BE	13.6	86.7	0.0	0.0	-	13.3
BG	10.1	40.4	47.9	1.6	0.2	9.9
CZ	32.5	21.1	70.1	0.5	0.8	7.6
DK	26.5	-	-	34.0	54.1	11.9
DE	132.5	28.9	37.8	8.5	2.3	22.4
EE	4.2	-	82.1	-	-	17.9
IE	1.5	-	42.4	23.3	-	34.3
EL	10.0	-	83.3	0.1	0.6	15.9
ES	30.3	50.3	13.9	0.1	0.4	35.4
FR	135.0	84.0	0.0	0.6	0.8	14.7
IT	26.4	0.0	0.3	28.7	20.1	51.0
CY	0.1	-	-	-	-	100.0
LV	1.8	-	0.2	-	-	99.9
LT	3.6	71.2	0.5	-	3.6	24.6
LU	0.1	-	-	-	-	100.0
HU	10.4	36.7	16.3	19.3	11.8	15.9
MT	-	-	-	-	-	-
NL	66.3	1.6	-	90.3	3.3	4.7
AT	10.6	-	0.0	12.4	9.4	78.2
PL	70.4	-	85.9	5.2	1.1	7.7
PT	4.4	-	0.0	-	-	100.0
RO	29.1	10.0	24.0	30.9	16.5	18.6
SI	3.6	44.4	32.5	0.1	0.0	22.9
SK	6.1	70.7	10.2	1.4	0.3	17.3
FI	16.3	36.4	7.1	-	-	56.4
SE	32.8	50.3	0.8	-	0.0	49.0
UK	164.5	8.2	6.4	38.1	44.4	2.9
IS	:	:	:	:	:	:
NO	219.3	:	1.0	39.7	53.2	6.1
CH	12.3	57.9	:	0.0	:	42.1
HR	3.9	:	0.0	55.8	22.2	22.0
TR	29.1	:	57.4	2.9	7.5	32.2

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

12.2 Consumption of energy

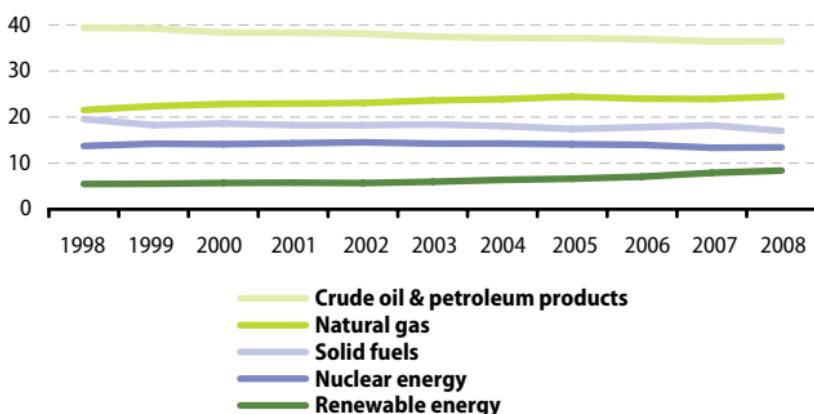
In tandem with supply-side policies, the EU has launched a number of initiatives which aim to reduce energy demand and attempt to decouple it from economic growth. Several instruments and implementing measures exist in this field, including the promotion of **co-generation**, the energy performance of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

Gross inland energy consumption of primary energy within the EU-27 in 2008 was 1 799 million tonnes of oil equivalent (toe).

Over the period 1998 to 2008 there was a gradual decline in the share of crude oil and petroleum products, solid fuels, and nuclear energy in total gross inland consumption, while an increasing share of EU-27 consumption was accounted for by natural gas and renewable energy sources.

The lowest levels of **energy intensity** – a measure of an economy's energy efficiency – were recorded for Denmark and Ireland in 2008, while the most energy-intensive Member States were Bulgaria and Romania. It should be noted that the economic structure of an economy plays an important role in determining energy intensity, as post-industrial economies with large service sectors will, a priori, have considerably lower energy use than economies characterised by heavy, traditional industries.

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



Source: Eurostat ([nrg_102a](#), [nrg_103a](#), [nrg_101a](#), [nrg_104a](#) and [nrg_1071a](#))

Table 12.2: Gross inland consumption of primary energy and energy intensity

	Gross inland consumption of primary energy (million toe)		Energy intensity (kg of oil equivalent per EUR 1 000 of GDP)	
	1998	2008	1998	2008
EU-27	1 723	1 799	200.4	167.1
EA-16⁽¹⁾	1 177	1 260	183.5	160.5
BE	60.1	58.3	255.8	199.8
BG	20.2	20.0	1 586.8	944.2
CZ	41.2	45.1	703.7	525.3
DK	20.8	19.9	127.0	103.1
DE	346.7	343.7	177.0	151.1
EE	5.4	5.9	956.0	570.5
IE	13.0	15.8	149.8	106.5
EL	27.0	31.9	211.4	170.0
ES	112.6	141.9	196.7	176.4
FR	255.2	273.7	190.0	166.7
IT	169.9	181.4	150.1	142.6
CY	2.2	2.9	242.6	213.4
LV	4.3	4.6	562.8	308.7
LT	9.3	9.2	769.9	417.5
LU	3.3	4.6	175.4	154.6
HU	25.6	26.8	545.0	401.4
MT	0.8	0.9	243.2	194.9
NL	76.6	83.7	199.4	171.6
AT	29.2	33.9	150.5	138.1
PL	96.2	98.8	564.6	383.5
PT	23.2	24.9	197.3	181.5
RO	41.5	40.6	1 039.1	614.6
SI	6.4	7.7	330.2	257.5
SK	17.5	18.5	804.8	519.7
FI	33.4	36.3	276.9	217.8
SE	50.6	50.0	206.3	152.1
UK	230.6	218.5	154.7	113.7
IS ⁽²⁾	2.7	:	310.0	357.7
NO	25.5	29.8	147.4	136.9
CH	26.1	28.0	101.2	88.5
HR	8.1	9.1	353.3	279.0
TR	72.5	100.3	258.2	245.3

