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POCKET

Business in Europe

Statistical pocketbook

Data 1995-2002

4

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Contents

Business in Europe - Statistical pocketbook
This publication has been prepared in close co-operation with a large number of persons from within Eurostat's Directorate for Business Statistics (Director, Mr Lothar Jensen). The opinions expressed are those of the individual authors alone and do not necessarily reflect the position of the European Commission.

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1. Introduction

GUIDE TO THE STATISTICS PRESENTED IN THIS PUBLICATION

Following the first edition of the Business in Europe pocketbook, it is now Eurostat's intention to release the publication on an annual basis. Its aim remains the presentation of a broad collection of the most important data available within the Business Statistics Directorate of Eurostat.

While the publication is a compendium of data that is available within the Business Statistics Directorate, it is by no means an exhaustive collection, and should be seen rather as a showcase for the various data sets that are available. Readers will note that since the last edition a chapter has been added on energy, reflecting a re-organisation of tasks that took place within Eurostat last year.

Since the early 1990s a significant amount of progress has been made in relation to the development of European business statistics. There have, in particular, been major changes in the tools used by statisticians for producing business statistics. The largest changes, in terms of data availability, have been with respect to the development of harmonised production statistics and the long-awaited extension of structural and short-term statistics, outside of their traditional areas of mining, manufacturing, utilities and construction, and into service sectors of the economy.

In addition, readers should be aware that other Directorates within Eurostat also collect data that is presented by economic activity (for example, the Labour Force Survey or innovation data). These data have also been used to some degree within this publication and they increase further the possibilities to study businesses.

Structure of the publication

This publication is structured into nine chapters that aim to provide the reader with information on the full spectrum of activities that form the work of the Business Statistics Directorate. Following this introductory chapter, an overview chapter looks at the business environment and the number of enterprises that make-up the business enterprise population. The following six chapters detail different sectors that make-up the business economy, namely, energy, manufacturing, construction, distributive trades, the information society and other service activities (such as hotels, transport, finance and business services). The publication closes with a chapter on methodological issues, business registers and classifications, that are prerequisites for a harmonised statistical system.

DATA INTERPRETATION

There follow some general notes that give a brief explanation of how to interpret the data. For more detailed methodological notes, please refer to chapter 9, which begins on page 101.

Definitions of specific indicators and methodological issues relating to specific data sets are often outlined within the text that is presented alongside tables and charts.

Sources

The vast majority of the sources used in this pocketbook come from within the Business Statistics Directorate of Eurostat. However, when the occasion warrants, sources from outside the Directorate have also been included. As noted above, these may be summarised as data from other Directorates within Eurostat (for example, the Labour Force Survey, National Accounts, external trade statistics) or alternatively they may be data from other Directorate-Generals within the European Commission (for example, Eurobarometer surveys).

Nevertheless, there are areas where official statistics remain weak and use has sometimes been made of non-official, private sources to complement the official data. Particular care should be taken when interpreting data from these sources, as data collection, survey techniques and compilation methods may not be fully harmonised, nor coverage fully representative. The source of the information that was used to produce each table and chart is provided on each page.

Data freshness

The data used in this publication was extracted from a wide variety of Eurostat databases during March 2003. The text that accompanies the tables and charts was drafted during April 2003.

Fresher data than that published may now be available within Eurostat's reference database, NewCronos, where more statistics in terms of activity or product coverage, geographical coverage (either for countries or regions) or time (additional months, quarters or years) may now exist.

Readers who wish to obtain the data behind the tables and charts, or readers who wish to obtain more detailed tabulations should contact one of Eurostat's Datashops (details are given on the page facing the inside back cover).

Geographical entities

Data published for EU totals (EU-15) is either the sum or average of all 15 Member States, as appropriate, or alternatively a figure that includes estimates to cover missing country data. When EU-15 data cannot be compiled using a full set of country data, appropriate footnotes have been added to detail the composition of the aggregate presented. Figures for Germany are on a post-unification basis, unless otherwise stated.

Monetary values

All nominal financial/monetary values are expressed in ECU/euro terms, with national currencies converted using average annual exchange rates. As of 1 January 1999, eleven of the Member States entered into the third stage of Economic and Monetary Union (EMU), forming what has become known as the euro-zone. Technically, data available prior to this date should continue to be denominated in ECU terms and data afterwards in euro (EUR) terms. As the conversion rate was 1 ECU=1 EUR, the two terms are used interchangeably. As of 1 January 2001, Greece also became a member of the euro-zone. Unless otherwise specified, the data for the euro-zone reflect the changes in the composition of this aggregate over time.

ABBREVIATIONS AND SYMBOLS

EU Member States

EU	European Union
EU-15	Fifteen Member States of the European Union
Euro-zone	Geographical entity covered by the Member States participating in the euro
B	Belgium
DK	Denmark
D	Germany
EL	Greece
E	Spain
F	France
IRL	Ireland
I	Italy
L	Luxembourg
NL	Netherlands
A	Austria
P	Portugal
FIN	Finland
S	Sweden
UK	United Kingdom

Other country codes

JP	Japan
US	United States of America

Abbreviations

ADSL	Asymmetric Digital Subscriber Line
ATM	Automatic Teller Machine
BOP	Balance Of Payments
CC	Classification of types of Construction
CD	Compact Disc
CODED	Eurostat's COncepts and DEfinitions Database
CPA	Statistical Classification of Products by Activity in the European Economic Community
CPC	Central Product Classification
DVD	Digital Versatile Disc or Digital Video Disc
EAO	European Audiovisual Observatory
EBT	European Business Trends
ECSC	European Coal and Steel Community
EEA	European Economic Area
EFTA	European Free Trade Area
EMU	Economic and Monetary Union
EPO	European Patents Office
FAO	Food and Agriculture Organisation of the United Nations
FTE	Full-time Equivalent
GDP	Gross Domestic Product

HORECA	HOtels, REstaurants and CAfes
HS	Harmonised System
ICT	Information and Communication Technology
IT	Information Technology
IMF	International Monetary Fund
ISIC	International Standard Industrial Classification of all Economic Activities
ITU	International Telecommunication Union
KAU	Kind-of-Activity Unit
MIG	Main Industrial Grouping
NACE Rev.1	Statistical Classification of Economic Activities in the European Community, Revision 1
NewCronos	Eurostat's Reference Database
OECD	Organisation for Economic Co-operation and Development
PC	Personal Computer
PPS	Purchasing Power Standard
PRODCOM	PRODucts of the European COMmunity
R&D	Research and Development
SBS	Structural Business Statistics
SME	Small and Medium-sized Enterprise
STS-R	Short-Term Statistics Regulation
TEN	Trans-European Network
TV	Television
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organisation
USPTO	United States Patent and Trademark Office
VAT	Value Added Tax
WHO	World Health Organization

Units and measures

billion	Thousand million
ECU	European Currency Unit
EUR	Euro
GJ	Giga Joule (one billion joules)
GWh	Gigawatt hour
km	Kilometre
kgOE	kilogram of Oil Equivalent
kW	Kilowatt
kWh	Kilowatt hour
TOE	Tonne of Oil Equivalent
TWh	Terra Watt hours

Symbols

-	Not applicable, not relevant
:	Not available
%	Per cent
0.0	Real zero or value less than 0.05

2. Business enterprises

2 STRUCTURAL INDICATORS - BENCHMARKING EUROPEAN BUSINESS

Table 2.1: Structural indicators, 2002

	EU-15	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
GDP per capita in PPS (EU-15=100) (1)	100.0	108.8	113.6	102.7	66.6	84.4	102.5	122.1	102.5	188.0	112.7	110.4	69.2	102.0	101.7	103.2
Employment rate, females (%) (2)	55.0	51.0	72.0	:	40.9	43.0	56.0	54.9	41.1	:	65.2	60.1	61.0	65.4	72.4	65.1
Employment rate, males (%) (2)	73.1	68.8	80.2	:	70.8	72.4	69.7	76.4	68.6	:	82.8	76.7	76.8	70.9	75.7	78.3
Unit labour cost growth (%) (3)	0.7	1.8	0.5	-0.8	-1.2	-0.4	1.6	1.1	0.3	6.8	0.3	-0.6	:	-0.2	0.8	-0.7
Accidents at work, serious (4)	99.0	82.0	89.0	96.0	88.0	108.0	102.0	72.0	99.0	104.0	105.0	92.0	94.0	89.0	111.0	111.0
Life-long learning (%) (5)	8.4	6.5	18.4	5.2	1.2	5.0	2.7	7.7	4.6	5.3	16.4	7.5	2.9	18.9	18.4	22.3
Gross domestic expenditure on R&D financed by industry (%) (6)	55.5	66.2	58.0	66.9	24.2	49.7	54.1	64.1	:	:	49.7	40.1	21.3	70.3	67.8	49.3
Number of patents EPO (per million inhabitants) (7)	161.1	151.7	211.0	309.9	7.7	24.1	145.3	85.6	74.7	211.3	242.7	174.2	5.5	337.8	366.6	133.5
Number of patents USPTO (per million inhabitants) (8)	80.1	93.3	106.0	147.4	3.4	8.7	76.5	49.1	32.7	115.6	98.5	82.6	1.9	156.1	213.7	77.2
IT expenditure (%) (9)	4.2	4.5	5.0	4.2	1.2	1.9	4.8	2.3	2.5	5.4	5.2	3.8	1.9	4.4	6.8	5.6
Business investment (%) (10)	17.8	19.3	18.3	18.4	18.8	22.2	17.0	19.0	17.3	17.4	18.5	22.0	23.1	17.8	14.8	15.3

(1) All data: forecasts; GDP per capita based on Purchasing Power Standards (PPS) series; PPS are indicators of the average price ratios between different countries, their use makes it possible to compare the volumes of, for example, GDP per capita, between different countries. (2) All data: 2001; employed persons aged 15-64 as a share of the population aged 15-64. (3) Growth rate of the ratio: compensation per employee in current prices divided by GDP per person employed in current prices; EU-15, B, E, F, IRL L and NL: 2001; UK: forecast. (4) All data: 2000; index of the number of serious accidents at work per 100 thousand persons in employment (1998=100); accidents at work resulting in more than 3 days absence from work (serious accidents); EU-15 and P: provisional; B: break in series. (5) Share of population aged 25-64 participating in education and training over the 4 weeks prior to the survey; EU-15, D and L: estimates. (6) EU-15: OECD estimate for 1999; B, DK, EL, F, IRL, NL, P and S: 1999; E, FIN and UK: 2000; D and A: 2001. (7) All data: preliminary for 2001; EU-15, EL, I, L, P and UK: estimates. (8) All data: 2001; EU-15, EL, I, L, P and UK: estimates; F: preliminary data. (9) All data: 2001; expenditure on information technology as a percentage of GDP. (10) All data: 2001; gross fixed capital formation by the private sector as a percentage of GDP.

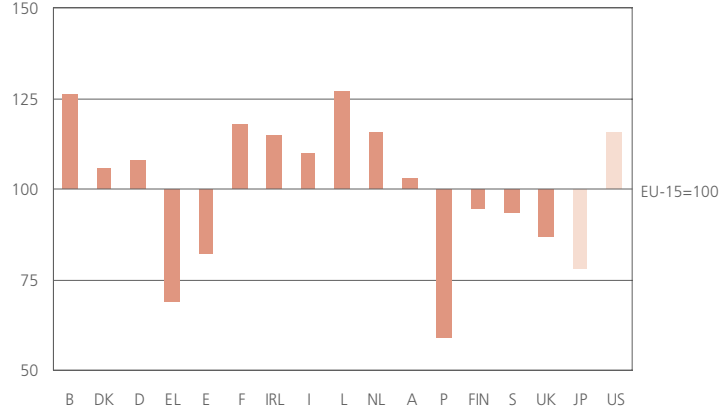
Source: Eurostat, Structural Indicators, available at http://www.europa.eu.int/comm/eurostat

At the Lisbon European Council in spring 2000, the Council set itself the "strategic goal for the next decade: to become the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion". The Council acknowledged the need to regularly discuss and assess progress made in achieving this goal on the basis of commonly agreed Structural Indicators. To this end it invited the Commission to draw up an annual Spring Report on progress on the basis of Structural Indicators relating to employment, innovation, economic reform, social cohesion and the general economic background, as well as - since 2002 - the environment.

Structural Indicators are also used in the annual Communication from the Commission on Structural Indicators in which every autumn, a new list of Structural Indicators is presented. Once agreed with the Council, this list is used for the Report presented the following spring to the European Council meeting. Thus, these indicators will be at the centre of political and economic interest for many years to come.

Eurostat disseminates the full set of Structural Indicators for the EU, Member States and as far as possible the EFTA Countries, the United States and Japan, including time-series on its Structural Indicators web-site (see http://www.europa.eu.int/comm/eurostat). For the general economic background indicators, data for the euro-zone (EUR-12) is also provided. Starting from 2003 Candidate Countries are also covered as far as possible, including an aggregate for the 10 acceding countries.

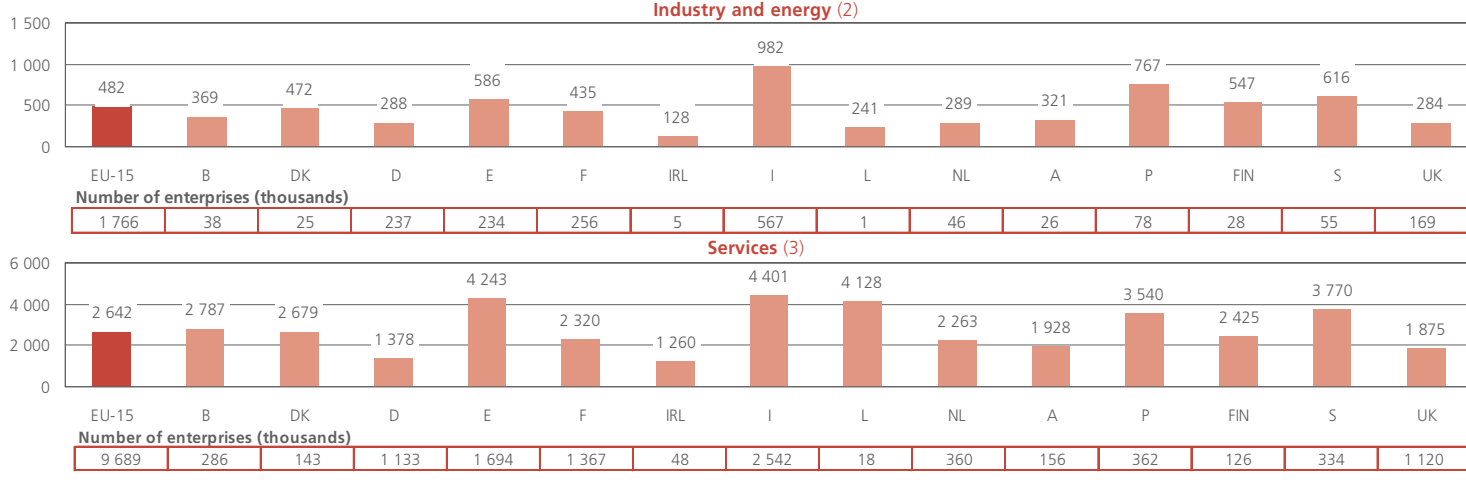
Chart 2.1: Labour productivity, GDP in PPS per hour worked relative to EU-15, 2002 (EU-15=100) (1)



(1) Forecasts; PPS are indicators of the average price ratios between different countries, their use makes it possible to compare the volumes of, for example, GDP per capita, between different countries.
Source: Eurostat, Structural Indicators, available at http://www.europa.eu.int/comm/eurostat

NUMBER OF ENTERPRISES

Chart 2.2: Number of enterprises per 100 thousand inhabitants, 2000 (units) (1)



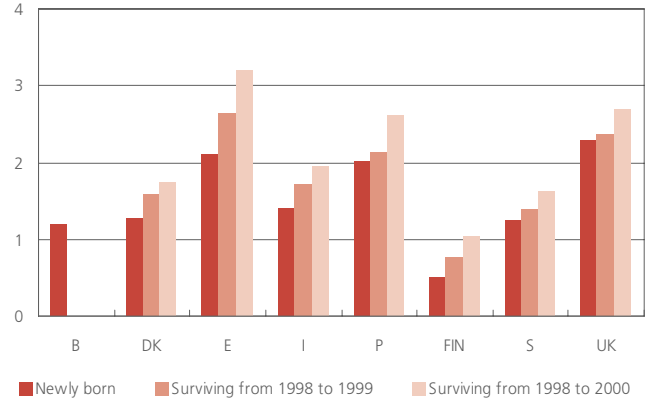
(1) Note the scales employed in the graphs are different; EL, not available. (2) NACE Sections C to E; D: NACE Section E for 1999; F: NACE Section C for 1999; IRL: NACE Section E for 1999. (3) NACE Sections G, H, I and K; B, DK, D and L: NACE Section G for 1999; IRL: 1999; D: NACE Section H for 1999; L: NACE Section I for 1997.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr)

Many aspects of today's economy have had a significant impact on the structure of the business economy. Out-sourcing, sub-contracting, foreign ownership, the pace of innovation, developments in the information society and labour market flexibility have all contributed to shifts in the composition of the enterprise population. These features that shape the business environment in the EU have generally led to a movement away from traditional, industrial sectors towards more information and knowledge based sectors.

A large amount of the data presented in this publication (including that on this and the following two double-page spreads) is collected within the framework of Council Regulation No 58/97 of 20 December 1996 concerning structural business statistics. The implementation of this Regulation has allowed Eurostat to provide users with information in relation to enterprises of all size classes (previously data only covered enterprises with 20 or more persons employed). This change provides significant new information on the whole of the enterprise population in the EU, allowing statistics to capture the true importance of those activities that are dominated by SMEs.

There were approximately 11.5 million enterprises active within industrial and service sectors (NACE Sections C to E and Sections G, H, I and K) in the EU in 2000 (see chart 2.2), of which the vast majority were found in the service sector. There was a distinct geographical split between northern and southern Member States, with relatively high numbers of enterprises in the southern EU economies, whereas the average size of enterprises in northern EU countries tended to be much larger.

Chart 2.3: Evolution of the average size of enterprises born in 1998, in the private sector (NACE Sections C to O, excluding Section L) (average number of persons employed) (1)



(1) DK and FIN: employment data are provided as full-time equivalents (FTEs); B: not available for one or two-year old enterprises; I: excluding activities of membership organizations (NACE Division 91); S: excluding electricity, gas & water supply (NACE Section E).
Source: Eurostat, Structural Business Statistics (theme4/sbs/bus_demo)

ENTERPRISE DISTRIBUTION ACROSS THE ECONOMY

Table 2.2: Number of enterprises and average number of persons employed per enterprise across different sectors of the economy, 2000 (1)

	EU-15	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Share in total number of enterprises (%)																
Industry and energy (NACE Sections C to E) (2)	13.3	10.1	14.6	12.8	:	10.6	13.2	8.8	15.7	5.6	9.8	13.0	15.1	15.5	12.4	11.4
Construction (NACE Section F) (3)	14.3	14.1	16.9	14.3	:	12.7	16.5	:	14.1	9.0	13.3	9.2	15.1	16.0	12.0	12.9
Distribution and HORECA (NACE Sections G and H) (4)	42.7	49.2	39.7	32.4	:	47.4	42.5	59.7	43.4	48.1	43.5	50.0	56.0	32.6	31.4	35.2
Transport and communication (NACE Section I) (5)	5.9	4.1	4.7	7.9	:	10.1	4.9	6.4	4.5	5.4	5.9	6.0	3.8	12.9	7.1	5.4
Other services (NACE Section K) (6)	23.9	22.5	24.1	32.6	:	19.2	22.9	25.1	22.3	31.8	27.5	21.9	9.9	23.1	37.1	35.1
Average number of persons employed per enterprise (units)																
Industry and energy (NACE Sections C to E) (7)	16.6	18.7	20.2	32.9	:	11.5	16.4	:	8.8	34.1	20.9	25.7	12.5	16.1	15.1	25.4
Construction (NACE Section F) (8)	5.2	4.7	6.7	7.7	:	6.0	4.5	:	2.9	14.7	7.2	13.2	4.4	4.1	4.3	7.0
Distribution and HORECA (NACE Sections G and H) (9)	5.2	4.0	8.4	8.3	:	3.7	4.6	9.8	2.5	5.3	8.2	7.6	3.3	4.9	4.7	12.8
Transport and communication (NACE Section I) (10)	10.9	18.0	11.5	19.9	:	4.1	16.2	21.5	7.1	16.2	17.5	20.4	8.8	6.8	9.6	19.8
Other services (NACE Section K) (11)	5.4	5.4	4.6	7.8	:	4.3	6.0	8.5	2.5	5.2	10.1	6.3	5.5	4.4	3.3	8.2

(1) EU-15: estimates based on available country information. (2) D, F and IRL: 1999. (3) L and NL: 1999. (4) B, DK, D, IRL and L: 1999. (5) IRL: 1999; L: 1997. (6) IRL: 1999. (7) D and F: 1999. (8) L and NL: 1999. (9) B, DK, D, IRL and L: 1999. (10) IRL: 1999; L: 1997. (11) IRL: 1999; L: 1998.

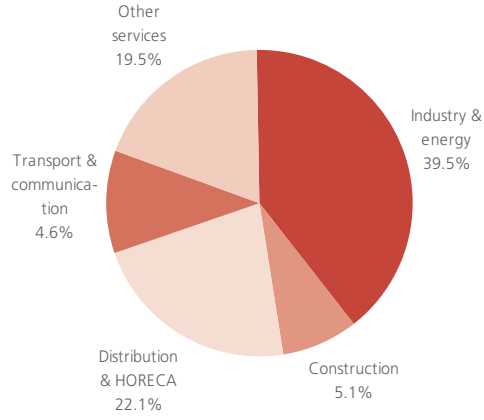
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr)

The average size of enterprises was generally lower in service activities and the construction sector, whilst it was considerably higher for industrial activities, as well as transport and communication services, where minimum efficient scales of operation are often required to run networks efficiently (see table 2.2).

A lot of very small and small enterprises were found in distributive trade activities, other services and the construction sector. Although these sectors contributed the vast majority of enterprises their contribution in terms of employment was less significant. Distribution, hotels, restaurants and cafés accounted for 42.7% of enterprises in the EU's business economy in 2000, employing, on average, just over 5 persons per enterprise. On the other hand, enterprises operating in industrial and energy sectors represented 13.3% of the business enterprise population, with average employment of almost 17 persons per enterprise.

In 2000, close to 40% of the EU's value added in the business economy was generated by industrial and energy related activities (see chart 2.4). By far the most important sub-sector was that of manufacturing (NACE Section D), which accounted for 87.0% of the industry and energy total. The second largest source of wealth creation was distribution and HORECA, with 22.1% of total value added in 2000. This sector was dominated by distribution activities (NACE Section G) that represented 85.5% of its value added.

Chart 2.4: Value added, activity breakdown in the EU, 2000 (1)



(1) NACE Sections C to K, excluding Section J; EU-15: excluding EL; EU-15: also excluding IRL for NACE Section F.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr)

2 THE IMPORTANCE OF SMALL AND MEDIUM-SIZED ENTERPRISES

Table 2.3: Number of enterprises and persons employed broken down by size-class, 2000 (% share of total) (1)

	EU-15	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Number of enterprises						Industry and energy (NACE Sections C to E)										
Very small enterprises (1-9 pers. employed)	78.3	78.6	75.5	67.2	0.0	78.6	82.0	:	83.5	:	76.8	68.5	79.5	84.1	85.1	70.6
Small enterprises (10-49 pers. employed)	17.2	16.2	18.2	23.8	79.4	18.5	13.8	:	14.4	:	16.7	23.5	16.2	11.5	11.1	21.7
Medium-sized enterprises (50-249 pers. employed)	3.7	4.1	5.0	7.2	17.1	2.4	3.3	:	1.8	:	5.0	6.2	3.8	3.4	3.0	6.1
Large enterprises (250+ pers. employed)	0.9	1.0	1.3	1.9	3.5	0.4	0.9	:	0.3	:	1.6	1.8	0.5	1.0	0.9	1.6
Number of persons employed																
Very small enterprises (1-9 pers. employed)	13.2	11.2	8.8	7.2	0.0	20.2	11.7	:	24.5	:	11.5	9.8	18.8	9.0	11.1	9.6
Small enterprises (10-49 pers. employed)	20.9	18.8	19.2	14.5	26.6	31.5	18.4	:	30.7	:	23.4	18.8	27.3	15.3	15.4	17.4
Medium-sized enterprises (50-249 pers. employed)	22.8	22.8	26.5	23.0	34.4	20.6	21.2	:	20.2	:	25.3	26.1	29.1	22.9	21.0	25.0
Large enterprises (250+ pers. employed)	43.1	47.2	45.5	55.4	39.0	27.8	48.7	:	24.6	:	39.8	45.3	24.8	52.8	52.6	48.0
Number of enterprises (2)						Services (NACE Sections G, H, I and K)										
Very small enterprises (1-9 pers. employed)	93.6	93.8	91.1	86.5	:	95.6	93.4	:	97.3	:	91.9	87.5	95.4	94.1	94.4	86.9
Small enterprises (10-49 pers. employed)	5.6	5.5	7.4	12.0	:	3.9	5.6	:	2.4	:	6.7	10.9	4.1	4.9	4.8	11.4
Medium-sized enterprises (50-249 pers. employed)	0.7	0.6	1.3	1.3	:	0.5	0.9	:	0.2	:	1.1	1.4	0.4	0.8	0.7	1.4
Large enterprises (250+ pers. employed)	0.1	0.1	0.2	0.2	:	0.1	0.2	:	0.0	:	0.3	0.2	0.1	0.2	0.1	0.3
Number of persons employed (3)																
Very small enterprises (1-9 pers. employed)	37.0	34.9	:	29.9	:	47.4	26.5	:	59.4	:	24.9	29.1	51.0	32.0	35.2	23.9
Small enterprises (10-49 pers. employed)	19.8	20.8	:	26.1	:	19.6	19.8	:	15.0	:	22.5	24.0	19.9	20.3	20.5	16.4
Medium-sized enterprises (50-249 pers. employed)	12.3	11.6	:	14.4	:	12.0	14.7	:	8.3	:	13.9	16.2	11.8	16.5	14.4	9.8
Large enterprises (250+ pers. employed)	30.9	32.7	:	29.6	:	21.0	39.0	:	17.4	:	38.7	30.7	17.3	31.2	29.9	49.9

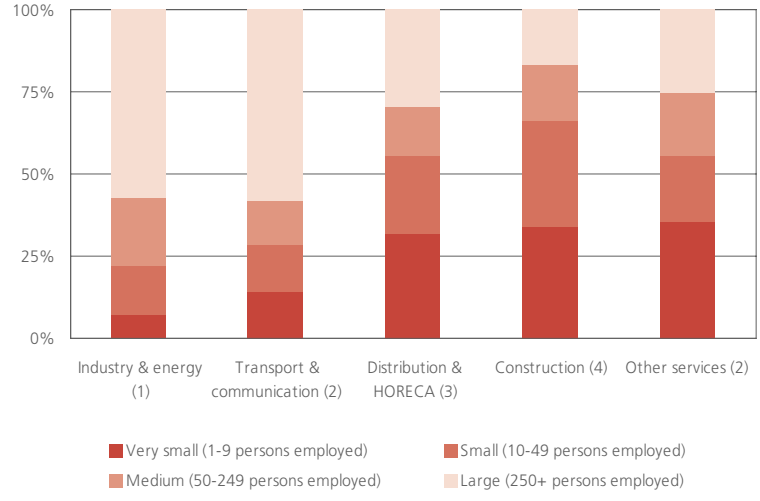
(1) EU-15: estimates based on available data. (2) B: NACE Section G, 1999; D: 1999. (3) D: 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/sizclass)

As shown in table 2.3, the number of very small enterprises (with 1 to 9 persons employed) was sizeable in both industrial and service activities. Indeed, they accounted for 78.3% of all industrial enterprises and 93.6% of all service enterprises. Nevertheless, in terms of their contribution to employment, very small enterprises employed just 13.2% of those working in industrial activities, a proportion that rose to 37.0% in the service sector.

