



## Industry and services

The European Commission's enterprise policy aims to create a favourable environment for enterprises and businesses to thrive within Europe, thus creating the productivity growth, jobs and wealth that are necessary to achieve the objectives set by the revised strategy for growth and jobs that has superseded the Lisbon objectives.

While competitiveness as a macro-economic concept is understood to mean increased standards of living and employment opportunities for those who wish to work, at the level of individual enterprises or industrial sectors, competitiveness is more concerned with the issue of productivity growth. Enterprises have a variety of options to improve their performance, such as tangible investment or spending on human capital, research and development, or other intangible assets. This latter category covers non-monetary assets created over time in the form of legal assets (such as patents or copyrights, which protect intellectual property) and competitive assets (such as collaboration), which can play an important role in determining the effectiveness and productivity of an enterprise. Human capital is generally regarded as the primary source of competitiveness in relation to intangibles, re-enforcing the belief that enterprises need to constantly invest in their workforces, attracting qualified staff, improving their skills, and maintaining their motivation. Innovation is seen as a key element towards the competitiveness of enterprises, and the competitiveness and innovation framework programme (CIP) aims to support innovation including eco-innovation.

The legal basis for the European Commission's activities with respect to enterprise policy is Article 157 of the EC Treaty, which ensures that the conditions necessary for industrial competitiveness exist. It also provides for conditions to encourage entrepreneurial initiatives, par-



ticularly among small and medium-sized enterprises (SMEs). The EU seeks to:

- reduce administrative burden;
- facilitate the rapid start-up of new enterprises, and;
- create an environment more supportive of business.

In October 2007, the European Commission adopted a Communication ‘small and medium-sized enterprises – key for delivering more growth and jobs: a mid-term review of modern SME policy’ <sup>(1)</sup>, which outlines progress since 2005 in SME policy and notes encouraging results in the mainstreaming of SMEs’ interests in national and EU policymaking.

The business environment in which European enterprises operate plays a significant role in their potential success through factors such as access to capital markets (in particular for venture capital), or the openness of markets. Ensuring that businesses can compete openly and fairly is also important with respect to making Europe an attractive place in which to invest and work. Creating a positive climate in which entrepreneurs and businesses can flourish is considered by many as the key to generating the growth and jobs that Europe needs. This is all the more important in a globalised economy, where some businesses have considerable leeway to select where they wish to operate.

## 7.1 Business structures

### Introduction

Despite the changing face of the business economy, manufacturing still plays a key role in Europe’s prosperity. The European Commission adopted a Communication on ‘fostering structural change: an industrial policy for an enlarged Europe’ <sup>(2)</sup> which rejected the claim that Europe was experiencing a widespread process of de-industrialisation. However, the combination of a decline in the competitiveness of European industry, and increased international competition, were identified as threats that could impede the process of structural change in Europe. The Communication also examined how structural change could be brought about and fostered through better regulation, synergies between various Community policies, and strengthening the sectoral dimension of industrial policy.

Small and medium-sized enterprises (SMEs) are often referred to as the backbone of the European economy, providing a potential source for jobs and economic growth. The European Commission’s strategy for SMEs aims to apply the ‘think small first’ principle to make the business environment easier for SMEs. Policy is concentrated in five priority areas, covering

<sup>(1)</sup> COM(2007) 592.

<sup>(2)</sup> COM(2004) 274 final; for more information: [http://eur-lex.europa.eu/LexUriServ/site/en/com/2004/com2004\\_0274en01.pdf](http://eur-lex.europa.eu/LexUriServ/site/en/com/2004/com2004_0274en01.pdf).



the promotion of entrepreneurship and skills, the improvement of SMEs' access to markets, cutting red tape, the improvement of SMEs' growth potential, and strengthening dialogue and consultation with SME stakeholders. A special SME envoy has been set-up in the European Commission Directorate-General for Enterprise and Industry with the objective of better integrating the SME dimension into EU policies. Through the European charter for small enterprises, Member States have also committed themselves to develop an SME-friendly business environment, in particular through learning from each other's experience in designing and implementing policies, so each can apply the best practice to their own situations.

Structural business statistics (SBS) describe the structure, conduct and performance of businesses within their economic activities, down to the most detailed activity level (several hundred sectors). SBS with a breakdown by size-class is the main source of data for an analysis of SMEs. SBS can provide answers to questions, such as: how much wealth and how many jobs are created in an activity?; is there a shift from the industrial sector to the services sector and in which specific activities is this shift most notable?; which countries are relatively specialised in the manufacture of aerospace equipment?; what is the average wage of an employee within the hotels and restaurants sector?; how productive is chemicals manufacturing and how does it fare in terms of profitability? Without this structural information, short-term data on the economic cycle would lack background and be hard to interpret.

It should be noted that there have been some important recent changes within this domain. The SBS Regulation (EC) No. 295/2008 of the European Parliament and of the Council of 11 March 2008 concerning structural business statistics (recast) introduces, among other items, a legal basis for data collections in relation to business services (annex VIII) and business demography (annex IX). With this new Regulation, SBS will move to the latest version of the NACE classification of economic activities, namely NACE Rev. 2. This will allow a broader and more detailed collection of information to be compiled on services, while also updating the classification to identify better new areas of activity (such as technology-producing sectors). The first reference year for which SBS data are due to be provided according to NACE Rev. 2 is 2008. The SBS data presented in this publication, therefore, are based on the NACE Rev. 1.1 version of the classification.

### Definitions and data availability

SBS cover the '**business economy**' (NACE Rev. 1.1 Sections C to K), which includes industry, construction and services. Note that financial services (Section J) are treated separately because of their specific nature and the limited availability of most types of standard business statistics in this area. As such, the term '**non-financial business economy**' is generally used within business statistics to refer to economic activities covered by Sections C to I and K of NACE Rev. 1.1 and the units that carry out those activities. SBS do not cover agriculture, forestry and fishing, nor public administration and (largely) non-market services such as education and health.



SBS describe the economy through the observation of units engaged in an economic activity, which in SBS is generally the enterprise. An **enterprise** carries out one or more activities at one or more locations and may comprise one or more legal units. Note that enterprises that are active in more than one economic activity (and the value added and turnover they generate and the persons they employ, and so on) will be classified under the NACE heading which is their principal activity, normally the one that generates the largest amount of value added. An abbreviated list of the NACE Rev. 1.1 classification is provided in an annex at the end of the publication. Note that a revised classification (NACE Rev. 2) was adopted at the end of 2006, and its implementation has since begun – however, the first reference year for SBS data using this new classification will be 2008.

SBS are compiled under the legal basis provided by the Council Regulation on Structural Business Statistics (EC, EURATOM) No. 58/97 of December 1996 (and later amendments), and in accordance with the definitions, breakdowns, deadlines for data delivery, and various quality aspects specified in the Commission Regulations implementing it. Note that the breakdown of economic activities is very detailed and that the data included in the SBS domain of Eurostat's dissemination database goes into much more detail than the limited set of information which, given space constraints, can be presented in this yearbook.

The SBS data collection consists of a common module (Annex I), including a set of basic statistics for all activities, as well as six sector-specific annexes covering a

more extensive list of characteristics. The sector-specific annexes are: industry (Annex II), distributive trades (Annex III), construction (Annex IV), insurance services (Annex V), credit institutions (Annex VI), and pension funds (Annex VII). There are also three newly introduced annexes: business services (Annex VIII), business demography (Annex IX) and a flexible module for ad-hoc data collections (Annex X).

SBS contain a comprehensive set of basic variables describing business demography and employment characteristics, as well as monetary variables (mainly concerning operating income and expenditure or investment). In addition, a set of derived indicators are compiled: for example, in the form of ratios of monetary characteristics or per head values. The variables presented in this section are defined as follows:

- The **number of enterprises** is a count of the number of enterprises active during at least a part of the reference period; the enterprise is the smallest combination of legal units that is an organisational unit producing goods or services, which benefits from a certain degree of autonomy in decision-making, especially for the allocation of its current resources. An enterprise carries out one or more activities at one or more locations. An enterprise may be a sole legal unit.
- **Value added** represents the difference between the value of what is produced and intermediate consumption entering the production, less subsidies on production and costs, taxes and levies. Value added can be calculated from turnover, plus capitalised production,



plus other operating income, plus or minus the changes in stocks, minus the purchases of goods and services, minus other taxes on products which are linked to turnover but not deductible, minus the duties and taxes linked to production. Alternatively it can be calculated from gross operating surplus by adding personnel costs.

- The **number of persons employed** is defined as the total number of persons who work in the observation unit (inclusive of working proprietors, partners working regularly in the unit and unpaid family workers), as well as persons who work outside the unit who belong to it and are paid by it (for example, sales representatives, delivery personnel, repair and maintenance teams); it excludes manpower supplied to the unit by other enterprises, persons carrying out repair and maintenance work in the enquiry unit on behalf of other enterprises, as well as those on compulsory military service.
- **Average personnel costs** (or unit labour costs) are defined as personnel costs divided by the number of employees (paid persons with an employment contract). Personnel costs are the total remuneration, in cash or in kind, payable by an employer to an employee (regular and temporary employees as well as home workers) in return for work done by the latter during the reference period. All remuneration paid during the reference period is included, regardless of whether it is paid on the basis of working time, output or piecework. Included are all gratuities, workplace and performance bonuses, ex gratia payments, 13th month pay (and similar fixed bonuses), payments

made to employees in consideration of dismissal, lodging, transport, cost of living and family allowances, commissions, attendance fees, overtime, night work, etc., as well as taxes, social security contributions and other amounts owed by employees and retained at source by employers. Also included are the social security costs for the employer. Payments for agency workers are not included in personnel costs.

- **Apparent labour productivity** equals value added divided by the number of persons employed.

SBS are also available broken down by region or by **enterprise size class**. In SBS, size classes are defined based on the number of persons employed, except for specific series within retail trade activities where turnover size classes can also be used. A limited set of the standard SBS variables (for example, the number of enterprises, turnover, persons employed, value added) is available mostly down to the 3-digit (group) level of NACE divided by size class. According to Commission Recommendation 2003/361/EC adopted on 6 May 2003, small and medium-sized enterprises are classified with regard to their number of employees, annual turnover, and their independence. For statistical purposes, small and medium-sized enterprises are generally defined as those enterprises employing fewer than 250 people. The number of size classes available varies according to the activity under consideration. However, the main groups used in this publication for presenting the results are:



- small and medium-sized enterprises (SMEs): with 1-249 persons employed, further divided into
- micro enterprises: with less than 10 persons employed;
- small enterprises: with 10 to 49 persons employed;
- medium-sized enterprises: with 50 to 249 persons employed;
- large enterprises: with 250 or more persons employed.

Structural business statistics also provide information on a number of special topics, of which **business demography** is one. Business demography statistics present data on the active population of enterprises, their birth, survival (followed up to five years after birth) and death. Special attention is paid to the impact of these demographic events on employment levels. Business demography variables presented in this section are defined as follows.

- An **enterprise birth** amounts to the creation of a combination of production factors with the restriction that no other enterprises are involved in the event. Births do not include entries into the population due to mergers, break-ups, split-off or restructuring of a set of enterprises, nor do the statistics include entries into a sub-population resulting only from a change of activity. A birth occurs when an enterprise starts from scratch and actually starts activity. The birth rate is the number of births relative to the stock of active enterprises.
- An **enterprise death** amounts to the dissolution of a combination of production factors with the restriction that no other enterprises are involved in the event. An enterprise is included in the count of deaths only if it is not reactivated within two years. Equally, a reactivation within two years is not counted as a birth.
- **Survival** occurs if an enterprise is active in terms of employment and/or turnover in the year of birth and the following year(s). Two types of survival can be distinguished: an enterprise born in year  $x$  is considered to have survived in year  $x+1$  if it is active in terms of turnover and/or employment in any part of year  $x+1$  (survival without change); an enterprise is also considered to have survived if the linked legal unit(s) have ceased to be active, but their activity has been taken over by a new legal unit set-up specifically to take-over the factors of production of that enterprise (survival by take-over). The information presented in this publication focuses on the two-year survival rate.

### Main findings

There were an estimated 20.2 million enterprises within the EU-27 non-financial business economy (defined as industry, construction, distributive trades and services, and therefore excluding financial services) in 2006. A little over three in every ten of these enterprises was active in the distributive trades sector (composed of motor trades, wholesale trade, and retail trade and repair) and generated EUR 1 099 thousand million of value added in 2006, whilst providing employment for about 31.7 million persons. Manufacturing enterprises, which represented a little over one in every ten (11.5 %) enterprises within the EU-27



non-financial business economy, generated a further EUR 1 712 thousand million of value added and provided employment for 34.4 million persons. It should be noted, though, that the employment data presented here are head counts and not, for example, full-time equivalents, and there may be a significant proportion of persons working part-time in some activities, notably distributive trades.

High rates of part-time work in many service sectors also help explain the considerable differences in average personnel costs within the non-financial business economy of the EU-27. Average personnel costs in the EU-27 electricity, gas and water supply sector were EUR 42 200 per employee in 2006, a level that was 2.7 times that for hotels and restaurants and 1.7 times that for the distributive trades. The variation in wages and salaries was even more marked between Member States. For example, average personnel costs across the manufacturing sectors (of available Member States) ranged by a factor of ten, from a high of EUR 53 000 per employee in Belgium (2007) to a low of EUR 5 300 per employee in Latvia (2006).

SBS 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 non-financial business economy employed 250 or more persons (and was therefore considered as large) in 2006, but these enterprises accounted for approximately one third (32.6 %) of employ-

ment and more than two fifths (43.1 %) of value added. Nevertheless, small and medium-sized enterprises (SMEs, with less than 250 persons employed) generated the majority of value added (56.9 %) and employed most (67.4 %) of the workforce in the non-financial business economy. Micro enterprises (those with less than 10 persons employed) played a particularly important role, providing employment to nearly as many persons as large enterprises.

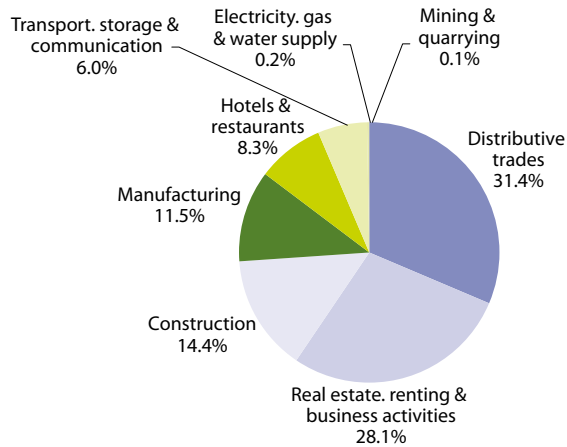
Large enterprises were particularly dominant within mining and quarrying; electricity, gas and water supply; and transport, storage and communication. These activities are characterised by relatively high minimum efficient scales of production and/or by (transmission) networks that are rarely duplicated due to their high fixed investment cost. On the other hand, small and medium-sized enterprises (SMEs) were relatively important within the activities of construction and hotels and restaurants, where enterprises with less than 250 persons employed accounted for more than three quarters of the wealth created (value added).

There are significant changes in the stock of enterprises within the business economy from one year to the next, reflecting the level of competition and entrepreneurial spirit. Newly-born enterprises accounted for at least one out of every 10 active enterprises in Estonia, Romania, Portugal, the United Kingdom, Luxembourg, Bulgaria, Spain and Germany in 2006.





**Figure 7.1:** Breakdown of number of enterprises within the non-financial business economy, EU-27, 2006 (1)  
(%)



(1) The total number of enterprises in the EU-27 non-financial business economy was estimated as 20.2 million in 2006.

Source: Eurostat ([tin00050](#))



**Table 7.1:** Value added, 2006  
(EUR 1 000 million)

	Mining & quarrying	Manu- facturing	Elec., gas & water supply	Construc- tion	Distrib. trades	Hotels & restaur.	Trans., storage & communi- cation	Real estate, renting & business activities
<b>EU-27</b>	88.55	1 711.79	203.66	510.02	1 099.04	181.91	652.93	1 202.14
Belgium (¹)	0.32	51.67	6.17	12.31	35.63	3.79	20.00	33.85
Bulgaria	0.64	3.58	1.09	1.06	:	0.33	1.89	0.95
Czech Republic	1.47	26.49	4.88	5.29	11.42	1.26	7.57	9.23
Denmark (¹)	7.16	29.23	2.54	11.08	24.09	2.54	15.35	30.55
Germany	6.47	459.39	44.23	55.44	202.96	23.23	118.70	242.11
Estonia (¹)	0.12	2.28	0.37	1.12	1.99	0.19	1.08	1.40
Ireland	1.17	35.50	2.07	9.22	16.38	3.41	7.13	16.03
Greece	0.95	15.83	2.68	6.38	22.27	3.46	9.21	8.78
Spain	2.50	132.37	15.13	94.26	106.23	25.17	58.68	102.46
France	4.61	215.48	25.78	69.55	151.49	28.53	97.27	202.55
Italy	7.32	218.77	19.79	63.26	116.04	21.99	76.09	108.07
Cyprus	0.04	1.14	0.28	1.21	1.73	0.92	1.03	1.20
Latvia	0.04	1.78	0.35	0.98	2.46	0.23	1.49	1.40
Lithuania	0.10	2.62	0.64	1.27	2.38	0.16	1.53	1.32
Luxembourg	0.03	2.76	0.27	1.62	2.60	0.49	2.57	4.08
Hungary	0.16	17.17	2.03	2.36	7.52	0.70	5.61	6.46
Malta	:	:	:	:	:	:	:	:
Netherlands	6.51	60.13	5.89	23.92	58.53	6.61	33.01	10.03
Austria (¹)	0.87	48.32	5.69	13.64	28.35	6.66	16.02	27.92
Poland	6.47	45.44	8.99	9.32	27.62	1.52	15.46	15.91
Portugal (¹)	0.69	19.78	3.84	9.46	17.00	3.36	10.12	12.54
Romania (¹)	3.02	13.81	2.61	5.26	9.67	0.75	5.94	5.30
Slovenia	0.12	6.43	0.64	1.42	3.06	0.46	1.71	1.92
Slovakia	0.19	6.94	2.67	0.99	3.19	0.17	1.91	1.99
Finland	0.42	33.23	3.32	7.01	13.47	1.81	9.42	13.81
Sweden (¹)	1.76	57.22	6.86	14.85	31.99	3.95	18.02	44.85
United Kingdom	34.98	217.89	35.65	97.62	212.38	41.71	121.86	310.46
Norway	43.65	22.60	5.43	9.98	19.72	2.45	17.88	23.39

(¹) 2007.

Source: Eurostat (tin00002)

**Table 7.2:** Number of persons employed, 2006  
(1 000)

	Mining & quarrying	Manufacturing	Elec., gas & water supply	Construction	Distrib. trades	Hotels & restaur.	Trans., storage & communication	Real estate, renting & business activities
<b>EU-27</b>	733	34 413	1 598	14 093	31 676	9 266	11 885	26 109
Belgium (¹)	3	611	25	272	640	172	247	570
Bulgaria	30	664	57	185	:	115	191	173
Czech Republic	44	1 354	57	393	694	158	337	501
Denmark (¹)	3	421	16	207	470	109	188	406
Germany	88	7 109	276	1 499	4 784	1 316	1 966	4 463
Estonia (¹)	5	132	8	59	101	21	47	71
Ireland	6	220	9	72	318	149	92	223
Greece	13	400	24	310	966	304	236	336
Spain	39	2 590	70	2 798	3 358	1 259	1 053	2 741
France	33	3 658	195	1 652	3 320	915	1 548	3 343
Italy	42	4 577	115	1 845	3 443	1 115	1 237	2 802
Cyprus	1	36	2	34	64	39	24	21
Latvia	3	164	15	73	181	31	83	93
Lithuania	3	268	25	125	269	39	102	101
Luxembourg	0	37	1	36	43	15	24	53
Hungary	6	778	54	240	583	127	265	483
Malta	:	:	:	:	:	:	:	:
Netherlands	7	779	24	481	1 383	345	475	1 599
Austria (¹)	6	638	31	262	625	248	243	436
Poland	185	2 591	204	700	2 240	231	761	969
Portugal (¹)	13	818	24	515	871	287	195	638
Romania (¹)	93	1 508	127	513	1 032	134	399	484
Slovenia	4	236	12	72	113	32	56	73
Slovakia	9	412	39	72	191	22	104	113
Finland	4	407	16	136	266	55	161	224
Sweden (¹)	9	806	31	298	633	139	315	640
United Kingdom	66	3 141	137	1 393	4 755	1 927	1 561	4 759
Norway	34	262	15	158	355	84	167	255

(¹) 2007.

Source: Eurostat (tin00004)



**Table 7.3:** Average personnel costs, 2006  
(EUR 1 000 per employee)

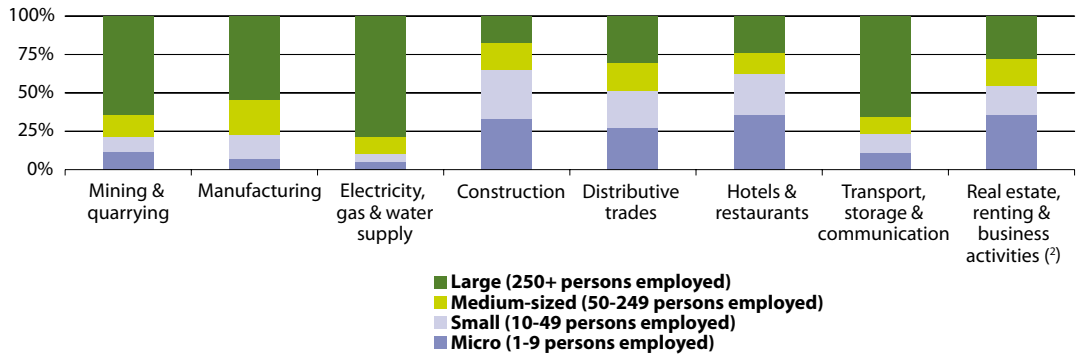
	Mining & quarrying	Manufacturing	Elec., gas & water supply	Construction	Distrib. trades	Hotels & restaur.	Trans., storage & communication	Real estate, renting & business activities
<b>EU-27</b>	31.3	33.3	42.2	27.9	24.2	15.6	33.0	29.7
Belgium (¹)	48.8	53.0	94.5	38.7	40.2	17.7	48.4	46.0
Bulgaria	:	:	:	2.4	:	1.6	3.9	3.1
Czech Republic	14.8	11.1	16.1	11.0	10.9	6.7	12.6	13.4
Denmark (¹)	66.1	48.2	49.9	43.0	35.8	17.4	47.2	42.1
Germany	49.4	47.2	69.5	32.6	27.2	12.6	32.8	30.5
Estonia (¹)	13.1	10.6	13.3	12.3	10.8	6.8	12.0	11.4
Ireland	52.8	43.8	92.9	49.3	29.0	18.0	46.1	41.3
Greece	42.0	26.2	49.2	17.4	18.7	14.3	31.9	22.7
Spain	33.9	31.1	52.3	26.8	23.2	17.6	31.9	23.8
France	50.6	44.2	62.1	37.7	35.2	26.9	43.2	44.3
Italy	48.1	34.4	49.9	27.7	29.1	19.5	37.6	28.0
Cyprus	29.9	20.0	41.9	24.1	20.1	17.8	26.1	23.6
Latvia	6.2	5.3	8.7	5.2	4.6	3.3	6.5	5.9
Lithuania	8.6	6.0	9.4	6.9	5.4	3.3	6.6	6.5
Luxembourg	42.5	50.3	77.8	35.2	38.4	24.6	52.6	46.3
Hungary	12.8	10.4	16.9	7.1	8.5	5.3	12.3	10.4
Malta	:	:	:	:	:	:	:	:
Netherlands	73.7	46.4	59.8	46.2	26.9	12.9	39.0	2.7
Austria (¹)	54.9	45.6	71.7	38.5	32.5	21.6	42.3	39.4
Poland	18.1	8.9	14.3	8.1	7.1	5.1	9.9	9.8
Portugal (¹)	17.9	14.8	38.3	12.6	12.8	9.1	24.4	12.3
Romania (¹)	16.5	6.4	12.5	4.9	4.3	3.4	7.1	5.5
Slovenia	26.8	17.8	25.5	15.2	17.7	12.8	20.6	20.0
Slovakia	8.5	8.6	12.1	7.8	7.9	5.2	9.4	9.6
Finland	40.5	45.5	50.5	38.3	34.1	27.1	39.9	40.4
Sweden (¹)	57.8	51.6	64.9	45.1	41.3	25.9	44.8	49.8
United Kingdom	76.1	41.9	52.4	39.0	26.1	13.5	43.9	38.5
Norway	129.9	58.6	66.5	52.8	39.1	25.1	51.6	56.6

(¹) 2007.