⁽¹⁾ Energy intensity, EA-15.⁽²⁾ Energy intensity, 2006 instead of 2008.Source: Eurostat ([ten00086](#) and [tsien020](#))

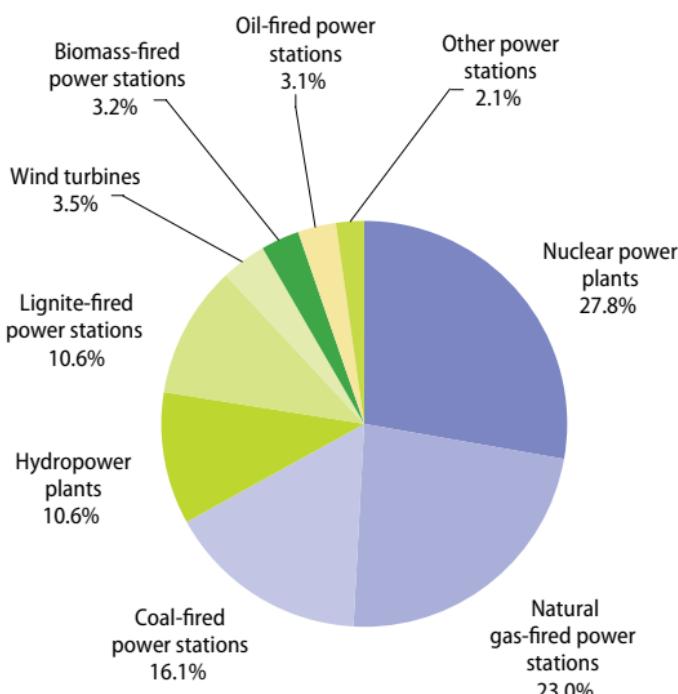
12.3 Electricity production

Total gross electricity generation in the EU-27 was 3.4 million gigawatt hours (GWh) in 2008 – which marked an increase of 0.2 % compared with the year before, but an increase of 15.9 % when compared with the volume of electricity generated in 1998.

Around one quarter of the total electricity generated in the EU-27 in 2008 came from nuclear power plants (27.8 %) and from natural gas-fired power stations (23.0 %); while coal-fired, lignite-fired and oil-fired power stations accounted for 16.1 %, 10.6 % and 3.1 % respectively of the total electricity generated.

During the ten-year period from 1998 to 2008, the consumption of electricity by households rose in the EU-27 by 17.2 % overall (see Figure 12.3). There was much faster growth in a number of Member States, in particular the southern Mediterranean countries of Cyprus, Spain and Greece, as well as Portugal, all

Figure 12.3: Electricity generation by fuel used in power-stations, EU-27, 2008
(% of total, based on GWh)



Source: Eurostat ([nrg_105a](#))

three of the [Baltic Member States](#), and Ireland. These figures on overall household electricity consumption are likely to be influenced, among others, by the average number of persons living in each household and by the total number of households – both of which are linked to demographic events.

Table 12.3: Electricity

	Gross electricity generation (1 000 GWh)		Market share of largest generator, 2008 (%)	Electricity consumption by households, 2008 (1998=100) (l¹)
	2003	2008		
EU-27	3 216	3 374	:	117.2
EA-16	2 234	2 379	:	:
BE	85	85	80.0	85.4
BG	43	45	:	95.1
CZ	83	84	72.9	101.4
DK	46	36	56.0	100.7
DE	599	637	30.0	106.6
EE	10	11	96.5	137.1
IE	25	30	45.6	154.6
EL	58	64	91.6	141.9
ES	263	314	22.2	175.3
FR	567	576	87.3	126.4
IT	294	319	31.3	115.4
CY	4	5	100.0	185.9
LV	4	5	87.0	182.3
LT	19	14	71.5	155.3
LU	4	4	:	114.0
HU	34	40	42.0	114.8
MT	2	2	100.0	132.6
NL	97	108	:	119.2
AT	60	67	:	127.9
PL	152	156	18.9	133.4
PT	47	46	48.5	153.1
RO	57	65	28.3	131.3
SI	14	16	53.0	118.6
SK	31	29	71.9	81.1
FI	84	77	24.0	116.7
SE	135	150	45.2	91.6
UK	398	389	15.3	107.7
IS	9	:	:	143.8
NO	107	143	27.4	98.4
CH	67	69	85.0	118.4
HR	13	12	:	127.4
TR	141	198	:	197.6

(¹) Iceland, 2006.

