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European business

Facts and figures

Part 4: Consumer goods and media

Data 1991-2001

4

EUROPEAN COMMISSION

THEME 4
Industry, trade and services

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European business, Facts & figures
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Guide to the publication

CONTENTS OF THE PUBLICATION

European business aims to provide a standard set of information for industrial and service activities within the EU. The data provided in European business traces the major developments of output (in terms of value added), employment and external trade. The commentaries concentrate largely on the 3-digit level of the NACE Rev. 1 classification of economic activities [(1)].

Structure of the publication

European business is divided into three main sections:

1. The first provides a general overview of the structure of the EU's business economy, looking at changes in output, employment and external trade.

2. The second provides a sectoral breakdown of industrial activities into 15 separate chapters, each of which contains a number of subchapters usually based on the 3-digit level of the NACE classification. Each chapter concludes with a statistical annex presenting structural business statistics and external trade statistics.

3. The third section provides a sectoral breakdown of service activities into 9 separate chapters (again with subchapters and a statistical annex, usually based on structural business statistics or alternatively a functional database specific to the subject area).

The chapters in European business are structured on the basis of their NACE code, starting with energy and the extractive industries and finishing with business services, the information society and media. Each chapter begins with a preliminary section explaining the sectoral coverage of the data provided.

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). NACE establishes a direct link between the European classification and the internationally recognised ISIC Rev.3 developed under the auspices of the United Nations. These two classifications are directly compatible at the 2-digit level and the lower levels of ISIC Rev.3 can be calculated by aggregating the more detailed levels of NACE.

The compilation of industrial data has followed a different historical development to that of other sectors of the business economy. It is generally easier to compile activity and product statistics about goods/merchandise than it is to collect information, for example, relating to knowledge or information-based services. Hence, the balance of this publication reflects to some degree the information that is currently available from official statistical sources. For this reason too, a different form of presentation is employed for the majority of the manufacturing chapters, using long time-series for enterprises with 20 or more persons employed.

There has been a rapid improvement in data availability for service sectors during the last few years and most EU Member States now compile annual statistics. Clearly it will take a number of years to build up robust time-series and considerable work still needs to be done in the area of product statistics for services.

The weak availability of energy, mining and quarrying, construction and services' data often renders it difficult to provide a standard set of information and where this is the case, Eurostat's functional databases have been used to complement structural business statistics. Furthermore, for these chapters it is important to note that structural business statistics that are presented for those sectors take account of all enterprises (in other words, with one or more persons employed), as opposed to the threshold of 20 or more persons employed for manufacturing chapters.

[(1)] Published by Eurostat, ISBN 92-826-8767-8, available from the usual outlets for Commission publications.

Differences compared to the 2002 edition

This edition of European business focuses increasingly on official sources of information, as the European statistical system continues to make advances. Nowhere is this development more felt in the 2003 edition than for service sectors, as a result of a rapid improvement in the availability of data - allowing EU totals to be calculated for the first time.

As a result, the chapter on distributive trades has been split into the three activities of motor, wholesale and retail trade, each with their own chapter. Furthermore, the media services have been separated from the information society chapter.

Within industrial activities there have also been some changes, such as the separation of water supply and sewerage industries from the energy chapter and the inclusion of a subchapter on recycling and waste treatment - once more reflecting an improvement in data availability in areas that were traditionally less well covered by business statistics.

Furthermore, several chapters have had their activity definitions modified in an attempt to improve data coverage, at both the chapter and subchapter level. Hence, readers should take care if comparing data across different editions of the publication.

Another development in this edition is the inclusion of candidate country data. For the moment this is found in the overview chapter (together with a short commentary), as well as in the statistical annex to each industrial and service chapter. It is hoped that as the accession of the various candidate countries moves forward their statistics will become fully integrated in the publication.

GUIDE TO THE STATISTICS

Two main data sources should be distinguished when using this publication: those originating from official sources (collected normally by the national statistical institutes in each Member State and harmonised by Eurostat) and those provided by professional trade associations (representative organisations of manufacturers and service providers) and other non-official bodies. Non-official sources are easily recognised as they always appear in a shaded box.

Time frame

The data within this publication was extracted from various Eurostat databases during the first two weeks of November 2002. Fresher data may well be available on the CD-ROM or by consulting the Eurostat Datashop network and asking for a tailor-made extraction from the NewCronos database. The accompanying text was written during the fourth quarter of 2002 and the first quarter of 2003.

Where possible the time-series for industrial activities are presented for the EU between 1991 and 2001. Individual country data are generally available up until 1999 or 2000 depending upon the country and activity in question. EU totals have been estimated for 2000 and/or 2001 where sufficient data exists. Services data are usually presented in the form of a snapshot for the latest year available.

Exchange rates

All data are reported in ECU/EUR terms, with national currencies converted using average exchange rates prevailing for the year in question. As of 1 January 1999, eleven of the Member States entered into an economic and monetary union (EMU). These countries formed what has become known as the euro-zone. Technically data available prior to that date should continue to be denominated in ECU terms, whilst data available afterwards should be denominated in euro. However, as the conversion rate was ECU 1 = EUR 1, for practical purposes the terms may be used interchangeably and this publication denotes all such monetary series in euro. On 1 January 2001, Greece also became a member of the euro-zone.

Whilst the conversion to a common currency of data originally expressed in national currencies facilitates comparison, large fluctuations in currency markets are partially responsible for movements identified when looking at the evolution of a series in euro terms (especially at the level of an individual country). For the exchange rates used, please refer to table SA.1 in the statistical annex of the overview chapter.

Geographical coverage

EU totals cover all 15 Member States. Footnotes are added when a partial total is created from an incomplete set of country information.

Figures for Germany are on a post-unification basis, unless otherwise stated.

Non-availability

The colon (:) is used to represent data that is not available, either because it has not been provided to Eurostat or because it is confidential. In figures (charts), missing information is footnoted as not available.

OFFICIAL DATA SOURCES

SBS

The bulk of the information contained within European business is derived from the structural business statistics (SBS) database. This data has been collected within the legal framework provided by the SBS Regulation [2]. Structural business statistics for the candidate countries are collected on a comparable basis, although data are currently provided to Eurostat on the basis of specific agreements rather than with a legal basis.

There are three main collections of SBS data that have been used in this publication. The first covers long time-series [3] for enterprises with 20 or more persons employed (often available from 1985 onwards). These series are only used in this publication for manufacturing activities. Not all Member States have transmitted data relating to the enterprise as the statistical unit and the specified size threshold. The table below presents the main discrepancies with respect to these standards.

[2] Council Regulation (EC, EURATOM) No. 58/97 of 20 December 1996 concerning structural business statistics.

[3] Public access to data for the Member States is available via the Eurostat Datashop network: NewCronos, theme 4, domain SBS, collection Enterpr, table ent_l_ms.

Table 1

Country	Year	Statistical unit and coverage
Belgium	1985-1994	Enterprises with 20 employees or more
	1995-2000	Enterprises with 1 person employed or more
Greece	1985-2000	Local kind-of-activity units with 20 persons employed or more
Spain	1985-1998	Enterprises with 1 employee or more
	1999-2000	Enterprises with 1 person employed or more
France	1985-1995	Enterprises with 20 employees or more; NACE Section D excludes Divisions 16 and 37; Subsection DA excludes Division 16; Subsection DN excludes Division 37
Ireland	1985-2000	Enterprises with 3 persons employed or more for NACE Sections C to E
	1995	NACE Subsection DN also includes Subsection DF
Luxembourg	1985-1994	Kind-of-activity units with 20 persons employed or more
	1995-1998	Kind-of-activity units with 1 person employed or more
	1985-1995	NACE Group 15.9 also includes Group 16.0
Netherlands	1997	Number of enterprises: data for this variable are rounded to multiples of 5; a "0" therefore means 2 or less enterprises
Austria	1985-1994	Establishments with 20 persons employed or more for NACE Sections C and D
Portugal	1985-2000	Enterprises with 1 person employed or more
	1990-1995	NACE Section D and Subsection DA exclude Division 37
Finland	1986-1994	Establishments with 5 persons employed or more
	1995-2000	Enterprises with 1 person employed or more
United Kingdom	1997	NACE Group 10.3 also includes Group 10.2; NACE Group 13.2 also includes Group 13.1

The second collection covers all enterprises [4] and these series have been used for non-manufacturing activities. The data generally start in 1995, although a small number of Member States have provided longer time-series. Not all Member States/candidate countries have transmitted data relating to this population. In particular, some Member States/candidate countries can only provide data for units with employment above a certain size threshold. The table below presents the main deviations from the standard population as laid down in the SBS Regulation (all enterprises, regardless of their level of employment).

[4] Public access to data for the Member States is available via the Eurostat Datashop network: NewCronos, theme 4, domain SBS, collection Enterpr, table enter_ms and by consulting theme 4, domain SBS, collection Enterpr, table enter_cc for the candidate countries.

Table 2a

Country	Statistical unit and coverage used from 1995 onwards			
	Industry (NACE Sections C - E)	**Construction (NACE Section F)**	**Trade (NACE Section G)**	**Services (NACE Sections H - K)**
Denmark	No major deviations	NACE Class 45.21 also includes data for NACE Classes 45.23 and 45.24; NACE Class 45.31 also includes data for NACE Class 45.34	No major deviations	
Germany	No major deviations			1998 onwards: data are not comparable with previous years 1999: for Section I to K the number of enterprises and turnover come from a different source than the other variables and the two groups of variables can not be compared 1999: for production value and value added NACE Class 60.21 also includes Class 60.23, Class 74.13 also includes Class 74.14, Class 74.11 also includes Classes 74.12 and 74.15
Greece	No major deviations		Enterprises with a turnover of 15 million GRD or more	
Spain	1995 to 1998: enterprises with 1 employee or more	No major deviations	1995-1998: enterprises with 1 employee or more	
France	1995: NACE Section D excludes Divisions 16 and 37; Subsection DA excludes Division 16; Subsection DN excludes Division 37	No major deviations		In some transport activities within NACE Group 61.2 the coverage is only enterprises with 6 employees or more
Ireland	Enterprises with 3 persons employed or more 1995: NACE Subsection DN also includes Subsection DF	No major deviations		
Italy	Turnover from the principal activity at the NACE 4-digit level: this data is supplied only for enterprises with 200 employees or more	No major deviations		
Luxembourg	1996 onwards: kind-of-activity units with 1 person employed or more		No major deviations	1995-1998: NACE Class 66.01 also includes Class 66.02
Netherlands	Number of enterprises: data for this variable are rounded to multiples of 5; a "0" therefore means 2 or less enterprises			
	Enterprises with 20 employees or more for NACE Section E; total intramural R&D expenditure and total number of R&D personnel refer to enterprises with 10 employees or more	No major deviations		Survey on holdings (NACE Class 74.15): enterprises with 5 employees or more

Table 2b

Country	Statistical unit and coverage used from 1995 onwards			
	Industry (NACE Sections C - E)	**Construction (NACE Section F)**	**Trade (NACE Section G)**	**Services (NACE Sections H - K)**
Portugal	1995: NACE Subsection DN and Section D exclude Division 37	No major deviations		
United Kingdom	1996: NACE Class 14.12 also includes Class 14.13; Class 15.94 also includes Class 15.95; Class 17.15 also includes Class 17.14; Class 17.16 also includes Class 17.17; Class 21.11 also includes 21.12 1997: NACE Group 10.3 also includes Group 10.2; Group 13.2 also includes Group 13.1; Class 14.12 also includes Class 14.13; Class 17.15 also includes Class 17.14: Class 17.16 also includes 17.17; Class 21.12 also includes Class 21.11 1998: NACE Group 10.3 also includes Group 10.2; Class 14.12 also includes Class 14.13	No major deviations	1998: NACE Class 51.35 also includes Classes 51.36 and 51.37	No major deviations
Czech Republic	Sampling errors at 3-digit level are significant (due to low coverage). The 3-digit level is only an estimation based on the sample, but the sample differs between years. The sample is only representative for data at the 2-digit level of NACE Rev. 1			
Estonia	In 1995, Section D data at the 2-digit level cover enterprises with 20 and more employees, except investment data which cover enterprises with 50 and more employees. Data at the Section level cover all enterprises	No major deviations		1995: NACE Division 71 also includes Division 72
Hungary	Enterprises with 5 or more persons employed			
Latvia	No major deviations		It is recommended not to use 4-digit level data as the sampling plan for the survey was designed at the 3-digit level only	No major deviations
Slovak Republic	Covers enterprises with 20 or more persons employed as well as enterprises with less than 20 persons employed which were considered statistically important			

The third collection covers information broken down by employment size class. Again, not all Member States/candidate countries have transmitted data to Eurostat that relates to this statistical unit or population. In particular, some Member States/candidate countries can only provide data for units with employment above a certain size threshold. The table below summarises the main deviations from the standard statistical unit and coverage.

Data in this publication are generally available at the 3-digit NACE level, whilst more detailed information is often available within the SBS Enter tables at the 4-digit NACE level.

Table 3

Country	Statistical units and coverage			
	Industry (NACE Sections C - E)	Construction (NACE Section F)	Trade (NACE Section G)	Services (NACE Sections H - K and M - 0)
Germany	1995 onwards: enterprises with 20 persons employed or more		No major deviations	
Spain	1995 onwards: enterprises with 1 employee or more	No major deviations		
France	1995: enterprises with 20 employees or more		No major deviations	
Ireland	1995 onwards: enterprises with 3 persons employed or more	1995 onwards: enterprises with 20 persons employed or more	No major deviations	1997: NACE Group 60.1 also includes data for Classes 60.21, 60.22 and 60.23; NACE Group 74.6 also includes data for NACE Group 74.7
Netherlands	1999 onwards: employment size classes are defined in terms of employees; size class 1-9 has been approximated with size class 0-9 employees; size class 500-999 includes size class 1000+		1999 onwards: employment size classes are defined in terms of employees; size class 1 has been approximated with size class 0 employee; size class 2-4 has been approximated with size class 1-4 employees; size class 500-999 includes size class 1000+	1999 onwards: employment size classes are defined in terms of employees; size class 1-4 has been approximated with size class 0-4 employees; size class 1-9 has been approximated with size class 0-9 employees; size class 500-999 includes size class 1000+
Portugal	1996 onwards: employment size classes are defined in terms of employees; size class 1-9 has been approximated with size class 0-9 employees		1996 onwards: employment size classes are defined in terms of employees	
Sweden	1996: employment size classes are defined in terms of employees; size class 1-9 has been approximated with size class 0-9 employees	No major deviations		
United Kingdom	1995: enterprises with 20 persons employed or more 1997: NACE Group 10.3 also includes data for NACE Group 10.2; NACE Group 13.2 also includes data for NACE Group 13.1	1995: enterprises with 20 persons employed or more	No major deviations	
Estonia	1995: Section D data at the 2-digit level cover enterprises with 20 and more employees, except investment data which cover enterprises with 50 and more employees. Data at the Section level cover all enterprises 1995 to 1999: employment size classes are defined in terms of employees 1995 to 1998: data for size class 500-999 includes data for size class 1000+ as well 1996 to 1999: the size class total is not equal to the sum of the size classes published as the total also includes data for the size class 0 employees	1995 to 1999: employment size classes are defined in terms of employees 1995 to 1998: data for size class 500-999 includes data for size class 1000+ as well 1996 to 1999: data for size class 1-9 employees also includes data for size class 0 employees	1995 to 1999: employment size classes are defined in terms of employees 1995 to 1998: data for size class 500-999 includes data for size class 1000+ as well 1996 to 1999: size classes 0 and 1-9 employees are provided instead of size classes 1, 2-4 and 5-9 employees; data for size class 0 are published under the size class 1 and data for size class 1-9 are published under the size class 5-9	1995 to 1999: employment size classes are defined in terms of employees 1995 to 1998: data for size class 500-999 includes data for size class 1000+ as well 1996 to 1999: size classes 0 and 1-9 employees are provided instead of size classes 1-4 and 5-9 employees; data for size class 0 are published under the size class 1-4 and data for size class 1-9 are published under the size class 5-9 1995: NACE Division 71 also includes Division 72
Hungary	1998: enterprises with 5 persons employed or more; data for size class 1-9 persons employed are not available; data for size class 5-9 persons employed have been provided Data for the total of the size classes refer to enterprises with 5 persons employed or more		1998: enterprises with 5 persons employed or more; data for the total of the size classes refer to enterprises with 5 persons employed and more	
Slovenia	1995 to 1998: employment size classes are defined in terms of employees			
Slovak Republic	1995 to 1998: size classes are defined in terms of employees; data for the total of the size classes refer to enterprises with 20 and more employees			

Standard definitions of variables have been laid down. As such the figures are largely comparable across activities and countries. There are nevertheless some known divergences from the standard definitions. Until the reference year 1994 inclusive, Member States transmitted their data to Eurostat according to either the legal basis preceding the SBS Regulation for industry or on a voluntary basis for services. As far as possible Eurostat and the Member States have worked to convert these data in line with the variable definitions as implemented following the adoption of the SBS Regulation. However, the results of the conversion may not be of the same quality as the data collected from the 1995 reference year onwards. For France, this conversion is applied until the reference year 1995 inclusive. For Greece, this conversion is applied until the reference year 1996 inclusive. The table below presents the main known discrepancies with respect to the standard variable definitions as regards data from Member States and candidate countries.

Table 4

SBS enter long time series: enterprises employing 20 or more persons			
Country	**Year**	**Variable**	**Discrepancy**
Belgium	1995-1998	Production value	The purchase of goods and services for resale are not removed, resulting in the values being overestimated
Denmark	1990-1998	Value added at factor cost Gross operating surplus	Value added at basic prices Value added at basic prices - personnel costs
Spain	1985-1999	Gross investment in tangible goods	Gross investment in land and gross investment in machinery and equipment
Ireland	1991-1994 (and possibly later years) 1991-1994	Value added at factor cost Gross operating surplus	Value added is calculated at market prices excluding VAT; for sectors where other indirect taxes play an important role, for example where there are taxes on petroleum products, Irish value added is disproportionately large; this non-standard definition of value added influences the Irish manufacturing total (through aggregation of NACE), EU totals (through aggregation across countries) and ratios, notably labour productivity measures Value added at market price excluding VAT - personnel costs
Italy	1992-1995	Number of persons employed	Number of employees
Finland	1986-1995	Value added at factor cost Gross operating surplus	Value added at market price Value added at market price - personnel costs
SBS enter: enterprises employing 1 or more persons			
Country	**Year**	**Variable**	**Discrepancy**
Belgium	1995-1998	Production value	The purchase of goods and services for resale are not removed, resulting in the values being overestimated
Germany	1999	Sections I to K: value added at factor cost	Does not include subsidies
Spain	1995-1998	Gross investment in tangible goods	Gross investment in land and gross investment in machinery and equipment
Ireland	1998-2000	Sections H, I and K: personnel costs	Wages and salaries
Finland	1995	Value added at factor cost Gross operating surplus	Value added at market prices Value added at market prices - personnel costs
Sweden	1995-1996	Number of persons employed: the number of persons employed and the number of employees are very close as self-employed persons are not included and for enterprises with less than 10 employees the number of employees is collected in full time equivalent units	
United Kingdom	1996-1999 1997	Gross investment in existing buildings and structures Turnover from trading and intermediary activities	Includes gross investment in land Turnover from trading activities of purchase and resale
Norway	1996-1997	For Sections C and D the definitions of variables 15 13 0 and 15 14 0 (concerning investment) are non-standard, however their sum is conform with the standard definitions	
Bulgaria	1996-1998 1996-1999 1999	Changes in stocks Investment in existing buildings and structure Turnover and production value	Concerns only changes in stocks of goods, and therefore excludes changes in stocks of services Includes also investment in construction and alteration of buildings Does not includes duties and taxes on services invoiced by the unit
Cyprus	1995-1998	Change in stocks of finished products and work in progress manufactured by the unit	Includes change in stocks of all goods and services
Czech Republic	1995-1998 1995-1998	Number of enterprises Personnel costs and social security costs	Average number of enterprises calculated on the basis of the length of the activity of the unit during the year; this means that an enterprise active only a part of the year is not counted as 1 but as a percentage (3 months=0.25 enterprises) Non-standard definitions
Hungary	1998	Number of employees	Estimated as a fixed percentage (99.5%) of the number of persons employed
Slovenia	1995-1998	Value added and wages and salaries	Non-standard definitions
SBS enter size class data			
Country	**Year**	**Variable**	**Discrepancy**
Denmark	1995-1996	Sections C to G: number of employees	Employees in full-time equivalents
Sweden	1996	Sections C to E: the number of persons employed and the number of employees are very close as self-employed persons are not included and for enterprises with less than 10 employees the number of employees is collected in full time equivalent units Sections H to K: number of persons employed shows in fact the number of employees	
Czech Republic	1995-1998	Number of enterprises Sections C to F: wages and salaries	Average number of enterprises calculated on the basis of the length of the activity of the unit during the year; this means that an enterprise active only a part of the year is not counted as 1 but as a percentage (3 months=0.25 enterprises) Non-standard definition
Hungary	1998	Sections C to F: number of employees	Estimated as a fixed percentage (99.5%) of the number of persons employed
Slovenia	1995-1998	Value added	Non-standard definition
Slovak Republic	1995-1998	Sections G to K: number of persons employed	Number of employees

Estimates

EU-15 data for 2000 and 2001 are estimated. Estimates are made using individual country information and short-term indicators such as indices of production, output prices and employment. The individual country estimates are not published and as a result the information by Member State is generally only available up until 1999 or 2000 depending upon the country in question. The majority of estimates have been made for manufacturing series that concern 20 or more persons employed. It is important to note that these time-series for manufacturing activities will under-report absolute values and that this can be particularly important in activities where smaller enterprises (with less than 20 persons employed) play an important role - for example, the manufacture of textiles or clothing.

Prodcom

The legal basis of the data is Council Regulation (EEC) No 3924/91 on the establishment of a Community survey of industrial production (Prodcom Regulation).

This Regulation requires that production be recorded according to the product headings of the Prodcom list. The list is based on the Community's external trade classification, the Combined Nomenclature (CN). The list does not, however, cover all products. The list is divided into Divisions corresponding to the (2-digit) Divisions of NACE Rev. 1. Each Prodcom code is identified by an eight-digit code. The first six digits are the CPA code (Community Classification of Products by Activity). The last two digits normally provide a reference to the Combined Nomenclature (CN), although there are exceptions to this rule.

The physical volume and the value of production are normally recorded for the products in the Prodcom list. Different production concepts are used in the survey, namely:
a) production sold during the survey period;
b) actual production (total production) during the survey period. This includes any production which is incorporated into the manufacture of other products. Such production is normally taken to mean own products which are either processed into another product or fitted into another product in the reporting unit itself, in another plant belonging to it, or under contract in another unit;
c) production during the survey period which is intended for sale.

The value of production sold/production intended for sale should be calculated on the basis of the ex-works selling price obtained/-obtainable during the reporting period. It also includes packaging costs, even if they are charged separately. However, the following are not included: any turnover tax and consumer tax charged; separately charged freight costs; any discounts granted to customers.

The particular physical units of the CN classification have normally been adopted for recording the volume of production. In exceptional cases a different and/or supplementary unit is recorded. All units belonging to the individual Prodcom headings are specifically indicated in the data set.

The Prodcom statistics normally cover all enterprises/local units which manufacture products contained in the Prodcom list. Among the rules on representativeness the Regulation stipulates that all enterprises in Sections C, D and E of NACE Rev. 1 employing at least 20 persons must be included. In addition, at least 90% of production in each (4-digit) Class of NACE Rev. 1 must also be recorded.

There is currently no Prodcom data available on NewCronos for candidate countries. Eurostat is migrating the Prodcom data set from NewCronos to Comext.

External trade

EU external trade statistics are available in the Comext database, and can be compiled according to a product classification (CPA). The analysis focuses on external trade data for the period between 1991 and 2001. No estimates are made for external trade statistics, although it is possible that subsequent revisions may occur. The data are processed by summing together product statistics (using a conversion table from CN to CPA). The data for EU-15 are reported in terms of trade flows with the rest of the world, in other words extra-EU trade. However, for the individual Member States total trade flows are used (in other words intra-EU and extra-EU trade). All trade figures are given in current EUR terms.

European Business Trends

Tracking the business cycle is indispensable for many economic actors. The European Business Trends (EBT) database provides politicians, government agencies, bankers, business owners, consumers and trade unionists with information that is crucial when making decisions on whether industries grow, stagnate or decline. The legal base of the European system of quantitative Short Term Statistics is the Council Regulation No. 1165/98, which was adopted on 19 May 1998 and is in the process of being implemented.

One variable from the EBT database is directly presented in this publication, namely the domestic output price index. Output price indices report the short-term changes in the prices of commodities produced and sold in a given Member State. Converted to an annual series, this index has also been used to deflate SBS turnover, production value and value added data, using appropriate activity indices to create series in constant price terms. Production and employment indices from the EBT database also provide valuable information that is used to nowcast SBS data for 2000 and 2001.

All price-determining characteristics of the products should be taken into account when compiling these indices, including the quantity of units sold, transport provided, rebates, service conditions, guarantee conditions and destination. The specification must be such that in subsequent reference periods, the observation unit is able to identify the product and to provide the appropriate price per unit. The appropriate price is the ex-factory price that includes all duties and taxes on the goods and services invoiced by the unit but excludes VAT invoiced by the unit vis-à-vis its customer and similar deductible taxes directly linked to turnover.

There is currently no EBT data available for candidate countries on NewCronos. However, the development of these short-term indices is in an advanced state for many of the countries.

Labour Force Survey

The methodological basis and the contents of this survey are described in the publication '*Labour Force Survey - Methods and Definitions*', 2001 edition. The main statistical objective of the Labour Force Survey is to divide the population of working age (generally 15 years and above into three mutually exclusive and exhaustive groups - persons in employment, unemployed persons and inactive persons - and to provide descriptive and explanatory data on each of these categories. Respondents are assigned to one of these groups on the basis of the most objective information possible, obtained through a survey questionnaire, which relates principally to their actual activity within a defined reference week.

Table 5

	A	B
EU-15 (1)	57 000	-
Belgium	2 500	4 500
Denmark	2 500	4 500
Germany	8 000	-
Greece	2 500	4 500
Spain	2 500	5 000
France	3 500	8 500
Ireland	2 500	4 500
Italy	3 500	7 500
Luxembourg	500	1 500
Netherlands	4 500	10 000
Austria	2 000	-
Portugal	7 500	15 000
Finland	2 500	4 500
Sweden (2)	2 500	-
United Kingdom	10 000	-
Bulgaria	5 500	10 000
Cyprus	500	1 500
Czech Republic	1 000	-
Estonia (3)	5 000	10 000
Hungary	2 500	4 500
Lithuania	5 000	-
Latvia	4 500	7 500
Malta	:	:
Poland	5 000	20 000
Romania	2 000	-
Slovak Republic	2 500	-
Slovenia	1 000	3 500
Turkey	:	:

A: threshold for publishing data.
B: threshold for reliable data.

(1) The limits applicable to data prior to 2001 are:
A: 9 000 B: - /
(2) The limits applicable to data prior to 2001 are:
A: 83 500 B: - /
(3) The limits applicable to data prior to 2000 are:
A: 4 000 B: 8 000 (1997); A: 1 500 B: 3 000 (1998-99)

It is important to note that the information is not collected from enterprises (as with the SBS database) but through a survey addressed to individual households. The National Statistical Institutes are responsible for selecting the sample, preparing the questionnaires, conducting the interviews and forwarding the results to Eurostat in accordance with a common coding scheme. Eurostat devises the programme for analysing the results and is responsible for processing and disseminating the information.

The Community Labour Force Survey [(5)], is based upon a sample of the population. The results are therefore subject to the usual types of errors associated with sampling techniques. Eurostat implement basic guidelines intended to avoid the publication of figures which are statistically unreliable. Figures below these thresholds are not published. A second threshold is applied to data that may only be published with a warning concerning its reliability. These data are footnoted in the tables that use LFS data.

There was a methodological change between 1998 and 1999 in the collection of Belgian Labour Force Survey data. As such there may well be a rupture in the series in 1999.

There is currently no LFS data available for candidate countries on NewCronos. However, the development of these indicators is in an advanced state for many of the countries and data for candidate countries have already been published in the Statistics in Focus series (theme 3, 20/2002 - ISSN 1024-4352). Many data are already stored in the LFS production database.

National Accounts

The European System of National and Regional Accounts (1995 ESA, or simply: ESA) is an internationally compatible accounting framework for a systematic and detailed description of a total economy (that is a region, country or group of countries), its components and its relations with other economies.

[(5)] Council Regulation (EC) No. 577/98 of 9 March 1998 on the organisation of a labour force sample survey in the Community.

The 1995 ESA, replaces the European System of Integrated Economic Accounts published in 1970 (1970 ESA; a second, slightly modified, edition appeared in 1978).

The 1995 ESA is fully consistent with the revised world-wide guidelines on national accounting, the System of National Accounts (1993 SNA, or simply: SNA; these guidelines have been produced under the joint responsibility of the United Nations, the IMF, the Commission of the European Communities, the OECD and the World Bank). However, the ESA is focused more on the circumstances and data needs of the European Union. Like the SNA, the ESA is harmonised with the concepts and classifications used in many other, social and economic statistics. Cases in point are statistics on employment, statistics on manufacturing and statistics on external trade. The ESA can therefore serve as the central framework of reference for the social and economic statistics of the European Union and its Member States.

The ESA framework consists of two main sets of tables:
(a) the sector accounts;
(b) the input-output framework and the accounts by industry.
The sector accounts provide, by institutional sector, a systematic description of the different stages of the economic process: production, generation of income, distribution of income, redistribution of income, use of income and financial and non-financial accumulation. The sector accounts also include balance sheets to describe the stocks of assets, liabilities and net worth at the beginning and the end of the accounting period.

The input-output framework and the accounts by industry describe in more detail the production process (cost structure, income generated and employment) and the flows of goods and services (output, imports, exports, final consumption, intermediate consumption and capital formation by product group).

National Accounts data for the candidate countries are available within the NewCronos database. These data have been fully integrated into the database and are found alongside the data for the Member States. Candidate country information is provided for the main National Accounts aggregates, as well as more detailed sectoral breakdowns.

GLOSSARY OF TERMS

There follows a brief list of the main terms employed within this publication:

Annual average growth rate: constant rate of growth that would be required in each year to achieve the same overall growth rate as that observed between two periods.

Apparent labour productivity: value added at factor cost/number of persons employed (expressed in thousand EUR per person employed); care should be taken in the interpretation of this ratio between different activities and countries because of the use of a simple head count for the labour input measure, as a proxy for the volume of work done; values may exceptionally be negative.

Average personnel costs: personnel costs/number of employees (expressed in thousand EUR per employee).

Constant prices: data presented with the effect of price fluctuations over time removed from them (deflated series); note that, as these are expressed in EUR, time series are influenced by fluctuations in the exchange rate.

Cover ratio: exports/imports (expressed as a percentage).

Current prices: data presented including the effects of price changes.

Domestic output price index: an index of the prices of commodities produced and sold within any given country in national currency terms; output price indices are often used to deflate production and value added data (in value) in order to obtain production and value added in constant price terms; this index shows the change in ex-works selling prices of all products sold on domestic markets, excluding VAT and similar deductible taxes.

Employees: are defined as those persons who work for an employer and who have a contract of employment and receive compensation in the form of wages, salaries, fees, gratuities, piecework pay or remuneration in kind; employees include part-time workers, seasonal workers, persons on strike or on short-term leave, but exclude those persons on long-term leave and voluntary workers.

Enterprise: an enterprise is the smallest combination of legal units that is an organisational unit producing goods or services, which benefits from a certain degree of autonomy in decision-making, especially for the allocation of its current resources; an enterprise carries out one or more activities at one or more locations; an enterprise may be a sole legal unit.

Extra-EU exports: goods which leave the statistical territory of a Member State bound for a non-Community country.

Extra-EU imports: goods which enter the statistical territory of a Member State from a non-Community country.

Gross operating surplus: is the surplus generated by operating activities after the labour factor input has been recompensed; it can be calculated from value added at factor cost less personnel costs.

Gross operating rate: gross operating surplus/turnover (profitability measure, expressed as a percentage).

Local unit: the local unit is an enterprise or part thereof (e.g. a workshop, factory, warehouse, office, mine or depot) situated in a geographically identified place. At or from this place economic activity is carried out for which - save for certain exceptions - one or more persons work (even if only part-time) for one and the same enterprise.

Number of persons employed (employment): is defined as the total number of persons who work in the observation unit (inclusive of working proprietors, partners working regularly in the unit and unpaid family workers), as well as persons who work outside the unit who belong to it and are paid by it (e.g. sales representatives, delivery personnel, repair and maintenance teams); it includes persons absent for a short period (e.g. sick leave, paid leave or special leave), and also those on strike, but not those absent for an indefinite period; it also includes part-time workers who are regarded as such under the laws of the country concerned and who are on the pay-roll, as well as seasonal workers, apprentices and home workers on the pay-roll.

Personnel costs: the total remuneration, in cash or in kind, payable by an employer to an employee (regular and temporary employees as well as home workers) in return for work done by the latter during the reference period; personnel costs also include taxes and employees' social security contributions retained by the unit as well as the employer's compulsory and voluntary social contributions.

Production value: measures in value the amount actually produced by the unit, based on sales adjusted for changes in stocks and the resale of goods and services; the production value is defined as turnover, plus or minus the changes in stocks of finished products, work in progress and goods and services purchased for resale, minus the purchases of goods and services for resale, plus capitalised production, plus other operating income (excluding subsidies).

Simple wage adjusted labour productivity: value added at factor cost/personnel costs * 100 (expressed as a percentage).

Trade balance: exports - imports.

Turnover: comprises the totals invoiced by the observation unit during the reference period, corresponding to market sales of goods or services supplied to third parties; turnover includes all duties and taxes on the goods or services invoiced by the unit with the exception of the VAT invoiced by the unit vis-à-vis its customer and other similar deductible taxes directly linked to turnover; it also includes all other charges (transport, packaging, etc.) passed on to the customer, even if these charges are listed separately in the invoice; reductions in prices, rebates and discounts as well as the value of returned packing must be deducted.

Value added at factor cost: can be calculated from turnover, plus capitalised production, plus other operating income, plus or minus the changes in stocks, minus the purchases of goods and services, minus other taxes on products which are linked to turnover but not deductible, minus the duties and taxes linked to production; alternatively it can be calculated from gross operating surplus by adding personnel costs; income and expenditure classified as financial or extra-ordinary in company accounts is excluded from value added.

Value added specialisation: relative index that compares the value added share of a given manufacturing activity in total manufacturing value added for a given country with the same ratio for the EU (expressed as a percentage - if a country displays a ratio above 100 then it is relatively more specialised than the average for the EU).

Wage adjusted labour productivity: (value added at factor cost/personnel costs) * (number of employees/number of persons employed) * 100 (expressed as a percentage).

ABBREVIATIONS

Countries

EU	European Union
EU-15	Fifteen Member States of the European Union
B	Belgium
BENELUX	Belgium, the Netherlands and Luxembourg
DK	Denmark
D	Germany
EL	Greece
E	Spain
F	France
IRL	Ireland
I	Italy
L	Luxembourg
NL	the Netherlands
A	Austria
P	Portugal
FIN	Finland
S	Sweden
UK	the United Kingdom
BG	Bulgaria
CY	Cyprus
CZ	Czech Republic
EE	Estonia
HU	Hungary
LV	Latvia
LT	Lithuania
MT	Malta
PL	Poland
RO	Romania
SK	Slovakia
SI	Slovenia
TR	Turkey
CH	Switzerland
EEA	European Economic Area
IS	Iceland
JP	Japan
NO	Norway
US	United States (of America)

Professional trade associations

ACEA	Association des Constructeurs Européens d'Automobiles
ACI	Airports Council International (European Region)
AEA	Association of European Airlines
AECMA	Association Européenne des Constructeurs de Matériel Aérospatial
AESGP	Association of the European Self–Medication Industry
APEAL	The Association of European Producers of Steel for Packaging
APME	Association of Plastics Manufacturers in Europe
AWES	Association of European Shipbuilders and Shiprepairers
CAEF	Comité des Associations Européennes de Fonderie
CAOBISCO	Association of the Chocolate, Biscuit & Confectionery Industries of the EU
CBMC	Brewers of Europe
CECCM	Confederation of European Community Cigarette Manufacturers
CEPI	Confederation of European Paper Industries
Cerame-Unie	Liaison Office of the European Ceramic Industry
CIAA	Confédération des Industries Agro-alimentaires de la CE
CPDP	Comité Professionnel du Pétrole
CPIV	Comité Permanent de l'Industrie du Verre de la CEE
ECMT	European Conference of Ministers of Transport
EDA/ZMP	Europäischer Milchindustrieverband/Zentrale Markt- und Preisberichtstelle der Land- und Ernährungswirtschaft
EFCA	European Federation of Engineering Consultancy Associations
EMF	European Mortgage Federation (and national associations)
EOS	European Organisation of the Sawmill Industry
ERMCO	European Ready Mixed Concrete Association
ESBG	European Savings Bank Group
ESOMAR	European Society for Opinion and Marketing Research
ESTA	European Security Transport Association
EURATEX	European Apparel and Textile Organisation
FBE	Fédération Bancaire Européenne
FEA	European Aerosol Federation
FEACO	Fédération Européenne des Associations de Conseil en Organisation
Fediol	Fediol - EC Seed Crushers' and Oil Processors' Federation
FEDMA	Federation of European Direct Marketing
FEFSI	Fédération Européenne des Fonds et Sociétés d'Investissement
FEP	European Federation of the Parquet Industry
FEVE	Fédération Européenne du Verre d'Emballage
FIBV	Fédération Internationale des Bourses de Valeurs
FIEC	Fédération de l'Industrie Européenne de la Construction
GEBC	Groupement Européen des Banques Coopératives
IAAPA	International Association of Amusement Parks and Attractions
IACA	International Air Carrier Association
ICAO	International Civil Aviation Organization, European and North Atlantic Office
IMACE	International Margarine Association of the Countries of Europe
ISL	Institute of Shipping Economics and Logistics
Leaseurope	European Federation of Leasing Company Associations
STD	Swedish Federation of Consulting Engineers and Architects (Svensk Teknik och Design)
UIC	Union Internationale des Chemins de Fer
UITP	Union Internationale des Transports Publics
UNAFPA	Union des Associations de Fabricants de Pâtes Alimentaires de la Communauté Européene
UNESDA	Union of EU Soft Drinks Associations

Other organisations and publications

EITO	European Information Technology Observatory
IISI	International Iron and Steel Institute
LME	London Metal Exchange Limited
UN	United Nations
USGS	US Geological Survey
WTO	World Tourism Organisation
WTO	World Trade Organization
ITU	International Telecommunication Union
UNEX	Unipost External Monitoring System, International Post Corporation
Media Salles	Media Salles
EAO	European Audiovisual Observatory
CTcon	CTcon
Software Magazine	Software Magazine, Wiesner Publishing, Framingham, Mass., USA
The Bankers' Almanac	The Bankers' Almanac
International Insurance Facts	Insurance Information Institute
Zenithmedia	Zenithmedia Western European Market and Mediafact
meatnews.com	Meatnews.com & Meat Processing Global
PricewaterhouseCoopers	PricewaterhouseCoopers 2002 Global Forest and Paper Survey
McGraw-Hill	Engineering News-Record, McGraw-Hill
Hotels Magazine	Hotels Magazine
Containerisation Yearbook	Containerisation Yearbook

Statistical abbreviations

CIS	Community Innovation Survey
COICOP	Classification Of Individual Consumption according to Purpose
CPA	Classification of Products by Activity
ECHP	European Community Household Panel
FATS	Foreign Affiliates Trade Statistics
FDI	Foreign Direct Investment
HBS	Household Budget Survey
LFS	Labour Force Survey
NACE	Nomenclature statistique des Activités économiques dans la Communauté Européenne (Statistical Classification of economic activities in the European Community)
n.e.c.	not elsewhere classified
Prodcom	PRODucts of the European COMmunity
SBS	Structural Business Statistics
SME	Small and medium sized enterprise
ZPA1	Eurostat's agricultural products database

Other abbreviations

ABS	Antilock Braking System
AM	After-Market
ATC	Agreement on Textiles and Clothing
ATM	Automatic Teller Machine
BSE	Bovine Spongiform Encephalopathy (Mad-cow disease)
CD-ROM	Compact disc read-only memory
CFP	Common Fisheries Policy
DIY	Do-It-Yourself
DTP	Desk-top Publishing
DVD	Digital Versatile Disc
ECSC	European Coal and Steel Community
EEE	Electrical and Electronic Equipment
EER	Energy Efficiency Requirements
GDP	Gross Domestic Product
ICT	Information and Communications Technologies
ISDN	Integrated Services Digital Network
IT	Information Technology
JIT	Just In Time
MDF	Medium Density Fibreboard
NASDAQ	National Association of Securities Dealers' Quotation System
n.p.r.s.	not put up in form for retail sale
NYSE	New York Stock Exchange
OE	Original Equipment
OJ	Official Journal (of the European Communities)
OPT	Outward Processing Trade
OSB	Oriented StrandBoard
PC	Personal Computer
p.r.s.	put up in form for retail sale
PVC	Polyvinyl Chloride
R & D	Research and Development
TENs	Trans-European Networks
TGV	Train à Grand Vitesse (High-speed train)
TV	Television
VAT	Value Added Tax
WEEE	Waste Electrical and Electronic Equipment

Weights and measures

AAGR	Average Annual Growth Rate
CGT	Compensated Gross Tonnes
DWT	Dead-Weight-Tonnes
GW	Gigawatt (10^6 kW)
Ha	Hectare (ten thousand square metres)
Hl	Hectolitre (hundred litres)
Kg	Kilogram(s)
Km	Kilometre
Kms	Kilometres
M	Metre
MW	Megawatt (10^3 kW)
PPS	Purchasing Power Standard
RPK	Revenue Passenger Kilometres
TEU	Twenty Foot Equivalent Unit
TOE	Tonne of Oil Equivalent (41 868 kilojoules net calorific value per kilogram)
TU	Tonnes of contained Uranium
TW	Terawatt (10^9 kW)

Currencies

EUR	Euro
BEF	Belgian Franc
DKK	Danish Krone
DEM	German Mark
GRD	Greek Drachma
ESP	Spanish Peseta
FRF	French Franc
IEP	Irish Pound
ITL	Italian Lira
LUF	Luxembourg Franc
NLG	Dutch Guilder
ATS	Austrian Schilling
PTE	Portuguese Escudo
FIM	Finnish Markka
SEK	Swedish Krone
GBP	Pound sterling
BGN	New bulgarian Lev
CYP	Cyprus Pound
CZK	Czech Koruna
EEK	Estonian Kroon
HUF	Hungarian Forint
LTL	Lithuanian Litas
LVL	Latvian Lats
MTL	Malta Lira
PLN	New Polish Zloty
ROL	Romanian Leu
SIT	Slovenian Tolar
SKK	Slovak Koruna
TRL	Turkish Lira
JPY	Japanese Yen
USD	US Dollar

Symbols

: not available

- not applicable

Overview - the EU's business economy

INTRODUCTION

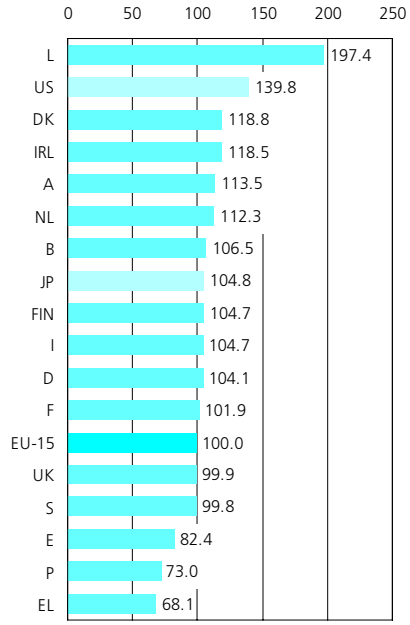
One of the most common measures of living standards is gross domestic product (GDP) per head. In order to make comparisons more meaningful it is usual to adjust this ratio to account for different price levels between countries and to therefore express the series in terms of purchasing power standards (PPS). GDP per capita in the EU averaged PPS 23 200 in 2001 (or EUR EUR 23 210 per head). Among the Member States, GDP per capita in PPS terms ranged from just over two thirds (68 %) of the EU average in Greece to almost double (197 %) the average in Luxembourg. The figure for Luxembourg was well ahead of Denmark and Ireland (the second and third placed countries), where GDP per inhabitant was some 18 % above average – see Figure 1.

According to national accounts, the EU economy generated EUR 8 200 billion of value added in 2001. This figure can be split between six major branches – see Table 1 – with the relative importance of agriculture, hunting, forestry and fishing (2.1 % of total value added) and construction (5.4 %) being fairly limited compared to the other branches [(1)].

The respective shares of the three service branches in total value added all rose between 2000 and 2001, while the share of industry (NACE Sections C to E) fell by 0.7 percentage points. This continued an established trend of the EU economy becoming increasingly dominated by the service sector.

Between 1991 and 2001 financial intermediation and business services (NACE Sections J and K) gained 3.0 percentage points of total value added, while distributive trades, hotels and restaurants, transport, storage and communications (NACE Sections G, H and I) gained 0.8 points. On the other hand, the share of industry fell by 2.5 points, construction by 0.9 points and that of agriculture, hunting, forestry and fishing by 0.6 points.

Figure 1
GDP per inhabitant, 2001 (EU-15=100) (1)



(1) At current market prices and PPS; L, UK and JP, forecasts.
Source: Eurostat, National Accounts - ESA95 - aggregates (theme2/aggs).

Table 1
Breakdown of GDP in the EU, 2001 (%)

NACE label (NACE code)	
Agriculture, hunting, forestry & fishing (A & B)	2.1
Mining & quarrying; manufacturing; electricity, gas & water supply (C to E)	22.1
Construction (F)	5.4
Distributive trades; hotels & restaurants; transport, storage & communication (G to I)	21.6
Financial intermediation; real estate, renting & business activities (J & K)	27.2
Public administration, community, social & personal services (L to Q)	21.7

Source: Eurostat, National Accounts - Breakdowns by branch of activity (theme2/brkdowns).

[(1)] Please note that agriculture, fishing and forestry (NACE Sections A and B), as well as public administration, community, social and personal services (NACE Sections L to Q) are generally not covered by this publication, as large parts of them are not usually covered by European business statistics, which are generally limited to NACE Sections C to K. Selected parts of other community, social and personal services (NACE Section O) are found in Chapters 13, 14 and 24.

The progressive shift towards a service-orientated economy is represented in Figure 2, with the two fastest growing sectors (in constant price terms) both part of the market services' economy. The value added generated by the financial intermediation and business services sector grew at an average rate of 3.1 % per annum between 1991 and 2001, and was followed by distributive trades, hotels and restaurants, transport, storage and communications (2.7 % growth per annum).

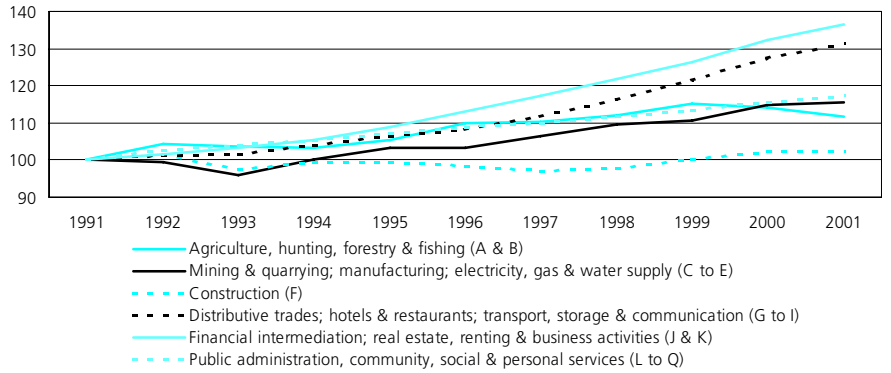
Although growth in the other branches of the EU economy was not as fast, it did, on average, remain positive during the 10–year period from 1991 to 2001. Industry and construction experienced the largest downturns in activity during 1993, with industry recovering at a much more rapid pace during the second half of the 1990s, resulting in average growth of 1.5 % per annum for the whole of the period from 1991 to 2001.