Source: Eurostat (tin00049)



**Figure 7.2:** Value added breakdown by enterprise size-class, EU-27, 2006 <sup>(1)</sup>  
(% of sectoral total)

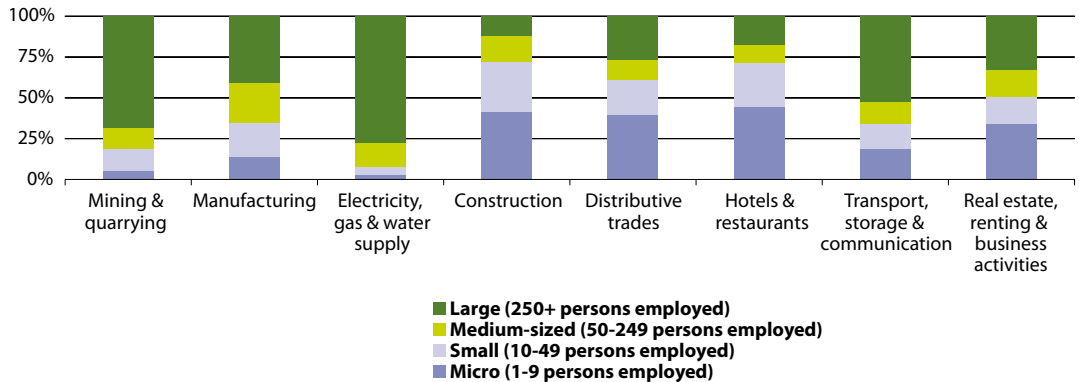


<sup>(1)</sup> Estimates.

<sup>(2)</sup> 2005.

Source: Eurostat (tin00053)

**Figure 7.3:** Employment breakdown by enterprise size-class, EU-27, 2006 <sup>(1)</sup>  
(% of sectoral total)



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

Source: Eurostat (tin00052)



**Table 7.4:** Value added by enterprise size-class, non-financial business economy, 2006

	Value added (EUR 1 000 million)	Share in total value added (%)			
		Micro (1-9 persons employed)	Small (10-49 persons employed)	Medium-sized (50-249 persons employed)	Large (250 + persons employed)
<b>EU-27<sup>(1)</sup></b>	5 650.2	20.2	18.8	17.8	43.1
Belgium <sup>(2)</sup>	163.7	19.4	:	:	:
Bulgaria	:	:	:	:	:
Czech Republic	67.6	18.8	16.0	19.9	45.3
Denmark <sup>(2)</sup>	122.6	25.9	:	19.0	:
Germany	1 152.5	15.5	:	:	:
Estonia <sup>(2)</sup>	8.5	20.2	26.5	:	:
Ireland	90.9	:	:	:	:
Greece	69.6	35.1	:	17.1	:
Spain	536.8	26.5	24.1	17.3	32.1
France	795.3	21.0	18.7	15.6	44.8
Italy	631.3	32.7	23.0	16.1	28.3
Cyprus	7.6	31.3	:	:	:
Latvia	8.7	18.5	:	28.4	:
Lithuania	10.0	11.6	:	29.2	:
Luxembourg	14.4	24.3	:	:	:
Hungary	42.0	17.5	:	18.2	:
Malta	:	:	:	:	:
Netherlands	259.9	:	:	:	:
Austria <sup>(2)</sup>	147.5	18.8	19.7	:	:
Poland	130.7	18.3	11.8	21.6	48.3
Portugal <sup>(2)</sup>	76.8	:	22.8	21.4	:
Romania	35.1	13.9	15.8	19.8	50.4
Slovenia	15.8	19.9	:	:	:
Slovakia	18.0	:	:	:	:
Finland	82.4	:	:	:	:
Sweden <sup>(2)</sup>	179.6	20.3	18.2	18.1	43.5
United Kingdom	1 072.6	18.5	15.5	16.6	49.3
Norway	145.1	29.8	15.7	18.9	35.5

(<sup>1</sup>) 2005 for the breakdown by size class.

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

Source: Eurostat (sbs\_sc\_1b\_se02, sbs\_sc\_3ce\_tr02, sbs\_sc\_4d\_co02, sbs\_sc\_2d\_mi02, sbs\_sc\_2d\_dade02 and sbs\_sc\_2d\_el02)

**Table 7.5:** Number of persons employed by enterprise size-class, non-financial business economy, 2006

	Number of persons employed (1 000)	Share in total employment (%)			
		Micro (1-9 persons employed)	Small (10-49 persons employed)	Medium-sized (50-249 persons employed)	Large (250 + persons employed)
<b>EU-27</b>	129 773	29.6	20.7	17.0	32.6
Belgium (1)	2 541	29.1	:	:	:
Bulgaria	:	:	:	:	:
Czech Republic	3 539	29.0	18.7	19.8	32.5
Denmark (1)	1 822	19.6	:	21.2	:
Germany	21 501	19.3	21.8	19.3	39.5
Estonia (1)	444	24.1	27.6	:	:
Ireland	1 089	:	:	:	:
Greece	2 589	58.0	:	11.8	:
Spain	13 908	37.7	25.5	14.8	22.0
France	14 663	24.7	20.8	16.2	38.3
Italy	15 177	46.9	21.6	12.5	19.0
Cyprus	220	39.0	:	:	:
Latvia	643	21.7	28.0	26.1	24.1
Lithuania	932	22.8	:	26.5	:
Luxembourg	210	19.1	:	:	:
Hungary	2 536	35.4	:	16.4	:
Malta	:	:	:	:	:
Netherlands	5 094	29.0	:	16.7	:
Austria (1)	2 489	24.9	23.2	:	:
Poland	7 882	38.6	11.6	18.7	31.1
Portugal (1)	3 362	:	:	16.5	:
Romania	4 114	21.2	19.8	22.6	36.4
Slovenia	597	:	:	:	:
Slovakia	961	:	:	:	:
Finland	1 268	:	:	:	:
Sweden (1)	2 874	24.2	21.0	18.3	36.3
United Kingdom	17 737	21.5	17.9	15.4	45.2
Norway	1 329	26.5	25.0	18.3	30.3

(1) 2007.

Source: Eurostat (sbs\_sc\_1b\_se02, sbs\_sc\_3ce\_tr02, sbs\_sc\_4d\_co02, sbs\_sc\_2d\_mi02, sbs\_sc\_2d\_dade02 and sbs\_sc\_2d\_el02)

**Table 7.6:** Enterprise demography, business economy, 2006 <sup>(1)</sup>

	<b>Enterprise birth rates (% of enterprise births among active enterprises) <sup>(2)</sup></b>	<b>Enterprise death rates (% of enterprise deaths among active enterprises) <sup>(3)</sup></b>	<b>Enterprise survival (% of enterprise births of year n-2 which are still active in year n) <sup>(4)</sup></b>
Belgium	:	:	:
Bulgaria	11.9	11.2	47.3
Czech Republic	9.3	11.3	64.1
Denmark	:	10.3	:
Germany	10.0	:	:
Estonia	15.9	10.3	64.6
Ireland	:	:	:
Greece	:	:	:
Spain	10.4	6.9	75.2
France	9.4	6.8	76.6
Italy	7.1	7.5	74.7
Cyprus	7.1	:	:
Latvia	9.9	7.9	73.0
Lithuania	:	:	:
Luxembourg	12.3	8.3	76.7
Hungary	8.7	12.0	63.1
Malta	:	:	:
Netherlands	9.8	8.6	73.1
Austria	8.4	6.1	:
Poland	:	:	:
Portugal	14.2	14.8	59.5
Romania	14.6	8.9	77.6
Slovenia	9.7	5.4	84.2
Slovakia	7.3	5.2	72.8
Finland	8.3	6.8	66.7
Sweden	6.7	5.6	87.3
United Kingdom	12.9	10.7	79.2
Norway	9.8	:	:
Switzerland	3.6	3.5	70.7

<sup>(1)</sup> Covers the business economy (NACE Rev. 1.1 Sections C to K) excluding holdings (NACE Rev. 1.1 Class 74.15); Portugal and Romania, sole proprietorships are not covered.

<sup>(2)</sup> Cyprus, the Netherlands, Slovakia and Finland, 2005; Germany and Switzerland, 2004.

<sup>(3)</sup> 2005, except the Netherlands, Slovakia, Finland and Switzerland, 2004.

<sup>(4)</sup> 2006, except the Netherlands, Slovakia, Finland and Switzerland, 2005.

Source: Eurostat ([tsier150](#))

## 7.2 Industry and construction

### Introduction

In its mid-term review of industrial policy <sup>(3)</sup>, the European Commission identified globalisation and technological change as key challenges for European industry. Industrial policy within the EU is designed to complement measures taken by the Member States. Whether or not a business succeeds depends ultimately on the vitality and strength of the business itself, but the environment in which it operates can help or harm its prospects, in particular when faced with the challenges of globalisation and intense international competition.

A 2005 European Commission Communication on industrial policy was based for the first time on an integrated approach; addressing sector-specific as well as common issues. Since this date, the overall performance of European industry continued to develop against a background of an increasingly integrated world and the accelerating pace of technological change. The European Commission's new industrial policy includes seven new initiatives on competitiveness, energy and the environment, intellectual property rights, better regulation, industrial research and innovation, market access, skills, and managing structural change. Seven additional initiatives are targeted at key strategic sectors, including pharmaceuticals, defence-related industries, and information and communication technologies.

### Definitions and data availability

For background information relating to structural business statistics (SBS), including definitions of value added and persons employed, refer to the section titled 'definitions and data availability' in the previous section (Subchapter 7.1: business structures). It is important to reiterate that in this publication, SBS data continue to be based on the NACE Rev. 1.1 classification of economic activities. Additional variables presented in this section are defined as follows.

- The **wage adjusted labour productivity ratio** is defined as the ratio of value added at factor cost divided by personnel costs (the latter having been divided by the share of employees in the number of persons employed); the result is expressed as a percentage. The ratio can also be calculated by dividing the apparent labour productivity by average personnel costs and expressing the result as a percentage.
- The **gross operating rate** is one measure of profitability that is a key factor for competitiveness and enterprise success. It is defined as the size of the gross operating surplus relative to turnover, and is expressed as a percentage. The **gross operating surplus** is the surplus generated by operating activities after the labour factor input has been recompensed (it can be calculated from value added at factor cost

<sup>(3)</sup> COM(2007) 374; for more information:  
[http://ec.europa.eu/enterprise/policies/industrial-competitiveness/documents/comm-policy-framework/index\\_en.htm](http://ec.europa.eu/enterprise/policies/industrial-competitiveness/documents/comm-policy-framework/index_en.htm).



less personnel costs); turnover is often referred to as sales; capital-intensive activities tend to report higher gross operating rates, while distributive activities often report lower rates.

**PRODCOM** (PRODUCTION COMMUNAUTAIRE) is a system for the collection and dissemination of statistics on the production of industrial (mainly manufactured) goods, both in value and quantity terms. It is based on a list of products called the Prodcom List which consists of about 4 500 headings relating to industrial products. These products are detailed at an 8-digit level, with the first four digits referring to the equivalent NACE class, and the next two digits referring to sub-categories within the statistical classification of products by activity (CPA). Most headings correspond to one or more combined nomenclature (CN) codes.

Aside from SBS and PRODCOM, a large proportion of the statistics presented in this section are derived from **short-term business statistics (STS)**. Among these, some of the most important indicators are a set of principal European economic indicators (PEEIs) that are essential to the European Central Bank (ECB) for reviewing monetary policy within the euro area. These short-term statistics give information on a wide range of economic activities and are now based on the NACE Rev. 2 classification (unlike the SBS statistics, which until data for 2008 are available remain based on NACE Rev 1.1); they are generally based on surveys and administrative sources. The Member States are encouraged to transmit seasonally adjusted data and trend-cycle indices: if they do not, then Eurostat calculates the seasonal adjustment. The national statis-

tical authorities are responsible for data collection and the calculation of national time series, while Eurostat is responsible for euro area and EU aggregations.

The presentation of short-term statistics may take a variety of different forms.

- The adjustment of **working days** takes account of the calendar nature of a given month in order to adjust the index. The adjustment of working days is intended to adjust calendar effects, whatever their nature. The number of working days for a given month depends on the timing of certain public holidays (Easter can fall in March or in April depending on the year), the possible overlap of certain public holidays and non-working days (1 May can fall on a Sunday), the fact that a year is a leap year or not and other reasons.
- **Seasonal adjustment**, or the adjustment of seasonal variations, aims, after adjusting for calendar effects, to take account of the impact of the known seasonal factors that have been observed in the past. For example, in the case of the production index, annual summer holidays have a negative impact on industrial production. Where necessary, Eurostat calculates the seasonal adjustment using the methods TRAMO (time-series regression with ARIMA noise, missing observations, and outliers) and SEATS (signal extraction in ARIMA time-series), referred to as TRAMO/SEATS.
- The trend is a slow variation over a long period of years, generally associated with the structural causes of the phenomenon in question. The cycle is a quasi-periodic oscillation. It is characterised by alternating periods of





higher and lower rates of change possibly, but not always, involving expansion and contraction. Generally, if this irregular component of the time-series is relatively important, the trend-cycle series is a better series for the analysis of longer-term past developments. However, this advantage is less clear when analysing very recent developments. This is because trend-cycle values for recent periods may have greater revisions than the equivalent seasonally adjusted values. Hence, the latter may be more appropriate for the analysis of recent developments; this is particularly true around turning points.

Short-term business statistics are compiled within the scope of the STS Regulation <sup>(4)</sup>. Despite major changes brought in by the STS Regulation, and improvements in the availability and timeliness of indicators that followed its implementation, strong demands for further development were voiced even as the STS Regulation was being adopted. The emergence of the ECB fundamentally changed expectations as regards STS. As a result, the STS Regulation was amended (Regulation (EC) No 1158/2005) on 6 July 2005. Among the main changes introduced were:

- new indicators for the purpose of analysis, namely the introduction of industrial import prices, services output prices, and the division of non-domestic turnover, new orders and industrial output prices between euro area and non-euro area markets;

- more timely data, by shortening data delivery deadlines for the industrial and construction production indices, the retail trade and services turnover (and volume of sales) indices, and employment indices for all activities;
- more frequent data, increasing the frequency of the index of production for construction to monthly from quarterly.

The **production index** aims to provide a measure of the volume trend in value added at factor cost over a given reference period. The index of production should take account of:

- variations in type and quality of the commodities and of the input materials;
- changes in stocks of finished goods and services and work in progress;
- changes in technical input-output relations (processing techniques);
- services such as the assembling of production units, mounting, installations, repairs, planning, engineering, creation of software.

The data necessary for the compilation of such an index are generally not available on a sub-annual basis. In practice, suitable proxy values for the compilation of the indices are needed. Within industry these may include gross production values (deflated), production quantity data, turnover (deflated), work input, raw material input, or energy input, while within construction they may include input data (consumption of typical raw materials, energy or labour) or output data (production quantities, deflated production values, or deflated sales values).

<sup>(4)</sup> Council Regulation (EC) No 1165/98 of 19 May 1998 concerning short-term statistics.



The **building production index** and the **civil engineering production index** is a split of construction production between buildings and civil engineering works according to the classification of types of construction (CC); the aim of the indices is to show the development of value added for each of the two main parts of construction. These indices may be calculated by assigning the basic information (deflated output, hours worked, authorisations/permits) to products in the CC and then aggregating the product indices in accordance with the CC to the section level. Buildings are sub-divided into residential buildings (in methodological terms, those buildings of which at least half are used for residential purposes) and non-residential buildings. Civil engineering works are all constructions not classified under buildings: for example, railways, roads, bridges, highways, airport runways, dams.

It is particularly difficult to compile a production index for construction, given that it is problematic to measure output in physical quantities, as almost every project is unique in terms of the building being constructed and the site being used; equally, it is difficult to obtain reliable output prices to use as a deflator in the event that output is measured in value terms. As a result, a wide variety of approaches are used in different countries to provide these statistics, including the use of hours worked as a proxy.

The **output price index** (sometimes referred to as the **producer price index**) shows monthly price changes in industrial output, which can be an indicator of inflationary pressure before it reaches the consumer. The appropriate price is

the basic price that excludes VAT and similar deductible taxes directly linked to turnover, as well as all duties and taxes on the goods and services invoiced by the unit, whereas subsidies on products received by the producer, if there are any, should be added. The price should refer to the moment when the order is made, not the moment when the commodities leave the factory gates. Output price indices are compiled for the total, domestic and non-domestic markets, with the latter further split between euro area and non-euro area markets (the information presented in this publication refers only to price developments within the domestic market). All price-determining characteristics should be taken into account, including the quantity of units sold, transport provided, rebates, service conditions, guarantee conditions and destination.

The **index of turnover** shows the evolution of the market for goods and services in terms of sales made. The index is not deflated, and so its objective is to measure market activity in value terms. Turnover comprises the totals invoiced by the observation unit during the reference period, and this equates to market sales of goods or services supplied to third parties. Turnover also includes all other charges (transport, packaging, etc.) passed on to the customer, even if these charges are listed separately in the invoice. Turnover excludes VAT and other similar deductible taxes directly linked to turnover as well as all duties and taxes on the goods or services invoiced by the unit. Reduction in prices, rebates and discounts as well as the value of returned packing must be deducted.



### Main findings

The EU-27 construction sector generated about one fifth (20.3 %) of the combined industrial and construction sectors' value added in 2006, more than two and a half times the contribution (7.7 %) of the machinery and equipment n.e.c. sector, which was the largest manufacturing sector (at the NACE division level) in these terms. The construction sector's share of employment was even higher, more than one quarter (27.7 %) of the total. A few sectors recorded a notably lower share of employment than of value added, and these were concentrated in energy-related activities and chemicals manufacturing.

The average value added generated per person within each of the EU-27 industrial sectors as well as construction more than covered respective average personnel costs in 2006. However, there were considerable differences between the various sectors; the wage adjusted labour productivity ratio was high for many of the energy-related activities, particularly for the extraction of crude petroleum and natural gas sector (900 % in 2005) and the coke, refined petroleum products and nuclear fuel sector (357 % in 2005), but less than 150 % for the clear majority of industrial sectors as well as the construction sector.

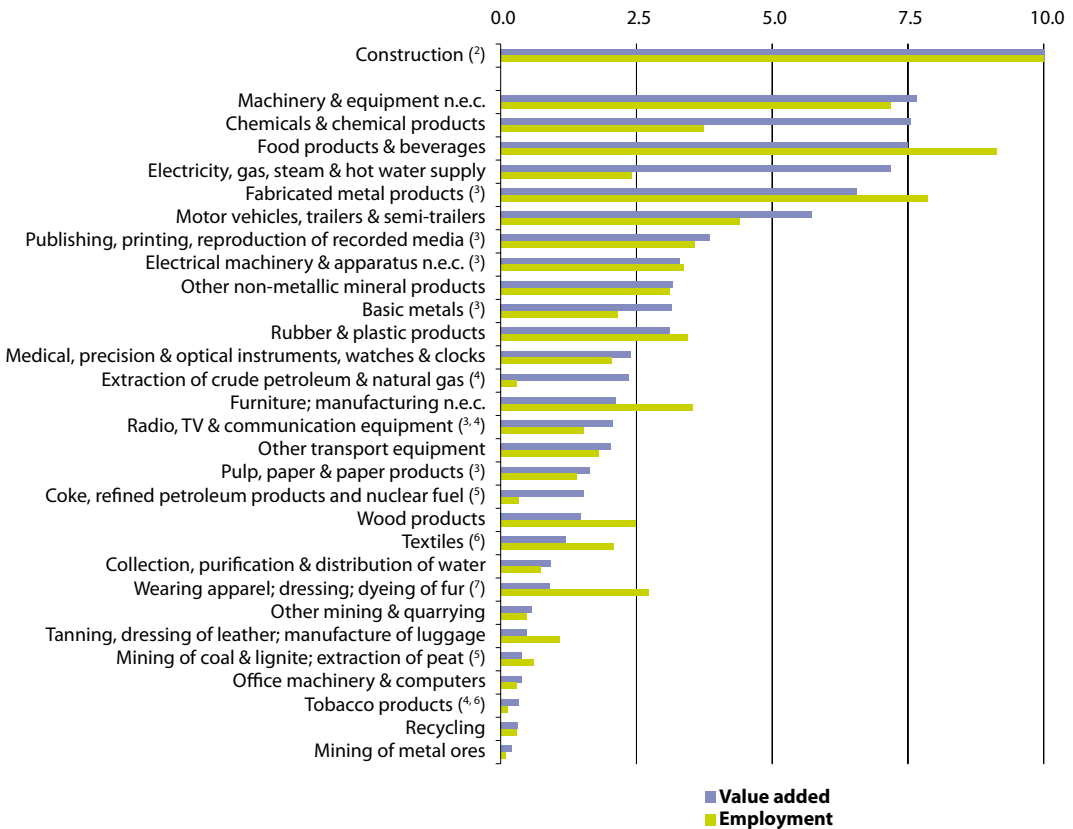
Based on PRODCOM data, transport equipment products dominated the list of the most sold manufacturing products in value terms in the EU-27 in 2008, occupying the first two places, with a number of further products among the top 20.

The indices of industrial production and industrial output prices (based on the NACE Rev. 2 classification) for the EU-27 followed broadly similar developments during the ten-year period through until July 2009; growth through until the start of 2001 then a period of stability until mid-2003, followed by a period of sustained and relatively strong growth until an abrupt downturn during the first half of 2008. The decline in the index of industrial production for the EU-27 from the relative peak in February 2008 was particularly steep, the index level of July 2009 being lower than that of July 1999. By contrast, although the index of industrial output prices for July 2009 fell from the relative peak of July 2008, it was similar to the pre-peak level of October 2007. In part this continued to reflect the relatively high price of oil and associated energy-related and intermediate products. In this respect, it should be noted that the domestic industrial output price index was about 5 % or more higher in 2008 than in 2007 in all Member States, and between 10 % and 18 % higher in 11 of them, the highest rates of increase being in Malta and the United Kingdom.

The downturn in activity was also noted for construction. The index of production for construction declined by about 14 % between the relative peak in February 2008 and the figure for June 2009. However, there was a distinct difference between the indices for buildings and civil engineering works in this same period; the index for buildings declined by 16.1 %, whereas that for civil engineering works remained relatively unchanged (-0.7 %).