While large enterprises (with 250 or more persons employed) represented a tiny share of industrial enterprises in the EU (0.9%), they accounted for 43.1% of total employment. Their contribution to employment in the service sector was less important, although almost one-third (30.9%) of those employed worked in a large enterprise.

Chart 2.5 ranks the sectors by the importance of very small enterprises in the generation of value added. It shows that the majority of wealth in the industrial sector was generated within large enterprises that accounted for 57.5% of value added. Likewise in transport and communication services, the majority of value added (58.1%) was generated in 2000 by large enterprises. On the other hand, around one-third of the value added generated in the EU's construction, distribution and HORECA and other services sectors was accounted for by very small enterprises.

Chart 2.5: Value added breakdown by activity and size-class in the EU, 2000



(1) Excluding IRL and L. (2) Excluding D, EL, IRL and L. (3) Excluding D, DK, EL, IRL and L. (4) Excluding EL, IRL and L.
Source: Eurostat, Structural Business Statistics (theme4/sbs/sizclass)

3. Energy

PRIMARY ENERGY PRODUCTION

Table 3.1: Primary energy production by fuel type, 2000 (thousand TOE) (1)

	EU-15	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Total primary energy production	759 312	13 155	27 622	131 916	9 946	31 154	130 405	2 281	30 581	57	56 912	9 453	3 131	14 805	29 570	268 325
Hard coal	50 826	-	-	24 164	-	6 544	1 898	-	-	-	-	-	-	-	-	18 221
(% of total)	*6.7*	-	-	*18.3*	-	*21.0*	*1.5*	-	-	-	-	-	-	-	-	*6.8*
Lignite	47 751	-	-	35 406	8 222	1 197	123	1 065	4	-	-	292	-	1 207	235	-
(% of total)	*6.3*	-	-	*26.8*	*82.7*	*3.8*	*0.1*	*46.7*	*0.0*	-	-	*3.1*	-	*8.1*	*0.8*	-
Oil	160 149	-	18 132	3 208	280	225	2 402	-	4 606	-	2 373	1 033	-	-	-	127 890
(% of total)	*21.1*	-	*65.7*	*2.4*	*2.8*	*0.7*	*1.8*	-	*15.1*	-	*4.2*	*10.9*	-	-	-	*47.6*
Gas	190 573	2	7 411	15 800	42	148	1 497	958	13 622	-	51 904	1 533	-	-	-	97 654
(% of total)	*25.1*	*0.0*	*26.8*	*12.0*	*0.4*	*0.5*	*1.2*	*42.0*	*44.5*	-	*91.2*	*16.2*	-	-	-	*36.4*
Nuclear	222 846	12 422	-	43 750	-	16 046	107 093	-	-	-	1 013	-	-	5 799	14 781	21 942
(% of total)	*29.3*	*94.4*	-	*33.2*	-	*51.5*	*82.1*	-	-	-	*1.8*	-	-	*39.2*	*50.0*	*8.2*
Renewables	87 166	731	2 079	9 587	1 403	6 994	17 392	258	12 348	57	1 622	6 595	3 131	7 799	14 554	2 618
(% of total)	*11.5*	*5.6*	*7.5*	*7.3*	*14.1*	*22.5*	*13.3*	*11.3*	*40.4*	*100.0*	*2.8*	*69.8*	*100.0*	*52.7*	*49.2*	*1.0*

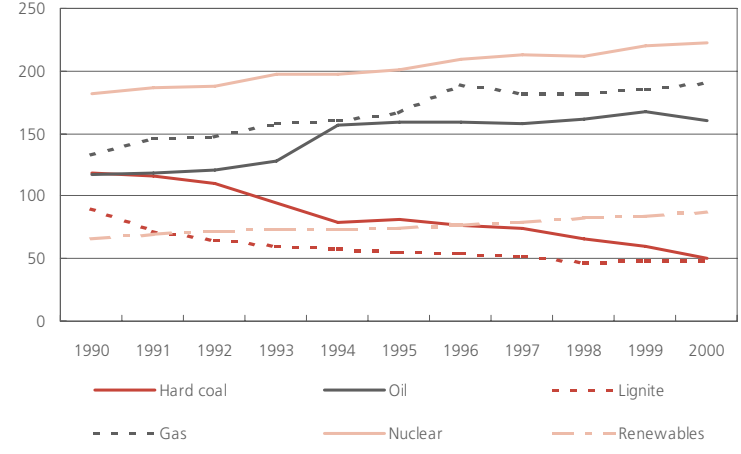
(1) Production of primary energy comprises energy extracted from natural resources such as coal, lignite, crude oil, and natural gas; renewables are defined to include hydro, biomass, geothermal, wind and solar energy; production from nuclear energy is calculated as the heat released during fission of uranium within a nuclear reactor.
Source: Eurostat (Energy statistics)

Primary energy production is the total amount of energy produced within the EU. The data presented in table 3.1 provides information about the production of primary production in the EU, with a breakdown into six products. It shows that nuclear energy was the most important energy source, accounting for 29.3% of the EU's primary energy production in 2000.

Primary energy commodities can be divided between fuels of fossil origin, nuclear energy and renewable energy commodities. Fossil fuels are taken from natural resources, which were formed from biomass, as a result of geological processes over several thousands of years. Included in the definition of renewable commodities is energy generated from solar, wind, biomass, geothermal, hydro and ocean resources.

The EU's primary energy production registered an overall increase of 7.7% between 1990 and 2000. This was primarily due to an expansion of primary production for all fuels, other than solid fuels, whose primary production decreased by 57% for hard coal and by 47% for lignite. Thus, while in 1990 coal represented around 30% of total primary production, by 2000 its share of the total was 13%. Primary production of hard coal and lignite has gone down because of environmental considerations and also because of increased imports from non-Community countries that produce coal at a cheaper price. In contrast, the primary production of crude oil and natural gas increased overall by 36.0% and 43.4% respectively between 1990 and 2000. The contribution of renewable energy sources also increased, but its relative share of total primary production remained low (11.5% of the total in 2000).

Chart 3.1: Primary energy production in the EU (million TOE)



Source: Eurostat (Energy statistics)

3

POWER STATION GENERATION

Table 3.2: Power station generation by energy type, 2000 (TWh)

	EU-15	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Total	2581.4	82.7	36.2	568.8	53.1	222.8	535.8	23.7	274.8	0.4	89.6	59.9	43.5	70.0	145.6	374.6
Hydro	321.1	0.5	0.0	23.2	3.7	29.5	67.5	0.8	44.3	0.1	0.1	41.6	11.3	14.7	78.6	5.1
Thermal (1)	1330.1	33.2	30.1	360.5	49.0	124.6	49.7	22.5	223.3	0.2	81.5	16.6	30.3	24.2	5.3	279.2
Nuclear	863.9	48.2	-	169.6	-	62.2	415.2	-	-	-	3.9	-	-	22.5	57.3	85.1
Other renewables	66.4	0.9	6.1	15.5	0.5	6.6	3.4	0.3	7.2	0.1	4.1	1.7	1.8	8.6	4.3	5.3

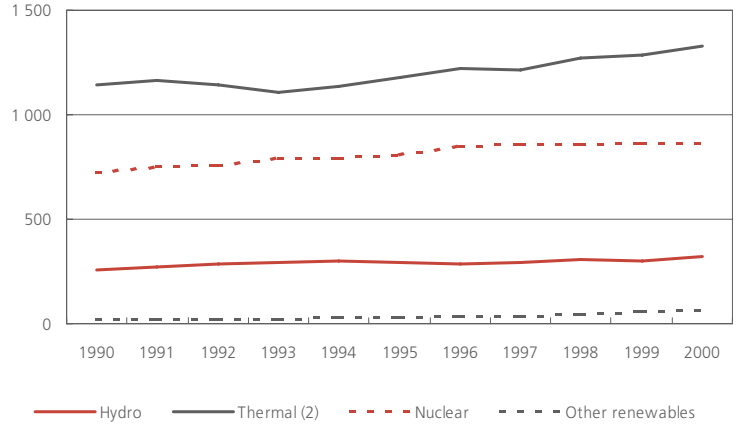
(1) Thermal generation is without biomass.
Source: Eurostat (Energy statistics)

Between 1990 and 2000 the total amount of electricity generated in power stations within the EU increased by 20.5%. Over this period, the weight of different types of power generation in the total remained quite similar, with little evolution.

The largest contribution in electricity generation came from thermal power stations, which accounted for 51.5% of total power generation in 2000. There was a 23.9% increase in electricity power generation from hydro power stations over the period 1990 to 2000, with hydro power accounting for 12.4% of total generation in the EU, almost the same percentage as in 1990 (12.1%). For nuclear generation there was almost 20% growth in power generation between 1990 and 2000, when nuclear power accounted for 33.5% of total electricity generation. Significant growth was registered in the electricity obtained from other (without hydro) renewable energy sources, whose share of total electricity generation rose from 1.6% in 1990 to 2.6% by 2000.

Among the Member States (see table 3.2), Finland, Denmark and Luxembourg reported the highest share of total electricity generation from other renewable sources in 2000 (with 12.3%, 16.9% and 25.0% respectively), while Austria and Sweden generated more than half of their electricity in hydro power stations. Nuclear power contributed 77.5% of the electricity generated in France in 2000.

Chart 3.2: Power station generation by energy type in the EU (TWh) (1)



(1) Power station generation covers the total amount of electricity generated, measured at output terminals of the main generators; for thermal and nuclear power generation German data includes former Eastern Germany. (2) Thermal generation is without biomass.

Source: Eurostat (Energy statistics)

3

GROSS INLAND CONSUMPTION

Table 3.3: Gross inland consumption by fuel type, 2000 (million TOE) (1)

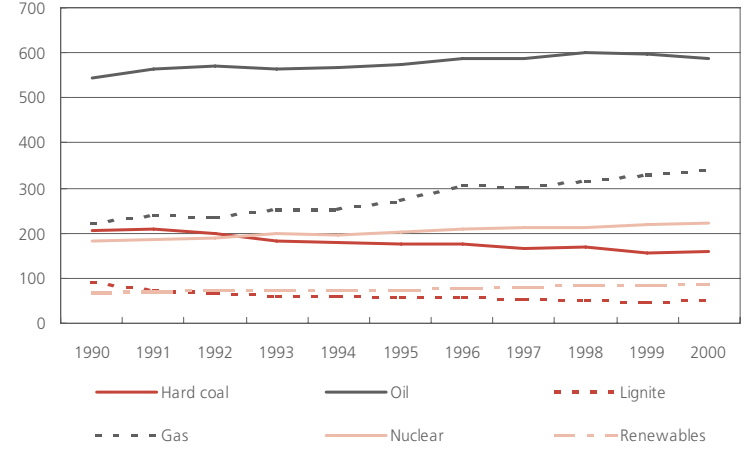
	EU-15	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Energy intensity (kgoe/EUR 1 000) (2)	193.7	236.0	125.1	165.1	263.9	227.2	189.7	173.1	190.9	189.2	198.6	138.0	241.0	256.5	213.1	229.8
Gross inland consumption	1455.8	57.2	19.7	339.5	28.1	122.6	257.2	14.0	175.7	3.6	75.6	28.4	24.1	32.6	47.5	230.0
Hard coal	163.8	8.1	4.0	45.0	0.7	19.5	15.0	1.8	12.7	0.1	8.0	3.2	3.8	3.6	2.3	35.9
(% of total gross inland consumption)	*11.2*	*14.2*	*20.4*	*13.2*	*2.6*	*15.9*	*5.8*	*12.8*	*7.2*	*3.3*	*10.5*	*11.3*	*15.8*	*11.1*	*5.0*	*15.6*
Lignite	50.7	0.1	0.0	38.1	8.3	1.2	0.1	0.9	0.0	0.0	0.0	0.3	-	1.4	0.2	-
(% of total gross inland consumption)	*3.5*	*0.2*	*0.0*	*11.2*	*29.6*	*0.9*	*0.0*	*6.1*	*0.0*	*0.2*	*0.0*	*1.2*	-	*4.4*	*0.5*	-
Oil	587.0	22.0	9.0	129.9	15.9	63.2	88.4	7.7	88.9	2.3	28.4	11.8	15.1	9.3	14.3	80.7
(% of total gross inland consumption)	*40.3*	*38.4*	*45.9*	*38.3*	*56.7*	*51.6*	*34.4*	*54.7*	*50.6*	*62.9*	*37.6*	*41.7*	*62.5*	*28.6*	*30.1*	*35.1*
Gas	338.7	13.4	4.4	71.9	1.7	15.2	35.1	3.4	57.9	0.7	34.7	6.5	2.0	3.4	0.7	87.5
(% of total gross inland consumption)	*23.3*	*23.4*	*22.6*	*21.2*	*6.1*	*12.4*	*13.7*	*24.5*	*33.0*	*18.5*	*45.9*	*23.0*	*8.4*	*10.5*	*1.5*	*38.1*
Nuclear	222.8	12.4	-	43.8	-	16.0	107.1	-	-	-	1.0	-	-	5.8	14.8	21.9
(% of total gross inland consumption)	*15.3*	*21.7*	-	*12.9*	-	*13.1*	*41.6*	-	-	-	*1.4*	-	-	*17.8*	*31.1*	*9.5*
Renewables	87.2	0.7	2.1	9.6	1.4	7.0	17.4	0.3	12.3	0.1	1.6	6.6	3.1	7.8	14.6	2.6
(% of total gross inland consumption)	*6.0*	*1.3*	*10.8*	*2.8*	*5.0*	*5.7*	*6.8*	*1.8*	*7.0*	*1.6*	*2.2*	*23.2*	*13.0*	*23.9*	*30.6*	*1.1*
Others	5.6	0.5	0.1	1.3	0.0	0.5	-6.0	0.0	3.9	0.5	1.8	-0.1	0.1	1.2	0.6	1.3
(% of total gross inland consumption)	*0.4*	*0.8*	*0.3*	*0.4*	*0.0*	*0.4*	*-2.3*	*0.1*	*2.2*	*13.5*	*2.4*	*-0.4*	*0.3*	*3.7*	*1.2*	*0.6*

(1) Gross inland consumption is defined as primary production plus imports, recovered products and changes in stocks, less exports and fuel supply to maritime bunkers (for seagoing ships of all flags); it therefore reflects the energy necessary to satisfy inland consumption within the limits of the national territory. (2) Energy intensity is calculated by dividing gross inland consumption by gross domestic product (GDP).

Source: Eurostat (Energy statistics, National Accounts)

Gross inland consumption in the EU increased overall by 10.3% during the period 1990 to 2000. Oil was the most important fuel with around 40% of total gross inland consumption and its contribution remained stable during the period considered. The share of natural gas in total inland consumption increased from 16.8% in 1990 to 23.3% by 2000, while that of solid fuels decreased from 22.7% in 1990 to 14.7% by 2000. Indeed, consumption of natural gas rose overall by 52.3% between 1990 and 2000, while that of solid fuels was reduced by 28.7%. The overall increase of inland consumption among the other energy commodities during this period was 31.5% for renewable commodities, 22.8% for the nuclear production of electricity and 7.7% for oil. The switch to natural gas from solid fuels can be largely attributed to environmental considerations.

Chart 3.3: Gross inland consumption by fuel type in the EU (million TOE)



Source: Eurostat (Energy statistics)

FINAL ENERGY CONSUMPTION

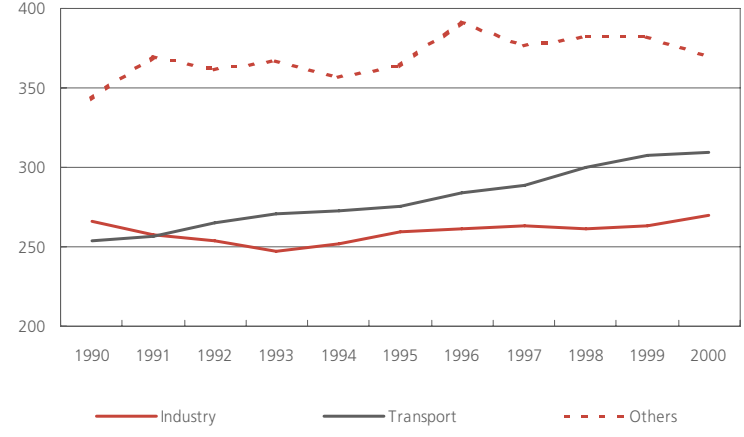
Table 3.4: Final energy consumption by sector, 2000 (million TOE) (1)

	EU-15	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Total	949.8	36.9	14.6	213.8	18.5	79.3	150.4	10.4	126.1	3.5	49.8	22.6	16.9	24.5	32.9	149.6
Industry	270.2	13.7	2.9	58.8	4.4	25.4	35.4	2.2	40.0	1.0	13.8	6.3	5.5	12.1	12.9	35.9
Transport	309.5	9.7	4.7	65.8	7.2	32.8	51.6	3.9	41.3	1.9	13.8	6.8	6.5	4.4	7.7	51.5
Others	370.1	13.6	6.9	89.2	6.9	21.1	63.4	4.3	44.8	0.7	22.2	9.5	4.9	8.0	12.3	62.2

(1) Final energy consumption includes all energy delivered to final consumers (in the transport, industry and other sectors), net of transformation and network losses; it also excludes consumption for non-energy purposes, such as feedstocks in the petrochemical industry.
Source: Eurostat (Energy statistics)

Final energy consumption is the energy actually consumed by end-users. Final energy consumption of the EU increased by 10.1% during the period 1990 to 2000. During the early 1990s there was a reduction in final energy consumption that can be explained by reduced demand from the industrial sector as a result of a slowdown in economic activity. The industrial sector reported energy consumption in 2000 that was barely higher than it had been in 1990, although this may also be explained by efficiency gains, resulting from the fact that less energy is required to produce the same volume of output. On the other hand, final energy consumption in the transport sector increased on a continuous basis to reach 310 million TOE by 2000. As a result, the weight of the transport sector in total final energy consumption increased from 29.4% to 32.6% over the period 1990 to 2000. Households, commerce and the public sector remained the largest consumers of final energy consumption, accounting for 38.9% of the total in 2000, compared with 39.8% in 1990.

Chart 3.4: Final energy consumption by sector in the EU (million TOE)



Source: Eurostat (Energy statistics)

ENERGY DEPENDENCY

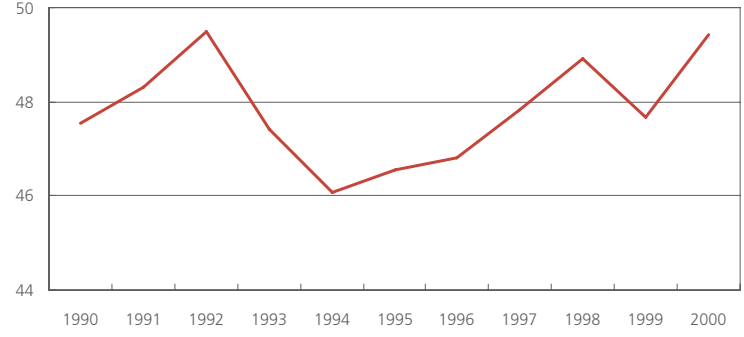
Table 3.5: Energy dependency, 2000 (%) (1)

	EU-15	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Energy dependency	49.4	77.7	-33.8	59.7	69.5	51.1	76.5	86.5	85.5	99.8	38.6	66.4	87.1	55.7	39.7	-17.1

(1) Energy dependency measures the extent to which a country relies on imports to meet its energy needs; energy dependency is calculated as the ratio of net imports of an energy product to its gross inland consumption plus bunkers.
Source: Eurostat (Energy statistics)

As noted above, the EU is highly dependent on energy imports to satisfy its energy demand. Chart 3.5 shows the evolution of the energy dependency rate, which fluctuated between 46% and 50% over the period 1990 to 2000. Only two countries, Denmark and United Kingdom, had a surplus of energy for their own requirements (negative energy dependency ratio), while energy dependency ratios were over 75% in six of the Member States. The EU remained most dependent upon imports of oil (the energy dependency ratio for oil was 75.1% in 2000), while in the same year, energy dependency ratios for other products were slightly lower, for example, 63.8% for hard coal and 45.7% for natural gas.

Chart 3.5: Energy dependency in the EU (%)



Source: Eurostat (Energy statistics)

ENERGY PRICES

Table 3.6: Energy prices, 2002 (1)

	EU-15	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
VAT-free industrial fuel prices (EUR per GJ)																
Residual fuel oil	5.5	3.5	5.8	4.2	4.9	5.3	4.8	:	5.1	3.6	5.1	4.2	6.2	6.9	11.7	:
Electricity	15.2	16.2	:	14.8	13.9	13.6	13.5	18.0	23.1	11.1	:	:	15.4	11.3	7.3	14.6
Natural gas	5.8	5.0	4.8	7.3	:	4.7	4.8	5.0	5.8	5.7	:	6.5	4.6	5.4	8.6	5.7
Tax-inclusive household fuel prices (EUR per GJ)																
Heating gas oil	10.3	7.5	18.3	8.6	8.3	9.3	8.6	10.9	22.4	7.2	15.2	10.2	9.9	9.2	17.8	6.9
Electricity	35.0	37.3	57.6	42.0	19.7	26.7	31.8	26.0	51.4	32.8	45.4	37.1	31.8	21.9	29.2	27.3
Natural gas	12.6	11.7	20.0	13.2	:	13.5	12.0	9.1	18.9	7.8	12.8	13.2	15.4	:	19.2	7.8
Tax-inclusive retail prices of transport fuels (EUR per litre)																
Unleaded gasoline	0.99	0.95	1.04	0.99	0.69	0.77	0.96	0.80	1.00	0.74	1.10	0.82	0.86	1.00	0.95	1.13
Automotive diesel	0.81	0.72	0.80	0.81	0.60	0.67	0.75	0.74	0.84	0.62	0.77	0.70	0.65	0.78	0.80	1.21

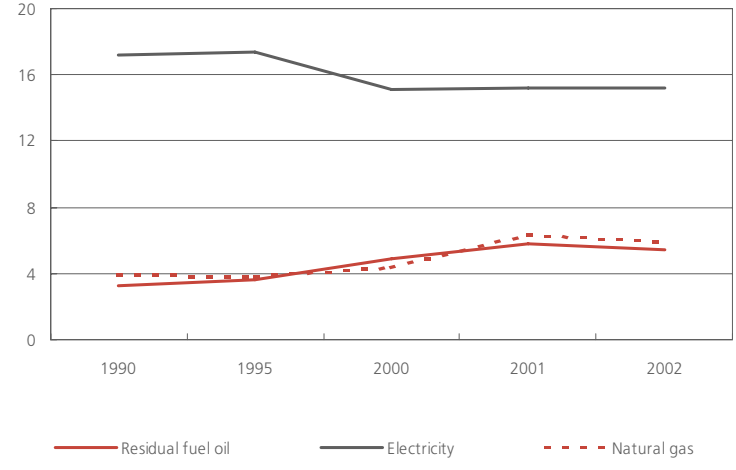
(1) For household electricity prices: the standard consumer used is Dd - one with an annual consumption of 7 500 kWh which corresponds to a standard dwelling of 100 square metres with 4-5 rooms plus a kitchen; for industrial prices: the standard consumer used is Ig - one with an annual consumption of 24 GWh and a maximum demand of 4 000 kW. For household natural gas consumers: the standard consumer used is D3 - one with an annual consumption of 83.70 GJ i.e. 23 260 kWh; for industrial prices: the standard consumer used is I4-1 - one with an annual consumption of 418 600 GJ i.e. 116.30 GWh. Heating gas oil prices are given for deliveries of between 2 000 and 5 000 litres, while those for residual fuel oil are for monthly deliveries of less than 2 000 tonnes or annual deliveries of less than 24 000 tonnes.