The increasing importance of the service sector may, in part, be attributed to manufacturers and other service enterprises switching from in-house provision to external suppliers of services such as accounting, IT services, advertising, training, management consultancy, security, catering or cleaning. This trend is often referred to as outsourcing and may, at least in part, explain the rapid growth of the business service sectors during the 1990s.

At the same time, manufacturing enterprises have tended to relocate their production, with relatively high wages, free trade and developments in communications driving output away from the EU towards low labour cost regions, particularly for more standardised products. Manufacturers within the EU increasingly concentrate on higher added value tasks, for example in the areas of research, design and development.

Figure 2

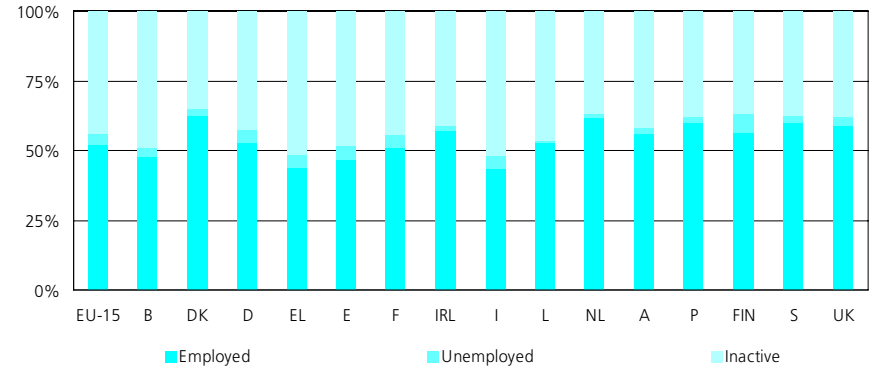
Breakdown of development of GDP in constant prices in the EU (1991=100)



Source: Eurostat, National Accounts - Breakdowns by branch of activity (theme2/brkdowns).

Figure 3

Breakdown of the labour force by employment status, 2001 (share of persons aged 15 or more) (1)



(1) NACE Sections A to Q.
Source: Eurostat, Labour Force Survey.

According to the labour force survey (LFS) [(2)], there were 310 million persons aged 15 years and above living in the EU in 2001; of these, some 174 million were either employed or seeking work, while the remaining 136 million were inactive (retired, in education, chose not to work, etc.) – see Figure 3. The activity rate measures the share of those employed in the total population aged between 15 and 64. In 2001, this ratio ranged from 60.3 % in Italy up to 79.2 % in Denmark; the EU average was 69.0 %. Higher activity rates tend to generate on the one hand more revenue for governments, while at the same time removing some of the social security burden, as persons (re-)join the labour force.

[(2)] The use of the Labour Force Survey, which is based on a household survey, may produce quite different results to those obtained through enterprise surveys that are the basis for the vast majority of the statistics presented in this publication.

Approximately one in six (18.0 %) persons in the EU were working on a part-time basis in 2001 – see Figure 4. Part-time employment accounted for less than 10 % of employment in just three of the Member States: Greece, Spain and Italy. The share of part–time employment was higher than average in Denmark, Germany, Sweden and the United Kingdom (all between 20 and 25 %), and significantly higher in the Netherlands (42.2 %).

There were considerable differences between Member States as regards the share of women in the total number of persons employed in 2001. The highest shares (at least 45 %) were registered in Denmark, the Netherlands, Portugal, Finland, Sweden and the United Kingdom. The EU average stood at 42.9 %, while three countries were below the threshold of 40 % (Greece, Spain and Italy).

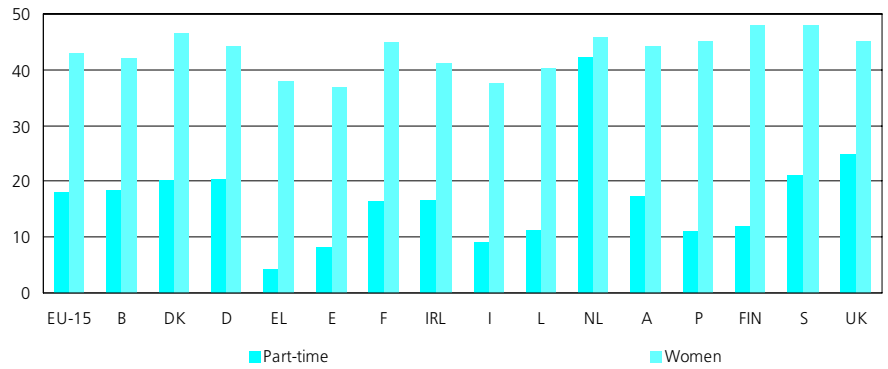
The service sector (NACE Sections G to Q) accounted for the majority of jobs in the EU in 2001, with just over two thirds (67.2 %) of those employed – see Figure 5. There were six countries where services accounted for more than 70 % of total employment, the highest share being recorded in Luxembourg (77 %). The shift towards services, evident for value added, was also present when studying the evolution of employment within the EU. Between 1995 and 2001 the number of persons employed in the service sector rose in every Member State, with the share of services in total employment increasing in every country, except Portugal. By 2001, Portugal was the only country to report that services did not account for more than 60 % of total employment.

There were large differences in the importance of the agriculture, hunting, forestry and fishing sectors (NACE Sections A and B): ranging from less than 2 % of total employment in Belgium, Luxembourg and the United Kingdom to 13 % of employment in Portugal and 16 % in Greece. The industrial and construction sectors (NACE Sections C to F) generally accounted for between 20 and 30 % of total employment, with their share rising above 30 % in Germany, Spain, Italy and Portugal.

Between 1995 and 2001 there was a 13 million net increase in the number of persons employed in the EU, with services accounting for 12.7 million of the net increase – see Table 2. The largest net gains were made by public administration, community, social and personal services (NACE Sections L to Q) and financial intermediation, real estate, renting and business activities (NACE Sections J and K), where employment in the EU rose by 5.1 million and 4.4 million respectively over the period considered. The only branch to register a net reduction in the number of persons employed was agriculture, hunting, forestry and fishing, with a decline of 1.1 million.

Figure 4

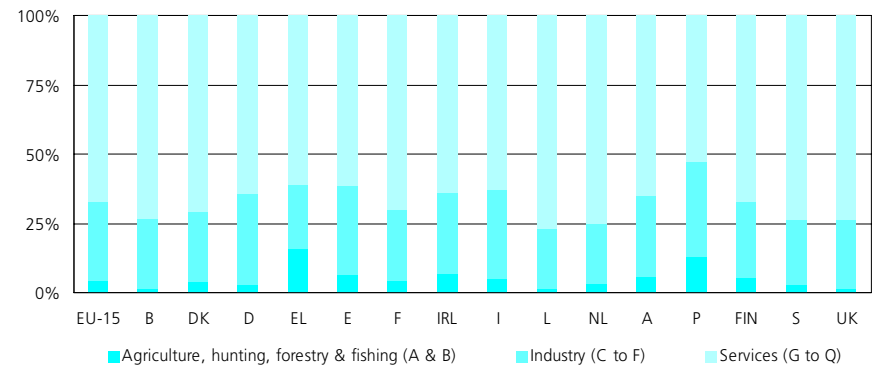
Labour force characteristics, 2001 (% share of those employed aged 15 or more) (1)



(1) NACE Sections A to Q.
Source: Eurostat, Labour Force Survey.

Figure 5

Breakdown of persons in employment by activity, 2001 (share of those employed aged 15 or more)



Source: Eurostat, Labour Force Survey.

Table 2

Evolution of total employment in the EU (millions)

NACE label (NACE code)	1995	2001	Share (%) 1995	Share (%) 2001	Growth rate, 2001/1995 (%)	Average annual growth rate, 1995-2001 (%)
Total (A to Q)	148.0	160.9	100.0	100.0	8.8	1.7
Agriculture, hunting, forestry & fishing (A & B)	7.8	6.7	5.3	4.2	-14.5	-3.1
Mining & quarrying; manufacturing; electricity, gas & water supply (C to E)	33.1	33.4	22.4	20.8	1.0	0.2
Construction (F)	11.6	12.7	7.9	7.9	9.4	1.8
Distributive trades; hotels & restaurants; transport, storage & comm. (G to I)	37.1	40.3	25.1	25.0	8.4	1.6
Financial intermediation; real estate, renting & business activities (J & K)	15.5	19.9	10.5	12.4	28.5	5.1
Public administration, community, social & personal services (L to Q)	42.8	47.9	28.9	29.8	12.0	2.3

Source: Eurostat, Labour Force Survey.

INTANGIBLES AND GLOBALISATION

Traditional economic theories were often based upon the exchange of tradable, physical goods in a one-to-one relationship. In recent years, intangibles (non-material factors) have been considered as playing an increasing role in determining economic performance. The exploitation of property rights, brands, R & D, know-how, skills and supply networks are thought to be some of the key drivers of intangible wealth creation.

At the Lisbon European Council in March 2000, the European Union set itself the ambitious goal '*to become the most competitive and dynamic knowledge-driven economy in the world*' by 2010. Enterprise policy is one area that will play a major role in setting the conditions for this objective to be met. In order to measure business performance, a benchmarking initiative was set up at the request of the Lisbon Council. The structural indicators' database was launched in the European Commission's Communication '*Realising the potential of the European Union – Consolidating and extending the Lisbon strategy*' [3]. Table 3 shows some selected indicators from this database. The aim of the database is to act as a tool, whereby countries can seek to improve their own performance (to the benefit of the whole EU) by comparing themselves with other Member States and adapting their enterprise policy to reflect best practices identified in other countries.

Globalisation encompasses a wide range of issues, such as the development of intra-enterprise trade, financial flows, forms of linkages between businesses and cross-border operations. Multi-national enterprises and networks are at the core of the process, acting as economic agents controlling or interacting with entities situated in different countries. The qualitative nature of information required to define a group's perimeter can often make it difficult to obtain reliable statistical information (such as the statistical system stands today). One of the key constraints is that global enterprises make their decisions against a worldwide backdrop, while these decisions continue to be analysed using national data collections truncated by geographical borders.

[3] COM(2001) 79. Eurostat's structural indicators homepage may be found at: http://www.europa.eu.int/comm/eurostat/Public/datashop/print-product/EN?catalogue=Eurostat&product=1-structur-EN&mode=download

Table 3

Selected structural indicators

	Business enterprise R&D expenditure relative to GDP, 2001 (%) (1)	Number of patent applications at the EPO per million inhabitants, 2000 (units) (2)	Venture capital investment relative to GDP - early stage, 2001 (%) (3)
EU-15	1.28	152.7	0.05
B	1.45	151.2	0.04
DK	1.32	169.5	0.08
D	1.80	296.8	0.06
EL	0.19	5.2	0.02
E	0.52	22.1	0.02
F	1.36	139.7	0.04
IRL	0.88	87.6	0.03
I	0.53	72.3	0.02
L	1.19	170.9	:
NL	1.14	217.7	0.04
A	1.14	154.1	0.02
P	0.17	3.9	0.01
FIN	2.68	320.3	0.10
S	2.84	346.4	0.10
UK	1.21	124.0	0.06
JP	2.11	148.5	:
US	2.04	158.2	0.14

(1) B, DK, F, L and US, 2000; EL, IRL, NL, P and S, 1999; A, 1998; B, FIN and UK, forecast; DK, D and F, estimate; US and L, provisional; EU-15, Eurostat estimate.
(2) All values are provisional.
(3) US, Eurostat estimate.
Source: Eurostat, Structural indicators (theme1/strind).

Many enterprises have concentrated on extending their operations beyond national borders in an attempt (among other things) to circumvent trade barriers, increase proximity to customers, reduce costs (labour, transportation or other inputs), guarantee a supply of materials or avoid regulations. Such changes in business structure, conduct and performance have created significant challenges for national statistical systems.

Foreign affiliates trade statistics (FATS) is a data collection exercise that measures the commercial presence of enterprises in the territory of another country. The statistics describe the overall activity of foreign controlled enterprises and have been developed for inward FATS – in other words, foreign owned affiliates in the reporting economy. Table 4 provides some of the main results from this study.

Table 4

Main indicators for foreign affiliates trade statistics, 1998 (1)

	Nationally owned	Foreign owned	Non-EU foreign owned
Value added at factor cost (million EUR)			
DK	66 734	8 518	:
NL	143 931	26 865	14 427
FIN	49 421	6 788	2 934
S	98 272	18 889	8 819
UK	540 963	100 858	:
Number of persons employed (units)			
DK	1 317 464	111 194	:
NL	3 948 904	412 477	184 228
FIN	972 426	119 264	47 073
S	2 090 256	327 904	142 794
UK	:	:	:

(1) NACE Section C to K, excluding Section J.
Source: Eurostat, Structural Business Statistics (theme4/sbs/fats).

STRUCTURAL BUSINESS STATISTICS

Structural business statistics (SBS) provide the majority of data used in this publication. The data are collected within the legal framework provided by the SBS regulation [4]. Figures relating to enterprises of all sizes (with one or more persons employed) [5] are used in this publication to provide a snapshot of the latest situation in the EU's business economy for the reference year 2000.

A second collection of SBS data provides a longer time-series, but only for industrial enterprises with 20 or more persons employed [6]. In this publication these figures are used to provide a comparison of the evolution of the manufacturing sector.

A SNAPSHOT OF THE EU'S BUSINESS ECONOMY

Estimates based on SBS data suggest that the value added of the EU's business economy (NACE Sections C to K) was EUR 4 700 billion in 2000, while there were over 100 million persons employed.

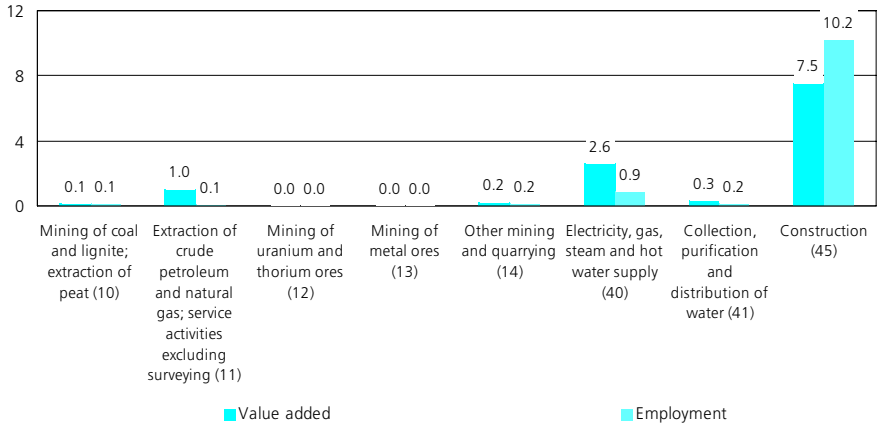
At the NACE section level, manufacturing was the largest activity, accounting for 31.2 % of value added and 27.7 % of employment. These two shares imply that the manufacturing sector is relatively productive when compared to the average performance of the whole economy. However, the remaining industrial activities were even more productive, as mining and quarrying accounted for a 1.4 % share of total value added, but just 0.4 % of employment, and electricity, gas and water supply was responsible for generating 2.9 % of total value added, while employing 1.0 % of the workforce. These figures may be explained in part by the transformation of the industrial base, as enterprises increasingly specialise in skills-intensive sectors, while low-skilled, labour-intensive activities have been driven out to lower cost countries.

This switch in productive capacity has also brought with it a change in demand between businesses, most notably an increase in the demand for business services. Real estate, renting and business activities generated 17.9 % of value added (the highest share among service sectors), while employing 17.0 % of the total. Financial intermediation accounted for 8.5 % of the EU's value added in 2000, while employing 5.1 % of those working.

Looking in more detail, at the two–digit level of NACE, construction (NACE Division 45) was by far the largest non-manufacturing industrial activity in every Member State in 2000, accounting on average for 7.5 % of the value added generated in the EU's business economy and 10.2 % of those employed – see Figure 6. The next largest activity was usually the supply of electricity, gas, steam and hot water (NACE Division 40), although in Denmark and the United Kingdom the extraction of petroleum and gas (NACE Division 11) generated more value added. The extraction of petroleum and gas was also relatively important in the Netherlands, where it generated almost as much value added as the supply of electricity, gas, steam and hot water – see Table 5.

Figure 6

Breakdown of activity in non-manufacturing industrial sectors in the EU, 2000 (% share of business economy) (1)



(1) Based on NACE Divisions 10 to 14 and 40, 41 and 45; estimates.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/enter_ms).

Table 5

Three largest non-manufacturing industrial sectors, 2000 (1)

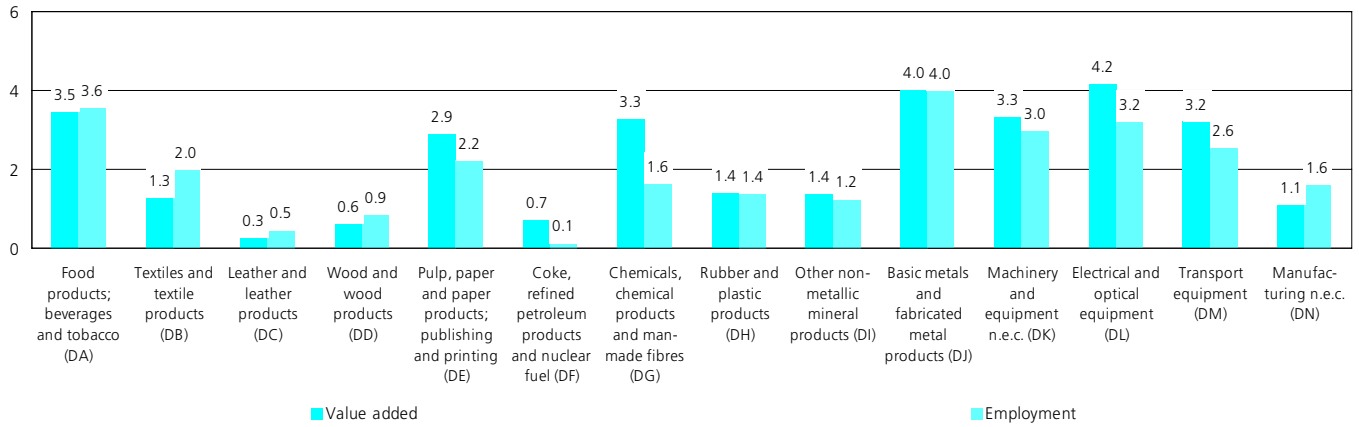
	Largest	Second largest	Third largest
EU-15	Construction	Electricity, gas, steam & hot water	Extraction of petroleum & gas
B	Construction	Electricity, gas, steam & hot water	Collection, purification & distribution of water
DK	Construction	Extraction of petroleum & gas	Electricity, gas, steam & hot water
D	Construction	Electricity, gas, steam & hot water	Mining of coal & lignite; extraction of peat
EL	Construction	Electricity, gas, steam & hot water	Other mining and quarrying
E	Construction	Electricity, gas, steam & hot water	Collection, purification & distribution of water
F	Construction	Electricity, gas, steam & hot water	Collection, purification & distribution of water
IRL	Construction	Electricity, gas, steam & hot water	Mining of coal & lignite; extraction of peat
I	Construction	Electricity, gas, steam & hot water	Extraction of petroleum & gas
L	Construction	Electricity, gas, steam & hot water	Other mining and quarrying
NL	Construction	Electricity, gas, steam & hot water	Extraction of petroleum & gas
A	Construction	Electricity, gas, steam & hot water	Other mining and quarrying
P	Construction	Electricity, gas, steam & hot water	Collection, purification & distribution of water
FIN	Construction	Electricity, gas, steam & hot water	Collection, purification & distribution of water
S	Construction	Electricity, gas, steam & hot water	Mining of metal ores
UK	Construction	Extraction of petroleum & gas	Electricity, gas, steam & hot water

(1) Based on value added for non-manufacturing industrial sectors (NACE Divisions 10 to 14 and 40, 41 and 45); estimates.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/enter_ms).

[4] Council Regulation (EC, EURATOM) No. 58/97 of 20 December 1996 concerning structural business statistics.
[5] These data can be found on Eurostat's NewCronos database at: theme4/sbs/enterpr/enter_ms.
[6] These data can be found on Eurostat's NewCronos database at: theme4/sbs/enterpr/ent_l_ms.

Figure 7

Breakdown of activity in manufacturing sectors in the EU, 2000 (% share of business economy) (1)



(1) Based on NACE Subsections DA to DN; estimates.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/enter_ms).

Within the manufacturing sector, the three largest activities (in terms of value added) were machinery and equipment (NACE Division 29), food products and beverages (NACE Division 15) and chemicals and chemical products (NACE Division 24) – see Figure 7. At least two of these three activities appeared in the ranking of the three largest manufacturing activities in 10 of the Member States. However, manufacturing in Greece, Luxembourg, Portugal, Finland and Sweden was more concentrated in activities that did not have such a predominant position in the EU as a whole. In the larger Member States, Germany reported a higher than average share of its output concentrated within the manufacture of motor vehicles, France and Italy produced more fabricated metal products than average and the share of publishing and printing was relatively high in the United Kingdom – see Table 6.

Table 6

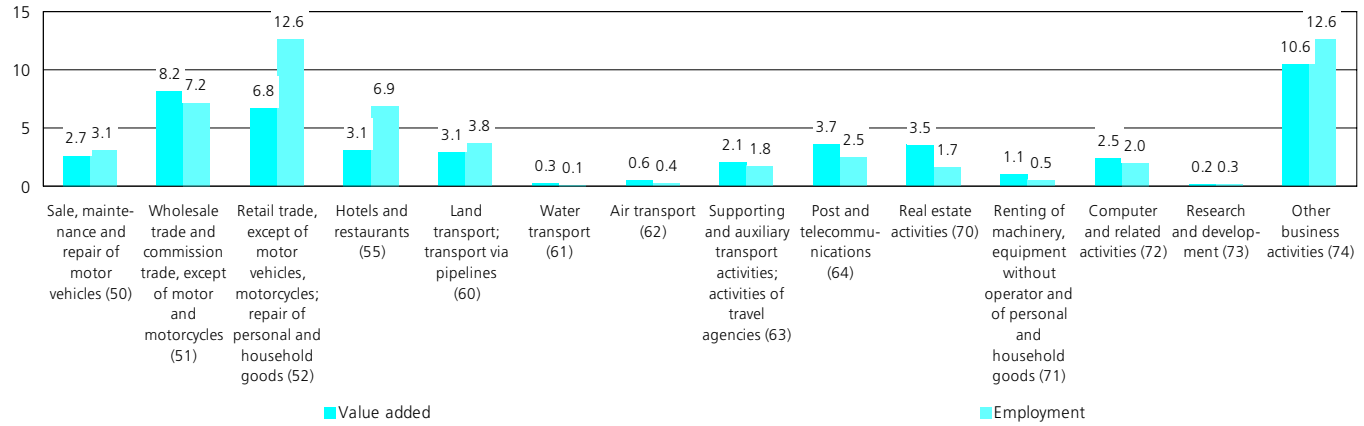
Three largest manufacturing sectors, 2000 (1)

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

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

Figure 8

Breakdown of activity in service sectors in the EU, 2000 (% share of business economy) (1)



(1) Based on NACE Divisions 50 to 64 and 70 to 74; estimates.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/enter_ms).

Within the service sector the three largest activities (still at the two–digit level of NACE) were generally wholesale trade (NACE Division 51), retail trade (NACE Division 52) and other business activities (NACE Division 74). The latter two activities both accounted for a particularly high share of total employment, 12.6 % of those employed in the EU. However, in terms of value added, wholesale trade was more important than retail trade – see Figure 8. Considering the individual Member States, other business activities and wholesale trade were the two largest sectors in terms of value added generated in every country in 2000, except for Ireland and Portugal, where retail trade displaced other business activities. In the remaining countries, retail trade was usually the third most important activity, except in Greece (hotels and restaurants), Luxembourg (post and telecommunications) and Sweden (real estate activities) – see Table 7.

The promotion of small and medium-sized enterprises (SMEs) is thought to be fundamental when fostering an environment that encourages economic growth and job opportunities. The size class domain of the SBS database provides information on the enterprise size structure within the EU's business economy in 1999. SMEs are found to be particularly important in the activities of hotels and restaurants, construction, distributive trades and real estate, renting and business activities, where they provide employment to a large number of persons – see Table 8.

Table 7

Three largest service sectors, 2000 (1)

	Largest	Second largest	Third largest
EU-15	Other business activities	Wholesale trade	Retail trade
B	Wholesale trade	Other business activities	Retail trade
DK	Wholesale trade	Other business activities	Retail trade
D	Other business activities	Wholesale trade	Retail trade
EL	Other business activities	Wholesale trade	Hotels and restaurants
E	Wholesale trade	Other business activities	Retail trade
F	Other business activities	Wholesale trade	Retail trade
IRL	Retail trade	Wholesale trade	Other business activities
I	Other business activities	Wholesale trade	Retail trade
L	Other business activities	Wholesale trade	Post and telecommunications
NL	Wholesale trade	Other business activities	Retail trade
A	Wholesale trade	Other business activities	Retail trade
P	Wholesale trade	Retail trade	Other business activities
FIN	Wholesale trade	Other business activities	Retail trade
S	Wholesale trade	Other business activities	Real estate activities
UK	Other business activities	Wholesale trade	Retail trade

(1) Based on value added for services (NACE Divisions 50 to 64 and 70 to 74); estimates.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/enter_ms).

Indeed, SMEs employed as many as 87 % of the EU's workforce in the construction sector in 1999, 80 % of those employed in hotels and restaurants and 72 % in distributive trades. Transport, storage and communication was the only NACE section to report that SMEs did not employ more than 50 % of its workforce – see Table 9.

The apparent labour productivity of micro enterprises was below the average of all enterprises for each NACE section except in real estate, renting and business activities, where micro-enterprises accounted for 32.2 % of employment, but generated 33.9 % of value added.

In the construction, distributive trades and hotels and restaurants sectors, there was no significant difference in apparent labour productivity of small, medium or large-sized enterprises. Real estate, renting and business activities reported that apparent labour productivity in the EU increased between micro, small and medium-sized enterprises before tailing off for large enterprises. There were, however, two sectors that did report increasing apparent labour productivity returns for larger enterprises, namely manufacturing and transport, storage and communication. Both of these activities often require significant capital investment to set up efficient production lines or maintain national networks at a minimum efficient scale.

Table 8

Importance of small enterprises in the value added of manufacturing activities in the EU, 2000 (% share of enterprises with less than 20 persons employed) (1)

NACE label (NACE code)	Share of enterprises with <20 persons employed in total value added (%)
Food products and beverages (15)	15.3
Tobacco products (16)	0.2
Textiles (17)	19.1
Wearing apparel; dressing; dyeing of fur (18)	27.7
Tanning, dressing of leather; luggage (19)	30.1
Wood, except furniture; articles of straw and plaiting materials (20)	34.8
Pulp, paper and paper products (21)	5.3
Publishing, printing, reproduction of recorded media (22)	23.0
Coke, refined petroleum products and nuclear fuel (23)	1.1
Chemicals and chemical products (24)	3.1
Rubber and plastic products (25)	12.0
Other non-metallic mineral products (26)	13.8
Basic metals (27)	3.7
Fabricated metal products, except machinery and equipment (28)	30.4
Machinery and equipment n.e.c. (29)	12.4
Office machinery and computers (30)	6.2
Electrical machinery and apparatus n.e.c. (31)	8.6
Radio, television and communication equipment and apparatus (32)	4.2
Medical, precision and optical instruments, watches and clocks (33)	18.4
Motor vehicles, trailers and semi-trailers (34)	1.9
Other transport equipment (35)	4.2
Furniture; manufacturing n.e.c. (36)	29.3
Recycling (37)	39.1

(1) Extraction of data made in March 2003; the data presented in this table shows the importance of enterprises with less than 20 persons employed, enterprises that are generally not covered within SBS LONG, the principal data set used when drafting chapters for manufacturing activities.
Source: Eurostat, Structural Business Statistics (theme4/sbs/sizclass).

Table 9

Breakdown of activity by enterprise size class in the EU, 1999 (1)

	Value added				Employment			
NACE label (NACE code)	Micro (1-9 persons employed)	Small (10-49 persons employed)	Medium (50-249 persons employed)	Large (250 or more persons employed)	Micro (1-9 persons employed)	Small (10-49 persons employed)	Medium (50-249 persons employed)	Large (250 or more persons employed)
Manufacturing (D)	7.7	16.3	22.2	53.7	13.4	21.7	23.3	41.5
Construction (F)	32.5	32.5	17.2	17.9	41.2	31.4	14.3	13.0
Distributive trades (G)	29.2	23.9	16.6	30.3	38.9	21.4	11.7	27.9
Hotels & restaurants (H)	39.7	24.6	11.9	23.8	45.6	24.5	9.9	20.0
Transport, storage & communication (I)	10.8	11.8	9.8	67.6	15.9	14.8	12.5	56.8
Real estate, renting & business activities (K)	33.9	23.9	22.3	19.9	32.2	19.0	16.5	32.2

(1) NACE Sections C, E and J, not available.
Source: Eurostat, Structural Business Statistics (theme4/sbs/sizclass).

THE EU'S MANUFACTURING SECTOR FROM 1990 TO 2001

After a reduction in manufacturing activity at the start of the 1990s, the EU's value added in constant price terms increased during six consecutive years from 1996 to 2001 – see Figure 9. By 2001, the value added generated by the EU's manufacturing sector had reached EUR 1 327 billion.

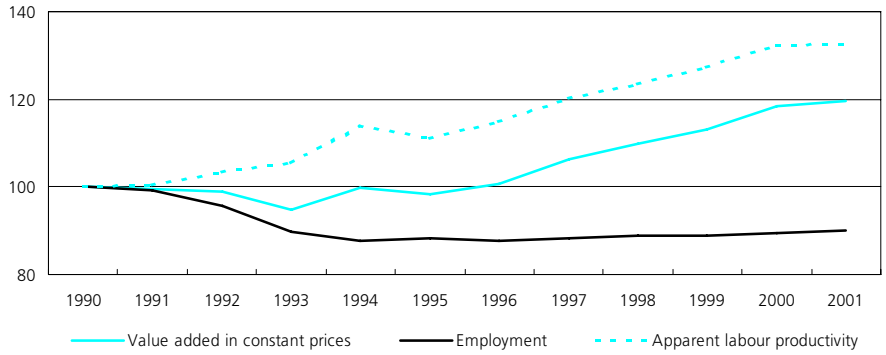
There were a total of 23.7 million persons employed in the EU's manufacturing sector in 2001, down from 26.3 million in 1990. The decline in manufacturing employment was almost exclusively confined to the first half of the 1990s, since when employment levelled off. There was an absolute gain of 3.0 % in the number of persons employed between the low reached in 1996 and the latest data for 2001.

The decline in employment levels during the first half of the 1990s was the main contributing factor to overall productivity gains in the EU's manufacturing economy between 1990 and 1995. Nevertheless, since 1996 apparent labour productivity gains have been stimulated mainly by a sharp increase in real value added rather than a fall in employment. It is also important to remember that while the level of employment in manufacturing has itself fallen between 1990 and 2001, a large proportion of employment in the tertiary sector is dependent on the manufacturing sector as the source of demand for their services.

As the role of intangibles becomes more important, most commentators agree that the fastest growing areas of the EU's economy are those driven by marketing, innovation and technology. SBS data for the EU between 1990 and 2001 reports that the fastest growth among manufacturing activities was recorded in the chemicals, chemical products and man-made fibres sector (NACE Subsection DG), rubber and plastic products' sector (NACE Subsection DH) and the transport equipment sector (NACE Subsection DM). All of these can be considered as either research-driven with a high degree of technological innovation (for example, aerospace, pharmaceuticals or plastics manufacture), or alternatively marketing-driven, with brand image playing an important role in differentiating products (for example, motor vehicles or detergents) – see Table 10.

Figure 9

Evolution of main indicators for manufacturing (NACE Section D) in the EU (1990=100)



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

Table 10

Share of manufacturing value added in the EU (%)

NACE label (NACE code)	1990	2001
Food products; beverages and tobacco (DA) (1)	11.0	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)	8.3	8.8
Coke, refined petroleum products and nuclear fuel (DF)	1.8	2.1
Chemicals, chemical products and man-made fibres (DG)	10.7	11.8
Rubber and plastic products (DH)	4.2	4.8
Other non-metallic mineral products (DI)	4.8	4.4
Basic metals and fabricated metal products (DJ)	12.4	11.7
Machinery and equipment n.e.c. (DK)	11.4	10.6
Electrical and optical equipment (DL) (2)	13.6	13.3
Transport equipment (DM)	11.9	12.5
Manufacturing n.e.c. (DN) (1)	2.0	2.7

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

Table 11

Relative specialisation in the manufacturing sector, 2000 (1)

B	DK	D	EL	E
Accumulators, cells & batteries	Fish	Electricity distribn. & control app.	Cement, lime & plaster	Cement, lime & plaster
Other first processing of iron & steel	Games & toys	Machine tools	Oils & fats	Ceramic tiles & flags
Other textiles	Optical & photographic equipment	Motor vehicles	Textile fibres	Stone
F	**IRL**	**I**	**L**	**NL**
Aircraft & spacecraft	Basic chemicals	Ceramic tiles & flags	Basic iron & steel (ECSC)	Audio-visual household goods
Processing of nuclear fuel	Office machinery & computers	Motorcycles & bicycles	Other textiles	Oils & fats
Steam generators	Reproduction of recorded media	Tanning & dressing of leather	Rubber products	Other transport equipment n.e.c.
A	**P**	**FIN**	**S**	**UK**
Railway rolling stock	Footwear	Pulp, paper & paperboard	Pulp, paper & paperboard	Aircraft & spacecraft
Sawmilling & planing of wood	Knitted & crocheted fabrics	Sawmilling & planing of wood	Sawmilling & planing of wood	Pesticides & other agro-chemical products
Sports goods	Other wood products	Telecommunications equipment	Tubes	Publishing

(1) Three most specialised manufacturing activities per country; based on NACE Groups and their specialisation ratios in terms of value added at factor cost; excluding recycling; only NACE Groups with a share >0.5% of national manufacturing are included; activities are ranked in alphabetical order; estimates.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Table 11 provides information on specialisation ratios, which compare for a given country the importance of a particular NACE group in total manufacturing value added to the same ratio for the EU as a whole. The results show that natural endowments of resources, reinforced by long-standing traditions, can be an important contributing factor to the composition of a country's manufacturing sector, as high ratios were recorded for sawmilling and planing of wood in Finland and Sweden, stone in Spain, other wood products (namely, cork) in Portugal and ceramic tiles and flags in Italy. High-technology sectors featured in several countries: for example, aircraft and spacecraft in France and the United Kingdom, office machinery and computers in Ireland and audiovisual household goods in the Netherlands. It is important to note that smaller countries tend to register a broader range (both much higher and much lower) of relative specialisation ratios than larger countries, as some manufacturing sectors do not exist in smaller countries, thus magnifying the relative importance of those that do. It is also important to consider that specialisation ratios, per se, provide no information as to whether or not an industry accounts for an important share of total manufacturing. For this reason, very small activities that accounted for less than 0.5 % of a country's manufacturing value added in 2000 were removed from the table, even when one country dominated the EU total in a very small industry.

One factor that plays an important role in determining the competitiveness of industrial sectors is price. The European business trends (EBT) database provides information for annual domestic output price indices. Table 12 shows that output prices in manufacturing as a whole rose by 7.6 % between 1995 and 2001. Prices at the NACE subsection level rose for all but one activity, as the price of electrical and optical equipment in the EU was 5.3 % lower in 2001 than it had been in 1995. The vast majority of price increases registered in the EU's manufacturing sector were less than 10 % overall between 1995 and 2001, while the harmonised index of consumer prices rose by 11.5 % during the same period. Indeed, there were just two exceptions to this rule, the leather and leather products' sector (where prices rose by 12.2 %) and the coke, refined petroleum products and nuclear fuel sector (where prices rose by as much as 57.6 %). Prices in the refined petroleum products and nuclear fuel sector are to a very large degree dependent upon the cost of crude oil.

EXTERNAL TRADE STATISTICS

THE EU'S EXTERNAL TRADE SITUATION FROM 1991 TO 2001

External trade statistics for manufactured goods are available within the Comext database, and can be compiled according to the classification of products by activity (CPA). The EU totals cited in this section refer to extra-EU trade only and do not include intra-EU flows (in other words, trade between the Member States). On the other hand, the data presented for the Member States takes account of all external trade flows, both with intra and extra-EU partners.

As the EU data only refer to extra-EU trade, it is important to bear in mind that certain products have characteristics that mean they are less likely to be traded over long distances (for example, goods with low unit values relative to their transportation cost, perishable goods or fragile goods). Extra-EU exports of manufactured products (CPA Section D) expanded by 153.5 % between 1991 and 2001, equivalent to an average rate of 9.7 % per annum. These growth rates reflect the growing importance of globalisation and world markets.

Table 12

Development of domestic output prices in the EU (1995=100)

NACE label (NACE code)	1995	1996	1997	1998	1999	2000	2001
Manufacturing (D)	100.0	101.1	101.8	100.9	101.2	106.6	107.6
Food products; beverages and tobacco (DA)	100.0	102.1	103.4	103.1	102.3	103.9	107.5
Textiles and textile products (DB)	100.0	100.9	101.8	102.6	102.3	103.5	105.1
Leather and leather products (DC)	100.0	102.1	103.7	105.1	105.4	107.6	112.2
Wood and wood products (DD)	100.0	98.9	100.0	100.7	100.2	101.1	101.7
Pulp, paper and paper products; publishing and printing (DE)	100.0	99.3	98.4	99.3	99.0	104.1	106.1
Coke, refined petroleum products and nuclear fuel (DF)	100.0	111.7	116.9	103.4	117.3	168.2	157.0
Chemicals, chemical products and man-made fibres (DG)	100.0	98.8	99.6	98.0	97.2	103.2	104.3
Rubber and plastic products (DH)	100.0	100.0	99.4	98.8	97.9	100.0	101.2
Other non-metallic mineral products (DI)	100.0	100.8	101.7	102.7	103.8	105.8	108.3
Basic metals and fabricated metal products (DJ)	100.0	97.5	98.0	98.5	96.3	100.7	101.0
Machinery and equipment n.e.c. (DK)	100.0	102.6	104.1	105.1	106.0	107.1	108.6
Electrical and optical equipment (DL)	100.0	99.4	98.3	96.7	95.2	95.2	94.7
Transport equipment (DM)	100.0	101.9	102.1	103.1	103.6	103.9	104.6
Manufacturing n.e.c. (DN)	100.0	102.7	103.7	104.9	106.1	107.6	109.9

Source: Eurostat, European Business Trends (theme4/ebt/ebt_ind/ind_pric).

The EU's manufacturing trade surplus in 2001 was EUR 95.7 billion, which was a EUR 42.1 billion increase on 2000. This rapid gain of 79 % was entirely the result of expanding exports, while imports remained at almost the same level as in 2000 (down by EUR 1.9 billion). As a result, the EU recorded its highest trade surplus in manufactured products since 1997.

Table 13 details the external trade position of each Member State for manufactured products in 2001. In absolute terms the highest trade surplus was recorded in Germany (EUR 132 billion). However, in relative terms the German cover ratio was 130.2 % (indicating that total exports of manufactured goods were some 30.2 % higher than the corresponding total for imports). This was not the highest ratio among the Member States, as it was surpassed marginally by the cover ratio for Sweden (130.4 %), and more significantly by the cover ratios for Finland (157.7 %) and Ireland (167.2 %).

On the other hand, there were six Member States that reported trade deficits for manufactured goods in 2001. The largest of these was in the United Kingdom (EUR 62 billion), where total exports of manufactured goods accounted for 81.1 % of imports; the cover ratios of Portugal (69.2 %) and Greece (37.1 %) were considerably lower still.

Table 13

External trade flows of manufactured goods (CPA Section D), 2001 (million EUR)

	Exports	Share in EU total (%)	Imports	Share in EU total (%)	Trade balance	Cover ratio (%)
EU-15 (1)	910 433	-	814 760	-	95 673	111.7
B	190 815	8.2	167 602	7.8	23 213	113.9
DK	49 601	2.1	45 595	2.1	4 006	108.8
D	568 221	24.4	436 281	20.3	131 940	130.2
EL	9 627	0.4	25 927	1.2	-16 299	37.1
E	118 059	5.1	144 778	6.7	-26 719	81.5
F	339 904	14.6	328 180	15.3	11 724	103.6
IRL	84 755	3.6	50 691	2.4	34 064	167.2
I	260 418	11.2	217 886	10.2	42 532	119.5
L	11 086	0.5	12 362	0.6	-1 276	89.7
NL	205 413	8.8	182 363	8.5	23 049	112.6
A	73 416	3.1	76 261	3.6	-2 845	96.3
P	26 431	1.1	38 205	1.8	-11 775	69.2
FIN	47 248	2.0	29 953	1.4	17 295	157.7
S	78 467	3.4	60 172	2.8	18 295	130.4
UK	267 428	11.5	329 573	15.4	-62 145	81.1

(1) Trade with non-Community countries only.
Source: Eurostat, Comext.

Looking at the EU's external trade performance, broken down by CPA subsection, Table 14 shows that in 2001 some 68.5 % of the EU's manufactured exports were concentrated within the four product groups of chemicals, machinery and equipment, electrical and optical equipment, and transport equipment. This share was 7 percentage points higher than in 1991. A similar pattern was observed for imports, with the share of the four most important subsections rising from 56.5 % in 1991 to 61.6 % by 2001.

The increase in manufactured imports and exports over the period 1991 to 2001 was concentrated within two CPA subsections. Electrical and optical equipment (CPA Subsection DL) and transport equipment (CPA Subsection DM) recorded 5.1 and 2.1 percentage point gains in their respective shares of total manufactured imports and 6.2 and 2.4 point gains in their shares of total exports. Hence, these products consolidated their position as the most important CPA subsections for imports (together they accounted for 43.0 % of the EU's total manufacturing imports in 2001 compared to 36.3 % in 1991). Furthermore, they supplanted machinery and equipment (CPA Subsection DK) as the EU's most exported manufactured goods (together accounting for 38.8 % of exports in 2001, compared to 30.3 % in 1991).

The EU's largest trade surpluses were recorded for chemicals, machinery and equipment, and transport equipment in 2001. Although not as important in size, the EU also enjoyed a positive external trade position for pulp, paper and paper products, publishing and printing and other non-metallic mineral products. On the other hand, the largest trade deficits were recorded for electrical and optical equipment and textiles, while the EU also relied heavily on imports of wood and wood products, and coke, refined petroleum products and nuclear fuel.

Table 14

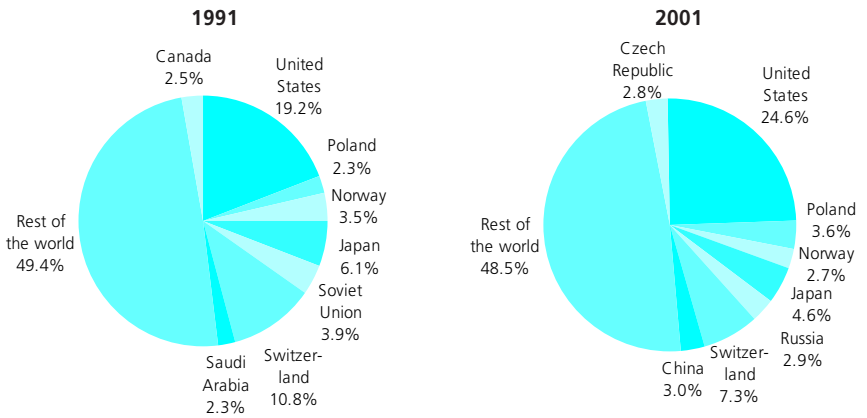
EU-15 external trade flows with non-Community countries (% share of manufacturing total)

CPA label (CPA code)	Exports		Imports	
	1991	2001	1991	2001
Food products; beverages and tobacco (DA)	7.6	5.3	7.2	5.0
Textiles and textile products (DB)	5.7	4.7	10.7	8.8
Leather and leather products (DC)	1.7	1.6	2.3	2.2
Wood and wood products (DD)	0.6	0.8	1.9	1.4
Pulp, paper and paper products; publishing and printing (DE)	3.2	2.8	2.6	2.1
Coke, refined petroleum products and nuclear fuel (DF)	2.0	1.9	4.4	2.8
Chemicals, chemical products and man-made fibres (DG)	13.1	14.7	9.5	9.8
Rubber and plastic products (DH)	2.3	2.5	1.9	2.2
Other non-metallic mineral products (DI)	2.3	1.9	1.0	1.2
Basic metals and fabricated metal products (DJ)	9.2	7.0	9.5	8.8
Machinery and equipment n.e.c. (DK)	18.1	14.9	8.2	8.3
Electrical and optical equipment (DL)	14.3	20.4	23.5	28.6
Transport equipment (DM)	16.0	18.4	12.8	14.4
Manufacturing n.e.c. (DN)	4.0	3.3	4.3	4.4

Source: Eurostat, Comext.

Figure 10

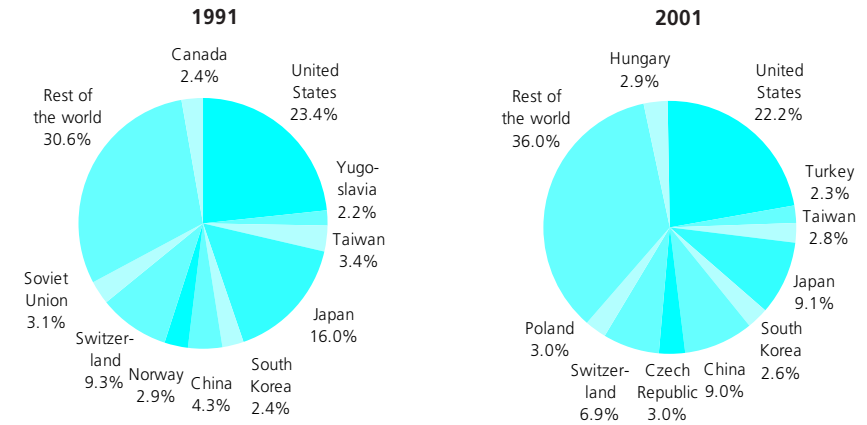
Destination of EU manufacturing (CPA Section D) exports



Source: Eurostat, Comext.

Figure 11

Origin of EU manufacturing (CPA Section D) imports



Source: Eurostat, Comext.

The share of the top 10 export markets for EU manufactured goods remained relatively stable between 1991 and 2001, rising from 54.7 to 56.0 %. The largest market was the United States, which accounted for almost one quarter (24.6 %) of the EU's exported manufactured products in 2001; this equated to a 5.4 percentage point increase when compared to 1991 – see Figure 10. On the other hand, the second and third most important export markets both saw their relative importance decline during the 1990s. The share of exports to Switzerland fell by 3.5 percentage points to 7.3 %, while there was a 1.5 point reduction in the share of total exports that were destined for Japan, reaching 4.6 % by 2001. Exports were, in part, redirected towards the candidate countries (as witnessed by the appearance of the Czech Republic in the top eight and the 1.3 point increase in the share of exports to Poland, which was already in the top eight), as well as towards China (which also entered the top eight export markets in 2001).