**Figure 7.4:** Breakdown of industrial and construction value added and employment, EU-27, 2006 <sup>(1)</sup>  
 (% of industrial and construction value added and employment)

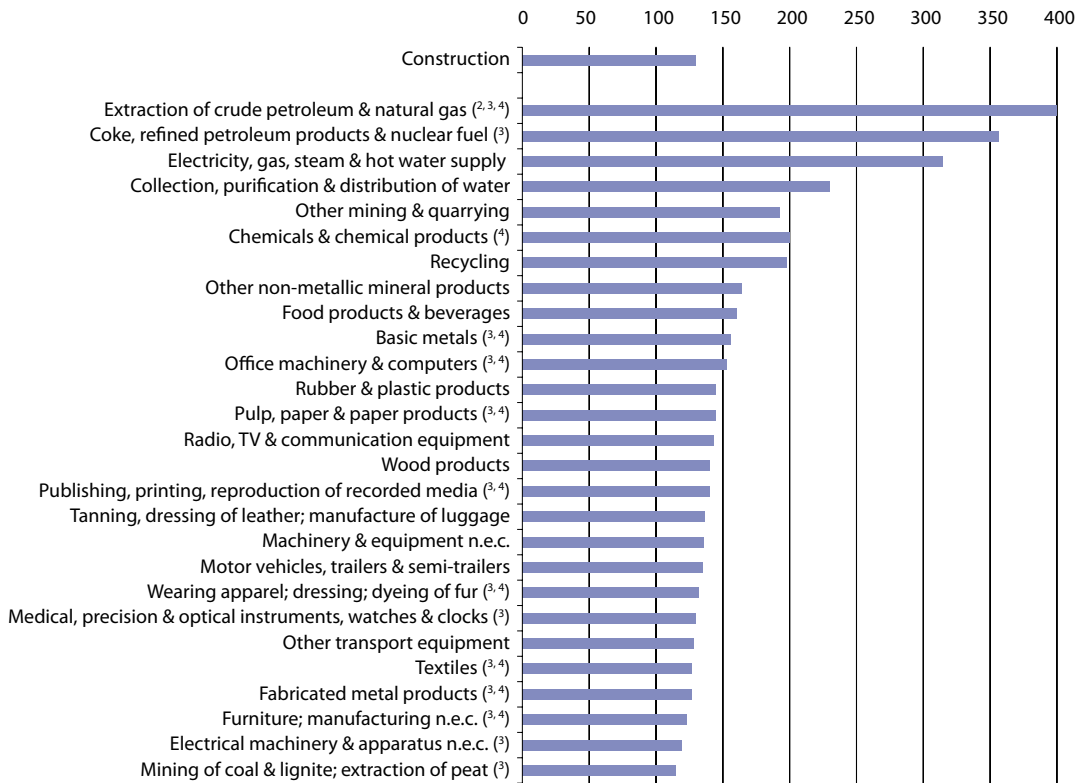


<sup>(1)</sup> Mining of uranium and thorium ores, not available  
<sup>(2)</sup> Note that the axis is cut: value added, 20.3 %, employment, 27.7 %.  
<sup>(3)</sup> Estimates.  
<sup>(4)</sup> Employment, 2005.  
<sup>(5)</sup> Value added, 2005.  
<sup>(6)</sup> Employment, estimate.  
<sup>(7)</sup> Value added, estimate.

Source: Eurostat (ebd\_all)



**Figure 7.5:** Wage adjusted labour productivity within industry and construction, EU-27, 2006 <sup>(1)</sup> (%)



<sup>(1)</sup> Mining of uranium and thorium ores, mining of metal ores and tobacco products, not available.

<sup>(2)</sup> Y-axis has been cut at 400 % from 900 %.

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

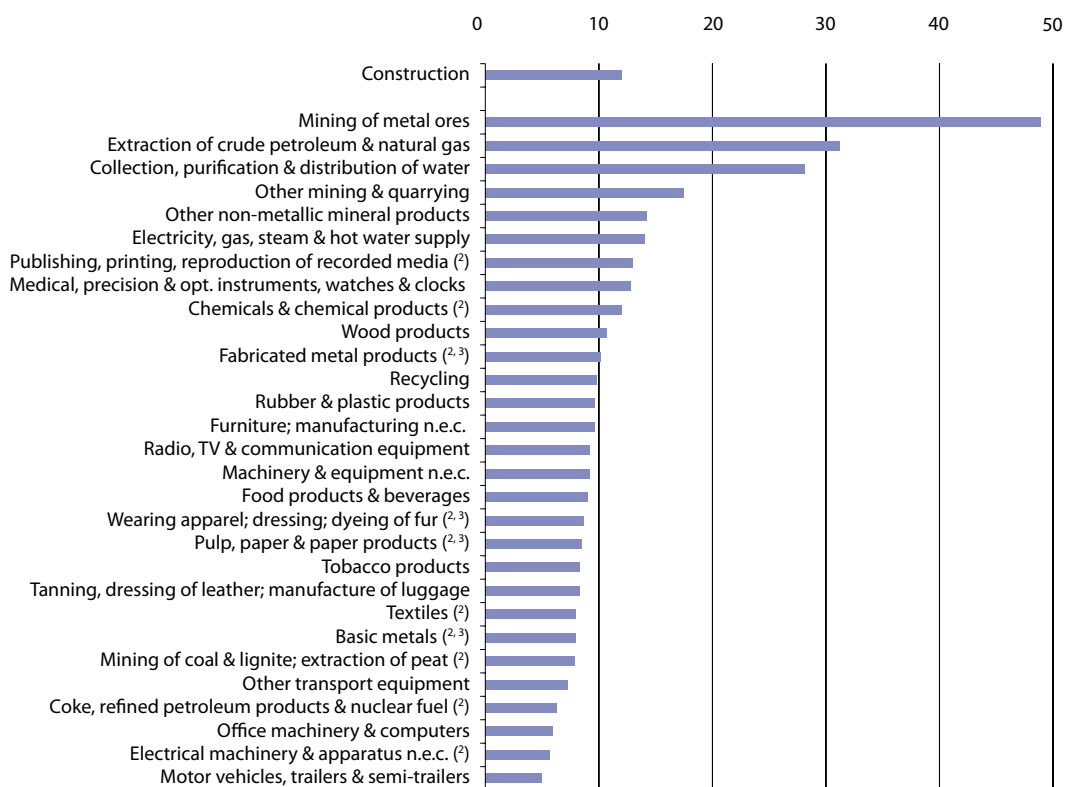
<sup>(4)</sup> Estimate.

Source: Eurostat ([ebd\\_all](#))





**Figure 7.6:** Gross operating rate within industry and construction, EU-27, 2006 <sup>(1)</sup>  
(%)



<sup>(1)</sup> Mining of uranium and thorium ores, not available.

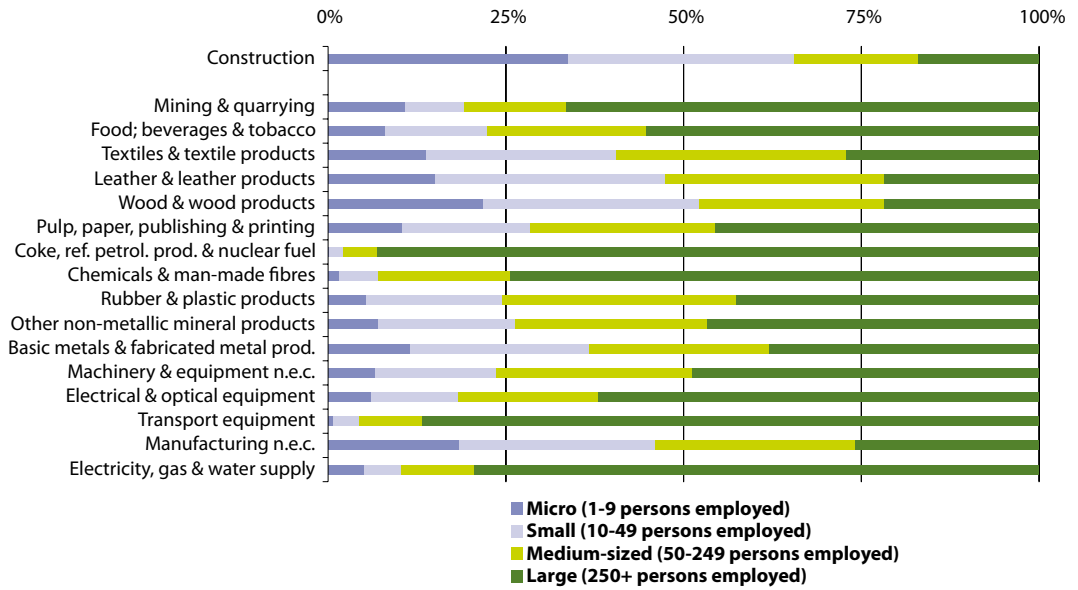
<sup>(2)</sup> 2005.

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

Source: Eurostat ([ebd\\_all](#))



**Figure 7.7:** Industrial and construction value added by enterprise size-class, EU-27, 2006 <sup>(1)</sup>  
(% of sectoral total)



<sup>(1)</sup> Includes rounded estimates based on non-confidential data.

Source: Eurostat (tin00053)

**Table 7.7:** Production sold in value terms, selected products, EU-27, 2008 <sup>(1)</sup>

PRODCOM code	Product	Value (EUR million)	Rounding base (million) <sup>(2)</sup>
29.10.22.30	Motor vehicles with a petrol engine > 1 500 cm <sup>3</sup> (including motor caravans of a capacity > 3 000 cm <sup>3</sup> ) (excluding vehicles for transporting >= 10 persons, snowmobiles, golf cars and similar vehicles)	111 332	
29.10.23.30	Motor vehicles with a diesel or semi-diesel engine > 1 500 cm <sup>3</sup> but <= 2 500 cm <sup>3</sup> (excluding vehicles for transporting >= 10 persons, motor caravans, snowmobiles, golf cars and similar vehicles)	90 339	
21.20.13.80	Other medicaments of mixed or unmixed products, p.r.s., n.e.c.	61 449	
17.29.11.20	Self-adhesive printed labels of paper or paperboard	52 434	
29.32.30.90	Other parts and accessories, n.e.c., for vehicles of HS 87.01 to 87.05; parts thereof	49 400	200
25.11.23.60	Other structures of iron or steel	36 081	9
29.32.20.90	Parts and accessories of bodies (including cabs), n.e.c.	33 911	
29.10.21.00	Vehicles with spark-ignition engine of a cylinder capacity <= 1 500 cm <sup>3</sup> , new	31 969	
25.62.20.00	Metal parts (excluding turned metal parts)	31 900	50
11.05.10.00	Beer made from malt (excluding non-alcoholic beer, beer containing <= 0.5 % by volume of alcohol, alcohol duty)	30 942	
10.71.11.00	Fresh bread containing by weight in the dry matter state <= 5 % of sugars and <= 5 % of fat (excluding with added honey; eggs; cheese or fruit)	27 954	
17.21.13.00	Cartons, boxes and cases, of corrugated paper or paperboard	27 492	
23.63.10.00	Ready-mixed concrete	27 246	
10.51.40.50	Grated, powdered, blue-veined and other non-processed cheese (excluding fresh cheese, whey cheese and curd)	26 000	400
29.10.41.10	Goods vehicles with a diesel or semi-diesel engine, of a gross vehicle weight <= 5 tonnes (excluding dumpers for off-highway use)	24 223	

<sup>(1)</sup> Data extracted on 17 December 2009.

<sup>(2)</sup> Indicates the magnitude of the rounding employed to protect confidential cell (in the case of PRODCOM code 25.11.23.60, the confidential value lies within the range +/- EUR 9 million of the reported value).

Source: Eurostat, from [http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search\\_database](http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database) go to

Data Navigation Tree/Database by themes/Industry, trade and services/

Statistics on the production of manufactured goods (prom)/NACE Rev. 2 (prodcom\_n2)/Prodcom Annual Sold (NACE Rev. 2.)

(DS056120)

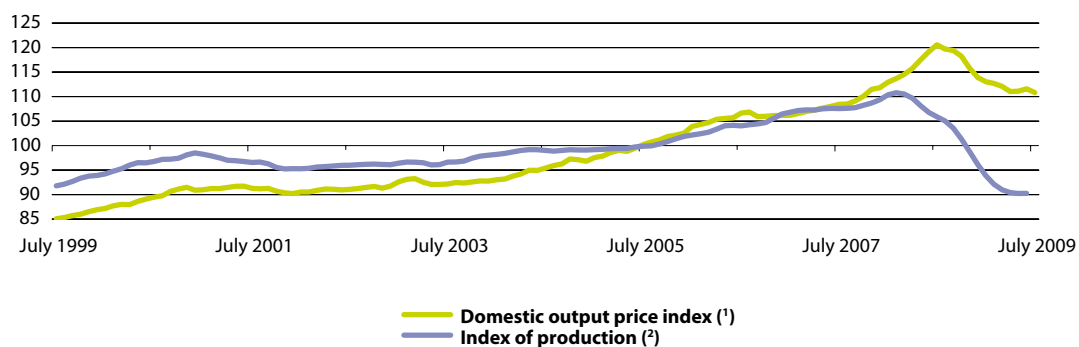
**Table 7.8:** Production sold in volume terms, selected products, EU-27, 2008 <sup>(1)</sup>

PRODCOM code	Product	Quantity (1 000)	Rounding base (1 000) <sup>(2)</sup>	Unit
24.10.22.10	Flat semi-finished products (slabs) (of stainless steel)	180 204		kg
23.51.12.10	Portland cement	220 699 380		kg
11.02.11.30	Champagne (important: excluding alcohol duty)	260 788		l
20.42.11.50	Perfumes	13 000	500	l
20.11.11.70	Oxygen	29 561 233		m <sup>3</sup>
16.10.10.34	Coniferous wood; sawn or chipped lengthwise, sliced or peeled, of a thickness > 6 mm, planed (excluding end-jointed or sanded)	14 980	70	m <sup>3</sup>
12.00.11.50	Cigarettes containing tobacco or mixtures of tobacco and tobacco substitutes (excluding tobacco duty)	758 642 288		p/st
27.90.52.20	Fixed electrical capacitors, tantalum or aluminium electrolytic (excluding power capacitors)	12 761 920		p/st

<sup>(1)</sup> Data extracted on 17 December 2009.

<sup>(2)</sup> Indicates the magnitude of the rounding employed to protect confidential cell (in the case of PRODCOM code 16.10.10.34, the confidential value lies within the range +/- 70 000 m<sup>3</sup> of the reported value).

Source: Eurostat, from [http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search\\_database](http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database) go to Data Navigation Tree/Database by themes/Industry, trade and services/ Statistics on the production of manufactured goods (prom)/NACE Rev. 2 (prodcom\_n2)/Prodcom Annual Sold (NACE Rev. 2.) (DS056120)

**Figure 7.8:** Production and domestic output price indices for industry (excluding construction), EU-27 (2005=100)

<sup>(1)</sup> Gross series; estimates, 1999-2004.

<sup>(2)</sup> Trend-cycle; estimates.

Source: Eurostat ([sts\\_inppd\\_m](#) and [sts\\_inpr\\_m](#))



**Table 7.9:** Annual growth rates for industry (excluding construction)  
(%)

	Index of production <sup>(1)</sup>					Domestic output price index <sup>(2)</sup>				
	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008
<b>EU-27</b>	2.1	1.2	4.0	3.5	-1.8	2.9	5.0	5.6	2.8	7.6
<b>Euro area</b>	2.1	1.3	4.2	3.7	-1.8	2.3	4.1	5.1	2.7	6.1
Belgium	3.7	-0.9	5.0	2.9	-0.6	5.2	2.5	5.1	3.1	9.3
Bulgaria	12.7	7.2	6.0	9.5	0.6	5.4	7.3	8.7	8.0	13.2
Czech Republic	9.5	4.3	8.7	10.7	-2.2	5.6	3.1	1.5	4.1	4.5
Denmark	-1.5	2.8	4.0	-2.1	-1.1	3.8	9.2	7.9	1.6	13.2
Germany	3.1	3.5	5.7	6.0	0.0	1.7	4.4	5.4	1.3	5.4
Estonia	9.5	11.1	10.2	6.4	-6.2	3.4	1.7	4.3	9.6	9.6
Ireland	1.2	3.9	3.0	4.9	-1.5	0.5	2.2	1.8	1.6	5.3
Greece	0.7	-1.6	0.8	2.3	-4.2	3.6	5.9	7.3	4.1	10.0
Spain	1.9	0.8	3.9	2.0	-7.3	3.4	4.7	5.4	3.6	6.6
France	1.4	0.1	1.4	1.2	-2.6	2.0	3.1	3.8	2.8	5.6
Italy	-0.4	-0.8	3.6	2.1	-3.3	2.7	4.0	5.2	3.3	5.8
Cyprus	1.8	0.5	0.4	4.6	4.0	4.4	5.0	5.3	3.6	11.7
Latvia	6.2	7.4	6.5	1.0	-3.8	7.4	7.1	9.6	18.6	15.7
Lithuania	10.9	7.6	6.7	2.5	4.9	2.5	5.9	6.9	9.4	15.8
Luxembourg	4.7	2.8	2.1	-0.3	-5.4	9.1	3.6	12.8	4.4	15.1
Hungary	6.8	7.3	10.6	8.1	-1.0	8.4	6.1	8.4	6.5	11.6
Malta	0.0	0.0	0.0	0.0	0.0	:	:	21.7	-4.9	17.5
Netherlands	4.5	0.5	1.5	2.3	1.4	2.4	7.0	8.6	5.3	8.9
Austria	6.1	4.3	7.8	5.8	0.8	2.0	3.4	2.1	4.1	4.8
Poland	12.2	4.5	12.3	9.2	2.2	7.6	2.2	3.4	4.0	5.4
Portugal	-4.2	-3.5	3.2	0.1	-4.1	:	:	4.4	2.8	5.2
Romania	1.9	-2.9	9.5	10.2	3.1	19.2	10.8	10.3	8.4	12.8
Slovenia	3.9	4.1	6.1	7.2	-1.9	4.4	2.8	2.4	5.5	5.6
Slovakia	3.7	-2.6	12.2	16.1	5.0	2.7	3.7	6.3	1.8	6.2
Finland	5.4	0.4	9.9	4.2	-0.5	0.7	4.3	6.3	3.9	8.6
Sweden	4.4	2.2	3.6	3.9	-2.9	1.8	3.9	6.1	3.6	6.1
United Kingdom	-0.9	-1.6	-0.5	0.1	-3.4	4.0	11.1	8.6	1.7	16.1
Croatia	2.5	5.0	4.3	5.1	0.6	3.5	2.7	2.7	3.5	8.3
Turkey	9.7	5.7	5.8	4.4	-0.9	12.2	7.1	9.8	6.0	13.0
Norway	-1.2	-0.3	-2.2	-1.3	0.3	3.9	6.1	8.6	-0.6	15.2
Switzerland	4.4	2.7	7.8	9.5	1.2	:	:	:	:	:
Japan	4.7	1.4	4.4	2.8	-3.3	:	:	:	:	:
United States	2.5	3.3	2.2	1.7	-1.8	:	:	:	:	:

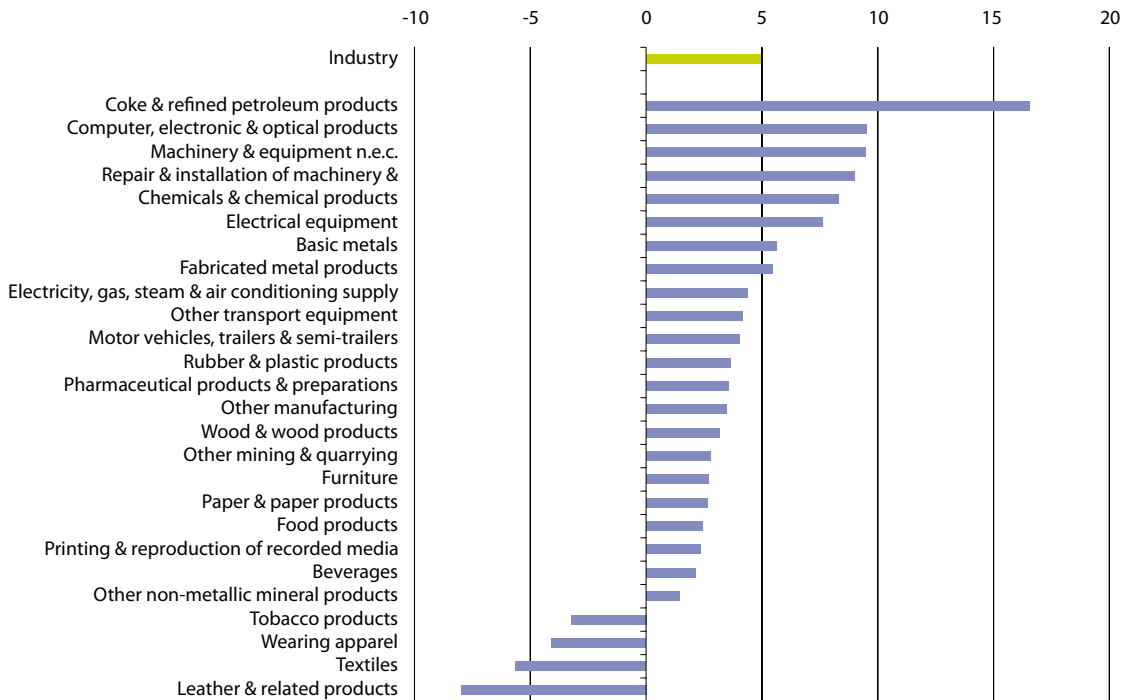
(1) Working day adjusted.

(2) Gross series.

Source: Eurostat (sts\_inprgr\_a and sts\_inppdgr\_a)



**Figure 7.9:** Average annual growth rate for the industrial index of production, EU-27, 2003-2008 (!)  
(%)



(!) Working day adjusted.