Source: Eurostat (Energy statistics)

The average price of energy products in each country is calculated as the median of the prices in various locations. The average EU price is then calculated by taking weighted averages of the prices in individual countries. Since price data are available for 2001 and 2002 but consumption data is not, the prices for 2001 and 2002 have been weighted according to consumption data from 2000 (with the exception of prices for unleaded gasoline in 2002, which were weighted according to 2001 consumption data); these differences should only have a small effect on the EU averages.

The industrial price of electricity recorded an overall decrease of 11.5% between 1990 and 2002, while the industrial price of natural gas and the industrial price of residual fuel oil recorded increases of 49.0% and 68.2% respectively over the same period.

Chart 3.6: Industrial energy prices in the EU (EUR per GJ) (1)

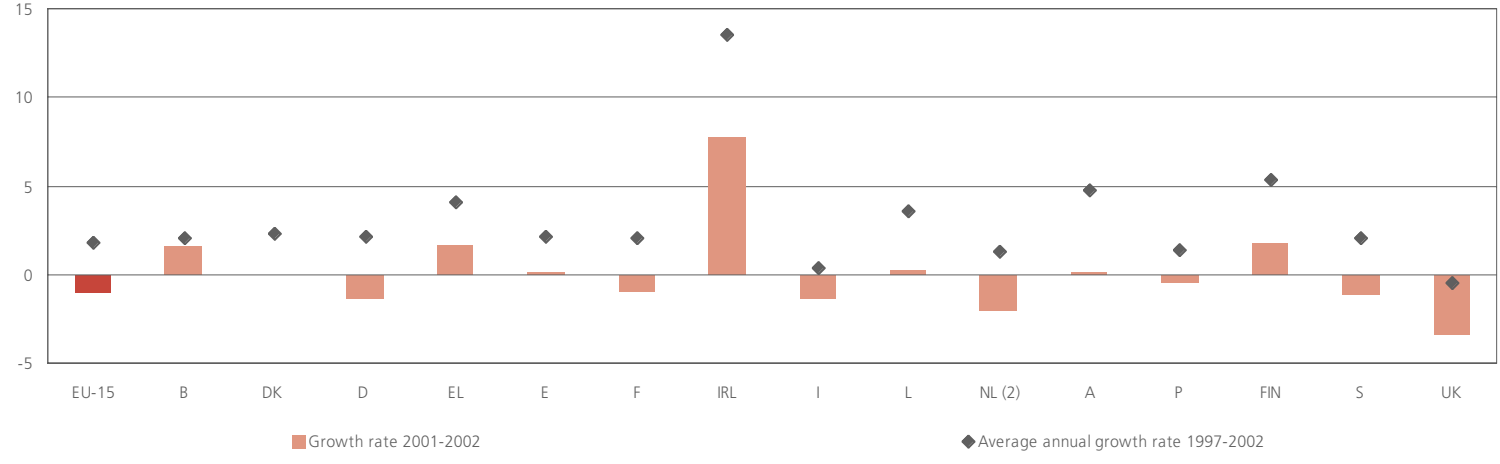


(1) VAT-free prices.
Source: Eurostat (Energy statistics)

4. Industry

EVOLUTION OF THE PRODUCTION INDEX FOR TOTAL INDUSTRY

Chart 4.1: Production index for total industry (excluding construction), growth rates (%) (1)



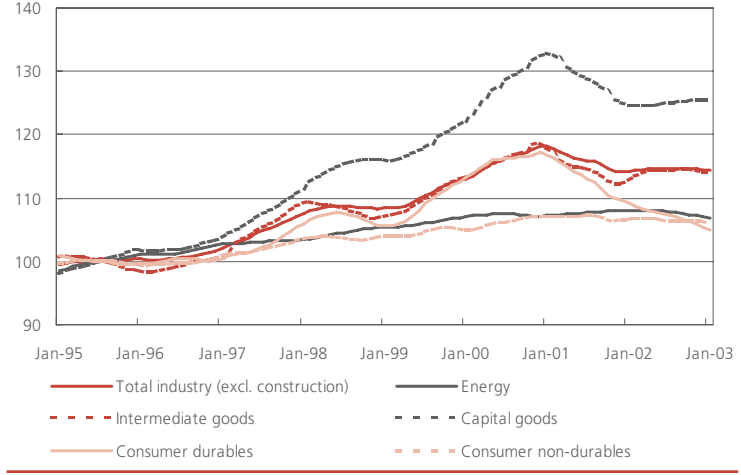
(1) Data adjusted for the number of working days; total industry excluding construction covers NACE Sections C to E. (2) Provisional data for 2002.
Source: Eurostat, European Business Trends - Monthly and Quarterly Short Term Statistics (theme4/ebt)

The production index is an important business cycle indicator that reflects activity within industry; it is one of the most volatile components of the economy. In line with traditional practice, the production index should show the evolution of value added at factor cost in constant price terms. Value added reflects the difference between operating income and purchases of goods and services, adjusted for changes in stocks and hence represents the value derived from the combination of factors such as capital and labour. In practice, data is often collected for production or turnover and value added is only used for weights.

The index should take account of variations in type and quality of the commodities and of the input materials, changes in stocks of finished goods and work in progress, changes in technical input-output relations (processing techniques) and services such as the assembling of production units, mounting, installations, repairs, planning, engineering and creation of software. The observation unit for this index is the kind-of-activity unit (KAU), although enterprises or the local unit may be used as a proxy under certain circumstances and data is often collected for individual products.

The legal basis for the production index is Council Regulation No 1165/98 of 19 May 1998 concerning short-term statistics (STS-R), which is in the process of implementation (due to be completed by mid-2003). It is important to note that the coverage of the production index according to the STS-R includes all activities listed in NACE Sections C to E (in other words, mining and quarrying, manufacturing, electricity, gas and water supply) and not just manufacturing (NACE Section D). Total industry (excluding construction) accounted for around 21.4% of the total value added generated in the EU economy in 2002.

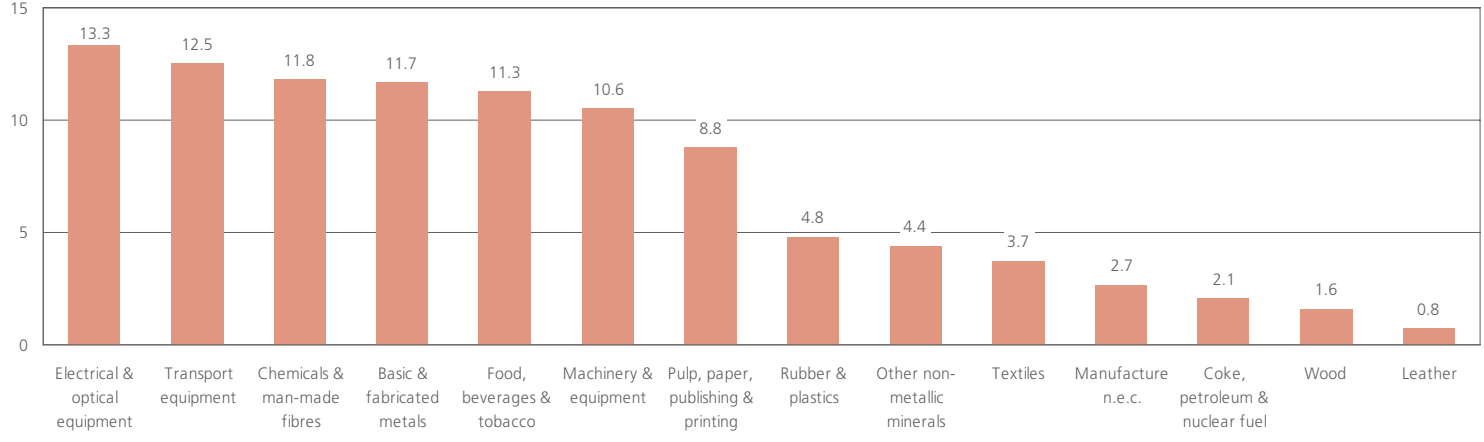
Chart 4.2: Production index for the EU, trend cycle (1995=100) (1)



(1) Estimates for January 2003 for all data; for a definition of the Main Industrial Groupings (MIGs) used in this chart, please refer to page 110.
Source: Eurostat, European Business Trends - Monthly and Quarterly Short Term Statistics (theme4/ebt)

THE LARGEST MANUFACTURING ACTIVITIES

Chart 4.3: Largest EU manufacturing activities (defined by NACE Subsections), 2001 (share of manufacturing value added at factor cost) (1)



(1) Estimates.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms)

The bulk of the information contained within this chapter (and several tables and charts in chapters 5-8) is derived from the Structural Business Statistics (SBS) database. This data has been collected within the legal framework provided by the Council Regulation No 58/97 of 20 December 1996 concerning structural business statistics. The SBS Regulation is built upon a modular approach and as the need for further data becomes apparent, annexes may be added. At present the annexes refer to different economic sectors, however, in the future there may be additional annexes for cross-sectoral subjects (for example, business demography).

In order to be able to use time-series that extend back before the SBS-Regulation, the data presented in this publication for manufacturing generally only cover enterprises with 20 or more persons employed. It is important to note that when comparing across activities, and between countries, the values under-report the population figures as the economic weight of smaller enterprises is not captured. This sub-population of smaller enterprises can be particularly significant in craft-based industries, for example, the manufacture of textiles or leather products, and smaller enterprises are also usually more common in the southern Member States.

The SBS data reflects the population of enterprises structured according to the NACE classification (for further details see pages 108 and 109). If an enterprise operates in more than one activity, the most important in value added terms is chosen as its principal activity and all values for that enterprise are assigned to the NACE heading of its principal activity.

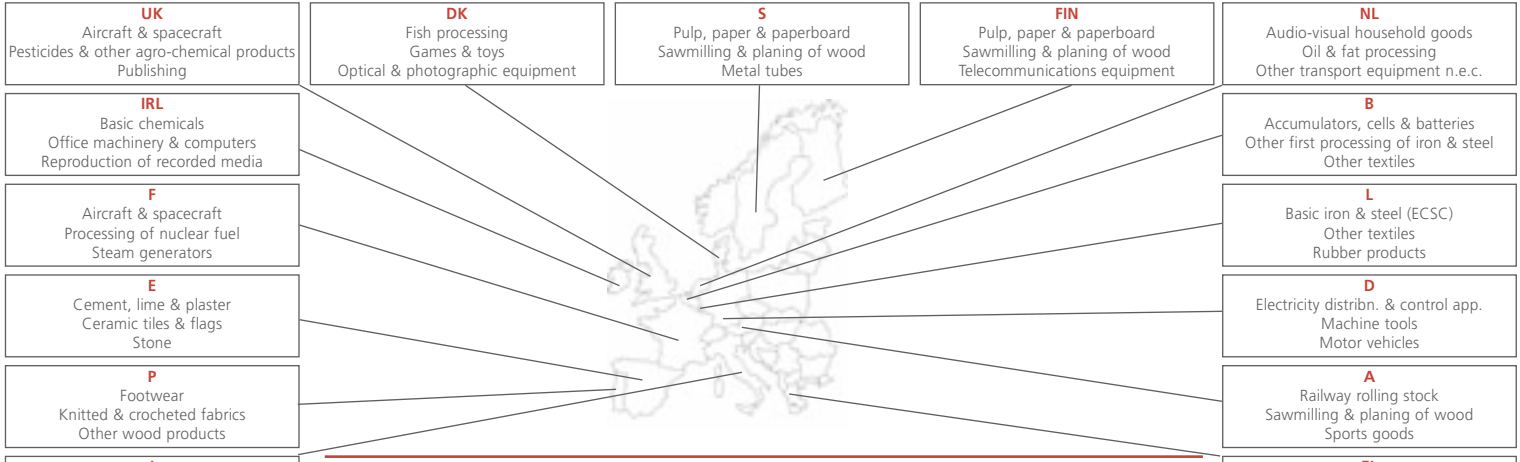
Table 4.1: Share of manufacturing value added in the EU (%)

NACE (NACE Subsection)	1990	2001
Food products; beverages and tobacco (DA) (1)	10.9	11.3
Textiles and textile products (DB)	5.3	3.7
Leather and leather products (DC)	1.0	0.8
Wood and wood products (DD)	1.6	1.6
Pulp, paper and paper products; publishing and printing (DE)	8.2	8.8
Coke, refined petroleum products and nuclear fuel (DF)	1.8	2.1
Chemicals, chemical products and man-made fibres (DG)	10.6	11.8
Rubber and plastic products (DH)	4.2	4.8
Other non-metallic mineral products (DI)	4.7	4.4
Basic metals and fabricated metal products (DJ)	12.3	11.7
Machinery and equipment n.e.c. (DK)	11.3	10.6
Electrical and optical equipment (DL) (2)	12.8	13.3
Transport equipment (DM)	11.8	12.5
Manufacturing n.e.c. (DN) (1) (2)	3.5	2.7

(1) Estimates for 2001. (2) Estimates for 1990.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms)

MANUFACTURING SPECIALISATION OF THE MEMBER STATES

Map 4.1: Manufacturing specialisation in the Member States, 2000 (1)



(1) Three most specialised manufacturing activities based on value added among manufacturing NACE Groups; excluding recycling; only NACE Groups with a share >0.5% of national manufacturing included; activities are ranked in alphabetical order; estimates.

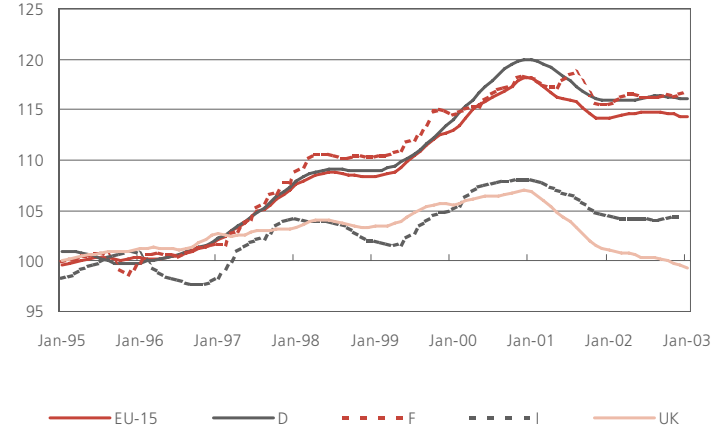
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms)

Several of the tables and charts in this publication use value added from SBS as a measure for the net output of an activity. Compared to turnover (sales) or production value (gross output), value added has the advantage in that it avoids double counting and is therefore less influenced by the industrial structure. For example, if a manufacturer of capital goods acquires one of its suppliers of intermediate goods the value added of the resulting enterprise is unaffected, and is equal to the sum of the value added of the two original enterprises. Turnover and production of the combined enterprise will be lower than the sum of the original enterprises because the sales from the manufacturer of the intermediate goods to the manufacturer of capital goods will have been internalised.

EU-15 data for manufacturing activities in the SBS database for the year 2001 are estimated by Eurostat. These estimates are made using short-term indicators such as indices of production, output prices and employment to update time-series of data received from individual Member States.

The calculation of specialisation ratios is performed using the following method: calculate for a given country the value added share of a given NACE Group in manufacturing and divide the result by the same ratio for the EU, expressing the result as a percentage. Values over 100 show that a country is relatively specialised in a particular activity compared to the EU-15 average. Specialisation ratios, per se, say nothing about whether an industry accounts for an important share of manufacturing value added.

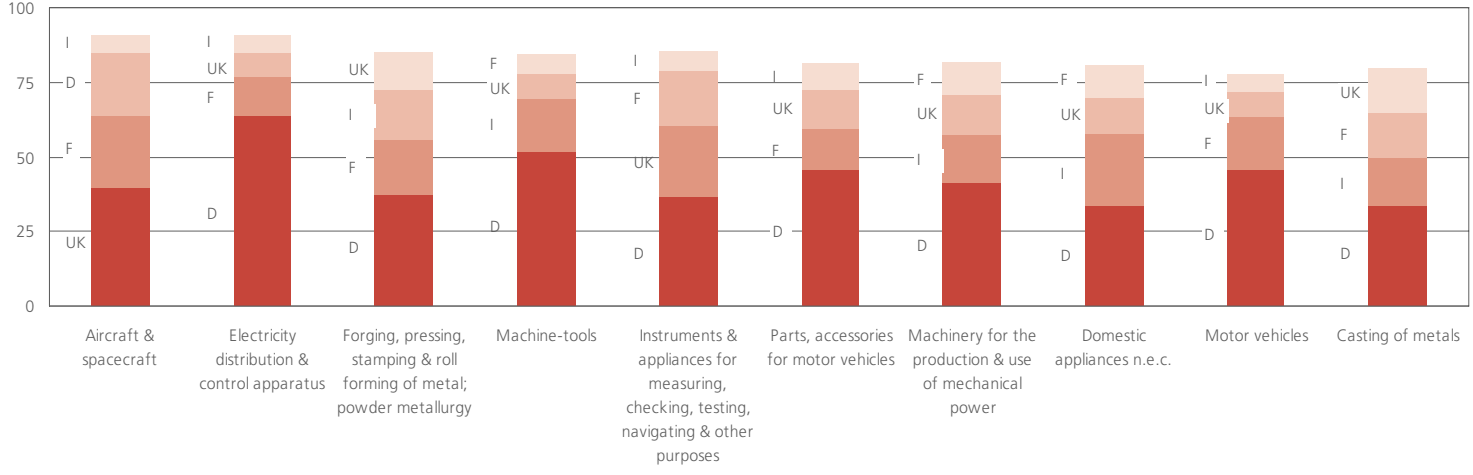
Chart 4.4: Production index for total industry (excluding construction), trend cycle (1995=100)



Source: Eurostat, European Business Trends - Monthly and Quarterly Short Term Statistics (theme4/ebt)

GEOGRAPHICAL CONCENTRATION OF OUTPUT

Chart 4.5: Geographical concentration of manufacturing, 2000 (cumulative share of the four largest countries in value added terms, %) (1)



(1) The following NACE Groups are excluded, 15.2, 16.0, 18.1, 18.3, 23.1, 23.2, 23.3, 28.2, 35.2 and 35.5; only NACE Groups >0.5% of EU manufacturing are included.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms)

An alternative way to study the structure of European manufacturing is to look at the geographical concentration of output. A concentration measure can be calculated by taking the share of the four largest countries in terms of value added for each NACE Group. Looking at the geographical concentration of manufacturing, the ratio of the four largest countries (Germany, France, Italy and the United Kingdom) was above 80% in eight NACE Groups in 2000 (see chart 4.5).

As globalisation widens the horizon for purchasing and production related decision making, it also increases the speed with which information and technology are diffused and ultimately competition spread. Countries that have a dynamic manufacturing industry that can adapt to these new challenges will benefit.

The geographical concentration of manufacturing, as shown in the map 4.1 (on the previous double page) provides information on the three most specialised manufacturing activities per country, based on NACE Groups and specialisation ratios in terms of value added at factor cost. The general trend is to see a higher level of specialisation in a limited number of activities for smaller countries. For example, Denmark is specialised in games and toys, Ireland in office machinery and computers, Austria in sports goods (notably, winter sports), Portugal in footwear and certain wood processing activities. Table 4.2 presents the three largest manufacturing activities for each Member State in absolute terms, based on value added.

Table 4.2: Three largest manufacturing activities, 2000 (1)

	Largest	Second largest	Third largest
EU-15	Machinery & equipment	Food & beverages	Chemicals
B	Chemicals	Food & beverages	Basic metals
DK	Food & beverages	Machinery & equipment	Chemicals
D	Machinery & equipment	Motor vehicles	Chemicals
EL	Food & beverages	Textiles	Coke, petroleum & nuclear
E	Food & beverages	Fabricated metals	Chemicals
F	Food & beverages	Chemicals	Fabricated metals
IRL	Chemicals	Food & beverages	Publishing & printing
I	Machinery & equipment	Fabricated metals	Food & beverages
L	Basic metals	Rubber & plastics	Fabricated metals
NL	Food & beverages	Chemicals	Publishing & printing
A	Machinery & equipment	Coke, petroleum & nuclear	Food & beverages
P	Food & beverages	Other non-metallic minerals	Textiles
FIN	Radio, TV, communication	Pulp & paper	Machinery & equipment
S	Motor vehicles	Machinery & equipment	Pulp & paper
UK	Food & beverages	Publishing & printing	Chemicals

(1) Based on value added for NACE Divisions 15 to 37; estimates.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms)

OUTPUT - RATES OF CHANGE

Table 4.3: Changes in manufacturing value added at factor cost in constant prices, 1991-2000 (% average annual change) (1)

	EU-15 (2)	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Food products; beverages and tobacco	1.5	:	2.4	1.3	10.1	-1.7	2.5	1.6	:	:	:	:	:	**-3.3**	0.3	1.9
Textiles and textile products	-1.7	:	-1.8	-4.1	:	-1.4	-1.4	-1.1	:	8.1	-2.1	:	:	-2.9	**-4.0**	1.4
Leather and leather products	-2.3	:	-0.3	-4.6	**-8.3**	-3.1	-2.6	:	:	:	-6.3	:	:	-3.6	-4.6	-4.9
Wood and wood products	2.4	:	7.4	1.6	**0.4**	0.9	2.0	:	:	19.9	3.0	:	:	6.1	1.1	1.7
Pulp, paper & paper products; publishing & printing	1.8	:	3.4	2.0	2.6	1.8	1.4	9.2	:	8.6	3.3	:	:	5.1	**-0.4**	1.6
Coke, refined petroleum products and nuclear fuel	0.4	:	-0.9	:	3.5	5.4	5.8	:	:	:	3.7	:	:	-5.9	**-9.4**	-1.3
Chemicals, chemical products and man-made fibres	2.9	:	7.0	1.8	1.1	**1.0**	4.7	21.8	:	9.1	3.2	:	:	3.5	3.0	3.4
Rubber and plastic products	3.1	:	4.2	2.0	3.6	2.8	5.6	4.8	:	2.2	2.9	:	:	5.3	**-0.1**	3.9
Other non-metallic mineral products	0.8	:	1.5	0.5	14.9	1.7	0.5	6.7	:	0.0	2.4	:	:	0.6	**-5.4**	1.1
Basic metals and fabricated metal products	1.7	:	3.9	0.9	4.1	2.2	2.8	:	:	3.5	2.5	:	:	3.6	2.6	**0.1**
Machinery and equipment n.e.c.	0.9	:	1.9	-0.1	:	1.9	1.6	:	:	**-0.2**	3.0	:	:	0.5	1.8	3.1
Electrical and optical equipment	5.4	:	8.0	1.3	9.7	-0.4	4.1	**-10.4**	:	7.0	1.8	:	:	20.8	7.5	6.3
Transport equipment	2.3	:	-1.4	1.0	-6.7	-0.9	3.0	**-7.0**	:	-1.5	1.0	:	:	-3.7	6.3	2.3
Recycling (3)	:	10.9	14.6	7.0	:	6.0	11.0	:	:	17.6	**3.3**	:	13.1	8.2	20.8	35.0

(1) Coloured text indicates the highest rate of change for each NACE Subsection, bold indicates the lowest rate of change for each NACE Subsection; EL, F, FIN and S: 1991-1999; IRL and NL: 1991-1998; UK: 1991-1997. (2) 1991-2001. (3) B, DK, D, E and L: 1996-2000; F and NL: 1996-1998; IRL: 1996-1997.

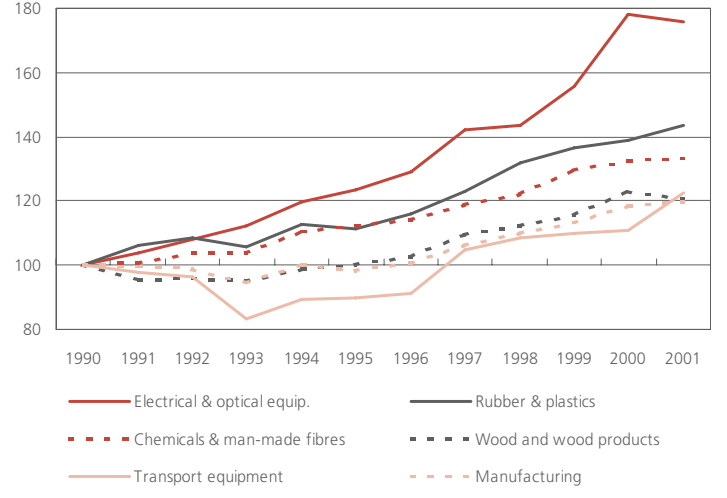
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms)

The industrial production index is a broad indicator of the state of the economic cycle. The general economic cycle of the EU exerted a strong influence on the performance of manufacturing activities. As shown in the chart 4.6, there was a slowdown in output in 1993, while latest data for 2001 also points to a downturn for some activities.

Observing the five fastest growing manufacturing activities in the EU at the level of NACE Groups, there was a general increase in output for all five activities; electrical and optical equipment manufacturing reported the highest growth rate, with output expanding by 75.0% between 1990 and 2001; the next highest growth was for rubber and plastics manufacturing (43.5%).

The average annual growth rate of manufacturing value added at factor cost between 1990 and 2001 was equal to 1.6%. This figure hides the contrasting values between the first and second halves of the 1990s. During the period 1996 to 2000, EU manufacturing value added in constant price terms rose in every year, with particularly high growth recorded in 1997 and 2000 (6.0% in both years), while there was a considerable slowdown in 2001 when 1.2% growth was registered.