The United States was also the most important supplier of manufactured products into the EU – see Figure 11. It accounted for 22.2 % of EU manufactured imports in 2001, which was 1.2 percentage points below its corresponding share in 1991. There were more significant reductions in the shares of Japan, Switzerland and Taiwan; however, all three of these countries remained in the top 10 importers into the EU. The main beneficiary was China, whose share of EU imports of manufactured products rose from 4.3 % in 1991 to 9.0 % by 2001. There were also significant gains made by several of the candidate countries, most notably Poland, the Czech Republic and Hungary, who occupied fifth, sixth and seventh places in the ranking in 2001.

Table 15

EU-15 international trade in services with non-Community countries, 2001 (million EUR)

	Credit	Debit	Net balance
Services	313 806	304 763	9 043
Transportation	78 082	74 059	4 023
Travel	71 866	77 445	-5 579
Communication services	6 201	6 934	-732
Construction services	10 046	6 390	3 656
Insurance services	7 892	3 285	4 606
Financial services	21 248	11 502	9 746
Computer and information services	11 880	7 457	4 423
Other business services	82 503	82 669	-167
Personal, cultural and recreational services	3 282	6 634	-3 352
Government services n.e.c.	7 108	5 974	1 133

Source: Eurostat, International trade in services (theme2/bop/its).

Services have increasingly become the subject of free trade negotiations and this has stimulated trade in services. However, according to balance of payments statistics, goods exported from the EU to non-Community countries were valued at more than three times the value of similar service transactions in 2001. EU credits for service transactions reached EUR 313.8 billion, equivalent to a 5.0 % increase on 2000. Debits grew by 4.3 % to reach EUR 305 billion, such that the EU recorded a net surplus of EUR 9.0 billion on its service transactions in 2001 – see Table 15. Three service sectors collectively accounted for almost three quarters (74.1 %) of the EU's external transactions of services in 2001: transportation, travel and other business services.

The United Kingdom had the highest share of credits from international trade in services in the EU, accounting for 17.5 % of the total in 2001 (see Table 16). This was well ahead of Germany, where EUR 98 billion of credits were recorded in 2001 (13.8 % of the total). Looking at the debits, as well as the credits, the United Kingdom registered the largest deficit for manufactured products but the highest net surplus for service transactions, while Germany recorded the largest surplus for manufactured products and the highest deficit for service transactions.

Table 16

International trade in services, 2001 (million EUR)

	Credit	Debit
EU-15 (1)	313 806	304 763
B/L	56 195	48 414
DK	30 066	26 294
D	97 804	154 744
EL	21 733	12 935
E	64 763	37 625
F	89 581	69 655
IRL	22 577	38 934
I	64 279	63 917
NL	59 131	61 340
A	36 704	35 259
P	9 835	6 917
FIN	6 512	9 049
S	24 571	25 628
UK	123 509	105 703

(1) Trade with non-Community countries only.
Source: Eurostat, International trade in services (theme2/bop/its).

CANDIDATE COUNTRIES

As with the data for the EU, this description of the business economies of the candidate countries begins with data relating to living standards. The candidate countries all possessed lower GDP per inhabitant than the EU average in 2001. However, Cyprus and Slovenia reported levels of GDP per inhabitant that were higher than some of the EU Member States – see Figure 12.

Table 17 provides information on the structure of the candidate country economies. Some still reflect the process of transition towards market economies. For example, the importance of agriculture, hunting, forestry and fishing was often considerably higher in the candidate countries than in the EU. Distributive trades, hotels and restaurants, transport, storage and communication also generally accounted for a higher share of activity in the candidate countries.

LFS data provides a measure of working characteristics in 11 of the candidate countries (no data were available for Malta or Turkey at the time of writing). There were 96 million persons living in the 11 countries for which data are available for 2001, with the vast majority of the population (some 85.2 million) aged 15 years or more. About half of those who had reached a working age were in employment, some 42.7 million persons, with 6.4 million persons unemployed and the remaining 36.1 million non-active – see Figure 13. Although part-time employment accounted for almost one in five persons in employment in the EU (18 %), there were only three candidate countries where the share of part-time employment in total employment rose into double digits; namely, Latvia (10.0 %), Poland (10.2 %) and Romania (16.8 %). Part-time employment accounted for 5 % or less of the workforce in Bulgaria, the Czech Republic, Hungary and the Slovakia.

Some 42.8 % of those employed in the EU in 2001 were women. In the majority of candidate countries the share of women in total employment was higher, surpassing 50 % in Latvia and Lithuania, and only below the EU average in Cyprus (41.5 %) – see Figure 14.

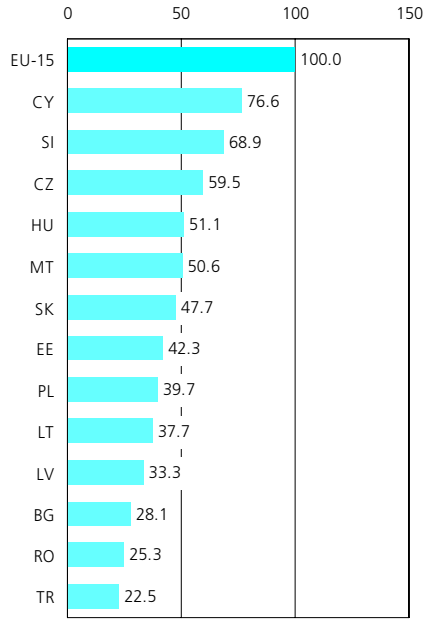
As regards the breakdown of employment, agriculture, hunting, forestry and fishing accounted for a higher share of those employed when compared to the EU average of 4.2 % in every candidate country – see Figure 15. In four of the candidates, the share of this sector in total employment rose into double digits, climbing as high as 44.4 % in Romania [7]. The industrial (and construction) economies of the candidate countries also tended to account for a somewhat higher share of total employment than the EU average of 28.7 %. However, this was not the case in Cyprus, Lithuania, Romania or Latvia, while at the other extreme more than 40 % of the workforce in the Czech Republic worked in the industrial economy. The service sector accounted for more than half of those employed in all but one of the candidate countries – Romania, where the share of services in total employment was 29.7 %. The vast majority of the candidates did not, however, report employment rates in the service sector as high as the EU average of 67.1 %. Indeed, the only one above the EU average was Cyprus, where 71.1 % of those employed worked in the service sector.

More detailed activity data are available for the majority of candidate countries from SBS for 2000. These data are generally available for most NACE sections within the business economy (Sections C to K).

[7] A high proportion of persons working in the candidate countries may have more than one occupation and it may therefore be difficult to distinguish their main occupation.

Figure 12

GDP per inhabitant in the candidate countries, 2001 (EU-15=100) (1)



(1) At current market prices and PPS; MT, 1999.
Source: Eurostat, National Accounts - ESA95 - aggregates (theme2/aggs).

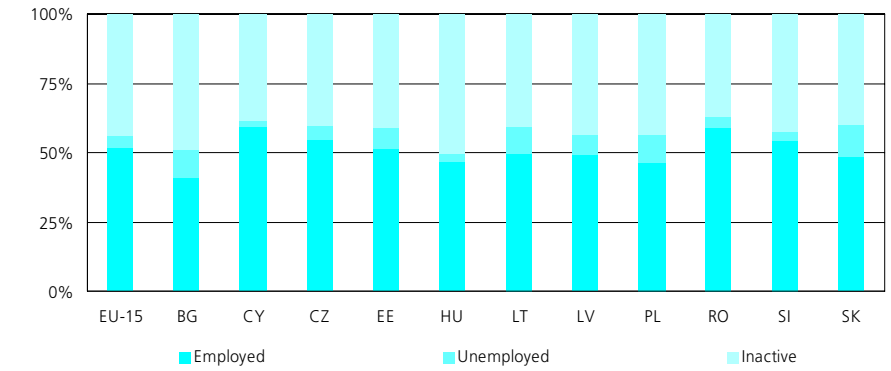
Table 17

Breakdown of GDP in the candidate countries, 2001 (%)

NACE label (NACE code)	EU-15	BG (1)	CY (2)	CZ	EE	HU	LT	LV	MT	PL	RO (1)	SI	SK	TR
Agriculture, hunting, forestry & fishing (A & B)	2.1	13.8	4.0	4.2	5.8	4.3	7.1	4.7	2.4	3.4	14.6	3.1	4.6	12.1
Mining & quarrying; manufacturing; electricity, gas & water supply (C to E)	22.1	23.0	12.9	32.9	22.8	27.1	27.8	18.7	24.5	25.4	28.5	31.0	27.5	23.8
Construction (F)	5.4	3.5	7.1	7.2	5.9	4.9	6.1	6.2	2.8	7.5	5.5	5.9	5.2	4.8
Distributive trades; hotels & restaurants; transport, storage & comm. (G to I)	21.6	:	32.5	25.2	32.1	22.0	29.5	35.4	22.1	30.0	51.3	22.4	29.1	34.4
Financial intermediation; real estate, renting & business activities (J & K) (3)	27.2	:	20.9	15.7	15.6	21.7	10.6	16.0	19.5	16.1	9.4	16.5	18.3	11.3
Public administration, community, social & personal services (L to Q) (3)	21.7	:	22.5	15.0	17.9	20.0	19.0	19.0	28.8	17.6	16.9	21.2	15.4	13.6

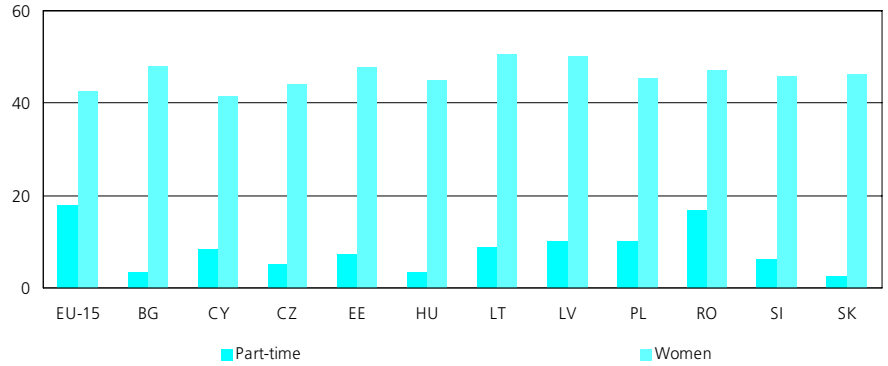
(1) 2000.
(2) Provisional.
(3) RO, 2000.
Source: Eurostat, National Accounts - Breakdowns by branch of activity (theme2/brkdowns).

Figure 13
Breakdown of the labour force by employment status in the candidate countries, 2001 (share of persons aged 15 or more) (1)



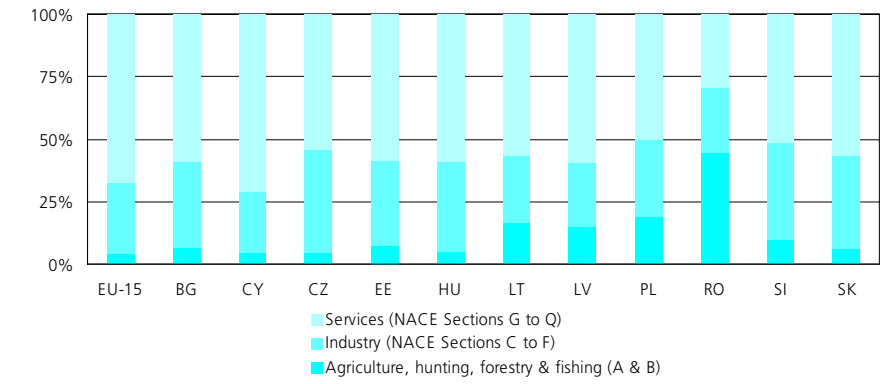
(1) NACE Sections A to Q.
Source: Eurostat, Labour Force Survey.

Figure 14
Labour force characteristics in the candidate countries, 2001 (% share of those employed aged 15 or more) (1)



(1) NACE Sections A to Q.
Source: Eurostat, Labour Force Survey.

Figure 15
Breakdown of persons in employment by activity in the candidate countries, 2001 (share of those employed aged 15 or more)



Source: Eurostat, Labour Force Survey.

Poland had by far the largest business economy in the candidate countries with EUR 92.6 billion of value added in 2000; a level that was in excess of that recorded in Denmark, Greece, Ireland, Luxembourg, Portugal and Finland. The next largest economy was the Czech Republic, with EUR 31.1 billion of value added in 2000, with Hungary and Romania the only other candidate countries to report that their respective business economies generated more than EUR 10 billion of value added.

At the NACE section level, manufacturing was the largest activity in the candidate countries, accounting for 39.1 % of value added, compared to 31.2 % of the total in the EU (see Table 18). The next largest was distributive trades (17.7 %), while transport and communications (12.7 %) and business services (10.3 %) were the only other sectors to account for a double-digit share of the business economy total. Unlike the EU, where mining and quarrying (Section C) was often the smallest activity, in the candidate countries the smallest activity was frequently hotels and restaurants (Section H), which accounted on average for just 1.8 % of business activity in the candidate countries. Taking an aggregate of all candidate countries is somewhat misleading, as there were naturally country differences away from the patterns reported above. For example, the hotels and restaurants sector accounted for as little as 0.9 % of total value added in Slovakia, to as much as 20.2 % of the total in Cyprus. In the same way, the share of the manufacturing sector varied considerably, from less than 30 % of the total in Cyprus, Estonia and Latvia to more than 40 % in the Czech Republic, Hungary, Slovenia and Slovakia and more than 50 % in Romania (55.3 %).

Table 18

Three largest activities in the candidate countries, 2000 (1)

	Largest	Second largest	Third largest
BG	Electricity, gas, steam & hot water	Post and telecommunications	Wholesale trade
CY (2)	Hotels and restaurants	Construction	Wholesale trade
CZ (3)	Wholesale trade	Construction	Other business activities
EE	Wholesale trade	Supporting and auxiliary transport activities; travel agencies	Post and telecommunications
HU (4)	Post and telecommunications	Electricity, gas, steam & hot water	Manufacture of food products and beverages
LT	Wholesale trade	Electricity, gas, steam & hot water	Post and telecommunications
LV	Wholesale trade	Construction	Supporting and auxiliary transport activities; travel agencies
MT	:	:	:
PL (5)	Wholesale trade	Construction	Other business activities
RO (6)	Construction	Land transport; transport via pipelines	Post and telecommunications
SI (7)	Construction	Wholesale trade	Other business activities
SK (8)	Wholesale trade	Electricity, gas, steam & hot water	Post and telecommunications
TR	:	:	:

(1) Ranking based on value added for NACE Divisions 15 to 74.
(2) 1998; NACE Divisions 60 to 74, not available.
(3) NACE Divisions 15 and 16, not available.
(4) NACE Divisions 50 to 52, 1998.
(5) NACE Division 26, 1999; NACE Divisions 15, 40, 41, 61 and 63, 1998.
(6) NACE Divisions 52 and 62, 1998; NACE Division 51, 1997.
(7) 1999.
(8) NACE Divisions 15, 19 and 62, 1999; NACE Divisions 23 and 61, 1998.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/enter_cc).

Table 19

Breakdown of value added by enterprise size class in manufacturing sector of the candidate countries, 2000 (%)

	1-9 persons employed	10-19 persons employed	20-49 persons employed	50-99 persons employed	100-249 persons employed	250+ persons employed
EU-15	7.2	6.2	9.4	8.3	13.1	55.8
CZ	5.9	3.7	7.5	8.2	15.0	59.6
EE	4.1	6.1	13.5	15.6	24.0	36.6
HU (1)	:	3.8	5.7	6.8	12.6	:
LT	4.1	3.9	9.5	9.4	16.4	56.7
LV	4.6	4.8	12.7	11.4	21.5	44.9
PL	11.0	2.4	6.7	7.3	14.1	58.5
RO	1.7	2.7	4.8	5.3	12.2	73.3
SI	10.1	4.0	6.2	7.7	17.6	54.4
SK	3.9	3.5	5.1	5.5	11.7	70.3

(1) Only enterprises with 5 or more persons employed are considered.
Source: Eurostat, Structural Business Statistics (theme4/sbs/sizclass/indus_cc and theme4/sbs/sizclass/indus_ms).

Among, non-manufacturing, industrial activities there was particular importance for the electricity, gas, steam and hot water supply subsector (NACE Division 40) and the construction sector (NACE Division 45). Turning to service activities, a completely different picture was apparent in the candidate countries. While the largest three service activities in almost every EU Member State were wholesale trade, retail trade and other business activities (NACE Divisions 51, 52 and 74), post and telecommunications (NACE Division 64) had considerably more importance in the candidate countries. This position may have been influenced by the rapid take-up of communication technologies in some of the candidate countries, with investment in telecommunications infrastructure fuelling growth. Another service activity that was relatively more important in several of the candidate countries was supporting and auxiliary transport activities and travel agencies (NACE Division 63) – see Table 18.

In terms of the distribution of enterprises across size classes there was also great diversity according to the candidate country being studied (see Table 19). Large enterprises with 250 or more persons employed accounted for a very high share of manufacturing activity in Romania and Slovakia (more than 70 % of total value added), while the corresponding share in Estonia was 36.6 %. This latter value was well below the EU average of 55.8 %, around which most of the remaining candidate countries were grouped – see Table 19.

Statistical annex

There follows a short set of tables giving some general information which may be of use in interpreting the data that follows in the remaining chapters. This data is of a horizontal nature and may prove relevant for a number of chapters.

Table SA.1

Exchange rates, annual average rates (1 ECU/EUR=... national currency)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002 (1)
BEF/LUF	42.2233	41.5932	40.4713	39.6565	38.5519	39.2986	40.5332	40.6207	40.3399	40.3399	40.3399	-
DKK	7.90859	7.80925	7.59359	7.54328	7.32804	7.35934	7.48361	7.49930	7.43556	7.45382	7.45207	7.43052
DEM	2.05076	2.02031	1.93639	1.92453	1.87375	1.90954	1.96438	1.96913	1.95583	1.95583	1.95583	-
GRD	225.216	247.026	268.568	288.026	302.989	305.546	309.355	330.731	325.820	336.678	340.750	-
ESP	128.469	132.526	149.124	158.918	163.000	160.748	165.887	167.184	166.386	166.386	166.386	-
FRF	6.97332	6.84839	6.63368	6.58262	6.52506	6.49300	6.61260	6.60141	6.55957	6.55957	6.55957	-
IEP	0.767809	0.760718	0.799952	0.793618	0.815525	0.793448	0.747516	0.786245	0.787564	0.787564	0.787564	-
ITL	1 533.24	1 595.52	1 841.23	1 915.06	2 130.14	1 958.96	1 929.30	1 943.65	1 936.27	1 936.27	1 936.27	-
NLG	2.31098	2.27482	2.17521	2.15827	2.09891	2.13973	2.21081	2.21967	2.20371	2.20371	2.20371	-
ATS	14.4309	14.2169	13.6238	13.5396	13.1824	13.4345	13.8240	13.8545	13.7603	13.7603	13.7603	-
PTE	178.614	174.714	188.370	196.896	196.105	195.761	198.589	201.695	200.482	200.482	200.482	-
FIM	5.00211	5.80703	6.69628	6.19077	5.70855	5.82817	5.88064	5.98251	5.94573	5.94573	5.94573	-
SEK	7.47927	7.53295	9.12151	9.16308	9.33192	8.51472	8.65117	8.91593	8.80752	8.44519	9.25511	9.16107
GBP	0.701012	0.737650	0.779988	0.775903	0.828789	0.813798	0.692304	0.676434	0.658735	0.609478	0.621874	0.628831
JPY	166.493	164.223	130.148	121.322	123.012	138.084	137.077	146.415	121.317	99.475	108.682	118.063
USD	1.23916	1.29810	1.17100	1.18952	1.30801	1.26975	1.13404	1.12109	1.06578	0.92194	0.89563	0.94557
BGN	0.03385	0.05105	0.03231	0.06439	0.08787	0.22515	1.90157	1.96913	1.95584	1.94792	1.94819	1.94921
CYP	0.573350	0.583675	0.582941	0.583931	0.591619	0.591904	0.582628	0.577418	0.578850	0.573924	0.575892	0.575301
CZK	:	:	34.1690	34.1509	34.6960	34.4572	35.9304	36.3196	36.8843	35.5995	34.0685	30.8036
EEK	:	:	15.4911	15.3962	14.9900	15.2763	15.7150	15.7530	15.6466	15.6466	15.6466	15.6466
HUF	142.202	172.777	107.611	125.030	164.545	193.741	211.654	240.573	252.767	260.045	256.591	242.958
LTL	:	2.14329	5.08682	4.73191	5.23203	5.07899	4.53616	4.48437	4.26405	3.69516	3.58229	3.45943
LVL	:	0.896066	0.793600	0.664101	0.689537	0.699605	0.659401	0.660240	0.625601	0.559227	0.560060	0.581048
MTL	0.399820	0.412953	0.447021	0.448852	0.461431	0.458156	0.437495	0.434983	0.425773	0.404138	0.403007	0.408936
PLN	2.01692	2.97484	2.12217	2.70153	3.17049	3.42232	3.71545	3.91784	4.22741	4.00817	3.67214	3.85742
ROL	145.4	673.7	885.8	1971.6	2661.8	3922.2	8111.5	9984.9	16345.2	19921.8	26004.0	31269.7
SIT	36.969	98.434	132.486	152.766	154.880	171.778	180.996	185.958	194.473	206.613	217.980	225.977
SKK	:	:	36.0317	38.1182	38.8649	38.9229	38.1061	39.5407	44.1229	42.6017	43.3001	42.6935
TRL	5153	8931	12879	35535	59912	103214	171848	293736	447237	574816	1102430	1439680

(1) National currencies marked as not applicable were replaced by the euro on 1 January 2002.
Source: Eurostat, Exchange rates (theme2/exint/exchrt/eurer/eurer_an).

Table SA.2

Population, as of 1 January (thousands)

	1991	1992	1993	1994	1995	1996	1997	1998	1999 (1)	2000 (2)	2001 (3)
EU-15	365 382	367 061	368 935	370 323	371 442	372 476	373 487	374 345	375 277	376 482	:
B	9 987	10 022	10 068	10 101	10 131	10 143	10 170	10 192	10 214	10 239	10 263
DK	5 146	5 162	5 181	5 197	5 216	5 251	5 275	5 295	5 314	5 330	5 349
D	79 753	80 275	80 975	81 338	81 539	81 817	82 012	82 057	82 037	82 163	82 260
EL	10 200	10 294	10 349	10 410	10 443	10 465	10 487	10 511	10 522	10 554	:
E	38 875	38 965	39 057	39 136	39 197	39 249	39 308	39 388	39 519	39 733	40 122
F	56 841	57 111	57 369	57 565	57 753	57 936	58 116	58 299	58 497	58 749	59 037
IRL	3 521	3 547	3 569	3 583	3 598	3 620	3 652	3 694	3 735	3 777	3 826
I	56 744	56 757	56 960	57 138	57 269	57 333	57 461	57 563	57 613	57 680	57 844
L	384	390	395	401	407	413	418	424	429	436	441
NL	15 010	15 129	15 239	15 342	15 424	15 494	15 567	15 654	15 760	15 864	15 987
A	7 769	7 868	7 962	8 015	8 040	8 055	8 068	8 075	8 083	8 103	8 121
P	9 877	9 961	9 965	9 983	10 013	10 041	10 070	10 108	10 150	10 198	10 263
FIN	4 998	5 029	5 055	5 078	5 099	5 117	5 132	5 147	5 160	5 171	5 181
S	8 591	8 644	8 692	8 745	8 816	8 837	8 844	8 848	8 854	8 861	8 883
UK	57 685	57 907	58 099	58 293	58 500	58 704	58 905	59 090	59 391	59 623	59 863
BG	8 669	8 595	8 485	8 460	8 427	8 385	8 341	8 283	8 230	8 191	8 149
CY	687	700	714	723	730	736	741	746	752	755	759
CZ	10 364	10 313	10 326	10 334	10 333	10 321	10 309	10 299	10 290	10 278	10 267
EE	1 570	1 562	1 527	1 507	1 492	1 476	1 462	1 454	1 446	1 372	1 367
HU	10 355	10 337	10 310	10 277	10 246	10 212	10 174	10 135	10 092	10 043	:
LT	3 736	3 747	3 736	3 724	3 718	3 712	3 707	3 704	3 701	3 699	3 693
LV	2 668	2 657	2 606	2 566	2 530	2 502	2 480	2 458	2 439	2 380	2 366
MT	356	360	363	366	369	371	374	377	379	380	391
PL	38 183	38 309	38 418	38 505	38 581	38 609	38 639	38 660	38 667	38 654	38 644
RO	23 192	22 811	22 779	22 748	22 712	22 656	22 582	22 526	22 489	22 455	22 430
SI	2 000	1 999	1 994	1 989	1 989	1 990	1 987	1 985	1 978	1 988	1 990
SK	5 272	5 296	5 314	5 336	5 356	5 368	5 379	5 388	5 393	5 399	5 403
TR	:	:	:	:	:	:	:	:	:	:	:

(1) E, IRL, L and BG, estimates.
(2) E, L and BG, estimates; IRL and EE, provisional.
(3) I, L, P and UK, estimates; IRL and EE, provisional.
Source: Eurostat, Demography - population (theme3/demo/dpop/pjan).

Table SA.3

Gross domestic product in constant prices, annual rate of change (%)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002 (1)
EU-15	1.3	-0.4	2.8	2.4	1.6	2.5	2.9	2.8	3.4	1.5	0.9
B	1.5	-1.0	3.2	2.4	1.2	3.6	2.0	3.2	3.7	0.8	0.7
DK	0.6	0.0	5.5	2.8	2.5	3.0	2.5	2.3	3.0	1.0	1.7
D	2.2	-1.1	2.3	1.7	0.8	1.4	2.0	2.0	2.9	0.6	0.4
EL	0.7	-1.6	2.0	2.1	2.4	3.6	3.4	3.6	4.2	4.1	3.5
E	0.9	-1.0	2.4	2.8	2.4	4.0	4.3	4.2	4.2	2.7	1.9
F	1.5	-0.9	2.1	1.7	1.1	1.9	3.4	3.2	3.8	1.8	1.0
IRL	3.3	2.7	5.8	9.9	8.1	10.9	8.8	11.1	10.0	5.7	3.3
I	0.8	-0.9	2.2	2.9	1.1	2.0	1.8	1.6	2.9	1.8	0.4
L	1.8	4.2	3.8	1.3	3.7	7.7	7.5	6.0	8.9	1.0	0.1
NL	1.7	0.9	2.6	3.0	3.0	3.8	4.3	4.0	3.3	1.3	0.2
A	2.3	0.4	2.6	1.6	2.0	1.6	3.9	2.7	3.5	0.7	0.7
P	1.1	-2.0	1.0	4.3	3.5	3.9	4.5	3.5	3.5	1.7	0.7
FIN	-3.3	-1.1	4.0	3.8	4.0	6.3	5.3	4.1	6.1	0.7	1.4
S	-1.7	-1.8	4.1	3.7	1.1	2.1	3.6	4.5	3.6	1.2	1.6
UK	0.2	2.5	4.7	2.9	2.6	3.4	2.9	2.4	3.1	2.0	1.6
BG	-7.3	-1.5	1.8	2.9	-9.4	-5.6	4.0	2.3	5.4	4.0	4.0
CY	:	0.7	5.9	6.2	1.9	2.5	5.0	4.8	5.2	4.1	1.8
CZ	-0.5	0.1	2.2	5.9	4.3	-0.8	-1.0	0.5	3.3	3.3	2.2
EE	:	:	-2.0	4.3	3.9	9.8	4.6	-0.6	7.1	5.0	4.5
HU	:	:	:	1.5	1.3	4.6	4.9	4.2	5.2	3.7	3.4
LT	-21.3	-16.2	-9.8	3.3	4.7	7.3	5.1	-3.9	3.8	5.9	5.0
LV	-34.9	-14.9	0.6	-1.6	3.7	8.4	4.8	2.8	6.8	7.7	5.0
MT	4.7	4.5	5.7	6.2	4.0	4.9	3.4	4.1	4.8	-0.4	2.8
PL	:	:	:	:	6.0	6.8	4.8	4.1	4.0	1.1	0.8
RO	-8.7	1.5	3.9	7.1	3.9	-6.1	-4.8	-1.2	1.8	5.3	4.2
SI	-5.5	2.8	5.3	4.1	3.5	4.6	3.8	5.2	4.6	3.0	2.6
SK	:	:	5.2	6.5	5.8	5.6	4.0	1.3	2.2	3.3	3.9
TR	6.0	8.0	-5.5	7.2	7.0	7.5	3.1	-4.7	7.4	-7.4	3.9

(1) Forecasts.

Source: Eurostat, National Accounts - ESA95 - aggregates (theme2/aggs).

Table SA.4

Gross domestic product in constant prices in the EU, annual rate of change (%)

NACE label (NACE code)	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Total (A to Q)	1.2	-0.3	2.5	2.4	1.7	2.5	3.0	2.7	3.7	1.8
Agriculture, hunting, forestry and fishing (A & B)	4.4	-0.6	-0.5	2.2	4.1	0.5	1.7	2.6	-0.9	-2.0
Mining & quarrying; manufacturing; electricity, gas & water supply (C to E)	-0.7	-3.5	4.3	3.1	0.0	3.0	3.0	1.1	3.8	0.6
Construction (F)	1.4	-4.1	2.2	0.0	-1.1	-1.3	0.8	2.4	2.3	-0.1
Distributive trades; hotels & restaurants; transport, storage & comm. (G to I)	1.4	0.1	2.7	2.2	1.6	3.4	4.0	4.6	4.9	2.8
Financial intermediation; real estate, renting & business activities (J & K)	1.5	1.9	1.9	3.5	3.7	3.7	4.1	3.7	4.6	3.0
Public administration, community, social & personal services (L to Q)	2.5	1.4	1.6	1.4	1.7	1.0	1.6	1.5	1.9	1.4

Source: Eurostat, National Accounts - Breakdowns by branch of activity (theme2/brkdowns).

Table SA.5

Long-term interest rate for government bond yields following the Maastricht Treaty, annual average rates (%)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
EU-15 (1)	9.8	8.3	8.5	8.9	7.5	6.3	4.9	4.7	5.4	5.0
B	8.7	7.2	7.8	7.5	6.5	5.8	4.8	4.8	5.6	5.1
DK	8.9	7.3	7.8	8.3	7.2	6.3	4.9	4.9	5.6	5.1
D	7.9	6.5	6.9	6.9	6.2	5.6	4.6	4.5	5.3	4.8
EL	:	23.3	20.7	17.0	14.5	9.9	8.5	6.3	6.1	5.3
E	11.7	10.2	10.0	11.3	8.7	6.4	4.8	4.7	5.5	5.1
F	8.6	6.8	7.2	7.5	6.3	5.6	4.6	4.6	5.4	4.9
IRL	9.3	7.7	7.9	8.3	7.3	6.3	4.8	4.7	5.5	5.0
I	13.3	11.2	10.5	12.2	9.4	6.9	4.9	4.7	5.6	5.2
L	7.9	6.9	7.2	7.2	6.3	5.6	4.7	4.7	5.5	4.9
NL	8.1	6.4	6.9	6.9	6.2	5.6	4.6	4.6	5.4	5.0
A	8.3	6.7	7.0	7.1	6.3	5.7	4.7	4.7	5.6	5.1
P	11.7	11.2	10.5	11.5	8.6	6.4	4.9	4.8	5.6	5.2
FIN	12.0	8.8	9.1	8.8	7.1	6.0	4.8	4.7	5.5	5.0
S	10.0	8.5	9.7	10.2	8.0	6.6	5.0	5.0	5.4	5.1
UK	9.1	7.6	8.2	8.3	7.9	7.1	5.6	5.0	5.3	5.0

(1) 1992, excluding EL.
Source: Eurostat, Interest rates (theme2/exint/intrt/govyield/govyie_a).

Table SA.6

Harmonised consumer price indices, annual rate of change (%)

	1991 (1)	1992 (1)	1993 (1)	1994 (1)	1995 (1)	1996 (2)	1997 (2)	1998	1999	2000	2001
EU-15	5.2	4.0	3.4	2.8	2.8	2.4	1.7	1.3	1.2	2.1	2.3
B	:	2.3	2.5	2.4	1.3	1.8	1.5	0.9	1.1	2.7	2.4
DK	2.2	1.9	0.9	1.8	2.0	2.1	1.9	1.3	2.1	2.7	2.3
D	:	:	:	:	:	1.2	1.5	0.6	0.6	2.1	2.4
EL	:	:	:	:	:	7.9	5.4	4.5	2.1	2.9	3.7
E	:	:	4.9	4.6	4.6	3.6	1.9	1.8	2.2	3.5	2.8
F	3.4	2.4	2.2	1.7	1.8	2.1	1.3	0.7	0.6	1.8	1.8
IRL	:	:	:	:	:	2.2	1.2	2.1	2.5	5.3	4.0
I	6.2	5.0	4.5	4.2	5.4	4.0	1.9	2.0	1.7	2.6	2.3
L	:	:	:	:	:	1.2	1.4	1.0	1.0	3.8	2.4
NL	3.2	2.8	1.6	2.1	1.4	1.4	1.9	1.8	2.0	2.3	5.1
A	3.1	3.5	3.2	2.7	1.6	1.8	1.2	0.8	0.5	2.0	2.3
P	11.4	8.9	5.9	5.0	4.0	2.9	1.9	2.2	2.2	2.8	4.4
FIN	4.5	3.3	3.3	1.6	0.4	1.1	1.2	1.4	1.3	3.0	2.7
S	8.7	1.3	4.8	2.9	2.7	0.8	1.8	1.0	0.6	1.3	2.7
UK	7.5	4.2	2.5	2.0	2.7	2.5	1.8	1.6	1.3	0.8	1.2

(1) EU-15, B, DK, E, F, I, P, FIN, S and UK, estimates.
(2) EU-15 and IRL, estimates.
Source: Eurostat, Harmonized indices of consumer prices (theme2/price/hicp/haind).

Table SA.7

Share in total mean consumption expenditure by households, 1999 (%) (1)

COICOP	EU-15 (2)	B	DK	D	EL	E	F (2)	IRL	I	L	NL	A	P (2)	FIN	S	UK
Food and non-alcoholic beverages	16.1	13.3	13.1	11.1	16.6	18.3	16.2	15.4	19.0	10.1	10.5	13.4	21.2	14.2	15.4	10.5
Alcoholic beverages, tobacco and narcotics	2.8	2.3	4.2	2.8	3.5	2.7	2.7	7.7	1.9	2.0	2.1	2.6	2.8	2.9	2.9	3.0
Clothing and footwear	6.9	5.4	5.5	5.7	8.6	7.4	5.6	6.2	7.5	5.9	6.0	6.6	6.3	4.6	5.2	5.5
Housing, water, electricity, gas and other fuels	24.6	26.2	28.4	31.2	21.9	27.5	23.2	17.4	24.7	27.4	26.7	23.9	19.9	28.1	26.8	28.3
Furnishings, household equipment & maintenance	7.0	6.5	6.4	7.4	7.5	5.0	7.6	4.5	7.6	8.2	7.2	7.2	6.7	4.5	5.0	7.3
Health	3.1	4.7	2.4	3.6	6.3	2.5	5.2	1.6	4.4	2.4	1.1	2.4	4.6	3.7	3.0	1.1
Transport	13.1	12.5	14.1	13.3	11.2	12.5	14.5	13.0	13.7	15.4	10.3	14.4	15.7	17.0	13.4	13.6
Communication	2.0	2.2	2.1	2.5	3.3	2.0	2.0	2.5	2.5	2.1	2.2	2.6	2.0	2.8	2.6	2.3
Recreation and culture	9.4	10.7	11.2	11.9	4.5	6.2	7.6	9.1	6.3	8.7	10.4	12.3	3.7	10.7	14.6	13.4
Education	0.7	0.5	0.4	0.5	2.4	1.4	0.5	1.4	0.8	0.1	1.2	0.3	1.3	0.2	0.1	1.3
Restaurants and hotels	6.4	5.7	4.1	4.9	8.8	9.3	6.9	5.1	4.6	9.6	7.0	5.4	9.2	4.1	3.8	7.9
Miscellaneous goods and services	7.9	10.0	8.1	5.0	5.5	5.1	8.1	8.1	7.1	8.0	15.3	8.9	6.5	7.1	7.2	5.8

COICOP	EU-15 (2)	BG	CY	CZ	EE	HU	LT	LV	MT	PL	RO	SI	SK	AL
Food and non-alcoholic beverages	16.1	46.5	:	25.2	35.7	28.9	48.1	42.1	:	35.1	55.3	26.1	33.0	63.2
Alcoholic beverages, tobacco and narcotics	2.8	3.9	:	3.5	3.4	4.3	4.0	2.8	:	3.3	2.7	3.4	3.6	4.7
Clothing and footwear	6.9	8.2	:	7.7	7.7	6.6	8.0	7.1	:	7.0	7.4	8.4	10.3	2.7
Housing, water, electricity, gas and other fuels	24.6	14.2	:	17.1	18.7	19.5	12.3	17.0	:	18.4	15.3	10.7	12.4	3.4
Furnishings, household equipment & maintenance	7.0	4.4	:	7.8	5.4	5.4	4.8	4.2	:	5.5	4.3	6.8	6.4	12.4
Health	3.1	3.3	:	1.5	1.6	3.0	3.5	3.5	:	4.4	2.3	1.6	1.2	1.0
Transport	13.1	7.2	:	10.2	6.8	9.2	6.7	6.9	:	8.6	5.2	16.5	8.9	5.4
Communication	2.0	1.9	:	2.0	2.8	4.4	1.9	3.2	:	2.3	1.4	1.9	2.1	0.5
Recreation and culture	9.4	3.0	:	11.0	7.5	6.7	3.5	5.6	:	6.5	2.6	8.8	8.2	3.9
Education	0.7	0.6	:	0.6	1.2	0.4	0.3	1.0	:	1.3	0.6	0.7	0.5	0.3
Restaurants and hotels	6.4	3.5	:	5.0	3.5	3.0	3.8	2.5	:	1.3	0.8	5.9	5.8	0.5
Miscellaneous goods and services	7.9	3.3	:	8.4	5.7	8.6	2.9	4.1	:	6.3	2.1	9.2	7.6	2.0

(1) Classified according to the COICOP classification.
(2) 1994.
Source: Eurostat, Household Budget Survey (theme3/hbs/struc/s_glob).

Table SA.8

Consumer confidence (balance)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
EU-15 (1)	-15.8	-19.2	-25.7	-13.5	-8.0	-14.8	-10.2	-3.8	-2.5	1.2	-4.3	-8.8
B	-6.5	-13.3	-24.7	-10.3	-8.6	-13.1	-12.8	1.7	2.6	13.5	0.6	-2.7
DK	-4.0	-2.4	-2.6	11.3	14.3	8.0	14.0	10.3	4.3	11.3	9.2	8.8
D	-10.8	-15.4	-25.3	-10.9	-6.0	-19.9	-18.0	-5.1	-1.6	2.9	-3.3	-11.4
EL	-33.3	-37.0	-31.1	-29.6	-37.3	-27.3	-29.9	-34.8	-27.0	-15.3	-26.6	-27.8
E	-13.4	-25.9	-30.9	-16.3	-12.8	-9.4	-2.9	0.1	1.7	2.2	-4.0	-11.6
F	-28.2	-27.3	-29.9	-18.6	-13.8	-29.8	-21.5	-11.6	-8.7	-2.8	-11.1	-15.8
IRL	-23.8	-25.7	-20.8	-10.3	-4.6	-0.2	11.7	12.4	14.0	12.5	-1.6	-7.5
I	-15.4	-21.9	-31.9	-13.1	-5.3	-12.0	-14.1	-7.7	-9.9	-7.6	-2.8	-8.6
L	:	:	:	:	:	:	:	:	:	:	:	7.4
NL	-5.3	-4.5	-15.6	-2.3	7.2	7.9	19.5	23.2	19.3	24.4	3.8	-1.6
A	:	:	:	:	-6.7	-12.7	-9.2	-1.7	4.7	5.9	3.0	4.4
P	-3.8	-13.7	-33.2	-30.9	-22.8	-25.1	-13.7	-14.8	-14.1	-18.0	-24.2	-33.7
FIN	-14.1	-8.3	-8.3	8.8	11.8	12.0	18.3	18.2	17.4	19.7	11.9	13.2
S	:	:	:	:	2.0	-4.8	4.4	10.0	12.4	21.8	5.0	9.6
UK	-17.3	-17.0	-17.8	-15.8	-10.4	-5.5	3.2	-1.8	-3.6	-3.8	-4.6	-3.8

(1) Average of available data.
Source: Directorate-General for Economic and Financial Affairs, Business and consumer surveys (theme1/euroind/bs/bsco_m).

Table SA.9

Gross fixed capital formation as a percentage of GDP (%)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002 (1)
EU-15 (2)	21.9	21.2	19.9	19.8	19.8	19.6	19.4	19.9	20.2	20.6	20.1	19.4
B	21.0	20.7	20.0	19.5	19.9	19.9	20.4	20.6	20.9	21.2	20.8	19.7
DK	19.1	17.9	17.1	17.3	18.6	18.6	19.6	20.6	20.3	21.7	21.0	21.2
D	23.8	24.0	23.0	23.1	22.4	21.8	21.4	21.4	21.5	21.6	20.1	18.8
EL (2)	22.6	21.3	20.3	18.6	18.6	19.5	19.8	21.1	21.7	22.6	22.8	23.0
E	25.1	23.1	21.3	21.1	22.0	21.6	21.9	22.8	24.1	25.3	25.0	25.0
F	22.0	20.9	19.4	19.1	18.8	18.5	18.0	18.4	19.2	20.1	20.2	20.0
IRL	17.1	16.9	15.5	16.5	17.5	19.1	20.7	22.2	23.7	24.1	23.3	22.8
I	21.0	20.5	18.4	18.0	18.3	18.3	18.3	18.5	19.1	19.8	19.8	19.3
L	25.3	21.4	23.7	22.4	21.6	21.3	22.3	22.6	24.0	20.5	21.7	21.2
NL	21.9	21.6	20.7	20.3	20.3	21.1	21.5	21.5	22.5	22.5	21.9	20.9
A	24.2	23.7	23.2	23.5	23.3	23.3	23.6	23.6	23.5	23.9	23.2	22.5
P	24.9	23.7	22.2	22.3	22.8	23.3	25.6	26.9	27.4	28.6	27.5	25.8
FIN	24.4	19.9	16.4	15.5	16.3	17.0	18.0	18.7	19.0	19.2	19.8	19.4
S	20.6	18.0	15.3	15.1	15.5	15.7	15.2	16.0	17.0	17.3	17.5	17.0
UK	17.9	16.5	15.7	15.9	16.3	16.5	16.5	17.6	17.0	16.7	16.5	15.6
BG	18.2	16.2	13.0	13.8	15.3	13.5	11.0	13.0	15.1	15.7	17.8	18.3
CY (3)	:	:	:	:	19.2	20.4	19.0	19.2	18.1	17.6	17.3	16.0
CZ	24.1	27.9	28.4	28.7	32.0	32.0	30.6	29.1	27.8	28.3	28.3	27.2
EE	:	:	24.2	26.8	25.9	26.7	28.1	29.6	24.9	25.4	26.1	28.3
HU	20.9	19.9	18.9	20.1	20.1	21.4	22.2	23.6	23.9	24.2	23.7	22.9
LT	22.5	23.0	23.1	23.1	23.0	23.0	24.4	24.3	22.1	18.5	19.3	20.4
LV	6.2	11.2	13.8	14.9	15.2	18.3	18.8	27.3	25.2	26.5	27.3	26.2
MT	29.6	27.5	29.5	29.7	31.9	28.7	25.3	24.5	23.4	26.3	23.2	22.8
PL	19.5	16.8	15.9	17.9	18.6	20.7	23.5	25.2	25.5	24.9	21.5	19.4
RO	14.4	19.2	17.9	20.3	21.4	23.0	21.2	18.2	17.7	18.9	19.0	19.0
SI	20.6	18.6	18.8	20.1	21.4	22.5	23.4	24.6	27.4	26.7	24.9	24.7
SK	:	:	30.4	26.6	25.2	32.4	34.3	36.2	30.3	29.3	31.1	30.2
TR	23.8	23.6	26.5	24.6	23.8	25.1	26.4	24.6	21.9	22.4	17.8	17.5

(1) Forecast. (2) 1991-1994, estimates. (3) 1999 and 2000, provisional.
Source: Eurostat, National Accounts - ESA95 - aggregates (theme2/aggs).

Table SA.10

Business enterprise expenditure on R&D relative to GDP (%)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
EU-15 (1)	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.3	:
B (2)	1.1	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.4	1.5	:	:
DK (3)	1.0	1.0	1.0	:	1.1	1.1	1.2	1.3	1.3	1.3	:	:
D	1.8	1.7	1.6	1.5	1.5	1.5	1.5	1.6	1.7	1.8	1.8	:
EL (4)	0.1	:	0.1	:	0.1	0.1	0.1	:	0.2	:	:	:
E (5)	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	:
F (6)	1.5	1.5	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.4	:	:
IRL (7)	0.6	0.7	0.8	0.9	1.0	0.9	0.9	0.9	0.9	:	:	:
I (8)	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	:
L	:	:	:	:	:	:	:	:	:	1.2	:	:
NL (9)	1.0	0.9	1.0	1.0	1.0	1.1	1.1	1.1	1.1	:	:	:
A (10)	:	:	0.8	:	:	:	:	1.1	:	:	:	:
P	:	0.1	:	:	0.1	:	0.1	:	0.2	:	:	:
FIN (11)	1.2	1.2	1.3	1.4	1.5	1.7	1.8	1.9	2.2	2.4	2.7	:
S (10)	1.9	:	2.2	:	2.6	:	2.8	2.9	2.8	:	:	:
UK (12)	1.4	1.4	1.4	1.4	1.3	1.2	1.2	1.2	1.3	1.2	1.2	1.2

(1) Estimates. (2) 1992-2000, estimates. (3) 1992, 1996, 1999 and 2000, estimates. (4) 1991, 1993 and 1999, estimates. (5) 1996, 2000 and 2001, estimates.
(6) 1991 and 2000, estimates. (7) 1991-1998, estimates. (8) 1997-2001, estimates. (9) 1993 and 1999, estimates. (10) 1998, estimate.
(11) 2000, estimate; 2001, provisional. (12) 2000, estimate; 2001 and 2002, provisional.
Source: Eurostat, R&D expenditure at the national level (theme9/rd_ex_p/rd_nat/nat_exp/nat_exp).