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



**Table 7.10:** Annual growth rates for construction (%)

	Index of production <sup>(1)</sup>					Construction costs index <sup>(2)</sup>				
	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008
<b>EU-27</b>	0.7	1.8	3.3	2.0	-3.1	6.6	4.1	4.7	4.5	3.5
<b>Euro area</b>	-0.2	2.0	3.1	1.1	-4.8	4.5	3.6	4.8	4.2	3.5
Belgium	-1.9	-3.4	3.3	2.3	-1.2	:	:	4.1	3.1	:
Bulgaria	34.8	32.2	23.9	27.8	-3.5	:	:	:	:	:
Czech Republic	8.4	5.3	6.3	7.1	-0.5	8.3	3.8	2.1	4.8	3.5
Denmark	-0.2	3.0	10.0	3.6	1.7	1.5	2.7	4.7	6.6	3.0
Germany	-5.3	-5.3	6.4	2.9	-0.8	2.4	0.8	1.5	3.3	2.4
Estonia	12.5	24.5	27.1	16.5	-15.4	5.3	6.2	10.5	12.7	3.5
Ireland	25.3	13.4	-1.7	-14.2	-30.1	12.8	8.7	9.6	1.7	:
Greece	-15.9	-38.7	3.8	15.2	2.7	3.1	3.4	4.2	4.6	5.1
Spain	2.3	10.1	2.2	-4.3	-16.3	4.7	4.6	6.9	5.0	4.7
France	-0.8	2.5	1.8	1.1	-0.6	5.8	2.3	5.3	4.6	5.5
Italy	1.6	1.3	3.9	6.4	-0.4	4.2	4.0	3.1	3.9	3.7
Cyprus	4.5	2.8	4.0	6.3	2.3	7.3	4.5	5.1	5.0	8.0
Latvia	14.1	15.3	13.2	13.8	-3.0	:	:	:	33.7	15.6
Lithuania	6.8	9.9	21.7	22.2	4.0	7.0	8.3	10.7	16.1	9.5
Luxembourg	-1.1	-0.9	2.5	2.6	-1.9	2.8	3.0	2.8	2.9	:
Hungary	4.3	15.7	-0.7	-14.0	-5.2	5.9	3.2	6.2	7.2	7.5
Malta	1.1	4.3	8.3	1.8	2.4	:	:	:	:	:
Netherlands	-2.5	3.4	2.6	5.8	5.6	2.1	1.8	3.2	4.0	4.3
Austria	5.0	4.9	5.9	3.9	-1.1	5.1	2.1	4.6	4.5	5.2
Poland	-1.1	9.4	15.9	16.2	9.6	2.6	2.8	1.4	6.6	:
Portugal	-4.4	-4.5	-6.6	-3.8	-1.4	:	:	:	:	:
Romania	1.8	6.1	15.6	33.0	27.0	25.1	14.3	11.1	10.2	16.2
Slovenia	0.7	2.0	15.7	18.5	15.5	10.4	6.1	3.4	5.1	5.1
Slovakia	6.0	14.1	15.7	5.4	11.5	6.9	4.8	4.0	4.4	:
Finland	4.1	5.3	7.5	10.2	4.1	2.4	3.4	3.8	5.9	3.9
Sweden	-1.0	2.7	8.8	7.6	6.0	3.9	3.9	5.0	6.1	4.8
United Kingdom	3.5	-0.5	1.4	2.3	-1.3	12.0	5.0	4.6	3.9	:
Croatia	1.9	-0.7	9.4	2.4	:	:	:	:	:	:
Turkey	:	:	:	:	:	14.6	9.9	16.0	8.3	13.6
Norway	7.3	8.9	6.1	5.7	2.5	3.0	3.4	3.7	7.4	5.7

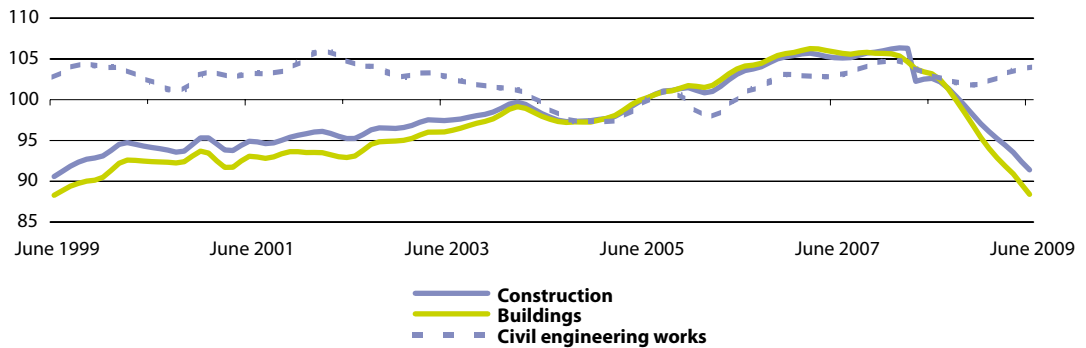
(1) Working day adjusted.

(2) Gross series for new residential buildings.

Source: Eurostat (sts\_copr\_a and sts\_copi\_a)



**Figure 7.10:** Index of production, construction, EU-27 <sup>(1)</sup>  
(2005=100)



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

Source: Eurostat (sts\_copr\_m)

## 7.3 Services

### Introduction

The contribution of services to the European economy grows almost every year, and it is important that official statistics are able to provide information on this growing area. The knowledge-based economy and the demand for intangibles, either for consumption or investment purposes, as well as international outsourcing, has led to a major restructuring of many European economies, with a shift away from industrial activities towards services activities. This weightlessness that is inherent to many sectors of the economy provides new opportunities and with it competition both nationally and internationally. Traditionally, business statistics were concentrated on industrial

and construction activities, and to a lesser extent distributive trades and services. Since the early 1990s major developments in official statistics within the EU have seen data collection efforts focus more on services.

The internal market is one of the EU's most important and continuing priorities. The central principles governing the internal market for services are set out in the EC Treaty, which guarantees EU companies the freedom to establish themselves in other Member States, and the freedom to provide services on the territory of another Member State other than the one in which they are established. The objective of the Services Directive <sup>(2)</sup> is to eliminate obstacles to trade in services,

<sup>(2)</sup> Directive 2006/123/EC of the European Parliament and of the Council of 12 December 2006 on services in the internal market.





thus allowing the development of cross-border operations. It is intended to improve competitiveness, not just of service enterprises, but also of European industry as a whole. The Directive was adopted by the European Parliament and the Council in December 2006, with transposition by the Member States foreseen for the end of 2009. It is hoped that the Directive will help achieve potential economic growth and job creation, and it is for this reason that the Directive is seen as a central element of the renewed Lisbon Strategy for growth and jobs. Moreover, by providing for administrative simplification, it also supports the better regulation agenda.

### Definitions and data availability

For background information relating to structural business statistics (SBS), refer to the section titled ‘definitions and data availability’ in Subchapter 7.1 (business structures), which includes definitions of value added and persons employed, while definitions of wage adjusted labour productivity and gross operating rate are presented in Subchapter 7.2 (industry and construction). Equally, a great deal of background information relating to short-term business statistics (STS) is provided in the section titled ‘definitions and data availability’ in Subchapter 7.2. Once again, it should be borne in mind that SBS data continue to be based on the NACE Rev. 1.1 classification of activities in this publication (the first reference year for which SBS data are due to be provided in NACE Rev. 2 is 2008), whereas the STS data are already based on the NACE Rev. 2 classification (including revised historical data).

The term ‘**non-financial services**’ is generally used within business statistics to refer to economic activities covered by Sections G to I and K of NACE Rev. 1.1 and the units that carry out those activities.

Retailing covers the resale without transformation of new and used goods to the general public for personal or household use and consumption. Retail trade has a particular importance because of its role as an interface between producers and final customers, allowing retail sales turnover and volume of sales indices to be used as a short-term indicator for final domestic demand by households.

**Retail trade turnover indices** are business cycle indicators which show the monthly activity of the retail sector in value and volume terms. The volume measure of the retail trade turnover index is more commonly referred to as the **index of the volume of (retail) sales**. Retail trade turnover indices are short-term indicators for final domestic demand. In order to eliminate the price effect on turnover in retail trade a deflator of sales is used. The deflator of sales is an index with a similar methodology to that of an output price index adapted to the particularities of retail trade but reflecting price changes in the goods retailed rather than the retail service provided. These indices may be split between food and non-food products. Food products are sold, either in non-specialised stores (hypermarkets, supermarkets) or in specialised stores (for example fruit and vegetable grocers). A greater proportion of sales in specialised stores is a sign of a more traditional pattern of retail trade.



The index of turnover for other services shows the evolution of sales in value terms. Note that prices for some services have actually been falling, perhaps due to market liberalisation and increased competition (for example, telecommunications and other technology-related activities). In such cases, the rapid growth rates observed for turnover value indices for some activities would be even greater in volume terms.

### Main findings

Business services play a particularly important role in the services economy. Many of the activities covered by this sector of the economy (computer services, research and development, and other business activities such as legal, accounting, market research, advertising, industrial cleaning and security services) have grown, a likely result of the outsourcing phenomenon.

Within non-financial services, other business activities (as defined by NACE Rev. 1.1 Division 74) contributed more than one fifth (22.7 %) of the value added generated in the EU-27 in 2006. In comparison, wholesale trade (16.5 %) and retail trade and repair (13.3 %) contributed smaller shares. In terms of employment, however, retail trade activities were of a similar size to other business activities (22.1 % and 24.6 % respectively of the EU-27 workforce in the non-financial services in 2006), which in part reflects the high

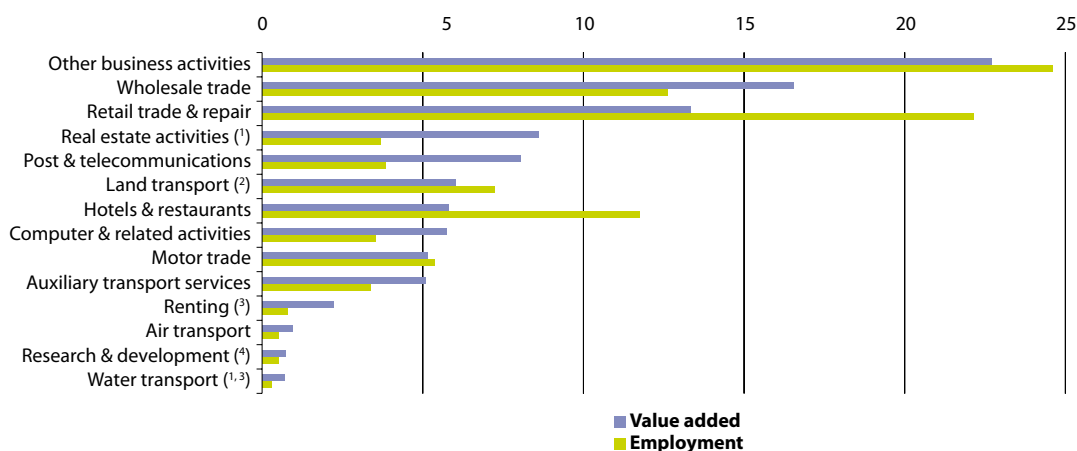
incidence of part-time employment in retail trade and repair activities.

The structure of EU-27 non-financial services activities varied considerably, in part reflecting differences in start-up costs and differences in market reach. Small and medium-sized enterprises (SMEs) in real estate activities generated the overwhelming majority (88.1 %) of value added in 2006 whereas they contributed a little less than one tenth (8.3 %) of the value added of post and telecommunications enterprises and a little less than one fifth (18.8 %) of the value added of air transport.

Among service activities (at the NACE Rev. 2 division level), the fastest rate of turnover growth in the five-year period between 2003 and 2008 was for employment activities (an average 9.4 % per annum), followed by legal, accounting and management consultancy activities (an average 9.0 % per annum). By contrast, growth was slowest for cinema, video and TV production activities (an average 1.3 % per annum). It should be noted, however, that the relatively steady growth in turnover came to an abrupt end in mid-2008, albeit to a less dramatic degree than the downturn for industry. In terms of the volume of sales, there was relative stability for retail trade as a whole in the year through to July 2009, with continued growth recorded for the retailing of textiles, clothing, footwear and leather in specialised stores.



**Figure 7.11:** Breakdown of non-financial services value added and employment, EU-27, 2006  
(% of non-financial services value added and employment)



(¹) Value added, estimate.

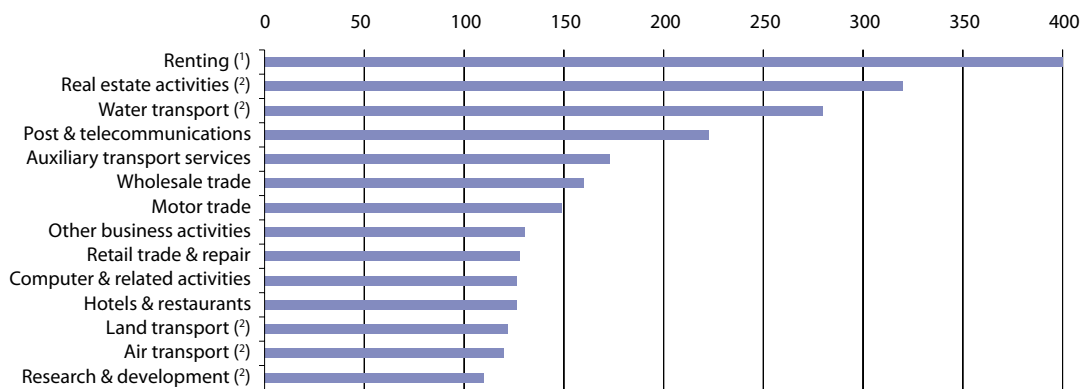
(²) Estimate, 2005.

(³) Number of persons employed, 2005.

(⁴) Value added, estimate, 2005.

Source: Eurostat (ebd\_all)

**Figure 7.12:** Wage adjusted labour productivity within non-financial services, EU-27, 2006  
(%)



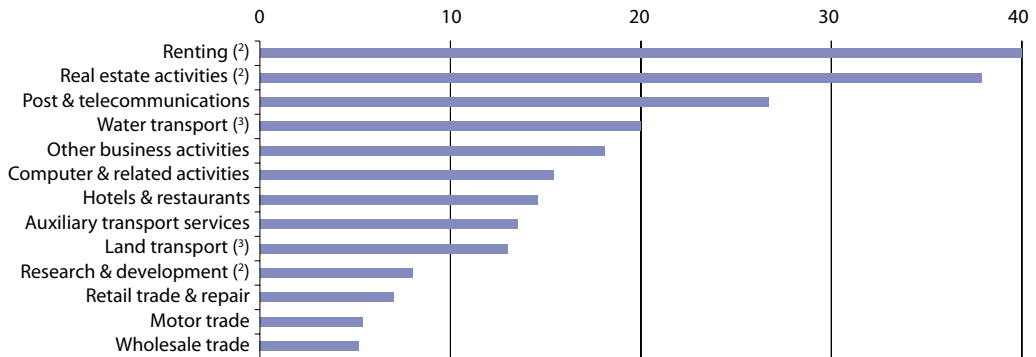
(¹) 2005.

(²) Estimate, 2005.

Source: Eurostat (ebd\_all)



**Figure 7.13:** Gross operating rate within non-financial services, EU-27, 2006 <sup>(1)</sup>  
(%)



<sup>(1)</sup> Air transport, confidential.

<sup>(2)</sup> Estimate, 2005.

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

Source: Eurostat ([ebd\\_all](#))

**Figure 7.14:** Non-financial services value added by enterprise size-class, EU-27, 2006 <sup>(1)</sup>  
(% of sectoral total)

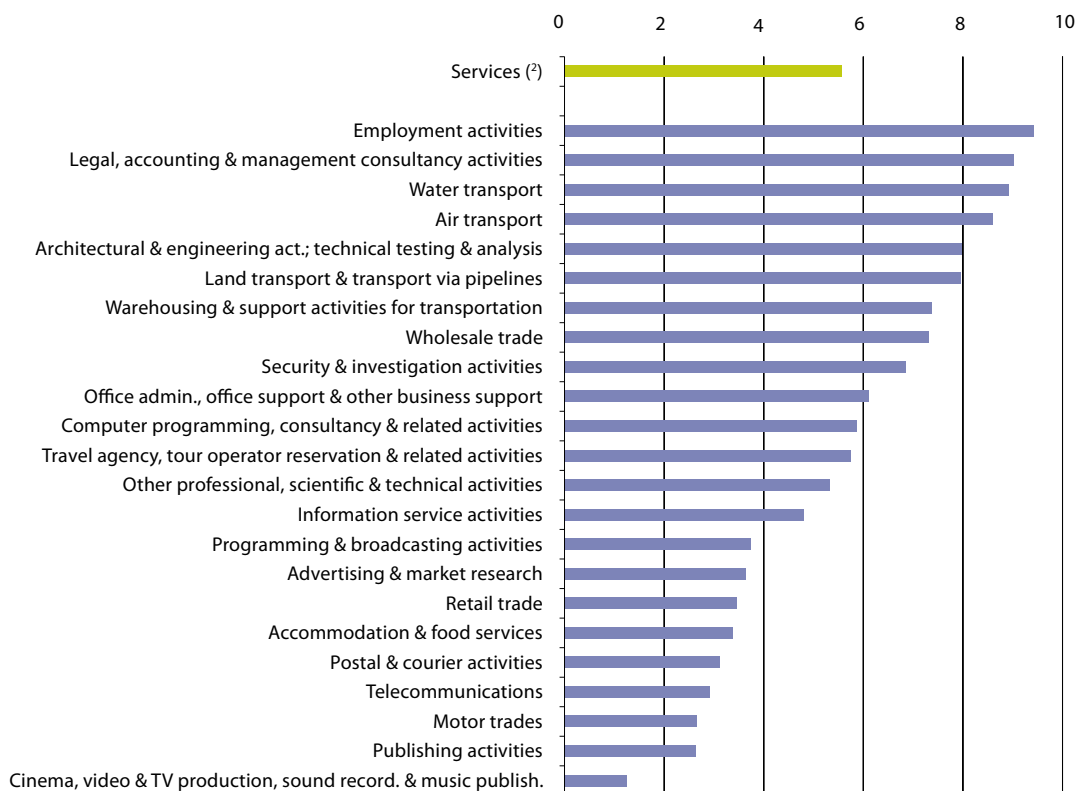


<sup>(1)</sup> Includes rounded estimates based on non-confidential data.

Source: Eurostat ([tin00053](#))



**Figure 7.15:** Average annual growth rate of turnover, selected services, EU-27, 2003-2008 <sup>(1)</sup>  
(%)



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

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

Source: Eurostat ([sts\\_setu\\_a](#) and [sts\\_trtu\\_a](#))

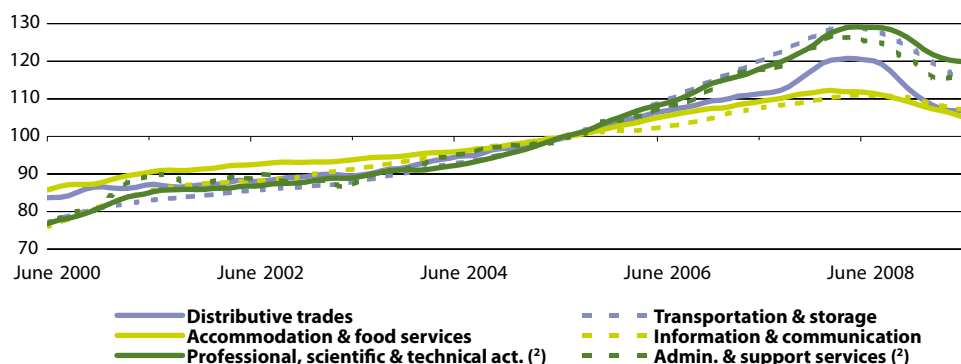
**Table 7.11:** Annual growth rates for the index of turnover, selected services <sup>(1)</sup> (%)

	Distributive trades		Transport. & storage		Accomm. & food services		Info. & comm.		Profes., scient. & technical activities <sup>(2)</sup>		Admin. & support serv. <sup>(2)</sup>	
	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008
<b>EU-27</b>	5.3	5.1	10.2	5.7	3.9	1.4	5.0	2.8	8.7	7.8	10.3	4.6
<b>Euro area</b>	4.2	2.9	7.0	3.5	4.0	0.3	3.4	1.6	6.9	7.0	8.3	6.1
Belgium	6.9	3.2	9.7	7.9	5.3	4.1	:	:	7.6	40.8	11.3	7.3
Bulgaria	16.3	13.8	18.6	18.3	21.8	16.4	21.9	0.8	51.6	11.2	42.5	5.8
Czech Republic	9.1	3.0	12.0	1.7	6.4	-2.9	9.5	6.0	11.3	8.6	19.3	1.1
Denmark	4.0	0.0	7.7	8.9	9.6	3.3	13.9	-1.5	10.1	6.3	-8.1	9.0
Germany	0.2	4.3	8.1	3.9	-0.8	-0.2	0.5	0.9	7.5	8.6	12.7	12.5
Estonia	25.9	-4.8	11.4	-6.2	18.1	1.6	18.7	10.6	31.6	8.0	37.5	-0.4
Ireland	7.4	-4.9	3.1	-2.4	5.0	-5.2	:	:	8.3	-0.9	:	:
Greece	8.9	6.3	8.8	5.3	6.4	3.2	-2.6	0.1	9.3	6.6	16.1	6.0
Spain	5.4	-4.5	5.9	-0.8	4.7	-2.3	6.4	1.1	9.0	-4.3	6.1	-0.2
France	4.8	3.7	5.4	4.2	4.5	1.0	5.8	4.7	4.8	4.7	3.6	2.8
Italy	3.3	1.1	:	:	:	:	1.5	-1.8	:	:	:	:
Cyprus	12.0	10.9	5.9	4.5	12.6	3.5	12.0	11.4	14.0	9.4	6.2	-1.4
Latvia	25.7	-4.8	17.5	24.9	21.9	-0.4	15.0	5.0	19.9	8.8	38.9	10.0
Lithuania	21.8	12.6	31.3	8.1	10.5	15.2	14.8	11.2	30.4	20.7	28.5	19.6
Luxembourg	:	:	:	:	3.4	2.2	:	:	:	:	:	:
Hungary	1.3	0.8	-8.8	21.1	5.5	4.2	1.4	3.3	2.1	34.8	6.2	24.1
Malta	17.0	-1.0	2.7	6.1	6.4	5.2	:	:	1.6	12.2	:	:
Netherlands	7.6	7.0	:	:	5.6	0.2	7.1	1.6	6.8	6.3	12.3	6.8
Austria	3.6	4.1	5.2	4.3	5.2	4.4	3.3	0.1	4.5	3.9	7.5	4.6
Poland	12.6	7.7	14.3	13.4	12.5	11.7	9.1	11.7	16.5	30.3	20.5	21.9
Portugal	4.3	0.7	:	:	:	:	:	:	:	:	:	:
Romania	27.3	21.3	17.4	25.4	20.3	-0.4	19.0	21.7	31.8	27.8	15.8	19.8
Slovenia	14.2	15.7	16.5	-5.9	9.8	6.5	13.4	6.5	2.2	6.4	21.9	4.8
Slovakia	7.7	12.3	15.0	13.7	4.0	5.9	8.4	8.3	10.9	7.2	4.7	28.4
Finland	6.8	6.2	8.0	7.1	6.7	5.4	5.2	3.8	14.2	8.7	13.8	12.7
Sweden	:	:	6.5	2.6	8.6	4.6	5.2	1.3	7.9	-0.3	9.6	0.8
United Kingdom	6.9	13.3	20.3	9.1	1.6	3.3	7.9	4.8	11.0	6.6	14.3	0.5
Norway	:	:	:	:	12.2	5.8	:	:	:	:	:	:

<sup>(1)</sup> Working day adjusted.<sup>(2)</sup> As required by the STS Regulation.Source: Eurostat ([sts\\_trtu\\_a](#) and [sts\\_setu\\_a](#))



**Figure 7.16:** Index of turnover, selected service activities, EU-27 <sup>(1)</sup>  
(2005=100)



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

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

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

**Figure 7.17:** Breakdown of turnover, retail sales of food, beverages and tobacco, 2006 <sup>(1)</sup>  
(% of total turnover)



<sup>(1)</sup> Denmark, confidential; Malta, not available.

<sup>(2)</sup> 2005; non-specialised stores, estimate.

<sup>(3)</sup> 2007.

<sup>(4)</sup> 2005.