Source: Eurostat ([ten00087](#), [tsier060](#) and [tsdpc310](#))

12.4 Renewable energy

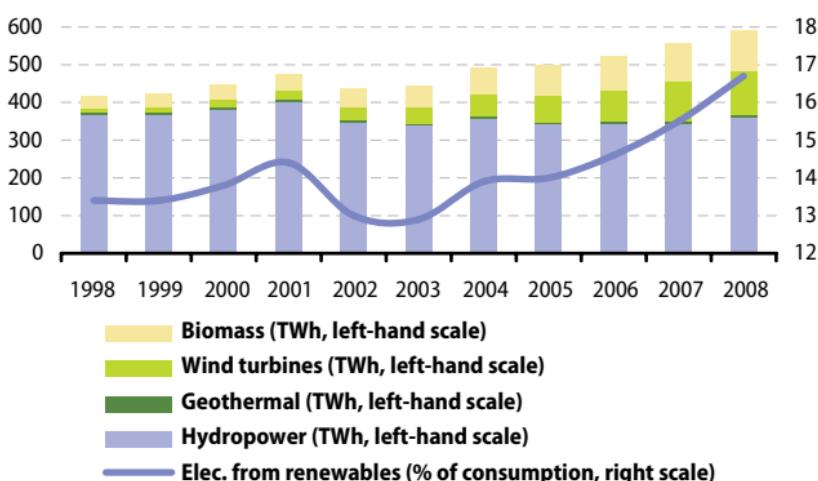
The **primary production** of renewable energy within the EU in 2008 was 148.1 million tonnes of oil equivalent (toe) – a 17.6 % share of total primary energy production. There were considerable differences in the renewable energy mix across the Member States, which reflected to a large degree natural endowments and climatic conditions.

Table 12.4 shows the latest data available for the share of renewable energies in gross **final energy consumption** and the indicative targets that have been set for each country by 2020. The share of renewables in gross final energy consumption stood at 10.3 % in the EU in 2008, almost half the target that has been set for 2020.

The latest information available for 2008 shows that electricity generated from renewable energy sources contributed 16.7 % of the EU-27's **gross electricity consumption**.

The growth in electricity generated from renewable energy sources during the period 1998 to 2008 largely reflects an expansion in two renewable energy sources; namely, wind turbines and biomass. Although hydropower remained the single largest source for renewable electricity generation in the EU in 2008, the amount of electricity generated was somewhat lower than a decade earlier (-2.6 %).

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



Source: Eurostat ([nrg_105a](#) and [tsdcc330](#))

Table 12.4: Production and consumption of renewable energy

	Primary production (1 000 toe)		Share of renewables in gross final energy consumption (%)	
	1998	2008	2008	2020 (*)
EU-27	94 343	148 134	10.3	20
EA-16	62 824	104 788	:	:
BE	678	1 806	3.3	13
BG	678	997	9.4	16
CZ	650	2 456	7.2	13
DK	1 814	3 159	18.8	30
DE	8 337	29 743	9.1	18
EE	512	755	19.1	25
IE	231	521	3.8	16
EL	1 329	1 594	8.0	18
ES	6 875	10 717	10.7	20
FR	16 783	19 825	11.0	23
IT	8 813	13 491	6.8	17
CY	43	74	4.1	13
LV	1 756	1 782	29.9	40
LT	612	883	15.3	23
LU	50	84	2.1	11
HU	483	1 656	6.6	13
MT	:	:	0.2	10
NL	1 691	3 135	3.2	14
AT	6 030	8 292	28.5	34
PL	3 883	5 457	7.9	15
PT	3 734	4 441	23.2	31
RO	4 640	5 418	20.4	24
SI	528	835	15.1	25
SK	444	1 056	8.4	14
FI	7 257	9 172	30.5	38
SE	14 206	16 051	44.4	49
UK	2 286	4 733	2.2	15
IS (*)	1 814	3 259	:	:
NO	11 202	13 384	:	:
CH	3 969	5 190	:	:
HR	845	864	:	:
TR	11 481	9 360	:	:

(*) 2006 instead of 2008.

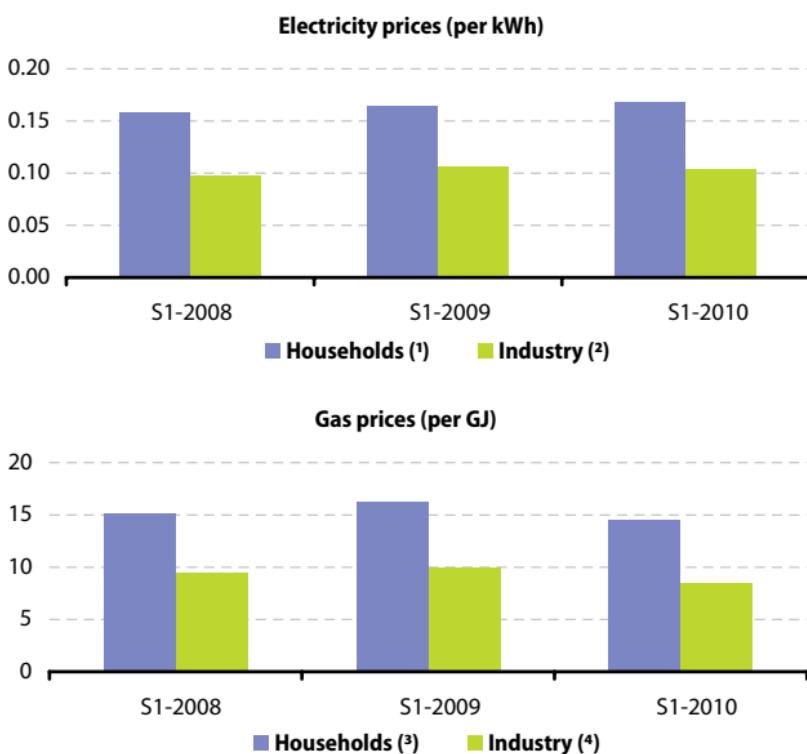
Source: Eurostat ([ten00081](#) and [tsdcc110](#))

12.5 Energy prices

Electricity and gas tariffs or price schemes vary from one supplier to another. They may result from negotiated contracts, especially for large industrial users. For smaller consumers, they are generally set according to the amount of electricity or gas consumed along with a number of other characteristics; most tariffs also include some form of fixed charge. There is, therefore, no single price for electricity or gas. In order to compare prices over time and between countries, this section shows information for consumption bands from the household sector and for industrial/business users.