Table SA.11

industrial confidence indicator (balance)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
EU-15 (1)	-13.1	-18.4	-25.4	-4.9	-1.3	-14.4	-3.9	-2.8	-8.3	3.2	-9.5	-11.8
B	-15.0	-20.4	-28.8	-6.3	-9.1	-17.8	-2.9	-7.8	-8.6	1.9	-14.0	-11.9
DK	-7.8	-7.3	-9.5	12.5	5.4	-8.7	5.5	-0.8	-12.9	5.7	-1.7	-4.0
D	0.7	-17.3	-33.3	-14.8	-5.9	-21.2	-10.1	-5.0	-14.4	-2.3	-14.8	-19.4
EL	-6.6	-3.7	-6.0	-0.1	3.8	-2.4	3.6	4.3	1.3	8.8	4.3	3.1
E	-21.8	-24.8	-34.8	-8.7	-3.3	-14.4	-1.4	1.4	-3.1	3.2	-4.2	-5.7
F	-21.0	-21.2	-34.4	-3.3	-2.3	-17.5	-5.3	5.3	-2.2	11.8	-4.0	-9.2
IRL	-8.8	-3.9	-12.8	2.5	7.1	-1.1	3.3	3.2	5.0	9.8	-7.7	-7.2
I	-12.6	-15.4	-17.6	1.3	6.4	-11.5	-0.3	0.3	-4.0	11.7	-2.8	-3.7
L	-24.1	-27.7	-25.0	-7.7	9.7	-22.0	4.2	6.7	-11.0	5.3	-15.5	-22.5
NL	-4.4	-6.3	-10.3	-0.9	1.5	-2.4	2.5	1.7	-0.4	4.1	-3.5	-4.8
A	-8.8	-17.4	-27.2	-7.5	-12.2	-23.9	-9.5	-8.6	-13.8	-2.8	-13.3	-16.3
P	-7.3	-11.8	-24.8	-3.9	-3.9	-9.6	0.4	2.2	-4.3	2.1	-5.8	-12.0
FIN	:	:	-4.5	18.2	7.8	-11.3	11.2	2.0	-3.8	17.4	-6.8	-5.7
S	:	:	:	:	:	-15.9	-0.9	3.1	-7.1	10.8	-18.7	-13.1
UK	-31.8	-23.6	-10.9	1.8	2.6	-5.1	-1.4	-15.5	-14.3	-6.6	-15.6	-14.6

(1) Average of available data.
Source: Directorate-General for Economic and Financial Affairs, Business and consumer surveys (theme1/euroind/bs/bssi_m).

Table SA.12

Capacity utilisation rates for total industry (%)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
EU-15 (1)	83.4	81.5	78.3	79.5	83.1	81.2	81.8	83.3	81.9	83.8	83.1	81.0
B	79.4	77.4	74.8	77.6	80.9	79.5	81.4	82.7	80.9	84.0	82.3	79.6
DK	81.0	79.7	77.7	81.8	83.4	81.7	83.3	85.5	82.2	82.5	82.8	81.2
D	88.2	84.8	78.8	80.2	84.6	82.2	83.2	85.5	84.0	85.9	85.1	82.0
EL	77.2	78.3	76.0	74.5	76.6	75.6	74.4	75.8	75.7	78.1	77.6	77.0
E	77.6	76.6	72.8	74.5	78.4	77.1	78.3	80.3	79.7	80.6	79.6	77.2
F	86.0	84.3	81.4	80.4	85.4	83.5	82.3	83.8	85.3	87.5	87.4	85.3
IRL	75.5	77.1	73.6	74.9	79.9	77.6	75.9	76.6	75.9	78.6	78.4	75.9
I	77.3	76.3	74.4	75.2	78.1	76.5	76.4	78.5	76.0	78.8	78.9	77.3
L	82.1	79.8	80.1	81.3	82.9	79.0	82.4	88.0	84.9	87.8	88.7	85.1
NL	84.6	83.5	81.0	82.4	84.4	83.9	84.4	85.3	84.0	84.7	84.6	82.9
A	:	:	:	:	:	80.2	82.0	83.7	81.9	84.5	83.1	80.6
P	79.1	77.4	73.9	77.3	79.7	78.9	80.9	81.4	80.8	81.2	81.7	79.4
FIN	:	:	82.3	86.9	87.7	83.2	87.2	88.9	86.1	86.8	85.7	82.7
S	:	:	:	:	:	85.0	85.7	85.1	85.8	87.5	83.6	83.1
UK	79.2	78.5	80.0	82.8	84.4	82.5	83.8	83.7	79.4	81.3	79.7	79.0

(1) Average of available data.
Source: Directorate-General for Economic and Financial Affairs, Business and consumer surveys (theme1/euroind/bs/bsin_q).

Table SA.13

Trade balance of goods (million EUR) (1)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
EU-15	:	-34 709	11 946	21 293	28 225	43 040	70 137	44 984	12 056	-59 965	-483
B/L	1 674	2 879	5 039	5 740	7 297	6 848	6 909	11 326	10 925	8 780	10 201
DK	4 135	5 738	6 672	6 397	5 093	6 077	4 741	3 450	6 038	7 387	7 768
D	15 405	21 563	35 171	42 970	48 814	54 737	62 097	68 572	65 815	61 995	98 875
EL	-8 160	-8 939	-9 015	-9 556	-11 092	-12 278	-13 647	-12 364	-16 901	-21 935	-21 302
E	-24 924	-23 304	-12 764	-12 426	-14 046	-12 818	-11 838	-18 391	-28 585	-37 778	-35 265
F	-7 602	1 857	6 349	6 719	8 417	11 784	23 728	23 437	18 791	-3 580	3 786
IRL	3 391	5 434	6 927	7 844	10 359	12 391	16 472	20 809	22 733	27 698	33 561
I	-155	2 414	28 236	29 865	33 680	47 796	41 412	31 854	22 051	10 360	17 783
NL	:	9 523	14 482	15 739	16 862	16 007	20 663	18 873	19 170	19 852	23 592
A	:	-7 900	-7 706	-8 924	-5 087	-5 734	-3 761	-3 268	-3 376	-2 990	-1 469
P	-6 350	-7 274	-6 806	-6 788	-6 860	-7 120	-8 709	-10 852	-12 943	-15 107	-14 507
FIN	:	2 915	5 342	6 339	9 443	8 856	10 136	11 157	11 453	14 896	14 142
S	:	5 216	6 442	8 059	12 301	14 660	16 067	15 180	15 806	16 460	15 220
UK	-14 670	-17 765	-17 257	-13 959	-13 975	-16 862	-17 827	-32 247	-41 552	-49 757	-53 924

(1) EU-15, trade with non-Community countries; Member States, trade with all partners (intra-EU and extra-EU).
Source: Eurostat, International trade in services (theme2/bop/its).

Table SA.14

Trade balance of services (million EUR) (1)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
EU-15	:	13 840	12 904	11 852	12 017	12 837	16 183	10 446	8 002	6 649	9 043
B/L	1 381	2 065	2 591	3 015	1 806	2 297	3 272	3 630	5 739	8 574	7 781
DK	2 240	1 775	1 397	447	544	1 020	293	-502	1 487	2 575	3 772
D	-18 208	-24 366	-28 878	-34 509	-35 012	-34 866	-36 445	-40 268	-49 039	-54 128	-56 940
EL	4 887	4 963	6 898	7 892	6 580	7 012	9 253	6 073	6 852	8 733	8 798
E	10 292	9 598	10 002	12 515	14 224	16 100	17 636	19 532	21 524	24 244	27 138
F	12 864	13 573	13 749	15 622	13 712	12 821	16 176	16 837	17 930	21 492	19 926
IRL	-945	-2 354	-2 526	-3 463	-4 808	-6 048	-7 945	-11 859	-10 688	-13 065	-16 357
I	-641	-2 688	706	1 594	1 301	1 599	1 772	3 582	1 104	1 142	362
NL	:	206	587	1 162	1 690	3 054	3 737	3 272	2 341	-939	-2 209
A	:	9 053	8 471	8 346	3 527	3 586	870	2 107	1 647	1 744	1 445
P	937	817	1 198	1 064	1 234	1 118	1 292	1 716	1 765	2 079	2 918
FIN	:	-1 896	-1 700	-1 189	-1 618	-988	-1 057	-930	-1 324	-2 442	-2 537
S	:	-2 191	-657	-838	-1 136	-1 421	-2 179	-1 952	-2 197	-3 419	-1 058
UK	4 766	6 632	6 885	5 587	8 440	11 793	18 096	18 725	17 904	19 423	17 806

(1) EU-15, trade with non-Community countries; Member States, trade with all partners (intra-EU and extra-EU).
Source: Eurostat, International trade in services (theme2/bop/its).

Table SA.15

Labour force characteristics, 2001 (1)

	EU-15	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Number of persons employed (thousands)																
Total	160 947	4 039	2 712	36 528	3 918	15 877	23 672	1 709	21 373	185	7 621	3 697	4 984	2 396	4 330	27 908
Male	92 447	2 338	1 457	20 376	2 431	10 007	13 043	1 014	13 358	111	4 570	2 063	2 731	1 256	2 267	15 425
Female	69 061	1 700	1 260	16 152	1 486	5 870	10 635	703	8 015	74	3 495	1 634	2 252	1 147	2 073	12 565
Activity rate (% share of persons employed aged 15-64)																
Total	69.0	63.6	79.2	71.3	62.1	64.2	68.6	67.6	60.3	64.1	75.7	70.7	71.7	77.1	78.1	75.2
Male	78.1	72.7	83.3	78.8	76.2	78.1	75.1	79.0	73.7	76.1	84.2	79.0	79.3	79.6	80.2	82.5
Female	60.0	54.5	75.0	63.7	48.8	50.3	62.3	56.0	47.1	52.0	66.9	62.3	64.5	74.7	76.0	67.7
Full-time and part-time work (% share of persons employed)																
Part-time	18.0	18.5	20.1	20.3	4.1	8.1	16.4	16.6	9.1	11.3	42.2	17.2	11.1	12.0	21.0	24.8
Full-time	82.0	81.5	79.9	79.7	95.9	91.9	83.6	83.4	90.9	88.7	57.8	82.8	88.9	88.0	79.0	75.2
Unemployment rate (% share of labour force aged 15-64)																
Total	7.4	6.2	4.2	7.8	10.4	10.4	8.6	3.7	9.7	1.8	2.1	4.0	4.1	10.4	4.8	4.7
Male	6.5	5.7	3.7	7.8	6.9	7.3	7.0	3.8	7.5	1.6	1.8	4.0	3.1	10.0	5.1	5.2
Female	8.5	6.9	4.8	7.8	15.6	15.2	10.5	3.5	13.1	2.2	2.5	4.1	5.3	10.8	4.4	4.1

(1) NACE Sections A to Q.
Source: Eurostat, Labour Force Survey.

Table SA.16

Average number of hours usually worked per week by persons aged 15-64, 2001 (hours)

NACE label (NACE code)	EU-15	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Total (A to Q)	37.7	37.5	36.4	36.8	43.3	40.1	36.9	37.7	39.0	38.2	31.7	38.4	40.1	38.4	36.9	38.1
Mining and quarrying (C)	42.3	38.6	:	39.6	41.9	40.1	39.1	42.0	40.0	:	38.0	38.0	42.4	:	:	51.0
Manufacturing (D)	39.2	39.0	37.2	37.4	43.7	40.8	37.8	39.5	40.4	40.2	35.2	38.5	40.8	39.3	38.3	42.3
Electricity, gas & water supply (E)	38.7	38.7	38.3	38.1	39.9	39.9	35.9	39.2	39.1	:	36.1	38.9	38.9	38.8	39.2	41.5
Construction (F)	41.2	40.5	40.0	40.0	43.8	41.1	39.4	42.1	41.6	40.3	39.5	39.4	41.8	41.5	39.8	44.5
Distributive trades (G)	37.6	39.7	34.9	35.5	45.9	41.5	37.9	35.4	42.3	38.9	30.4	36.5	42.2	37.4	36.5	34.4
Hotels and restaurants (H)	39.1	42.2	31.8	38.9	49.5	43.9	41.1	34.1	42.4	43.8	26.8	39.7	48.1	36.6	36.1	31.0
Transport, storage & communication (I)	40.2	40.1	38.6	39.3	47.5	42.3	37.2	40.2	40.2	39.1	35.0	39.9	41.8	39.7	37.9	43.2
Financial intermediation (J)	38.0	38.3	37.5	37.8	40.3	39.5	37.2	37.8	38.5	38.7	34.3	36.9	37.7	38.4	37.5	38.6
Real estate, renting & business activities (K)	37.9	38.4	38.0	36.6	43.1	38.2	37.8	38.1	39.2	38.3	33.8	36.1	40.0	37.4	37.6	39.5

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

Table SA.17

Unemployment rates (% share of labour force aged 15-64)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
EU-15	:	:	:	:	10.8	11.0	10.9	10.3	9.5	8.5	7.4
B	7.0	6.7	8.1	9.7	9.4	9.5	9.0	9.4	8.7	6.6	6.2
DK	9.2	9.2	10.9	8.1	7.0	6.9	5.4	5.1	5.2	4.5	4.2
D	5.3	6.4	7.7	8.8	8.2	8.9	9.9	9.9	8.9	8.0	7.8
EL	7.8	8.1	8.8	9.1	9.3	9.9	9.8	11.0	12.0	11.3	10.4
E	16.1	17.9	22.4	24.5	22.9	22.4	21.0	18.9	15.7	14.0	10.4
F	9.2	10.3	11.4	12.7	11.9	12.5	12.7	12.1	12.0	10.3	8.6
IRL	16.1	15.4	15.9	14.8	12.2	11.9	10.4	7.8	5.8	4.3	3.7
I	10.2	9.6	10.4	11.5	11.9	12.3	12.5	12.3	11.8	11.0	9.7
L	1.5	2.0	2.3	3.5	2.9	3.3	2.5	2.8	2.4	2.4	1.8
NL	7.3	5.6	6.3	7.2	7.2	6.5	5.6	4.4	3.6	2.7	2.1
A	:	:	:	:	4.4	5.3	5.2	5.5	4.7	4.7	4.0
P	4.1	4.1	5.5	7.0	7.4	7.7	6.9	4.9	4.9	4.1	4.1
FIN	:	:	:	:	17.2	15.7	15.1	13.3	11.8	11.2	10.4
S	:	:	:	:	8.2	9.7	10.5	9.1	7.7	5.5	4.8
UK	8.6	9.9	10.4	9.7	8.8	8.3	7.2	6.3	6.1	5.6	4.7

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

Food, beverages and tobacco

There has been a decline in the share of food in total household consumption expenditure evident in most European countries since the 1950s, as disposable incomes have grown. Comparable EU data are only available from 1995 to 2000, but even in this relatively short period of time average expenditure on food (excluding beverages) fell from 12.9 % of total household expenditure to 11.5 %. On average, each inhabitant in the EU spent EUR 1 446 on food in 2000.

The food products and beverages sector is generally less subject to economic cycles, as demand for necessity purchases of foodstuffs is usually quite inelastic. On the other hand, the part of demand for food products that is made up of discretionary purchases is often characterised by branded labels for which manufacturers are often able to charge premium prices and these products often exhibit rapid growth in demand.

Shopping patterns within the EU have changed considerably in recent years. It is now less common for people to purchase food on a daily basis and, especially in northern Europe, consumers tend to make less frequent trips and these are usually to large retail outlets. In southern Europe there is still a predominance of small, specialised retail outlets selling particular food items and shopping patterns are more likely to be on a daily basis - see Chapter 18 for more details.

STRUCTURAL PROFILE

Food products and beverages (NACE Division 15) is the second largest manufacturing sector in the EU economy. It generated EUR 142.4 billion of value added in 2001, while employing 2.74 million persons and thus accounted for 10.7 % of manufacturing value added and 11.5 % of manufacturing employment in 2001.

The importance of food products and beverages has grown relative to total manufacturing for both value added and the number of persons employed. Its share of total manufacturing employment rose by 1.2 percentage points between 1990 and 2001, while there was less of a shift in its contribution to manufacturing value added, which rose from 10.4 % in 1990 to 10.7 % by 2001.

Using estimates it is possible to rank the importance of food and beverages subsectors according to their value added. The largest activity in 2000 was other food products (NACE Group 15.8) which accounted for over one third (35 %) of the value added generated in the food products and beverages' sector (this group includes non-traditional food activities, where output is generally growing at a more rapid pace). Furthermore, it is important to bear in mind that until the next revision of NACE is complete, any non-defined or new activities are likely to be included in this subsector). Beverages (both alcoholic and non-alcoholic), which are classified within NACE Group 15.9, were the second largest subsector in terms of value added, followed by meat processing (NACE Group 15.1) and dairy products (NACE Group 15.5). None of the remaining subsectors accounted for more than 10 % of the value added generated in the food products and beverages' sector.

This chapter refers to the processing of food, beverage and tobacco products and excludes the agricultural activities of growing, farming, rearing and hunting (which are covered in NACE Division 01). NACE Division 15 covers food products and beverages, while Division 16 covers tobacco products. Data for the EU's tobacco sector are often confidential and this is why they have been omitted from this overview (statistics pertaining to the manufacture of tobacco products may be found within Subchapter 3.6).

NACE

15: manufacture of food products and beverages;
15.1: production, processing and preserving of meat and meat products;
15.2: processing and preserving of fish and fish products;
15.3: processing and preserving of fruit and vegetables;
15.4: manufacture of vegetable and animal oils and fats;
15.5: manufacture of dairy products;
15.6: manufacture of grain mill products, starches and starch products;
15.7: manufacture of prepared animal feeds;
15.8: manufacture of other food products;
15.9: manufacture of beverages;
16: manufacture of tobacco products.

Table 3.1

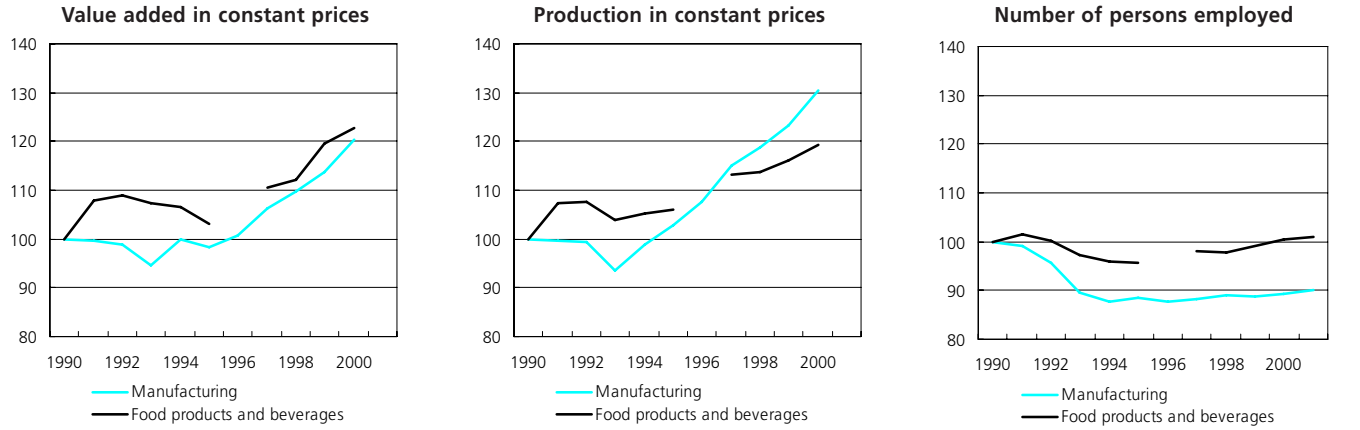
Manufacture of food products and beverages (NACE Division 15)
Main indicators in the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Production (million EUR)	461 706	476 079	466 458	478 729	494 665	:	537 231	537 830	543 943	564 428	593 721
Number of persons employed (thousands)	2 758	2 721	2 641	2 606	2 596	:	2 661	2 654	2 693	2 728	2 738
Value added (million EUR)	106 391	110 517	110 864	111 953	111 646	:	121 064	123 116	130 149	135 212	142 411
Personnel costs (million EUR)	63 055	65 335	65 440	66 448	66 914	:	71 855	72 049	76 000	77 698	77 630
App. labour productivity (thous. EUR/pers. emp.)	38.6	40.6	42.0	43.0	43.0	:	45.5	46.4	48.3	49.6	52.0
Simple wage adjusted labour productivity (%)	168.7	169.2	169.4	168.5	166.8	:	168.5	170.9	171.2	174.0	183.4

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

Figure 3.1

Manufacture of food products and beverages (NACE Division 15)
Main indicators in the EU (1990=100)



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

In employment terms the same subsectors headed the ranking, although the relative importance of other food products rose to almost 40 % and that of meat processing to over 20 %, whereas the beverages sector employed a considerably lower share of persons than its share of value added. Once again, none of the remaining subsectors accounted for more than 10 % of employment within the food products and beverages sector.

The highest share of value added was generated in the United Kingdom, which accounted for 22.2 % of the EU total in 2000, more than 2 percentage points ahead of Germany (19.8 %), which was followed by France (15.1 %) and Spain (10.1 %). Italy only accounted for 8.7 % of the EU's value added. However, this relatively low share may be explained in part by the fact that the data presented in this chapter only covers enterprises with 20 or more persons employed and so small, local manufacturers of regional specialities are not likely to be represented - see below for more information on SMEs.

The United Kingdom (4.2 percentage points difference), the Netherlands (1.5 points), Ireland (1.4 points) and Italy (1.0 points) all reported noticeably higher shares of value added than employment, suggesting levels of apparent labour productivity that were above the EU average.

The relative importance of the food products and beverages sector to EU national economies can be further illustrated through the fact that this sector generated more than 10 % of manufacturing value added in 9 of the 13 countries for which data are available [(1)]. This share rose to 15 % or more in Ireland, the Netherlands, Denmark and Greece.

[(1)] L and A, not available.

In Denmark, Greece, Spain, the Netherlands, Portugal and the United Kingdom food products and beverages was the largest manufacturing activity (at the NACE division level). The only countries where food products and beverages were not included among the three largest manufacturing NACE divisions were Germany, Luxembourg, Finland and Sweden.

The growth rate of EU value added in constant price terms (6.3 %) for food products and beverages was slightly below the manufacturing average (6.6 %) between 1999 and 2000. However, over the whole of the 1990s value added in constant prices for food products and beverages grew on average by 2.5 % per annum, compared to 1.9 % for manufacturing. The highest year-on-year growth rates for food products and beverages were registered in 1991 (8.0 %), 1999 (7.1 %) and 2000 (6.3 %) - again all data are in constant price terms.

Using estimates it is possible to indicate the subsectors within the EU's food products and beverages sector that grew at the most rapid pace during the 1990s. Between 1990 and 1999 the average growth of value added in constant price terms was highest for the meat processing sector (4.0 % per annum), followed by other food products (3.7 %). Two subsectors reported slower than average growth in the EU, namely fish processing and oils and fats, with real output for the latter decreasing.

The food products and beverages sector is very diversified, ranging from small and medium-sized enterprises, that are often family-owned, to major multinationals. In general terms, the vast majority of food and beverage enterprises are small and medium-sized and this is particularly the case in the southern Member States. However, the overall share of SMEs in total value added was just under 50 % in 1999, as large EU enterprises employing 250 or more persons generated some 51.7 % of total value added, while employing just 37.6 % of the workforce. The share of large enterprises in total value added was below one third (31.9 %) in Italy in 1999, while rising as high as 73.5 % in Denmark in 2000. Table 3.2 shows a ranking of the largest European food processing companies in 2001.

Table 3.2
Ten largest companies in the food processing industry in Europe, 2001

	Country	Sales (billion EUR)
Nestlé	CH	52.6
Unilever	NL/UK	32.1
Diageo	UK	19.0
Danone	F	14.5
Cadbury Schweppes	UK	8.9
Heineken	NL	8.1
Parmalat	I	7.8
Interbrew	B	7.3
Associated British Foods	UK	7.1
Tate & Lyle	UK	6.4

Source: CIAA.

LABOUR AND PRODUCTIVITY

There was a net gain of 22 900 jobs in the EU's food products and beverages sector between 1990 and 2001. The number of persons employed fell from 1991 to 1996 when employment bottomed out around 2.6 million persons. Between 1998 and 2001 there was growth of 3.2 % leading to a level of employment of 2.74 million persons employed.

By far the largest absolute expansion in employment was registered by the other food products' subsector, where a net gain of 139 400 jobs was recorded between 1990 and 2000, equivalent to average growth of 1.4 % per annum. There was also an expansion in the number of persons employed in the EU's meat processing subsector, with a net gain of 70 200 persons. Using a limited set of country information, the most rapid decline in employment was recorded by the oils and fats subsector, where the number of persons employed fell by 43.1 % between 1990 and 2000 [(2)]. Over the same period, the number of persons employed in the beverages' subsector was also reduced, by approximately 19 % [(3)].

Between 1995 and 2001 the share of the number of women working in the food products and beverages sector rose each year, except for 2000. Overall, the share of women in the EU's food products and beverages workforce rose from 36.2 to 39.0 %. The development of part-time work followed a similar trend, as the share of part-time employees in the total number of employees rose every year except for 1996 and 2000. By 2001, some 12.4 % of the EU's workforce in the food and beverages sector were working part-time. There was little change in the working status of the food and beverages workforce between 1995 and 2001. The share of employees in the total number of persons employed remained unchanged in 2001 at 89.4 %, while 8.3 % of the workforce were self-employed and just over 2 % of those employed were family workers.

(2) EL, F and S, data available from 1990-99; A, data available from 1991-98; B, IRL, L and NL, not available.
(3) EL, IRL, FIN and S, data available from 1990-99; A, data available from 1991-98; B, not available.

The EU's food products and beverages sector relies to a fairly high degree on automation and this can be demonstrated by the ratio of personnel costs relative to production value, which stood at 13.1 % in 2001, well below the manufacturing average of 18.3 %. Furthermore, during the period 1995-2001 there was a continued shift in production factors, as personnel costs grew by 16.0 %, while purchases of goods and services increased by 22.5 %.

Value added per person employed in the EU's food products and beverages sector was EUR 52 000 per person employed in 2001, slightly below the manufacturing average of EUR 56 000. Apparent labour productivity increased at a slightly slower pace than the manufacturing average between 1995 and 2001, rising by 21.0 %, compared to 23.4 % for manufacturing as a whole. However, with lower than average personnel costs and with personnel costs accounting for a lower share of production value, the EU' food products and beverages sector recorded simple wage adjusted labour productivity that was 183 % in 2001, compared to a manufacturing average of 161 %.

Table 3.3

Manufacture of food products and beverages (NACE Division 15)
Labour force characteristics (% of total employment)

	Female		Part-time		Self-employed	
	1996	2001	1996	2001 (1)	1996	2001 (2)
EU-15	36.5	39.0	11.1	12.4	7.7	8.3
B	31.9	31.1	7.9	11.9	9.1	4.2
DK	40.5	41.3	13.1	10.0	:	2.4
D	43.8	49.6	14.9	19.6	7.0	5.7
EL	32.3	34.7	:	3.9	19.3	15.5
E	28.2	31.7	4.7	4.0	13.4	12.4
F	38.3	39.4	9.4	10.1	9.9	9.5
IRL	24.2	27.7	7.0	8.9	:	:
I	30.2	32.3	6.4	6.9	8.3	19.8
L	:	34.7	:	:	:	:
NL	31.6	33.8	25.0	31.8	3.1	2.9
A	33.1	31.8	9.6	11.7	6.2	5.2
P	38.7	45.6	:	6.3	14.7	9.3
FIN	47.5	50.2	:	7.8	:	6.0
S	39.2	36.8	18.6	13.3	:	:
UK	34.9	34.8	13.6	13.5	2.0	:

(1) S, 2000; EL, 1999; P, 1998.
(2) DK and FIN, 1999.
Source: Eurostat, Labour Force Survey.

EXTERNAL TRADE

The EU exported EUR 46.0 billion of food products and beverages in 2001, while importing EUR 40.4 billion of goods. These figures represented 5.0 % of total manufactured exports and imports. The products that accounted for the highest share of EU exports in 2001 were beverages (CPA Group 15.9) and other food products (CPA Group 15.8), which together accounted for almost 56 % of all food products and beverages exported outside of the EU. Dairy products (CPA Group 15.5) also recorded a relatively high share of exports (11.3 %).

Fish products accounted for more than one quarter (27.2 %) of the EU's imports of food products and beverages in 2001, while a further 16.4 % of imports in value terms were made up of oils and fats.

External trade data by Member State shows that there was a considerably higher level of intra-EU trade than trade with non-Community countries. This could be expected for goods that may be perishable or goods that often have a low price-to-volume ratio. There were just three countries that reported that food products and beverages accounted for more than 10 % of their total manufacturing exports, Denmark, Greece and the Netherlands.

Six of the Member States ran a trade surplus for food products and beverages in 2001. Of these the largest was recorded in the Netherlands (EUR 10.8 billion), followed by France (EUR 7.7 billion) and Denmark (EUR 5.9 billion). Portugal and Italy both registered deficits of between EUR 2 billion and EUR 3 billion, while Germany (EUR 3.2 billion) and the United Kingdom (EUR 10.3 billion) were the only countries to report larger deficits.

While the EU's trade surplus (with non-Community countries) grew almost uninterruptedly between 1990 and 1997 to reach EUR 10.6 billion, there were subsequent reductions in 1998 and 1999, mainly as a result of a reduction in the level of EU exports to non-Community countries. In 2000 and 2001 the pace at which imports of food products and beverages entered the EU also quickened. The combination of these two effects resulted in the EU's trade surplus being reduced to EUR 5.5 billion by 2001.

As regards food and beverage exports from the EU, their most popular destination was the United States, whose share of EU exports rose from 16.2 % in 1991 to 20.1 % by 2001. There was a slight reduction in the importance of the next three largest export markets (Japan, Switzerland and Russia) over the same period.

Brazil supplanted the United States as the EU's most important origin of imports of food and beverages in 2001, accounting for 10.3 % of imports. The United States saw its importance as a supplier of food and beverages decline from 11.3 % in 1991 to 9.4 % in 2001. Argentina had a 7.2 % share of the EU's imports of food products and beverages in 2001, while no other country accounted for more than 4 % of the total.

Table 3.4

Food products and beverages (CPA Division 15)
External trade indicators for the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Extra-EU exports (million EUR)	26 046	27 759	30 646	34 085	36 340	37 731	42 255	40 885	39 225	44 436	45 962
Extra-EU imports (million EUR)	24 565	25 049	24 528	27 706	27 332	29 246	31 652	33 353	33 361	37 558	40 446
Trade balance (million EUR)	1 481	2 710	6 118	6 379	9 008	8 485	10 603	7 532	5 864	6 877	5 516
Cover ratio (%)	106.0	110.8	124.9	123.0	133.0	129.0	133.5	122.6	117.6	118.3	113.6

Source: Eurostat, Comext.

Table 3.5

Food products and beverages (CPA Division 15)
Extra-EU exports from the EU

	1991 (million EUR)	(%)	2001 (million EUR)	(%)	Change in export value 2001/1991 (%)	Change in export share 2001/1991 (% points)
Food products and beverages	26 046.1	100.0	45 962.2	100.0	76.5	-
Meat and meat products	3 792.1	14.6	4 840.4	10.5	27.6	-4.0
Processed and preserved fish and fish products	1 110.7	4.3	1 861.8	4.1	67.6	-0.2
Processed and preserved fruit and vegetables	1 338.2	5.1	2 578.6	5.6	92.7	0.5
Animal and vegetable oils and fats	1 366.5	5.2	2 712.9	5.9	98.5	0.7
Dairy products and ice cream	3 795.6	14.6	5 175.5	11.3	36.4	-3.3
Grain mill products, starches and starch products	1 351.8	5.2	1 884.2	4.1	39.4	-1.1
Prepared animal feeds	568.6	2.2	1 247.2	2.7	119.4	0.5
Other food products	5 815.3	22.3	12 297.0	26.8	111.5	4.4
Beverages	6 885.2	26.4	13 242.6	28.8	92.3	2.4

Source: Eurostat, Comext.

Table 3.6

Food products and beverages (CPA Division 15)
Extra-EU imports into the EU

	1991 (million EUR)	(%)	2001 (million EUR)	(%)	Change in import value 2001/1991 (%)	Change in import share 2001/1991 (% points)
Food products and beverages	24 564.8	100.0	40 445.8	100.0	64.6	-
Meat and meat products	3 882.5	15.8	6 028.6	14.9	55.3	-0.9
Processed and preserved fish and fish products	6 599.3	26.9	11 019.2	27.2	67.0	0.4
Processed and preserved fruit and vegetables	3 998.4	16.3	5 085.7	12.6	27.2	-3.7
Animal and vegetable oils and fats	4 164.8	17.0	6 620.4	16.4	59.0	-0.6
Dairy products and ice cream	713.9	2.9	1 320.1	3.3	84.9	0.4
Grain mill products, starches and starch products	1 108.4	4.5	794.2	2.0	-28.3	-2.5
Prepared animal feeds	226.0	0.9	985.9	2.4	336.2	1.5
Other food products	2 849.7	11.6	4 719.4	11.7	65.6	0.1
Beverages	1 021.9	4.2	3 809.1	9.4	272.8	5.3

Source: Eurostat, Comext.

3.1: MEAT

This subchapter covers all meat processing stages that follow on from animal rearing; in other words, the activities of slaughtering through to the preparation of meat for final consumption (NACE Group 15.1), including fresh, chilled, frozen, processed, dried, salted and smoked meats. The data presented also includes the treatment of hides and skins, the rendering of fats and the processing of animal offal.

There are a number of factors that influence the demand for meat. Health and dietary considerations have led to the substitution of red meats by poultry and non-meat products. From the mid-1990s onwards there were also a number of health scares relating to outbreaks of BSE and foot and mouth disease that reduced demand for meat and meat products. This period was also characterised by growth in markets for organic meat produce, helped by the introduction of labelling that guaranteed the quality and/or origin of products.

According to Eurostat's ZPA1 database, some 17.5 million tonnes of pigs were slaughtered in the EU in 2001. This figure was higher than the combined total of other meat types [4], as 7.3 million tonnes of bovines were put to slaughter, 943 000 tonnes of sheep and 74 000 tonnes of goats. The slaughtering subsector contracted and consolidated in 2000 and 2001, as the volume of meat slaughtered in the EU fell by 2.1 % and 1.9 %. Prodcom data indicate that 6.1 million tonnes of fresh and frozen chicken were prepared in the EU in 2000.

[4] No data available for poultry.

Table 3.7 shows the top 10 players in the meat processing subsector, together they accounted for approximately one quarter of the market. Consolidation in the meat processing subsector may be in response to the growing demands from retailers, notably large supermarket chains, who increasingly want to ensure quality and traceable products. Meat processors have reacted to these demands by integrating production systems to include livestock farmers, feed subsectors, slaughtering operators and distributors, so their bargaining power is increased as well as their ability to control and verify quality.

STRUCTURAL PROFILE

The value added generated by the EU's meat processing subsector was EUR 21.5 billion in 2000. This figure was equivalent to 15.9 % of the food products and beverages total, compared to a 15.2 % share in 1990. In employment terms the EU's meat processing subsector was relatively more important, as over one fifth (22.2 %) of the food and beverages workforce were employed processing meat in 2000 (compared to 19.7 % in 1990).

The United Kingdom generated the highest level of value added in the meat processing subsector in 2000, with EUR 4.7 billion, equivalent to 22.0 % of the EU total. The next largest producers were France (EUR 4.0 billion) and Germany (EUR 3.7 billion), while no other Member State generated more than 10 % of the EU's value added.

Table 3.7
Top ten players in the meat processing industry in Europe, 2001

	Market share (%)	HQ
Tulip/Danish Crown	4.0	DK/UK
Campofrio	3.5	E
Nestlé	3.0	CH/F/UK
Grampian Country Food	2.5	UK
Sarah Lee	2.0	B/F
Unilever	2.0	NL/UK
Barfuss	2.0	D
Madranges	2.0	F
Stockmeyer	1.5	D
Nolke	1.5	D

Source: http://www.meatnews.com, Meat Processing Global Top Companies.

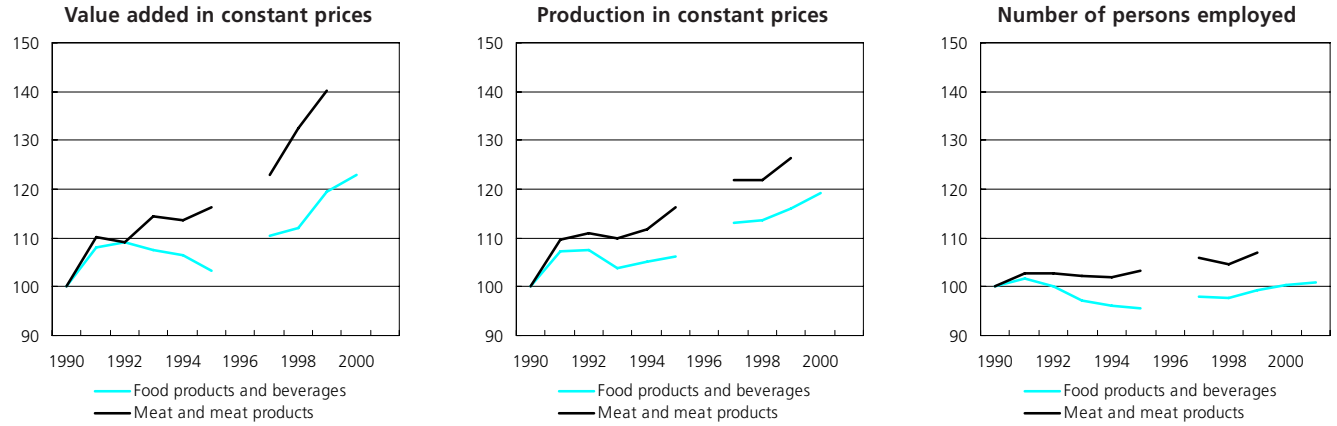
Table 3.8
Production, processing, preserving of meat, meat products (NACE Group 15.1)
Main indicators in the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Production (million EUR)	91 657	96 029	93 830	94 607	98 567	:	109 052	104 153	103 881	:
Number of persons employed (thousands)	549	549	545	544	551	:	566	558	571	604
Value added (million EUR)	16 354	16 761	17 348	17 079	17 492	:	19 522	20 095	20 578	21 524
Personnel costs (million EUR)	11 246	11 689	11 844	12 064	12 498	:	13 558	13 651	14 773	15 533
App. labour productivity (thous. EUR/pers. emp.)	29.8	30.5	31.8	31.4	31.7	:	34.5	36.0	36.0	35.6
Simple wage adjusted labour productivity (%)	145.4	143.4	146.5	141.6	140.0	:	144.0	147.2	139.3	138.6

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

Figure 3.2

Production, processing, preserving of meat, meat products (NACE Group 15.1)
Main indicators in the EU (1990=100)



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

Denmark was by far the most specialised country in terms of meat processing, with a particular specialisation in pork. The meat processing subsector in Denmark contributed more than three times the EU average to national manufacturing value added in 2000. As a share of the EU total, Danish manufacturers of meat products generated 5.5 % of value added in 2000. Other countries that displayed relative specialisation in this subsector included the United Kingdom, France, the Netherlands and Spain.

Specialisation in a certain type of meat may be driven by climatic/geological conditions that influence the type of farming that can be carried out. For example, there is a high concentration of beef output in Brittany, pork in Denmark and sheep and goat meat production in Spain.

In constant price terms the meat processing subsector saw its value added in the EU grow on average by 4.0 % per annum between 1990 and 1999 (compared to a food products and beverages average of 2.1 % per annum). Apart from 1992, the meat processing subsector reported a higher annual growth rate for value added than the food products and beverages sector as a whole, with the most rapid periods of growth in 1991, 1998 and 1999 (all in excess of 7 %).

Table 3.9

Production, processing, preserving of meat, meat products (NACE Group 15.1)
Value added specialisation ratio relative to total manufacturing (%)

	1990	1995	1999 (1)
EU-15	100.0	100.0	100.0
B	:	116.1	106.0
DK	414.4	400.1	329.9
D	61.7	61.5	65.6
EL	71.8	99.7	97.7
E	139.0	126.6	120.2
F	125.4	134.6	136.7
IRL	168.8	171.7	108.6
I	75.9	66.2	76.7
L	33.3	41.7	62.3
NL	121.4	122.9	132.7
A	:	91.7	85.9
P	:	:	78.6
FIN	161.6	122.5	99.7
S	108.8	104.7	75.5
UK	102.2	116.6	:

(1) NL, 1998.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

LABOUR AND PRODUCTIVITY

There were 604 300 persons employed in the meat processing subsector in the EU in 2000. This was equivalent to an overall increase of 13.1 % between 1990 and 2000. The apparent labour productivity of the meat processing subsector was relatively low (EUR 35 600 per person employed) compared to the average productivity for all food products and beverages (EUR 49 600). This difference was evident throughout the whole of the 1990s with the ratio between the two figures remaining constant. Although average personnel costs were somewhat lower than the food products and beverages average in the majority of countries, the simple wage adjusted labour productivity ratio of the EU's meat processing subsector (139 % in 2000) also remained below the food products and beverages average (174 %).

Denmark had the most productive meat processing subsector in relation to its own apparent labour productivity for total manufacturing in 2000. In fact, each person employed in the Danish meat processing subsector generated slightly more value added (EUR 51 600) as the manufacturing average (EUR 51 000). Within the other Member States, meat processing was always less productive than manufacturing as a whole. The differences were least in the southern Member States of Spain, Greece, Portugal and Italy (between 78 and 83 % of the manufacturing average), with most countries reporting a ratio of between 57 and 72 %. In Ireland (32 %) and Luxembourg (44 %) the meat processing sector reported apparent labour productivity that was less than half that of their respective manufacturing averages.

Table 3.10

Meat and meat products (CPA Group 15.1)
External trade indicators for the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Extra-EU exports (million EUR)	3 792	3 765	4 317	4 870	4 834	5 104	5 623	4 912	4 931	5 522	4 840
Extra-EU imports (million EUR)	3 883	4 207	4 034	4 578	4 493	4 631	5 022	4 653	4 576	5 493	6 029
Trade balance (million EUR)	-90	-442	282	292	342	473	601	259	355	29	-1 188
Cover ratio (%)	97.7	89.5	107.0	106.4	107.6	110.2	112.0	105.6	107.7	100.5	80.3

Source: Eurostat, Comext.

EXTERNAL TRADE

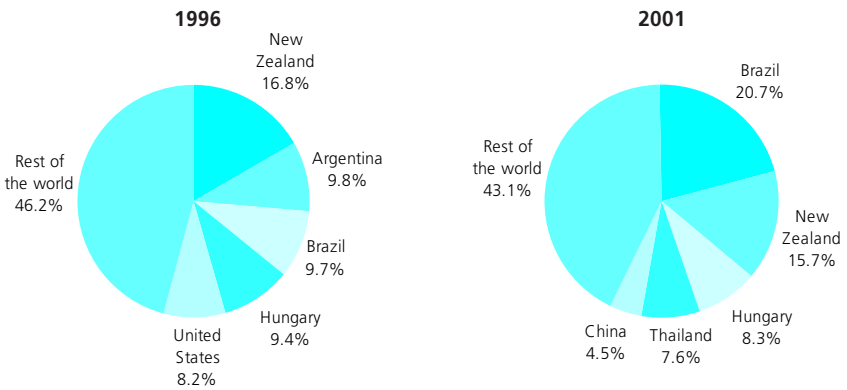
EU exports of meat products increased by 27.6 % overall between 1991 and 2001 to be valued at EUR 4.8 billion. Imports from non-Community countries grew at a more rapid pace, gaining 55.3 % to reach EUR 6.0 billion. From 1993 to 2000 the EU ran a trade surplus in meat products. However, this was overturned in 2001 as the EU registered a deficit of EUR 1.2 billion. This resulted from rapid import growth in 2000 (20.0 %) and 2001 (9.7 %) combined with the lowest level of exports since 1997 (probably a result of the BSE and foot and mouth crises). The level of meat exports from the United Kingdom fell from a high of EUR 2.0 billion in 1995 to EUR 900 million by 2001.

Meat exports accounted for 10.5 % of the EU's food and beverage exports in 2001, a share that declined from 14.6 % 10 years earlier. The relative importance of imports was somewhat higher at 14.9 % of the food and beverages total in 2001.

Denmark and the Netherlands ran by far the largest trade surpluses for meat products in 2001, EUR 3.7 billion and EUR 2.8 billion respectively. Almost 40 % of Danish food and beverage exports were made up of processed meat. Belgium, Ireland, Spain and France were the only other countries not to report a trade deficit for meat products, while Italy (EUR 3.4 billion) and the United Kingdom (EUR 3.7 billion) recorded the largest deficits.

Figure 3.3

Meat and meat products (CPA Group 15.1)
Origin of extra-EU imports



Source: Eurostat, Comext.

3.2: FISH

This subchapter includes information on the preparation and preservation of fish, crustaceans and molluscs (be they fresh, frozen, smoked, salted or canned) and the manufacture of prepared fish and seafood dishes, all included within NACE Group 15.2. The manufacture of fish soups and oils and fats derived from aquatic species are not included.

Demand for fish has grown with consumers becoming increasingly aware of the important contribution that it can provide towards a balanced diet. However, as fish stocks have declined significantly in recent years, the effects of the imbalance between supply and demand have been seen in escalating prices. EU output prices for the processing and preserving of fish rose by 20.8 % between 1995 and 2001, compared to an average increase of 6.3 % for all food products and beverages.

EU fish processing activities rely increasingly on non-Community imports or alternatively aquaculture for their supply of raw materials. This situation is unlikely to change in the medium term, as the European Commission adopted a Green Paper on the future of the common fisheries policy (CFP) in March 2001, followed by proposals for legislation in the areas of conservation and sustainable exploitation, scrapping fishing vessels and structural assistance. It is widely agreed that many fish stocks are outside biological safe limits after having been too heavily exploited (in particular cod, hake and whiting). The Commission aims to implement a series of measures, such as reducing the fishing fleet, using more selective nets to prevent the capture of young fish, or implementing closures for specific fishing areas where dense concentrations of young fish occur.

STRUCTURAL PROFILE

On the basis of available country information, the output of the EU's fish processing and fish products' subsector was EUR 2.8 billion in 2000 [5]. There were 93 600 persons employed in this subsector in 2000.

[5] EL, F, IRL and S, 1999; NL, 1998; A, not available.

In absolute terms the United Kingdom was the largest producer of fish products in 2000, accounting for almost one fifth (19.9 %) of the EU's value added in this sector. Germany, France and Spain all accounted for shares that were between 14 and 18 %. However, in relative terms Denmark was the most specialised producer of fish products in the EU, with the fish processing subsector contributing more than five (5.1) times the EU average to total manufacturing value added. Spain and Portugal were also highly specialised in fish processing, while Greece, the United Kingdom and Ireland were the only other Member States that were more specialised than the EU average.

LABOUR AND PRODUCTIVITY

Although at an aggregated level EU employment levels in the fish processing subsector were reduced at a fairly rapid pace during the 1990s, several countries bucked this trend. The majority of them had relatively small workforces (Ireland, Finland and Sweden) and in absolute terms, their net employment creation never surpassed 1 000 persons. However, there was also employment growth in the United Kingdom (3 600 extra jobs).

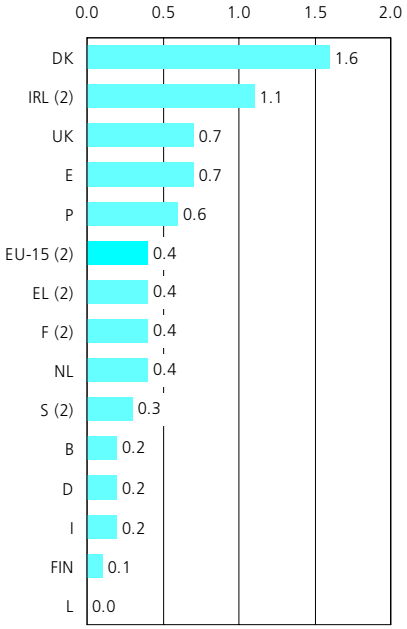
On the other hand, the 18 500 persons that were working in the German fish processing subsector in 1990 were reduced to just 8 600 by 1998, to recover somewhat to 10 600 by 2000 (an overall reduction of 42.9 %). The next largest declines were registered in the Iberian peninsula, with net losses of 1 500 persons in Portugal and 1 100 in Spain, equivalent to overall reductions of 22.1 % and 5.5 % between 1990 and 2000.