Source: Eurostat ([tin00007](#))



**Table 7.12:** Annual growth rates for the volume of sales index, retail trade (1)  
(%)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>EU-27</b>	2.8	2.4	2.4	2.2	2.0	1.7	2.6	2.3	3.2	2.5	0.3
<b>Euro area</b>	3.0	2.1	1.5	1.6	1.1	0.8	1.4	1.7	2.3	1.4	-0.8
Belgium	4.1	2.2	5.2	0.2	-0.9	-0.2	1.7	1.3	1.7	1.8	1.2
Bulgaria	:	:	:	2.9	5.9	15.5	16.7	14.6	13.0	19.0	3.1
Czech Republic	-6.5	3.2	-1.0	7.3	1.2	8.0	3.1	6.8	8.9	7.8	4.0
Denmark	2.2	1.1	0.8	4.4	3.3	3.2	4.5	8.9	4.7	-1.4	-3.4
Germany	0.7	-0.2	0.5	0.0	-2.3	-0.9	1.7	0.9	0.3	-3.0	-0.7
Estonia	:	2.3	14.2	12.9	13.0	-0.9	11.0	14.8	17.6	10.5	-4.5
Ireland	:	:	:	9.0	3.6	3.5	5.7	6.7	8.8	8.0	-2.3
Greece	2.6	1.8	8.8	4.3	4.9	4.3	4.5	3.0	9.0	2.2	1.3
Spain	6.0	3.4	2.7	3.5	6.4	3.2	2.5	1.3	2.3	2.7	-5.4
France	4.6	4.5	2.8	3.4	3.3	2.9	3.1	3.3	2.7	4.1	1.3
Italy	1.2	0.9	-0.6	-0.6	-0.6	-0.7	-2.5	-0.6	1.9	0.8	-2.3
Cyprus	:	:	:	9.2	2.6	-1.4	3.2	4.9	6.9	8.5	4.8
Latvia	:	5.9	20.1	5.5	10.7	12.7	10.0	20.0	19.9	15.3	-7.2
Lithuania	8.1	-5.1	14.3	2.8	10.1	11.2	9.3	11.7	7.2	13.7	3.8
Luxembourg	:	:	:	:	:	:	:	:	:	:	:
Hungary	:	6.0	3.4	3.8	8.5	7.7	6.0	4.3	4.9	-2.0	-1.9
Malta	:	:	:	8.0	-4.9	15.5	-5.4	-20.4	-6.4	17.6	-11.3
Netherlands	4.1	3.4	-0.9	2.9	1.2	-1.0	-0.3	1.8	4.6	2.7	-0.1
Austria	:	:	2.0	-1.9	-0.5	-0.1	0.1	1.4	1.8	0.8	-0.8
Poland	:	:	:	2.5	-1.2	4.7	4.7	1.4	12.5	11.0	4.4
Portugal	9.9	6.3	-0.7	2.7	0.5	-2.1	2.1	6.0	1.8	0.6	1.2
Romania	:	:	:	0.0	3.0	8.4	14.7	16.2	19.6	20.4	20.4
Slovenia	:	-15.0	30.5	10.1	2.9	3.4	3.8	8.0	2.6	6.1	12.1
Slovakia	4.6	16.7	-3.0	7.6	8.3	-2.4	8.2	10.2	8.2	5.5	9.0
Finland	7.7	5.7	5.3	5.6	3.6	4.8	5.0	4.8	4.6	5.2	1.2
Sweden	2.8	3.7	5.7	2.7	3.8	3.9	3.9	5.8	6.2	0.9	0.8
United Kingdom	:	3.5	5.9	4.4	5.9	3.3	5.7	2.5	3.3	4.3	2.4
Croatia	:	:	:	12.4	11.6	10.7	7.3	3.1	4.3	2.8	-0.4
Norway	:	:	:	1.8	5.2	2.6	3.2	3.4	5.6	6.6	1.5

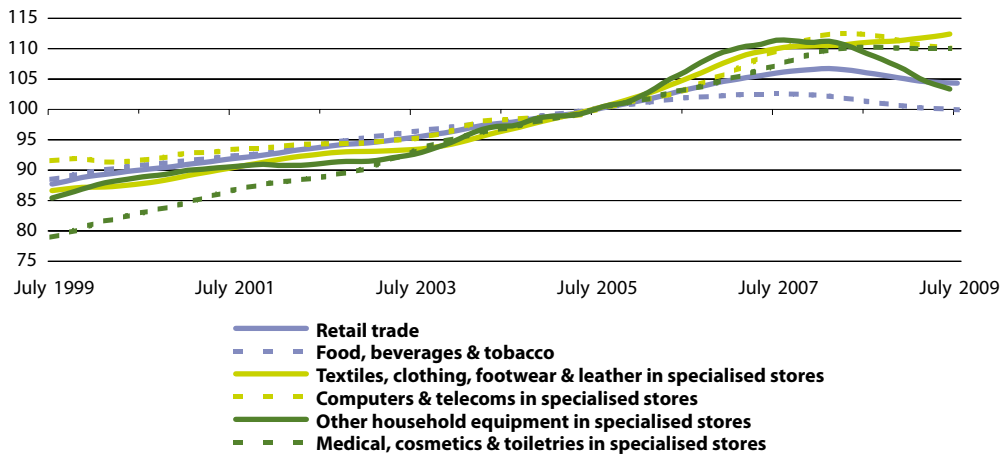
(1) Working day adjusted.

Source: Eurostat (sts\_trtu\_a)





**Figure 7.18:** Volume of sales index, selected retail trade activities, EU-27 (°)  
(2005=100)



(°) Trend-cycle.

Source: Eurostat (sts\_trtu\_m)

## 7.4 Tourism

### Introduction

Europe is a major tourist destination with six of the EU Member States among the world's top ten destinations for holiday-makers. As a result, tourism plays an important role in terms of its economic and employment potential, while presenting social and environmental implications; these twin characteristics drive the demand for reliable and harmonised statistics within this field.

Tourism plays an important role in terms of its economic and employment potential; infrastructure created for tourism purposes contributes to local development, while jobs that are created (often

with an emphasis on opportunities for young people) or maintained can help counteract industrial or rural decline.

However, tourism also has social and environmental implications that put into question whether tourism is developing in a sustainable way; as well as concerns about global pollution from mass tourism transport, there are localised concerns about the allocation of sometimes scarce resources, the environmental impact of tourist infrastructure, the pressure of tourism on the quality of living of local communities and the maintenance of their cultural and historical heritage. The twin characteristics of economic potential and environmental concern drive

the demand for reliable and harmonised statistics within this field. 'Sustainable tourism' involves the preservation and enhancement of cultural and natural heritage, ranging from the arts, to local gastronomy, or the preservation of biodiversity.

A new policy approach for tourism is in the process of being developed. The European Commission adopted in 2006 a Communication titled 'a renewed EU tourism policy: towards a stronger partnership for European tourism'. The document addressed a range of challenges that will shape tourism in the coming years, including:

- Europe's ageing population;
- growing external competition;
- consumer demand for more specialised tourism;
- the need to develop more sustainable and environmentally-friendly tourism practices.

The document argues that a more competitive tourism industry and sustainable destinations would contribute further to the success of the renewed Lisbon Strategy, tourist satisfaction, and securing the position of Europe as the world's leading tourist destination.

This was followed by a communication from the European Commission in October 2007 – 'Agenda for a sustainable and competitive European tourism' – which outlined the future steps for promoting the sustainability of European tourism and further contributes to the implementation of the renewed Lisbon Strategy for growth and jobs and of the renewed Sustainable Development Strategy, through addressing stakeholders playing a role in

European tourism. The sustainable management of destinations, the integration of sustainability concerns by businesses, and sustainability awareness of tourists form the framework of the actions proposed.

### Definitions and data availability

Eurostat publishes tourism statistics relating to capacity and occupancy of tourism accommodation establishment and tourism demand by European residents, collected and compiled by the national statistical authorities.

Statistics in this field are not only used to monitor tourism-specific policies, but also play a role in the wider context of regional policy and sustainable development. A system of tourism statistics has been laid down in Council Directive 95/57/EC of 23 November 1995 on the collection of statistical information in the field of tourism. This legal basis requires EU Member States' national governments to provide a regular set of comparable tourism statistics. A Commission Decision of December 1998 (1999/35/EC) implemented some aspects of this Directive; amendments in 2004 and 2006 concerned the enlargement of the EU and recent changes in the world market for tourism.

The system consists of two main components: on the one hand, statistics relating to capacity and occupancy in collective tourist accommodation and, on the other hand, statistics relating to tourism demand. In most Member States, the former are collected via surveys filled in by accommodation establishments, while the latter are mainly collected via traveller surveys at border crossings or via traditional household surveys.



Statistics on the **capacity of collective tourist accommodation** include the number of establishments, the number of bedrooms and the number of bed places. These statistics are available by establishment type or by region, and are compiled annually.

Statistics on the **occupancy of collective tourist accommodation** refer to the number of arrivals (at accommodation establishments) and the number of nights spent by residents and non-residents, separated into establishment type or region. Annual and monthly statistical series are available. In addition, statistics on the use of bed places (occupancy rates) are compiled.

Statistics on **tourism demand** refer to tourist participation, in other words, the number of people in the population who make at least one trip of at least four overnight stays during the reference period (quarter or year). They also look at the number of tourism trips made (and the number of nights spent on those trips), separated into tourism-related variables, such as:

- destination country;
- departure month;
- length of stay;
- type of trip organisation;
- transport mode;
- accommodation type;
- expenditure.

The statistical data is also separated into socio-demographic explanatory variables, such as age and gender.

Besides pure tourism statistics, data from other sources may be used to further explore the statistical picture of EU

tourism. In the tourism accommodation sector, these additional statistics include employment data (from the labour force survey (LFS)) or information from the balance of payments (BoP):

- working time (either full- or part-time);
- working status;
- age;
- level of education;
- sex;
- permanency and seniority of work with the same employer;
- tourism receipts and expenditure.

Furthermore, transport statistics (for example, air passenger transport) and structural business statistics (SBS) can give additional indications, respectively, on tourism flows, and on the economic performance of certain tourism-related sectors.

‘**Tourism**’ refers to the activity of visitors taking a trip to a main destination outside their usual environment, for less than a year. It can be for any main purpose, including business, leisure or other personal reasons other than to be employed by a resident person, household or enterprise in the place visited. The statistics presented here are limited to at least an overnight stay; the possibility of including statistics relating to same-day visits is being examined.

A **tourist** is any visitor who stays at least one night in collective or private accommodation. A **night spent** is defined as each night that a guest is registered to stay in a hotel or similar establishment (his/her physical presence there is not necessary). A breakdown of nights spent is provided for **residents and non-residents**,



the former are identified as having lived for most of the past year in a country/place, or having lived in that country/place for a shorter period and intending to return within a year to live there; note that a significant proportion of tourism, using the definitions above, is accounted for by business customers.

**Tourism intensity** and international tourism receipts relative to GDP both give an indication of the importance of the size of tourism. Tourism intensity shows the number of nights spent by tourists relative to the population of the host country.

On the supply side, tourism relies on enterprises from a variety of sectors, which can be summarised as the provision of accommodation, food and drink, transport facilities and services, and entertainment. The term **tourist accommodation** refers to all types of collective accommodation – thus, excluding privately rented tourist accommodation. This may be broken down to cover **hotels and similar establishments** which include the provision of lodging in hotels, motels, inns and similar establishments combined with typical hotel services like bed-making and cleaning of the room and sanitary facilities, and **other collective accommodation establishments** which consist of holiday dwellings, tourist campsites and other short-stay accommodation, like youth hostels, tourist dormitories and holiday homes. The **number of bed places** in an establishment or dwelling is determined by the number of persons who can stay overnight in beds set-up in the establishments, ignoring any extra beds that may be set-up by customer request. The term 'bed place' applies to a single bed. A double bed is counted as two bed places.

**Travel services** carried out by enterprises that are engaged in arranging transport, accommodation and catering on behalf of travellers, are classified within NACE Rev. 1.1 Group 63.3, which encompasses the following activities: furnishing travel information, advice and planning; arranging custom-made tours, accommodation and transportation for travellers and tourists; furnishing tickets; selling package tours; tour operating; and organising tourist guides.

### Main findings

In 2007, EU residents made nearly a thousand million holiday trips. They made 76 % of these trips to a destination within their own country of residence, while the remaining 24 % of trips were abroad. Slightly more than half of all trips (55 %) were short trips of one to three nights.

Large differences could be observed across the EU, as some countries reported over half of all holidays were spent abroad; this was the case for Belgium, Denmark, Ireland, Luxembourg, the Netherlands and Slovenia. However, 10 % or less of the residents in Greece, Spain, France and Portugal went abroad for their holiday trips; this pattern appeared to be influenced by both the Member State's size and its geographical location.

From the supply perspective, there were 202 353 hotels and similar establishments active in 2007 within the EU. In addition, there were 220 497 other collective tourist accommodation establishments (such as campsites and holiday dwellings, etc.). These hotels and similar establishments provided over 11.7 million bed places, of which nearly half (47 %) were in the top



three countries: Italy (2.1 million bed places), Germany and Spain (both 1.7 million bed places). In 2007, non-resident (foreign) tourists spent almost 730 million nights in hotels and similar establishments in the EU-27.

In 2008, the biggest group of outbound tourists among the EU population was recorded for Germany. During that year, Germans spent more than 625 million nights in collective accommodation establishments outside of Germany, closely followed by residents from the United Kingdom (546 million nights abroad in 2007). These two Member States alone accounted for more than half of the total number of nights spent by EU residents outside their respective countries. The top 10 countries made-up slightly more than 90 % of the 2 000 million nights that Europeans spent in tourist accommodation establishments outside the Member State where they had their usual place of residence in 2008. When taking into account the country's size in terms of population, Luxembourg was the Member State where the highest proportion of residents (16 years of age or more) went abroad, followed by Cyprus and Sweden. At the other end of the spectrum, during 2008, only 1.6 % of Bulgarians spent at least four holiday nights abroad.

In 2008, Spain was the most popular tourism destination for non-residents, with 225 million nights spent in collective accommodation. This country alone accounted for more than 23 % of the total nights spent by non-residents in the EU. The top three most popular countries were Spain (224 million nights), Italy

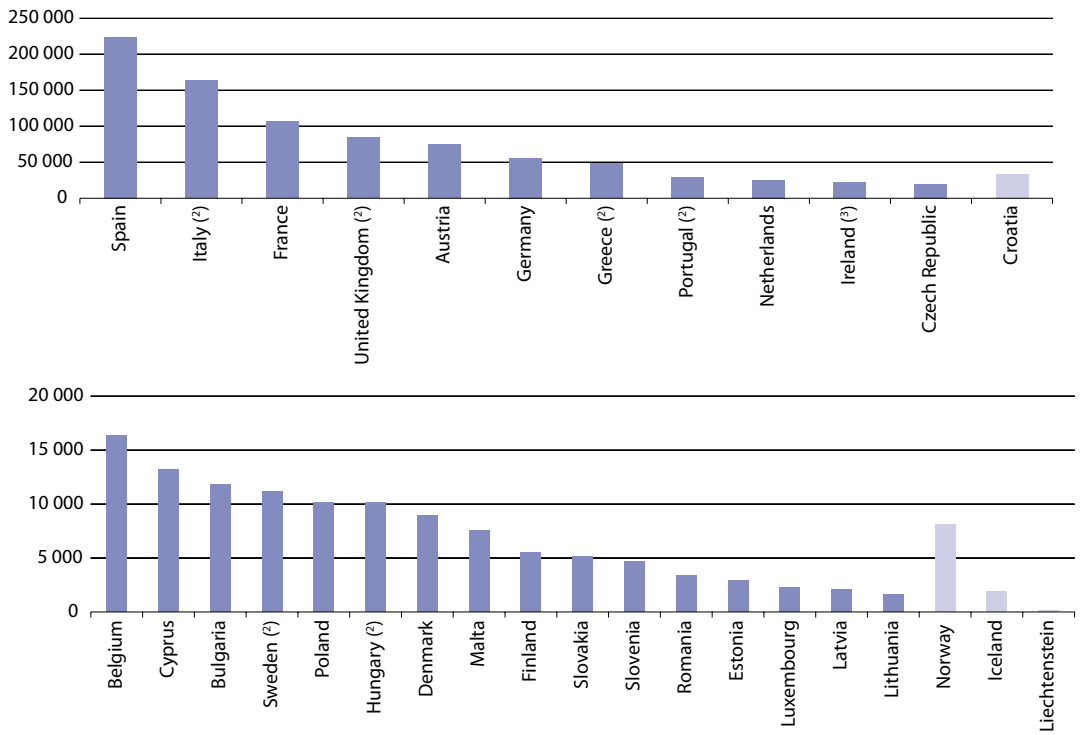
(163 million nights in 2007) and France (107 million nights). Together these three countries accounted for 51 % of the nights spent by EU residents in collective accommodation establishments outside their own country. The least popular destinations were Luxembourg and the three Baltic Member States of Lithuania, Latvia and Estonia – in each case, the effect of the size of these countries should be considered.

Putting the number of nights spent in perspective by comparing them to the population of the Member State, tourism intensity can be ascertained. In 2008, this indicator revealed the Mediterranean island destinations of Malta and Cyprus, as well as the alpine/city destination of Austria, as the most popular destinations.

The economic importance of tourism can be measured by looking at the ratio of international tourism receipts relative to gross domestic product (GDP). In 2007, this was highest in Cyprus (11.55 %), confirming the importance of tourism to this island nation. In absolute terms, the highest international tourism receipts from personal travel were recorded in France (EUR 34 995 million), Italy (EUR 24 280 million) and the United Kingdom (EUR 20 301 million). The biggest spenders in terms of international tourism were the British with expenditure totalling over EUR 44 878 million. In 2007, when taking into account the size of each economy, Cypriot and Luxembourgish residents spent the highest amount per capita on personal travel (more than 6.5 % of GDP), well ahead of the third-placed country, Ireland (3.32 %).



**Figure 7.19:** Tourism destinations, 2008 <sup>(1)</sup>  
(1 000 nights spent in the country by non-residents)



<sup>(1)</sup> Note the differences in the scales employed between the two parts of the figure.

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

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

Source: Eurostat ([tour\\_occ\\_ni](#))



Table 7.13: Tourism indicators

	Hotels & similar establishments (units)		Other collective accommodation establishments (units)		Bed places in hotels & similar establishments (1 000)		Nights spent in hotels & similar establishments (1 000) (1)		Ratio of population (aged 15+) taking part in tourism	
	2003 (2)	2008 (3)	2003 (2)	2008 (3)	2003 (2)	2008 (3)	2003 (2)	2008 (4)	2003	2008 (5)
<b>EU-27</b>	204 457	202 353	193 275	220 497	10 895	11 715	626 802	729 871	:	:
<b>Euro area</b>	143 062	142 277	139 446	163 787	8 309	8 871	498 328	574 260	:	:
Belgium	1 957	2 009	1 561	1 527	122	125	10 281	11 120	0.45	0.47
Bulgaria	849	1 646	210	482	144	240	8 987	11 641	:	0.07
Czech Republic	4 377	4 483	3 549	3 222	227	258	13 688	17 741	0.50	0.54
Denmark	478	470	623	588	68	73	4 512	4 552	0.64	0.62
Germany	37 547	35 891	17 572	18 068	1 611	1 677	33 301	45 218	0.66	0.63
Estonia	230	368	313	680	18	30	2 086	2 727	0.23	0.34
Ireland	4 821	3 947	4 150	5 483	146	169	17 748	:	:	:
Greece	8 689	9 385	333	321	645	716	39 760	47 410	0.43	0.42
Spain	17 102	18 026	14 447	20 976	1 452	1 685	136 865	155 379	0.50	0.43
France	18 617	17 970	10 489	10 697	1 236	1 256	69 323	71 725	0.59	0.67
Italy	33 480	34 058	79 864	96 991	1 969	2 143	93 935	113 017	0.50	:
Cyprus	829	708	122	161	91	86	13 424	13 151	0.75	0.89
Latvia	261	387	65	104	15	24	963	1 913	:	0.20
Lithuania	270	365	218	177	14	22	766	1 544	:	0.36
Luxembourg	307	267	277	236	15	14	1 144	1 297	0.66	0.77
Hungary	2 261	2 001	1 256	923	159	155	8 046	8 635	:	0.51
Malta	194	155	4	7	40	39	7 301	7 416	:	:
Netherlands	2 908	3 196	3 795	4 072	180	200	13 798	14 962	0.69	0.69
Austria	14 708	13 756	6 206	6 682	566	580	55 200	60 462	0.53	0.61
Poland	1 547	2 642	5 569	4 215	134	211	5 450	7 939	0.35	0.36
Portugal	1 934	2 031	280	308	246	265	23 215	26 769	0.28	0.19
Romania	2 989	4 362	580	522	202	238	2 688	3 251	:	0.29
Slovenia	381	410	422	440	29	34	3 166	3 659	0.57	0.60
Slovakia	838	1 313	1 246	1 454	55	70	3 560	3 978	:	0.52
Finland	992	901	472	448	120	121	3 758	4 768	0.56	0.58
Sweden	1 765	1 893	2 048	2 083	185	207	4 833	5 842	:	:
United Kingdom	44 126	39 860	37 604	41 988	1 204	1 245	49 003	64 253	0.64	0.58
Croatia	832	835	509	1 150	194	164	16 830	17 605	:	0.35
FYR of Macedonia	150	:	175	:	16	:	249	:	:	:
Turkey	9 877	:	:	:	820	:	51 118	74 192	:	:
Iceland	283	301	384	280	15	19	1 070	1 517	:	:
Liechtenstein	46	45	101	103	1	1	105	131	:	:
Norway	1 099	1 108	1 120	1 179	144	157	4 375	4 871	0.72	0.72
Switzerland	5 643	5 582	94 100	:	259	270	17 768	21 478	:	:

(1) Nights spent by non-residents.

(2) Former Yugoslav Republic of Macedonia and Switzerland, 2002.

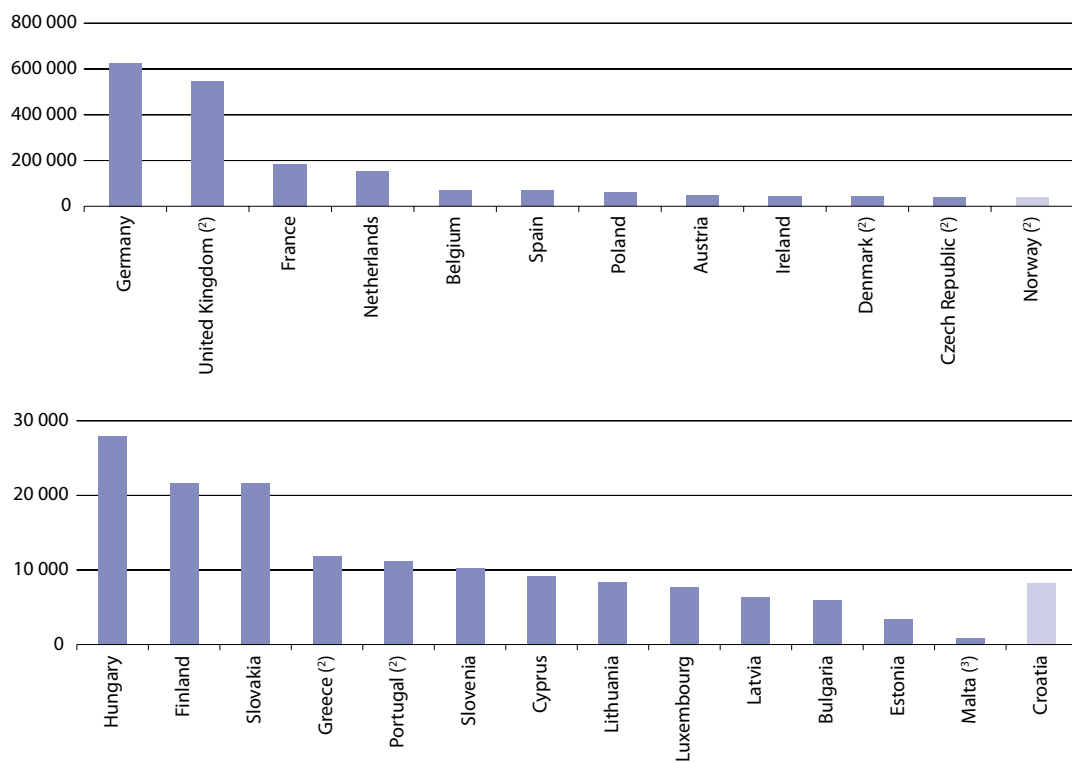
(3) EU-27, euro area, Italy, the Netherlands, Portugal, Sweden and the United Kingdom, 2007.