Chart 4.6: Evolution of manufacturing value added at factor cost in constant prices in the EU for the five fastest growing NACE Subsections (1990=100) (1)



(1) Based on a ranking of table 4.3; electrical & optical equipment: estimates for 1990, 1991 and 1992.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms)

EMPLOYMENT - RATES OF CHANGE

Table 4.4: Changes in employment within manufacturing, 1991-2000 (% average annual change) (1)

	EU-15 (2)	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Food products; beverages and tobacco (3)	-0.1	:	2.3	-0.2	0.7	-0.1	1.0	1.0	-0.5	:	-1.4	:	-1.5	**-2.2**	-1.5	-0.9
Textiles and textile products	-3.2	:	-3.3	-8.0	-7.0	-1.3	-1.9	-6.0	-2.2	3.8	-4.4	**-7.5**	-3.0	-5.3	-6.0	-5.3
Leather and leather products (4)	-2.9	:	-2.7	-8.8	-3.0	-0.9	-2.8	-3.4	-2.0	:	-8.8	-5.7	-1.1	-4.4	-4.4	**-12.3**
Wood and wood products	0.2	:	6.1	**-1.7**	-1.0	0.8	5.1	3.5	2.6	9.0	2.1	1.5	-1.5	0.7	-0.9	0.4
Pulp, paper & paper products; publishing & printing	-0.3	:	7.5	-0.6	4.3	0.9	2.9	5.1	-0.8	3.0	0.0	-1.7	-0.2	-0.7	**-2.8**	-0.8
Coke, refined petroleum products and nuclear fuel (5)	-1.8	:	**-10.8**	-5.2	-2.5	0.1	-2.2	:	-0.1	:	:	:	:	1.9	7.4	-0.5
Chemicals, chemical products and man-made fibres	-1.3	:	1.4	-3.2	-3.2	-1.2	0.2	5.8	-2.0	3.2	-2.9	**-4.4**	-3.8	-0.7	1.8	-1.6
Rubber and plastic products	0.6	:	4.1	-1.3	2.0	1.0	2.7	3.6	3.4	**-1.8**	-0.2	4.1	0.6	3.6	-1.2	-0.3
Other non-metallic mineral products	-1.4	:	0.6	**-3.0**	-1.2	-0.3	0.4	1.3	-1.2	-0.4	-0.3	-2.0	-0.6	-1.1	-4.1	-2.9
Basic metals and fabricated metal products	-0.7	:	3.9	-2.7	1.5	0.1	2.5	3.0	1.4	**-3.4**	-0.4	-0.9	-1.4	3.7	0.9	-2.6
Machinery and equipment n.e.c. (6)	-1.3	:	1.4	**-3.4**	1.1	2.0	1.1	2.1	1.3	-2.2	0.5	-0.7	1.5	1.5	-0.7	-2.7
Electrical and optical equipment	:	:	4.2	**-4.2**	8.5	-0.5	1.7	8.9	-1.9	2.7	-2.3	0.4	2.4	7.8	2.1	-1.5
Transport equipment (7)	-0.9	:	-2.3	-0.5	**-5.7**	0.1	-1.2	2.9	-2.9	-5.5	-1.5	0.5	:	-2.3	0.2	-2.3
Recycling (8)	:	:	-1.0	4.5	:	-1.3	:	:	**-11.2**	0.2	:	:	:	9.0	:	15.6

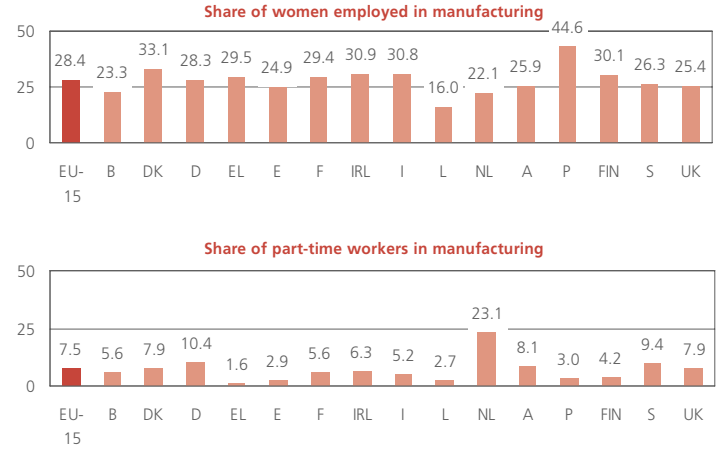
(1) Coloured text indicates the highest rate of change for each NACE Subsection, bold indicates the lowest rate of change for each NACE Subsection; IRL: 1991-1999. (2) 1991-2001. (3) Excluding NACE Division 16; EL, F, FIN and S: 1991-1999. (4) S: 1991-1999. (5) D: 1993-2000; S and P: 1991-1999. (6) P: 1993-2000. (7) A: 1991-1999. (8) 1995-2001.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms)

The number of persons employed is defined as the total number of persons who work in the observation unit (inclusive of working proprietors, partners 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 also includes part-time workers, seasonal workers, apprentices and home workers who are on the pay-roll of the observation unit, as well as persons absent for a short period (for example, on sick leave, paid leave or special leave), and those on strike. The number of persons employed does not include those absent for an indefinite period, nor manpower supplied to the unit by other enterprises (such as temporary, agency workers), persons carrying out repair and maintenance work on behalf of other enterprises, or those on compulsory military service.

Employment (and unemployment) are highly cyclical indicators. As demand within an economy increases, enterprises tend to increase over-time work and try to take-up slack in their productive capacity. The hiring of more persons usually occurs when increasing demand is perceived to be both strong and durable. In the same way, as demand slows or contracts, the number of hours that are worked are usually cut before job losses ensue. As such, indicators of employment generally lag behind the economic cycle (by between 3 and 9 months according to the activity in question).

The number of persons employed in EU manufacturing was estimated to be around 26.1 million in 2001. The use of part time workers in manufacturing ranged from 1.6% in Greece to 23.1% in the Netherlands, with an EU average of 7.5% (see chart 4.7).

Chart 4.7: Employment characteristics within manufacturing, 2001 (%)



Source: Eurostat, Labour Force Survey (theme3/lfs)

EXPENDITURE AND PRICE INDICATORS

Table 4.5: Expenditure and price indicators in manufacturing, 1997-2002 (% average annual growth) (1)

	EU-15	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Personnel costs, of which (2)	2.0	0.3	0.4	3.7	3.6	6.6	5.1	9.2	-1.0	3.3	1.8	0.5	4.6	4.5	8.2	10.5
Wages and salaries (3)	2.8	0.2	0.4	3.3	3.8	6.3	5.3	9.2	0.3	1.1	0.8	0.6	2.8	5.0	7.7	10.5
Social security costs (3)	2.7	0.7	0.4	12.0	2.9	7.9	4.6	8.9	-1.9	0.3	6.7	0.2	1.4	2.7	9.3	10.4
Purchases of goods and services (4)	5.6	5.7	4.9	4.6	6.0	9.1	9.9	15.7	1.4	3.9	7.0	4.4	8.3	9.4	9.0	16.9
Output prices, of	1.1	1.8	1.7	0.9	3.3	1.5	0.9	2.9	1.6	2.2	2.3	0.4	3.2	1.1	1.5	0.3
Energy	2.5	3.2	:	2.0	3.3	2.4	2.8	:	2.8	:	4.4	1.2	6.2	3.2	4.5	1.3
Intermediate goods	0.7	0.7	1.7	0.4	3.2	1.3	0.7	2.2	1.1	-0.3	1.5	0.5	1.0	0.5	1.0	-0.4
Capital goods (5)	0.5	:	1.1	0.7	2.1	1.2	0.3	2.7	1.3	1.5	1.4	0.2	:	-0.6	-0.6	-0.6
Consumer durables	1.1	:	2.0	1.2	2.6	2.2	0.6	4.7	1.3	:	2.2	0.0	1.6	2.5	0.7	0.0
Consumer non-durables (6)	1.2	1.0	1.5	0.7	3.3	1.9	1.6	2.9	1.8	2.1	2.3	-0.7	1.8	0.6	1.9	0.9

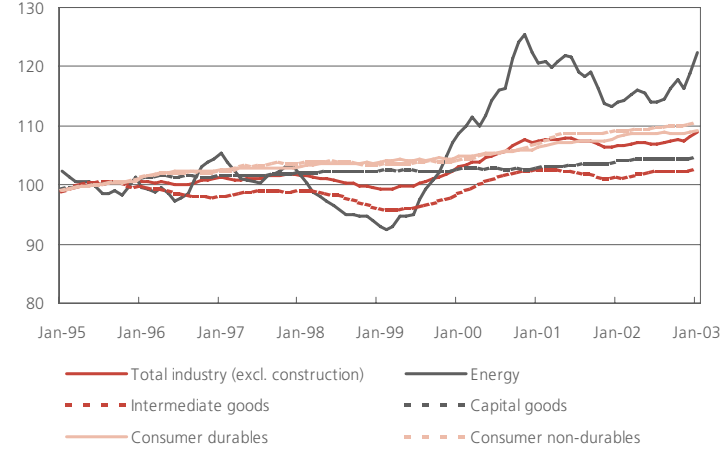
(1) For a definition of the Main Industrial Groupings (MIGs) used in this table, please refer to page 110. (2) B, D, EL, E, F, I, L, NL, P, FIN, S and UK: 1995-2000; DK and IRL: 1995-1999. (3) B, DK, D, EL, E, F, I, NL, A, FIN, S and UK: 1995-2000; P: 1996-2000; IRL: 1995-1999; EU-15 and L: 1995-1998. (4) IRL: 1995-1999; B, DK, D, EL, E, F, I, L, NL, A, P, FIN, S and UK: 1995-2000; EU-15: 1996-2001. (5) F: 1998-2002. (6) F: 1999-2002.

Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms) and Eurostat, European Business Trends - Monthly and Quarterly Short Term Statistics (theme4/ebt)

The output price index (or producer price index) shows monthly price changes in the industrial economy, which can be an indicator of inflationary pressure before it reaches the consumer. All price-determining characteristics should be taken into account in the calculation of the index, including the quantity of units sold, transport provided, rebates, service conditions, guarantee conditions and destination. The appropriate price is the ex-factory price in national currency, including all duties and taxes on the goods and services invoiced by the unit but excluding VAT invoiced by the unit vis-à-vis its customer and similar deductible taxes directly linked to turnover. The price should refer to the moment when the order is made, not the moment when the commodities leave the factory gates. The prices presented in table 4.5 and chart 4.8 are for the domestic market only, in other words, prices paid by customers resident within the same national territory as the observation unit. Chart 4.8 shows that whilst the evolution of prices in energy-oriented activities was volatile in the EU during the 1990s, price developments for other industrial goods were largely subdued.

The pressure for timely and comparable European short-term business statistics has drastically increased in recent years, especially with the developments in the European Monetary Union. Short-term statistics should enable economic and political decision-makers to quickly and accurately analyse the economic situation.

Chart 4.8: Output price indices for the EU (1995=100) (1)



(1) Estimates for January 2003 for all data; for a definition of the Main Industrial Groupings (MIGs) used in this chart, please refer to page 110.
Source: Eurostat, European Business Trends - Monthly and Quarterly Short Term Statistics (theme4/ebt)

PERFORMANCE INDICATORS

Table 4.6: Performance indicators for manufacturing

	EU-15	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
								1996 (1)								
Labour productivity (EUR thousand)	46.5	56.8	50.1	52.2	22.8	33.3	48.3	69.5	38.2	56.9	:	55.1	15.1	52.7	53.7	42.2
Personnel costs / employee (EUR thousand)	33.6	40.0	35.4	42.2	18.7	21.8	36.1	23.9	27.6	37.3	:	38.0	9.8	32.1	37.6	23.7
Wage adjusted labour productivity (%)	134.7	142.2	141.4	123.9	121.9	152.9	133.8	290.8	138.5	152.6	:	139.3	154.7	164.3	142.7	178.2
Gross operating surplus (EUR billion)	328.9	13.1	5.2	64.7	0.9	27.0	39.7	10.4	75.2	0.7	16.4	8.2	6.0	8.6	9.7	64.7
Gross operating rate (%)	8.6	8.9	10.0	5.9	3.9	9.6	6.2	21.6	11.2	10.6	10.6	9.9	10.0	12.6	8.3	12.8
								2000 (2)								
Labour productivity (EUR thousand)	55.9	65.7	51.6	57.6	39.8	38.7	52.2	:	52.5	68.1	67.5	60.9	19.3	70.6	66.4	62.1
Personnel costs / employee (EUR thousand)	:	42.2	:	43.8	20.3	24.6	36.9	:	32.1	41.7	39.6	40.3	11.9	35.6	43.3	38.1
Wage adjusted labour productivity (%)	:	155.8	:	131.4	196.7	157.4	141.6	:	163.4	163.3	170.4	151.1	162.3	197.9	153.3	162.9
Gross operating surplus (EUR billion)	505.3	17.7	:	89.7	4.4	40.7	65.1	:	60.7	0.9	21.4	10.7	7.5	16.8	15.2	82.1
Gross operating rate (%)	10.3	9.6	:	6.7	14.7	10.5	7.2	:	9.4	12.0	10.3	10.7	11.1	16.1	9.6	11.7

(1) EU-15 and A: 1995 for personnel costs per employee and wage adjusted labour productivity. (2) EU-15: 2001.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms)

The competitiveness of an enterprise is not an easy concept to measure. The indicators included in table 4.6 aim to provide an ex-post evaluation of competitive performance. Essentially an enterprise remains competitive if it continues, over time, to satisfy its customers by providing goods and/or services in a more efficient manner than its competitors.

Apparent labour productivity: value added at factor cost divided by the number of persons employed. The result is expressed in EUR thousand per person employed.

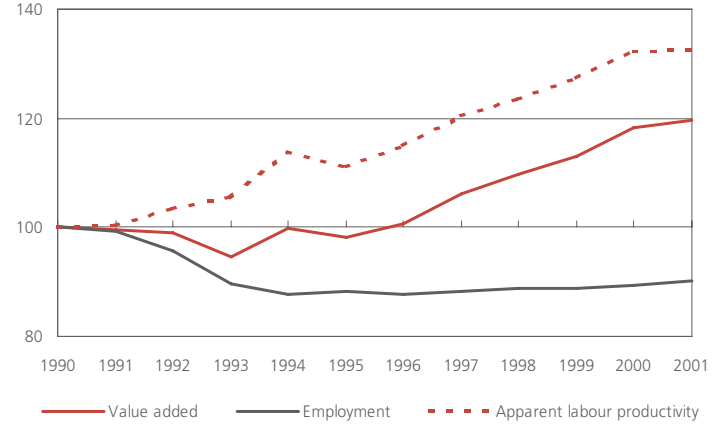
Personnel costs per employee: personnel costs divided by the number of employees. Note this indicator uses employees (as opposed to persons employed), in other words those persons who work for an employer with an employment contract, receiving compensation in the form of wages, salaries, fees, gratuities, piecework pay or remuneration in kind.

Wage adjusted labour productivity: value added at factor cost divided by personnel costs. This ratio is adjusted by multiplying by the ratio of the number of employees to the number of persons employed.

Gross operating surplus: the surplus generated by operating activities after labour input has been recompensed. This indicator can be calculated from value added at factor cost less personnel costs. It is a proxy for gross profits, and can be defined as a surplus that is used to recompense the providers of own funds and debt, to pay taxes and eventually to finance all or a part of future investment.

Gross operating rate: gross operating surplus expressed as a percentage of turnover (or sales).

Chart 4.9: Indices of value added, employment and labour productivity in the EU's manufacturing sector (1990=100)



Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms)

PRODCOM

Table 4.7: Example of production and market statistics from the PRODCOM database, 2001

	EU-15	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Production value of cartons; boxes and cases of corrugated paper or paperboard -PRODCOM Code 21211300 (EUR million)																
Production	18 218	610	0	3 255	165	1 944	3 038	188	3 303	0	527	390	199	214	485	3 732
Exports	375	244	56	414	1	79	173	50	133	1	80	141	7	11	39	108
Imports	165	161	49	212	5	26	237	55	27	16	178	49	12	6	40	101
Trade balance	210	83	8	202	-4	52	-64	-5	106	-15	-98	93	-5	5	-1	7
Apparent consumption	18 008	527	-7	3 053	211	1 892	3 103	193	3 197	15	625	298	204	209	485	3 725
Production quantity of mechanical display battery/accumulator powered wrist-watches, excl. with case of precious metal/metal clad with precious metal - PRODCOM Code 33501213 (thousands)																
Production	4 245	0	2	1 035	0	0	3 005	0	203	0	0	0	0	0	0	0
Exports	5 231	7 354	173	4 163	48	2 069	2 484	12	666	111	3 064	2 327	94	48	424	1 569
Imports	106 314	7 597	1 165	24 790	3 293	13 871	22 476	388	11 044	255	7 458	4 588	2 579	1 201	2 858	17 108
Trade balance	-101 084	-243	-992	-20 627	-3 244	-11 802	-19 992	-375	-10 378	-144	-4 394	-2 261	-2 484	-1 153	-2 434	-15 539
Apparent consumption	105 329	243	994	21 661	3 244	11 802	22 997	375	10 581	144	4 394	2 261	2 484	1 153	2 434	15 539

Source: Eurostat, European Production and Market Statistics - Comext, Domain PRODCOM

PRODCOM aims to provide information on European production of commodities. The data is published monthly in NewCronos (Eurostat's reference database) and on CD-ROM as part of Europroms. From 2003 on-line dissemination is through COMEXT rather than NewCronos. Information provided in PRODCOM includes data for the value and quantity of production sold during the reference period. In some cases production sold is replaced by total production during the reference period or by production for sale.

Commodities are specified in the PRODCOM List, which includes around 5 000 products that are agreed upon by all Member States; the List is updated each year. The products are listed according to an eight-digit code, of which the first six are directly aligned with the statistical classification of products, the CPA.

While data on European production in itself is very useful, PRODCOM data is also used to provide information on the quantity and value of products available on European and national markets. PRODCOM data is combined with data for imports and exports, and apparent consumption is calculated for each product by adding imports to production and deducting exports.

Imports and exports shown are for goods crossing the external borders of the territory concerned: for individual countries this is both intra-EU and extra-EU trade, while for the EU-15 totals only extra-EU trade is included.

It is not uncommon for data for PRODCOM headings to be confidential as very few companies in each country may produce products. As a result, non-confidential PRODCOM data is only available for a reduced number of headings.

To improve usefulness, efforts are constantly being made to detect possibilities for better alignment between the methodologies of PRODCOM and external trade statistics, and ways of publishing more data without disclosing confidential data.

EXPORTS

Table 4.8: Export specialisation ratio relative to the EU, 2001 (%) (1)

	EU-15	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Food products; beverages and tobacco	100	120.2	313.0	60.7	235.6	139.7	116.4	111.6	75.4	70.9	195.2	72.2	87.8	25.6	37.0	75.1
Textiles and textile products	100	122.9	129.0	70.0	421.3	107.5	82.0	17.8	237.2	102.9	71.1	94.9	415.2	28.5	38.3	65.5
Leather and leather products	100	93.8	39.2	34.0	47.0	173.9	70.4	10.3	388.8	9.7	69.1	108.9	469.7	16.4	16.7	37.6
Wood and wood products	100	100.8	162.6	69.7	37.7	91.2	61.9	28.9	61.8	108.4	34.4	381.4	499.2	585.6	415.9	21.3
Pulp, paper and paper products; publishing and printing	100	80.2	65.9	87.9	48.8	95.5	70.4	50.4	64.7	72.2	78.0	168.8	141.0	610.7	331.9	74.6
Coke, refined petroleum products and nuclear fuel	100	162.1	73.4	36.7	524.6	111.6	78.6	11.3	80.7	2.7	289.4	23.9	55.2	131.0	137.6	116.2
Chemicals, chemical products and man-made fibres	100	161.9	90.6	83.2	66.3	77.5	101.6	264.3	63.5	43.2	113.7	58.7	36.4	40.2	78.5	112.0
Rubber and plastic products	100	110.6	116.1	112.9	109.3	128.8	92.5	31.0	122.1	264.2	72.9	116.2	92.3	60.6	86.8	80.0
Other non-metallic mineral products	100	104.6	86.8	79.5	218.1	215.6	86.1	25.0	204.7	161.3	46.8	138.4	207.4	66.5	52.8	63.7
Basic metals and fabricated metal products	100	115.7	71.7	109.9	203.9	102.1	86.0	15.0	102.8	289.6	87.6	152.0	67.1	110.6	130.2	90.0
Machinery and equipment n.e.c.	100	61.8	112.8	136.8	37.8	65.9	72.2	18.2	176.2	58.7	50.9	123.2	47.1	99.9	116.7	84.3
Electrical and optical equipment	100	51.0	98.3	94.5	38.6	52.6	83.6	224.0	53.2	159.5	159.7	90.1	73.3	143.2	101.0	146.2
Transport equipment	100	89.5	26.3	134.9	14.7	150.2	157.4	6.0	59.9	39.1	33.9	88.9	94.4	43.7	83.0	95.5

(1) The ratio measures the share of exports for each CPA Subsection in manufacturing exports for each country and compares this ratio to the same ratio for the sum of the EU Member States, expressing the result as a percentage; values over 100 show that a country exports relatively more of those products than the EU average.
Source: Eurostat, Comext

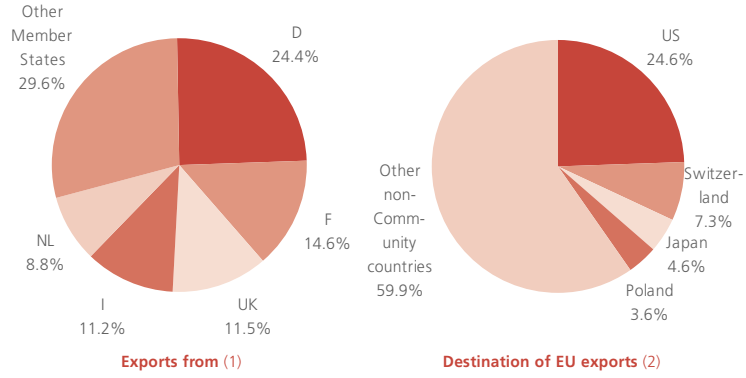
In many manufacturing activities the share of production destined for domestic markets has generally declined at the expense of exports, as a result of the globalisation process and the opening up of the Internal Market. The effects of these changes may only be partially measured by official statistics, as it is often difficult to measure the trade of goods and services between units within the same enterprise group.

The information presented on these last two double-page spreads differs from that in the remainder of this chapter in that it is not based on the NACE classification of economic activities, but on the CPA (statistical classification of products by activity in the European Economic Community). For more details of this classification please refer to page 105.

When compiling external trade statistics a distinction should be made between data that is presented for the EU as a whole (EU-15) and that for the individual Member States. For the EU, external trade is measured with respect to the rest of the world, in other words the sum of each Member States' extra-EU trade, therefore excluding intra-Community trade. On the other hand, for individual Member States, world trade is taken as the partner to reflect trade carried out between the Member States and trade with non-Community countries.

The calculation of trade specialisation ratios is performed using the following method: calculate for a given country the export (or import) share for a given CPA Group in manufacturing and divide by the same ratio for the sum of all 15 Member States, expressing the result as a percentage. Values over 100 show that a country is relatively specialised in exporting (or importing) a particular product. A high specialisation ratio says nothing, per se, about whether a product accounts for a large or small share of total manufacturing imports or exports.

Chart 4.10: Exports of manufactured goods, 2001



(1) Exports from EU Member States to all partners (including intra-Community trade).
(2) Extra EU-15 exports.
Source: Eurostat, Comext

IMPORTS

Table 4.9: Import specialisation ratio relative to the EU, 2001 (%) (1)

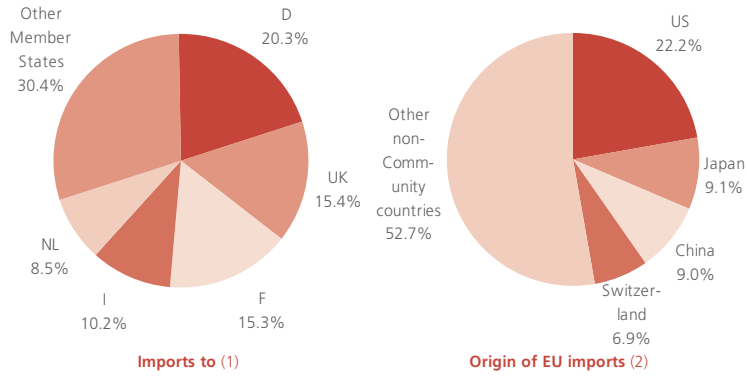
	EU-15	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Food products; beverages and tobacco	100	102.0	148.4	84.0	153.3	116.7	92.4	90.5	115.8	112.2	115.6	69.7	135.6	72.9	88.9	98.8
Textiles and textile products	100	85.1	126.5	113.9	130.8	91.0	96.8	63.6	104.2	57.5	81.4	103.1	128.6	80.8	86.1	105.1
Leather and leather products	100	79.4	83.2	92.3	96.5	84.0	96.6	46.6	187.1	34.2	85.1	107.1	154.9	57.3	60.0	98.3
Wood and wood products	100	84.1	220.9	86.6	99.4	111.5	74.2	87.2	128.2	64.7	93.1	130.7	101.2	87.4	104.3	111.3
Pulp, paper and paper products; publishing and printing	100	101.8	132.2	99.3	120.1	90.0	100.3	76.9	93.9	79.6	92.9	128.5	100.3	83.8	80.3	108.8
Coke, refined petroleum products and nuclear fuel	100	147.6	101.4	101.2	101.6	109.4	93.8	79.3	81.6	195.4	115.9	89.6	111.9	134.9	120.2	73.1
Chemicals, chemical products and man-made fibres	100	162.1	80.3	94.8	111.2	101.1	94.1	90.1	114.1	82.1	102.7	80.0	86.8	94.3	87.9	82.9
Rubber and plastic products	100	113.9	124.4	99.3	86.3	111.7	102.5	85.6	84.1	116.2	90.5	131.4	120.5	103.1	121.5	87.5
Other non-metallic mineral products	100	95.9	130.9	104.6	116.0	103.5	110.7	80.2	92.9	136.8	91.6	144.9	130.0	98.8	102.4	75.0
Basic metals and fabricated metal products	100	95.3	100.0	102.4	101.6	102.2	85.7	46.8	133.4	171.2	96.2	121.3	103.3	106.3	116.8	88.9
Machinery and equipment n.e.c.	100	89.5	118.6	98.9	108.7	122.1	103.5	66.3	106.1	73.2	71.2	131.3	111.1	138.8	132.0	90.6
Electrical and optical equipment	100	60.3	95.6	108.2	62.5	74.1	82.3	212.4	75.8	110.6	152.5	90.2	74.8	132.7	110.9	111.5
Transport equipment	100	93.1	63.6	96.7	101.6	119.3	138.3	51.4	96.2	83.6	53.6	93.1	102.2	65.3	81.6	110.4

(1) The ratio measures the share of imports for each CPA Subsection in manufacturing imports for each country and compares this ratio to the same ratio for the sum of the EU Member States, expressing the result as a percentage; values over 100 show that a country imports relatively more of those products than the EU average.
Source: Eurostat, Comext

The EU exported manufactured goods valued at EUR 985 billion in 2001, whilst it imported EUR 1 028 billion. In 2001, some 22.1% of the EU's manufactured exports to non-Community countries were made-up of electrical and optical equipment goods (office machinery and computers, electrical machinery, TV, audio and communications equipment, medical and precision instruments). Transport equipment was the second most important CPA Subsection, with 17.7% of exports, followed by chemicals and man-made fibres (13.4%) and machinery and equipment (8.7%). The same ranking was observed for the four largest import Subsections, with respectively 19.7%, 18.8%, 14.4% and 11.5% of total manufactured goods.