Apparent labour productivity in the fish processing subsector was generally lower than in manufacturing as a whole. Indeed, this observation held for each Member State for which data are available [6], except Italy, where apparent labour productivity in the fish processing subsector was 2.9 % higher than the manufacturing average. In most countries labour productivity ratios were between 60 % and 80 % of the manufacturing average. Considerably lower ratios were recorded in Finland (45.8 %), the United Kingdom (37.7 %) and Ireland (22.2 %), three countries where workforces had grown during the 1990s.

[6] L, NL and A, not available.

Figure 3.4

Processing and preserving of fish and fish products (NACE Group 15.2)
Share of number of persons employed in manufacturing, 2000 (%) (1)



(1) A, not available.
(2) 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Table 3.11

Processed and preserved fish and fish products (CPA Group 15.2)
External trade indicators for the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Extra-EU exports (million EUR)	1 111	1 075	1 147	1 305	1 409	1 473	1 610	1 581	1 534	1 685	1 862
Extra-EU imports (million EUR)	6 599	6 505	5 945	6 748	6 754	7 064	7 928	9 383	8 835	9 951	11 019
Trade balance (million EUR)	-5 489	-5 430	-4 798	-5 443	-5 346	-5 592	-6 318	-7 802	-7 301	-8 266	-9 157
Cover ratio (%)	16.8	16.5	19.3	19.3	20.9	20.8	20.3	16.8	17.4	16.9	16.9

Source: Eurostat, Comext.

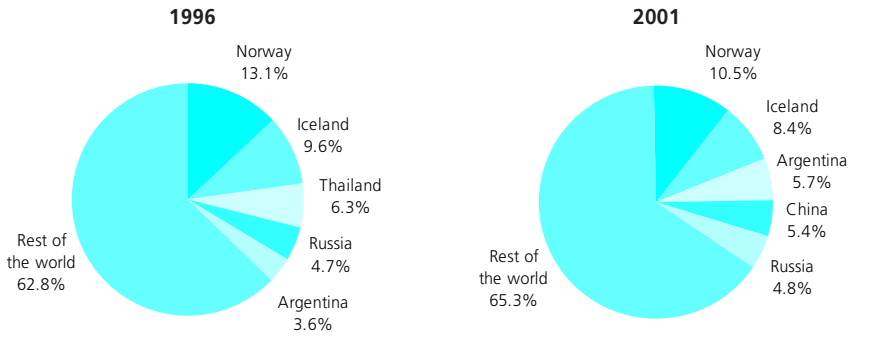
EXTERNAL TRADE

The EU runs a significant trade deficit with respect to fish products. From 1993 onwards the deficit grew almost continuously from EUR 4.8 billion to reach EUR 9.2 billion by 2001, pausing only in 1995 and 1999. At the level of individual countries, Denmark, Ireland and the Netherlands were the only three Member States to report a trade surplus for fish products in 2001, while all five of the EU's largest economies reported deficits in excess of EUR 1 billion (rising as high as EUR 2.1 billion in Italy). Other than in Finland, where there was almost no change in the trade balance, the trade deficit registered in each of the Member States worsened between 1991 and 2001.

Norway and Iceland together supplied almost one fifth (18.9 %) of the EU's imports of fish products in 2001. Their share of total imports decreased by almost 4 percentage points between 1991 and 2001. The most important changes in relation to the origin of imports between these two years concerned China, Russia, Namibia, Argentina and Morocco, whose respective shares of the EU market increased by at least a percentage point.

Figure 3.5

Processed and preserved fish and fish products (CPA Group 15.2)
Origin of extra-EU imports



Source: Eurostat, Comext.

3.3: DAIRY PRODUCTS

This subchapter includes the production of fresh milk, cream, butter, yoghurt, cheese, whey, ice creams and sorbets which are all classified within NACE Group 15.5. As with the rest of this chapter, the data presented does not cover activities within the confines of farms themselves, as these are considered as agricultural activities (NACE Class 01.21).

The dairy sector has a high degree of regional concentration, with production often located near to dairy farms which are usually in areas that offer meteorological and geological factors conducive to high milk yields. Examples include Brittany, Normandy and the Loire Valley (France); Bavaria and Württemberg (Germany); Veneto, Lombardia and Emilio Romagna (Italy); and the West Country, Shropshire, Cheshire and Lancashire (United Kingdom).

STRUCTURAL PROFILE

The EU's dairy products' subsector generated EUR 14.6 billion of value added in 2000 [7], equivalent to about 10.9 % of the food products and beverages total. It accounted for a slightly lower share of the food products and beverages workforce, employing 10.1 % of the total, some 273 000 persons [8].

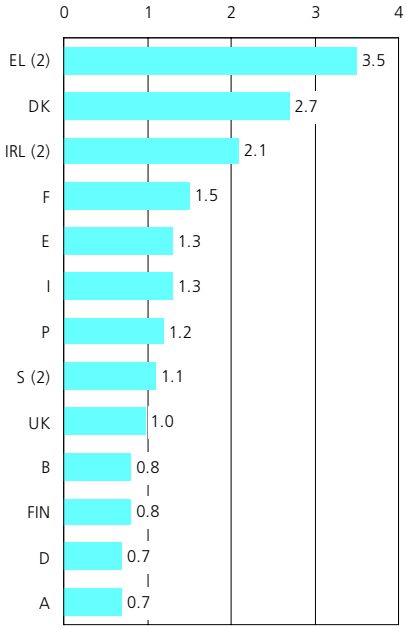
France was the largest producer of dairy products within the EU in 2000, generating EUR 2.8 billion of value added, one fifth of the EU total. However, Greece, Denmark, Ireland and the Netherlands were all more specialised in relative terms.

[7] EL, IRL and S, 1999; NL, 1997; L, not available.
[8] EL, IRL and S, 1999; L, not available.

Table 3.12 shows the evolution of three of the most common dairy products in volume terms between 1996 and 2002. There was rapid growth in the output of cheese during this period, rising to 7.4 million tonnes (an overall gain of more than 10 %). Milk production also expanded, although at a much slower pace, rising by 1.2 %. On the other hand, the production of butter in the EU decreased by 4.4 % during the period considered. In their review of prospects within the EU's dairy subsector [9], the European Commission's Directorate-General for Agriculture noted the likelihood that these trends would continue, with further declines in dairy herds and the output of butter and skimmed milk, while the production of cheese was forecast to continue growing.

[9] *'Prospects for agricultural markets in the European Union (2002-09), update for EU markets'*, European Commission Directorate-General for Agriculture, December 2002.

Figure 3.6
Manufacture of dairy products (NACE Group 15.5)
Share of value added in manufacturing, 2000 (%) (1)



(1) EU-15, L and NL, not available.
(2) 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Table 3.12
Production of milk and dairy products in the EU (million tonnes)

	1996	1997	1998	1999	2000	2001 (1)	2002 (1)
Drinking milk	29.8	29.5	29.7	29.7	29.6	30.1	30.2
Butter	1.9	1.8	1.8	1.8	1.8	1.8	1.8
Cheese	6.7	6.8	6.9	7.0	7.2	7.4	7.4

(1) Forecasts.
Source: EDA/ZMP.

Table 3.13

Dairy products and ice cream (CPA Group 15.5)
External trade indicators for the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Extra-EU exports (million EUR)	3 796	4 044	4 202	3 992	4 665	4 631	4 962	4 580	4 368	5 190	5 175
Extra-EU imports (million EUR)	714	707	790	817	872	836	920	961	984	1 115	1 320
Trade balance (million EUR)	3 082	3 337	3 412	3 175	3 794	3 795	4 041	3 619	3 383	4 075	3 855
Cover ratio (%)	531.7	572.2	532.2	488.5	535.3	553.9	539.1	476.6	443.8	465.5	392.0

Source: Eurostat, Comext.

LABOUR AND PRODUCTIVITY

Five Member States reported that apparent labour productivity in their dairy products' subsector was above their respective manufacturing average (Portugal, Spain, Germany, Greece and Italy), while only Ireland and Finland had productivity considerably below (less than 80 % of the manufacturing average).

EXTERNAL TRADE

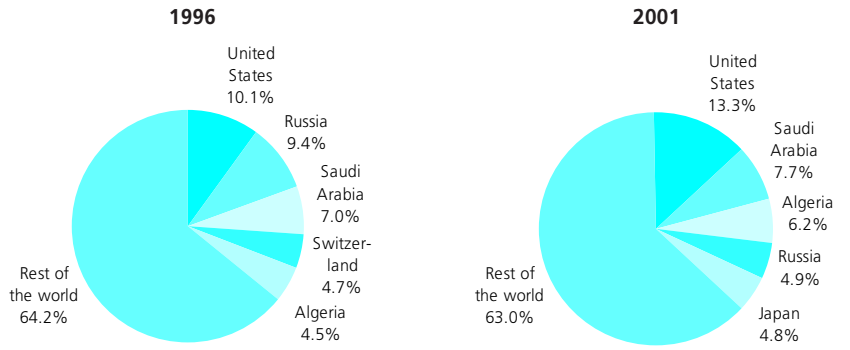
The share of dairy products in total EU exports of food products and beverages fell from 14.6 % in 1991 to 11.3 % in 2001. There was little change in the relative importance of dairy imports, which accounted for 3.3 % of total food and beverage imports in 2001.

Denmark, the Netherlands and Ireland were the most specialised exporters of dairy products within the EU in 2001, as they had been 10 years earlier, although the relative specialisation of the Netherlands and Ireland was significantly reduced.

Almost half of the EU's imports of dairy products in 2001 came from Switzerland and New Zealand, their joint share having decreased from 72.9 % some 10 years earlier. The main beneficiaries in terms of this switch in trading partners were Australia and several east European countries (notably Ukraine, Hungary, the Czech Republic, Estonia and Latvia).

Figure 3.7

Dairy products and ice cream (CPA Group 15.5)
Destination of extra-EU exports



Source: Eurostat, Comext.

3.4: MISCELLANEOUS FOOD PRODUCTS

This subchapter deals with five different NACE groups that are each treated separately: NACE Group 15.3 covers the processing and preserving of fruit and vegetables; Group 15.4, vegetable and animal oils and fats; Group 15.6, grain mill and starch products; Group 15.7, prepared animal feed; and Group 15.8, other food products (which includes, bread, sugar, confectionery, pasta, tea, coffee, homogenised and dietetic foods).

There have been significant shifts in the demand for many food items that have resulted from lifestyle choices, eating and shopping habits. They have led to increased demand for convenience foods, ready-made meals, as well as savoury snacks, chocolates and confectionery - all of which are included within this subchapter. Demand for miscellaneous food products is not exclusively in the form of final household consumption, as bakeries, biscuit makers and confectionery manufacturers are among the largest consumers of basic ingredients such as flour and sugar.

PROCESSING AND PRESERVING OF FRUIT AND VEGETABLES (NACE GROUP 15.3)

This subsector accounted for 6.3 % of the EU's value added generated within the food products and beverages sector in 2000, while its corresponding share of employment was 6.9 %. The average growth rate of EU value added in constant price terms between 1990 and 1999 for the processed and preserved fruit and vegetables subsector was 2.1 % per annum, slightly below the food products and beverages average of 2.5 %.

There were 186 900 persons employed in the processed and preserved fruit and vegetables subsector in 2000. This was equivalent to a 3.9 % net reduction compared to 1990. The majority of job cuts were made in the first half of the 1990s, as employment levels in the processed and preserved fruit and vegetables subsector grew by 3.2 %, 4.2 % and 1.9 % respectively in 1998, 1999 and 2000.

In keeping with the majority of food products and beverages subsectors, the apparent labour productivity ratio of the EU's processed and preserved fruit and vegetables subsector was somewhat lower than the manufacturing average in most countries. Only Austria, Portugal and the United Kingdom were able to record higher apparent labour productivity in 2000. In the majority of the remaining Member States, apparent labour productivity was between 70 and 90 % of the national manufacturing average.

Processed and preserved fruit and vegetables accounted for 5.6 % of the EU's exports of food products and beverages in 2001, a share that gradually rose from a low of 4.8 % in 1997. Processed and preserved fruit and vegetables were a more important component of EU imports, as they accounted for 12.6 % of total imports of food products and beverages in 2001. There were five countries that supplied the majority of the EU's imports of processed and preserved fruit and vegetables in 2001 (Brazil, Turkey, Poland, the United States and China). Each of them accounted for between 9 and 14 % of total imports.

Table 3.14

Processing and preserving of fruit and vegetables (NACE Group 15.3)
Main indicators in the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Production (million EUR)	26 992	27 721	26 351	27 199	27 476	:	29 709	32 130	35 329	:
Number of persons employed (thousands)	197	193	189	185	177	:	171	176	183	187
Value added (million EUR)	6 464	6 779	6 625	7 040	6 795	:	7 106	7 557	8 006	8 493
Personnel costs (million EUR)	4 041	4 126	4 090	4 136	3 936	:	4 274	4 456	4 723	4 877
App. labour productivity (thous. EUR/pers. emp.)	32.8	35.1	35.1	38.0	38.3	:	41.7	43.0	43.7	45.4
Simple wage adjusted labour productivity (%)	160.0	164.3	162.0	170.2	172.6	:	166.3	169.6	169.5	174.1

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

Table 3.15

Processed and preserved fruit and vegetables (CPA Group 15.3)
External trade indicators for the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Extra-EU exports (million EUR)	1 338	1 356	1 507	1 780	1 828	1 905	2 022	2 153	2 071	2 368	2 579
Extra-EU imports (million EUR)	3 998	3 894	3 593	3 991	4 023	4 339	4 333	4 556	4 916	5 205	5 086
Trade balance (million EUR)	-2 660	-2 538	-2 086	-2 211	-2 194	-2 434	-2 312	-2 403	-2 845	-2 837	-2 507
Cover ratio (%)	33.5	34.8	41.9	44.6	45.5	43.9	46.7	47.3	42.1	45.5	50.7

Source: Eurostat, Comext.

VEGETABLE AND ANIMAL OILS AND FATS (NACE GROUP 15.4)

The vegetable and animal oils and fats subsector was the smallest of the five NACE groups treated within this subchapter in terms of value added. An estimate based on available data suggests that this subsector generated approximately EUR 2.7 billion of value added in 2000 [10].

The output of margarine in the EU would appear to have peaked in the mid-1990s, since when production fell in the majority of Member States (see Table 3.16). The reduction in output of margarine between 1995 and 2000 was slightly under 20 %, such that the EU produced 2.1 million tonnes of margarine (and its derivatives) in 2000 [11]. The EU's output of oilseeds was 14.1 million tonnes in 2001, while the production of crude vegetable oils and fats stood at 9.0 million tonnes (see Table 3.17). Three crops (soya, rape and sunflower) made up 94 % of the EU's output of vegetable oils and fats, while they also accounted for 93 % of all oilseeds.

The vegetable and animal oils and fats subsector employed approximately 37 000 persons in 2000 [12], equivalent to 1.4 % of the total food products and beverages workforce. There was a significant decline in the number of persons employed in this subsector, as employment had stood at 67 000 in 1990.

[10] EL, F, IRL, A, P and S, 1999; L, 1998.
[11] EL and IRL, 1999; L, not available.
[12] EL, F, IRL, A and S, 1999; L, 1998; NL, not available.

Table 3.16

Production of margarine, fat spreads, three-quarter fat and half-fat margarine in the EU (tonnes)

	1990	1995	2000 (1)
EU-15 (2)	2 282 827	2 624 201	2 124 959
B	189 138	275 434	280 935
DK	108 700	100 000	62 666
D	560 570	591 361	535 656
EL	32 200	35 962	38 923
E	81 698	84 479	84 804
F	168 219	164 500	136 750
IRL	20 255	16 500	14 345
I	79 976	82 366	58 448
L	:	:	:
NL	255 640	340 334	268 930
A	48 135	48 536	43 472
P	60 019	41 905	49 830
FIN	37 756	85 400	23 700
S	110 539	134 975	137 800
UK	475 000	485 000	388 700

(1) EL and IRL, 1999; EU-15 is the sum of the latest period available for each country.
(2) Excluding L.
Source: IMACE (International Margarine Association of the Countries of Europe).

Table 3.17

Production of crude vegetable oils, fats and oilseeds in the EU, 2001 (thousand tonnes)

Total oilseeds	14 058
Soyabeans	1 205
Rapeseeds	8 845
Sunflower seeds	3 035
Cottonseeds	838
Linseeds	135
Total crude vegetable oils and fats	8 957
Groundnut	10
Soya	3 036
Rape	3 477
Sunflower	1 887
Cotton	105
Other liquid oils	23
Copra	18
Palmkernel	0
Other lauric oils	0
Linseed oil	175
Castor oil	8
Maize germ oil	205
Grape pips oil	13

Source: Fediol - EC Seed Crushers' and Oil Processors' Federation.

Oils and fats represented 16.4 % of the EU's imports of food products and beverages in 2001, while their share of exports to non-Community countries some 5.9 %. The EU's trade deficit for oils and fats fluctuated up until 1998 when it stood at EUR 2.1 billion, after which the deficit worsened for three successive years to EUR 3.9 billion in 2001.

The majority of the EU's imports of oils and fats in 2001 came from the two South American countries of Brazil and Argentina (29.4 % and 28.7 % respectively of total imports). The Asian countries of Indonesia, Malaysia, the Philippines, India and Papua New Guinea were also present among the 10 most important suppliers of oils and fats to the EU.

Table 3.18

Animal and vegetable oils and fats (CPA Group 15.4)
External trade indicators for the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Extra-EU exports (million EUR)	1 367	1 564	1 524	1 923	2 486	2 265	3 048	3 240	2 641	2 730	2 713
Extra-EU imports (million EUR)	4 165	4 133	4 397	5 212	4 810	5 172	5 364	5 341	5 230	5 797	6 620
Trade balance (million EUR)	-2 798	-2 569	-2 873	-3 289	-2 324	-2 907	-2 316	-2 101	-2 589	-3 067	-3 908
Cover ratio (%)	32.8	37.8	34.7	36.9	51.7	43.8	56.8	60.7	50.5	47.1	41.0

Source: Eurostat, Comext.

Table 3.19

Grain mill products, starches and starch products (CPA Group 15.6)
External trade indicators for the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Extra-EU exports (million EUR)	1 352	1 612	1 659	1 671	1 706	1 999	2 093	1 880	1 711	1 928	1 884
Extra-EU imports (million EUR)	1 108	1 185	1 129	1 260	1 152	898	778	813	734	799	794
Trade balance (million EUR)	243	427	530	411	555	1 100	1 315	1 067	977	1 129	1 090
Cover ratio (%)	122.0	136.0	146.9	132.6	148.2	222.5	268.9	231.2	233.2	241.4	237.3

Source: Eurostat, Comext.

GRAIN MILL AND STARCH PRODUCTS (NACE GROUP 15.6)

The EU's value added in this subsector was approximately EUR 4.6 billion in 2000 [13]. The United Kingdom produced more than one quarter (28.5 %) of the EU's output. Some 59 300 persons were employed in 2000 [14] in this subsector, which was equivalent to 2.3 % of employment within the EU's food products and beverages sector.

The EU ran a trade surplus for grain mill and starch products during the period 1991 to 2001. The surplus peaked in 1997 at EUR 1.3 billion and subsequently fell back to EUR 1.1 billion. In 1991 the United States accounted for 76.5 % of the EU's imports of grain mill and starch products, a share that was reduced to 27.6 % some 10 years later, in part due to the rapid growth of imports originating from Thailand and India.

[13] EL, IRL and S, 1999; NL, 1998; L, not available.
[14] EL, IRL and S, 1999; L and NL, not available.

PREPARED ANIMAL FEED (NACE GROUP 15.7)

The manufacture of prepared animal feed is estimated to have generated around EUR 5.6 billion of value added in 2000 [15]. The United Kingdom was the largest producer in the EU, accounting for slightly more than one fifth (21.6 %) of total output. There were approximately 91 000 persons employed in this subsector in the EU in 2000 [16].

The importance of prepared animal feed in total EU imports of food products and beverages grew at a fairly rapid pace (from a low initial level) during the 1990s. This may be due to changes in the supply of animal feed that were induced by the BSE and foot and mouth epidemics. By 1997 just over 3.0 % of the EU's imports of food products and beverages were composed of animal feed (compared to just 0.9 % in 1991). There was a subsequent reversal of this trend, and by 2001 the share had fallen to 2.4 %.

[15] EL, IRL, L and S, 1999; NL, 1998.
[16] EL, IRL, L and S, 1999.

OTHER FOOD PRODUCTS (NACE GROUP 15.8)

In contrast to many food products the other food products' subsector is often characterised by product differentiation and extensive marketing campaigns for new goods (such as ready-made foods, biscuits and confectionery). In 2000, the value added of the other food products' subsector was double that of the other four NACE groups covered in this subchapter, reaching EUR 47.2 billion. In employment terms the weight of this subsector was even more important, with almost 40 % of the EU's food products and beverages' workforce.

Table 3.20

Manufacture of other food products (NACE Group 15.8)
Main indicators in the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Production (million EUR)	98 497	104 568	106 035	110 734	113 462	:	:	137 061	139 897	:	:
Number of persons employed (thousands)	940	943	921	918	896	:	:	1 049	1 072	1 069	:
Value added (million EUR)	31 438	33 357	34 471	35 652	35 166	:	:	41 929	45 616	47 227	:
Personnel costs (million EUR)	19 402	20 462	20 512	21 164	21 560	:	:	25 143	26 671	27 876	:
App. labour productivity (thous. EUR/pers. emp.)	33.4	35.4	37.4	38.8	39.2	:	:	40.0	42.5	44.2	:
Simple wage adjusted labour productivity (%)	162.0	163.0	168.1	168.5	163.1	:	:	166.8	171.0	169.4	:

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

The average growth rate of value added in constant prices within the EU's other food products' subsector (3.7 % per annum) was considerably higher than that recorded for the whole of food products and beverages (2.5 %) between 1990 and 1999 [17].

In more detail, Italy was by far the leading producer of dried pasta in 2000, with just over 3 million tonnes of output. This was more than 10 times the levels recorded in France, Germany or Spain (see Table 3.21).

Within the sugar confectionery subsector the EU produced 1.8 million tonnes of output in 2001. Germany was the leading producer, accounting for more than one quarter (27.6 %) of the EU's production (see Table 3.22). Some 2.7 million tonnes of chocolate products were produced in the EU in 2001. Germany was again the main producer and it's share of EU output was even more pronounced, rising slightly above one third (33.7 %). In the EU's biscuits and baked goods subsector some 5.9 million tonnes of output were registered in 2001, with the United Kingdom the largest single producer, accounting for almost one third of the EU's production (32.7 %) in 2001.

[17] It is important to remember that this NACE activity is a residual group containing miscellaneous activities that are not classified elsewhere and that some of the increase may be due to the classification of new food or beverage sectors within this group.

The number of persons employed in the other food products' subsector increased by 15.0 % between 1990 and 2000 in the EU. During the late 1990s the workforce grew to just over one million persons. There were net employment gains recorded in the majority of Member States during the 1990s, with the exception of Ireland, Finland and the United Kingdom [18].

After having doubled during the first half of the 1990s, the EU's trade surplus for other food products fluctuated until 1999 when it stood at EUR 5.3 billion. Subsequent year-on-year growth of around 20 % was recorded in both 2000 and 2001, when the surplus reached EUR 7.6 billion.

[18] B and P, not available.

Table 3.21

Main indicators for industrial dried pasta, 2000

	Production (tonnes)	Consumption per inhabitant (kg)
B/L	99 500	5.4
DK	:	2.0
D	258 006	5.5
EL	112 000	8.6
E	200 000	4.8
F	262 700	7.4
IRL	:	1.0
I	3 003 322	28.0
NL	:	4.4
A	25 650	4.0
P	68 000	6.8
FIN	:	3.2
S	22 000	6.5
UK	:	2.8

Source: UNAFPA - Union of Organisations of Manufacturers of Pasta Products in the European Community.

Table 3.22

Production of sugar confectionery, chocolate products, biscuits and baked goods, 2001 (tonnes)

	Sugar confectionery	Chocolate products	Biscuits and baked goods
EU-15 (1)	1 751 565	2 733 445	5 899 275
B	72 495	161 940	402 760
DK	52 925	32 960	116 370
D	483 880	921 725	734 000
EL	18 000	26 000	55 500
E	214 875	123 735	484 950
F	203 095	372 015	743 220
IRL (2)	18 500	35 705	29 200
I	120 750	229 200	870 500
L	:	:	:
NL	130 315	195 815	330 140
A	21 565	73 575	71 560
P (3)	2 880	4 390	32 745
FIN	33 455	28 280	74 145
S	69 390	48 380	23 700
UK	309 440	479 725	1 930 485

(1) Excluding L; sum of the latest period available for each country.
(2) 2000.
(3) 1998, except for chocolate products.
Source: CAOBISCO.

Table 3.23

Other food products (CPA Group 15.8)
External trade indicators for the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Extra-EU exports (million EUR)	5 815	6 353	7 430	8 755	9 568	9 833	11 021	10 954	9 822	11 289	12 297
Extra-EU imports (million EUR)	2 850	2 993	3 126	3 449	3 584	3 851	4 181	4 401	4 514	4 879	4 719
Trade balance (million EUR)	2 966	3 360	4 303	5 307	5 983	5 982	6 840	6 552	5 308	6 410	7 578
Cover ratio (%)	204.1	212.3	237.6	253.9	266.9	255.3	263.6	248.9	217.6	231.4	260.6

Source: Eurostat, Comext.

3.5: BEVERAGES

NACE Group 15.9 covers both alcoholic and non-alcoholic beverages. As such, the data presented in this subchapter include mineral waters, soft drinks, beer, wine and spirits. However, they do not include fruit and vegetable juices (NACE Class 15.32) or the processing of tea and coffee (NACE Class 15.86).

Most alcoholic beverages are mature markets that are characterised by a slow decrease in their levels of consumption. In the face of these trends, manufacturers are increasingly turning to product differentiation with the hope that the introduction of new lines will create higher added value and renew growth. There are a number of examples of this trend, such as branded beers and '*alcopops*', the majority of which are aimed at young consumers.

Multinationals increasingly dominate the soft beverages and beer subsectors. In contrast to many food products these segments are often characterised by high advertising budgets. Furthermore, a good distribution network is often essential for the success of a product, be it sold in a place of entertainment or through a retail outlet. Brewers often control a network of outlets which exclusively sell their own beers alongside other drinks.

Table 3.24
Consumption of soft drinks in the EU (million litres)

	1995	1996	1997	1998	1999	2000	2001
Carbonates	24 739	24 502	25 478	25 738	26 723	27 375	27 836
Packaged water	29 094	28 863	30 214	31 375	32 907	34 516	36 168
Fruit juices and nectars	7 928	8 012	8 256	8 377	8 547	8 992	9 108
Other soft drinks (1)	8 785	9 773	9 108	9 302	9 859	10 076	10 458

(1) Includes still fruit drinks, fruit squashes / syrups, fruit powder, iced tea and coffee, sports and energy drinks.
Source: UNESDA - Union of EU Soft Drinks Associations.

Table 3.25
Main indicators for beer, 2000

	Number of active breweries (units)	Total beer production (thousand hl)	Consumption per inhabitant (litres)
B	113	14 734	99.0
DK	12	7 460	102.2
D	1 270	110 429	125.5
EL	6	4 405	40.0
E	22	26 414	71.8
F	20	18 926	36.2
IRL	6	8 710	125.0
I	16	12 575	28.1
L	4	438	108.2
NL	16	25 072	82.8
A	59	8 750	107.7
P	7	6 881	64.6
FIN	6	4 600	78.4
S	33	4 495	56.4
UK (1)	69	55 279	95.4

(1) Excluding small and micro breweries.
Source: The Brewers of Europe.

STRUCTURAL PROFILE

The EU's beverages subsector generated about EUR 27.3 billion of value added in 2000 [19], almost a quarter of which was accounted for by the United Kingdom, which was one of five countries that stood out as being comparatively specialised in the manufacture of beverages (Greece, Spain, Ireland and Portugal being the others). In Greece, the beverages sector accounted for 6.8 % of manufacturing value added in 1999, more than three times the EU average.

Table 3.24 shows that all four segments of the soft drinks market that are detailed grew between 1995 and 2001, according to the Union of EU Soft Drinks Associations (Unesda). The most rapid increase was recorded for packaged water, which was also the largest product segment in volume terms.

The structure of the beer subsector in the EU has been generally characterised by consolidation and merger activity. Nevertheless, there were still 1 300 breweries in Germany in 2000, as the sector continued to be based around local markets. Germany was by far the largest producer of beer in the EU, with an output of 110 million hl, which was double that of the United Kingdom (see Table 3.25).

LABOUR AND PRODUCTIVITY

There were 311 000 persons employed in the EU's beverages subsector in 2000 [20]. This marked a fairly sizeable net reduction of 73 000 persons when compared to the level of employment in 1990, equivalent to a 19 % decrease.

The apparent labour productivity of the beverages subsector was particularly high and was found to be above the national manufacturing average in every Member State, sometimes more than twice as high (Portugal and the United Kingdom).

Average personnel costs were, with the exception of Luxembourg (82 % of the average), also higher than national manufacturing averages in every Member State. The norm was to find personnel costs up to 20 % higher than average, although in Greece, Spain, Ireland and Portugal the difference was greater.

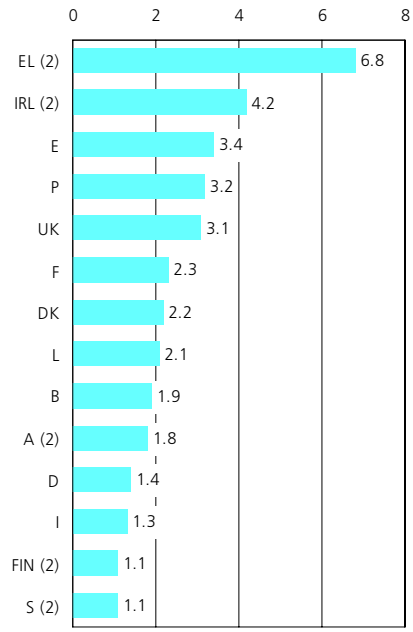
Combining these two ratios allows the measure of simple wage adjusted labour productivity to be calculated. In the majority of Member States this ratio showed that for each unit of personnel costs at least two units of value added were generated. In the five countries (Belgium, Denmark, Germany, Austria and Sweden) where this was not the case, the simple wage adjusted labour productivity ratio remained relatively high, as only Austria reported a value below the average for the whole of its manufacturing sector.

[19] EL, IRL, A, FIN and S, 1999; NL, 1997.

[20] EL, IRL, A, FIN and S, 1999.

Figure 3.8

Manufacture of beverages (NACE Group 15.9)
Share of value added in manufacturing, 2000 (%) (1)



(1) EU-15 and NL, not available.
(2) 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

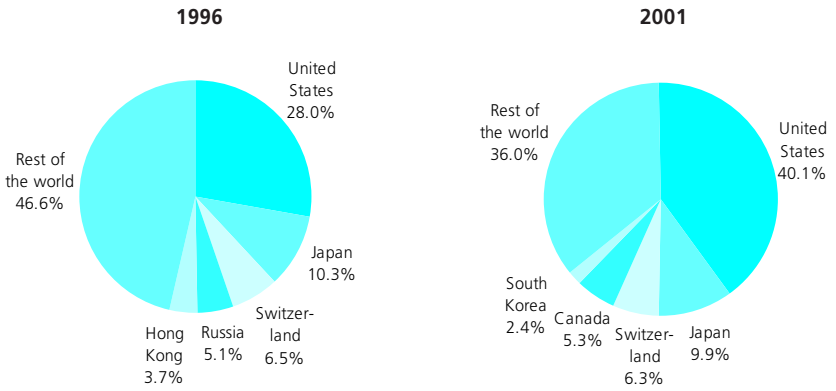
EXTERNAL TRADE

The EU ran a sizeable trade surplus for beverages in 2001 that was valued at EUR 9.4 billion, equivalent to a 60 % increase on 10 years earlier. The EU exported beverages to the value of EUR 13.2 billion, with France the leading exporter in the EU. The main trading partner of the EU was the United States, that accounted for more than 40 % of the EU's exports in value terms (a considerable increase compared to just five years earlier when the share of the United States had stood at 28 %).

While the value of the EU's imports of beverages was considerably lower than that of its exports, the pace at which the level of imports grew was faster between 1991 and 2001. The United States, Australia, Chile, South Africa and the Bahamas together accounted for almost three quarters of the EU's imports in 2001.

Figure 3.9

Beverages (CPA Group 15.9)
Destination of extra-EU exports



Source: Eurostat, Comext.

Table 3.26

Beverages (CPA Group 15.9)
External trade indicators for the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Extra-EU exports (million EUR)	6 885	7 264	7 972	8 875	8 838	9 491	10 697	10 091	10 958	12 468	13 243
Extra-EU imports (million EUR)	1 022	1 157	1 230	1 323	1 307	1 601	2 015	2 286	2 673	3 202	3 809
Trade balance (million EUR)	5 863	6 107	6 742	7 552	7 531	7 890	8 682	7 805	8 285	9 266	9 433
Cover ratio (%)	673.8	627.7	648.1	670.7	676.3	592.7	531.0	441.4	410.0	389.4	347.7

Source: Eurostat, Comext..

3.6: TOBACCO

NACE Division 16 covers the manufacture of all tobacco products, namely cigarettes, cigarette tobacco, cigars, pipe tobacco, chewing tobacco and snuff. The activities of growing and preliminary processing of tobacco are not included in the information presented, as they form part of the agricultural sector.

Faced with stagnating levels of consumption within developed economies, multinational tobacco manufacturers have been forced to turn their attention to new markets. The reduction in tobacco consumption in the EU may be associated with smoking bans, health education campaigns, bans on tobacco advertising, as well as higher indirect taxation on tobacco products. The harmonised index of consumer prices in the EU for tobacco products rose by 32.6 % overall between 1995 and 2001, compared to an all-items average increase of 11.5 %.

STRUCTURAL PROFILE

The tobacco subsector generated approximately EUR 7.8 billion of value added in 2000 [21]. The main tobacco product is the cigarette, accounting for around 90 % of all tobacco consumption. Within the EU there were 742 billion cigarettes made in 2000, with Germany, the Netherlands and the United Kingdom the main centres of production (see Table 3.27). In the same year the Netherlands was the leading producer of cigars and hand-rolled tobacco, while Belgium and Luxembourg produced more than half of the 22 000 tonnes of pipe tobacco processed in the EU.

[21] EL, IRL, P, FIN and S, 1999; NL, 1997; L and A, not available.

Table 3.27

Production of tobacco products, 2000

	Production of cigarettes (million pieces)	Production of cigars (million pieces)	Production of pipe tobacco (tonnes) (1)	Production of hand rolling tobacco (tonnes)
EU-15 (2)	742 143	7 053	21 730	74 594
B/L	19 739	47	12 651	:
DK	11 018	306	4 625	:
D	206 770	1 861	791	28 725
EL	41 989	:	13	:
E	68 597	981	19	147
F	38 240	625	1 478	2 675
IRL	7 000	60	:	6 216
I	44 300	88	67	:
NL	123 071	2 300	350	30 700
A	25 431	21	:	:
P	20 383	:	:	:
FIN	3 500	1	:	800
S	6 000	0	400	500
UK	126 105	763	1 335	4 831

(1) B/L and EL, includes hand rolling tobacco.
(2) Sum of available country data.
Source: CECCM, most recent figures provided by national manufacturers' associations as of March 2002.

LABOUR AND PRODUCTIVITY

There were slightly more than 51 000 persons employed in the EU's tobacco subsector in 2000 [22]. Apparent labour productivity was above the average recorded for the manufacturing sector in every Member State except Italy and Finland, often by a significant amount (for example, at least three times as high in Denmark, Portugal and the United Kingdom).

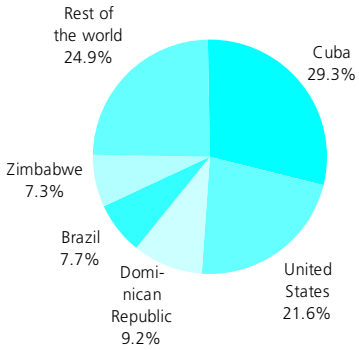
Average personnel costs in the tobacco subsector were in general higher than national manufacturing averages. Only in Belgium, Italy and Sweden did employees earn less than the manufacturing average [23].

[22] EL, IRL, FIN and S, 1999; L, NL and A, not available.
[23] IRL, FIN and S, 1999; EL and F, 1998; DK, L, NL and A, not available.

EXTERNAL TRADE

There is a very low level of official trade in tobacco products. In 2001, this subsector accounted for 0.03 % of manufactured imports and 0.2 % of manufactured exports to non-Community countries. The EU's principal export markets for tobacco products are in Asia and the Middle East, while the majority of the EU's imports originate from either Cuba or the United States.

Figure 3.10
Tobacco products (CPA Division 16)
Origin of extra-EU imports, 2001



Source: Eurostat, Comext.

Table 3.28
Tobacco products (CPA Division 16)
External trade indicators for the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Extra-EU exports (million EUR)	1 218	1 446	1 422	958	857	1 299	1 999	1 902	1 955	1 994	1 879
Extra-EU imports (million EUR)	571	592	949	923	404	386	204	219	207	256	258
Trade balance (million EUR)	647	854	473	35	453	912	1 794	1 683	1 747	1 738	1 621
Cover ratio (%)	213.3	244.3	149.8	103.8	212.2	336.2	978.2	869.0	942.5	779.7	728.9

Source: Eurostat, Comext.

Table 3.29

Production, processing, preserving of meat, meat products (NACE Group 15.1)
Main indicators, 2000

	B	DK	D	EL (1)	E	F	IRL (1)	I	L	NL	A	P	FIN	S (1)	UK
Production (million EUR)	4 112	4 837	18 864	473	11 381	24 632	3 210	11 157	87	7 799	1 754	1 539	1 794	2 421	17 738
Number of persons employed (thousands)	17	23	113	5	67	125	14	39	1	24	11	16	11	14	125
Value added (million EUR)	815	1 185	3 717	134	2 021	3 972	509	1 710	25	988	425	259	452	520	4 741
Purchases of goods and services (million EUR)	3 775	3 954	16 697	427	10 024	22 604	3 029	10 588	69	7 067	1 507	1 418	1 711	2 162	14 117
Personnel costs (million EUR) (2)	535	849	2 866	67	1 271	3 256	294	1 102	23	702	317	169	343	469	3 279
Gross investment in tangible goods (million EUR) (3)	132.4	:	505.5	:	494.9	:	104.3	367.3	:	:	71.1	76.0	80.1	221.1	:
App. labour productivity (thous. EUR/pers. emp.)	47.0	51.6	33.0	29.3	30.1	31.8	35.4	43.6	29.7	41.6	38.3	15.8	40.8	38.0	38.0
Simple wage adjusted labour productivity (%) (2)	152.5	135.3	129.7	135.8	159.0	124.5	173.3	155.2	108.9	140.6	134.2	153.7	131.9	110.9	144.6
Gross operating rate (%) (2)	6.1	6.8	4.2	5.1	6.4	3.0	6.5	5.0	2.3	3.5	5.6	5.4	5.3	1.9	7.7

(1) 1999.
(2) DK and F, 1999; EL, 1998.
(3) D, 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Table 3.30

Processing and preserving of fish and fish products (NACE Group 15.2)
Main indicators, 2000

	B	DK	D	EL (1)	E	F (1)	IRL (1)	I	L	NL (2)	A	P	FIN	S (1)	UK
Production (million EUR)	347	1 205	1 745	61	2 291	2 262	332	1 319	0	497	:	542	79	282	2 395
Number of persons employed (thousands)	1	7	11	1	19	12	3	4	0	3	:	5	1	2	24
Value added (million EUR)	69	247	408	24	493	425	65	237	0	102	:	83	19	71	555
Purchases of goods and services (million EUR)	358	1 119	1 513	43	2 130	2 079	275	1 267	0	426	:	526	69	228	1 899
Personnel costs (million EUR) (3)	44	172	301	8	291	336	48	120	0	69	:	51	12	49	411
Gross investment in tangible goods (million EUR) (4)	7.0	:	46.5	:	109.7	:	28.5	70.3	:	:	:	39.4	4.0	11.5	:
App. labour productivity (thous. EUR/pers. emp.)	48.4	37.9	38.6	25.7	25.6	34.5	24.4	54.0	:	:	:	15.1	32.3	40.3	23.4
Simple wage adjusted labour productivity (%) (3)	156.0	132.5	135.4	194.0	169.4	126.7	135.7	196.4	:	147.9	:	163.6	163.0	144.4	134.9
Gross operating rate (%) (3)	5.9	4.5	5.6	16.2	7.8	3.5	5.1	7.7	:	6.2	:	5.2	8.6	7.4	5.8

(1) 1999.
(2) All except persons employed, 1998.
(3) DK, 1999; EL, 1998.
(4) D, 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Table 3.31

Processing and preserving of fruit and vegetables (NACE Group 15.3)
Main indicators, 2000

	B	DK	D	EL (1)	E	F	IRL (1)	I	L	NL (2)	A	P	FIN	S (1)	UK
Production (million EUR)	1 778	480	6 533	711	4 427	5 637	179	4 090	:	2 214	897	465	366	772	5 665
Number of persons employed (thousands)	7	3	27	7	33	28	2	21	:	9	3	5	2	4	34
Value added (million EUR)	399	122	1 360	149	921	1 037	69	784	:	524	230	120	107	224	2 206
Purchases of goods and services (million EUR)	1 492	428	5 495	641	3 995	5 204	144	3 529	:	1 870	790	397	375	615	3 575
Personnel costs (million EUR) (3)	219	75	832	103	583	682	38	510	:	279	114	69	59	139	992
Gross investment in tangible goods (million EUR) (4)	129.8	:	231.9	:	255.9	:	11.3	214.1	:	:	43.1	35.2	23.9	36.5	:
App. labour productivity (thous. EUR/pers. emp.)	57.7	43.0	50.0	20.0	27.8	37.3	39.2	37.3	:	:	81.4	26.5	52.5	60.0	65.0
Simple wage adjusted labour productivity (%) (3)	182.4	142.0	163.5	187.3	158.0	143.2	184.0	153.7	:	187.7	201.7	174.0	182.0	161.5	222.3
Gross operating rate (%) (3)	9.6	6.4	7.7	12.2	7.2	5.1	14.2	6.7	:	10.2	11.1	10.7	9.7	10.3	20.6

(1) 1999.
(2) All except persons employed, 1998.
(3) DK and F, 1999; EL, 1998.
(4) D, 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Table 3.32

Manufacture of vegetable and animal oils and fats (NACE Group 15.4)
Main indicators, 2000

	B	DK	D	EL (1)	E	F (1)	IRL (1)	I	L (2)	NL	A (1)	P	FIN	S (1)	UK
Production (million EUR)	1 940	290	4 322	363	4 398	2 269	8	1 251	0	2 643	309	584	205	551	1 559
Number of persons employed (thousands)	1	1	7	2	11	4	0	3	0	:	1	3	1	2	2
Value added (million EUR) (3)	102	57	520	95	497	311	0	176	0	367	77	66	32	134	316
Purchases of goods and services (million EUR)	1 859	241	4 325	337	4 272	1 989	9	1 189	0	4 157	364	585	182	467	1 345
Personnel costs (million EUR) (4)	67	34	367	43	282	183	1	79	0	136	49	35	31	74	89
Gross investment in tangible goods (million EUR) (5)	20.6	:	100.7	:	131.7	:	0.1	65.5	:	:	4.0	34.0	4.6	54.2	:
App. labour productivity (thous. EUR/pers. emp.) (3)	75.0	67.0	76.5	57.3	44.6	72.4	6.9	63.0	:	:	100.8	17.7	42.0	73.3	173.6
Simple wage adjusted labour productivity (%) (6)	151.0	145.6	141.9	146.0	176.0	170.2	30.8	221.7	:	269.5	157.8	195.8	104.2	181.8	356.7
Gross operating rate (%) (4)	1.8	4.9	3.2	5.5	4.3	5.2	-8.9	7.1	:	5.0	6.3	4.6	0.5	10.2	13.7

(1) 1999.
(2) 1998.
(3) P, 1999.
(4) DK, 1999; EL, 1998.
(5) D, 1999.
(6) DK and P, 1999; EL, 1998.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Table 3.33

Manufacture of dairy products (NACE Group 15.5)
Main indicators, 2000

	B	DK	D	EL (1)	E	F	IRL (1)	I	L	NL	A	P	FIN	S (1)	UK
Production (million EUR)	2 859	2 767	18 480	1 105	6 504	20 308	3 214	10 821	:	:	1 494	1 315	1 675	2 386	9 503
Number of persons employed (thousands)	7	11	40	7	27	60	9	37	:	12	4	8	5	9	35
Value added (million EUR)	336	579	2 644	286	1 283	2 835	571	2 038	:	:	226	217	239	464	2 063
Purchases of goods and services (million EUR)	2 689	2 828	18 087	953	5 914	18 947	3 529	9 674	:	:	1 518	1 124	1 688	2 150	8 115
Personnel costs (million EUR) (2)	261	357	1 587	140	685	1 938	315	1 234	:	:	161	103	169	357	1 140
Gross investment in tangible goods (million EUR) (3)	81.4	:	404.2	:	278.1	:	124.8	412.7	:	:	53.6	78.8	132.8	90.2	:
App. labour productivity (thous. EUR/pers. emp.)	47.6	50.7	65.5	39.8	47.9	46.9	61.8	55.3	:	:	57.0	28.1	44.1	49.1	59.2
Simple wage adjusted labour productivity (%) (2)	129.1	155.8	166.6	229.7	187.3	147.2	181.2	165.1	:	:	140.3	211.6	141.1	130.2	180.9
Gross operating rate (%) (2)	2.6	5.5	5.1	14.5	8.4	4.4	6.5	6.8	:	:	3.8	8.6	3.9	4.1	9.2

(1) 1999.
(2) DK and F, 1999; EL, 1998.
(3) D, 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Table 3.34

Manufacture of other food products (NACE Group 15.8)
Main indicators, 2000

	B	DK	D	EL (1)	E	F	IRL (1)	I	L	NL	A	P	FIN	S (1)	UK
Production (million EUR)	6 829	2 986	34 568	1 110	11 135	22 611	5 215	15 874	143	:	2 539	1 911	1 767	2 789	27 668
Number of persons employed (thousands)	50	23	304	15	147	108	11	69	2	40	25	47	15	19	190
Value added (million EUR)	1 941	1 103	11 301	412	3 940	5 745	1 605	4 170	72	:	1 021	654	553	1 015	11 123
Purchases of goods and services (million EUR)	5 539	2 208	25 680	821	8 337	19 368	3 742	12 158	75	:	1 825	1 460	1 314	1 975	19 006
Personnel costs (million EUR) (2)	1 172	620	7 771	265	2 511	3 568	299	2 178	47	:	750	409	428	675	5 657
Gross investment in tangible goods (million EUR) (3)	489.6	:	1 359.6	:	540.8	:	338.2	700.6	:	:	160.0	137.3	68.4	140.3	:
App. labour productivity (thous. EUR/pers. emp.)	39.0	47.1	37.2	27.9	26.8	53.4	143.9	60.7	31.9	:	40.3	13.8	35.9	54.2	58.5
Simple wage adjusted labour productivity (%) (2)	165.6	190.3	145.4	155.5	156.9	167.1	537.8	191.5	153.4	:	136.1	159.7	129.3	150.3	196.6
Gross operating rate (%) (2)	10.3	20.0	9.4	11.6	11.8	9.4	24.5	12.3	17.0	:	9.5	11.6	13.0	11.6	18.1

(1) 1999.
(2) DK and F, 1999; EL, 1998.
(3) D, 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Table 3.35

Manufacture of beverages (NACE Group 15.9)
Main indicators, 2000

	B	DK	D	EL (1)	E	F	IRL (1)	I	L	NL	A (1)	P	FIN (1)	S (1)	UK
Production (million EUR)	2 930	1 463	18 642	1 329	11 980	15 480	2 575	8 930	122	:	1 593	2 135	820	1 468	20 013
Number of persons employed (thousands)	11	6	74	8	46	41	6	25	1	9	9	14	4	6	52
Value added (million EUR)	849	484	5 141	549	3 390	4 335	1 157	1 923	49	:	553	574	274	454	6 502
Purchases of goods and services (million EUR)	2 149	786	13 965	897	9 613	11 309	1 182	6 860	93	:	1 035	1 909	562	1 116	11 214
Personnel costs (million EUR) (2)	486	270	3 252	214	1 434	1 813	272	894	21	:	378	245	127	253	2 330
Gross investment in tangible goods (million EUR) (3)	203.9	:	1 154.2	:	809.4	:	133.0	511.6	:	:	110.1	186.3	100.0	80.3	:
App. labour productivity (thous. EUR/pers. emp.)	79.4	74.7	69.7	68.0	73.6	106.2	196.6	77.3	76.3	:	64.8	41.1	78.2	72.1	124.2
Simple wage adjusted labour productivity (%) (2)	174.8	161.8	158.1	248.7	236.3	229.9	424.8	215.0	237.0	:	146.4	234.3	215.7	179.2	279.1
Gross operating rate (%) (2)	11.6	11.2	9.0	23.9	16.1	15.3	30.7	11.4	19.6	:	9.8	14.3	18.6	12.9	18.6

(1) 1999.
(2) DK and F, 1999; EL, 1998.
(3) D, 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Table 3.36

Manufacture of tobacco products (NACE Division 16)
Main indicators, 2000

	B	DK	D	EL (1)	E	F	IRL (1)	I	L	NL	A	P	FIN (1)	S (1)	UK
Production (million EUR)	1 585	1 438	14 428	218	1 470	8 827	993	1 091	:	:	:	305	97	316	13 337
Number of persons employed (thousands)	3	1	13	1	8	5	1	8	:	:	:	1	0	2	9
Value added (million EUR) (2)	210	233	1 842	69	590	553	159	403	:	:	:	103	23	203	2 077
Purchases of goods and services (million EUR)	1 431	276	6 372	182	1 233	2 651	204	1 905	:	:	:	183	79	173	2 142
Personnel costs (million EUR) (3)	105	:	773	60	279	243	36	250	:	:	:	46	15	44	440
Gross investment in tangible goods (million EUR) (4)	29.0	:	178.1	:	45.8	:	8.1	42.2	:	:	:	28.7	2.3	60.8	:
App. labour productivity (thous. EUR/pers. emp.) (2)	80.5	181.6	145.8	51.6	78.4	118.6	168.2	48.1	:	:	:	77.6	58.5	133.8	233.8
Simple wage adjusted labour productivity (%) (5)	199.6	:	238.4	194.1	211.5	199.3	446.2	161.4	:	:	:	234.4	154.1	460.5	472.7
Gross operating rate (%) (3)	6.5	:	6.1	12.5	17.6	2.5	11.6	6.5	:	:	:	21.5	8.6	44.5	11.9

(1) 1999.
(2) P, 1999.
(3) EL and F, 1998.
(4) D, 1999.
(5) P, 1999; EL and F, 1998.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Table 3.37

Manufacture of food products and beverages (NACE Division 15)
Main indicators, 2000

	BG	CY (1)	CZ	EE	HU	LV	LT (2)	MT	PL (1)	RO	SK (2)	SI (2)	TR
Production (million EUR)	1 551	790	:	674	6 151	:	1 167	:	19 635	4 249	1 612	1 567	:
Number of persons employed (thousands)	100	10	:	20	121	:	55	:	467	227	:	:	:
Value added (million EUR)	263	230	:	148	1 302	:	249	:	5 310	886	232	354	:
Purchases of goods and services (million EUR)	1 518	:	:	637	5 251	:	1 004	:	17 286	4 599	1 639	1 232	:
Personnel costs (million EUR)	148	:	:	93	664	:	197	:	2 263	586	191	287	:
Gross investment in tangible goods (million EUR)	150.3	40.9	:	38.6	51.3	:	129.9	:	1 291.9	477.5	123.5	140.7	:
App. labour productivity (thous. EUR/pers. emp.)	2.6	23.3	:	7.3	10.8	:	4.5	:	11.4	3.9	:	:	:
Simple wage adjusted labour productivity (%)	178.5	:	:	160.1	196.0	:	126.7	:	234.6	151.0	121.5	123.4	:
Gross operating rate (%)	7.2	:	:	7.1	9.1	:	4.9	:	14.1	6.5	2.1	4.1	:

(1) 1998.
(2) 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/enter_cc).