(4) EU-27, euro area, Greece, Italy, Hungary, Portugal, Sweden, the United Kingdom and Turkey, 2007.

(5) The Czech Republic, Denmark, Greece, Portugal, the United Kingdom and Norway, 2007.

Source: Eurostat (tin00039, tin00040, tin00041, tin00043, tin00045, tps00001 and tps00010)

**Figure 7.20:** Country of origin for outbound holidays, 2008 <sup>(1)</sup>  
(1 000 nights spent abroad)



<sup>(1)</sup> Note the differences in the scales employed between the two parts of the figure; Italy, Romania and Sweden, not available.

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

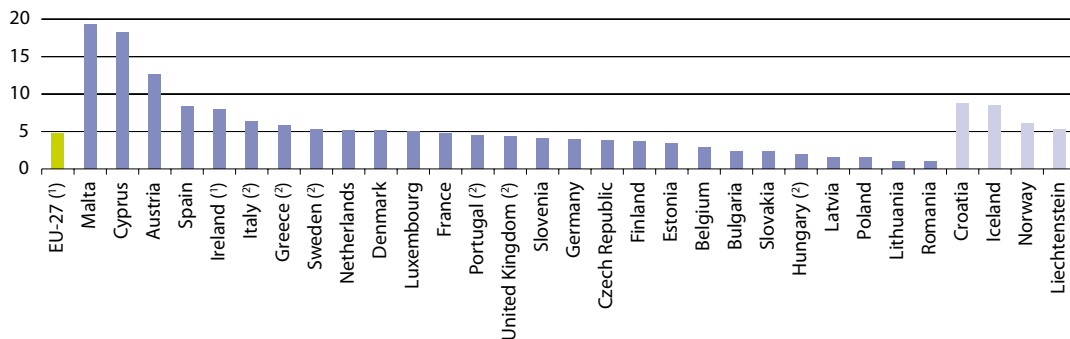
<sup>(3)</sup> Estimate, 2007.

Source: Eurostat ([tour\\_dem\\_tnw](#))



**Figure 7.21:** Tourism intensity, 2008

(ratio of nights spent by residents and non-residents in hotels and similar establishments and other collective accommodation establishments per inhabitant)



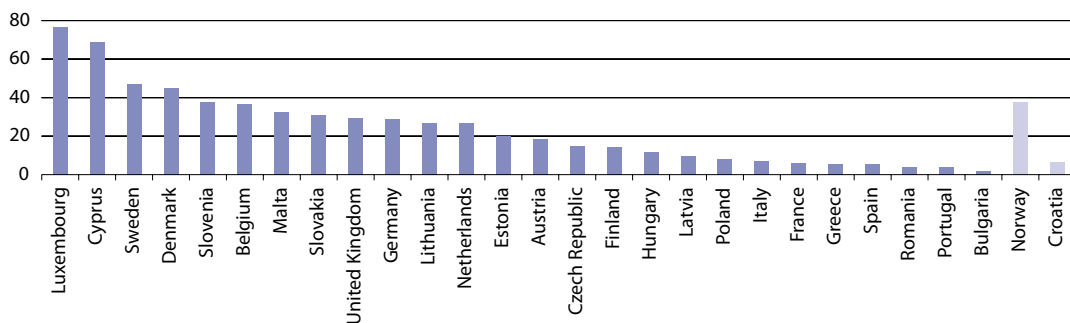
(1) 2006.

(2) 2007.

Source: Eurostat ([tour\\_occ\\_ni](#) and [tps00001](#))

**Figure 7.22:** Proportion of the population aged 15+ going on holiday abroad for at least four nights, 2008 (1)

(%)



(1) Bulgaria, the Czech Republic and Malta, estimates; Denmark, Malta and Norway, 2007; Italy and Sweden, 2006; Ireland, not available.

Source: Eurostat ([tour\\_dem\\_toage](#), [tps00001](#) and [tps00010](#))

**Table 7.14:** Holiday trips of EU residents aged 15+, 2008

	Number of trips (1 000)			Breakdown of all trips by destination and duration (%)			
	All trips	Short trips (1-3 nights)	Long trips (4+ nights)	Short domestic trips (1-3 nights)	Long domestic trips (4+ nights)	Short outbound trips (1-3 nights)	Long outbound trips (4+ nights)
Belgium	10 712	3 609	7 103	16.5	11.3	17.2	55.0
Bulgaria	6 251	3 775	2 476	57.0	32.0	3.4	7.6
Czech Republic	24 532	14 626	9 906	53.6	20.1	6.0	20.3
Denmark <sup>(1)</sup>	10 368	4 377	5 991	32.5	15.2	9.7	42.6
Germany	214 482	110 659	103 823	44.9	21.1	6.7	27.3
Estonia	1 241	813	428	49.5	7.7	17.0	25.8
Ireland	11 839	6 023	5 816	38.4	10.4	12.5	38.8
Greece	13 561	5 627	7 934	40.3	50.4	1.2	8.1
Spain	119 969	80 687	39 282	65.4	28.0	1.9	4.7
France	212 562	125 587	86 975	56.4	34.3	2.7	6.6
Italy <sup>(2)</sup>	78 055	36 920	41 134	43.3	39.8	4.0	12.9
Cyprus	1 704	813	891	42.2	11.4	5.5	40.9
Latvia	4 262	3 318	944	71.8	6.4	7.6	14.2
Lithuania	3 813	2 418	1 395	49.5	13.9	13.9	22.7
Luxembourg	1 199	444	755	0.5	0.3	36.6	62.7
Hungary	22 155	15 010	7 144	60.8	19.6	7.0	12.7
Malta	:	:	:	:	:	:	:
Netherlands <sup>(1)</sup>	29 083	10 621	18 462	25.5	22.7	11.0	40.8
Austria	15 426	6 857	8 569	30.7	20.9	13.8	34.6
Poland	36 245	19 080	17 165	49.4	35.6	3.3	11.7
Portugal <sup>(2)</sup>	10 265	6 423	3 842	60.5	29.6	2.1	7.9
Romania	10 275	:	:	:	:	:	:
Slovenia	3 733	2 149	1 584	36.7	11.4	20.9	31.0
Slovakia	6 724	2 071	4 653	24.1	33.8	6.7	35.4
Finland	30 115	23 246	6 869	69.5	15.3	7.7	7.5
Sweden <sup>(2)</sup>	38 399	25 618	12 781	58.3	19.1	8.5	14.2
United Kingdom <sup>(2)</sup>	112 695	53 375	59 320	40.8	20.1	6.5	32.5
Croatia	6 721	3 557	3 164	39.5	32.3	13.4	14.7
Norway	16 800	9 650	7 150	44.9	19.9	12.6	22.6

<sup>(1)</sup> 2007.<sup>(2)</sup> 2006.Source: Eurostat ([tour\\_dem\\_ttmtd](#))

**Table 7.15:** Tourism receipts and expenditure from personal travel

	Receipts				Expenditure			
	(EUR million)			Relative to GDP, 2007 (%)	(EUR million)			Relative to GDP, 2007 (%)
	2005	2006	2007		2005	2006	2007	
<b>EU-27<sup>(1)</sup></b>	51 644	56 643	59 366	0.48	66 150	67 028	73 166	0.59
Belgium	6 506	6 658	6 330	1.89	10 330	10 551	10 728	3.20
Bulgaria	1 735	1 832	2 027	7.02	295	325	302	1.04
Czech Republic	2 892	3 465	3 675	2.89	1 566	1 805	2 217	1.74
Denmark	3 281	3 428	3 490	1.54	4 207	4 507	4 837	2.14
Germany	:	:	:	:	:	:	:	:
Estonia	599	629	572	3.74	213	287	308	2.02
Ireland	3 813	:	4 312	2.26	:	:	6 321	3.32
Greece	10 082	10 439	10 339	4.53	1 429	1 308	1 425	0.62
Spain	:	:	:	:	:	:	:	:
France	30 838	32 368	34 995	1.85	19 763	18 223	20 413	1.08
Italy	22 679	23 825	24 280	1.57	11 652	11 895	12 710	0.82
Cyprus	1 779	1 776	1 810	11.55	736	751	1 048	6.69
Latvia	190	270	343	1.62	345	451	564	2.67
Lithuania	594	604	579	2.04	455	510	717	2.52
Luxembourg	1 871	1 767	1 732	4.76	2 184	2 282	2 382	6.54
Hungary	2 684	2 766	2 792	2.75	1 621	1 292	1 595	1.57
Malta	:	:	:	:	:	:	:	:
Netherlands	5 639	6 149	6 564	1.15	9 847	10 256	10 519	1.85
Austria	:	:	:	:	:	:	:	:
Poland	4 008	4 618	6 160	1.98	2 555	3 545	3 109	1.00
Portugal	5 557	5 998	6 649	4.07	1 565	1 727	1 807	1.11
Romania	432	382	329	0.27	229	294	331	0.27
Slovenia	1 392	1 493	1 739	5.04	520	596	618	1.79
Slovakia	:	:	1 250	2.28	:	:	963	1.76
Finland	1 049	1 072	1 231	0.68	1 651	1 765	2 058	1.15
Sweden	:	:	:	:	5 827	6 268	6 995	2.11
United Kingdom	18 320	19 500	20 301	0.99	40 778	42 708	44 878	2.20
Croatia	5 458	5 876	6 345	14.82	337	355	450	1.05
United States	78 599	81 660	83 729	0.82	58 646	60 982	58 876	0.57

(<sup>1</sup>) Extra-EU-27 flows.

Source: Eurostat ([bop\\_its\\_det](#) and [nama\\_gdp\\_c](#))

## 7.5 Information society

### Introduction

Information and communication technologies (ICT) are considered as critical for improving the competitiveness of European industry and, more generally, to meet the demands of its society and economy. ICT affects many aspects of everyday lives, at both work and in the home. EU policies in this area range from the regulation of entire industrial sectors to the protection of an individual's privacy.

The policy framework for ICT is the i2010 initiative <sup>(6)</sup> – ‘a European information society for growth and employment’ – which seeks to boost efficiency throughout the European economy by means of wider use of ICT. The initiative is designed to promote an open and competitive digital economy, research into information and communication technologies, as well as their application to improve social inclusion, public services and quality of life. Indeed, at the heart of the policy is a desire to ensure that social and geographical differences are overcome, thus creating an inclusive digital society that provides opportunities for all. The i2010 initiative has three main priorities:

- creating a single European information space, which promotes an open and competitive internal market for information society and media services;
- stimulating the information society – to strengthen investment in innovation and research in ICT;

- exploiting the benefits of ICT – to foster inclusion, better public services and quality of life through the use of ICT.

A benchmarking framework for i2010 was approved by the EU Member States and the European Commission in 2006. It defines a comprehensive set of indicators on Internet and broadband take-up and on the use of computers and on-line services by citizens and businesses. In addition, it provides for flexible modules on a specific issue to be defined each year.

After undergoing a mid-term review, an updated i2010 Strategy was presented in April 2008, addressing key challenges for the period 2008-2010. This was followed by a European Commission Communication on future networks and the Internet <sup>(7)</sup> which outlined the social and economic potential of the Internet in the future, based on the premise of a high-speed Internet available to all, internationally open and competitive, secure and safe to use, with transparent and effective governance. These fundamental conditions of accessibility, openness, transparency and security form the basis of the European Commission's short-term agenda for the Internet of the future, as summarised by six actions:

- the construction of high-speed Internet infrastructures that are open to competition and give consumers real choices;
- promoting access for all to a good-quality Internet connection at an affordable price;

<sup>(6)</sup> For more information: [http://ec.europa.eu/information\\_society/eeurope/i2010/index\\_en.htm](http://ec.europa.eu/information_society/eeurope/i2010/index_en.htm).

<sup>(7)</sup> COM(2008) 594 final; for more information: [http://ec.europa.eu/information\\_society/eeurope/i2010/docs/future\\_internet/act\\_future\\_networks\\_internet\\_en.pdf](http://ec.europa.eu/information_society/eeurope/i2010/docs/future_internet/act_future_networks_internet_en.pdf).

- keeping the Internet open to competition, innovation and consumer choice;
- launching a debate on the design and development of the Internet of the future;
- providing clear guidelines on the implementation of existing rules on data protection and a coherent strategy for a secure Internet of the future;
- taking into account the crucial role played by international policy, regulatory dialogue and research cooperation in all these developments.

Broadband technologies are considered to be of major importance when measuring access and use of the Internet as they offer users the possibility to rapidly transfer large volumes of data and keep their access line open; the take-up of broadband is considered a key indicator within the domain of ICT policymaking. Widespread access to the Internet via broadband is seen as essential for the development of advanced services on the Internet, for example, in the field of e-business, e-government or e-learning. Broadband growth has continued in recent years and 49 % of all households in the EU-27 have broadband. Digital subscriber lines (DSL) remain the main form of delivery for broadband technology, although alternatives such as cable, satellite, fibre optics and wireless local loops are becoming much more widespread.

### Definitions and data availability

Statisticians are well aware of the challenges posed by rapid technological change in areas related to the Internet and other new means of ICT. As such, there has been a considerable degree of evolu-

tion in this area, with statistical tools being adapted to satisfy new demands for data. Statistics within this domain are re-assessed on an annual basis in order to meet user needs and reflect the rapid pace of technological change.

It is also clear that while ICTs have become available to a wider public, in terms of accessibility and cost, there remains a gap between users and non-users, often referred to as the 'digital divide'. This may be attributed to a number of factors, including: a lack of infrastructure (particularly in remote, rural areas), or a lack of computer literacy/skills necessary to take part in the information society, or a lack of awareness or interest in what the information society can offer; tracking this divide provides important policy insight.

This approach is reflected in **Eurostat's surveys on the use of information and communication technologies in households and by individuals** as well as its **surveys on the use of information and communication technologies in enterprises**. These annual surveys on ICT use in households/by individuals and in enterprises can be used to benchmark ICT-driven developments, both by following developments for core variables over time, as well as by looking in greater depth at other aspects at a point in time. While the surveys initially concentrated on access and connectivity issues, their scope has subsequently been extended to cover a variety of subjects (including, for example, e-government, e-skills) and socio-economic breakdowns, such as regional diversity, gender specificity, age, educational differences and the individual's employment situation in the household survey or a breakdown by size



(small, medium-sized, large) in the enterprise survey. The scope of the surveys with respect to different technologies is also adapted so as to cover emerging technologies and uptake of these technologies by end-users (enterprises and households).

#### *Households and individuals*

**Households** in this survey are defined in terms of those households with at least one member in the age group 16 to 74 years old. **Internet access of households** refers to the percentage of households with an Internet access, so anyone in the household could use the Internet at home, if desired, even if just 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. **Regular Internet users** are individuals who used the Internet, on average, at least once a week in the three months prior to the survey (in general, during the first quarter of 2008).

The most commonly used technologies to access the Internet are distinguished according to speed of connection between broadband and narrowband access, either fixed or mobile. **Broadband includes digital subscriber lines (DSL)** or cable TV networks and uses technology that transports data at high speeds. **Broadband lines** are defined as having a capacity equal to or higher than 144 kbit/s. A **dial-up access** using a modem can be made over a normal or an ISDN telephone line. Due to its limited bandwidth it is often referred to as narrowband. The **availability of broadband** is measured as the percentage of households that are connectable to an exchange that has been converted to

support xDSL-technology, to a cable network upgraded for Internet traffic, or to other broadband technologies.

A **computer** is defined as a personal computer powered by one of the major operating systems (Mac OS, Linux or Microsoft); handheld computers or palmtops (PDAs) are also included.

The **ordering of goods and services by individuals** includes confirmed reservations for accommodation, purchasing financial investments, participation in lotteries and betting, Internet auctions, as well as information services from the Internet that are directly paid for. Goods and services that are obtained via the Internet for free are excluded. Orders made by manually written e-mails are also excluded. The indicator shows the percentage of individuals aged 16 to 74 who have used the Internet, in the 12 months prior to the survey, for ordering goods or services. Services related to travel and accommodation include using the Internet for ascertaining information or for purchasing goods and services in relation to travel and accommodation, for example, travel tickets, hotels or any other types of accommodation or websites containing information for tourists.

On the Internet people cannot only view information, buy goods or services, or obtain content-related products (for example, downloading music, films or games over the Internet). With the availability of Web 2.0 technology, individuals can also participate in social or professional networks enabling them to generate content and share it with those who have a common interest.



### Enterprises

The survey on ICT usage in enterprises covers enterprises with 10 or more persons employed. Its activity coverage is restricted to those enterprises whose principal activity is within NACE Rev. 1.1 Sections D, F, G, I and K and Groups 55.1, 55.2, 92.1 and 92.2, in other words manufacturing, construction, distributive trades, hotels and other accommodation, transport, storage and communication, real estate, renting and business activities, motion picture, video, radio and television activities. A distinction is made according to the size of enterprises in terms of persons employed into small (10-49 persons employed), medium-sized (50-249) and large enterprises (250 or more persons employed).

**Sharing information within the enterprise** means sharing information electronically and automatically between different functions of the enterprise under any of the following aspects:

- using one single software application to support the different functions of the enterprise;
- data linking between the software applications that support the different functions of the enterprise;
- using a common database or data warehouse accessed by the software applications that support the different functions of the enterprise, or
- automated data exchange between different software systems.

The sharing of information in this survey was studied in case of receipt of a sales order with at least one of the following functions: management of inventory levels, accounting, production or services man-

agement, distribution management; in case of sending of a purchase order with at least one of the following functions: management of inventory levels or accounting.

**Sharing information outside the enterprise** means sharing information electronically on supply chain management under the following aspects:

- exchanging all types of information with suppliers and/or customers in order to coordinate the availability and delivery of products or services to the final consumer;
- including information on demand forecasts, inventories, production, distribution or product development;
- via computer networks, not only the Internet but also other connections between computers of different enterprises;
- excluding normal e-mail messages manually written.

Indicators relating to **interaction with public authorities** by enterprises use a concept of public authorities that is as wide as possible, referring to both public services and administration activities. Administration refers to obligations and rights in the country (so-called 'red tape'), public services referring to non-administrative tasks or competences of government bodies, for example offering a public library's catalogue on-line. **Obtaining information** refers to searches for information from public authority websites. **Obtaining forms** includes downloading official forms for any purpose of use (for example for information or for requesting a service). **Returning filled in forms** (for example provision of statistical information



to public authorities), includes filled in forms sent via Internet only. **Treating an administrative procedure completely electronically** includes only administrative procedures (for example registration, authorisation request) for which all steps can be treated electronically by means of the Internet without the need for additional paper work, including possible payments, signatures, etc. **Submitting a proposal in an electronic tender system** (e-procurement) includes the submission of proposals in Internet-based systems (either based on web interfaces or any other architecture).

**E-commerce** is defined as ordering or selling goods and services over computer mediated networks. On-line purchases or orders received exclude those relating to manually typed e-mail purchases or orders received. The indicator on enterprises having **received orders or made purchases on-line** covers on-line selling and EDI via Internet or via other computer networks within the year prior to the survey. Only enterprises buying/selling more than 1 % on-line are included.

Data on **information technology (IT) expenditure** covers expenditure for IT hardware, equipment, software and other services.

### Main findings

During the last decade, information and communication technologies (ICTs) have become widely available to the general public, 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 and this proportion grew still further in 2008

(60 %). The highest proportion (86 %) of households with Internet access in 2008 was recorded in the Netherlands, the lowest (25 %) in Bulgaria. Widespread and affordable broadband access is one of the means of promoting the knowledge-based and informed society. In almost all Member States, broadband was by far the most common form of Internet access (an average of 49 % of all EU-27 households in 2008 compared with 11 % of households that used dial-up access or ISDN access), the exception being Romania.

Two thirds (66 %) of individuals in the EU-27, aged between 16 and 74 years, used a computer in the three months before the 2008 ICT survey. A similar proportion (62 %) of individuals used the Internet. The proportion of individuals using a computer and the Internet in the three months before the 2008 survey rose to between 80 % and 90 % in Sweden, the Netherlands, Denmark, Finland and Luxembourg, but was in a minority in Bulgaria, Greece, Italy, Portugal, Cyprus and particularly in Romania. Almost one third (32 %) of individuals in the EU-27 used the Internet for services related to travel and accommodation in 2008, the spread among Member States being from less than 10 % of individuals in Bulgaria and Romania to between 50 % and 60 % of individuals in Finland, the Netherlands and Luxembourg.

Among Internet users, in other words, those EU-27 individuals using the Internet in the three months before the ICT survey, a large majority (86 %) accessed the Internet from home. By comparison, about one half of this proportion accessed it at work (42 %), around double the proportion accessing from a friend,



neighbour or relative's house (22 %). While 87 % of all individuals aged 16 to 74 used a mobile phone, the proportion of individuals who used a mobile phone for browsing the Internet was only 6 % in EU-27. Finland and Sweden had the highest shares (16 %) for web browsing via a mobile phone.

Of the 62 % of individuals in the EU-27 that used the Internet in the three months before the 2008 ICT survey, seven in every ten accessed the Internet on a daily or almost daily basis. Among Internet users, the proportion of those who used the Internet on a daily basis was highest in Denmark (85 %) and Italy (84 %), the latter despite a relatively low overall rate of Internet use.

Almost two fifths (38 %) of individuals across the EU-27 used the Internet to obtain or share digital content. Looking at selected activities, 28 % of individuals downloaded music or films and 9 % downloaded computer or video games. The proportion of individuals having uploaded self-created content such as text, images, photos, videos or music to any website to be shared was 11 %.

A large minority (40 %) of enterprises in the EU-27 had some form of automated data exchange with an ICT system outside their own enterprise in 2008. For example, about one quarter (27 %) of all enterprises automatically sent payment instructions to financial institutions, similar shares exchanging data with public authorities (25 %) and with customers and/or suppliers (25 %). In motion picture, video, radio and TV activities, a small majority (53 %) of enterprises carried out automated data exchanges. In contrast, only one third (32 %) of hotels,

camping and other accommodation enterprises and of construction enterprises carried out automated data exchanges with ICT systems outside their own enterprise in 2008. Sharing information automatically within the same enterprise (for different functions) or outside on the supply chain grew with enterprise size: more than two thirds (70 %) of large enterprises (those employing at least 250 persons) shared within the enterprise and one third (32 %) had automated supply chain management systems in place, which represented more than double the rates for small enterprises (10-49 persons employed).

Around two thirds (68 %) of enterprises made use of e-government services in 2008: a majority using e-government services to obtain information and to download forms (in both cases 61 %), while 50 % of enterprises returned filled in forms. The take-up of e-government services among enterprises was particularly strong (all above 90 % of enterprises) in Finland, Ireland, Denmark and Luxembourg in 2008. Romania was the only Member State to report a minority of enterprises making use of e-government services.

About six in every ten enterprises (64 %) in the EU-27 with over ten persons employed (excluding those in the financial sector) had their own website in 2008. This share increased with enterprise size, as nine out of ten large enterprises had their own website; overall rates were highest in Denmark and Sweden.

Some 16 % of enterprises in the EU-27 received orders on-line during 2007, which was about three fifths of the proportion of enterprises (28 %) that used compu-



ter networks to place orders to purchase goods or services. The percentage of enterprises purchasing or selling on-line tends to rise with the size of the enterprise. It may be easier for large enterprises to finance investments for the introduction of e-commerce services. The general pattern across Member States is one where a considerably higher proportion of enterprises have made purchases on-line when compared with those that have received orders on-line (probably reflecting the greater complexity of setting up an on-line selling system compared with making purchases). Almost one third (32 %) of all enterprises in the United Kingdom received orders on-line

in 2008, while corresponding shares were also equal to or above one quarter in the Netherlands and Ireland. In contrast, a small majority of enterprises in Ireland, Germany and Sweden made purchases on-line in 2008, with upwards of 40 % of all enterprises in the United Kingdom and the Netherlands also making purchases on-line.