When looking at the partners of EU external trade, some 22.2% of the EU's imports came from the United States, whereas 24.6% of the EU's exports were destined for the same country in 2001 (see charts 4.10 and 4.11). Japan and China were the second and third largest partners in terms of the origin of EU imports.

Chart 4.11: Imports of manufactured goods, 2001



(1) Imports to EU Member States from all partners (including intra-Community trade).
(2) Extra EU-15 imports.
Source: Eurostat, Comext

5. Construction

EVOLUTION OF MAIN ECONOMIC INDICATORS

Table 5.1: Main indicators for construction (% average annual growth)

	EU-15	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
								1991-1996								
GDP in constant prices	1.5	1.5	2.3	1.2	1.1	1.5	1.1	5.9	1.2	3.0	2.2	1.8	1.5	1.5	1.8	2.6
Production index for construction (1)	0.9	1.5	:	1.8	:	-2.3	1.6	:	:	-2.6	:	:	:	:	0.5	-0.1
Production index for building (1)	:	:	:	3.0	:	-0.4	:	:	:	-2.7	:	:	:	:	-0.1	-0.1
Production index for civil engineering (1)	:	:	:	-0.2	:	-4.9	:	:	:	-2.6	:	:	:	:	2.5	-0.1
Employment index for construction (2)	-1.9	:	-3.0	0.5	:	1.4	-2.7	1.3	-4.5	-1.6	:	:	:	-7.7	:	-2.7
								1996-2001								
GDP in constant prices	2.6	2.7	2.5	1.8	3.8	3.9	2.8	9.3	2.0	6.2	3.3	2.5	3.5	4.1	3.2	2.8
Production index for construction (3) (4)	1.6	2.2	1.2	-3.3	:	7.1	2.5	:	:	3.1	:	4.4	:	6.4	0.9	2.2
Production index for building (3)	1.8	7.7	2.5	-4.2	:	8.0	3.1	:	:	2.7	2.8	3.7	:	7.0	0.5	2.5
Production index for civil engineering (3)	1.5	6.7	-3.5	-1.7	:	5.2	1.1	:	:	3.6	4.1	6.5	:	4.5	1.5	0.2
Employment index for construction (4)	1.7	1.4	1.3	-6.4	:	8.6	1.5	6.4	1.7	1.8	:	-0.8	:	4.3	:	5.1

(1) S: 1993-1996. (2) A: 1991 is confidential. (3) I: data are confidential. (4) NL: data are confidential.

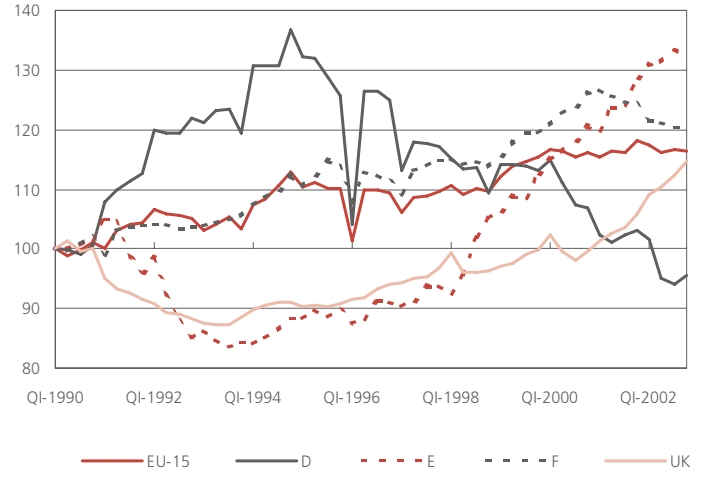
Source: Eurostat, National Accounts - aggregates (theme2/aggs/aggs_gdp/a_gdp_k) and Eurostat, European Business Trends - Monthly and Quarterly Short Term Statistics (theme4/ebt)

The production index provides a measure of the development of the volume of value added at factor cost during a given reference period. In practice, the ideal production index can only be approximated using input data (consumption of typical raw materials or labour input), output data (deflated production values or deflated sales values) or exceptionally, in some countries, administrative declarations (related to the progression of construction work). The production index for construction should take account of:

- variations in the 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 mounting, installation, repair, planning or engineering.

The legal basis for short-term construction statistics is the same as for the manufacturing sector, Council Regulation No 1165/98 of 19 May 1998. The production index covers NACE Section F and is broken down into civil engineering and building construction, according to the Classification of types of Construction (CC).

Chart 5.1: Production index for construction (QI-1990=100) (1)



(1) Seasonally adjusted data; data are shown for the EU total and four of the largest Member States; I: data are confidential.
Source: European Business Trends -
Monthly and Quarterly Short Term Statistics (theme4/ebt)

BREAKDOWN OF ACTIVITY

Table 5.2: Structure of construction, 2000 (1)

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Building works and civil engineering (NACE Groups 45.1 and 45.2)															
Number of enterprises (thousands)	19.9	9.4	79.6	:	129.2	121.0	:	218.7	0.7	31.5	6.2	50.6	18.4	25.1	96.8
Number of persons employed per enterprise (units)	6.6	8.6	13.2	:	8.6	5.7	:	3.7	20.0	7.7	20.4	5.1	4.2	4.9	8.3
Turnover (EUR billion)	17.9	11.0	104.1	:	86.8	76.5	:	88.5	1.5	35.1	14.6	17.4	11.1	18.6	136.4
Gross operating rate (%)	9.4	8.8	4.4	:	:	5.7	:	13.0	17.6	6.0	8.5	10.9	:	5.7	14.3
Completion work (NACE Groups 45.3 and 45.4)															
Number of enterprises (thousands)	33.0	18.4	199.5	:	152.0	198.4	:	291.2	1.0	29.9	12.2	27.7	10.4	26.8	90.3
Number of persons employed per enterprise (units)	3.6	5.8	5.6	:	3.8	3.8	:	2.3	11.3	6.6	9.5	3.1	4.0	3.8	5.7
Turnover (EUR billion)	11.6	9.0	83.9	:	28.5	59.6	:	40.5	1.0	18.0	9.3	3.6	3.9	10.2	56.2
Gross operating rate (%)	12.6	11.5	5.9	:	:	9.7	:	20.6	15.5	9.8	14.1	8.7	:	8.7	18.8

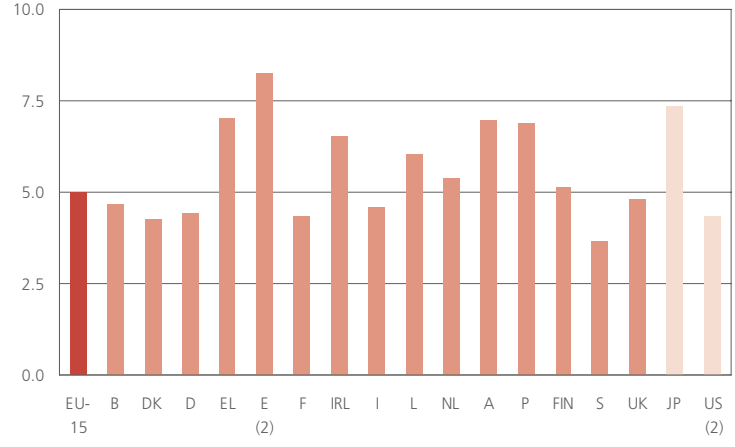
(1) NL: 1999; L: provisional.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/enter_ms)

SBS data presented in table 5.2 is classified according to NACE. The data (unlike those presented in the tables and charts for manufacturing) cover enterprises of all size classes, including those with less than 20 persons employed. This is particularly important for an activity such as construction, where there is generally a high presence of SMEs operating, especially in building, finishing, completion and installation work.

Construction accounted for around 5.0% of total value added in the EU economy in 2001. There were around 1.9 million construction enterprises operating in the EU in 2000, equivalent to more than 14.3% of the enterprises that were active in the EU's business economy. Construction enterprises together accounted for around 10.4% of total business enterprise employment in the EU in 2000. With an average of just over 5 persons employed per enterprise, construction, together with retail trade, was the activity most dominated by small enterprises.

Construction work is fixed investment, and when in the form of new offices or factories it may be seen as providing a foundation for future economic output, while new roads and bridges generally improve social welfare and can also lead to efficiency gains in terms of the time it takes to transport goods and people, again boosting efficiency and thus competitiveness. The construction of housing tends not to have a direct impact on future economic output.

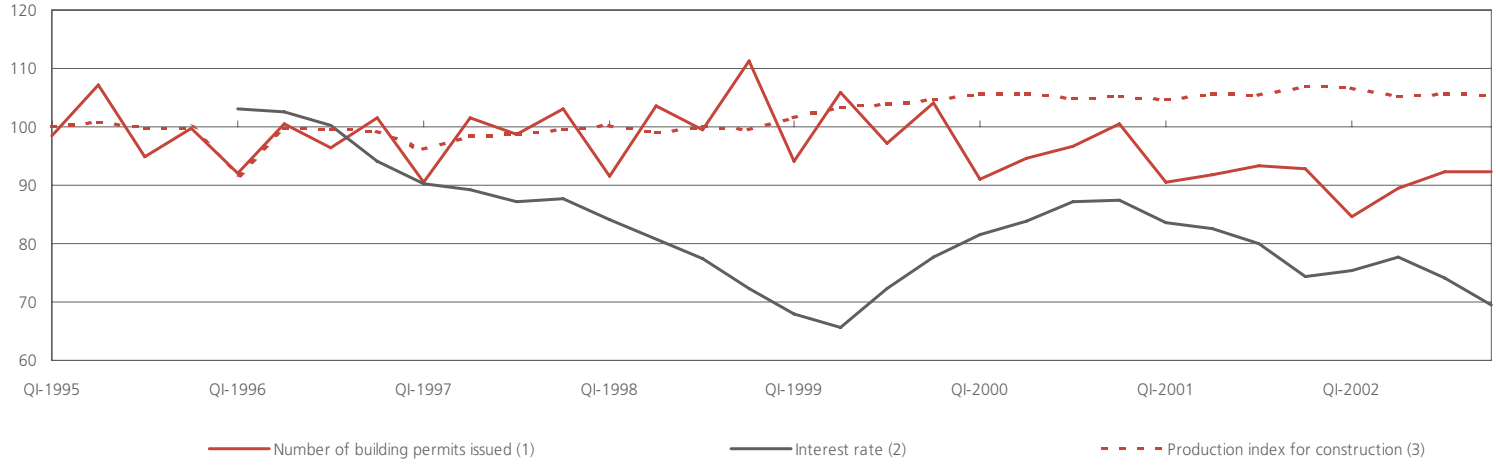
Chart 5.2: Share of construction in GDP, 2001 (%) (1)



(1) Gross value added at basic prices in relation to GDP. (2) 2000.
Source: Eurostat, National Accounts - breakdowns by branch of activity (theme2/brkdowns)

BUILDING PERMITS ISSUED AND LABOUR INPUT INDICATORS

Chart 5.3: Short-term indicators for construction in the EU (1995=100)



(1) Gross data for residential buildings only; QI-2001 to QIV-2002, estimates. (2) Housing loans to households; 1996=100. (3) Seasonally adjusted data.
Source: Eurostat, European Business Trends - Monthly and Quarterly Short Term Statistics (theme4/ebt) and Eurostat, National Accounts - exchange rates and interest rates (theme2/exint)

Construction activity is highly sensitive to interest rate fluctuations and expectations of future demand. Low interest rates encourage capital spending, especially in times of growing economic activity when increasing demand and capacity utilisation encourages work on new projects.

The administrative formalities related to building vary considerably between Member States, but the vast majority have something close to an authorisation to start work on a building project. A building permit is the final stage of planning and building authorisation, prior to the start of work. It may be the case that a proportion of permits are not used or alternatively that there is a time lag between the permit being issued and the start of the project. However, an index based on permits issued gives some indication of the future workload for the building industry.

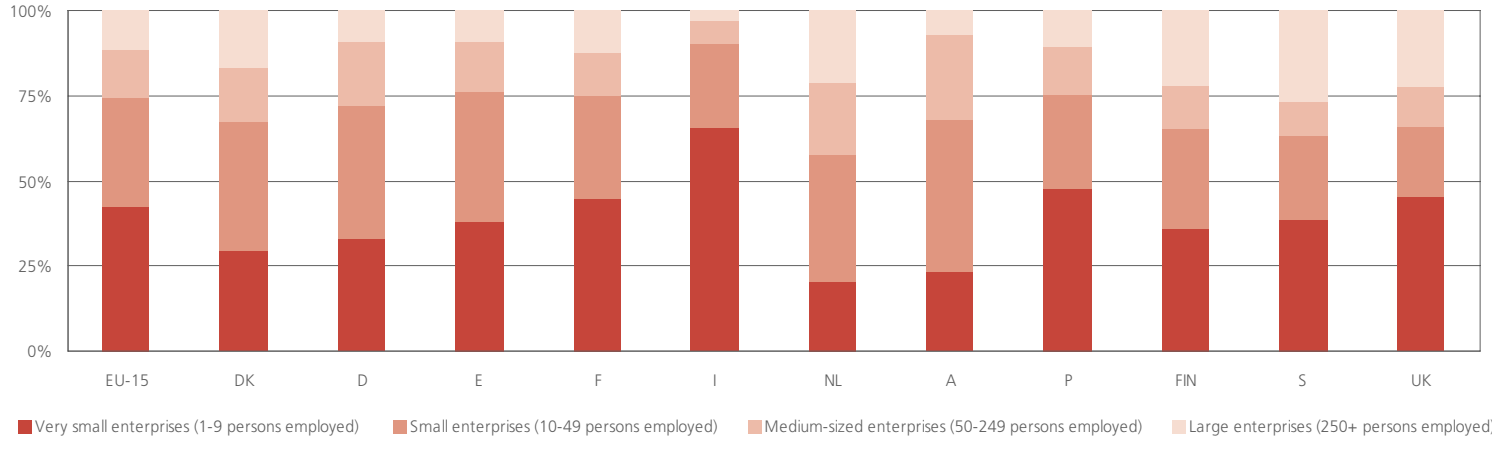
Indices of the number of permits are compiled for residential buildings that are intended for private habitation. A dwelling is defined as having a separate access to the street or to a common space within the building. In this simple form, the permits index does not give a precise idea as to the scale of the projects for which permits have been granted. Eurostat therefore also collects data on permits recorded by a size measure, namely the square metres of useful floor area, as measured within the external walls, excluding functional areas (for example, heating and air-conditioning installations) or thoroughfares (stairwells, lifts, escalators).

Chart 5.4: Labour input indicators for construction in the EU (1995=100)

(1) Seasonally adjusted data. (2) Seasonally adjusted data; QIV-2002: estimate.
Source: Eurostat, European Business Trends -
Monthly and Quarterly Short Term Statistics (theme4/ebt)

THE IMPORTANCE OF SMALL AND MEDIUM-SIZED ENTERPRISES

Chart 5.5: Number of persons employed in construction, broken down according to enterprise size-class, 2000 (share of total) (1)



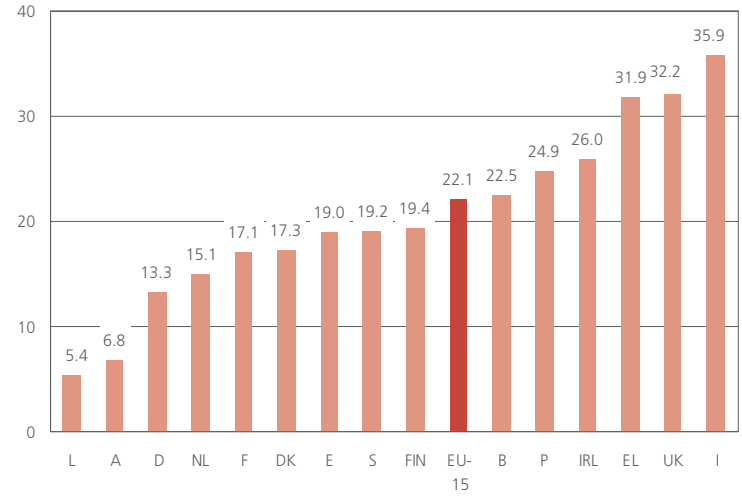
(1) EU-15: estimates based on latest available country data; NL and UK: 1999; B, EL, IRL and L: not available.
Source: Eurostat, Structural Business Statistics (theme4/sbs/sizclass)

Construction is characterised by a strong presence of small enterprises. Indeed, very small enterprises accounted for 42.3% of those employed in the construction sector in 2000. As well as having a high number of small enterprises, the construction sector is also characterised by a high number of self-employed persons. Chart 5.6 shows that in Italy, the United Kingdom and Greece, around one-third of the construction sector's labour force were self-employed.

Another characteristic of the construction sector is that it makes extensive use of sub-contracting, with production processes involving medium to long completion times (similar to the manufacturing activities of shipbuilding or aircraft production). Work is often structured in the form of a pyramid, with a lead developer organising various different levels of sub-contractors who perform specialised tasks. As a result, care needs to be taken in order to correctly distinguish production, work in progress and sales.

The pattern of work, different types of buildings and civil engineering structures, as well as repair and maintenance work, also varies from period to period and from year to year. Each building and civil engineering work is, in some way, unique, mainly because of variations in ground or site conditions. This, allied with the long production process, can make the evaluation of costs and/or prices quite difficult.

Chart 5.6: Share of self-employed persons in the construction labour force, 2001 (% share of total) (1)



(1) Excluding non-response and unknown.
Source: Eurostat, Labour Force Survey

6. Distributive trade

MAIN ECONOMIC INDICATORS

Table 6.1: Main economic indicators for distributive trade, 2000

	EU-15 (1)	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Motor trade (NACE Division 50)																
Number of enterprises (thousands) (2)	568.5	20.3	8.7	62.1	:	72.3	80.6	4.0	159.2	0.9	23.4	7.8	29.6	9.1	18.9	71.6
Turnover (EUR billion) (3)	929.6	46.7	20.1	147.5	:	76.3	125.2	10.9	131.3	3.0	63.1	21.1	26.3	13.3	31.7	213.0
Value added at factor cost (EUR billion) (3)	120.6	3.3	2.4	32.1	:	8.8	15.5	1.0	12.0	0.3	6.1	3.2	2.3	1.5	3.5	28.6
Wholesale trade (NACE Division 51)																
Number of enterprises (thousands) (4)	1 259.4	42.2	16.9	125.1	:	184.3	162.8	3.2	421.0	2.9	55.2	19.4	50.3	16.3	41.7	118.1
Turnover (EUR billion) (5)	3 114.1	152.6	73.5	558.8	:	274.3	528.0	21.1	344.1	8.6	239.0	84.5	56.2	45.0	100.4	628.0
Value added at factor cost (EUR billion) (5)	372.9	13.4	9.8	78.5	:	31.5	52.8	3.0	42.4	0.9	28.0	11.0	6.4	5.2	13.1	76.8
Retail trade (NACE Division 52)																
Number of enterprises (thousands) (2)	2 625.7	81.5	24.5	284.5	:	530.8	378.9	13.5	741.4	2.8	85.7	35.0	150.5	23.6	57.4	215.4
Turnover (EUR billion) (3)	1 609.5	48.4	27.3	313.6	:	141.4	299.4	14.9	203.4	3.0	68.8	36.6	27.8	23.4	44.5	357.0
Value added at factor cost (EUR billion) (3)	310.0	7.5	5.1	70.7	:	27.1	52.2	2.9	32.5	0.5	14.3	7.2	4.0	3.8	7.8	74.3

(1) Estimates based on the sum of available data, excluding EL. (2) B, DK, D and IRL: 1999. (3) DK, D and IRL: 1999. (4) B, DK, D, IRL and L: 1999. (5) DK, D, IRL and L: 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/enter_ms)

Distributive trade is the link between industrial producers of goods and end-users, be they private enterprises, public administrations or consumers. As such, the distributive trade sector provides information about products and services, stimulates new demand and acts as an interface between producers and consumers in the face of changing consumption patterns. Like most sectors of the EU economy, it faces a number of challenges, which include the effects of the introduction of information and communication technologies, which are in the process of revolutionising storage facilities, logistics and delivery schedules.

Distributive trade is one of the largest sectors within the EU economy no matter which size measure is used to classify its importance. It totalled some 4.5 million enterprises in 2000 within the EU, which together generated EUR 5.7 billion of turnover, employing more than 22 million persons in 1999, according to SBS data. Retail trade accounted for 59% of the enterprises operating in this sector in 2000, while generating 28% of turnover. On the other hand, 27% of all enterprises operated within the wholesale trade sector, generating as much as 55% of total turnover, while motor trade accounted for a relatively small share of total activity, with 13% of the total number of enterprises and 16% of turnover. It is important to note that many goods may pass through the hands of several intermediaries before reaching the final consumer and as such the turnover measure for wholesale trade may be considered as over-stating the importance of this activity.

As well as offering a large number of employment opportunities, the distributive trade's labour force also provides a relatively high share of part-time employment, a share which rose to almost one-third of those working in the retail trade sector in the EU in 2001. Retail trade also provided employment to a relatively high proportion of women, some 60% of those employed in 2001.

Chart 6.1: Employment characteristics of distributive trade in the EU, 2001 (%)

Source: Eurostat, Labour Force Survey

MOTOR AND WHOLESALE TRADE

Table 6.2: Number of persons employed in motor and wholesale trade, 2000 (thousands) (1)

	EU-15	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Motor trade, of which	3 082	81	65	573	:	342	448	29	451	6	155	80	130	35	79	608
Sale of motor vehicles	1 344	43	29	322	:	103	234	12	94	4	97	34	47	11	32	284
Maintenance and repair of motor vehicles	931	20	18	115	:	142	108	6	237	1	22	25	46	11	23	158
Sale of motor vehicle parts and accessories	404	11	6	84	:	42	64	:	41	1	17	10	15	7	9	97
Sale, maintenance & repair of motorcycles and related parts & accessories	79	2	1	12	:	8	14	:	21	0	3	1	6	1	2	10
Retail sale of automotive fuel	321	6	12	41	:	47	28	8	58	1	15	10	15	6	13	60
Wholesale trade, of which	7 235	226	176	1 309	:	941	1 005	51	1 042	:	483	203	248	84	218	1 249
Wholesale on a fee or contract basis	712	14	6	114	:	66	69	1	321	1	:	11	25	5	10	70
Wholesale of agricultural raw materials and live animals	288	8	10	52	:	38	58	2	27	:	36	17	8	2	7	24
Wholesale of food, beverages and tobacco	1 336	36	22	214	:	302	180	13	159	3	70	39	56	9	26	207
Wholesale of household goods	1 628	57	36	317	:	205	189	10	231	2	106	46	62	16	55	296
Wholesale of non-agricultural intermediate products, waste and scrap	1 482	46	37	334	:	171	209	10	169	3	85	42	43	15	54	264
Wholesale of machinery, equipment and supplies	1 464	59	58	194	:	149	291	11	102	4	147	46	38	30	65	270
Other wholesale	300	7	5	84	:	10	9	5	33	0	:	3	17	7	2	118

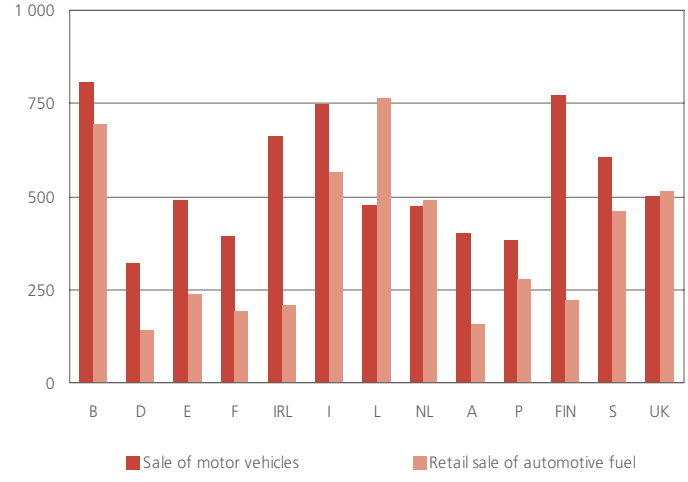
(1) EU-15: estimates based on the sum of available data; DK and D: 1999; IRL: 1999, provisional data, NACE Groups 50.3 and 50.4 are confidential; L: preliminary data.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/enter_ms)

Motor trade is a special part of the distributive trade sector, since motor vehicles and motorcycles are not everyday commodities. Vehicle manufacturers have faced considerable over-capacity in recent years. As a result, competition between manufacturers is now as intense as ever. Its effects have serious implications on motor vehicle wholesale and retail markets. Indeed, there has been a general tendency towards fewer but larger dealerships, i.e. dealerships employing a greater number of persons and selling more cars.