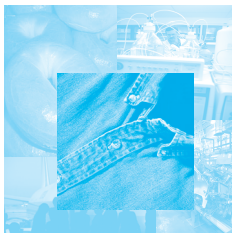
Table 3.38

Manufacture of tobacco products (NACE Division 16)
Main indicators, 2000

	BG	CY (1)	CZ	EE	HU	LV	LT	MT	PL	RO	SK	SI	TR
Production (million EUR)	412	96	:	0	263	:	:	:	2 403	502	:	:	:
Number of persons employed (thousands) (2)	10	0	:	0	2	:	:	:	11	5	:	:	:
Value added (million EUR)	93	23	:	0	88	:	:	:	1 777	272	:	:	:
Purchases of goods and services (million EUR)	205	:	:	0	221	:	:	:	805	239	:	:	:
Personnel costs (million EUR)	43	:	:	0	25	:	:	:	129	233	:	:	:
Gross investment in tangible goods (million EUR)	10.1	0.9	:	0	1.4	:	:	:	95.5	28.7	:	:	:
App. labour productivity (thous. EUR/pers. emp.) (2)	9.1	82.7	:	:	42.3	:	:	:	150.7	55.5	:	:	:
Simple wage adjusted labour productivity (%)	217.2	:	:	:	357.7	:	:	:	1 375.7	117.0	:	:	:
Gross operating rate (%)	9.8	:	:	:	23.1	:	:	:	64.2	8.3	:	:	:

(1) 1998.
(2) PL, 1998.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/enter_cc).

Textiles, clothing, leather and footwear



The textiles, clothing, leather and footwear sector has faced fierce global competition and this has generally resulted in the redeployment of productive capacity to areas outside of the EU. Production in this sector has switched location during the last 20 to 30 years, as many enterprises have relocated their manufacturing activities to areas with considerably lower wage costs. Nevertheless, the EU remains competitive in certain markets, especially in areas where innovation, product development, quality, creativity, design and fashion play an important role. Indeed, the EU is a world leader in the development of specialised and technical textile products, fashion and footwear.

The redeployment of production away from the EU has often been carried out through the process of outward processing trade (OPT), whereby EU enterprises outsource the manufacture of labour-intensive operations. This usually involves the export by EU enterprises of their own fabrics or cuttings of semi-finished products to low-wage countries, where the materials are made-up into finished articles for reimporting by the EU manufacturer. The most important partners for this type of trade are currently in the candidate countries (particularly Poland and Romania) and the Mediterranean rim (particularly Morocco and Tunisia).

STRUCTURAL PROFILE

Textiles, clothing, leather and footwear accounted for approximately 4.5 % of total value added in the EU's manufacturing sector in 2001. The share of this sector in manufacturing employment was considerably higher, some 8.4 % in the same year.

When studying the importance of the three NACE divisions that make up this chapter, the largest sector is the manufacture of textiles (NACE Division 17) which accounted for 53.9 % of value added in 2001. The remainder was split 29.0 % for the manufacture of clothing (NACE Division 18) and 17.1 % for the manufacture of leather and footwear (NACE Division 19).

Italy had by far the largest textiles, clothing, leather and footwear sector in the EU. Indeed, Italy was the biggest producer in each of the three NACE divisions covered by this chapter, with overall value added of EUR 16.8 billion in 2000, equivalent to 28.9 % of the EU total. This value was double the share of the next highest level of output, with Germany, Spain, France and the United Kingdom all accounting for between 12 and 15 % of the total.

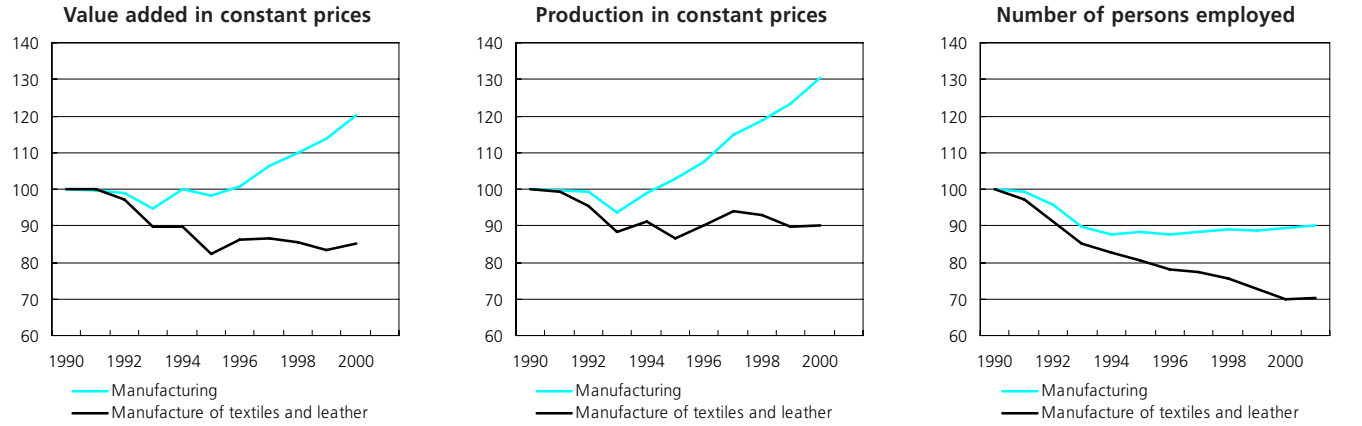
This chapter covers the manufacture of textiles, clothing, fur and leather goods, as defined by NACE Subsections DB and DC. The processing stages of textile manufacture (as covered by NACE Groups 17.1 to 17.6) are dealt with in the first subchapter, while NACE Group 17.7 and Division 18 make up the second subchapter on clothing (which includes articles that are either knitted or crocheted). The final subchapter concentrates on leather and footwear (as covered by NACE Division 19).

NACE

17: manufacture of textiles;
17.1: preparation and spinning of textile fibres;
17.2: textile weaving;
17.3: finishing of textiles;
17.4: manufacture of made-up textile articles, except apparel;
17.5: manufacture of other textiles;
17.6: manufacture of knitted and crocheted fabrics;
17.7: manufacture of knitted and crocheted articles;
18: manufacture of wearing apparel; dressing and dyeing of fur;
18.1: manufacture of leather clothes;
18.2: manufacture of other wearing apparel and accessories;
18.3: dressing and dyeing of fur; manufacture of articles of fur;
19: tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness and footwear;
19.1: tanning and dressing of leather;
19.2: manufacture of luggage, handbags and the like, saddlery and harness;
19.3: manufacture of footwear.

Figure 4.1

Manufacture of textiles and textile products; manufacture of leather and leather products (NACE Subsections DB and DC)
Main indicators in the EU (1990=100)



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

Table 4.1

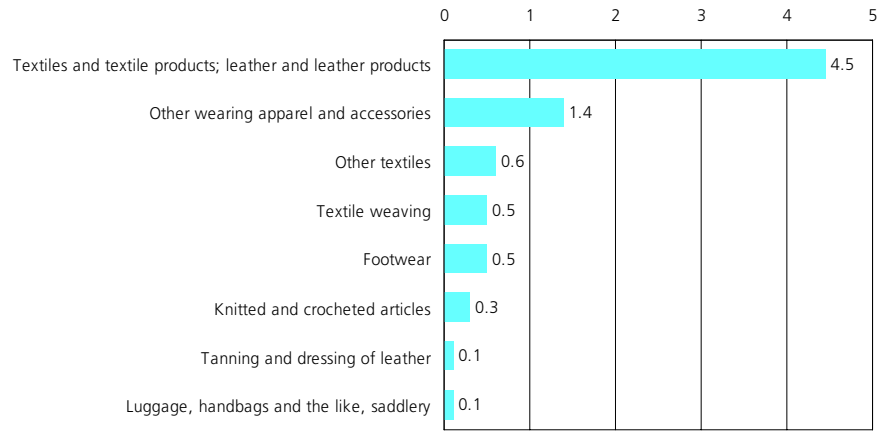
Manufacture of textiles and textile products; manufacture of leather and leather products (NACE Subsections DB and DC)
Main indicators in the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Production (million EUR)	184 461	181 390	169 832	178 835	181 858	184 411	192 876	194 282	188 978	191 280	193 946
Number of persons employed (thousands)	2 748	2 579	2 409	2 334	2 273	2 208	2 182	2 141	2 057	1 981	1 989
Value added (million EUR)	61 454	61 069	56 976	58 309	57 312	58 405	58 799	58 941	57 445	58 145	59 150
Personnel costs (million EUR)	45 827	45 442	41 929	41 689	40 473	42 200	41 780	41 073	40 143	39 806	39 716
App. labour productivity (thous. EUR/pers. emp.)	22.4	23.7	23.7	25.0	25.2	26.5	26.9	27.5	27.9	29.4	29.7
Simple wage adjusted labour productivity (%)	134.1	134.4	135.9	139.9	141.6	138.4	140.7	143.5	143.1	146.1	148.9

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

Figure 4.2

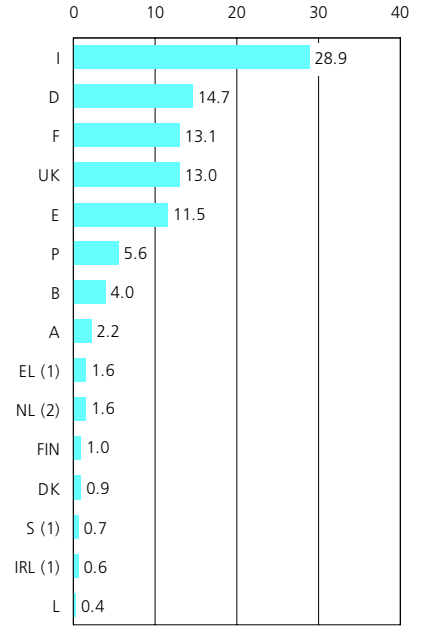
Manufacture of textiles and textile products; manufacture of leather and leather products (NACE Subsections DB and DC)
Share of manufacturing value added in the EU, 1999 (%) (1)



(1) Textiles and textile products; leather and leather products, 2001; all missing activities from Subsections DB and DC are not available.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Figure 4.3

Manufacture of textiles and textile products; manufacture of leather and leather products
(NACE Subsections DB and DC)
Share of value added in the EU, 2000 (%)



(1) 1999. (2) 1998.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Between 1990 and 2000, value added in constant prices of the EU's textile, clothing, leather and footwear sector deteriorated by 15.0 %. This change was equivalent to an average loss of 1.6 % per annum, during a period when value added in the manufacturing sector rose by 1.9 % per annum. Practically all of the losses were experienced in the first half of the 1990s, as between 1996 and 2000 there was a fairly constant level of output.

The standard source used for SBS data in the manufacturing chapters of this publication covers enterprises with 20 or more persons employed. In an activity that is dominated by small and medium-sized enterprises (many privately owned or family-run) it is important to also take account of enterprises with less than 20 persons employed - see Table 9 of the introductory chapter for an intra-industry comparison of the importance of these enterprises. In 1999, the textiles, clothing, leather and footwear sector generated EUR 69.2 billion of value added in the EU, some 41.7 % of which was accounted for by very small and small enterprises (with less than 50 persons employed). The weight of these enterprises in the 2.6 million persons employed was even higher, at just over 50 %. Spain and Italy were the two Member States that reported the highest prevalence of very small and small enterprises, as more than half of their value added was generated by enterprises employing less than 50 persons in 1999. At the other end of the range, very small and small enterprises accounted for less than 25 % of value added generated in the textiles, clothing, leather and footwear sector in Germany and Austria [(1)].

LABOUR AND PRODUCTIVITY

The labour force characteristics of the textiles, clothing, leather and footwear sector do not conform to the patterns observed for most manufacturing sectors. The most fundamental difference is the high share (60 %) of women in the total number of persons employed. Indeed, women made up the majority of the workforce in every Member State in 2001, except in Belgium (49.4 %) and the Netherlands (41.7 %).

[(1)] IRL, L, NL and S, incomplete or no data available.

Given that the majority of the workforce were usually women, it is perhaps unsurprising to find that there was also a higher propensity to engage in part-time work. Some 9.5 % of those employed in the EU's textiles, clothing, leather and footwear sector worked part-time in 2001, compared to a manufacturing average of 7.5 %. In keeping with a sector dominated by SMEs, the share of self-employed persons in the textiles, clothing, leather and footwear workforce (12.5 %) was also well above the corresponding average for the whole of manufacturing (7.3 %).

The highly labour-intensive nature of the textiles, clothing, leather and footwear sector is apparent when looking at the latest data for apparent labour productivity, which shows that in 2001 this sector had a productivity level that was 53.2 % of the EU's manufacturing average. The same ratio was between 50 and 65 % in the majority of Member States in 2000, although productivity was at least 70 % of the national manufacturing average in Denmark, Germany, Italy and Luxembourg [(2)].

[(2)] EL, IRL and S, 1999; NL, not available.

Average personnel costs in the textiles, clothing, leather and footwear sector were below manufacturing averages in every Member State for which data are available in 2000 [(3)], other than Luxembourg. Average personnel costs were generally between 60 and 75 % of national manufacturing averages, with Denmark (89.9 %) the only other country outside this range. To some extent this can be attributed to the higher proportion of part-time employment. Nevertheless, with the exception of Luxembourg, no Member State was able to report that its wage adjusted labour productivity ratio in the textiles, clothing, leather and footwear sector was above its manufacturing average in 2000 [(4)]. Denmark, Germany and Italy did, however, report adjusted productivity levels that were very close to parity with their respective manufacturing averages, while in the remainder of countries (excluding Ireland) adjusted labour productivity was situated between 65 and 90 % of the manufacturing average.

[(3)] F, IRL, DK and S, 1999; EL and NL, not available.
[(4)] F, IRL, DK and S, 1999; EL and NL, not available.

Table 4.2

Manufacture of textiles and textile products; manufacture of leather and leather products (NACE Subsections DB and DC)
Labour force characteristics (% of total employment)

	Female		Part-time		Self-employed	
	1996	2001 (1)	1996	2001 (2)	1996	2001 (3)
EU-15	61.4	60.0	9.8	9.5	11.1	12.5
B	49.9	49.4	7.2	7.3	5.0	5.3
DK	63.0	58.2	:	13.2	:	19.9
D	61.2	58.6	19.1	18.5	9.1	6.2
EL	62.0	61.5	4.6	3.2	22.5	24.1
E	53.1	58.7	7.2	6.7	17.0	15.6
F	64.7	60.2	8.2	6.1	5.2	5.4
IRL	55.3	56.1	:	13.7	:	:
I	61.6	59.7	5.1	7.9	11.9	16.5
L	:	:	:	:	:	:
NL	41.4	41.7	27.2	34.4	:	13.3
A	64.3	61.0	12.8	13.6	4.2	6.9
P	73.2	71.5	6.7	4.8	13.5	12.3
FIN	71.3	67.6	:	12.5	20.4	20.3
S	69.3	60.9	:	:	:	:
UK	59.0	52.6	16.2	15.7	6.6	8.4

(1) S, 1999.
(2) DK and IRL, 1999; FIN, 1998.
(3) NL, 2000; DK, 1999; B, 1998.
Source: Eurostat, Labour Force Survey.

In terms of improving the competitiveness of the EU's textile and clothing sector, the European Commission has launched the e-Tailor and FashionMe programmes. The main aim of these projects is to facilitate the mass-customisation of tailored garments and size harmonisation in the EU by making use of information technology. On another front, the European Commission launched the Bentex project (technology management benchmarking in the textile industry) at the end of 2000. This initiative concentrates in particular on the dyeing and finishing industries and is principally concerned with fostering technological improvement through a system of benchmarking.

EXTERNAL TRADE

The EU has traditionally run a trade deficit in textile, clothing, leather and footwear products (CPA Subsections DB and DC). The EU's deficit remained fairly constant during the first half of the 1990s, at between EUR 15 billion and EUR 20 billion. However, it deteriorated beyond the level of EUR 20 billion in 1997 and widened still further in successive years through to 2001 when it stood at EUR 32.8 billion. On average both exports and imports grew by between 7 and 8 % per annum between 1991 and 2001.

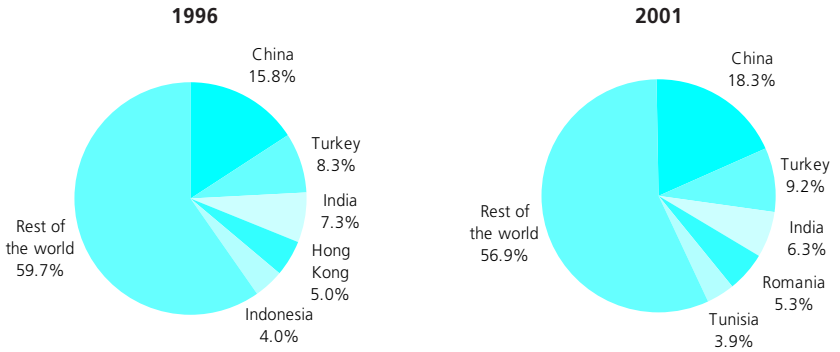
The main destinations for EU textile, clothing, leather and footwear exports were the United States, Switzerland and Japan, which together accounted for almost one third (31 %) of the total in 2001, compared to just over 40 % some 10 years before.

EU imports originated from three main geographical areas: Asia, neighbouring European countries and northern Africa, which together supplied more than 85 % of imports. China was the largest supplier in 2001, with an 18.3 % share of the total, followed by Turkey (9.2 %) and India (6.3 %).

One of the most important changes in the textiles and clothing sector was the return to normal World Trade Organization (WTO) rules for 18 % of textile and clothing products on 1 January 2002, under the third phase of the Agreement on Textiles and Clothing (ATC). By 31 December 2004, all textile and clothing products should fully conform to WTO rules, as quotas should have been completely removed by this date.

Figure 4.4

Textiles and textile products; leather and leather products (CPA Subsections DB and DC)
Origin of extra-EU imports



Source: Eurostat, Comext.

Table 4.3

Textiles and textile products; leather and leather products (CPA Subsections DB and DC)
External trade indicators for the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Extra-EU exports (million EUR)	26 574	27 863	30 466	35 325	37 942	41 857	45 268	45 201	44 339	52 772	57 106
Extra-EU imports (million EUR)	45 463	46 152	49 166	53 543	53 126	56 767	65 767	68 626	71 756	85 030	89 857
Trade balance (million EUR)	-18 889	-18 289	-18 699	-18 218	-15 184	-14 910	-20 499	-23 425	-27 417	-32 257	-32 751
Cover ratio (%)	58.5	60.4	62.0	66.0	71.4	73.7	68.8	65.9	61.8	62.1	63.6

Source: Eurostat, Comext.

Table 4.4

Textiles and textile products; leather and leather products (CPA Subsections DB and DC)
Extra-EU exports from the EU

	1991 (million EUR)	1991 (%)	2001 (million EUR)	2001 (%)	Change in export value 2001/1991 (%)	Change in export share 2001/1991 (% points)
Textiles and textile products; leather and leather products	26 574.5	100.0	57 105.5	100.0	114.9	-
Textile yarn and thread	1 444.7	5.4	2 440.8	4.3	68.9	-1.2
Textile fabrics	5 983.3	22.5	11 627.5	20.4	94.3	-2.2
Made-up textile articles, except apparel	798.6	3.0	1 910.4	3.3	139.2	0.3
Other textiles	2 951.4	11.1	6 325.6	11.1	114.3	0.0
Knitted or crocheted fabrics	592.2	2.2	1 905.4	3.3	221.8	1.1
Knitted and crocheted articles	1 137.4	4.3	2 414.1	4.2	112.3	-0.1
Leather clothes	185.7	0.7	413.9	0.7	122.9	0.0
Other wearing apparel and accessories	6 882.1	25.9	14 655.4	25.7	113.0	-0.2
Furs; articles of fur	344.5	1.3	632.0	1.1	83.5	-0.2
Leather	1 470.5	5.5	4 220.0	7.4	187.0	1.9
Luggage, handbags and the like; saddlery and harness	1 279.6	4.8	3 482.2	6.1	172.1	1.3
Footwear	3 503.2	13.2	7 062.2	12.4	101.6	-0.8

Source: Eurostat, Comext.

Table 4.5

Textiles and textile products; leather and leather products (CPA Subsections DB and DC)
Extra-EU imports into the EU

	1991 (million EUR)	1991 (%)	2001 (million EUR)	2001 (%)	Change in import value 2001/1991 (%)	Change in import share 2001/1991 (% points)
Textiles and textile products; leather and leather products	45 463.2	100.0	89 856.8	100.0	97.6	-
Textile yarn and thread	2 393.1	5.3	3 521.1	3.9	47.1	-1.3
Textile fabrics	3 995.1	8.8	5 557.4	6.2	39.1	-2.6
Made-up textile articles, except apparel	1 899.2	4.2	5 279.7	5.9	178.0	1.7
Other textiles	2 583.9	5.7	3 685.4	4.1	42.6	-1.6
Knitted or crocheted fabrics	341.5	0.8	786.8	0.9	130.4	0.1
Knitted and crocheted articles	3 114.1	6.8	7 850.7	8.7	152.1	1.9
Leather clothes	1 312.1	2.9	1 601.3	1.8	22.0	-1.1
Other wearing apparel and accessories	21 501.0	47.3	43 130.0	48.0	100.6	0.7
Furs; articles of fur	240.9	0.5	370.3	0.4	53.7	-0.1
Leather	1 414.5	3.1	3 229.1	3.6	128.3	0.5
Luggage, handbags and the like; saddlery and harness	2 085.2	4.6	4 456.5	5.0	113.7	0.4
Footwear	4 581.5	10.1	10 387.7	11.6	126.7	1.5

Source: Eurostat, Comext.

4.1: TEXTILES

This subchapter deals with the processing of textiles and includes manufacturing processes such as spinning, weaving and the finishing of products (other than clothes) which are classified within NACE Groups 17.1 to 17.6.

The EU's textile sector is faced with a series of major challenges: internationalisation (particularly relocation of production), relatively high labour costs in comparison to most of its competitors, and pressure from clothing manufacturers and retailers who have increasing economic weight.

Table 4.6

Top ten textile groups in the EU, 2000

		Turnover (million EUR)
Coats Group (1) (2)	UK	2 619
Gruppo Marzotto SpA (1)	I	1 619
Chargeurs Textiles	F	1 198
Daun & Cie	D	1 059
Damart (1)	F	974
Hartmann Gruppe	D	958
Gamma Holding Text	NL	938
Freudenberg Nonwovens (2)	D	888
Gruppo Tessile Miroglio (1)	I	795
Porcher Textile	F	676

(1) Company also active in the clothing / making-up sector.
(2) Only textile activities covered.
Source: EURATEX.

STRUCTURAL PROFILE

The value added generated by the EU's textile sector (NACE Groups 17.1 to 17.6) was EUR 27.2 billion in 2000 [5]. Using this figure, it is possible to estimate that the share of textiles in total manufacturing value added was approximately 2.2 % in the same year.

The manufacture of other textiles (NACE Group 17.5), which includes the manufacture of carpets, rugs, cord, rope, twine and netting was the largest subsector in 2000 (EUR 7.7 billion of value added), followed by textile weaving (NACE Group 17.2) with EUR 6.2 billion.

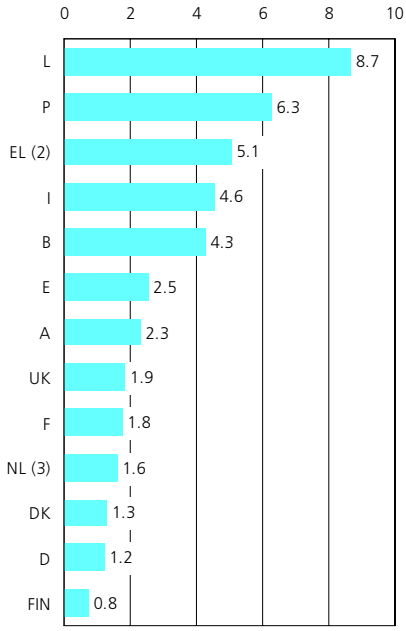
Italy was the leading producer of textiles in the EU, accounting for approximately 25 % of total value added. In relative terms three countries were more specialised: Greece, Luxembourg and Portugal.

A full set of size class data does not exist for textiles; however, it is possible to provide data for Italy (the largest producer in the EU) as an example of the importance of SMEs in this subsector. In 1999, Italian SMEs (with less than 250 persons employed) generated 78.2 % of total value added in the textile sector compared to 68.4 % of value added in the Italian manufacturing sector as a whole. There are, nevertheless, a number of large enterprises that also operate in the EU's textile sector. Table 4.6 provides a list of the 10 largest textile manufacturers in terms of sales.

[5] EL, 1999; NL, 1998, IRL, 1999, excluding NACE Groups 17.3 and 17.4; S, 1999, excluding NACE Group 17.1.

Figure 4.5

Preparation and spinning of textile fibres; textile weaving; finishing of textiles; made-up textile articles, except apparel; other textiles; knitted and crocheted fabrics (NACE Groups 17.1 to 17.6). Share of value added in manufacturing, 2000 (%) (1)



(1) EU-15, IRL and S, not available.
(2) 1999.
(3) 1998.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

LABOUR AND PRODUCTIVITY

According to LFS data, there were 1.2 million persons producing textiles in the EU in 2001 [6]. One half of the workforce were women (50.4 %), while just under 10 % of them were self-employed or working on a part-time basis.

[6] LFS data used in this paragraph refers to NACE Division 17 and hence also includes the manufacture of knitted and crocheted articles (NACE Group 17.7).

EXTERNAL TRADE

The EU had a trade surplus of EUR 5.4 billion in 2001 for textile products, almost 10 times higher than the corresponding figure recorded in 1991 (EUR 557 million). Between 2000 and 2001 the growing surplus continued, as EU exports grew by 5.5 %, while imports increased by 2.9 %.

Some 11.2 % of the EU's exports of textiles were destined for the United States in 2001. There was little change in the relative importance of the United States (11.7 % of exports in 1991) as the main trading partner of the EU. However, during the same period, the share of the EU's exports that were destined for Switzerland and Japan declined considerably, while exports to some of the candidate countries, Tunisia and Morocco grew at a rapid pace.

China, India and Turkey together supplied more than one third of the EU's imports of textiles in 2001, their share having risen from 24.4 % in 1991. There were also significant gains in the respective shares of imports originating from the Czech Republic, Poland and Hungary.

Table 4.7

Textile yarn and thread; textile fabrics; textile finishing services; made-up textile articles, except apparel; other textiles; knitted or crocheted fabrics (CPA Groups 17.1 to 17.6)
External trade indicators for the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Extra-EU exports (million EUR)	11 770	12 350	13 668	15 411	16 565	17 580	19 460	19 890	19 621	22 937	24 210
Extra-EU imports (million EUR)	11 213	10 900	11 028	12 785	12 712	13 053	15 165	15 889	15 652	18 295	18 830
Trade balance (million EUR)	557	1 450	2 640	2 626	3 853	4 526	4 295	4 001	3 970	4 642	5 379
Cover ratio (%)	105.0	113.3	123.9	120.5	130.3	134.7	128.3	125.2	125.4	125.4	128.6

Source: Eurostat, Comext.

4.2: CLOTHING, INCLUDING KNITTED ARTICLES

This subchapter contains information on the clothing industry, as defined by NACE Group 17.7 (the manufacture of knitted and crocheted articles) and NACE Division 18 (the manufacture of leather clothes, workwear, outerwear, underwear and articles of fur).

The importance of clothing in household budgets has declined in recent decades, in part due to the slow progression of consumer prices for these items. According to national accounts, household consumption of clothing in the EU fell from 7.0 % of total expenditure in 1995 to 6.6 % by 1999.

An increasing degree of concentration in the retail distribution sector (see Chapter 18) has led to a limited number of players putting considerable pressure on upstream clothing manufacturers in terms of both delivery schedules and costs. Consumer prices of clothing fell by 0.3 % overall between 1996 and 2001 in the EU. Some clothing manufacturers have reacted to these pressures by starting their own operations, especially in the form of branded retail chains.

At the top end of the clothing market the EU enjoys world renown for its design talent. Many luxury clothing groups have diversified in recent years through acquisition and no longer deal exclusively in haute couture, but now also market branded accessories and consumer goods such as luggage, sunglasses, perfumes and toiletries, as well as more moderately priced clothing ranges. Table 4.8 provides a list of the 10 largest clothing manufacturers within the EU, which is dominated by Italian enterprises (5 out of the top 10).

STRUCTURAL PROFILE

The clothing sector in the EU generated EUR 20.6 billion of value added in 2000. Out of the four NACE groups that make up this subchapter, the manufacture of other wearing apparel [7] (NACE Group 18.2) was by far the largest subsector in 1999, accounting for 85.8 % of total output. The manufacture of knitted and crocheted articles (NACE Group 17.7) was the next largest subsector (17.2 %), while the remaining two Groups, leather clothes (NACE Group 18.1) and the fur industry (NACE Group 18.3), together accounted for less than 2 % of the clothing sector's value added.

[7] This NACE group covers the manufacture of all clothes except knitted or crocheted articles, leather and fur clothing.

Table 4.8

Top ten clothing groups in the EU, 2000

		Turnover (million EUR)
Holding Partecipaz. Ind.	I	3 310.6
LVMH-Gruppe Clothing	F	3 200.0
Zara-Ind.Dis.Text. (1) (2)	E	2 614.7
Adidas Konzern Clothing (1)	D	2 175.0
Benetton Clothing (1) (2)	I	2 018.1
Marzotto - Abbigliamento (1) (2)	I	1 219.5
Armani Giorgio SpA (1)	I	1 034.0
Max Mara Fashion (1)	I	988.9
Boss Hugo World (1)	D	923.5
Groupe André (1)	F	822.6

(1) Company also active in the distribution sector.
(2) Company also active in the textile sector, for which the turnover is not given.
Source: EURATEX.

As with the textiles industry, Italy was the leading producer of clothing in the EU, with 30.7 % of the EU's total output in 2000. Germany, Spain, France and the United Kingdom all reported shares of between 13 and 15 % of the EU's total output.

Table 4.9

Manufacture of knitted and crocheted articles; manufacture of wearing apparel; dressing; dyeing of fur (NACE Group 17.7 and Division 18)
Main indicators in the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Production (million EUR)	:	:	66 006	66 577	68 228	:	71 297	71 826	70 104	:	:
Number of persons employed (thousands)	:	:	1 130	1 075	1 036	:	1 000	974	932	:	:
Value added (million EUR)	:	:	22 768	22 385	22 135	:	22 224	22 121	21 296	:	:
Personnel costs (million EUR)	:	:	17 115	16 729	16 359	:	16 449	15 728	15 544	:	:
App. labour productivity (thous. EUR/pers. emp.)	:	:	20.1	20.8	21.4	:	22.2	22.7	22.8	:	:
Simple wage adjusted labour productivity (%)	:	:	133.0	133.8	135.3	:	135.1	140.6	137.0	:	:

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

The four southern Member States of Greece, Spain, Italy and Portugal were all highly specialised in the manufacture of clothing. Indeed, these were the only countries to report that this sector had a higher proportion of manufacturing value added than the EU as a whole. The clothing sector accounted for 8.0 % of manufacturing value added in Portugal, 5.4 % of the total in Greece (1999) and 4.2 % in Italy, compared to an EU average of 1.6 %. These countries also had a particularly high prevalence of SMEs in the clothing sector, as enterprises with less than 250 persons employed accounted for more than 80 % of the value added generated in Spain, Italy and Portugal [8].

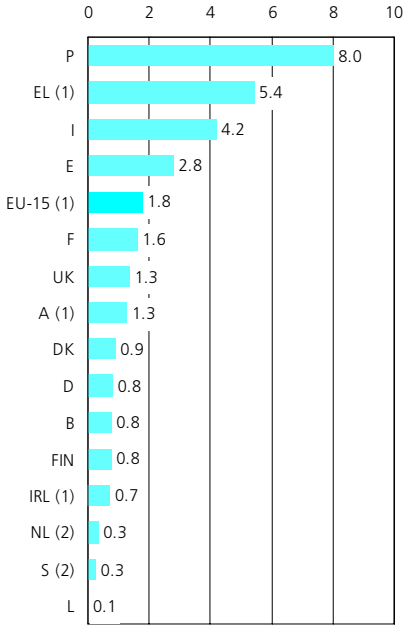
Demand for clothing has recently been driven by a growing tendency for more relaxed, casual wear in the workplace and at home, while at the same time sports and leisure wear, branded goods and designer fashion have also become increasingly important. Prodcom data also shows the importance of these products in the EU's output, as T–shirts were the most widely produced clothing product in the EU in 2000 (see Table 4.10), with denim trousers and track–suits also appearing in the top 20 items.

The relative decline in the weight of the clothing sector in the EU is apparent when looking at its share in total manufacturing value added, which fell from 2.4 % in 1993 to 1.6 % by 2000. The reduction was not just relative to the rest of manufacturing, but also an absolute decline in real terms, as constant price value added in the EU's clothing sector fell between 1993 and 1999 by an average of 2.6 % per annum. This pattern was replicated in Italy and France, where output fell on average by 3.5 % and 2.5 % per annum over the same period, while there were even larger reductions recorded in Germany (– 6.9 % per annum). A real expansion in output was registered in both Spain and Portugal during the second half of the 1990s.

[8] EL, not available.

Figure 4.6

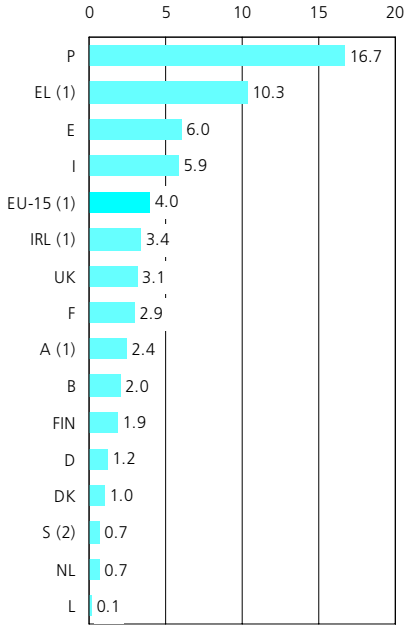
Manufacture of knitted and crocheted articles; manufacture of wearing apparel; dressing; dyeing of fur (NACE Group 17.7 and Division 18) Share of value added in manufacturing, 2000 (%)



(1) 1999.
(2) 1998.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Figure 4.7

Manufacture of knitted and crocheted articles; manufacture of wearing apparel; dressing; dyeing of fur (NACE Group 17.7 and Division 18) Share of number of persons employed in manufacturing, 2000 (%)



(1) 1999.
(2) 1998.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Table 4.10

Production of selected wearing apparel and accessories in the EU, 2000 (million units) (1)

	Sold production or production for sale
T-shirts, singlets and vests of cotton	403.7
Brassieres	213.4
Men's and boys' underpants (incl. boxer shorts)	188.6
Hats and other headgear (2)	173.7
Ties; bow ties and cravats (excl. knitted or crocheted)	117.9
Women's and girls' blouses; shirts and shirt-blouses	94.6
Men's and boys' trousers of denim (2)	93.8
Men's and boys' shirts of cotton (2)	92.7
Shawls; scarves; mufflers of textiles (2)	90.0
Men's and boys' shirts of knitted or crocheted textiles (3)	71.8
Women's and girls' singlets; vests; briefs and panties of cotton (3)	68.0
T-shirts; singlets and vests of knitted or crocheted textiles (3)	60.7
Women's and girls' blouses; shirts and shirt-blouses of man-made fibres	49.1
Women's and girls' trousers of cotton	48.9
Track-suits of knitted or crocheted textiles (2)	47.3
Gloves, mittens and mitts, knitted (4)	47.3
Swimwear knitted (3)	47.0
Women's and girls' trousers of denim	39.5
Women's and girls' blouses; shirts and shirt-blouses of cotton (3)	38.0
Shawls; scarves; mufflers of knitted or crocheted textiles	36.2

(1) The table shows the top 20 headings where an EU total is available within CPA Group 18.2; please note there are 179 additional headings for which no EU total is available.
(2) 1998. (3) 1999. (4) Pairs and not single units; 1997.
Source: Eurostat, European production and market statistics (theme4/europrom).

LABOUR AND PRODUCTIVITY

There were 864 000 persons employed in the EU's clothing sector in 2000, a figure that fell from 932 000 in 1999. As such, between 1993 and 2000 employment in the clothing sector declined at an average rate of 3.8 % per annum.

The most striking employment characteristic of the clothing sector is the high proportion of women in total employment. Three quarters of the EU's clothing workforce were women in 2001. In every Member State for which data are available [9], at least 60 % of those employed were women.

EXTERNAL TRADE

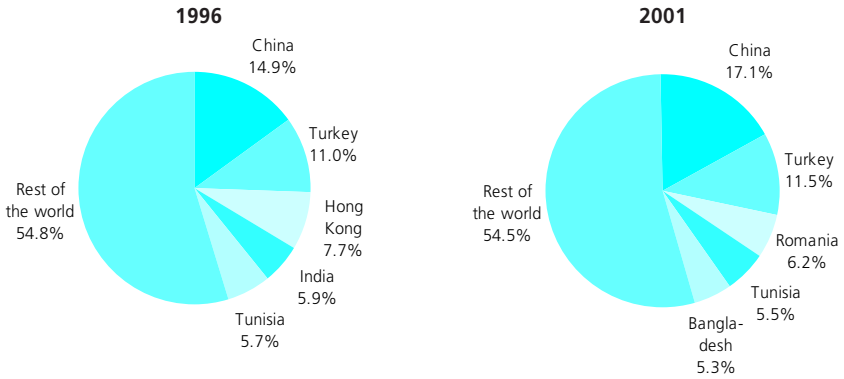
The EU runs a very large trade deficit for clothing products (CPA Group 17.8 and CPA Division 18), which reached EUR 34.8 billion in 2001, roughly double its level of some 10 years earlier (EUR 17.6 billion).

The EU imported almost three times as many clothing products (in value terms) as it exported. The main origin of imports was China, whose share of total imports grew from 14.1 % of the total in 1991 to 17.1 % by 2001. The relative weight of imports originating from Romania and Bangladesh increased at a faster pace, and by 2001 these two countries together accounted for 11.5 % of the EU's clothing imports.

[9] L and S, not available.

Figure 4.8

Wearing apparel; furs; knitted and crocheted articles (CPA Group 17.7 and Division 18)
Origin of extra-EU imports



Source: Eurostat, Comext.

Table 4.11

Wearing apparel; furs; knitted and crocheted articles (CPA Group 17.7 and Division 18)
External trade indicators for the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Extra-EU exports (million EUR)	8 550	8 936	9 538	11 031	11 870	13 532	14 561	14 669	14 103	16 359	18 115
Extra-EU imports (million EUR)	26 168	27 198	29 559	30 944	30 684	33 071	38 216	40 361	42 933	50 310	52 952
Trade balance (million EUR)	-17 618	-18 262	-20 021	-19 912	-18 814	-19 539	-23 655	-25 692	-28 829	-33 951	-34 837
Cover ratio (%)	32.7	32.9	32.3	35.6	38.7	40.9	38.1	36.3	32.8	32.5	34.2

Source: Eurostat, Comext.

4.3: LEATHER AND FOOTWEAR

This subchapter covers the leather sector, which in terms of the NACE classification is found in Division 19. The leather sector includes tanning and dressing, as well as the manufacture of luggage, handbags and footwear.

According to the Confederation of National Associations of Tanners and Dressers of the European Community (Cotance), Europe accounts for about 25 % of the world's leather production. As with the textile and clothing sectors, EU leather and leather goods' manufacturers rely on technological leadership, fashion, design, quality and service to remain competitive.

Access to raw materials is a major concern for EU leather tanners since the production of raw hides and skins depends on the animal population and slaughter rate, which in turn is correlated with meat consumption. EU meat consumption fell as a result of consumer confidence falling in the wake of BSE and foot and mouth disease. Lower slaughter rates led to bottlenecks in the supply of hides and skins of EU origin, which were compounded by increased difficulties for EU producers to obtain hides and skins on world markets. The resultant shortages in the supply of raw materials has driven the price of hides and skins upwards in recent years. Domestic output prices for leather and leather products grew at a relatively fast pace, rising in the EU by 4.2 % in 2001, compared to a manufacturing average of 1.0 %.

Leather is usually used as an intermediate product, with numerous applications in downstream consumer goods' sectors. These require different types and grades of leather (for example, for furniture upholstery, clothing or footwear). Footwear is the most important downstream market and according to Cotance, footwear accounts for half of the leather used in the EU, followed by clothing (20 %), furniture and upholstery (17 %) and other leather goods (13 %).

Table 4.12

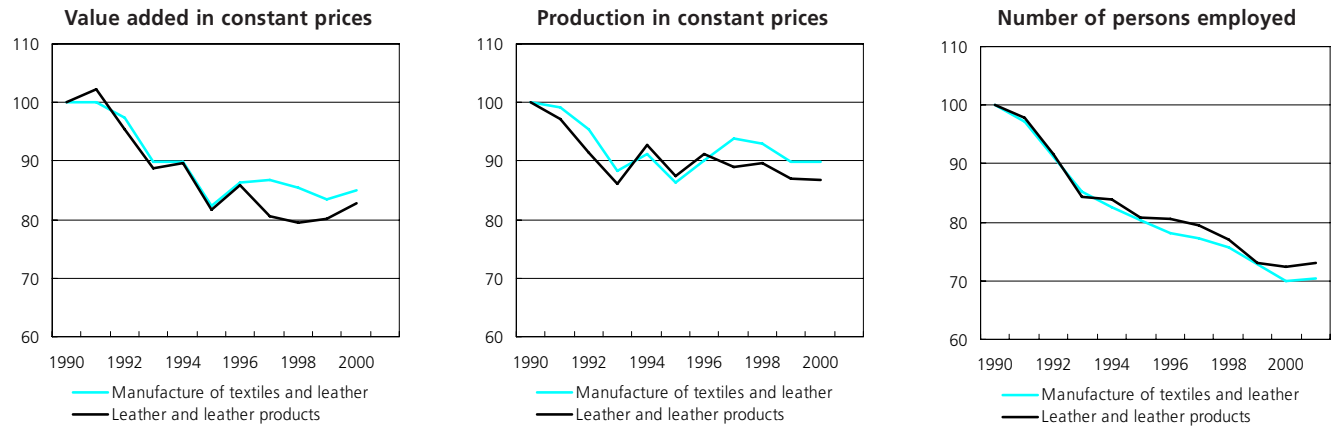
Tanning, dressing of leather; manufacture of leather products (NACE Division 19)
Main indicators in the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Production (million EUR)	33 353	32 057	30 744	33 734	32 963	34 945	34 710	35 372	36 027	37 059	38 033
Number of persons employed (thousands)	479	449	413	411	396	395	389	377	358	355	358
Value added (million EUR)	10 344	9 857	9 357	9 631	9 086	9 714	9 258	9 276	9 673	9 937	10 112
Personnel costs (million EUR)	7 513	7 300	6 653	6 639	6 038	6 800	6 638	6 474	6 318	6 434	6 453
App. labour productivity (thous. EUR/pers. emp.)	21.6	22.0	22.7	23.4	23.0	24.6	23.8	24.6	27.0	28.0	28.2
Simple wage adjusted labour productivity (%)	137.7	135.0	140.6	145.1	150.5	142.9	139.5	143.3	153.1	154.4	156.7

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

Figure 4.9

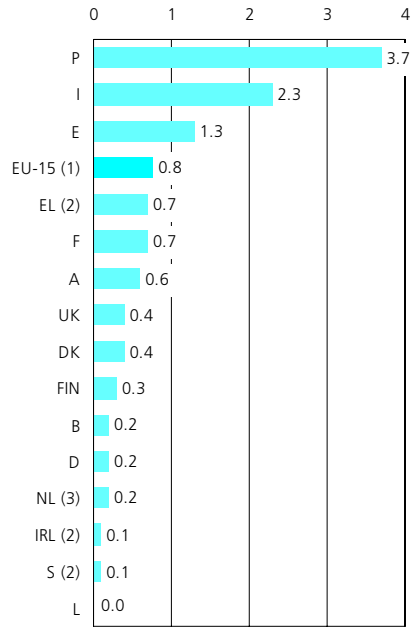
Tanning, dressing of leather; manufacture of leather products (NACE Division 19)
Main indicators in the EU (1990=100)



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

Figure 4.10

Tanning, dressing of leather; manufacture of leather products (NACE Division 19) Share of value added in manufacturing, 2000 (%)



(1) 2001.
(2) 1999.
(3) 1998.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

STRUCTURAL PROFILE

Total EU value added in the leather and leather products' sector (including footwear) was EUR 10.1 billion in 2001, some 17.1 % of the total for textiles, clothing, leather and footwear. The manufacture of footwear (NACE Group 19.3) was by far the largest subsector accounting for 61.1 % of this sector's value added in 2000, while tanning and dressing (NACE Group 19.1) and the manufacture of luggage and handbags (NACE Group 19.2) had almost equal shares that were under 20 %.