Prices include the basic price of the electricity/gas, transmission and distribution charges, meter rental, and other services. Electricity prices for household consumers are presented in this section including taxes and value added tax (VAT) as this generally

Figure 12.5: Half-yearly electricity and gas prices, EU-27 (EUR)



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

(2) Annual consumption: 500 MWh < consumption < 2 000 MWh.

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

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

Source: Eurostat ([nrg_pc_204](#), [nrg_pc_205](#), [nrg_pc_202](#) and [nrg_pc_203](#))

reflects the end price paid by consumers in the domestic sector. As industrial/business users are usually able to recover VAT and some other taxes, prices for these enterprises are shown without VAT in this section.

Table 12.5: Half-yearly electricity and gas prices, first semester 2010 (EUR)

	Electricity prices (per kWh)		Gas prices (per GJ)	
	Households (¹)	Industry (²)	Households (³)	Industry (⁴)
EU-27	0.17	0.10	14.54	8.44
EA-16	0.18	0.11	15.98	8.90
BE	0.20	0.11	14.70	7.93
BG	0.08	0.06	10.21	6.66
CZ	0.13	0.10	13.04	8.56
DK	0.27	0.09	29.70	15.81
DE	0.24	0.11	15.70	10.10
EE	0.10	0.07	10.07	8.00
IE	0.18	0.11	13.79	7.83
EL	0.12	0.09	:	:
ES	0.17	0.12	14.83	7.70
FR	0.13	0.07	14.46	9.19
IT	0.20	0.14	17.15	8.24
CY	0.19	0.15	:	:
LV	0.10	0.09	8.73	7.17
LT	0.12	0.10	10.43	8.91
LU	0.17	0.10	12.07	10.26
HU	0.15	0.12	13.38	10.31
MT	0.17	0.15	:	:
NL	0.17	0.10	19.46	8.96
AT	0.20	0.11	17.29	:
PL	0.13	0.10	11.81	8.40
PT	0.16	0.09	16.49	7.62
RO	0.10	0.09	7.64	6.19
SI	0.14	0.10	16.00	10.53
SK	0.15	0.12	12.11	9.11
FI	0.13	0.07	:	8.40
SE	0.18	0.08	28.71	12.26
UK	0.14	0.10	11.26	5.94
NO	0.20	0.10	:	:
HR	0.12	0.09	10.63	9.45
TR	0.13	0.09	8.98	6.66

(¹) Annual consumption: 2 500 kWh < consumption < 5 000 kWh; Hungary and Malta, S1-2009.

(²) Annual consumption: 500 MWh < consumption < 2 000 MWh; Hungary and Malta, S1-2009; Austria, S1-2008.

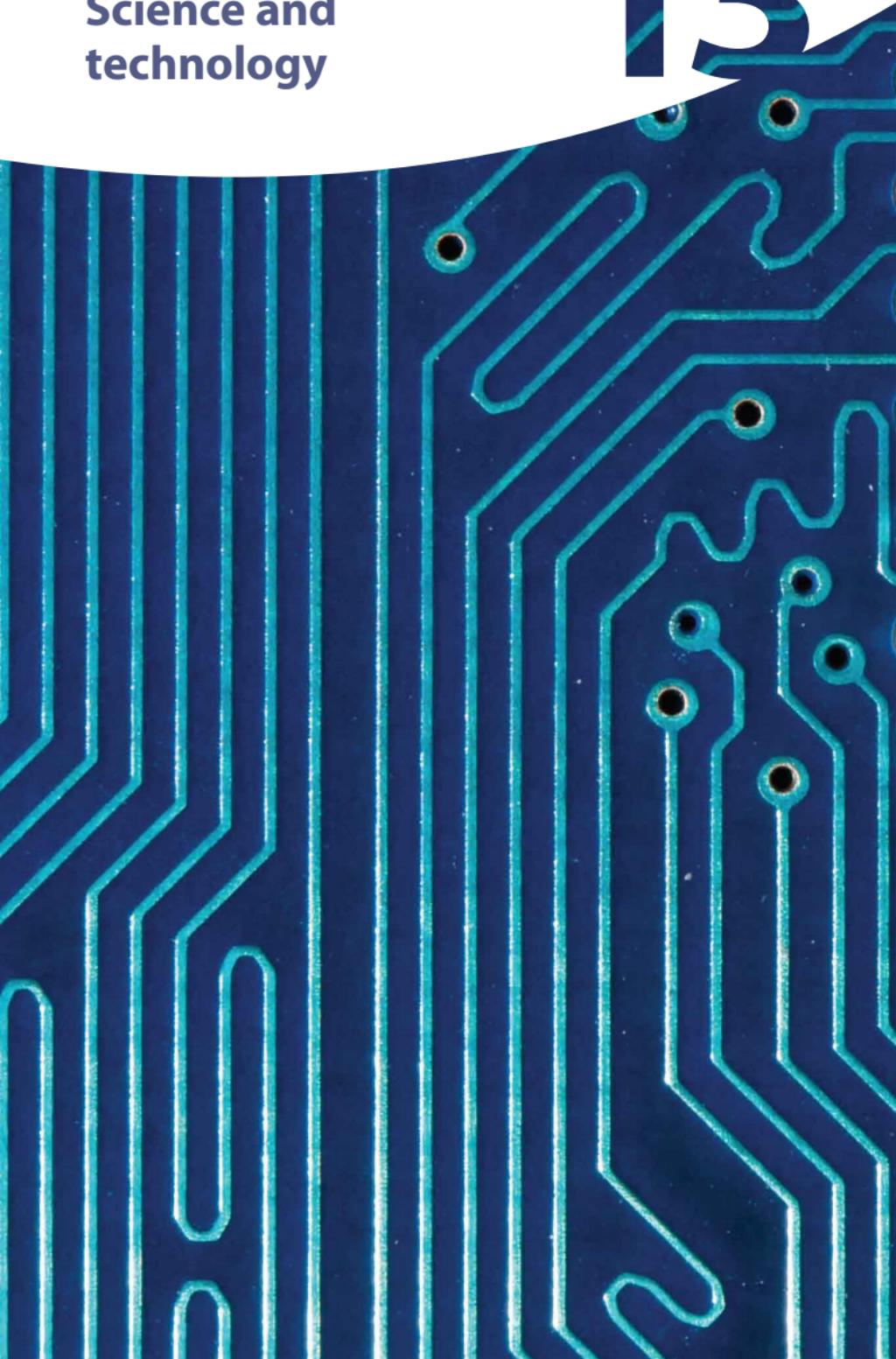
(³) Annual consumption: 20 GJ < consumption < 200 GJ; Hungary, S1-2009.