The European Commission has recently adopted a comprehensive reform of competition rules for car sales and servicing. The Commission Regulation (EC) No 1400/2002 of 31 July 2002 lays down specific EU competition rules for the sector, notably replacing the "block exemption" regime which governed vehicle manufacturers relations with respect to their distribution systems.

Wholesale trade is an essential activity for a modern economy. It plays an important pivotal and logistical role in moving goods from the producer towards the consumer. New technologies - for example, electronic data interchange - pose a challenge for wholesalers, as they facilitate direct relations between producers and other distributors and even consumers. These technologies reduce the so-called "lead-time" - the period between the preparation and the execution of an order - thereby streamlining production processes and reducing the need for large stocks. As a consequence, many wholesalers are seeking to respond to these threats by providing other value added services including retail, transport services, financing and assembly.

Chart 6.2: Average turnover per person employed, 2000 (EUR thousand) (1)



(1) DK and EL: not available; D : 1999; IRL: 1999, provisional data; L: preliminary data.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/enter_ms)

VOLUME OF RETAIL SALES

Table 6.3: Volume of retail sales, growth rates (1)

	EU-15	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
								Annual growth rate 2000-2001 (%) (2)								
Retail sales	2.1	0.8	0.4	0.5	:	3.7	2.3	7.4	-1.2	-0.1	1.2	-0.4	3.7	4.2	2.7	5.9
Retail sale of food items	1.7	-0.4	2.5	1.7	:	4.4	1.5	4.8	-1.9	0.7	0.0	-7.1	7.7	4.1	2.3	3.6
Retail sale of non-food items, of which selected items,	2.6	:	5.0	-0.3	:	2.7	3.2	12.4	-0.8	-0.4	1.7	2.9	0.7	4.0	3.0	7.5
Retail sale of textiles, clothing, footwear & leather goods	3.3	1.8	1.6	-0.9	:	0.1	4.7	15.6	-2.0	1.4	3.4	4.7	1.6	2.0	1.8	10.1
Retail sale of household equipment	1.2	1.6	2.3	-3.7	:	0.8	2.5	14.9	-1.0	-11.2	0.9	-1.0	-1.3	1.8	1.7	8.8
Retail sale of books, newspapers & retail sales in other specialised stores	2.8	1.6	17.7	-1.9	:	7.1	4.2	9.5	-1.8	3.9	2.4	2.6	-1.8	5.4	4.7	6.1
								Average annual growth rate 1996-2001 (%) (2) (3)								
Retail sales	2.5	3.4	1.4	0.2	:	3.6	3.6	7.8	0.3	2.4	3.4	:	4.8	4.4	4.0	4.4
Retail sale of food items	2.0	1.3	0.7	0.7	:	3.2	3.0	4.3	0.8	2.6	0.8	:	5.8	3.1	1.3	2.9
Retail sale of non-food items, of which selected items,	2.8	:	-0.4	0.0	:	4.3	4.3	13.6	-0.1	2.3	5.2	:	4.1	5.4	6.8	5.5
Retail sale of textiles, clothing, footwear & leather goods	2.4	5.7	2.0	-1.0	:	2.2	4.1	17.0	-0.8	-1.2	3.8	:	4.2	3.5	3.8	5.6
Retail sale of household equipment	3.6	4.9	-0.5	-0.1	:	5.4	5.7	12.1	-0.5	3.9	5.8	:	3.1	5.7	9.4	8.6
Retail sale of books, newspapers & retail sales in other specialised stores	3.0	4.6	1.3	-0.4	:	4.3	4.3	12.6	-0.4	1.3	6.1	:	3.2	4.2	7.2	4.3

(1) Data are working day adjusted; retail trade is defined as NACE Groups 52.1 to 52.6; retail sale of food-items is defined as NACE Class 52.11 and Group 52.2, retail sale of non-food items is defined as NACE Class 52.12 and Groups 52.3 to 52.6; retail sale of textiles, clothing, footwear and leather goods is defined as NACE Classes 52.41 to 52.43; retail sale of household equipment is defined as NACE Classes 52.44 to 52.46; retail sale of books, newspapers & retail sale in other specialised stores is defined as NACE Classes 52.47 and 52.48. (2) D: provisional data; E, IRL, I, NL and UK: estimates. (3) A: 1996 to 1998 are confidential.
Source: Eurostat, European Business Trends - Monthly and Quarterly Short Term Statistics (theme4/ebt)

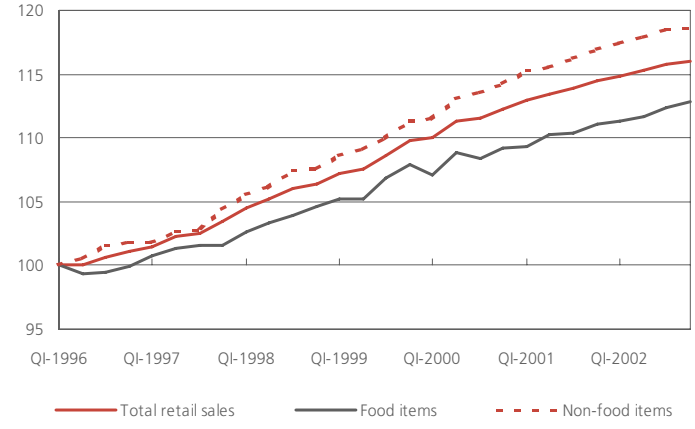
The volume of sales index shows the evolution of the quantity of goods sold in the retail sector. It is an indicator of final domestic demand and reflects consumer confidence. However, it should be noted that some items sold by retailers are bought by other businesses and that consumers purchase items, particularly services, from other sources than retailers - as such, the correlation between consumer spending and retail sales is not direct.

The legal basis for the collection of data on retail sales volumes is Council Regulation No 1165/98 from 19 May 1998. The volume of sales represents the value of turnover in constant prices. It is derived from turnover in current prices adjusted by a deflator of sales.

Turnover comprises market sales of goods or services supplied to third parties. It includes all duties and taxes on the goods or services invoiced by the unit with the exception of the VAT invoiced vis-à-vis its customer and other similar deductible taxes.

Retail sales data are usually seasonally adjusted. When interpreting data, account should be taken of factors such as sales prices, changes in the weather and consumer expectations of changes in consumption taxes, which may lead to spending decisions being brought forward or being postponed. In times of economic slowdown, non-essential consumer spending can be deferred, with sales of consumer durables usually being worst hit.

Chart 6.3: Volume of retail sales in the EU (QI-1996=100) (1)



(1) Data are seasonally adjusted; QIV-2002: estimates.
Source: Eurostat, Eurostat, European Business Trends - Monthly and Quarterly Short Term Statistics (theme4/ebt)

7. Information society

INFORMATION AND COMMUNICATION TECHNOLOGIES

Table 7.1: Main economic indicators for the information society, 2000 (1)

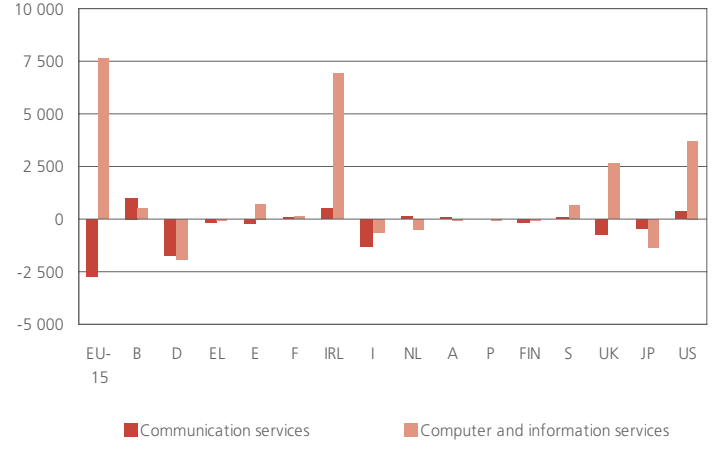
	EU-15	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Number of enterprises (2)																
Information and communication technologies (thousands)	550.7	8.3	7.3	29.4	:	39.9	75.4	112.4	112.4	1.6	23.3	12.3	7.5	8.4	34.5	160.7
Manufacturing (% of total)	*8.2*	*6.8*	*8.1*	*22.2*	*:*	*6.7*	*9.0*	*13.0*	*13.0*	*0.8*	*5.4*	*4.0*	*6.9*	*8.3*	*5.3*	*5.4*
Services (% of total)	*91.8*	*93.2*	*91.9*	*77.8*	*:*	*93.3*	*91.0*	*87.0*	*87.0*	*99.2*	*94.6*	*96.0*	*93.1*	*91.7*	*94.7*	*94.6*
Telecommunications (% of services)	*2.6*	*2.0*	*3.0*	*1.0*	*:*	*3.1*	*2.6*	*0.9*	*0.9*	*3.4*	*3.5*	*1.6*	*2.4*	*3.3*	*1.2*	*4.4*
Number of persons employed (3)																
Information and communication technologies (thousands)	6 050.0	162.9	90.7	826.1	:	422.3	845.5	69.1	710.2	:	345.7	148.3	94.4	126.4	274.3	1 409.4
Manufacturing (% of total)	*25.8*	*15.6*	*27.0*	*45.1*	*:*	*14.6*	*35.3*	*57.0*	*25.3*	*:*	*19.1*	*26.4*	*23.0*	*37.6*	*24.2*	*22.1*
Services (% of total)	*74.0*	*84.4*	*73.0*	*54.9*	*:*	*85.4*	*64.7*	*43.0*	*74.7*	*:*	*80.9*	*73.6*	*77.0*	*62.4*	*75.8*	*77.9*
Telecommunications (% of services)	*22.1*	*23.8*	*33.5*	*37.8*	*:*	*22.4*	*:*	*:*	*21.1*	*11.0*	*22.2*	*23.6*	*27.8*	*24.2*	*16.1*	*21.3*
Value added at factor cost (4)																
Information and communication technologies (EUR billion)	443 000	12 939	5 672	64 472	:	24 523	49 179	6 574	44 297	:	13 289	9 663	4 892	11 847	18 606	113 969
Manufacturing (% of total)	*24.2*	*16.7*	*20.0*	*38.7*	*:*	*12.5*	*38.6*	*71.0*	*21.5*	*:*	*11.7*	*29.2*	*15.2*	*56.1*	*23.0*	*19.9*
Services (% of total)	*75.8*	*83.3*	*80.0*	*61.3*	*:*	*87.5*	*61.4*	*29.0*	*78.5*	*:*	*88.3*	*70.8*	*84.8*	*43.9*	*77.0*	*80.1*
Telecommunications (% of services)	*35.7*	*38.4*	*47.5*	*47.8*	*:*	*47.0*	*:*	*:*	*48.1*	*53.9*	*:*	*29.2*	*61.0*	*36.0*	*31.5*	*32.0*
External trade (5)																
ICT manufacturing exports (EUR billion)	120.2	12.0	5.3	66.2	0.4	6.9	38.0	32.6	15.2	3.5	47.5	7.7	2.5	10.6	11.0	62.6
ICT manufacturing imports (EUR billion)	171.4	14.2	6.8	74.7	2.4	14.6	43.0	20.6	25.0	2.7	47.7	10.4	4.2	6.4	10.2	65.6

(1) ICT manufacturing: NACE Divisions 30, 32, Groups 31.3, 33.2 & 33.3; ICT services: NACE Classes 51.43, 51.64, 51.65, Group 64.2 & Division 72. (2) EU-15: estimates, excluding EL; B, DK & D: excluding NACE Classes 51.43, 51.64 & 51.65; IRL: excluding NACE Group 64.2, 1999; NL: excluding NACE Group 64.2. (3) EU-15: estimates, excluding EL; DK & D: excluding NACE Classes 51.43, 51.64 & 51.65; F: excluding NACE Group 64.2; IRL: excluding NACE Group 64.2, 1999. (4) EU-15: estimates, excluding EL; DK & D: excluding NACE Classes 51.43, 51.64 & 51.65; F: excluding NACE Group 64.2; IRL: excluding NACE Group 64.2, 1999; NL: excluding NACE Division 32, Class 51.64 & Group 64.2. (5) Data refer to 2001; ICT maufacturing: CPA Divisions 30, 32, Groups 31.3, 33.2 & 33.3. *Source:* Eurostat, Structural Business Statistics (theme4/sbs/enterpr/enter_ms); Eurostat, Comext

At the Lisbon summit, in March 2000, the European Heads of State recognised that serious work needed to be done to improve technological take-up within the EU. Indeed, they set a new goal for the European Union to become the most competitive, knowledge-based society in the world by 2010. By boosting economic growth, information and communication technology (ICT) have great potential for creating new and better jobs, and generating greater prosperity.

ICT is a generic term that covers both information technologies (hardware and software), as well as communication equipment and services. The data presented in table 7.1 therefore span the divide (often created for practical purposes) between industrial and service statistics. They cover, on the one hand, the production of equipment such as computers, telephone hand-sets and networks, and on the other, value-added services provided by mobile phone operators, Internet service providers, software development houses or computer help-desk support.

Chart 7.1: Trade surplus/deficit of communication and computer and information services, 2001 (EUR million) (1)



(1) DK: not available; L: included within B.
Source: Eurostat, International Trade in Services, geographical breakdown of the current account (theme2/bop/its)

TELECOMMUNICATIONS

Table 7.2: Main indicators for telecommunications, 2001

	EU-15	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Number of fixed lines (millions) (1)	209.7	5.1	3.9	52.3	5.6	17.5	34.1	1.6	27.2	0.3	9.9	3.8	4.4	2.8	6.0	35.3
Number of mobile subscriptions (millions)	274.6	7.7	4.0	56.2	8.0	26.5	35.9	2.8	48.7	0.4	11.9	6.6	8.0	4.0	6.9	47.0
Number of fixed lines per 100 inhabitants (units) (1)	:	49	73	64	53	44	58	42	47	76	62	48	43	54	67	59
Number of mobile subscriptions per 100 inhabitants (units)	72.4	74.7	73.6	68.3	75.1	65.5	60.5	72.9	83.9	96.1	73.9	80.7	77.5	77.8	77.1	78.3
Share of international calls in total duration of telephone calls (%) (2)	:	18.1	3.5	3.1	:	3.3	2.7	:	2.3	25.6	5.3	8.6	3.5	2.5	7.8	5.6

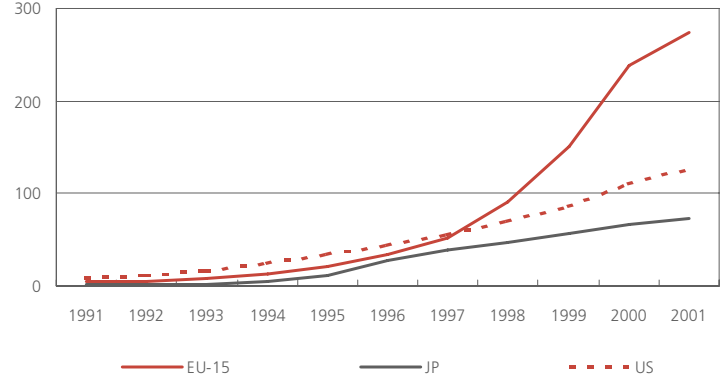
(1) B, I, NL and A: 2000. (2) Data refer to 2000; F and L: 1999; I and NL: 1998; B and A: 1997.
Source: Eurostat, Statistics on the Information Society in Europe, 2002

Balance of payment (BOP) statistics record all cross-border currency flows, including the movement of capital. The balance of payments of the European Union is compiled as the sum of the harmonised balance of payments accounts of the fifteen Member States. The data presented in chart 7.1 show figures for the current account net balance (exports-imports) of information and communication services. Whilst it is relatively easy to measure trade flows for manufactured goods, the collection of data for trade in services such as shipping, travel and tourism, financial services, advertising or indeed, communication, computer and information services is considerably more difficult.

The importance of the communication sector lies in its impact on all other sectors of the economy. It offers the potential for organisations to make best use of their investment in information technology and to realise productivity gains, improvements in quality and opportunities for greater social inclusion. The sector is therefore of fundamental importance to the full development of the knowledge-based economy.

In 2002, the number of mobile telephone subscribers around the world was estimated to be around 1.2 billion, whereas there were around 1.1 billion main telephone lines (Source: International Telecommunication Union (ITU), available at http://www.itu.int/home/index.html). Turning to Europe, there were 209.7 million fixed lines and 274.6 million mobile subscriptions in operation in 2001 (see table 7.2). The take-up of Third Generation Mobile Systems has taken considerably longer than many analysts predicted and the start date for many scheduled services has been postponed.

Chart 7.2: Mobile telephone penetration (millions of subscriptions)



Source: Eurostat, Statistics on the Information Society in Europe, 2002 (International Telecommunications Union estimates)

COMPUTERS

Table 7.3: Main indicators for computers, 2001

	EU-15	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
ICT market (EUR billion) (1)	562.0	17.3	12.0	130.1	7.3	34.6	88.6	6.0	64.3	:	31.1	13.3	8.2	9.2	21.1	119.2
ICT equipment (%) (2)	*26.7*	*27.2*	*27.2*	*27.6*	*25.1*	*26.9*	*25.6*	*29.4*	*25.8*	*:*	*25.7*	*26.0*	*28.2*	*28.4*	*32.1*	*26.0*
computer hardware (%) (2)	*13.7*	*12.8*	*15.0*	*14.4*	*9.7*	*11.4*	*13.5*	*15.7*	*12.4*	*:*	*13.3*	*13.7*	*12.7*	*16.8*	*16.4*	*14.0*
Software products (%) (2)	*10.6*	*9.5*	*11.7*	*11.6*	*4.4*	*5.4*	*11.9*	*7.7*	*7.4*	*:*	*14.5*	*10.3*	*5.6*	*12.2*	*11.2*	*11.6*
IT services (%) (2)	*20.4*	*19.6*	*21.5*	*19.8*	*7.8*	*12.3*	*26.9*	*11.1*	*15.1*	*:*	*19.8*	*19.8*	*8.4*	*19.1*	*22.8*	*23.6*
Carrier services (%) (3)	*42.3*	*44.2*	*39.6*	*41.0*	*62.7*	*55.4*	*35.5*	*51.8*	*51.7*	*:*	*40.0*	*43.9*	*57.8*	*40.2*	*35.5*	*38.8*
Number of PCs in use (millions)	116.6	3.7	2.4	29.0	0.9	6.8	20.0	1.5	11.3	0.2	6.9	2.4	2.3	2.2	5.0	22.0
PCs in use per 100 inhabitants (units)	31	36	45	35	9	17	34	39	20	45	43	30	22	43	56	37
Number of computers per 100 pupils (units) (4)	10.8	11.1	31.2	7.4	8.0	12.2	12.1	9.7	6.7	14.2	12.6	12.3	7.9	16.0	13.6	14.5
Share of households with a desktop (%)	35	42	59	32	15	34	29	28	35	45	66	32	20	45	56	36

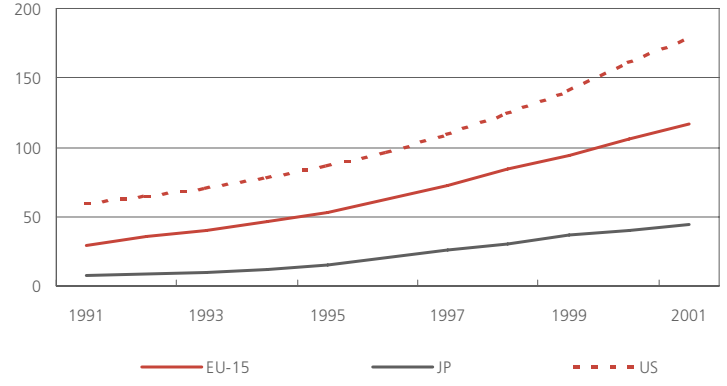
(1) Data refer to estimates for 2002; data for L are included within B; ICT (information and communication technologies) market is defined as being composed of ICT equipment, software products, IT services and carrier services; data are presented using fixed 2000 exchange rate. (2) Data refer to estimates for 2001; data for L are included within B; data are presented using fixed 2000 exchange rate. (3) Includes telecom and Internet carriers; data refer to estimates for 2002; data for L are included within B; data are presented using fixed 2000 exchange rate. (4) Data refer to February 2002.

Source: Eurostat, Information Society Statistics (theme4/infosoc/misc/pc/pcuse); European Commission (Flash Eurobarometer 118); European Information Technology Observatory, EITO 2002

The data presented in table 7.3 refer to the sales of information technology equipment (for example, computer hardware, communications equipment, office equipment and network equipment), software products, information technology services and carrier services (Internet and mobile telephones). Computer and telecommunications hardware generally accounts for around one-third of the turnover generated in ICT markets.

While the use of mobile phones increased exponentially during the second half of the 1990s in the EU (and at much faster rate than in the US or Japan), the same could not be said for the use of personal computers (PCs). There were around 117 million PCs in use in the EU in 2001, equivalent to 31 per 100 inhabitants, whilst the corresponding rate was 34.9 in Japan and 62.3 in the United States. The penetration rate of PCs into EU households was equal to 35% in 2001 and within PC equipped households, just over half (51%) declared that they used the Internet in June 2002 (see table 7.3 and 7.4).

Chart 7.3: Number of PCs in use (millions)



Source: Eurostat, Information Society Statistics (theme4/infosoc/misc/pc/pcnb)

THE INTERNET

Table 7.4: Selected indicators for Internet use and Internet supply, 2002

	EU-15	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Number of Internet users (millions) (1)	119.1	2.9	2.4	30.0	1.4	7.4	15.7	0.9	16.0	0.2	5.3	2.6	3.6	2.2	4.6	24.0
Proportion of the population using the Internet (%) (2)	51	49	73	56	18	42	49	57	40	62	68	61	42	67	70	61
Share of enterprises with access to Internet (%) (3)	70.2	60.5	74.6	80.0	57.5	57.2	77.2	59.1	64.8	62.8	64.2	76.9	73.7	54.2	75.7	77.1
Share of Internet users visiting government web-sites (%) (2)	49.0	51.2	65.0	48.4	33.2	44.5	58.8	35.3	41.1	52.1	55.9	42.5	38.8	42.9	78.4	44.8
Number of Internet computers per 100 pupils (units) (4)	5.9	4.6	25.0	4.1	2.5	6.4	6.1	5.0	2.9	7.1	5.4	6.3	5.1	12.0	11.0	10.6
Share of households connected to the Internet (%) (2)	40	41	65	44	9	29	36	48	35	55	65	49	31	54	64	45
Number of Internet hosts (thousands) (1)	12 354	329	467	2 361	136	487	906	116	879	14	2 550	516	157	785	670	1 981
Number of Internet hosts per 100 inhabitants (units) (1)	3.3	3.2	8.8	2.9	1.3	1.2	1.5	3.1	1.5	3.1	16.1	6.4	1.6	15.2	6.0	3.3
Number of ADSL providers (5)	:	7	4	6	:	6	5	1	10	3	10	14	2	3	3	13
Number of cable modem providers covered (5)	:	4	2	2	:	4	3	1	:	1	4	3	3	4	2	2
Number of secure servers (units)	12 356	153	458	3 934	83	479	622	224	823	25	545	496	140	322	360	3 692

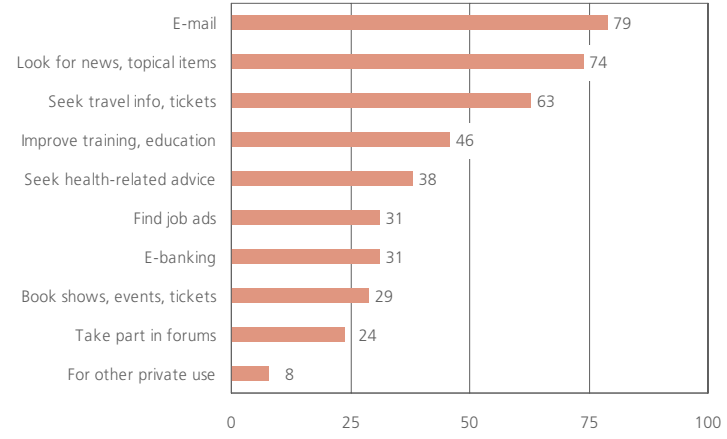
(1) 2001. (2) Data refer to June 2002. (3) Data refer to December 2001. (4) Data refer to March 2002. (5) Data refer to May 2002.
Source: Eurostat, Information Society Statistics (theme4/infosoc/misc/internet/iuse and ihostnb); European Commission (Flash Eurobarometer 116, 118, 119 and 125); European Commission, DG Information Society, Internet Access Report, May 2002

Within the EU and looking at the latest figures available, the highest penetration rates for Internet use were found in the Nordic countries, with Denmark reporting the highest share of its population using Internet (73%) - see table 7.4. As regards use made of the Internet in the EU, the main occupations were to communicate and pass leisure time. E-mail was the principal application in spring 2002, followed by the research of information (be it looking for news, topical items or seeking travel information and tickets). Some 31% of EU inhabitants said that they had used the Internet for e-banking, the same proportion that had used it to look for a job.