Italy was by far the largest producer of leather and leather products in the EU, with more than one third (35.8 %) of the EU's value added in 2000, while France and Spain were the only other countries to report double-digit shares. Germany, the United Kingdom and Portugal all reported shares of between 6 and 10 % of EU output, while none of the remaining Member States accounted for more than 2 % of the EU's value added [10].

[10] EL, IRL and S, 1999; NL, 1998.

In constant price terms, the value added of the EU's leather and leather products sector (including footwear) declined at an average rate of 1.9 % per annum between 1990 and 2000.

Leather tanneries are typically family-owned, small and medium-sized enterprises. According to Cotance only 10 tanneries in the EU employ more than 200 persons. The leather industry also has a very high degree of regional concentration and often plays a key role in the development of local economies.

Italy dominated the tanning and dressing of leather, accounting for approximately half the EU's value added in 2000 (EUR 767 million). This subsector contributed more than four times the EU average to manufacturing value added in Italy. The second largest producer was Spain with EUR 240 million of value added in 2000.

France and Italy together accounted for well over half of the EU's output of luggage, handbags and the like in 2000. Spain was the only other country in the EU to be relatively more specialised in the manufacture of these products than the EU average.

Italy accounted for almost 38 % of the EU's output of footwear in 2000. However, Portugal was more specialised in the manufacture of these products, generating 9.9 % of the EU's value added in the footwear sector in 2000 (a higher share of the EU's output than in the United Kingdom and the same as in Germany). The relative specialisation of Portugal was seven times higher than the EU average, with Italy, Spain and Greece the only other countries in the EU that were relatively specialised in this subsector.

The number of pairs of shoes produced in the EU has fallen in the last decade. Prodcom data for the reference period 1998 to 2000 suggests that the EU produced just under one billion pairs of shoes at the end of the 1990s. The largest single product categories were women's and men's shoes and boots with leather uppers, with 251 million and 181 million pairs produced respectively.

Table 4.13

Tanning, dressing of leather; manufacture of leather products (NACE Division 19) Labour force characteristics (% of total employment)

	Female		Part-time		Self-employed	
	1996	2001	1996	2001	1996	2001
EU-15	49.6	50.1	:	:	:	12.6
B (1)	:	73.3	:	:	:	:
DK	:	:	:	:	:	:
D	48.1	45.8	:	:	:	:
EL	38.5	45.7	:	:	27.8	24.9
E	35.7	42.2	7.0	7.4	12.1	14.1
F	65.7	64.1	:	7.2	:	:
IRL	:	:	:	:	:	:
I	52.5	47.4	4.5	5.8	7.2	17.8
L	:	:	:	:	:	:
NL	:	:	:	:	:	:
A	55.6	51.7	:	:	:	:
P	56.7	63.8	:	:	:	:
FIN (2)	47.3	:	:	:	:	:
S	:	:	:	:	:	:
UK	41.5	38.1	:	:	:	:

(1) 2000.
(2) 1996.
Source: Eurostat, Labour Force Survey.

LABOUR AND PRODUCTIVITY

There were 358 000 persons employed in the EU's leather and leather products' sector in 2001. Employment fell by 121 000 persons, approximately one quarter of the workforce, between 1991 and 2001.

In keeping with the textiles and clothing sectors, the high number of SMEs probably explains the higher than average number of persons in self-employment in the EU's leather sector, some 12.6 % of those employed in 2001, well above the average for manufacturing (7.3 %).

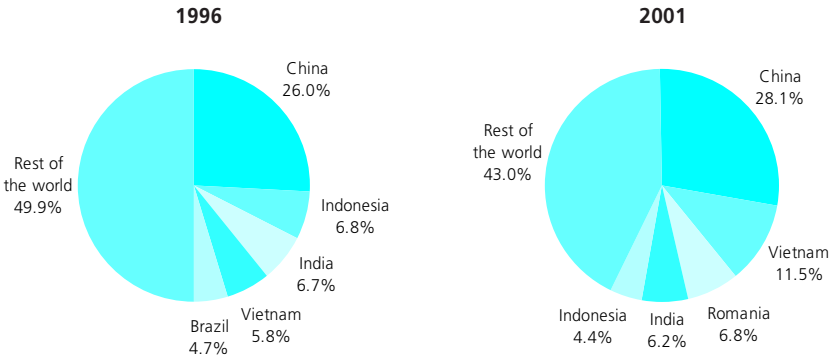
EXTERNAL TRADE

After having moved from a trade deficit of EUR 1.8 billion in 1991 to a balanced trade position by 1996, the EU's trade balance in leather and leather products deteriorated in successive years through to 2001, when the deficit stood at EUR 3.3 billion. This trend was dominated by the development of trade in footwear products, as the EU's trade deficit for footwear products was EUR 3.3 billion in 2001, while tanning and dressing products ran a surplus of EUR 991 million, cancelled out by an EUR 974 million deficit for luggage and handbags.

The EU's major export markets for leather and leather products (including footwear) were the United States, Japan and Switzerland, which together accounted for just over 40 % of the EU's exports in 2001.

Figure 4.11

Leather and leather products (CPA Division 19)
Origin of extra-EU imports



Source: Eurostat, Comext.

The main origin of imports was China, which accounted for more than one quarter (28.1 %) of the EU's imports of leather products in 2001 (8.8 percentage points more than 10 years before). Chinese imports were particularly concentrated within luggage and handbags, where their share rose to 65 % of the total in 2001.

There was even faster growth in the value of EU imports of leather and leather products originating from Vietnam. They rose from EUR 10 million in 1991 to EUR 2.1 billion by 2001, equivalent to 11.5 % of total EU imports. Romania also reported a rapid increase, as its share of EU imports grew from 0.7 % in 1991 to 6.8 % by 2001. China, Vietnam and Romania together accounted for approximately 50 % of the EU's imports of footwear in 2001.

Table 4.14

Leather and leather products (CPA Division 19)
External trade indicators for the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Extra-EU exports (million EUR)	6 253	6 576	7 260	8 882	9 507	10 737	11 238	10 632	10 610	13 468	14 764
Extra-EU imports (million EUR)	8 081	8 053	8 578	9 813	9 728	10 642	12 385	12 375	13 171	16 423	18 073
Trade balance (million EUR)	-1 828	-1 477	-1 318	-930	-222	95	-1 147	-1 743	-2 561	-2 955	-3 309
Cover ratio (%)	77.4	81.7	84.6	90.5	97.7	100.9	90.7	85.9	80.6	82.0	81.7

Source: Eurostat, Comext.

Table 4.15

Preparation and spinning of textile fibres (NACE Group 17.1)
Main indicators, 2000

	B	DK	D	EL (1)	E	F	IRL (1)	I	L	NL	A	P	FIN	S	UK
Production (million EUR)	639	28	1 791	404	1 690	2 134	95	5 909	0	71	409	630	22	:	1 394
Number of persons employed (thousands)	4	0	14	6	17	15	1	38	0	1	3	11	0	:	13
Value added (million EUR)	182	11	583	158	514	497	32	1 524	0	20	148	178	8	:	535
Purchases of goods and services (million EUR)	533	18	1 350	267	1 302	1 688	65	4 572	0	51	288	506	15	:	915
Personnel costs (million EUR) (2)	117	11	468	117	317	429	23	957	0	15	96	113	6	:	378
Gross investment in tangible goods (million EUR) (3)	40.6	:	59.5	:	102.1	:	3.0	317.4	:	:	29.5	65.6	0.7	:	:
App. labour productivity (thous. EUR/pers. emp.)	43.3	45.2	40.3	27.2	30.4	33.8	32.3	40.4	:	33.3	51.8	16.0	32.1	:	41.6
Simple wage adjusted labour productivity (%) (2)	155.2	123.6	124.5	155.9	162.1	114.1	138.6	159.2	:	134.2	154.9	157.9	122.2	:	141.4
Gross operating rate (%) (2)	9.3	6.8	5.9	13.8	11.2	2.8	9.6	9.6	:	7.4	12.4	9.8	5.1	:	10.7

(1) 1999.
(2) F, 1999; DK and EL, 1998.
(3) D, 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Table 4.16

Textile weaving (NACE Group 17.2)
Main indicators, 2000

	B	DK	D	EL (1)	E	F	IRL (1)	I	L	NL	A	P	FIN	S (1)	UK
Production (million EUR)	1 580	87	3 089	147	2 001	2 880	70	7 540	0	373	388	987	13	162	1 415
Number of persons employed (thousands)	10	1	23	2	19	18	1	52	0	2	3	20	0	1	12
Value added (million EUR)	491	30	1 006	48	537	725	26	2 253	0	100	134	305	4	57	471
Purchases of goods and services (million EUR)	1 135	60	2 326	107	1 550	2 271	46	5 512	0	274	274	708	10	107	1 007
Personnel costs (million EUR) (2)	319	29	814	29	361	555	13	1 432	0	72	113	196	3	38	397
Gross investment in tangible goods (million EUR) (3)	128.7	:	151.7	:	83.3	:	4.6	330.5	:	:	23.9	88.3	0.2	6.8	:
App. labour productivity (thous. EUR/pers. emp.)	48.7	43.3	43.1	30.9	27.6	39.4	44.6	43.6	:	51.8	40.9	15.1	32.0	46.6	38.1
Simple wage adjusted labour productivity (%) (2)	154.1	116.0	123.6	139.5	148.5	135.4	192.5	157.4	:	138.9	119.1	155.2	124.2	148.0	118.8
Gross operating rate (%) (2)	10.7	4.5	5.8	8.2	8.7	6.3	17.4	11.0	:	7.5	5.3	11.1	6.4	11.3	5.0

(1) 1999.
(2) DK and F, 1999; EL, 1998.
(3) D, 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Table 4.17

Manufacture of other textiles (NACE Group 17.5)
Main indicators, 2000

	B	DK	D	EL (1)	E	F	IRL (1)	I	L	NL	A	P	FIN	S (1)	UK
Production (million EUR)	3 173	288	4 639	122	1 155	3 241	125	3 922	506	1 308	440	717	341	399	3 244
Number of persons employed (thousands)	16	2	34	2	14	24	2	22	1	5	4	20	3	3	30
Value added (million EUR)	794	99	1 628	48	384	954	53	1 095	198	358	181	256	154	174	1 318
Purchases of goods and services (million EUR)	2 532	203	3 410	91	832	2 487	80	2 918	308	1 002	339	501	194	246	2 136
Personnel costs (million EUR) (2)	487	65	1 176	25	262	730	38	582	68	244	130	172	86	116	939
Gross investment in tangible goods (million EUR) (3)	172.5	:	259.1	:	64.6	:	8.7	188.0	:	:	26.4	87.2	22.0	22.5	:
App. labour productivity (thous. EUR/pers. emp.)	50.6	52.4	47.7	29.1	26.7	39.8	32.8	49.7	169.9	68.0	45.0	13.0	58.3	54.1	44.4
Simple wage adjusted labour productivity (%) (2)	163.0	154.9	138.5	147.0	146.5	136.7	137.2	188.1	292.7	146.5	139.3	149.1	180.4	149.4	140.5
Gross operating rate (%) (2)	9.4	11.6	9.0	8.7	10.3	7.8	10.8	13.1	25.4	8.4	9.8	11.5	20.1	13.7	10.9

(1) 1999.
(2) DK and F, 1999; EL, 1998.
(3) D, 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Table 4.18

Manufacture of textiles (NACE Division 17)
Main indicators, 2000

	BG	CY (1)	CZ	EE	HU	LV	LT	MT	PL	RO	SK	SI (2)	TR
Production (million EUR)	225	47	1 605	219	645	135	328	:	2 180	675	195	605	:
Number of persons employed (thousands) (3)	32	1	69	9	33	11	22	:	123	111	17	:	:
Value added (million EUR)	63	20	473	53	187	63	97	:	801	262	52	165	:
Purchases of goods and services (million EUR)	186	:	1 229	176	518	103	233	:	1 734	492	136	432	:
Personnel costs (million EUR)	50	:	299	35	129	43	82	:	487	177	58	140	:
Gross investment in tangible goods (million EUR) (4)	52.2	1.3	115.7	14.1	3.1	12.3	19.8	:	114.0	93.3	13.7	38.2	:
App. labour productivity (thous. EUR/pers. emp.) (3)	2.0	13.7	6.8	6.0	5.6	5.9	4.3	:	6.0	2.4	3.0	:	:
Simple wage adjusted labour productivity (%)	125.4	:	158.2	153.9	145.4	146.9	117.9	:	164.4	148.6	89.2	117.7	:
Gross operating rate (%)	7.6	:	10.5	8.3	8.3	15.4	4.4	:	13.0	12.8	-3.0	4.0	:

(1) 1998.
(2) 1999.
(3) PL, 1998.
(4) CZ, 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/enter_cc).

Table 4.19

Manufacture of wearing apparel; dressing; dyeing of fur (NACE Division 18)
Main indicators, 2000

	B	DK	D	EL (1)	E	F	IRL (1)	I	L	NL (2)	A (1)	P	FIN	S (1)	UK
Production (million EUR)	2 627	507	9 953	999	7 689	8 997	398	19 534	2	451	791	3 448	541	169	5 809
Number of persons employed (thousands)	12	3	65	19	140	79	6	140	0	4	10	136	7	4	86
Value added (million EUR)	296	146	2 641	363	2 475	2 474	166	5 344	1	117	274	1 228	193	60	2 238
Purchases of goods and services (million EUR)	2 428	392	8 048	693	5 938	7 058	268	17 681	1	365	644	2 340	427	139	4 054
Personnel costs (million EUR) (3)	274	111	1 954	262	1 728	2 118	99	2 992	1	94	233	966	153	90	1 628
Gross investment in tangible goods (million EUR) (4)	48.1	:	144.9	:	202.0	:	11.4	443.5	:	:	16.2	195.7	10.9	4.8	:
App. labour productivity (thous. EUR/pers. emp.)	25.2	43.2	40.4	18.8	17.7	31.1	29.6	38.2	27.3	:	28.6	9.0	28.6	17.0	26.0
Simple wage adjusted labour productivity (%) (3)	108.0	146.2	135.1	142.1	143.2	117.2	167.6	178.6	185.7	123.7	117.9	127.1	126.4	66.6	137.5
Gross operating rate (%) (3)	0.8	9.2	6.4	10.6	9.1	4.0	14.9	10.6	28.6	4.7	4.5	7.5	6.9	-15.1	9.6

(1) 1999.
(2) All except persons employed, 1998.
(3) DK and F, 1999; EL, 1998.
(4) D, 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Table 4.20

Manufacture of wearing apparel; dressing; dyeing of fur (NACE Division 18)
Main indicators, 2000

	BG	CY (1)	CZ	EE	HU	LV	LT	MT	PL	RO	SK	SI (2)	TR
Production (million EUR)	335	149	637	141	646	115	212	:	2 097	1 074	213	306	:
Number of persons employed (thousands) (3)	114	5	64	14	68	14	38	:	238	294	30	:	:
Value added (million EUR)	156	61	268	61	282	53	119	:	1 062	638	80	149	:
Purchases of goods and services (million EUR)	202	:	419	98	415	60	106	:	1 229	551	120	170	:
Personnel costs (million EUR)	123	:	184	47	219	39	97	:	730	449	93	141	:
Gross investment in tangible goods (million EUR) (4)	33.4	1.9	44.2	7.7	2.7	6.5	16.5	:	77.2	130.1	12.6	9.0	:
App. labour productivity (thous. EUR/pers. emp.) (3)	1.4	11.2	4.2	4.4	4.1	3.7	3.2	:	4.3	2.2	2.7	:	:
Simple wage adjusted labour productivity (%)	126.9	:	145.4	128.1	128.7	135.9	123.7	:	145.5	142.1	86.1	105.5	:
Gross operating rate (%)	10.0	:	13.0	8.5	8.5	12.5	10.4	:	14.7	17.0	-5.7	2.4	:

(1) 1998.
(2) 1999.
(3) PL, 1998.
(4) CZ, 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/enter_cc).

Table 4.21

Tanning, dressing of leather; manufacture of luggage (NACE Division 19)
Main indicators, 2000

	B	DK	D	EL (1)	E	F	IRL (1)	I	L	NL (2)	A	P	FIN	S (1)	UK
Production (million EUR)	285	380	3 189	176	5 307	3 653	73	16 328	0	290	728	2 341	238	100	1 914
Number of persons employed (thousands)	3	1	24	3	71	40	1	104	0	2	6	67	3	1	17
Value added (million EUR)	96	76	906	59	1 335	1 353	25	3 553	0	85	188	672	94	33	845
Purchases of goods and services (million EUR)	283	312	2 657	130	4 517	2 710	53	13 920	0	218	587	1 757	148	67	1 619
Personnel costs (million EUR) (3)	68	42	679	50	948	1 025	17	2 180	0	59	134	524	64	25	472
Gross investment in tangible goods (million EUR) (4)	10.5	:	85.8	:	116.2	:	2.3	475.7	:	:	22.3	148.3	6.3	7.1	:
App. labour productivity (thous. EUR/pers. emp.)	36.3	61.9	38.5	18.6	18.9	33.8	25.7	34.3	:	:	33.8	10.0	33.9	39.4	48.9
Simple wage adjusted labour productivity (%) (3)	141.4	163.2	133.3	148.4	140.8	130.7	146.4	163.0	:	143.2	139.9	128.2	148.3	129.2	179.2
Gross operating rate (%) (3)	7.5	7.4	6.3	11.1	6.7	7.9	10.1	8.1	:	8.6	6.9	6.2	12.7	7.9	14.9

(1) 1999.
(2) All except persons employed, 1998.
(3) DK and F, 1999; EL, 1998.
(4) D, 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Table 4.22

Tanning, dressing of leather; manufacture of luggage (NACE Division 19)
Main indicators, 2000

	BG	CY (1)	CZ	EE (2)	HU	LV (1)	LT (2)	MT	PL	RO	SK (2)	SI (2)	TR
Production (million EUR)	83	49	264	39	227	14	41	:	825	425	139	225	:
Number of persons employed (thousands) (3)	19	1	21	:	23	3	4	:	66	101	:	:	:
Value added (million EUR)	29	21	89	13	94	4	10	:	277	191	38	86	:
Purchases of goods and services (million EUR) (4)	63	:	202	26	135	11	31	:	626	269	100	166	:
Personnel costs (million EUR)	23	:	77	10	79	5	10	:	198	138	42	81	:
Gross investment in tangible goods (million EUR) (4)	4.9	1.4	19.3	1.3	0.6	0.7	0.8	:	44.2	53.3	19.2	10.6	:
App. labour productivity (thous. EUR/pers. emp.) (3)	1.5	16.4	4.3	:	4.2	1.6	2.8	:	4.0	1.9	:	:	:
Simple wage adjusted labour productivity (%)	125.9	:	116.1	134.0	119.3	89.6	109.5	:	139.7	137.8	90.9	106.2	:
Gross operating rate (%)	8.5	:	4.4	8.5	6.0	-2.0	2.4	:	9.0	11.9	-2.6	2.0	:

(1) 1998.
(2) 1999.
(3) PL, 1998.
(4) CZ, 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/enter_cc).

Wood and paper

Forest-based activities are increasingly being influenced by globalisation and the most visible effects of this trend are in the high number of mergers and acquisitions that took place among forest-based companies in the second half of the 1990s. Furthermore, there was also the emergence of multinational buyers of forest-based materials (for example, large DIY chains), while global markets emerged for fibre, pulp and newsprint.

One result of these changes was that many enterprises, in particular in the pulp, paper and paperboard sector, became more diversified by moving either into upstream activities to control their own raw material supplies, or into downstream activities such as the collection and trading of recovered paper. Table 5.1 provides information on the largest 10 companies in the EU operating in the forest-based cluster of activities (note the information, coming from PricewaterhouseCoopers, does not follow the definition strictly of NACE as used in the remainder of this publication).

STRUCTURAL PROFILE

The EU's wood and paper manufacturing sector (NACE Divisions 20 and 21) generated EUR 62.6 billion of value added in 2000 [(1)], which equated to 5.0 % of the EU's manufacturing sector. The wood and paper sector's share of total manufacturing value added barely changed between 1990 and 2000, rising by just 0.1 percentage points. There were 1.19 million persons working in the EU's wood and paper sector in 2000 [(2)].

[(1)] Division 21: EL, IRL, A and S, 1999; L, not available.
[(2)] Division 21: EL, IRL, A and S, 1999; L, not available.

This chapter covers the cluster of forest-based activities, more specifically the manufacture of wood and wood products (classified under NACE Division 20) and the manufacture of pulp, paper and paperboard (which is covered by NACE Division 21). The former includes all stages of wood processing that follow on from the activity of forestry, while the latter often follows on as a downstream sector after wood processing.

NACE

20: manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials;
20.1: sawmilling and planing of wood; impregnation of wood;
20.2: manufacture of veneer sheets; manufacture of plywood, laminboard, particle board, fibre board and other panels and boards;
20.3: manufacture of builders' carpentry and joinery;
20.4: manufacture of wooden containers;
20.5: manufacture of other products of wood; manufacture of articles of cork, straw and plaiting materials;
21: manufacture of pulp, paper and paper products;
21.1: manufacture of pulp, paper and paperboard;
21.2: manufacture of articles of paper and paperboard.

Table 5.1

Top ten companies in the forest and paper sector in the EU, 2001 (million EUR)

		World ranking	Sales	Net income	Return on capital employed (%)
Stora Enso	FIN	5	13 505.6	904.4	6.0
UPM-Kymmene	FIN	8	9 915.9	954.6	8.7
Svenska Cellulosa	S	10	8 913.3	604.0	8.0
Metsäliitto	FIN	11	8 770.4	40.2	3.0
Anglo American (Mondi)	UK	18	4 654.8	415.4	12.3
Worms	F	19	4 571.1	137.3	1.1
Jefferson Smurfit	IRL	20	4 510.8	168.6	6.5
David S. Smith	UK	34	2 526.7	87.1	8.6
Kappa Packaging	NL	35	2 470.9	11.2	6.1
Ahlstrom	FIN	38	2 050.0	-7.8	0.9

Source: PricewaterhouseCoopers 2002 Global Forest and Paper Survey, available at http://www.pwcglobal.com/forestry.

The structure of the EU's wood and paper sector in 2000 was split approximately equally between the wood sector (NACE Division 20), the manufacture of pulp, paper and paperboard (Group 21.1) and the manufacture of articles of paper and paperboard (Group 21.2). At the level of the NACE groups the largest subsector within the wood sector was the manufacture of builders' carpentry and joinery (Group 20.3), which accounted for 13.2 % of the EU's value added in the wood and paper sector in 2000.

Germany was the largest producer of wood and paper in the EU, with 23.2 % of the EU's output in 2000 [3]. This was considerably higher than any other Member State, as the United Kingdom and France accounted for 13.0 % and 11.3 % of the EU's output respectively. The most specialised countries tended to be those with a high natural endowment of raw materials (in other words, forests). This was particularly the case in Finland and Sweden, which accounted for 10.9 % and 7.9 % respectively of the EU's output of wood and paper, while Austria and Portugal were also relatively highly specialised. The largest number of persons employed in the wood and paper sector was in Germany, 21.9 % of the EU total. Given their high shares of output, the number of persons employed in Finland and Sweden was comparatively low (5.9 % and 6.2 % respectively), suggesting that both of these countries had above average labour productivity.

[3] Division 21: EL, IRL, A and S, 1999; L, not available.

A complete time-series is not available to study the evolution of output in the wood and paper sector in the EU, although there are some data for individual Member States. The highest rates of growth (in constant price terms) were recorded in Finland, where value added rose by 50.2 % overall between 1990 and 1999, equivalent to an average rate of 4.6 % per annum. Increases of between 20 and 30 % overall were recorded in Denmark, Germany and Spain, while value added in constant prices contracted in Italy (0.7 %) and Sweden (1.7 %) [4].

LABOUR AND PRODUCTIVITY

The characteristics of the wood and paper manufacturing labour force are quite different, as many enterprises in the wood sector are family-run concerns with a relatively high proportion of self-employed persons, while the majority of enterprises in the paper sector are large enterprises, almost completely staffed by paid employees. More details of the specific characteristics are provided in the two subchapters that follow this overview.

Apparent labour productivity in the wood and paper sector ranged between EUR 26 000 per person employed in Portugal and EUR 98 000 per person employed in Finland in 2000 [5]. Productivity was generally slightly below the manufacturing average, although in Ireland, Greece, Spain and France, the difference was in excess of 10 %. On the other hand, productivity levels in Austria and Sweden were 2.5 % and 9.7 % higher than manufacturing averages, rising to 32.8 % and 38.4 % higher in Portugal and Finland.

[4] B, IRL, L, NL, A, P and UK, not available for either 1990 or 1999.
[5] EL, IRL, A and S, 1999; L and NL, not available.

Average personnel costs were also generally lower than in the manufacturing sector in 2000 [6]. The difference in the majority of Member States was below 10 %, although in Germany, France and Spain personnel costs were between 10 and 20 % lower than national manufacturing averages. Portugal and Finland were the only countries to report that average personnel costs in the wood and paper sector were higher than their national manufacturing averages (by 2.8 % and 9.5 %). The level of average personnel costs in the wood sector were generally much lower than for the paper sector.

Combining the ratios of apparent labour productivity and average personnel costs, it is possible to derive a wage adjusted labour productivity ratio corrected for the share of employees in persons employed. This ratio shows that value added covered personnel costs 2.5 times in Finland and 2.1 times in Portugal, the two most productive countries in 2000 using this measure [7]. Denmark, Germany and France had the lowest adjusted productivity ratios, as value added exceeded personnel costs by less than 50 %. Austria (20 percentage points), Sweden (21 points), Portugal (47 points) and Finland (53 points) reported that their wood and paper sectors were at least 20 percentage points more productive than the average for the whole of manufacturing.

[6] DK, F, IRL, A and S, 1999; EL, 1998, L and NL, not available.
[7] DK, F, IRL, A and S, 1999; EL, 1998; L and NL, not available.

Table 5.2

Wood and wood products; pulp, paper and paper products (CPA Divisions 20 and 21)
Extra-EU exports from the EU

	1991 (million EUR)	1991 (%)	2001 (million EUR)	2001 (%)	Change in export value 2001/1991 (%)	Change in export share 2001/1991 (% points)
Wood and wood products; pulp, paper and paper products	9 807.5	100.0	25 197.8	100.0	156.9	-
Wood, sawn, planed or impregnated	824.3	8.4	2 307.2	9.2	179.9	0.8
Veneer sheets; plywood, laminboard; particle board, fibre board and other panels and boards	443.8	4.5	1 964.1	7.8	342.6	3.3
Builders' joinery and carpentry, of wood	410.4	4.2	1 278.8	5.1	211.6	0.9
Wooden containers	89.4	0.9	360.1	1.4	302.8	0.5
Other products of wood; articles of cork, straw and plaiting materials	430.7	4.4	957.6	3.8	122.3	-0.6
Pulp, paper and paperboard	5 616.5	57.3	13 368.5	53.1	138.0	-4.2
Articles of paper and paperboard	1 991.5	20.3	4 866.8	19.3	144.4	-1.0

Source: Eurostat, Comext.

EXTERNAL TRADE

There has been a rapid change in the trade position of the wood and paper sector (CPA Divisions 20 and 21) in the EU. In 1991 the EU's trade deficit stood at EUR 4.0 billion. However, this deficit was persistently eroded through until 1996, when a surplus was recorded. With three consecutive years of an increasing deficit between 1998 and 2000 it appeared that the wood and paper sector was once more returning to a prolonged period of trade deficits. However, as exports grew marginally by 0.6 % in 2001 and imports fell by 4.9 % the result was a surplus of EUR 527 million.

Germany exported more wood and paper (to intra- and extra-EU destinations) than any other Member State in 2001, with exports valued at EUR 17.1 billion, or 20.1 % of the total. Finland and Sweden were the next most successful exporters, accounting for 14.6 % and 14.0 %. These shares were somewhat lower than they had been in 1991, when Finland and Sweden accounted for 15.1 % and 17.4 % of wood and paper exports.

The EU's main export markets for wood and paper products in 2001 included the United States (14.4 %) and Switzerland (9.9 %). There was an expansion of 2.6 percentage points in the share of the United States between 1991 and 2001, while Switzerland lost 7.3 points. There were four other countries where the share of EU exports grew quite rapidly over the period 1991 to 2001, namely, Poland, the Czech Republic, Japan and China.

The main origin of wood and paper imports was North America, as the United States accounted for 16.0 % of the EU's imports and Canada for 10.1 % in 2001. These shares were considerably reduced compared to 1991 when together these two countries supplied 41.2 % of the EU's imports. The main beneficiaries of the relative reduction in imports from North America were central and eastern European countries (including the Baltic States and Russia), as well as Brazil, Indonesia, Chile and Cameroon.

Table 5.3

Wood and wood products; pulp, paper and paper products (CPA Divisions 20 and 21)
Extra-EU imports into the EU

	1991 (million EUR)	1991 (%)	2001 (million EUR)	2001 (%)	Change in import value 2001/1991 (%)	Change in import share 2001/1991 (% points)
Wood and wood products; pulp, paper and paper products	13 803.8	100.0	24 670.5	100.0	78.7	-
Wood, sawn, planed or impregnated	3 633.1	26.3	5 211.9	21.1	43.5	-5.2
Veneer sheets; plywood, laminboard; particle board, fibre board and other panels and boards	1 544.6	11.2	2 452.8	9.9	58.8	-1.2
Builders' joinery and carpentry, of wood	471.3	3.4	1 507.9	6.1	219.9	2.7
Wooden containers	177.0	1.3	416.1	1.7	135.2	0.4
Other products of wood; articles of cork, straw and plaiting materials	811.3	5.9	2 065.0	8.4	154.5	2.5
Pulp, paper and paperboard	6 253.6	45.3	10 482.1	42.5	67.6	-2.8
Articles of paper and paperboard	912.6	6.6	2 534.6	10.3	177.7	3.7

Source: Eurostat, Comext.

Table 5.4

Wood and wood products; pulp, paper and paper products (CPA Divisions 20 and 21)
External trade indicators for the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Extra-EU exports (million EUR)	9 808	9 951	11 219	13 262	16 559	16 865	19 173	19 119	20 200	25 048	25 198
Extra-EU imports (million EUR)	13 804	13 733	13 143	15 836	18 668	16 512	18 773	19 457	20 509	25 939	24 670
Trade balance (million EUR)	-3 996	-3 782	-1 924	-2 575	-2 109	353	401	-338	-309	-891	527
Cover ratio (%)	71.0	72.5	85.4	83.7	88.7	102.1	102.1	98.3	98.5	96.6	102.1

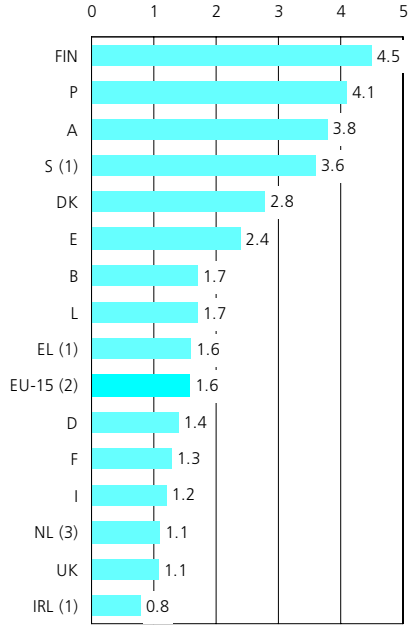
Source: Eurostat, Comext.

5.1: WOOD AND WOOD PRODUCTS

The wood processing sector is classified under NACE Division 20. It is split into five NACE groups that cover the initial processing stages of sawing and planing (Group 20.1), through semi-processed wood products, such as boards and veneer sheets (Group 20.2) and builders' carpentry and joinery (Group 20.3), towards end uses such as wooden containers (Group 20.4) and products used in the home, for example wooden household utensils (Group 20.5).

Figure 5.1

Manufacture of wood and wood products (NACE Division 20)
Share of value added in manufacturing, 2000 (%)



(1) 1999.
(2) 2001.
(3) 1998.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

The main downstream sectors from which the demand for wood products is derived are the furniture sector (that is covered in Subchapter 13.1) and the construction sector (Chapter 15).

STRUCTURAL PROFILE

The EU's wood sector generated EUR 21.0 billion of value added in 2001, equivalent to 1.6 % of the manufacturing total. It employed 566 000 persons in 2001, which was almost exactly the same number as in 1990. The largest subsector was the manufacture of builders' carpentry and joinery (NACE Group 20.3), which accounted for 41.5 % of the EU's value added in 2000, followed by the sawmilling and planing of wood, impregnation of wood subsector (NACE Group 20.1) with 22.8 %. Approximately 20 % of the total was accounted for by the manufacture of veneer sheets, panels and boards (NACE Group 20.2) and just over 10 % by other products of wood, articles of cork, straw and plaiting materials (NACE Group 20.5), leaving around 8 % for the manufacture of wooden containers (NACE Group 20.4) [8].

Germany had the largest share of output in the EU's wood sector, accounting for 24.9 % of value added in 2000, followed by Spain (12.0 %) and France (11.5 %). Relatively high shares of value added were recorded in Sweden (7.4 %, 1999), Finland (6.8 %), Austria (5.8 %) and Portugal (3.6 %).

[8] Data for NACE Groups 20.2 and 20.4 are estimates.

The wood sector is dominated by SMEs, as enterprises with less than 250 persons employed accounted for more than 80 % of employment in Belgium, Spain, France, Italy (1999), the Netherlands, Portugal and the United Kingdom in 2000 [9]. The share of SMEs in total value added was also over 80 % in all of these countries except Belgium (70.4 %) in 2000 [10]. However, in Finland, the most specialised country in the wood sector, large enterprises (with 250 or more persons employed) played a far more important role, as they accounted for more than half (50.4 %) of the value added generated in 2000 and 44.8 % of those employed. It is important to note that the data presented in this chapter are largely based on information on enterprises with 20 or more persons employed. Table 9 of the introductory chapter provides an intra-industry comparison of the importance of enterprises with less than 20 persons employed.

[9] EL, IRL and L, not available.
[10] I, 1999; NL, not available.

Table 5.5

Manufacture of wood and wood products (NACE Division 20)
Main indicators in the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Production (million EUR)	46 623	46 319	45 317	49 038	55 275	55 787	60 404	63 070	65 941	69 072	70 367
Number of persons employed (thousands)	557	531	502	504	528	543	552	556	555	566	566
Value added (million EUR)	15 034	15 228	15 250	16 090	17 227	17 150	18 593	19 221	19 730	20 513	20 967
Personnel costs (million EUR)	11 125	11 205	10 856	11 018	12 142	12 540	12 845	13 125	13 423	13 829	13 705
App. labour productivity (thous. EUR/pers. emp.)	27.0	28.7	30.4	31.9	32.6	31.6	33.7	34.5	35.5	36.2	37.1
Simple wage adjusted labour productivity (%)	135.1	135.9	140.5	146.0	141.9	136.8	144.7	146.4	147.0	148.3	153.0

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

Prodcom data provides more detail on a number of products in the EU; for example, the output of wooden windows, French windows and their frames was EUR 6.0 billion in 2000, while that of doors and their frames was EUR 5.6 billion. Production of parquet flooring was EUR 1.1 billion in the EU in 1999 (excluding mosaic floors), while there were 42 million kg of corks and stoppers of natural cork produced (again 1999) and some 340 million flat pallets of wood (2000). The European Organisation of the Sawmill Industry (EOS) and the European Federation of the Parquet Industry (FEP) provide more figures on individual wood products as presented in Table 5.6.

LABOUR AND PRODUCTIVITY

The characteristics of the EU's labour force in the wood sector differ from the average displayed for the whole of manufacturing as there is a considerably higher proportion of persons who are self-employed (16.7 % compared to 7.3 % in 2001). Furthermore, the number of men working in the wood sector (85.0 % of the total labour force) was also considerably higher than the manufacturing average of 71.6 %. On the other hand, the proportion of the labour force that was working on a full-time basis (94.1 %) was only slightly above the manufacturing average of 92.5 %.

The apparent labour productivity of the EU's wood sector was EUR 36 000 of value added per person employed in 2000. This figure was considerably below the manufacturing average of EUR 55 000 per person employed. Indeed, Luxembourg was the only Member State to report that the apparent labour productivity of its wood sector was higher (10.9 %) than its manufacturing average. Otherwise, labour productivity in the wood sector was generally between 65 and 85 % of the manufacturing average, with Spain and Ireland below this range. Average personnel costs in the wood sector ranged between EUR 10 000 per person employed (Portugal) and EUR 35 000 (Germany and Sweden) in 2000 [11]. As such, personnel costs were below manufacturing averages in every Member State, ranging from 67.5 % of the average in Spain to 90.7 % in Denmark.

[11] DK, F, IRL and S, 1999; EL, 1998; NL, not available.

Table 5.6

Production of wood in the EU, 2001 (million m³)

Sawnwood	
Softwood	69 173
Hardwood	7 874
Wood based panels	
Particleboard	36 700
MDF	9 600
Plywood	3 300
Hard/softboard	2 300
OSB	1 600
Parquet (1)	59 636

(1) Surface area in thousand square metres; EU-15 (excluding EL, IRL, L, P and UK), CH and NO.
Source: EOS (European Organisation of the Sawmill Industry), Annual report 2001; FEP (European Federation of the Parquet Industry), FEP statistics 2001.

Table 5.7

Manufacture of wood and wood products (NACE Division 20) Labour force characteristics (% of total employment)

	Female		Part-time		Self-employed	
	1996	2001 (1)	1996	2001 (2)	1996	2001
EU-15	16.4	15.0	6.7	6.7	16.5	16.7
B	:	18.8	:	:	13.8	14.8
DK	23.3	13.8	15.4	:	:	:
D	18.1	15.6	6.9	8.3	12.9	10.5
EL	:	7.6	:	:	48.7	49.4
E	10.9	10.8	3.6	2.2	28.0	20.6
F	16.4	14.7	5.8	4.6	11.3	6.2
IRL	:	:	:	:	:	:
I	19.1	16.9	4.7	5.4	15.2	28.3
L	:	:	:	:	:	:
NL	:	:	:	:	:	:
A	20.8	18.9	8.2	7.2	6.5	6.4
P	17.4	21.2	:	:	24.6	23.4
FIN	22.6	19.5	:	:	10.9	10.4
S (3)	:	26.0	:	:	:	:
UK	11.8	12.6	:	:	20.8	13.3

(1) DK, 2000; EL, 1999.
(2) F, 2000; EU-15, 1998.
(3) 1998.
Source: Eurostat, Labour Force Survey.

EXTERNAL TRADE

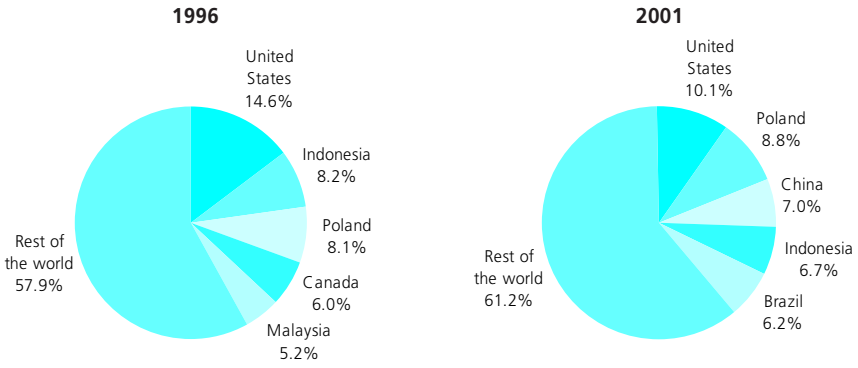
The EU exported EUR 6.9 billion of wood products in 2001, which was 2.6 % more than a year before. On the other hand, imports coming into the EU fell by 5.5 % in 2001, following growth of 19.0 % in 2000. EU imports were valued at EUR 11.7 billion in 2001, and the trade deficit was EUR 5.8 billion, close to the middle of the range of deficits recorded by these products between 1991 and 2001, (EUR 4.3 billion to EUR 6.9 billion).

All five CPA wood products' groups reported trade deficits in 2001, the largest being for sawn, planed or impregnated wood (CPA Group 20.1) and other products of wood, and articles of cork, straw and plaiting materials (CPA Group 20.5), with deficits of EUR 2.9 billion and EUR 1.1 billion.

EU imports in 2001 principally originated from the United States, Poland, China, Indonesia and Brazil. Compared to 1991 the relative shares of Canada, the United States and Malaysia fell at the most rapid pace, while Poland, China, Estonia, Brazil and Latvia all gained importance.

Figure 5.2

Wood and wood products (CPA Division 20)
Origin of extra-EU imports



Source: Eurostat, Comext.

Table 5.8

Wood and wood products (CPA Division 20)
External trade indicators for the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Extra-EU exports (million EUR)	2 199	2 146	2 532	3 150	3 652	3 999	4 844	5 022	5 521	6 693	6 868
Extra-EU imports (million EUR)	6 637	6 754	6 842	7 984	8 168	7 775	9 355	9 557	10 362	12 334	11 654
Trade balance (million EUR)	-4 439	-4 608	-4 310	-4 834	-4 516	-3 776	-4 511	-4 535	-4 842	-5 641	-4 786
Cover ratio (%)	33.1	31.8	37.0	39.5	44.7	51.4	51.8	52.5	53.3	54.3	58.9

Source: Eurostat, Comext.

5.2: PULP, PAPER AND PAPERBOARD

The pulp, paper and paperboard sector is broken down in the NACE classification into two groups. The first (21.1) covers the manufacture of pulp, paper and paperboard, through mechanical and chemical processes. These products often require further processing, as covered by the second group (21.2), which includes the manufacture of corrugated, household and sanitary paper products, as well as newsprint, wallpaper and stationery. Printing and publishing activities (NACE Division 22) are covered in the final chapter of this publication.

Paper and paperboard is used for a wide variety of applications, for example the transfer of information in the form of newspapers, books and business documents, the transportation of goods in bags, sacks and other forms of packaging or personal hygiene products, such as tissues, napkins or nappies.

According to the Confederation of European Paper Industries (CEPI), almost 40 million tonnes of paper were collected in the EU in 2001, equivalent to a collection rate of 55.3 % (see Table 5.9). CEPI estimates that recovered paper represented 42 % of the total volume of raw materials used by the European paper sector in 2001, almost equivalent to the share of virgin fibres (43 %).

STRUCTURAL PROFILE

The pulp, paper and paperboard sector (Division 21) generated EUR 42.1 billion of value added in the EU in 2000 [12] and was approximately double the size of the wood sector. There were 619 000 persons employed in 2000 [13] (2.6 % of the manufacturing total). Table 5.10 presents information on the volume of pulp, paper and paperboard output in Europe in 2001.

[12] EL, IRL, A and S, 1999; L, not available.
[13] EL, IRL, A and S, 1999; L, not available.

Table 5.9

Main indicators for paper recycling, 2001

	Recovered paper utilisation (thousand tonnes)	Collection rate (%)	Utilisation rate (%)
EU-15 (1)	39 485	55.3	48.0
B	605	51.2	36.4
DK	377	45.4	104.4
D	11 526	74.3	64.5
EL	380	30.5	76.8
E	4 196	54.6	81.8
F	5 566	47.1	57.8
IRL	47	27.3	109.3
I	5 089	43.6	57.0
L	:	:	:
NL	2 320	63.5	73.1
A	1 890	65.2	44.5
P	347	44.0	24.5
FIN	698	71.3	5.6
S	1 832	65.0	17.4
UK	4 612	44.2	74.3

(1) Excluding L.
Source: CEPI (Confederation of European Paper Industries), Special Recycling, October 2002.

Table 5.10

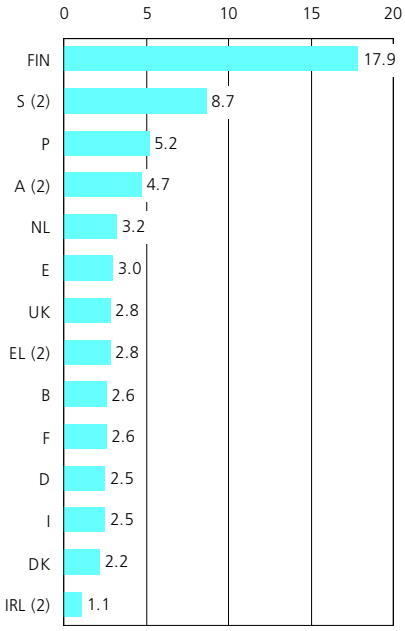
Breakdown of pulp and paper production in Europe, 2001 (thousand tonnes) (1)

Total pulp	37 889
Woodpulp for papermaking	37 440
Mechanical & semi-chemical pulp	13 771
Chemical pulp	23 669
Other pulp	449
Total graphic paper	43 718
Newsprint	10 723
Uncoated mechanical	5 962
Coated	8 449
Uncoated woodfree	9 767
Coated woodfree	8 817
Household & sanitary	5 400
Total packaging	35 144
Case materials	20 318
Carton boards	7 339
Wrappings	3 510
Other paper for packaging	3 977
Others	3 941

(1) EU-15 (excluding EL and L), CH and NO.
Source: CEPI (Confederation of European Paper Industries), Key statistics 2001.