(⁴) Annual consumption: 10 000 GJ < consumption < 100 000 GJ; Hungary, S1-2009.

Source: Eurostat ([nrg_pc_204](#), [nrg_pc_205](#), [nrg_pc_202](#) and [nrg_pc_203](#))

**Science and
technology**

13



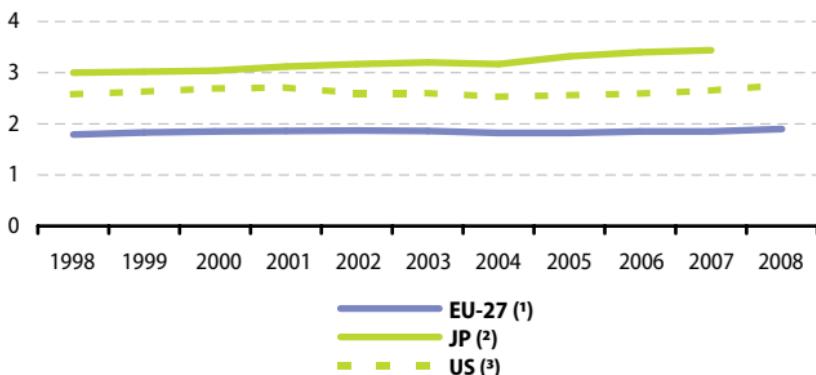
13.1 R & D expenditure

Gross domestic expenditure on R & D (GERD) stood at EUR 237 001 million in the EU-27 in 2008, which marked a 3.5 % increase on the level of GERD in 2007.

At the [Barcelona Council](#) in 2002, the EU agreed to a target of spending at least 3 % of gross domestic product (GDP) on research by 2010, of which two thirds was to be financed by the business sector; most of the EU Member States specified their own targets in national reform programmes. Using this measure, the highest [R & D intensity](#) was recorded in Sweden (3.75 % in 2008) and Finland (3.73 %).

The European Commission has through its Europe 2020 flagship initiative, titled '[innovation union](#)', placed renewed emphasis on the conversion of Europe's scientific expertise into marketable products and services, through seeking to use public sector intervention to stimulate the private sector and to remove bottlenecks which stop such ideas reaching the market. Furthermore, the latest revision of the integrated economic and employment guidelines (revised as part of the Europe 2020 strategy for smart, sustainable and inclusive growth) includes a guideline to optimise support for R & D and innovation, strengthening the knowledge triangle and unleashing the potential of the digital economy. Additional information about the Europe 2020 strategy can be found on the [Europe 2020 website](#).

Figure 13.1: Gross domestic expenditure on R&D in the Triad (% share of GDP)



(¹) Estimates.

(²) Not available, 2008.

(³) Excludes most or all capital expenditure.

Source: Eurostat ([tsc00001](#)), OECD

Table 13.1: Gross domestic expenditure on R&D, 2008

	Share of GDP (%) ⁽¹⁾	Breakdown by source of funds (% of gross domestic expenditure on R&D) ⁽²⁾		
		Business enterprises	Government	Abroad
EU-27	1.90	55.0	33.5	8.9
EA-16	1.91	56.3	34.7	7.2
BE	1.92	61.4	22.2	13.0
BG	0.49	34.2	56.7	7.6
CZ	1.47	52.2	41.3	5.3
DK	2.72	61.1	25.3	9.7
DE	2.63	67.9	27.7	4.0
EE	1.29	33.6	50.0	15.5
IE	1.43	49.6	32.2	15.9
EL	0.58	:	:	:
ES	1.35	45.5	43.7	7.0
FR	2.02	50.5	39.4	8.0
IT	1.18	42.0	44.3	9.5
CY	0.46	16.4	64.6	14.5
LV	0.61	27.0	47.3	23.1
LT	0.80	21.4	55.6	15.5
LU	1.62	76.0	18.2	5.7
HU	1.00	48.3	41.8	9.3
MT	0.54	50.8	28.1	21.0
NL	1.63	:	:	:
AT	2.67	46.3	37.2	16.1
PL	0.61	30.5	59.8	5.4
PT	1.51	47.0	44.6	5.4
RO	0.58	23.3	70.1	4.0
SI	1.66	62.8	31.3	5.6
SK	0.47	34.7	52.3	12.3
FI	3.73	70.3	21.8	6.6
SE	3.75	64.0	22.2	9.3
UK	1.88	47.2	29.5	17.6
IS	2.65	50.4	38.8	10.0
NO	1.62	45.3	44.9	8.3
CH	:			
HR	0.90	40.8	49.3	7.9
TR	0.72	48.4	47.1	0.5
JP	3.44	77.7	15.6	0.3
US	2.76	67.3	27.0	:

⁽¹⁾ Greece, Turkey and Japan, 2007.⁽²⁾ Belgium, Bulgaria, Germany, Spain, Italy, Cyprus, Luxembourg, Portugal, Sweden, Norway, Turkey and Japan, 2007.Source: Eurostat ([tsiir020](#) and [tsiir030](#)), OECD

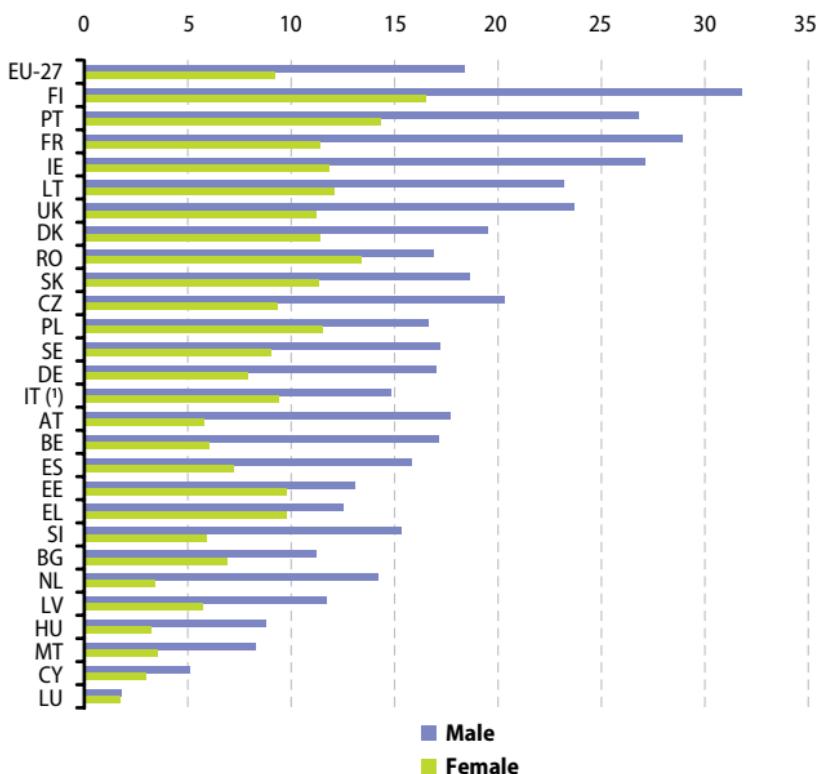
13.2 R & D personnel

There were 1.5 million researchers ([full-time equivalents \(FTE\)](#)) employed in the EU-27 in 2008 (see Table 13.2), which marked an increase of almost 386 000 (or 34.5 %) when compared with 2000.

A breakdown of R & D personnel in the EU-27 by [institutional sector](#) in 2008 shows that close to half (46 %) were concentrated in the business enterprise sector, while two fifths (40 %) were in the higher education sector and 13 % in the [government sector](#).

Within the EU-27 there were 13.9 graduates in mathematics, science and technology fields of education per 1 000 persons aged 20 to 29 years in 2008, with particularly high ratios in Finland, Portugal, France and Ireland. This ratio should be interpreted with care as some graduates may be foreigners who return home following their studies and so push up the ratio in the country

Figure 13.2: Science and technology graduates, 2008
(tertiary graduates in science and technology per 1 000 persons aged 20-29 years)



Source: Eurostat ([tsiir050](#))

where they studied and pull down the ratio in their country of origin; this may explain to a large extent the very low ratios recorded in the three smallest Member States.

Table 13.2: Researchers, 2008

	Researchers (1 000 FTEs) (1)					
	Total	Business enterprises	Government	Higher education	Male (%) (2)	Female (%) (2)
EU-27	1 504.6	689.9	188.4	608.6	71	29
EA-16	1 006.3	501.8	137.2	354.4	73	27
BE	36.4	17.8	2.7	15.6	69	31
BG	11.4	1.5	6.0	3.8	52	48
CZ	29.8	13.3	7.1	9.4	75	25
DK	30.9	19.6	1.2	9.9	71	29
DE	299.0	178.0	44.0	77.0	81	19
EE	4.0	1.2	0.5	2.1	59	41
IE	13.7	7.4	0.6	5.7	70	30
EL	20.8	6.1	2.2	12.4	68	32
ES	131.0	46.4	22.6	61.7	62	38
FR	215.8	118.6	26.5	67.4	:	:
IT	96.3	36.1	16.3	39.8	67	33
CY	0.9	0.2	0.1	0.5	66	34
LV	4.4	0.5	0.9	3.0	51	49
LT	8.5	1.2	1.7	5.6	52	48
LU	2.3	1.5	0.6	0.2	77	23
HU	18.5	7.9	4.7	5.9	68	32
MT	0.5	0.2	0.0	0.3	74	26
NL	51.1	26.6	6.9	17.5	:	:
AT	34.4	21.8	1.5	11.0	79	21
PL	61.8	8.9	12.9	39.9	61	39
PT	40.6	10.6	3.3	22.5	56	44
RO	19.4	6.3	6.2	6.8	56	44
SI	7.0	3.1	2.2	1.8	66	34
SK	12.6	1.6	2.9	8.1	59	41
FI	40.9	24.1	4.5	11.8	:	:
SE	48.2	33.4	1.8	12.9	71	29
UK	261.4	94.3	8.2	154.9	:	:
IS	2.3	1.1	0.5	0.6	64	36
NO	24.8	12.4	3.9	8.5	:	:
CH	:	:	0.5	:	:	:
HR	6.7	1.1	1.9	3.7	53	47
TR	49.7	15.3	4.8	29.5	66	34
JP	710.0	483.7	32.7	185.2	:	:
US	1 430.0	1 140.0	:	:	:	:

(1) Greece, France, Norway, Turkey and Japan, 2007; United States, 2006.