Compared with Japan or the United States, the EU has a relatively low share of ICT expenditure, expressed as a share of GDP; expenditure on information technology represented 2.7 % of GDP in the EU-27 in 2006, compared with 3.4 % in Japan and 3.3 % in the United States.



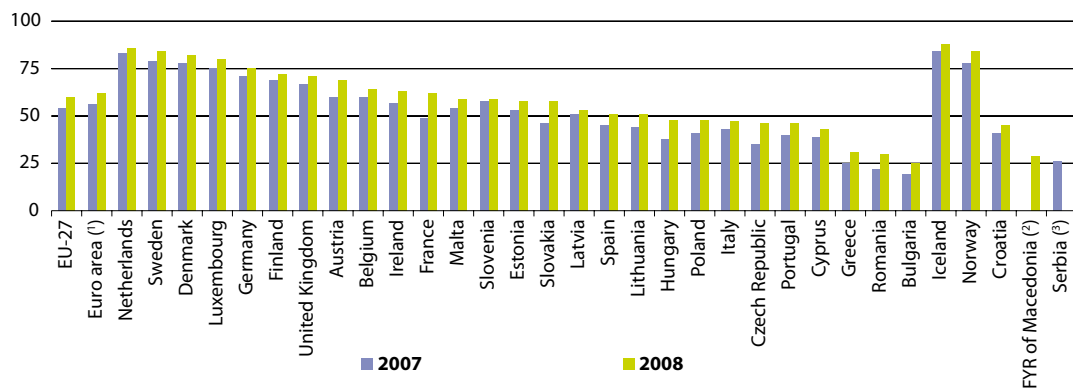
**Table 7.16:** Use of ICTs and use of on-line services for travel and accommodation  
(% of individuals aged 16 to 74)

	Computer use			Internet use			Used Internet for services related to travel and accommodation		
	2006	2007	2008	2006	2007	2008	2006	2007	2008
<b>EU-27</b>	59	63	66	52	57	62	25	31	32
<b>Euro area (¹)</b>	60	64	66	53	59	63	25	33	34
Belgium	67	70	71	62	67	69	30	34	36
Bulgaria	30	35	40	24	31	35	4	5	6
Czech Republic	52	55	63	44	49	58	22	25	26
Denmark	86	84	86	83	81	84	45	51	47
Germany	76	78	80	69	72	75	41	45	42
Estonia	62	65	66	61	64	66	20	21	27
Ireland	58	62	67	51	57	63	37	39	41
Greece	38	40	44	29	33	38	12	16	17
Spain	54	57	61	48	52	57	16	33	35
France	55	69	71	47	64	68	15	30	38
Italy	43	43	46	36	38	42	15	18	20
Cyprus	44	47	47	34	38	39	16	23	18
Latvia	53	58	63	50	55	61	18	18	25
Lithuania	47	52	56	42	49	53	12	14	15
Luxembourg	76	80	83	71	78	81	48	55	50
Hungary	54	58	63	45	52	59	20	24	23
Malta	43	48	51	38	45	49	15	21	22
Netherlands	84	87	88	81	84	87	43	48	50
Austria	68	73	76	61	67	71	26	28	32
Poland	48	52	55	40	44	49	11	11	14
Portugal	42	46	46	36	40	42	13	14	12
Romania	30	34	35	21	24	29	4	5	7
Slovenia	57	58	60	51	53	56	24	26	26
Slovakia	61	64	72	50	56	66	21	26	29
Finland	80	81	84	77	79	83	53	57	58
Sweden	87	88	89	86	80	88	45	41	46
United Kingdom	73	78	80	66	72	76	47	46	48
Croatia	:	47	46	:	38	42	:	10	15
FYR of Macedonia	34	:	50	25	:	42	2	:	7
Iceland	90	91	92	88	90	91	61	60	62
Norway	85	90	90	81	85	89	51	55	61
Serbia	:	41	:	:	30	:	:	9	:

(¹) EA-15 instead of EA-16.

Source: Eurostat ([isoc\\_ci\\_cfp\\_cu](#), [isoc\\_ci\\_ifp\\_iu](#) and [isoc\\_ci\\_ac\\_i](#))

**Figure 7.23:** Internet access of households  
(% of all households)



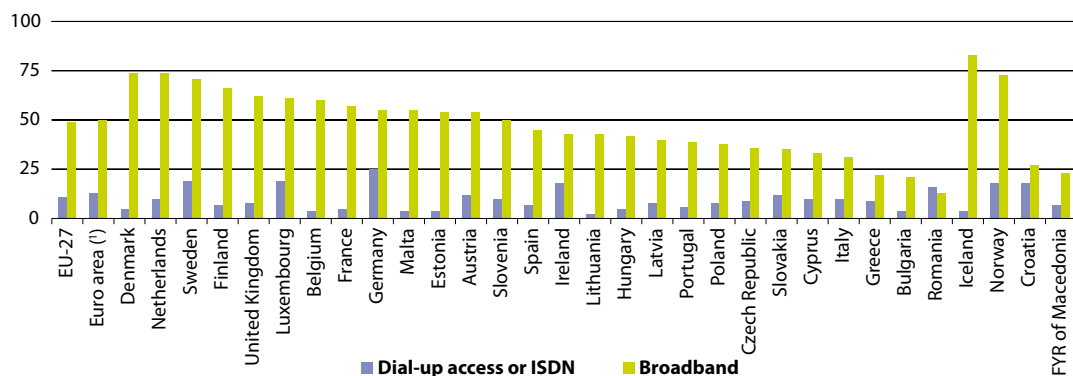
(1) EA-13 in 2007; EA-15 in 2008.

(2) 2007, not available.

(3) 2008, not available.

Source: Eurostat (tsiir040)

**Figure 7.24:** Internet access of households by type of connection, 2008  
(% of all households)



(1) EA-15 instead of EA-16.

Source: Eurostat (tin00073)

**Table 7.17:** Place of Internet use, 2008

(% of individuals aged 16 to 74 who used the Internet in the three months prior to the survey)

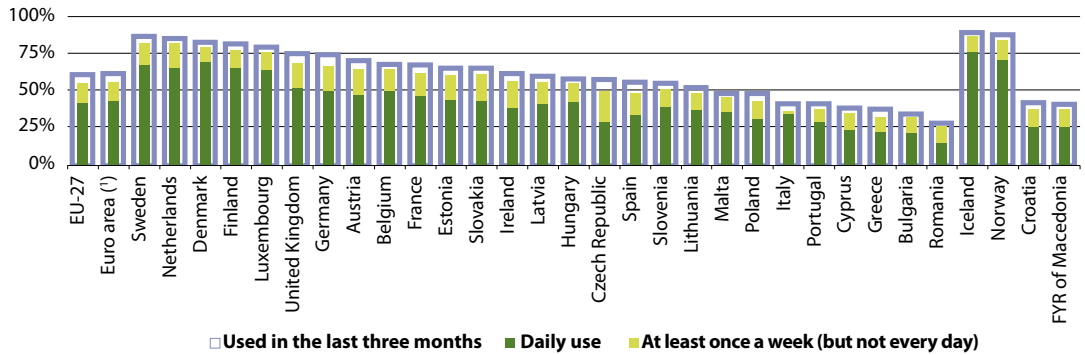
	Home	Place of work (other than home)	Place of education	Neighbour, friend or relative's house	Other place
<b>EU-27</b>	86	42	13	22	12
<b>Euro area (¹)</b>	86	43	11	23	13
Belgium	92	34	11	8	5
Bulgaria	81	33	12	4	10
Czech Republic	83	39	17	13	5
Denmark	95	53	13	14	10
Germany	91	41	9	20	11
Estonia	87	39	13	11	5
Ireland	83	39	11	4	5
Greece	70	43	11	13	22
Spain	78	44	12	25	20
France	86	39	9	36	12
Italy	79	46	13	21	18
Cyprus	77	49	12	18	14
Latvia	82	37	17	24	15
Lithuania	86	38	20	19	10
Luxembourg	94	44	10	14	15
Hungary	81	36	20	23	10
Malta	93	36	8	12	4
Netherlands	97	51	13	19	6
Austria	80	51	10	12	10
Poland	82	30	18	19	7
Portugal	80	41	20	31	17
Romania	77	31	20	9	4
Slovenia	86	51	16	29	18
Slovakia	74	51	18	23	12
Finland	91	54	20	36	22
Sweden	94	54	14	21	15
United Kingdom	90	45	14	20	11
Croatia	80	40	17	15	5
FYR of Macedonia	62	21	18	17	36
Iceland	96	60	28	44	28
Norway	95	60	16	22	17

(¹) EA-15 instead of EA-16.

Source: Eurostat ([isoc\\_pibi\\_pai](#))



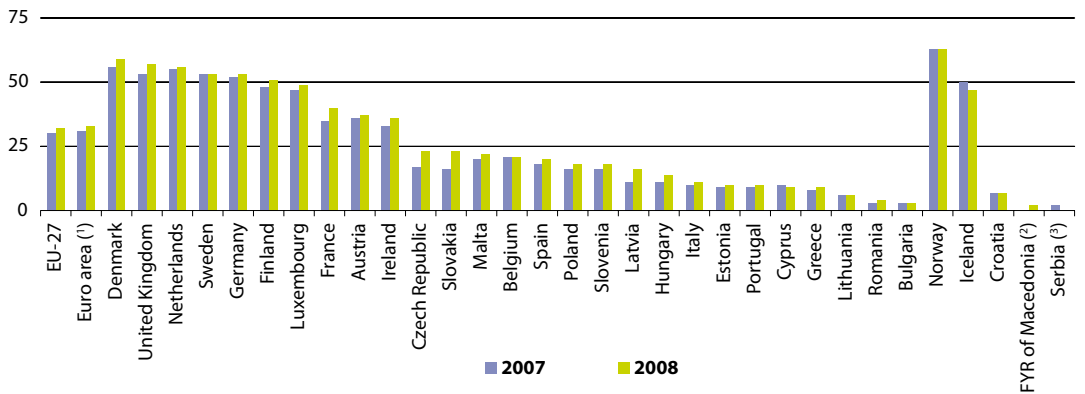
**Figure 7.25:** Frequency of Internet use, 2008  
(% of individuals aged 16 to 74)



(1) EA-15 instead of EA-16.

Source: Eurostat ([isoc\\_ci\\_ifp\\_iu](#) and [isoc\\_ci\\_ifp\\_fu](#))

**Figure 7.26:** Individuals who ordered goods or services over the Internet for private use in the twelve months prior to the survey  
(% of individuals aged 16 to 74)

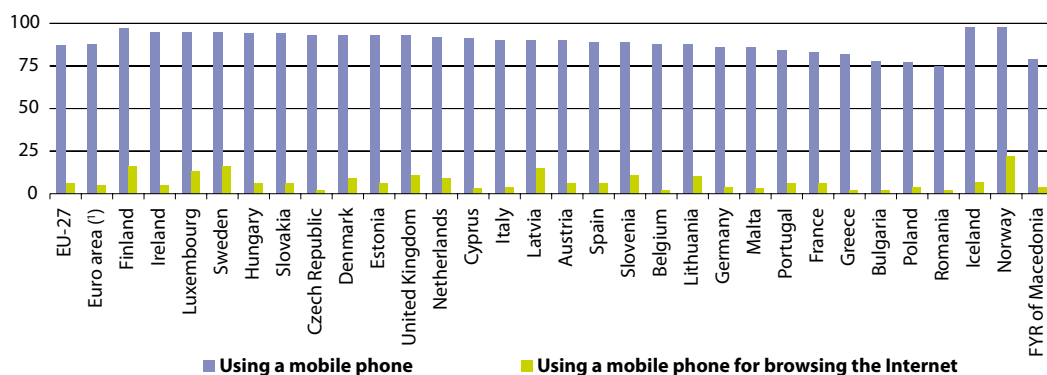


(1) EA-13 in 2007; EA-15 in 2008. (2) 2007, not available. (3) 2008, not available.

Source: Eurostat ([isoc\\_ec\\_ibuy](#))



**Figure 7.27:** Individuals using a mobile phone for browsing the Internet, 2008  
(% of individuals aged 16 to 74)



(¹) EA-15 instead of EA-16.

Source: Eurostat ([isoc\\_cias\\_mph](#))

**Table 7.18:** Individuals using the Internet for obtaining and sharing content, 2008  
(% of individuals aged 16 to 74)

	Using the Internet for obtaining and sharing content			Individuals using the Internet for selected content-related activities		
	Total	Male	Female	Downloading, listening or watching music and/or films	Downloading computer or video games	Uploading self-created content to any website to be shared
<b>EU-27</b>	38	43	32	28	9	11
<b>Euro area (¹)</b>	38	44	32	28	10	11
Belgium	31	34	27	23	6	5
Bulgaria	24	27	22	21	6	3
Czech Republic	26	32	20	19	5	2
Denmark	57	63	51	36	11	14
Germany	43	53	33	29	18	14
Estonia	36	42	31	25	11	21
Ireland	27	30	23	19	5	8
Greece	24	29	19	19	6	4
Spain	40	45	35	31	7	8
France	48	51	45	38	6	17
Italy	21	26	16	15	4	7
Cyprus	22	27	17	16	7	6
Latvia	42	47	37	33	13	19
Lithuania	35	40	32	32	12	8
Luxembourg	57	67	47	42	9	15
Hungary	37	40	34	30	13	17
Malta	35	38	32	29	12	5
Netherlands	61	68	54	46	15	19
Austria	31	39	23	20	6	8
Poland	31	35	28	21	7	7
Portugal	27	32	21	19	7	7
Romania	19	22	17	16	8	5
Slovenia	38	39	36	29	9	10
Slovakia	38	45	32	28	11	4
Finland	53	59	48	34	7	9
Sweden	55	62	47	34	8	15
United Kingdom	46	52	39	34	10	19
Croatia	24	31	18	18	6	6
FYR of Macedonia	34	39	29	28	9	5
Iceland	68	71	65	37	9	20
Norway	63	72	55	42	14	12

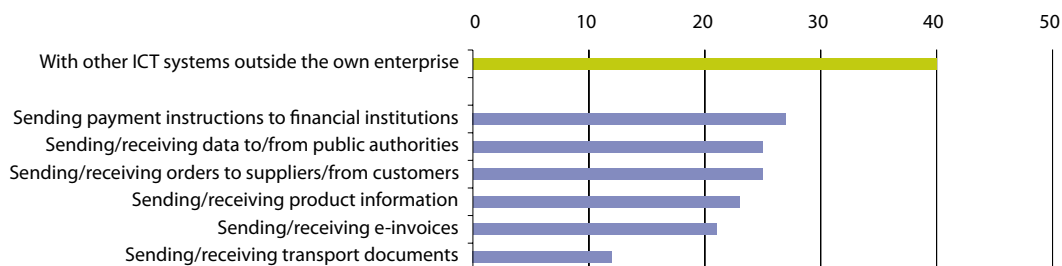
(¹) EA-15 instead of EA-16.

Source: Eurostat ([isoc\\_cias\\_av](#))





**Figure 7.28:** Automated data exchange between the enterprise and ICT systems outside the own enterprise, EU-27, January 2008 <sup>(1)</sup>  
(% of enterprises)



<sup>(1)</sup> Automated data exchange between the enterprise and ICT systems outside the own enterprise covers:

- exchange of messages (e.g. orders, invoices, payment transactions or description of goods);
- via the Internet or other computer networks;
- in an agreed format which allows its automatic processing (e.g. XML, EDIFACT etc.);
- without the individual message being manually typed.

Enterprises with 10 or more persons employed; enterprises that have their main activity in NACE Rev. 1.1 Sections D, F, G, I and K or Groups 55.1, 55.2, 92.1 and 92.2.

Source: Eurostat ([isoc\\_pibi\\_isc](#))

**Figure 7.29:** Automated data exchange between the enterprise and ICT systems outside the enterprise, EU-27, January 2008 <sup>(1)</sup>  
(% of enterprises)



<sup>(1)</sup> Automated data exchange between the enterprise and ICT systems outside the own enterprise covers:

- exchange of messages (e.g. orders, invoices, payment transactions or description of goods);
- via the Internet or other computer networks;
- in an agreed format which allows its automatic processing (e.g. XML, EDIFACT etc.);
- without the individual message being manually typed.

Enterprises with 10 or more persons employed; enterprises that have their main activity in NACE Rev. 1.1 Sections D, F, G, I and K or Groups 55.1, 55.2, 92.1 and 92.2.

Source: Eurostat ([isoc\\_pibi\\_isc](#))

**Table 7.19:** Enterprises using the Internet for interacting with public authorities, 2008 <sup>(1)</sup>  
(% of enterprises)

	E-government usage by enterprises	Obtaining information	Down-loading official forms	Returning filled in forms	Treating admin. procedures electronically	E-procurement
<b>EU-27</b>	68	61	61	50	39	9
<b>Euro area <sup>(2)</sup></b>	70	62	62	52	42	9
Belgium	69	:	:	49	47	7
Bulgaria	58	53	51	43	36	8
Czech Republic	73	70	63	35	20	8
Denmark	90	86	85	65	45	8
Germany	56	47	48	45	30	10
Estonia	77	75	75	62	46	12
Ireland	91	84	85	68	63	26
Greece	83	68	66	66	53	:
Spain	64	59	60	45	40	5
France	73	67	66	67	68	13
Italy	82	74	71	42	41	9
Cyprus	65	62	55	18	26	0
Latvia	55	51	50	39	30	8
Lithuania	86	83	85	75	57	20
Luxembourg	90	82	87	41	28	7
Hungary	60	56	58	50	25	9
Malta	74	73	68	46	37	7
Netherlands	85	77	79	75	16	6
Austria	80	71	75	59	44	16
Poland	68	56	58	60	20	6
Portugal	75	67	69	68	54	14
Romania	39	37	35	23	20	10
Slovenia	88	85	82	69	60	11
Slovakia	88	82	81	51	54	7
Finland	95	90	92	81	46	0
Sweden	78	76	76	58	30	11
United Kingdom	64	60	57	51	43	9
Croatia	57	52	54	37	33	17
Iceland	91	89	85	87	73	11
Norway	76	70	70	63	40	16

<sup>(1)</sup> Enterprises with 10 or more persons employed; enterprises that have their main activity in NACE Rev. 1.1 Sections D, F, G, I and K or Groups 55.1, 55.2, 92.1 and 92.2; the year given relates to the survey year; the e-government data relates to the year prior to the survey.

<sup>(2)</sup> EA-15 instead of EA-16.

Source: Eurostat (tsiir140 and tin00065)



**Table 7.20:** Enterprises having a website or a homepage by size-class, 2008 <sup>(1)</sup>  
(% of enterprises)

	<b>All enterprises</b>	<b>Small</b>	<b>Medium</b>	<b>Large</b>
<b>EU-27</b>	64	60	80	91
<b>Euro area <sup>(2)</sup></b>	65	61	82	92
Belgium	76	72	89	95
Bulgaria	33	28	48	69
Czech Republic	74	70	86	92
Denmark	87	85	94	96
Germany	77	73	89	94
Estonia	66	62	83	92
Ireland	65	60	83	95
Greece	60	56	76	88
Spain	54	51	72	89
France	54	50	71	85
Italy	58	55	81	91
Cyprus	48	42	77	95
Latvia	42	37	61	86
Lithuania	55	49	73	91
Luxembourg	64	60	77	94
Hungary	48	44	65	77
Malta	57	53	72	87
Netherlands	85	83	94	96
Austria	79	77	90	97
Poland	57	50	77	88
Portugal	46	42	68	92
Romania	27	25	37	61
Slovenia	71	67	84	97
Slovakia	73	72	78	84
Finland	82	79	94	94
Sweden	86	84	95	97
United Kingdom	76	71	91	98
Croatia	64	61	75	84
Iceland	77	74	:	100
Norway	73	70	87	90

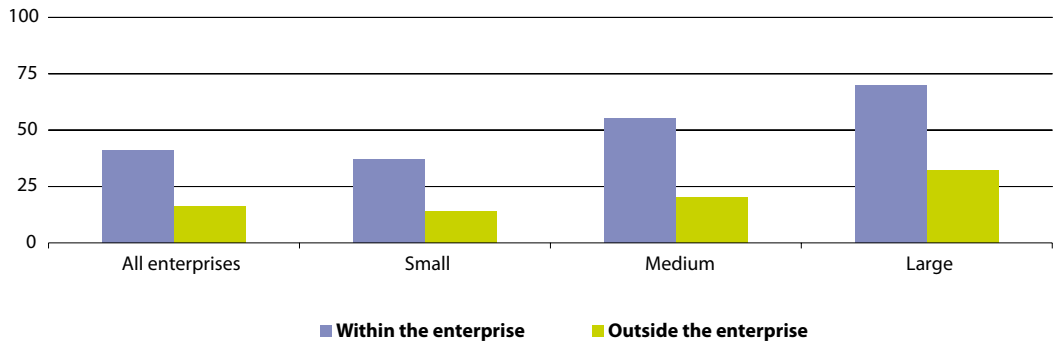
<sup>(1)</sup> Enterprises with 10 or more persons employed; enterprises that have their main activity in NACE Rev. 1.1 Sections D, F, G, I and K or Groups 55.1, 55.2, 92.1 and 92.2; small enterprises: 10-49 persons employed; medium-sized enterprises: 50-249 persons employed; large enterprises: 250 or more persons employed.

<sup>(2)</sup> EA-15 instead of EA-16.

Source: Eurostat (isoc\_pi\_b3)



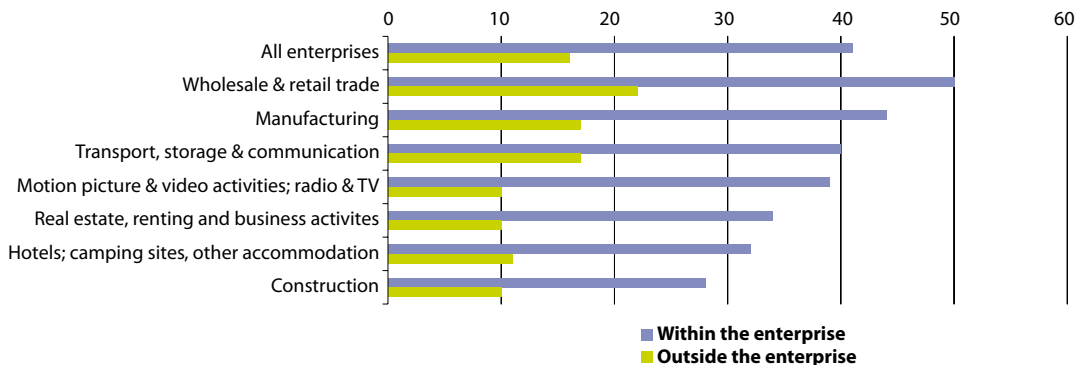
**Figure 7.30:** Enterprises sharing information automatically within the enterprise for different functions and outside the enterprise on supply chain management, by size-class, EU-27, January 2008 <sup>(1)</sup>  
(% of enterprises)



<sup>(1)</sup> Enterprises with 10 or more persons employed; enterprises that have their main activity in NACE Rev. 1.1 Sections D, F, G, I and K or Groups 55.1, 55.2, 92.1 and 92.2; small enterprises: 10-49 persons employed; medium-sized enterprises: 50-249 persons employed; large enterprises: 250 or more persons employed.