On the supply side, the Internet consists of a maze of permanently interconnected computers that provide the backbone to the system by routing traffic. Globally there were more than 140 million Internet hosts in 2001, of which around 12.4 million were in the EU, 7.6 million in the United States and 0.6 million in Japan. The number of Internet hosts in the EU grew by 17.9% between 2000 and 2001.

It is hoped that new technologies such as broadband and security systems should provide some stimulus to information technology markets and also stimulate innovative web content and applications. At the same time, actions regarding e-government, e-health, e-learning and e-business are designed to foster the development of new services and to increase demand, and it may be hoped that these too will provide a stimulus for growth.

Chart 7.4: Top ten uses made of the Internet in the EU, spring 2002 (% share of users having made use of the following during the previous three months)



Source: European Commission (Eurobarometer 125)

AUDIO-VISUAL MEDIA

Table 7.5: Selected indicators for audio-visual media, 2000

	EU-15	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Average TV viewing time per inhabitant per day (minutes) (1)	204	193	151	203	236	210	196	181	239	125	156	144	203	171	150	221
Average radio listening time per inhabitant per day (minutes) (2)	:	:	192	209	:	95	161	:	:	:	176	:	192	201	174	178
Number of video cassette sales (millions) (3)	288	6	7	36	1	14	55	3	40	:	10	4	8	4	6	97
Number of video cassette rentals (millions) (4)	752	24	20	:	10	90	68	28	46	:	37	9	7	9	18	186
Number of DVD sales (millions)	52.2	2.6	0.9	8.2	:	3.0	12.5	:	3.2	:	1.9	:	0.7	0.5	1.2	16.6
Number of sound recording sales (millions)	1 011.9	35.5	20.4	262.2	9.1	71.3	150.5	11.0	48.1	:	39.5	23.4	16.8	12.9	28.8	282.3
of which, CDs (%) (5)	:	*69*	*89*	*81*	*28*	*58*	*82*	*80*	*45*	:	*92*	*60*	*54*	*63*	*78*	*70*

(1) L and P: 1999. (2) F and UK: 1999. (3) EL, IRL, I and A: 1999. (4) EL, IRL, A and P: 1999. (5) EL, E, I, FIN and S: 1999.
Source: Eurostat, Statistics on Audio-visual Services, 2002

The European Commission encourages artistic and literary creation, including the audio-visual sector. These actions are largely aimed at protecting national projects in the face of growing global competition as satellite and cable distribution expands across the EU, by promoting, for example, film productions within the Member States.

The Television Without Frontiers Directive aims to create the conditions necessary for the free movement of television broadcasts within the Community (the scope includes all forms of transmission to the public of television programmes, except communication services providing items of information or other messages on demand). The development and application of digital technologies, combined with other developments in the broadcasting market is changing the reality of European broadcasting. Consequently, the Commission has launched a review of the Directive, which is scheduled to be completed by the end of 2003.

In addition to its economic importance, television also plays a key social and cultural role, as it is the most important source of information and entertainment in the EU, with 98% of homes having a television, and Europeans watching, on average, more than 200 minutes of television per day (see table 7.5).

Chart 7.5: Main mode of TV reception among TV households in 2001

Source: Eurostat, Statistics on Audio-visual Services, 2002

CINEMA

Table 7.6: Selected indicators for cinemas, 2001

	EU-15	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Number of films produced (units) (1)	625	12	18	83	25	106	204	8	103	16	32	13	17	12	25	83
Share of US films (% of box office receipts) (2)	65	72	59	79	80	82	54	:	64	81	60	:	65	75	64	81
Share of national films (% of box office receipts) (2)	:	2	28	16	5	10	32	10	25	0	9	7	8	15	22	12
Number of cinema sites (units) (3)	10 552	123	165	1 815	350	1 254	2 182	70	2 243	11	173	206	238	219	811	692
Number of cinema screens per 100 thousand inhabitants (units)	6.8	4.5	6.6	5.8	3.6	8.9	8.4	7.5	:	4.9	3.5	6.2	5.6	6.6	12.8	5.0
Number of admissions (millions) (4)	928.1	23.2	11.9	177.9	13.2	146.8	185.8	15.9	111.1	1.4	23.9	17.0	19.3	6.5	18.1	155.9
Average number of admissions per inhabitant per year (units) (4)	2.4	2.3	2.2	2.2	1.3	3.6	3.1	4.2	1.8	3.2	1.5	2.1	1.9	1.3	2.0	2.6

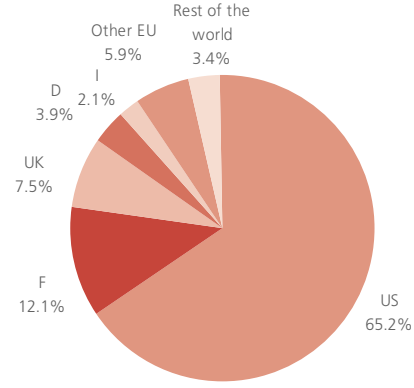
(1) EU-15: double counting eliminated, when co-production with several EU countries; data cover national and international co-productions of full-length films; EU-15, B and IRL: source EAO. (2) EL: source Media Salles; P: box office receipts estimated; all countries: source EAO. (3) B, EL, IRL and A: data source Media Salles. (4) EL: source Media Salles; P: box office receipts estimated.

Source: Eurostat, Statistics in Focus on Cinema statistics, 2003

The cinema industry is composed of three broad areas: production, distribution and exhibition. On the basis of available data, the European Audiovisual Observatory estimates that 625 feature films were produced in 2001 (see table 7.6), as opposed to 595 in 2000. Total admissions to cinemas in the EU experienced strong growth of 10.2% in 2001. With 928 million admissions, the EU regained a level of attendance that was similar to that seen in the early 1980's. Attendances were up in almost all countries, with the strongest growth in Germany (16.7%), Denmark (11.5%), France (11.4%) and the Netherlands (11.2%). Inhabitants in the EU visited the cinema 2.4 times, on average, in 2001.

In terms of box office receipts and admissions, American movies dominated the EU cinema market, but less than in 2000, falling from 73.7% of total admissions to 65.2% (see chart 7.6). Films produced in France and the United Kingdom accounted for a considerably higher share of total admissions than in other Member States. The increase in the share of European films in the European Union market, in relation to 2000, was essentially due to the success of local films on their own markets (for which the increase in admissions was around 27% in relation to 2000), but also due to important growth in admissions to European films outside their national markets (for which growth was estimated at more than 21%).

Chart 7.6: Breakdown of cinema admissions in the EU, according to the origin of the film, 2001



Source: European Audio-visual Observatory *in* Eurostat, Statistics on Audio-visual services, 2002

8. Other services

TOURISM - MAIN ECONOMIC INDICATORS

Table 8.1: Main indicators for tourism, 2000 (1)

	EU-15	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Hotels, camping sites and other provision of short-stay accommodation (NACE Groups 55.1-55.2) (2)																
No. of enterprises per 100 000 inhabitants (units)	51.5	21.2	30.0	49.0	:	41.0	78.1	90.8	69.5	89.3	32.8	191.6	38.0	27.9	35.5	24.8
No. of persons employed per 100 000 inhabitants (units)	25.4	16.1	23.6	17.1	:	31.1	29.4	36.4	24.0	47.6	24.7	63.8	15.5	21.9	27.9	32.7
Average turnover per 100 000 inhabitants (EUR million)	454.5	207.6	431.0	371.1	:	629.9	377.1	938.5	403.7	696.3	373.7	1 283.9	452.3	254.1	341.0	614.3
Restaurants, bars, canteens and catering (NACE Groups 55.3-55.5) (2)																
No. of enterprises per 100 000 inhabitants (units)	282.1	382.4	223.3	177.1	:	616.5	270.2	194.0	364.5	485.6	218.5	279.6	553.9	176.6	199.2	170.4
No. of persons employed per 100 000 inhabitants (units)	58.5	69.1	58.3	32.2	:	68.7	54.4	85.0	58.4	125.7	65.6	58.5	48.4	54.9	56.0	99.1
Average turnover per 100 000 inhabitants (EUR million)	1 345.6	1 340.2	1 334.9	900.8	:	2 010.3	937.8	1 759.1	1 085.7	2 185.9	1 544.4	1 334.5	1 667.7	794.7	865.7	2 391.3
Travel agencies (NACE Group 63.3) (3)																
No. of enterprises per 100 000 inhabitants (units)	11.4	13.0	10.6	9.0	:	14.9	7.3	8.1	15.4	25.7	14.2	15.5	9.6	14.4	25.1	11.0
No. of persons employed per 100 000 inhabitants (units)	33.6	44.5	41.1	23.7	:	27.4	19.3	29.9	18.5	52.4	26.8	39.7	18.8	20.5	49.5	85.7
Average turnover per 100 000 inhabitants (EUR million)	109.9	86.0	107.8	97.3	:	104.5	72.4	88.6	70.4	152.6	160.1	128.1	73.0	102.0	155.9	215.0

(1) Number of inhabitants: 1999; EU-15: excluding EL; IRL and L: provisional data; UK: average turnover per 100 000 inhabitants is provisional. (2) D and IRL: 1999.
(3) D: provisional data; IRL: 1998.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/enter_ms) and Eurostat, Population and Social Conditions (theme2/demo)

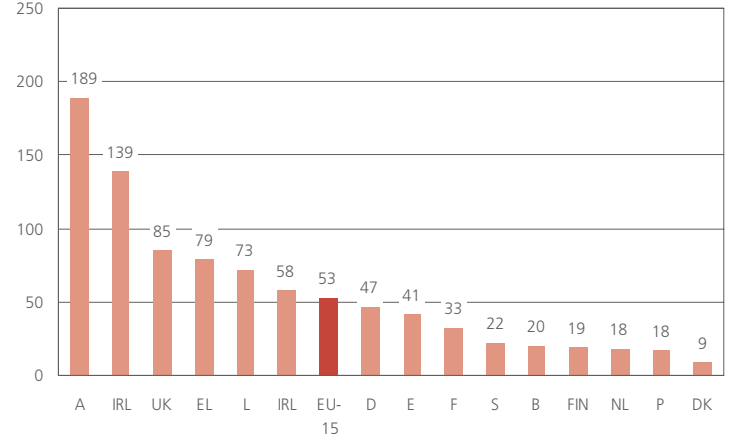
Tourism may be defined as the activities of persons travelling to and staying in places outside of their usual environment for not more than one consecutive year, be it for leisure or business purposes. As a concept, tourism involves a wide range of activities that are best viewed as a market rather than an activity.

Tourism's economic contribution to the EU is not the only beneficial impact that this sector has. Travel also plays an important social role, as tourism is no longer an activity for the privileged few, but rather a widespread experience for the great majority of EU citizens. This process may be expected to continue as the number of tourists in Europe is expected to double over the next ten years.

The main economic indicators presented in table 8.1 have been collected within the framework of the SBS Regulation. In the NACE classification the activities that most relate to tourism are travel agencies (Group 63.3) hotels, short-stay accommodation, restaurants, bars and canteens (Division 55) and some of the transport service activities (Divisions 60 to 62).

The data presented in chart 8.1 provides information on the supply of accommodation services offered by hotels and similar establishments relative to the number of inhabitants in a country. Hotels comprise hotels, apartment hotels, motels, inns, residential clubs and similar establishments that provide a set of services that go beyond daily bed-making and cleaning of bedrooms and sanitary facilities. The term similar establishments refers, for example, to boarding houses, guest houses, bed and breakfast accommodation and farmhouse accommodation, where basic services are provided.

Chart 8.1: Number of hotels and similar establishments per 100 000 inhabitants, 2001 (units) (1)



(1) Number of inhabitants: 1999; EU-15: estimate, including IRL, 1999; IRL: 1999.
Source: Eurostat, Tourism (theme4/tour)

TOURISM - CAPACITY

Table 8.2: Number of bed places in hotels, campsites and holiday dwellings (thousands)

	EU-15	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
							Number of bed-places in hotels and similar establishments									
1990	7 834.0	93.7	88.5	1 126.4	438.4	929.5	1 087.7	70.3	1 703.5	14.8	111.3	650.6	179.3	92.1	161.9	1 086.0
1995	8 613.2	114.9	99.0	1 446.7	557.2	1 031.7	1 193.3	96.9	1 739.5	14.7	142.5	646.1	204.1	102.5	173.8	1 050.2
2000	9 360.9	119.2	62.1	1 590.3	607.6	1 315.7	1 178.3	138.6	1 854.1	14.4	173.1	588.2	223.0	117.3	188.3	1 190.6
2001	:	121.5	64.0	1 603.0	607.6	1 333.4	1 201.0	139.6	1 891.3	14.3	174.3	587.3	228.7	118.5	194.8	:
							Number of bed-places in campsites									
1990	:	373.2	237.6	506.6	78.1	571.3	2 625.4	:	1 228.1	50.6	493.8	:	261.1	23.5	:	1 328.4
1995	:	368.4	266.1	731.6	90.2	622.4	2 828.2	:	1 269.6	54.2	474.4	:	256.1	84.2	:	1 280.9
2000	:	351.4	268.4	780.9	:	740.0	2 692.0	33.9	1 314.0	46.1	726.2	199.0	252.0	21.3	305.9	1 324.2
2001	:	348.2	269.1	762.1	:	764.1	2 294.7	33.9	1 327.1	44.8	721.1	211.3	253.1	91.9	289.8	:
							Number of bed-places in holiday dwellings									
1990	:	:	:	200.8	:	384.9	246.8	:	163.1	:	123.5	:	:	:	44.6	275.5
1995	:	62.4	39.6	262.1	:	391.1	249.2	:	139.8	:	142.8	:	:	8.3	48.7	265.7
2000	:	61.7	40.0	316.4	:	566.6	263.5	11.3	467.9	1.9	182.6	54.6	:	9.4	49.9	:
2001	:	61.0	39.1	321.5	:	546.3	260.7	14.6	503.1	1.9	185.5	55.4	:	9.0	47.6	:

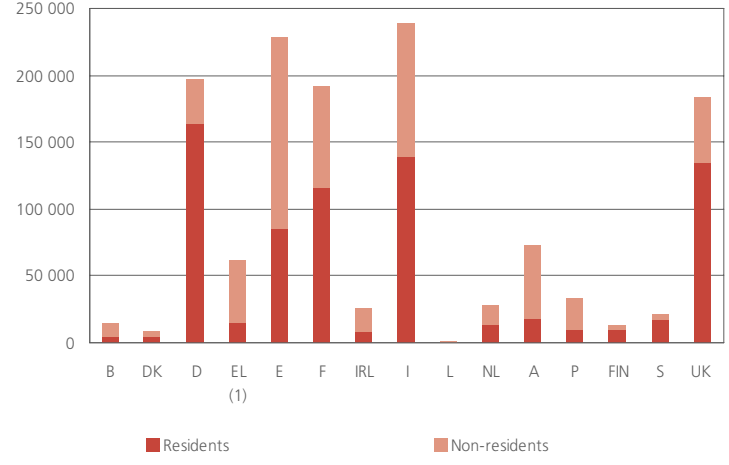
Source: Eurostat, Tourism (theme4/tour)

An essential issue for tourism is the euro. Since the tourism sector is largely characterised by cross-boarder activities, it benefits greatly from the single currency. As for the tourism destinations of EU citizens, three out of four remain within the EU when taking a holiday. The expenditure of EU tourists travelling within the EU amounted to EUR 115 billion in 2000 (excluding domestic tourism expenditure). The single currency greatly reduces costs arising from exchange commission in intra-European tourism and travelling from non-EU countries is now easier with only one currency needed to visit countries within the euro area.

The data in table 8.2 provides an indication of the supply of bed-places in the EU, broken down by type of accommodation. Holiday dwellings include collective facilities that are under common management, for example, holiday bungalows. Whilst these types of accommodation can provide limited hotel-style services, this does not include daily bed making and cleaning.

The number of bed places is determined by the number of persons who can stay overnight in the establishment; this figure should not include temporary beds set-up as a result of a specific customer request. The number of nights spent is a demand-side measure of the tourism market. A night spent (or overnight stay) is each night that a guest spends or is registered as spending in an establishment (in other words, physical presence is not necessary). These figures are calculated on the basis of the country of residence of the guest and hence allow a breakdown to be made between resident and non-resident guests.

Chart 8.2: Number of nights spent by residents and non-residents in hotels and similar establishments, 2001 (thousands)



(1) 2000.
Source: Eurostat, Tourism (theme4/tour)

TRANSPORT SERVICES - MAIN ECONOMIC INDICATORS

Table 8.3: Main economic indicators for transport services, 2000

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Land transport; transport via pipelines (NACE Division 60)															
Average number of persons employed per enterprise (units) (1) (2)	14.0	6.0	11.0	:	3.0	9.0	8.0	4.0	17.0	15.0	15.0	5.0	3.0	:	12.0
Average turnover per enterprise (EUR million)	1.1	0.5	0.9	:	0.1	0.7	:	0.3	1.6	1.3	1.0	0.2	0.3	0.5	1.2
Average personnel costs per employee (EUR thousand) (1)	36.9	31.9	30.9	:	22.0	33.9	:	31.8	39.8	31.4	33.1	16.3	32.1	:	30.2
Water transport (NACE Division 61)															
Average number of persons employed per enterprise (units) (1)	4.0	24.0	11.0	:	38.0	8.0	:	14.0	:	3.0	4.0	18.0	27.0	:	14.0
Average turnover per enterprise (EUR million)	4.3	27.3	5.4	:	6.4	2.9	:	3.7	:	1.2	1.4	3.6	7.1	4.5	5.6
Average personnel costs per employee (EUR thousand) (1)	45.1	42.2	40.9	:	28.2	41.9	:	39.5	:	42.3	43.3	21.1	41.0	:	56.3
Air transport (NACE Division 62)															
Average number of persons employed per enterprise (units) (1) (3) (4)	118.0	121.0	140.0	:	729.0	127.0	:	129.0	240.0	:	111.0	489.0	159.0	:	111.0
Average turnover per enterprise (EUR million)	35.3	24.1	27.4	:	126.4	28.1	:	56.0	92.8	:	29.2	62.1	27.1	18.3	31.5
Average personnel costs per employee (EUR thousand) (1) (3) (4)	46.3	48.8	61.1	:	45.0	54.7	:	55.3	59.2	:	47.9	39.2	43.2	:	49.6
Supporting and auxiliary transport activities; activities of travel agencies (NACE Division 63)															
Average number of persons employed per enterprise (units) (1) (2) (3)	14.0	14.0	22.0	:	10.0	26.0	16.0	11.0	10.0	:	15.0	14.0	12.0	:	21.0
Average turnover per enterprise (EUR million)	4.8	3.6	3.9	:	1.8	4.9	:	1.7	2.5	:	4.8	2.0	2.3	3.2	5.6
Average personnel costs per employee (EUR thousand) (1) (3)	42.1	35.1	33.5	:	25.8	33.4	:	29.3	43.3	:	39.1	23.2	32.8	:	32.8

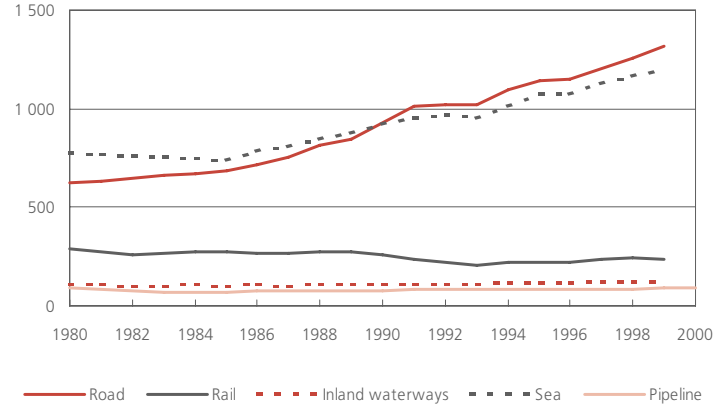
(1) L: provisional data. (2) NL: NACE Divisions 62 and 63 are confidential. (3) D and UK: NACE Division 62 is provisional.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/enter_ms)

Each mode of transport has its own advantages, for example, potential capacity, high levels of safety, flexibility, low energy consumption, low environmental impact. The challenge to the EU is to optimise its transport networks, combining the different transport services to make them more efficient, cost effective and sustainable. The European Commission aims, through an integrated package of measures, to limit the increase in the speed at which road haulage services are developing. Actions focus on supporting alternative modes of transport, particularly for long haul sections of a journey. This plan should not only reduce congestion on the roads, but also improve road safety and be beneficial for the environment.

Longer-term objectives include ensuring that all regions of the EU benefit from the Internal Market due to modern and efficient infrastructure. Fundamental behind these plans is the development of Trans-European Networks (TENs) as a key element for the creation of the Internal Market and the reinforcement of Economic and Social Cohesion. This development includes the interconnection and interoperability of national networks as well as access to such networks.

Transport services are primarily engaged in the conveyance of goods and passengers either directly or indirectly. Direct involvement relates to the specific conveyance of goods and passengers by various modes of transport (land, air, inland waterways or sea), while indirect involvement relates to auxiliary services, such as cargo handling and storage, operation of terminal facilities, freight forwarding, travel agencies and tourist guide activities. The use of freight transport in the EU can be split into two groups: with particularly high recourse to road and sea transport, while the use of rail, inland waterways and pipeline was less significant (see chart 8.3).

Chart 8.3: Use of freight transport in the EU (million tonnes-km)



Source: Eurostat, Transport and Environment Reporting Mechanism (theme8/term)

Other services

FINANCIAL SERVICES - BANKING

Table 8.4: Main indicators for banking, 2000

	EU-15	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
									Number of enterprises broken down by legal status (units) (1)							
Incorporated enterprises limited by shares	2 380	61	77	181	18	175	764	45	280	135	76	107	42	23	109	287
Co-operative enterprises	3 779	13	24	1 782	14	92	186	3	543	2	1	684	145	288	2	0
Public-law enterprises	836	1	99	562	0	1	0	4	0	2	0	43	5	40	79	0
Branches of non-EEA enterprises	361	14	0	28	9	52	96	2	14	8	10	1	2	0	1	124
Others	543	0	0	239	0	48	51	28	4	55	0	6	22	1	22	67
									Number of enterprises broken down by size class (according to balance sheet) (units)							
<EUR 100 million	2 817	15	118	735	17	115	373	13	285	27	23	509	146	278	110	53
EUR 100 - EUR 999 million	3 282	34	61	1 501	10	130	414	15	368	87	31	286	40	62	68	175
EUR 1 000 - EUR 9 999 million	1 439	28	11	480	8	105	268	48	143	71	23	39	25	10	23	157
EUR 10 000 - EUR 99 999 million	318	5	10	65	6	16	36	6	44	17	7	6	5	2	12	81
>EUR 99 999 million	39	3	0	11	0	2	6	0	1	0	3	1	0	0	0	12
Number of persons employed (thousands) (2)	:	76	49	757	57	249	367	35	344	22	131	73	60	26	:	480
Balance sheet as a share of GDP (%)	274	298	250	347	124	185	213	345	170	3 112	253	267	279	107	182	350

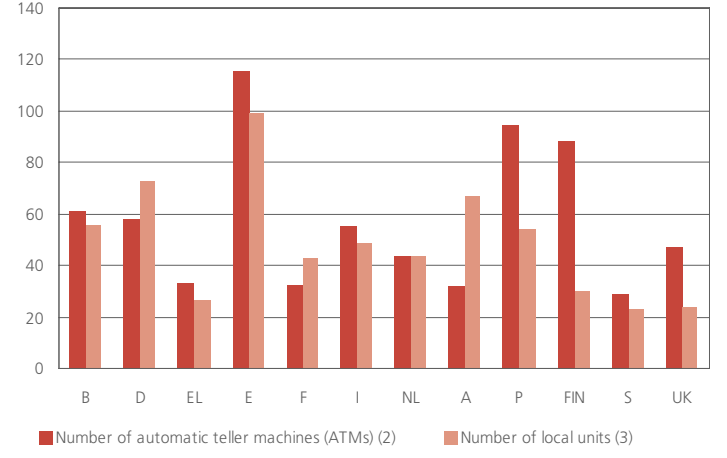
(1) NL: revised value. (2) B: provisional data; I: revised value.
Source: Eurostat, Structural Business Statistics (theme4/sbs/credstat)

Mainly as a result of improvements in information technology and deregulation, world financial institutions and markets have experienced many changes. Advances in information technology have lowered the costs of communication, making an international network more practical, while at the same time deregulation has opened up new markets. These factors have facilitated the process of internationalisation.

Eurostat started to collect basic structural statistics on credit institutions from reference year 1994 onwards. The collection of data was through national central banks, financial supervisory authorities and national statistical offices on a voluntary basis. In order to ensure high quality data on credit institutions, Eurostat drafted an amendment to Council Regulation No 58/97 concerning structural business statistics, which has added a new annex to the Regulation with an extensive list of characteristics specific to credit institutions.

There were just over 3 700 co-operative enterprises in the EU's banking sector in 2000. This was the most popular legal status within the banking sector, while the majority of enterprises operated with a balance sheet between EUR 100 million and EUR 999 million (see table 8.4).