(2) All countries, 2007, except for: Greece, 2005 and Italy, 2006.

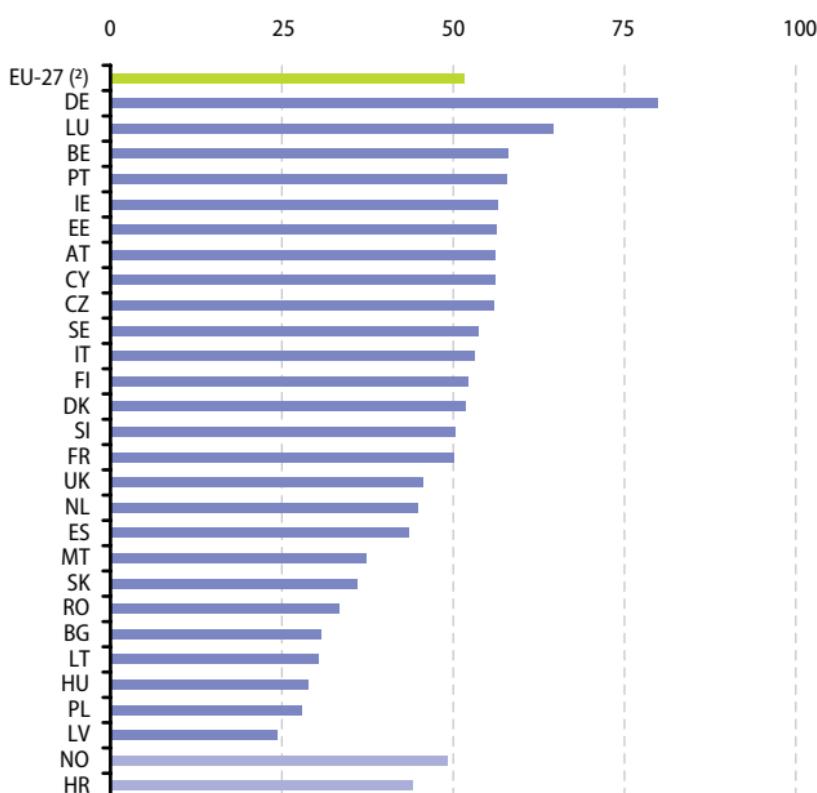
Source: Eurostat ([tsc00004](#) and [tsc00006](#)), OECD

13.3 Innovation

Among the EU Member States the highest propensity to innovate in 2008 (see Figure 13.3) was recorded in Germany (79.9 %), followed by Luxembourg (64.7 %) – these were the only Member States where more than 60 % of all enterprises were innovative – the EU-27 average (excluding Greece) was 51.6 %. Note that large enterprises tend to innovate more than small and medium-sized enterprises (SMEs) and as such these figures for the Member States may, at least to some degree, reflect the enterprise structure of each domestic economy.

Large enterprises (with 250 or more employees) were more likely to have brought product innovations to market in 2008 than either medium-sized enterprises (50 to 249 employees) or small enterprises (10 to 49 employees); this pattern held for all of the Member States for which data are available – as shown in Table 13.3.

Figure 13.3: Proportion of innovative enterprises, 2008 (¹)
(% of all enterprises)



(¹) Greece, not available.

(²) Excluding Greece.

Source: Eurostat ([inn_cis6_type](#))

Innovations are based on the results of new technological developments, new combinations of existing technology, or the use of other knowledge acquired (by the enterprise).

Table 13.3: Proportion of innovative enterprises which introduced products new to the market, 2008 (%)

	Total	With 10 to 49 employees	With 50 to 249 employees	With > 250 employees
BE	47.5	47.1	45.5	59.3
BG	25.9	23.3	30.8	30.8
CZ	39.1	34.0	47.0	54.1
DK	44.4	44.1	42.3	54.1
DE	26.0	23.2	29.5	43.7
EE	25.8	24.2	28.0	36.1
IE	:	:	:	:
EL	:	:	:	:
ES	21.5	18.0	28.1	43.6
FR	43.2	39.9	46.3	60.0
IT	47.7	45.5	55.5	61.4
CY	26.8	24.0	33.6	40.9
LV	23.4	22.7	21.5	35.6
LT	37.2	40.2	28.8	47.1
LU	40.6	35.3	47.6	55.8
HU	33.1	31.2	32.0	45.2
MT	39.1	38.3	32.7	60.0
NL	49.2	48.1	51.3	53.6
AT	49.5	46.3	52.1	66.4
PL	41.5	40.1	41.6	47.5
PT	35.6	33.1	41.7	53.7
RO	24.8	23.0	26.8	31.4
SI	51.3	51.3	48.1	59.5
SK	35.7	34.2	33.4	48.0
FI	37.3	35.5	35.9	57.7
SE	50.4	48.3	53.6	62.8
UK	:	:	:	:
NO	34.5	36.8	28.5	34.6
HR	37.4	36.7	38.5	39.1