Source: Eurostat ([isoc\\_pibi\\_ibp](#) and [isoc\\_pibi\\_isc](#))

**Figure 7.31:** Enterprises sharing information automatically within the enterprise for different functions and outside the enterprise on supply chain management, by economic activity, EU-27, January 2008 <sup>(1)</sup>  
(% of enterprises)

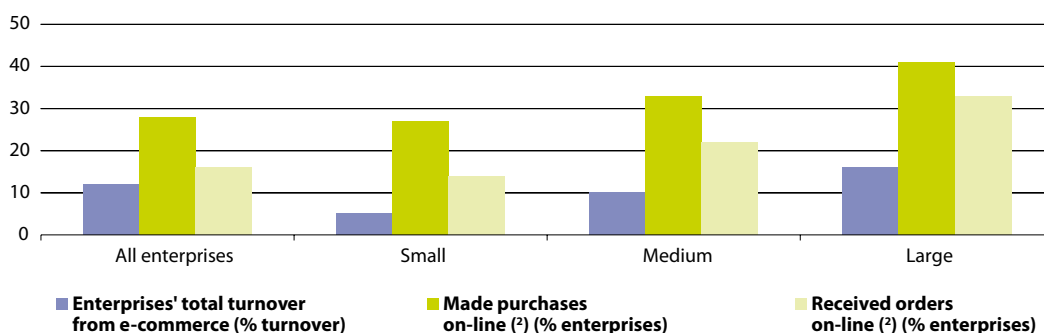


<sup>(1)</sup> Enterprises with 10 or more persons employed; enterprises that have their main activity in NACE Rev. 1.1 Sections D, F, G, I and K or Groups 55.1, 55.2, 92.1 and 92.2; the figure is ranked on the average of within and outside the enterprise.

Source: Eurostat ([isoc\\_pibi\\_ibp](#) and [isoc\\_pibi\\_isc](#))



**Figure 7.32:** E-commerce among enterprises by size-class, EU-27, 2008 <sup>(1)</sup>

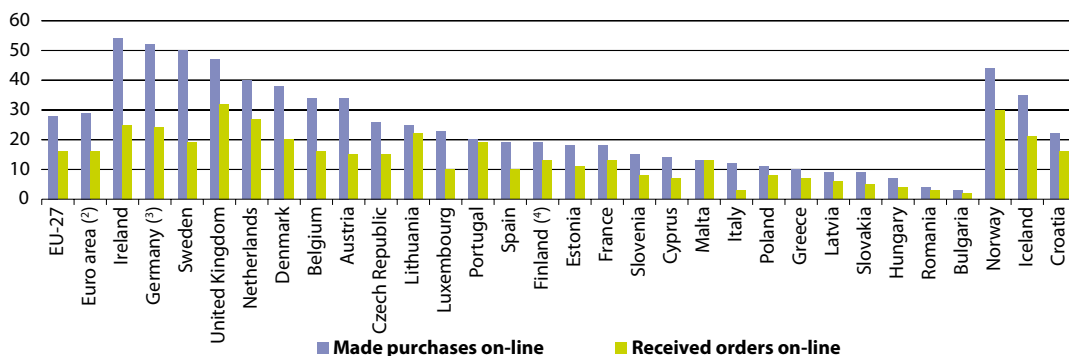


<sup>(1)</sup> Enterprises with 10 or more persons employed; enterprises that have their main activity in NACE Rev. 1.1 Sections D, F, G, I and K or Groups 55.1, 55.2, 92.1 and 92.2; small enterprises: 10-49 persons employed; medium-sized enterprises: 50-249 persons employed; large enterprises: 250 or more persons employed.

<sup>(2)</sup> Only enterprises having made purchases/received orders on-line of at least 1 % of total purchases/total turnover.

Source: Eurostat ([isoc\\_ec\\_eval](#), [isoc\\_ec\\_ebuy](#) and [isoc\\_ec\\_esel](#))

**Figure 7.33:** Enterprises having received orders/made purchases on-line, 2008 <sup>(1)</sup>  
(% of enterprises)



<sup>(1)</sup> Enterprises with 10 or more persons employed; enterprises that have their main activity in NACE Rev. 1.1 Sections D, F, G, I and K or Groups 55.1, 55.2, 92.1 and 92.2; only enterprises having made purchases/received orders on-line of at least 1 % of total purchases/total turnover.

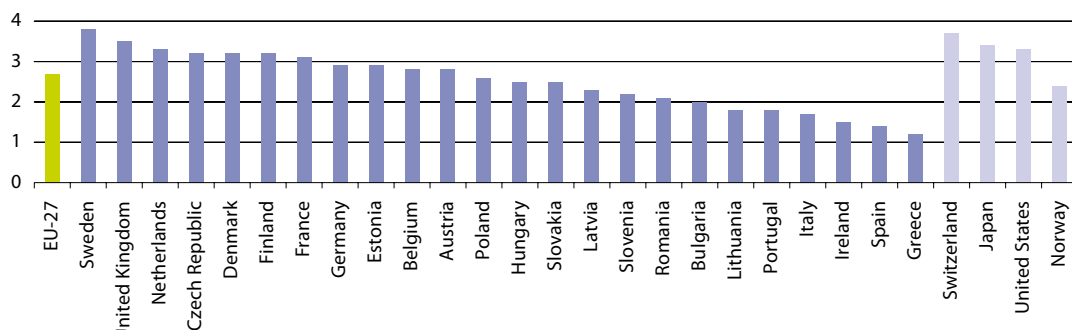
<sup>(2)</sup> EA-15 instead of EA-16.

<sup>(3)</sup> 2007.

<sup>(4)</sup> Made purchases on-line, 2007.

Source: Eurostat ([isoc\\_ec\\_ebuy](#) and [tin00068](#))

**Figure 7.34:** Information technology expenditure, 2006 <sup>(1)</sup>  
(% of GDP)



<sup>(1)</sup> Cyprus, Luxembourg and Malta, not available.

Source: Eurostat ([tsiir090](#)), European Information Technology Observatory (EITO)

## 7.6 Telecommunications

### Introduction

Telecommunication networks and services are the backbone of Europe's developing information society. Individuals, enterprises and public organisations alike have come to rely ever more on convenient, reliable networks and services.

The European telecommunications sector was historically characterised by public service, monopoly providers, often run in conjunction with postal services. Liberalisation moves began in the first half of the 1980s and, at first, concerned value added services or business users, while basic services were left in the hands of monopoly providers. By 1998, telecommunications were, in principle, fully liberalised across all of the Member States. The liberalisation of telecommunication markets has led to considerable reduc-

tions in prices. This may, in part, reflect the introduction of competition into a number of markets that were previously the domain of incumbent, monopoly suppliers, as well as reflecting technological changes that have increased capacity and made it possible to communicate not only by voice, but also over the Internet. Market regulation has nonetheless continued, and the European Commission oversees this to ensure that consumers benefit. Regulation continues to monitor the significant market power of former monopolies, ensure universal service and protect consumers, especially those social groups that may otherwise face exclusion.

On 30 June 2007, a new set of rules on mobile phone roaming entered into force. These foresee that people travelling within the EU are able to phone across

borders at more affordable and transparent prices. The so-called roaming Regulation <sup>(8)</sup> put in place a set of maximum prices for phone calls made and received while abroad (Eurotariff); these maximum prices apply to all consumers unless they opt for special packages offered by operators. The European Commission and national regulators have closely monitored price developments for text messages and data services. On the basis of this monitoring, a review was conducted which came to the conclusion that competition has not encouraged mobile operators to voluntarily reduce very high roaming charges for text messages. The European Commission therefore proposed on 23 September 2008:

- to bring down prices for text messages sent while travelling in another EU Member State;
- to ensure that consumers are kept informed of the charges that apply for data roaming services;
- to introduce a Euro-SMS Tariff from 1 July 2009 so that sending an SMS from abroad would cost no more than 11 cents (excluding VAT), while receiving an SMS in another EU Member State would remain free of charge;
- to improve transparency so that customers travelling to another Member State should receive an automated message of the charges that apply for data roaming services upon arrival; while from 1 July 2010, operators should provide customers with the opportunity to determine in advance how much they want to spend before a data roaming service is 'cut-off';

- to restrict to EUR 1 per megabyte wholesale data roaming fees, so these are more predictable for operators;
- to reduce further the cost of Eurotariff voice calls, with the price for making calls decreasing from 43 cents on 1 July 2009, to 40 cents, 37 cents and 34 cents in each of the subsequent years, while the price of receiving a call would decrease from 19 cents on 1 July 2009 to 16 cents, 13 cents and 10 cents.

### Definitions and data availability

Eurostat's data collection in relation to **telecommunications statistics** is conducted through the use of a predefined questionnaire (TELECOM), which is sent on annual basis to the national statistical institutes. They collect information from their relevant regulatory authorities and send the completed questionnaires back to Eurostat.

**Main telephone lines** are the traditional way of connecting to communication networks. They are usually used for voice telephony, but may also be used for accessing the Internet via a modem or dial-up connection. The rapid growth of more powerful means to access the Internet (broadband) and mobile communications has eroded somewhat the market for traditional fixed telecommunication networks.

Indicators presented in relation to market share refer to fixed-line telecommunications and mobile telephony. The **incumbent** for **fixed-line telephony** is defined as the enterprise active in the market just before liberalisation. The market share is calculated on the basis of retail revenues. Indicators relating to

<sup>(8)</sup> Regulation (EC) No 717/2007 of the European Parliament and of the Council of 27 June 2007 on roaming on public mobile telephone networks within the Community and amending Directive 2002/21/EC; for more information: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:171:0032:0040:EN:PDF>.



the **mobile market** refer to the number of subscriptions to public cellular mobile telecommunication systems and also include active pre-paid cards. Note that an increasing number of people have multiple mobile subscriptions (for example, for private and work use, or for use in different countries). **SMS** messages are short-message services, traditionally sent between mobile phones, but also between a range of other SMS-enabled devices and on-line web services.

Data on **expenditure for telecommunications** covers hardware, equipment, software and other services. The data are not collected by Eurostat; further methodological information is available at: <http://www.eito.com/>.

**Telecommunications prices** are based on the price (including VAT) in euro of a 10-minute call at 11 am on a weekday in August, based on normal rates. Three markets are presented, namely a **local call** (3 km), a **national long-distance call** (200 km) and an **international call** (to the United States). The data are not collected by Eurostat; further methodological information is available at: <http://www.teligen.com/>.

### Main findings

Telecommunications expenditure accounted for 3.0 % of GDP in the EU-27 in 2006, compared with 2.1 % in the United States and 4.2 % in Japan. The highest

relative levels of expenditure were generally recorded in those Member State that have joined the EU since 2004 (Cyprus and Malta, not available), in particular in the Baltic Member States, Bulgaria and Romania.

Although overall expenditure on telephony has increased, the proportion accounted for by ex-monopoly providers has generally been reduced, as the share of the total telecommunication market accounted for by fixed-line voice operations has shrunk, whereas growth has been concentrated in mobile markets and other data services. The incumbents in fixed telecommunications markets across the EU-25 accounted for 72 % of local calls in 2005, 66 % of national calls and 56 % of international calls. In contrast, the share of the leading operator in the mobile market was relatively low at 39 % in 2006.

The average number of mobile subscriptions per 100 inhabitants stood at 106 in the EU-27 in 2006, and surpassed parity (100) in 17 of the Member States, where there were more subscriptions than inhabitants.

Total turnover in value terms is based on sales from all telecommunication services, including leased lines, fixed network services, cellular mobile telecommunication services, interconnection services, and Internet service provisions. In the majority of Member States (with data



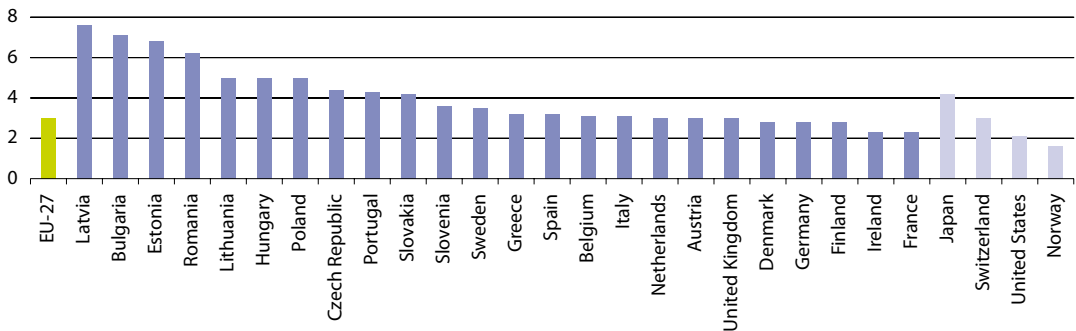
available) turnover from mobile services exceeded that from fixed network services in 2006.

The price of telecommunications fell between 2004 and 2006 in a large number of Member States. Price reductions were most apparent for national long-distance and international calls (defined here as calls to the United States), as on average in the EU-25 the price of a national long-distance call fell by almost 20 % between 2004 and 2006, while the price of an international call fell by almost 16 %. In

comparison, there was a modest reduction in the price of a local call, which fell by less than 3 %.

The prices of local, national long-distance or international calls varied greatly across the Member States in 2006. Local and national long-distance calls were most expensive in Slovakia, while the price of international calls was highest in Latvia. The cheapest tariff for local calls was found in Spain, for national long-distance calls in Cyprus, and for calls to the United States in Germany.

**Figure 7.35:** Communications expenditure, 2006 <sup>(1)</sup>  
(% of GDP)



<sup>(1)</sup> Cyprus, Luxembourg and Malta, not available.

Source: Eurostat ([tsiir090](#)), European Information Technology Observatory (EITO)

**Table 7.21:** Market share of incumbents in fixed telecommunications and leading operators in mobile telecommunications  
(% of total market)

	Fixed telecommunications, 2005			Leading operator in mobile telecommunications, 2006 <sup>(3)</sup>
	Local calls <sup>(1)</sup>	National long-distance calls <sup>(2)</sup>	International calls <sup>(2)</sup>	
<b>EU-25</b>	72	66	56	39
Belgium	68	68	58	45
Bulgaria	:	:	:	:
Czech Republic	76	63	65	41
Denmark	:	:	:	32
Germany	56	57	39	37
Estonia	:	:	:	46
Ireland	83	63	62	47
Greece	78	73	74	41
Spain	78	75	62	46
France	80	68	67	46
Italy	71	73	47	41
Cyprus	:	:	86	90
Latvia	97	98	72	35
Lithuania	97	88	76	36
Luxembourg	:	:	:	51
Hungary	92	90	87	45
Malta	99	99	98	52
Netherlands	75	75	45	48
Austria	53	59	50	39
Poland	85	70	71	34
Portugal	:	78	80	46
Romania	:	:	:	:
Slovenia	100	100	83	71
Slovakia	99	100	88	56
Finland	95	45	41	45
Sweden	:	:	:	43
United Kingdom	60	52	53	26
Norway	:	73	61	57

<sup>(1)</sup> Austria and Finland, 2004.

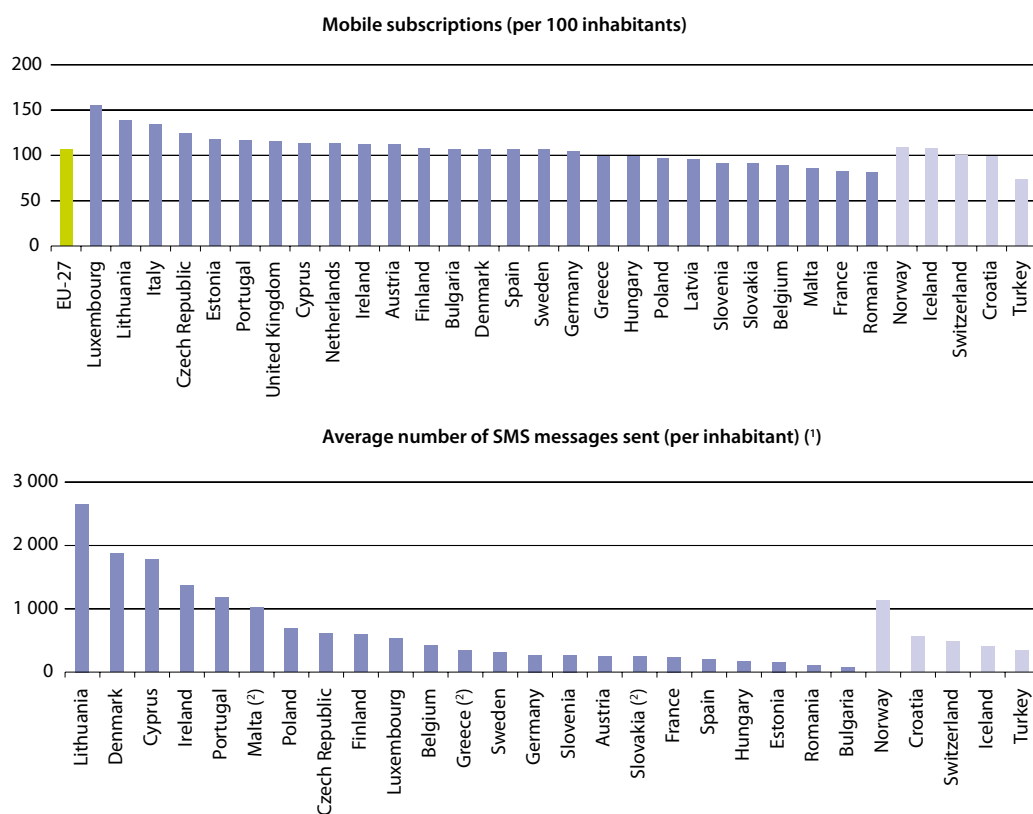
<sup>(2)</sup> Finland, 2004.

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

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



**Figure 7.36:** Mobile phone subscriptions and the use of SMS, 2006



(¹) Data for SMS in Italy, Latvia, the Netherlands and the United Kingdom, not available.

(²) 2005 instead of 2006.

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

**Table 7.22:** Turnover from telecommunications, 2006 <sup>(1)</sup>  
(EUR million)

	Total turnover	of which:		
		Fixed network services	Cellular mobile services	Internet service provision
Belgium	9 721	863	4 226	:
Bulgaria	1 754	399	920	73
Czech Republic	4 304	1 503	2 458	287
Denmark <sup>(2)</sup>	5 433	1 314	1 949	214
Germany <sup>(2)</sup>	66 200	21 900	23 100	3 400
Estonia <sup>(4)</sup>	557	165	400	:
Ireland	4 284	2 180	1 924	:
Greece <sup>(5)</sup>	8 034	3 284	4 305	123
Spain	42 006	7 734	13 402	2 786
France	47 448	11 420	16 771	3 739
Italy	:	:	:	:
Cyprus	303	111	158	34
Latvia	:	:	:	:
Lithuania	781	123	359	77
Luxembourg <sup>(4)</sup>	593	238	248	29
Hungary	4 792	768	1 461	323
Malta <sup>(5)</sup>	175	57	79	8
Netherlands	14 241	4 678	7 243	:
Austria	4 719	1 401	2 708	520
Poland	:	:	:	:
Portugal <sup>(3)</sup>	7 781	1 601	2 112	255
Romania <sup>(6)</sup>	4 307	848	1 510	228
Slovenia	1 049	205	406	127
Slovakia <sup>(5)</sup>	1 492	307	898	64
Finland	4 511	573	2 260	:
Sweden	8 659	2 108	1 820	861
United Kingdom	:	:	:	:
Croatia	1 945	699	1 089	96
Turkey	9 167	3 925	5 165	597
Iceland <sup>(5)</sup>	374	102	160	23
Norway	3 862	1 090	1 782	653
Switzerland <sup>(5)</sup>	10 363	2 951	3 009	113

<sup>(1)</sup> Possibility of double counting in the breakdown of the total turnover.

<sup>(2)</sup> Cellular and Internet services, 2005.

<sup>(3)</sup> Internet services, 2005.

<sup>(4)</sup> Total turnover, 2005.

<sup>(5)</sup> 2005.

<sup>(6)</sup> Fixed, cellular and Internet services, 2005.

Source: Eurostat ([isoc\\_tc\\_tur](#))



**Table 7.23:** Price of fixed telecommunications <sup>(1)</sup>  
(EUR per 10-minute call)

	Local calls			National long-distance calls			Calls to the United States		
	2001	2005	2006	2001	2005	2006	2001	2005	2006
<b>EU-25</b>	0.39	0.35	0.36	1.17	0.76	0.74	:	2.11	1.79
Belgium	0.54	0.57	0.57	0.54	0.57	0.57	1.84	1.98	1.98
Bulgaria	:	:	:	:	:	:	:	:	:
Czech Republic	0.40	0.56	0.56	2.44	1.13	0.56	:	2.02	2.02
Denmark	0.41	0.37	0.37	0.41	0.37	0.37	2.71	2.38	2.38
Germany	0.43	0.39	0.39	1.23	0.49	0.49	1.23	1.23	0.46
Estonia	0.23	0.23	0.23	0.23	0.23	0.23	:	2.10	2.13
Ireland	0.51	0.49	0.49	0.94	0.82	0.82	1.91	1.91	1.91
Greece	0.36	0.31	0.31	0.98	0.74	0.74	2.91	2.93	3.49
Spain	0.28	0.28	0.19	1.60	0.84	0.85	4.25	1.53	1.53
France	0.39	0.33	0.36	0.96	0.83	0.89	2.97	2.27	2.32
Italy	0.25	0.22	0.22	1.44	1.15	1.15	2.79	2.12	2.12
Cyprus	0.16	0.22	0.22	0.40	0.22	0.22	3.82	0.66	0.66
Latvia	0.36	0.36	0.36	1.03	1.03	1.03	5.92	5.94	5.94
Lithuania	0.35	0.39	0.39	1.20	0.79	0.79	11.96	4.07	4.07
Luxembourg	0.31	0.31	0.31	-	-	-	1.44	1.37	1.37
Hungary	0.35	0.41	0.40	1.23	1.09	1.04	4.29	2.97	2.88
Malta	:	0.25	0.25	-	-	-	:	1.77	1.64
Netherlands	0.32	0.33	0.33	0.48	0.49	0.49	0.78	0.85	0.85
Austria	0.69	0.49	0.49	0.77	0.59	0.59	4.32	1.90	1.90
Poland	0.35	0.30	0.50	1.22	1.22	1.00	10.58	3.74	1.23
Portugal	0.30	0.37	0.37	1.13	0.65	0.65	2.89	3.11	3.11
Romania	:	:	:	:	:	:	:	:	:
Slovenia	0.17	0.26	0.26	0.17	0.26	0.26	2.98	1.40	1.40
Slovakia	0.42	0.60	0.60	1.17	1.23	1.29	8.92	3.02	1.23
Finland	0.23	0.24	0.24	0.88	0.94	0.94	4.80	4.90	4.90
Sweden	0.29	0.29	0.29	0.29	0.29	0.29	1.10	1.06	1.18
United Kingdom	0.59	0.44	0.44	1.17	0.44	0.44	3.50	2.08	2.23
Norway	0.33	0.34	:	0.34	0.34	:	1.18	0.77	:
Japan	0.29	0.25	0.25	1.02	1.02	1.02	4.39	4.39	4.34
United States	0.09	0.07	0.07	0.43	1.03	1.03	-	-	-

(<sup>1</sup>) The indicator gives the price in euro of a 10-minute call at 11 am on a weekday (including VAT) for respectively a local call (3 km), a national call (200 km) and an international call to the United States; prices refer to August 2001, August 2005 and September 2006; normal tariffs without special rates are used.

Source: Eurostat ([tsier030](#)), Teligen