Chart 8.4: Network access to banking - ATMs and local units per 100 000 inhabitants, 2000 (units) (1)



(1) Number of inhabitants: 1999. (2) IRL: estimate; S: 1999, revised value.
(3) DK, IRL and L: no data available; NL: 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/credstat)

FINANCIAL SERVICES - INSURANCE AND PENSION FUNDS

Table 8.5: Main indicators for insurance, 2000

	EU-15 (1)	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Number of enterprises broken down by type of insurance (units) (2)																
Life insurance enterprises	868	23	91	123	:	49	89	40	80	56	101	5	16	15	38	142
Non-life insurance enterprises	1 975	81	129	315	:	193	302	82	99	24	266	17	27	139	111	190
Composite insurance enterprises	:	38	:	:	:	62	38	:	20	:	:	32	7	:	:	23
Specialist reinsurance enterprises	432	14	8	41	:	4	33	:	7	264	:	4	1	5	8	43
Gross premiums written (EUR billion) (3)																
Life insurance enterprises	410	2.0	7.3	61.2	:	12.1	38.8	8.5	28.8	6.0	23.0	0.5	2.6	4.2	14.8	199.8
Non-life insurance enterprises	225	3.8	4.0	76.2	:	7.9	43.9	3.4	10.9	0.7	17.3	1.7	1.9	2.5	8.4	42.4
Composite insurance enterprises	:	13.2	:	:	:	21.3	58.0	:	31.4	:	:	9.6	2.6	:	:	37.3
Specialist reinsurance enterprises	:	:	0.9	40.0	:	0.8	6.0	:	1.8	2.8	:	1.4	0.0	0.0	0.1	6.1

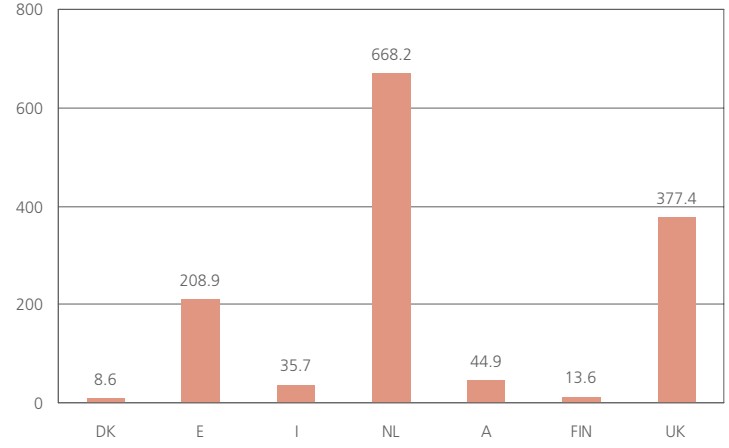
(1) Calculated as sum of available countries. (2) B: 1999; IRL: 1999 for life insurance and non-life insurance. (3) B and IRL: 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/statonis)

The majority of insurance markets are characterised by a tendency towards increased concentration. Life insurance business has developed at a faster rate than non-life insurance business, with non-life markets almost saturated. It is likely that the growth experienced in life insurance markets in the last decade will continue as more Europeans seek complementary income to pension benefits received from public welfare protection systems, that are increasingly likely to face financing difficulties as populations age.

The data presented for insurance enterprises are collected within the context of Annex 5 of Council Regulation No 58/97 concerning structural business statistics. Life insurance enterprises are defined as covering all forms of life insurance (on death or to a stipulated age), as well as marriage insurance, birth insurance and permanent health insurance. Non-life insurance enterprises cover risks associated with accidents, sickness, vehicles, goods in transit, fire and natural forces, damage to property, vehicle and general liability. Composite insurance enterprises cover both life and non-life insurance business, while specialist reinsurance enterprises provide cover to other insurance enterprises or pension funds.

In order to improve data availability and quality within the field of supplementary pension funds, Eurostat proposed a pension funds sector specific module to be annexed to Regulation 58/97 concerning structural business statistics - this was adopted in 2002. Until such time that this is implemented, data will continue to be collected on a voluntary basis.

Chart 8.5: Average contributions to autonomous pension funds per inhabitant, 2000 (EUR) (1)



(1) Values represent the sum of contributions receivable from members and contributions receivable from employers; no data available for missing countries; the number of inhabitants refers to 1999.
Source: Eurostat, Structural Business Statistics (theme4/pension)

BUSINESS SERVICES - MAIN ECONOMIC INDICATORS

Table 8.6: Main economic indicators for business services, 2000

	EU-15 (1)	B	DK	D	EL	E	F	IRL (2)	I	L	NL	A	P	FIN	S	UK
Real estate activities (NACE Division 70)																
Average number of persons employed per enterprise (units) (3)	3.0	2.0	2.0	2.0	:	2.0	4.0	4.0	2.0	2.0	4.0	6.0	3.0	2.0	3.0	5.0
Average turnover per enterprise (EUR million)	0.6	0.4	0.3	0.6	:	0.6	0.9	0.7	0.2	0.4	1.3	1.4	0.4	0.5	0.7	0.7
Average personnel costs per employee (EUR thousand) (3)	31.2	32.6	23.1	38.2	:	21.2	33.4	24.9	26.8	31.9	44.3	31.9	13.9	30.0	34.3	28.8
Renting of machinery and equipment (NACE Division 71)																
Average number of persons employed per enterprise (units) (4)	5.0	4.0	3.0	7.0	:	3.0	4.0	6.0	2.0	3.0	7.0	5.0	4.0	3.0	3.0	12.0
Average turnover per enterprise (EUR million)	1.0	1.7	0.5	2.1	:	0.4	0.8	0.9	0.3	1.5	1.6	1.4	0.8	0.5	0.5	1.7
Average personnel costs per employee (EUR thousand) (4)	27.3	34.6	24.2	34.7	:	18.9	31.9	17.0	25.3	40.6	26.6	30.9	15.5	29.9	32.7	25.5
Research and development (NACE Division 73)																
Average number of persons employed per enterprise (units) (3)	11.0	16.0	17.0	20.0	:	5.0	12.0	8.0	2.0	104.0	21.0	26.0	6.0	8.0	8.0	30.0
Average turnover per enterprise (EUR million)	2.3	2.0	1.5	1.3	:	0.2	1.7	1.8	0.2	14.0	2.0	2.9	0.3	2.6	0.7	2.8
Average personnel costs per employee (EUR thousand) (3)	46.2	61.8	49.4	43.5	:	27.5	49.1	25.2	40.4	72.6	36.9	47.3	30.2	39.2	49.1	51.8
Other business activities (NACE Division 74)																
Average number of persons employed per enterprise (units)	6.0	6.0	6.0	10.0	:	5.0	6.0	9.0	3.0	:	12.0	7.0	6.0	5.0	3.0	10.0
Average turnover per enterprise (EUR million)	0.4	0.5	0.5	0.7	:	0.2	0.6	0.7	0.2	0.5	0.6	0.6	0.3	0.3	0.3	0.8
Average personnel costs per employee (EUR thousand) (4)	26.9	30.0	31.0	26.9	:	15.7	34.2	19.9	22.5	:	20.0	30.5	12.6	25.1	38.3	28.9

(1) EU-15: excluding EL. (2) 1999. (3) D, IRL, L and UK: provisional data. (4) IRL and L: provisional data. (5) IRL: provisional data.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/enter_ms)

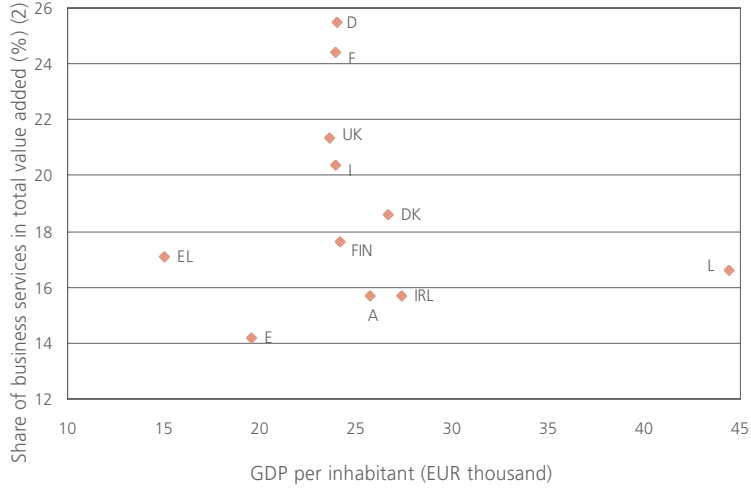
Business services are services that are usually (but not always) purchased by other businesses. Examples include the auditing of accounts, the preparation of building plans by an architect, or the cleaning of an office. Businesses that offer these services to other enterprises are classified within Section K of NACE, where real estate, renting and business activities are grouped together. Sometimes the services offered are purchased by private individuals, and therefore, not all of the output is exclusively provided to business.

Many enterprises also perform some business services as part of their own in-house activities, for example, an enterprise may employ its own computer personnel rather than making use of specialist enterprises and most larger enterprises have their own accounts department.

Businesses typically make use of support services at critical stages of their development. The provision of information and advice that forms the core service of most support organisations is thought to be particularly important when an enterprise is starting up and at sensitive stages of subsequent development, such as when growth opportunities or problems present themselves, when exporting is contemplated, or when arrangements have to be made to hand on a business to new owners.

The proper use of good business support services can improve the competitiveness of enterprises, particularly when external business services are used as part of a more developed management strategy that attempts to focus on core activities and bring in ancillary services from outside.

Chart 8.6: Relationship between the importance of business services and GDP, 2001 (1)



(1) Missing countries: no data available. (2) Business services: defined as NACE Section K; DK, D, A, FIN and UK: 1999; F and L: 1998.
Source: Eurostat, National Accounts (theme2/aggs and theme2/brkdowns)

9. Background notes and information

METHODOLOGY AND METHODOLOGICAL CO-ORDINATION

The methodological co-ordination section of Eurostat Unit D1 aims to promote harmonised rules and methods for business statistics and to improve the co-ordination of work related to business statistics. As part of its drive to improve co-ordination, groups have been set up for seven horizontal topics: globalisation, data on the information society, intangibles, statistical units, the use of administrative sources, the linking of employer and employee data, and accounting standards.

Eurostat also actively co-operates with other European and worldwide institutions. Meetings with the EU's trade (industrial) associations are held on a regular basis and an electronic network for the exchange of information between Eurostat and trade associations has been set up. There are also frequent working contacts with the UN, OECD, IMF, FAO, WHO, UNESCO and other international institutions.

To promote harmonised European business statistics of high quality, Eurostat produces and disseminates classifications, a glossary of concepts and definitions and methodological information as support services.

Business Methods: your guide to European business statistics methodology

Eurostat has set up a number of publicly available tools to support co-ordination and harmonisation. They are available within Metadata on Eurostat's web site. Under Metadata are found the titles "Classifications and definitions" containing RAMON and CODED, and "Methods and explanatory texts" containing Business Methods.

Metadata is a tool for co-ordination of statistical methodology in Europe. It also plays an important role in disseminating methodological information and promoting the use of agreed standards. The aim of Business Methods is to bring together all existing and draft methodology, norms and useful information relating to European business statistics within a coherent and user friendly framework. The information can be accessed via the following Internet address: http://europa.eu.int/comm/eurostat/.

- **RAMON -** Eurostat's classifications server (see *classifications* on *page 105* for more details).
- **CODED -** Eurostat's Concepts and Definitions database - this database currently holds more than 4 200 concepts and definitions covering business statistics as well as other European statistical domains.
- **Business methods - containing:**
  - Manual of Business Statistics, combining all existing and draft manuals covering specific areas of business statistics into one coherent and consistent structure. Due to its size, it only exists in electronic format, though individual sections or sub-sections continue to be produced in paper format where there is sufficient demand;
  - Legal texts relevant to business statistics;
  - National data collection methodology, including information about the statistical infrastructure in the Member States, for example, registers and classifications.

Most of the material is available in English, French and German.

Further information: for questions relating to *Business Methods*, CODED or general methodological questions concerning business statistics, please contact the methodological co-ordination section within Eurostat, at eurostat-methodology@cec.eu.int

BUSINESS REGISTERS

Why business registers are important

The most important uses of statistical business registers are:

- as a sampling frame for a large variety of surveys, a tool for the preparation and co-ordination of surveys;
- as a source of data for a quick overview of business indicators, business demography and for statistical analysis; currently there are 23 million enterprises recorded in EU statistical business registers with 125 million persons employed;
- to mobilise administrative data and detect and construct statistical units from administrative or legal ones;
- other uses including inter-administrative and commercial use depend upon specific country legislation.

Legal background

Council Regulation on Community co-ordination in drawing up Business Registers for Statistics Purposes No 2186/93 gives the legal basis for the set-up, scope, characteristics, maintenance and updating of business registers. This builds on other Regulations, notably the Council Regulation on statistical units for the observation and analysis of the production system in the Community No 696/93 and the Council Regulation on the statistical classification of economic activities in the European Union (NACE) No 761/93. These Regulations and other documents on business registers are available on the Business Methods web-site (see previous page for more details).

Coverage and updating

Units - there are three compulsory units - the legal unit, the enterprise and the local unit. The inclusion of enterprise groups in registers is a major development project and in most Member States some information on enterprise groups is already available. Other units like kind-of-activity units are rarely included, but may be constructed in an analytical way.

Coverage - all enterprises contributing to GDP at market prices must be included in business registers, with certain exceptions. The inclusion of NACE Sections A, B and L (agriculture, fishing and public administration) is optional, although in most countries they are included. Registers generally exclude natural persons owning property which they rent to third parties. This means that a natural person will not be included in the registers on account of his/her activities in Group 70.2 of the NACE. The smallest enterprises of no statistical importance may also be excluded, if they fall below administrative (VAT or employment) thresholds.

Variables - the characteristics can generally be divided into four main categories:

- identification variables, for example, name and address;
- stratification variables, for example, activity or size;
- demographic variables, for example, date of creation;
- relationship variables, for example, links between units.

Updating - the Registers Regulation gives the minimum updating requirements, which are generally exceeded. In updating, special attention is paid to enterprise continuity and detecting enterprise births and deaths.

Annual inquiry on business registers

The annual inquiry on business registers originated from the need to monitor the implementation of the Business Registers Regulation, but now it serves many purposes. It started in 1995 and the main results are stored in a database, which is not public. The following information is asked regularly, as well as several ad hoc questions:

- identification and contact persons;
- sources - the most important administrative sources are tax registers, but many others are used, both administrative and survey sources;
- number of legal units, enterprises and local units, by NACE Section, as well as employment and turnover figures; data on public enterprises and their employment is also included;
- variables available for legal units, local units, enterprises and enterprise groups;
- enterprise group information - the number of resident and multinational groups by nationality, units and employment;
- quality information - coverage and logic of the data, units without activity code, discrepancies between register and survey results.

On-going work

The aim of work in this field is harmonisation - to improve the quality of business statistics as well as international comparability. High quality business registers reduce survey costs and response burden. The most important development project at present is the harmonisation of the methodology for enterprise groups and their inclusion in business registers, as a necessary tool for the development of statistics on globalisation.

The revision of the business register recommendations manual was completed in March 2003. The manual explains the Registers Regulation, guides its development and recommends measures going beyond the Regulation. The manual now includes 21 chapters and a glossary.

The annual inquiry and database are developed according to agreements with the Member States. Publishing good country practices on a web site is an established practise. Co-operation with various projects wherever business registers are used as a survey frame, as data source, or in linking with other administrative or statistical registers is expanding both inside Eurostat and within the Member States.

Further information: information on business registers can be accessed via the following Internet address, http://forum.europa.eu.int by clicking on Eurostat and then Business Methods. Within Business Methods a page has been created, with a link to the Eurostat manual of business statistics, chapter 5 of which deals with business registers.
Alternatively for questions relating to business registers please contact arto.luhtio@cec.eu.int

CLASSIFICATIONS

Why do we need statistical classifications?

Statistical classifications belong to the basic instruments without which statistical data cannot be compiled. They are also an important factor in the quality of statistical information. Statistical classifications must be revised from time to time to reflect changing economic structures that lead to the creation of new activities and products or the expansion of existing ones. Such change is thus a constant challenge for the compilation of statistical classifications. The intervals between revisions must not be too long, since the pertinence of the classification diminishes with time, nor must they be too short, since otherwise the comparability of the data over time is adversely affected.

Two main types of classification

Different classifications are needed to cater for the functions which statistics are required to perform. Economic classifications can be broadly divided into two categories:

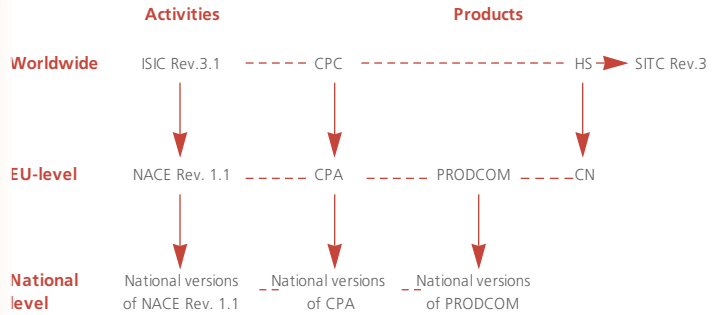
1. classifications of economic activities that are used to classify economic entities (enterprises, local units and similar statistical units). Such classifications therefore form the basis for compiling statistics on output, the production factors entering into the production process (labour, raw materials and supplies, energy etc.), capital formation or financial transactions.

2. product classifications that are used to classify the outputs (goods and services) of economic entities. Goods classifications have traditionally been far more important than classifications of services. Examples of this type of product-related data are external trade statistics or product statistics on production and consumption.

Harmonisation and co-ordination at an international level

During the 1990s a thorough revision of the international statistical classifications took place, with the result that new classifications were developed as an integrated system of statistical classifications, whereby a) the various product classifications were harmonised and b) the central product classifications were related to the classifications of economic activities by the economic origin criterion. In addition to this, integration at world level (mainly under the auspices of the United Nations), and regional levels, for example, the European Union and North America, aligned to various extents classifications towards global classifications.

At the European level, this has given rise to an integrated system where the various classifications have been harmonised and linked at global, European Union and national level.



Revised system of integrated statistical classification

Over time there is a need to update activity and product classifications, and in 1998 the process to revise the activity classifications ISIC Rev. 3 and NACE Rev. 1 began, as well as a revision of the product classifications CPC and CPA. The aim was to reflect:

- new activities which did not exist when NACE Rev. 1 was developed;
- activities which had manifestly grown in importance since NACE Rev. 1 was developed, either due to technological change or economic reality.

This update resulted in a few additional items and changes. NACE Rev. 1.1 and CPA 2002 are legally binding in the European Community as of 1 January 2003.

Having finalised these updates, experts commissioned by the United Nations and Eurostat in 2002 launched a project for a true revision of the activity and product classifications, with the aim of bringing about greater convergence at an international level between classifications. The outcome of this ongoing project - known as Operation 2007 is scheduled to be implemented in the form of legally binding Regulations in the Member States on 1 January 2007.

Key European statistical classifications used within the Business Statistics Directorate

NACE Rev. 1.1 (statistical classification of economic activities in the European Community)

NACE is the EU classification of economic activities that is in line with ISIC Rev. 3 and can thus be regarded as its European counterpart. NACE Rev. 1 came into force in 1990 through Council Regulation No 3037, which was subsequently amended by Commission Regulation No 761 in 1993, as well as Commission Regulation No 29 in 2002. Work on drawing up NACE Rev. 1 began in 1986 and it soon emerged that large parts of ISIC Rev. 3 were inadequately broken down for the purposes of observing and analysing European economies, so a further disaggregation was required.

NACE is a hierarchical classification made up of Sections (1-letter codes), Subsections (2-letter codes), Divisions (2-digit codes), Groups (3-digit codes) and Classes (4-digit codes). The most important aid to interpretation of NACE Rev. 1.1 is the explanatory notes on the individual headings. These notes are based on those of ISIC Rev. 3.1. This ensures that not only the structure but also the contents of NACE Rev. 1.1 are in line with those of ISIC Rev. 3.1.

CPA (statistical classification of products by activity in the European Economic Community)

The most significant achievement to come out of the work to develop an international system of integrated classifications of economic activities and products is without doubt the Central Product Classification (CPC) devised by the United Nations. Before the CPC was developed, the international system did not have any classification which encompassed both goods and services. The CPC was created with the aim of providing a framework for the comparison of many different kinds of statistics concerning goods and services. The CPA is the European version of the CPC and the purposes it serves are in line with those of the CPC. Whilst the CPC is merely a recommended classification, the CPA - subsequently updated as Commission Regulation 204 in 2002 - is legally binding in the European Community. The CPA differs from the CPC in that it is not only more detailed but also it has a different structure. The view at a European level was that a central product classification should be structured according to the criterion of economic origin, being based, naturally enough, on NACE Rev. 1.1. This recourse to NACE Rev. 1.1 with respect to the definitions of economic activity means that the CPA's structure is coherent at all levels with that of NACE Rev. 1.1.

PRODCOM list (Community survey of industrial production)

PRODCOM is the abbreviation for the EU's system of production statistics, the legal basis for which is Council Regulation No 3924 from 1991. The PRODCOM list of goods is now legally binding in the European Community and is updated on an annual basis. The headings of the PRODCOM list are derived from the Harmonised System (HS), which thus enables comparisons to be made between production statistics and external trade statistics. PRODCOM headings use an eight-digit numerical code, the first six digits of which are identical to those of the CPA code. The PRODCOM list is therefore linked to, and consistent with, the classification of products by activity.

Further information: Eurostat's classifications server, RAMON, is available to the general public at:
http://europa.eu.int/comm/eurostat/ramon.
All of the above mentioned classifications are available on-line.

NACE Rev. 1 - CLASSIFICATION OF ECONOMIC ACTIVITIES

A Agriculture, hunting & forestry
B Fishing
C Mining & quarrying
D Manufacturing
DA Manufacture of food products; beverages & tobacco
15 Manufacture of food products & beverages
16 Manufacture of tobacco products
DB Manufacture of textiles & textile products
17 Manufacture of textiles
18 Manufacture of wearing apparel; dressing & dyeing of fur
DC Manufacture of leather & leather products
19 Manufacture of leather & leather products
DD Manufacture of wood & wood products
20 Manufacture of wood & wood products
DE Manufacture of pulp, paper, publishing & printing
21 Manufacture of pulp, paper & paper products
22 Publishing, printing & reproduction of recorded media
DF Manufacture of coke, refined petroleum products & nuclear fuel
23 Manufacture of coke, refined petroleum products & nuclear fuel
DG Manufacture of chemicals, chemical products & man-made fibres
24 Manufacture of chemicals, chemical products & man-made fibres
DH Manufacture of rubber & plastic products
25 Manufacture of rubber & plastic products
DI Manufacture of other non-metallic mineral products
26 Manufacture of other non-metallic mineral products
DJ Manufacture of basic metals & fabricated metal products
27 Manufacture of basic metals
28 Manufacture of fabricated metal products, except machinery & equip.
DK Manufacture of machinery & equipment n.e.c.
29 Manufacture of machinery & equipment n.e.c.
DL Manufacture of electrical & optical equipment
30 Manufacture of office machinery & computers
31 Manufacture of electrical machinery & apparatus n.e.c.
32 Manufacture of radio, television & communication equipment & app.
33 Manufacture of medical, precision & optical instr., watches & clocks
DM Manufacture of transport equipment
34 Manufacture of motor vehicles, trailers & semi-trailers
35 Manufacture of other transport equipment
DN Manufacturing n.e.c.
36 Manufacture of furniture; manufacturing n.e.c.
37 Recycling

E Electricity, gas & water supply
- 40 Electricity, gas, steam & hot water supply
- 41 Collection, purification & distribution of water

F Construction
- 45 Construction

G Distributive trades
- 50 Motor trade; retail sale of automotive fuel
- 51 Wholesale & commission trade (except motor vehicles & motorcycles)
- 52 Retail trade & repair (except of motor vehicles & motorcycles)

H Hotels & restaurants
- 55 Hotels & restaurants

I Transport, storage & communication
- 60 Land transport; transport via pipelines
- 61 Water transport
- 62 Air transport
- 63 Supporting & auxiliary transport activities; activities of travel agencies
- 64 Post & telecommunications

J Financial intermediation
- 65 Financial intermediation, except insurance & pension funding
- 66 Insurance & pension funding, except compulsory social security
- 67 Activities auxiliary to financial intermediation

K Real estate, renting & business activities
- 70 Real estate activities
- 71 Renting of machinery & equipment
- 72 Computer & related activities
- 73 Research & development
- 74 Other business activities

L Public administration & defence; compulsory social security

M Education

N Health & social work

O Other community, social & personal service activities

P Private households with employed persons

Q Extra-territorial organizations & bodies

Further information: for a more detailed listing of NACE, please use the Eurostat web-site at :
http://europa.eu.int/comm/eurostat/ramon,
click on classifications and then type NACE in the search field.

Main industrial groupings (MIGs)

Energy
NACE Groups 10.1-10.3, 11.1, 11.2, 12.0, 23.1-23.3, 40.1-40.3 and 41.0

Intermediate goods
NACE Groups 13.1, 13.2, 14.1-14.5, 15.6, 15.7, 17.1-17.3, 17.6, 20.1-20.5, 21.1, 21.2, 24.1-24.3, 24.6, 24.7, 25.1, 25.2, 26.1-26.8, 27.1-27.5, 28.4-28.7, 31.2-31.6, 32.1, 37.1 and 37.2

Capital goods
NACE Groups 28.1-28.3, 29.1-29.6, 30.0, 31.1, 32.2, 33.1-33.3, 34.1-34.3, 35.2 and 35.3

Consumer durables
NACE Groups 29.7, 32.3, 33.4, 33.5, 35.4, 35.5 and 36.1-36.3

Consumer non durables
NACE Groups 15.1-15.5, 15.8, 15.9, 16.0, 17.4, 17.5, 17.7, 18.1-18.3, 19.1-19.3, 22.1-22.3, 24.4, 24.5 and 36.4-36.6