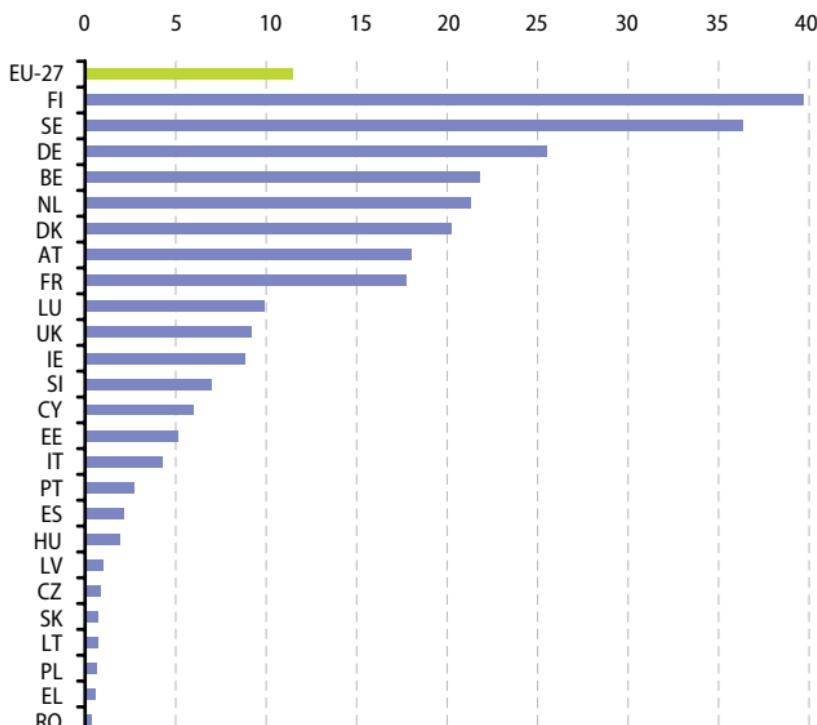
Source: Eurostat ([inn_cis6_prod](#))

13.4 Patents

Intellectual property rights and in particular **patents** provide a link between **innovation**, **inventions** and the marketplace. Applying for a patent makes an invention public, but at the same time gives it protection.

With the exception of the years 2000 to 2002, the number of EU-27 patent applications filed with the **European Patent Office (EPO)** increased at a relatively fast pace from 1997 to the latest period for which data are available (2007), with annual growth averaging 8.2 % per annum between 1997 and 2000, and 2.7 % between 2002 and 2007; over the whole period under consideration, the number of patents increased from 40 576 to 57 725. In relative terms, Sweden reported the highest number of **patent applications** per million inhabitants (298.4), followed by Germany (290.7), Finland (250.8) and Luxembourg (230.2).

Figure 13.4: High-technology patent applications to the EPO, 2007⁽¹⁾
(per million inhabitants)



(1) Estimates; Bulgaria and Malta, not available.

Source: Eurostat ([pat_ep_ntec](#))

Finland and Sweden registered the highest number of high-technology patent applications per million inhabitants in 2007, the figures for both countries being over 35, while Belgium, Denmark, Germany France, the Netherlands and Austria were the only other Member States to record double-digit ratios.

Table 13.4: Patents

	Patent applications to the EPO (units)		Patent applications to the EPO, 2007 (per million inhabitants)	Patents granted by the USPTO, 2004 (per million inhabitants)
	2002	2007		
EU-27	50 462	57 725	116.5	32.3
BE	1 287	1 472	139.0	38.0
BG	15	29	3.8	6.2
CZ	88	162	15.8	4.8
DK	935	1 057	194.1	45.5
DE	21 503	23 929	290.7	83.3
EE	6	23	17.4	2.8
IE	224	288	66.8	38.8
EL	74	109	9.8	1.8
ES	938	1 451	32.6	5.0
FR	7 321	8 421	132.4	37.6
IT	4 168	5 107	86.4	18.1
CY	7	9	11.5	1.6
LV	6	19	8.4	0.9
LT	3	8	2.4	5.5
LU	61	110	230.2	83.5
HU	120	173	17.2	3.9
MT	4	8	20.5	:
NL	3 442	3 656	223.5	57.7
AT	1 269	1 797	217.0	44.9
PL	81	146	3.8	1.0
PT	41	121	11.4	1.4
RO	11	21	1.0	0.6
SI	76	103	51.5	4.2
SK	24	42	7.8	1.1
FI	1 257	1 323	250.8	104.3
SE	2 002	2 719	298.4	56.8
UK	5 500	5 422	89.2	32.4
IS	35	28	90.6	85.2
LI	26	31	895.4	377.2
NO	377	515	110.0	32.7
CH	2 641	3 224	429.3	103.5
HR	37	32	7.2	2.3
TR	60	220	3.2	0.1
JP	20 218	20 657	161.7	228.1
US	31 171	31 908	105.8	273.8

Source: Eurostat ([tsc00009](#), [tsiir060](#), [pat_us_ntot](#) and [tsiir070](#))

European Commission

Key figures on Europe

Luxembourg: Publications Office of the European Union

2011 — 173 pp. — 10.5 x 21 cm

Theme: General and regional statistics

Collection: Pocketbooks

ISBN 978-92-79-18441-3

ISSN 1830-7892

doi:10.2785/6232

Cat. No KS-EI-11-001-EN-C

How to obtain EU publications

Free publications:

- via EU Bookshop (<http://bookshop.europa.eu>);
- at the European Commission's representations or delegations. You can obtain their contact details on the Internet (<http://ec.europa.eu>) or by sending a fax to +352 2929-42758.

Priced publications:

- via EU Bookshop (<http://bookshop.europa.eu>).

Priced subscriptions (e.g. annual series of the *Official Journal of the European Union* and reports of cases before the Court of Justice of the European Union):

- via one of the sales agents of the Publications Office of the European Union (http://publications.europa.eu/others/agents/index_en.htm).



Key figures on Europe

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, candidate countries to the European Union, Japan or the United States. This pocketbook treats the following areas: economy and finance; population; health; education and training; the labour market; living conditions and social protection; industry, trade and services; agriculture, forestry and fisheries; international trade; transport; the environment; energy; and science and technology.

This pocketbook, which presents a subset of the most popular information found in *Europe in figures – Eurostat yearbook 2011*, 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>

ISBN 978-92-79-18441-3

9 789279184413



Publications Office