Figure 5.3

Manufacture of pulp, paper and paper products (NACE Division 21)
Share of value added in manufacturing, 2000 (%) (1)



(1) EU-15 and L, not available.
(2) 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Germany accounted for 22.4 % of value added in 2000, the United Kingdom some 14.1 %, while in third place was Finland, with EUR 5.5 billion of value added (13.1 % of the EU total). The relative importance of the pulp, paper and paperboard sector in Finland grew from 8.5 % of the EU total in 1991, with value added in constant prices rising on average by 5.7 % per annum during the 1990s. In comparison, the average growth rate in France and Germany was just below 2 % per annum between 1990 and 2000 [14], while in Italy and Sweden there was no change in output in constant price terms between 1990 and 1999.

Large enterprises in Finland (with 250 or more persons employed) accounted for 90.5 % of those employed and 95.0 % of the value added generated in 2000. In 7 of the remaining 11 countries for which data are available, large enterprises accounted for the majority of value added, with Denmark, Spain, Italy and the United Kingdom the only Member States to report that SMEs accounted for more than half of total value added [15].

Output prices in the pulp, paper and paperboard sector were 1.0 % higher in 2001 than they had been in 1995. This relatively modest increase masks a more dramatic evolution to price developments, as output prices fell by almost 10 % during the four-year period 1995 to 1999. In 2000, prices rose rapidly by 10.3 %, as there was a global shortage of pulp, which resulted in price increases being passed on to downstream sectors.

[14] F, 1989 and 1999.
[15] DK, A, P and S, 1999; EL, IRL and L, not available.

LABOUR AND PRODUCTIVITY

Unlike the wood sector, where the self-employed and persons working in SMEs were relatively important, the vast majority of persons employed in the EU's pulp, paper and paperboard sector were employees (97.3 % in 2000). Almost three quarters (73.9 %) of the EU's labour force were male, which was slightly above the manufacturing average of 71.6 %. There was a relatively low propensity for part–time work, 5.9 %, compared to a manufacturing average of 7.5 %.

The pulp, paper and paperboard sector reported a high level of apparent labour productivity, with most countries in the range of EUR 50 000 to EUR 85 000 of value added per person employed in 2000 [16]. The only country below this range was Greece (EUR 32 000 per person employed) and the only country above it was Finland (EUR 134 000 per person employed). The level of labour productivity in Finland was 90 % higher than the national manufacturing average. However, in Portugal, apparent labour productivity of EUR 67 000 per person employed was as much as two and a half times the manufacturing average. France, the Netherlands, Greece and Ireland were the only countries where apparent labour productivity was lower than the national manufacturing average.

[16] EL, IRL, A and S, 1999; L, not available.

EXTERNAL TRADE

In 2001, the EU exported pulp, paper and paper products (CPA Division 21) valued at EUR 18.3 billion, while importing EUR 13.0 billion of these goods. The EU's trade surplus for these products rose almost continuously between 1991 and 2001 (with interruptions in 1994 and 1998) from a starting point of EUR 442 million in 1991 to EUR 5.3 billion by 2001.

The main destinations for the EU's exports of pulp, paper and paperboard (CPA Group 21.1) were the United States (14.9 % in 2001), followed by Switzerland (7.8 %) and Poland (7.3 %), with all remaining partners accounting for less than 4 % of total exports. For articles made of paper and paperboard (CPA Group 21.2), Switzerland, the United States, Russia, Poland, Norway and the Czech Republic were the most important export markets for the EU in 2001, as all remaining partners accounted for less than 5 % of total exports in 2001.

Table 5.11

Pulp, paper and paper products (CPA Division 21)
External trade indicators for the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Extra-EU exports (million EUR)	7 609	7 805	8 687	10 112	12 907	12 866	14 330	14 098	14 679	18 355	18 330
Extra-EU imports (million EUR)	7 166	6 980	6 301	7 852	10 500	8 737	9 418	9 900	10 147	13 605	13 017
Trade balance (million EUR)	442	826	2 386	2 259	2 407	4 129	4 912	4 197	4 533	4 750	5 313
Cover ratio (%)	106.2	111.8	137.9	128.8	122.9	147.3	152.2	142.4	144.7	134.9	140.8

Source: Eurostat, Comext.

Table 5.12

Sawmilling and planing of wood, impregnation of wood (NACE Group 20.1)
Main indicators, 2000

	B	DK	D	EL (1)	E	F	IRL (1)	I	L	NL (2)	A	P	FIN	S (1)	UK
Production (million EUR)	547	168	3 310	39	1 121	2 153	245	947	22	32	1 524	529	3 147	3 791	1 286
Number of persons employed (thousands)	3	1	19	1	13	16	1	7	0	1	6	11	11	14	12
Value added (million EUR)	120	54	895	14	294	636	69	207	6	11	376	138	622	768	486
Purchases of goods and services (million EUR)	468	128	2 682	32	884	1 855	207	823	17	23	1 320	457	2 635	3 156	1 037
Personnel costs (million EUR) (3)	76	36	596	8	184	413	36	143	4	7	198	91	346	499	271
Gross investment in tangible goods (million EUR) (4)	34.7	:	190.7	:	61.6	:	15.3	25.5	:	:	108.4	45.6	154.9	260.4	:
App. labour productivity (thous. EUR/pers. emp.)	39.5	41.5	48.1	26.5	23.3	38.7	48.3	31.1	33.9	:	61.5	12.9	55.4	55.6	41.9
Simple wage adjusted labour productivity (%) (3)	157.5	134.8	150.2	168.3	159.7	129.0	192.5	145.3	136.6	162.9	189.7	152.0	179.6	154.1	179.5
Gross operating rate (%) (3)	7.5	7.9	8.5	13.6	9.5	5.7	12.2	6.2	6.7	12.9	10.7	8.1	8.5	6.9	14.2

(1) 1999. (2) All except persons employed, 1998. (3) DK and F, 1999; EL, 1998. (4) D, 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Table 5.13

Manufacture of veneer sheets; manufacture of plywood, laminboard, particle board, fibre board and other panels and boards (NACE Group 20.2)
Main indicators, 2000

	B	DK	D	EL (1)	E	F	IRL (1)	I	L	NL	A	P	FIN	S (1)	UK
Production (million EUR)	1 200	137	4 005	199	1 818	1 782	186	2 235	:	62	836	417	741	232	1 176
Number of persons employed (thousands)	3	1	22	2	13	9	1	10	:	0	4	3	6	2	5
Value added (million EUR)	317	46	1 289	74	475	406	60	509	:	17	213	96	280	69	349
Purchases of goods and services (million EUR)	948	96	2 861	156	1 596	1 441	125	1 816	:	48	682	327	464	179	883
Personnel costs (million EUR) (2)	132	33	842	44	252	260	24	256	:	14	171	42	183	57	184
Gross investment in tangible goods (million EUR) (3)	100.3	:	296.3	:	219.8	:	14.3	217.5	:	:	144.7	78.6	39.8	13.3	:
App. labour productivity (thous. EUR/pers. emp.)	95.1	38.6	59.7	36.9	37.7	44.5	80.5	53.1	:	35.9	49.9	31.9	49.3	44.3	63.7
Simple wage adjusted labour productivity (%) (2)	240.7	134.5	153.0	170.3	188.9	147.4	251.1	199.1	:	117.7	125.1	230.0	152.7	121.0	189.1
Gross operating rate (%) (2)	14.8	8.9	10.9	14.5	11.2	7.5	19.4	11.1	:	4.0	4.9	13.3	13.1	4.8	13.5

(1) 1999. (2) DK and F, 1999; EL, 1998. (3) D, 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Table 5.14

Manufacture of builders' carpentry and joinery (NACE Group 20.3)
Main indicators, 2000

	B	DK	D	EL (1)	E	F	IRL (1)	I	L	NL	A	P	FIN	S (1)	UK
Production (million EUR)	782	1 126	6 376	74	3 654	2 535	225	1 800	:	1 214	1 443	607	1 328	1 593	2 487
Number of persons employed (thousands)	6	10	54	1	59	16	3	16	:	9	13	19	11	12	24
Value added (million EUR)	221	450	2 230	31	1 124	658	71	549	:	395	551	200	416	533	1 014
Purchases of goods and services (million EUR)	587	723	4 369	54	2 687	1 955	171	1 338	:	825	1 024	441	963	1 113	1 602
Personnel costs (million EUR) (2)	155	313	1 869	15	770	445	47	333	:	287	420	130	296	406	720
Gross investment in tangible goods (million EUR) (3)	53.0	:	281.2	:	188.0	:	11.4	119.8	:	:	84.3	48.9	93.0	56.6	:
App. labour productivity (thous. EUR/pers. emp.)	37.1	45.7	41.7	24.5	18.9	40.0	27.4	34.9	:	43.1	40.9	10.5	38.4	44.7	41.4
Simple wage adjusted labour productivity (%) (2)	142.5	131.5	119.3	167.6	146.0	147.7	150.2	164.8	:	137.7	131.1	153.4	140.6	131.3	140.8
Gross operating rate (%) (2)	8.4	9.4	5.5	14.7	9.5	8.7	10.1	11.8	:	9.0	8.3	11.2	9.3	7.8	11.2

(1) 1999. (2) DK and F, 1999; EL, 1998. (3) D, 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Table 5.15

Manufacture of wooden containers (NACE Group 20.4)
Main indicators, 2000

	B	DK	D	EL (1)	E	F	IRL (1)	I	L	NL (2)	A	P	FIN	S (1)	UK
Production (million EUR)	225	53	623	15	950	1 457	36	565	:	262	47	45	114	140	644
Number of persons employed (thousands)	1	1	5	0	10	12	0	4	:	2	1	1	1	1	6
Value added (million EUR)	48	20	210	4	245	454	11	149	:	73	18	10	43	48	214
Purchases of goods and services (million EUR)	206	39	493	11	730	1 091	26	487	:	204	35	37	75	97	429
Personnel costs (million EUR) (3)	33	15	170	2	159	308	7	97	:	49	13	7	26	38	137
Gross investment in tangible goods (million EUR) (4)	6.1	:	30.1	:	49.8	:	2.0	19.6	:	:	2.3	1.2	6.6	9.5	:
App. labour productivity (thous. EUR/pers. emp.)	40.8	36.2	39.3	16.6	24.0	37.8	30.3	33.2	:	:	35.0	11.5	42.1	40.4	38.8
Simple wage adjusted labour productivity (%) (3)	145.3	123.6	123.6	265.2	153.7	132.9	160.6	153.7	:	149.5	144.1	151.5	168.2	128.3	156.8
Gross operating rate (%) (3)	6.2	6.9	5.7	26.5	9.0	7.4	11.2	8.5	:	8.8	11.0	7.4	15.1	7.3	11.9

(1) 1999. (2) All except persons employed, 1998. (3) DK and F, 1999; EL and NL, 1998. (4) D, 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Table 5.16

Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials (NACE Division 20)
Main indicators, 2000

	BG	CY (1)	CZ	EE	HU	LV	LT	MT	PL	RO	SK	SI (2)	TR
Production (million EUR)	136	125	1 566	423	466	734	296	:	3 805	789	258	494	:
Number of persons employed (thousands) (3)	17	3	80	14	23	32	23	:	131	98	14	:	:
Value added (million EUR)	24	54	374	99	131	204	81	:	1 186	226	61	132	:
Purchases of goods and services (million EUR)	135	:	1 289	338	316	534	226	:	2 910	690	208	367	:
Personnel costs (million EUR)	18	:	238	55	77	97	60	:	572	129	48	117	:
Gross investment in tangible goods (million EUR) (4)	50.6	6.1	107.4	45.1	2.3	105.5	23.8	:	261.9	250.0	27.1	23.7	:
App. labour productivity (thous. EUR/pers. emp.) (3)	1.4	16.4	4.7	6.9	5.8	6.4	3.5	:	6.3	2.3	4.5	:	:
Simple wage adjusted labour productivity (%)	130.2	:	157.5	178.5	170.1	209.9	134.7	:	207.3	174.6	129.0	112.4	:
Gross operating rate (%)	5.6	:	8.5	9.9	10.4	15.1	6.9	:	15.8	12.4	5.1	2.8	:

(1) 1998. (2) 1999. (3) PL, 1998. (4) CZ, 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/enter_cc).

Table 5.17

Manufacture of pulp, paper and paperboard (NACE Group 21.1)
Main indicators, 2000

	B	DK	D	EL (1)	E	F	IRL (1)	I	L (2)	NL	A	P	FIN	S (1)	UK
Production (million EUR)	2 208	260	14 376	156	3 930	7 823	31	5 360	0	:	3 313	1 639	14 854	8 504	5 143
Number of persons employed (thousands)	6	1	47	2	15	27	0	17	0	7	8	5	37	33	19
Value added (million EUR)	608	81	4 189	46	1 302	1 846	12	1 249	0	:	1 041	746	5 284	2 835	1 494
Purchases of goods and services (million EUR)	1 683	179	11 059	113	2 921	6 145	20	4 428	0	:	2 621	908	10 744	5 890	3 792
Personnel costs (million EUR) (3)	292	48	2 227	40	496	1 119	7	637	0	:	421	150	1 699	1 337	853
Gross investment in tangible goods (million EUR) (4)	155.3	:	1 322.5	:	360.8	:	0.4	465.6	:	:	172.3	604.0	593.5	1 040.7	:
App. labour productivity (thous. EUR/pers. emp.)	105.4	74.3	89.2	21.5	88.3	69.6	58.4	72.8	:	:	125.2	146.1	144.3	86.5	77.1
Simple wage adjusted labour productivity (%) (3)	208.4	162.2	188.1	118.0	262.7	148.9	184.6	195.9	:	:	247.1	496.1	311.0	212.0	175.1
Gross operating rate (%) (3)	13.8	13.1	13.1	6.5	19.7	8.0	17.2	10.9	:	:	17.1	37.6	26.4	17.3	12.1

(1) 1999. (2) 1998. (3) DK and F, 1999; EL, 1998. (4) D, 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Table 5.18

Manufacture of articles of paper and paperboard (NACE Group 21.2)
Main indicators, 2000

	B	DK	D	EL (1)	E	F	IRL (1)	I	L	NL	A (1)	P	FIN	S (1)	UK
Production (million EUR)	1 831	1 021	16 039	485	6 263	11 002	672	9 895	:	:	1 361	691	623	1 903	12 070
Number of persons employed (thousands)	10	7	102	5	41	60	4	45	:	18	9	9	4	12	69
Value added (million EUR)	557	388	5 245	178	1 727	2 929	280	2 578	:	:	561	193	232	691	4 432
Purchases of goods and services (million EUR)	1 986	675	12 473	341	4 864	8 651	420	8 125	:	:	974	536	447	1 389	8 072
Personnel costs (million EUR) (2)	373	285	3 999	99	995	2 100	138	1 393	:	:	348	125	157	466	2 765
Gross investment in tangible goods (million EUR) (3)	93.2	:	986.6	:	332.2	:	32.3	408.1	:	:	90.1	54.5	55.5	148.6	:
App. labour productivity (thous. EUR/pers. emp.)	56.7	54.7	51.2	36.4	42.4	48.5	62.3	57.4	:	:	64.9	21.7	51.9	57.7	64.1
Simple wage adjusted labour productivity (%) (2)	149.5	141.3	131.2	181.2	173.6	137.0	202.7	185.1	:	:	161.3	154.3	148.0	148.2	160.3
Gross operating rate (%) (2)	7.4	11.4	7.1	15.8	11.4	7.5	20.2	11.4	:	:	14.0	9.7	11.5	11.4	13.3

(1) 1999. (2) DK and F, 1999; EL, 1998. (3) D, 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

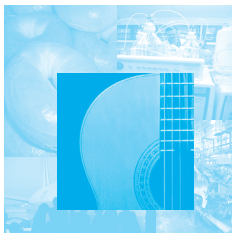
Table 5.19

Manufacture of pulp, paper and paper products (NACE Division 21)
Main indicators, 2000

	BG	CY (1)	CZ	EE	HU	LV	LT	MT	PL	RO	SK	SI (2)	TR
Production (million EUR)	134	56	1 333	73	721	59	69	:	2 552	388	684	496	:
Number of persons employed (thousands) (3)	12	1	20	2	10	2	3	:	39	20	11	:	:
Value added (million EUR)	23	19	362	19	156	17	19	:	646	104	184	99	:
Purchases of goods and services (million EUR)	124	:	1 036	53	599	43	52	:	2 067	336	518	370	:
Personnel costs (million EUR) (4)	23	:	114	9	73	7	13	:	285	45	57	80	:
Gross investment in tangible goods (million EUR) (4)	23.5	3.2	94.6	10.9	10.7	5.2	2.1	:	206.2	57.8	43.4	37.0	:
App. labour productivity (thous. EUR/pers. emp.) (3)	1.9	23.3	18.5	12.3	15.3	9.7	6.4	:	12.7	5.3	17.4	:	:
Simple wage adjusted labour productivity (%)	97.8	:	:	214.4	214.1	244.1	142.7	:	226.9	232.1	323.2	123.3	:
Gross operating rate (%)	0.9	:	17.6	14.1	11.0	17.7	8.0	:	13.9	14.4	18.0	3.7	:

(1) 1998. (2) 1999. (3) PL, 1998. (4) CZ, 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/enter_cc).

Furniture, other manufacturing industries and recycling



13.1: FURNITURE

The NACE classification breaks down the manufacture of furniture (NACE Group 36.1) into the following activities: the manufacture of chairs and seats (Class 36.11), other office and shop furniture (36.12), other kitchen furniture (36.13), other furniture (36.14) and mattresses (36.15).

The EU furniture sector has for some time faced strong competition, particularly for lower value items, from non-Community countries; a comparison of the source of furniture imports over a 10-year period shows a shift towards lower cost countries in Asia and central and eastern Europe.

Household demand for furniture products in developed countries tends to originate from replacement purchases and from the formation of new households, whereas increased spending power is an additional factor in countries that have undergone recent development.

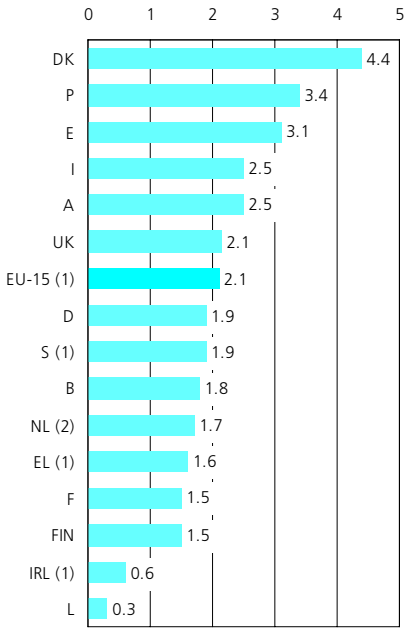
STRUCTURAL PROFILE

The furniture sector generated EUR 26.9 billion of value added in 2000, 2.1 % of the manufacturing total. In employment terms, the furniture sector accounted for 3.3 % of the EU's manufacturing workforce, some 774 400 persons employed in 2000.

In 2000, Germany (26.6 %) and the United Kingdom (16.7 %) had the largest shares of the furniture industry in value added terms. In 2000 Germany (157 700) and Spain (139 800) had the largest workforces, with the United Kingdom also employing more than 100 000 persons. Relative to manufacturing as a whole, Denmark and Portugal recorded a high specialisation in this sector: in Denmark furniture accounted for 4.4 % of manufacturing value added and in Portugal 3.4 %.

Figure 13.1

Manufacture of furniture (NACE Group 36.1) Share of value added in manufacturing, 2000 (%)



(1) 1999.
(2) 1998.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

This chapter covers a number of unrelated manufacturing activities that are classified within NACE Divisions 36 and 37. The largest of these is the furniture sector (NACE Group 36.1), which is the subject of a specific subchapter. The remaining activities include the manufacture of jewellery and related articles (NACE Group 36.2), musical instruments (NACE Group 36.3), sports goods (NACE Group 36.4) and games and toys (NACE Group 36.5), as well as recycling and waste treatment (NACE Division 37). Note that NACE Division 36 does not cover the manufacture of sports clothes or footwear (which are classified within NACE Divisions 18 and 19).

NACE

36: manufacture of furniture; manufacturing n.e.c.;
36.1: manufacture of furniture;
36.2: manufacture of jewellery and related articles;
36.3: manufacture of musical instruments;
36.4: manufacture of sports goods;
36.5: manufacture of games and toys;
36.6: miscellaneous manufacturing n.e.c.;
37: recycling;
37.1: recycling of metal waste and scrap;
37.1: recycling of non-metal waste and scrap.

Table 13.1

Manufacture of furniture (NACE Group 36.1)
Main indicators in the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Production (million EUR)	56 554	58 175	55 696	57 896	59 879	:	68 177	74 072	76 384	:	:
Number of persons employed (thousands)	729	720	687	687	652	:	737	751	765	774	:
Value added (million EUR)	20 676	21 220	20 616	20 671	20 846	:	23 523	25 110	25 812	26 865	:
Personnel costs (million EUR)	15 530	16 096	15 616	15 903	16 193	:	17 754	18 222	18 941	19 829	:
App. labour productivity (thous. EUR/pers. emp.)	28.4	29.5	30.0	30.1	32.0	:	31.9	33.4	33.8	34.7	:
Simple wage adjusted labour productivity (%)	133.1	131.8	132.0	130.0	128.7	:	132.5	137.8	136.3	135.5	:

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

Table 13.2

Number of persons employed in very small enterprises, NACE Group 36.1, 2000

	Number (thousands)	Share of all size classes (%)
B	5 631.0	24.9
DK	2 061.0	8.0
D	19 310.0	10.0
EL	:	:
E	46 082.0	33.0
F	28 829.0	25.4
IRL (1)	941.0	15.7
I	72 089.0	35.1
L	:	:
NL	8 349.0	22.6
A	9 957.0	26.2
P	19 910.0	36.1
FIN	2 501.0	20.0
S	4 064.0	14.7
UK	21 444.0	13.9

(1) 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/sizclass/indus_ms).

Table 13.3

EU production value of seats (excluding parts of) (million EUR)

	Prodcom code	Latest year	Value
Seats for aircraft	36.11.11.10	2000	419.9
Seats for motor vehicles	36.11.11.30	2000	7 722.6
Upholstered swivel seats with variable height adjustment, backrest, fitted castors or glides (excluding medical, surgical, dental or similar chairs)	36.11.11.55		:
Non-upholstered swivel seats with variable height adjustment (excluding seats with castors or glides, medical, surgical or similar chairs)	36.11.11.59	2000	62.0
Upholstered seats with metal frames (excluding swivel seats, medical, surgical, dental or veterinary seats, barbers' or similar chairs, for motor vehicles, for aircraft)	36.11.11.70	2000	2 073.9
Non-upholstered seats with metal frames (excluding medical, surgical or similar chairs, swivel seats)	36.11.11.90	1997	608.0
Seats convertible into beds (excluding garden seats or camping equipment)	36.11.12.10	2000	1 628.1
Seats of cane, osier, bamboo or similar materials	36.11.12.30	1997	60.0
Upholstered seats with wooden frames (including three piece suites) (excluding swivel seats)	36.11.12.50	2000	7 876.0
Non-upholstered seats with wooden frames (excluding swivel seats)	36.11.12.90	1998	687.3
Garden and other seats	36.11.13.00		:

Source: Eurostat, European production and market statistics (theme4/europrom).

It is important to note that the data presented in this chapter are largely based on information on enterprises with 20 or more persons employed. Table 9 of the introductory chapter provides an intra-industry comparison of the importance of enterprises with less than 20 persons employed. Table 13.2 shows the importance of very small enterprises in the furniture sector. Across the EU [(1)] enterprises with less than 10 persons employed accounted for around 23.4 % of employment in 2000, approximately 10 percentage points higher than the corresponding share of this enterprise size class to total manufacturing employment. Portugal, Italy and Spain typically reported high proportions of their respective workforces accounted for by very small enterprises, and in Ireland the share of very small enterprises was 4.6 times higher for the furniture sector than for manufacturing as a whole.

After four consecutive years of growth between 1.2 and 1.4 % the EU's domestic output price index for furniture manufacture grew by 2.2 % in 2001. As such it stood 7.8 % higher overall than in 1996, indicating an annual average growth rate over the five years of 1.5 %. Over the same period only Belgium recorded a fall in output prices (average rate of change of – 1.1 % per annum) and the highest price rises were recorded in Greece (3.8 % per annum) and Finland (3.1 % per annum).

[(1)] EL and L, not available; IRL, 1999.

Traditionally considered as one of the forest-based industries, glass, plastics and metal are all used in the production of furniture. The importance of metal in seat production, for example, can be seen in Table 13.3, which provides EU production values for the latest available year.

LABOUR AND PRODUCTIVITY

Apparent labour productivity in the EU's furniture sector is particularly low, EUR 34 700 per person employed in 2000 compared to a manufacturing average of EUR 55 900. Among the Member States wage adjusted labour productivity reached 156.6 % in Italy in 2000, notably higher than the other Member States [2] that all reported values in the range of 118 to 137 %. Wage adjusted labour productivity was lower in this sector than it was in manufacturing as a whole in every Member State, as were average personnel costs.

EXTERNAL TRADE

After trade surpluses throughout the 1990s, the EU recorded its first trade deficit in furniture products in 2000 and followed this with a larger deficit in 2001. Exports grew in 2001 to reach EUR 10.3 billion, but imports grew faster to EUR 11.0 billion increasing the trade deficit to EUR 721.8 million and reducing the cover ratio (exports as a percentage of imports) to 93.5 %. The EU's imports of furniture more than doubled from 1996 to 2001. The share of furniture in EU manufacturing exports fell to 1.1 %, while its share of manufacturing imports increased to 1.4 %.

Italy and Denmark, the EU's two largest net exporters (intra- and extra-EU trade combined) of furniture, both increased their trade balances in 2001, as they have done for several years. The trade deficits of France, the Netherlands and the United Kingdom, three of the four largest net importers of furniture, continued to increase in 2001. Germany, which traditionally had the largest trade deficit throughout the 1990s, recorded a smaller deficit in 2001 when compared to 2000, down to EUR 1.5 billion from a peak of over EUR 2 billion in 1998.

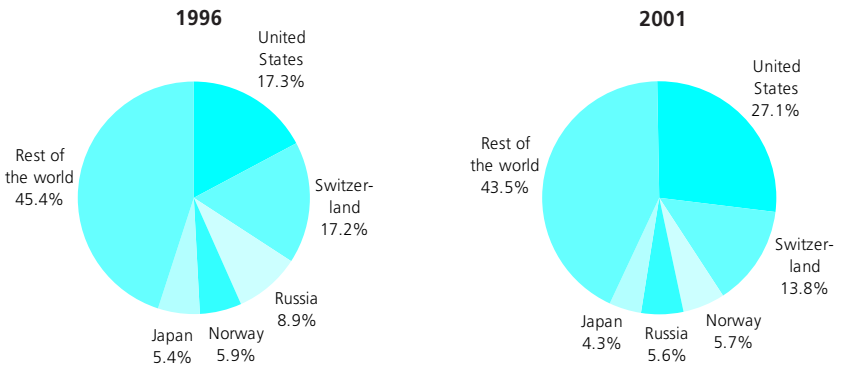
[2] DK, EL, FR, IRL, NL and S, not available.

The increase in EU imports of furniture between 1996 and 2001 has been supplied principally by Poland (an increase of EUR 1.2 billion) and China (an increase of EUR 0.9 billion); these two countries were the largest suppliers of furniture to the EU in 2001. EU imports from other Asian (Indonesia and Malaysia) and central and eastern European countries (Czech Republic, Slovenia and Hungary) also increased by more than EUR 200 million over the same period.

The EU has become increasingly dependent on the United States market for its exports, in 1996 the United States was the destination for 17.3 % of the EU's furniture exports and by 2001 this share had grown to 27.1 %, down slightly on the figure for 2000 (28.6 %).

Figure 13.2

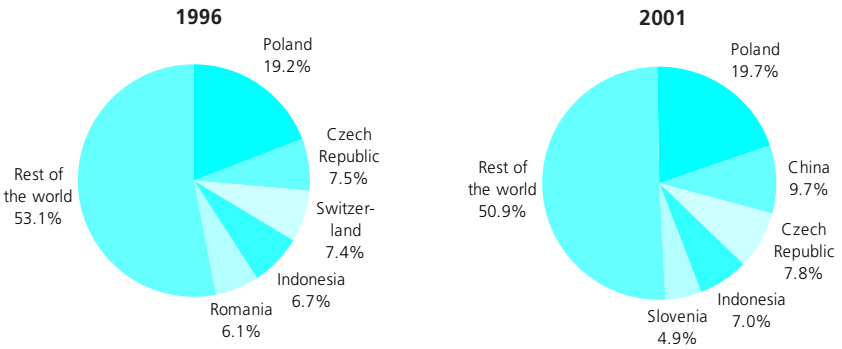
Furniture (CPA Group 36.1)
Destination of extra-EU exports



Source: Eurostat, Comext.

Figure 13.3

Furniture (CPA Group 36.1)
Origin of extra-EU imports



Source: Eurostat, Comext.

Table 13.4

Furniture (CPA Group 36.1)
External trade indicators for the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Extra-EU exports (million EUR)	4 099	4 135	4 557	5 433	6 157	6 815	7 834	8 089	8 443	10 031	10 308
Extra-EU imports (million EUR)	2 540	2 877	3 275	3 705	4 309	4 877	5 862	6 831	8 329	10 382	11 030
Trade balance (million EUR)	1 558	1 257	1 282	1 728	1 848	1 939	1 972	1 258	113	-350	-722
Cover ratio (%)	161.3	143.7	139.2	146.6	142.9	139.8	133.6	118.4	101.4	96.6	93.5

Source: Eurostat, Comext.

13.2: MUSICAL INSTRUMENTS, SPORTS GOODS, TOYS AND GAMES, JEWELLERY

This subchapter covers a number of manufacturing activities that are classified within NACE Division 36. Note that NACE Division 36 does not cover the manufacture of sports clothes and footwear (classified within NACE Divisions 18 and 19), vehicles (classified within NACE Subsection DM) and weapons (classified within NACE Division 29).

Figure 13.4 shows the relative importance of the four activities covered by this subchapter.

MUSICAL INSTRUMENTS (NACE GROUP 36.3)

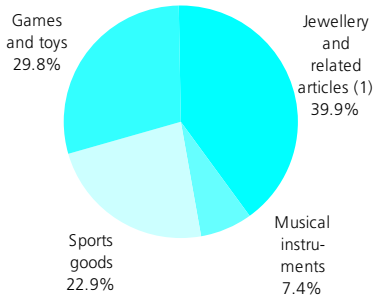
The manufacture of musical instruments is the smallest activity covered in this subchapter. Value added generated by this subsector was EUR 405.7 million in 2000, a level that has remained fairly constant (in current price terms) throughout the 1990s. The manufacture of musical instruments employed 10 800 persons in 2000 considerably lower than the 16 300 employed in 1990. In 2000 Germany recorded the largest share of the EU's workforce, with 4 900 persons employed.

Very small enterprises (with less than 10 persons employed) accounted for 33.3 % of EU [3] employment in this subsector in 2000 and in several Member States there were no enterprises with 50 or more persons employed.

The EU's trade deficit in musical instruments fell throughout the first half of the 1990s to just under EUR 300 million, but stabilised thereafter at between EUR 300 million and EUR 335 million. Japan was the largest supplier of EU imports of musical instruments in 2001, with 28.5 % of the total. China and the United States accounted for the next highest shares, as in 2000.

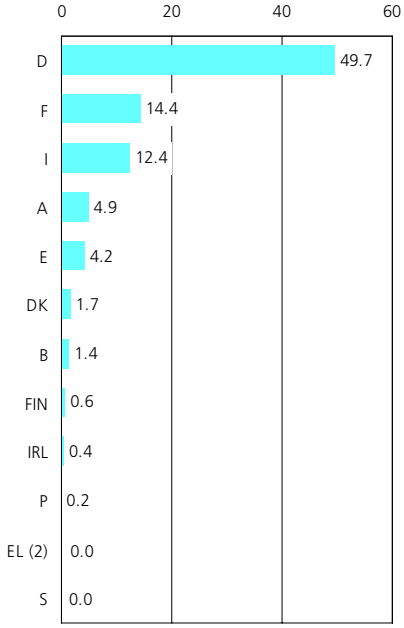
[3] EL, IRL, L, NL, P and FIN, not available; S, 1999.

Figure 13.4
Other manufacturing industries in the EU (NACE Groups 36.2 to 36.5), 2000
Relative share of value added



(1) EL and S, 1999; NL, 1998; IRL, not available.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Figure 13.5
Manufacture of musical instruments (NACE Group 36.3)
Share of value added in the EU, 1999 (%) (1)



(1) L, NL and UK, not available.
(2) 1998.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Table 13.5
Musical instruments (CPA Group 36.3)
External trade indicators for the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Extra-EU exports (million EUR)	263	267	282	321	346	359	394	383	395	487	454
Extra-EU imports (million EUR)	705	679	651	679	643	660	698	715	705	819	777
Trade balance (million EUR)	-442	-413	-369	-358	-297	-302	-304	-332	-309	-332	-323
Cover ratio (%)	37.4	39.2	43.3	47.2	53.8	54.3	56.5	53.6	56.1	59.5	58.4

Source: Eurostat, Comext.

SPORTS GOODS (NACE GROUP 36.4)

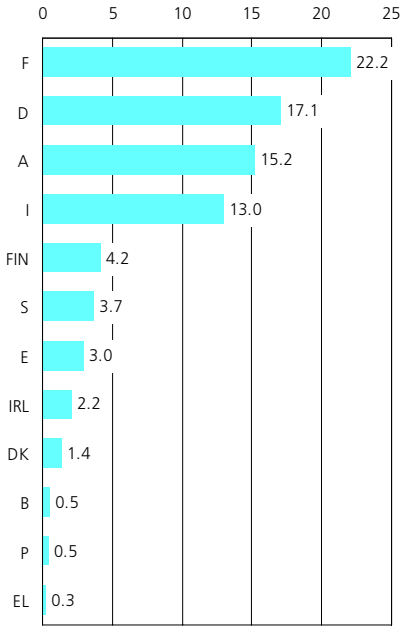
EU value added in this subsector was EUR 1.3 billion in 2000, 0.1 % of the manufacturing total. The level of employment was 27 800 in 2000, lower than in 1999 (30 300). France and Austria had the highest levels of activity in this subsector in 2000, both recording value added in excess of EUR 250 million. Austria was the most specialised of the Member States in this subsector with the manufacture of sports goods accounting for 0.8 % of Austrian manufacturing value added, a figure that was boosted by a 36.9 % increase in value added (in current price terms) between 1999 and 2000.

After a surge in 2000 (reaching EUR 2.5 billion), the imports of sports goods into the EU returned in 2001 (EUR 1.8 billion) to a similar level to that seen towards the end of the 1990s. Exports also fell back from EUR 1.4 billion in 2000 to EUR 1.0 billion in 2001 and the trade deficit consequently narrowed to EUR 876.4 million.

China (38.3 %) and the United States (21.8 %) were the origin of more than half of the EU's imports of sports goods in 2001. The United States accounted for approximately one quarter of the EU's exports of sports goods in 2001, unchanged when compared to a year before, as well as five years earlier.

Figure 13.6

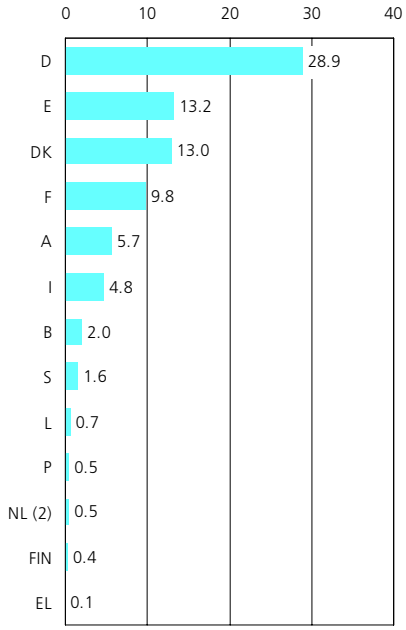
Manufacture of sports goods (NACE Group 36.4) Share of value added in the EU, 1999 (%) (1)



(1) L, NL and UK, not available.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Figure 13.7

Manufacture of games and toys (NACE Group 36.5) Share of value added in the EU, 1999 (%) (1)



(1) IRL and UK, not available.
(2) 1998.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Table 13.6

Sports goods (CPA Group 36.4) External trade indicators for the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Extra-EU exports (million EUR)	670	721	952	1 084	1 204	1 125	1 124	1 063	1 161	1 357	968
Extra-EU imports (million EUR)	1 091	1 152	1 231	1 360	1 400	1 799	2 001	1 980	1 987	2 535	1 844
Trade balance (million EUR)	-421	-430	-279	-276	-196	-674	-877	-917	-825	-1 179	-876
Cover ratio (%)	61.4	62.6	77.3	79.7	86.0	62.5	56.2	53.7	58.5	53.5	52.5

Source: Eurostat, Comext.

Table 13.7

Games and toys (CPA Group 36.5) External trade indicators for the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Extra-EU exports (million EUR)	754	804	902	1 027	1 057	1 035	1 174	1 165	1 208	1 422	1 513
Extra-EU imports (million EUR)	3 872	4 833	4 655	4 106	3 968	4 126	5 496	5 639	6 025	7 482	7 064
Trade balance (million EUR)	-3 118	-4 029	-3 753	-3 079	-2 911	-3 092	-4 322	-4 475	-4 817	-6 061	-5 551
Cover ratio (%)	19.5	16.6	19.4	25.0	26.6	25.1	21.4	20.7	20.1	19.0	21.4

Source: Eurostat, Comext.

GAMES AND TOYS (NACE GROUP 36.5)

The number of persons employed in the EU's games and toys subsector was 42 500 in 2000, a slight fall compared to 1999. This subsector generated EUR 1.6 billion of value added in 2000, of which just under 32 % was accounted for by Germany. Games and toys generated 0.5 % of Danish manufacturing value added in 2000, a higher share than in any other Member State [4], though considerably lower than their 1.2 % share recorded in 1999. Although a small producer, Austria has recorded considerable growth of value added within this subsector since 1996, with output increasing to levels around EUR 100 million.

In 2001 the EU's trade deficit in games and toys was one of the largest of any CPA group. At EUR 5.5 billion it was, however, lower than in 2000 (EUR 6.1 billion) following an increase in exports (6.4 %) and a fall in imports (– 5.6 %); this was the first fall in the deficit since 1995. Games and toys accounted for 0.2 % of the EU's exports of manufactured goods and 0.9 % of its imports. Compared to 2000, China increased its share of EU imports of games and toys from 58.2 % to 62.5 %. China and Japan together provided 80.0 % of the EU's imports of these goods in 2001, up from 64.7 % in 1996.

[4] EL, IRL and S, 1999; NL, 1998.

JEWELLERY AND RELATED ARTICLES (NACE GROUP 36.2)

The manufacture of jewellery and related articles is the largest activity covered in this subchapter: in 2000 its value added in the EU [5] was EUR 2.2 billion, close to 0.2 % of EU manufacturing value added. Italy alone accounted for close to 33 % of this total. The manufacture of jewellery and related articles accounted for 0.5 % of Italian manufacturing value added in 2000, making Italy the most specialised Member State in this subsector. The share of jewellery and related articles in manufacturing value added was also relatively high in Greece (1999), Portugal, Spain and Belgium, where shares above 0.2 % were reported. This subsector also had the largest workforce of the activities covered in this subchapter, reaching a total of 59 400 persons in 2000 for the EU [6]. This was 0.3 % of the EU's manufacturing employment, a larger share than its corresponding share of value added.

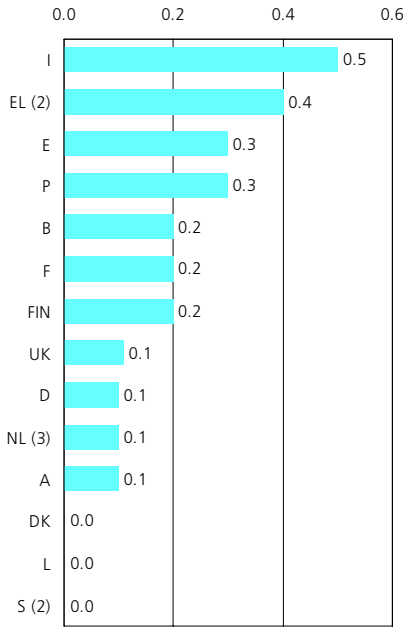
Among the activities covered in this subchapter the manufacture of jewellery and related articles is the one most dominated by very small enterprises: 41.8 % of EU [7] employment in this subsector was concentrated in enterprises with less than 10 persons employed in 2000.

[5] EL and S, 1999; NL, 1998; IRL, not available.
[6] EL and S, 1999; IRL, not available.
[7] EL, IRL and L, not available.

Jewellery and related articles is the only CPA group covered in this subchapter where the EU had a trade surplus in 2001. These products accounted for 1.4 % of the EU's exports of manufactured goods and 1.2 % of its imports. Between 2000 and 2001 the United States strengthened its position as the main origin of EU imports of these products. India's share remained relatively stable during the five years to 2001, as it moved from the largest source of imports to the third largest. Switzerland and the United States remained the most important destinations for EU exports in 2001, with a combined share of 55.1 % of all exports, comparable to their share a year earlier, but 11.2 percentage points higher than in 1996.

Figure 13.8

Manufacture of jewellery and related articles (NACE Group 36.2)
Share of value added in manufacturing, 2000 (%) (1)



(1) EU-15 and IRL, not available.
(2) 1999.
(3) 1998.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Table 13.8

Jewellery and related articles (CPA Group 36.2)
External trade indicators for the EU

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Extra-EU exports (million EUR)	6 444	6 476	7 654	8 215	7 905	8 426	9 495	9 038	9 731	12 690	13 008
Extra-EU imports (million EUR)	4 134	3 965	5 220	5 596	5 229	5 886	6 716	6 554	6 886	9 318	9 803
Trade balance (million EUR)	2 310	2 511	2 434	2 619	2 676	2 540	2 779	2 484	2 845	3 372	3 205
Cover ratio (%)	155.9	163.3	146.6	146.8	151.2	143.2	141.4	137.9	141.3	136.2	132.7

Source: Eurostat, Comext.

13.3: RECYCLING AND WASTE TREATMENT

This new subchapter covers the recycling of waste and scrap (NACE Division 37) and solid waste treatment (part of NACE Division 90). The NACE classification characterises recycling as the processing of used or unused, sorted or unsorted, waste and scrap into secondary raw materials which can then be used by other sectors as an intermediate good. It involves a number of treatment stages such as sorting, crushing, mechanical reduction, stripping, separation and cleaning which may be followed by further treatments to prepare raw materials for use by other sectors, for example producing pellets. Note that the re-use of products (for example, re-treading of tyres) is not covered by this NACE heading and is treated in the appropriate chapters elsewhere in the publication.

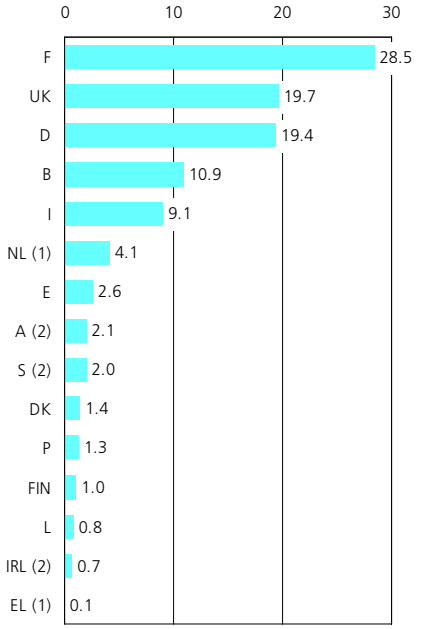
Solid waste treatment covers the treatment of solid waste which is not recycled or re-used. As well as the collection and transportation of solid waste, this activity involves its disposal by means of dumping (for example, landfill), incineration (with or without energy recovery) or other means of destruction. Treatment of liquid waste is covered in Chapter 14.

STRUCTURAL PROFILE

The recycling sector (NACE Division 37) employed 45 500 persons in the EU in 2001, an increase of 10.7 % compared to 2000 which in turn was an increase of 7.0 % compared to 1999. This sector generated EUR 2.2 billion of value added, 5.8 % less than in 2000, contributing 0.2 % to the EU's manufacturing value added and employment in 2001. In employment terms the recycling of non-metal waste and scrap (NACE Group 37.2) was slightly larger than the recycling of metal waste and scrap (NACE Group 37.1) in 2000.

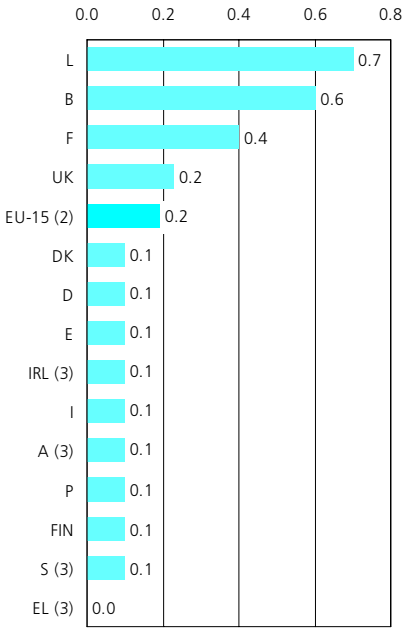
In 2000 France had the largest workforce in this sector, with 34.1 % of the EU total; Germany (19.8 %) and the United Kingdom (18.9 %) had the next largest shares. Most Member States reported employment growth in this sector during the second half of the 1990s, most notably the United Kingdom whose workforce more than doubled.

Figure 13.9
Recycling (NACE Division 37)
Share of value added in the EU, 2000 (%)



(1) 1998.
(2) 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Figure 13.10
Recycling (NACE Division 37)
Share of number of persons employed in manufacturing, 2000 (%) (1)



(1) NL, not available.
(2) 2001.
(3) 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Very small enterprises (with less than 10 persons employed) accounted for just over a quarter (27.5 %) of employment in the EU's [8] recycling sector in 2000, higher than the manufacturing average.

Data from Eurostat's environmental statistics database on waste provides information on the infrastructure and volume of waste treatment, covering recovery and disposal (see Tables 13.10 to 13.12). For this source waste refers to materials that are not prime products (destined for the market), for which the generator has no further own use and which are discarded. This definition excludes residuals directly recycled or reused at the place of generation and waste materials that are directly discharged into ambient water or air.

[8] DK, EL, IRL and L, not available; NL, excluding NACE Group 37.1; A and FIN, 1999.

Table 13.9
Number of persons employed in very small enterprises, NACE Division 37, 2000

	Number (thousands)	Share of all size classes (%)
B	799	20.5
DK	:	:
D	2 850	21.3
EL	:	:
E	344	21.1
F	7 001	28.1
IRL	:	:
I	4 979	42.0
L	:	:
NL (1)	670	16.6
A (2)	182	18.1
P	446	37.4
FIN (2)	206	69.4
S	430	32.2
UK	3 092	24.3

(1) NACE Group 37.2.
(2) 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/sizclass/indus_ms).

Table 13.10

Treatment of municipal waste (thousand tonnes) (1)

		Recovery				Disposal operations		
	Year	Recycling	Composting	Incineration with energy recovery	Other	Incineration without energy recovery	Landfill	of which: controlled
B	1998	1 982	831	1 149	:	233	1 473	:
DK	2000	775	560	1 852	:	:	355	355
D	1998	:	:	:	:	:	16 190	:
EL (2)	2001	286	32	:	:	:	:	:
E	2000	1 778	3 106	1 724	599	:	10 253	10 253
F	2000	3 627	2 964	8 787	:	1 527	14 306	14 306
IRL	2000	271	17	:	:	:	2 093	2 093
I (3)	1999	2 595	2 209	2 121	:	524	21 745	21 745
L	1999	1	33	133	0	0	60	:
NL	2001	2 415	2 301	3 704	:	0	1 314	1 314
A	1999	1 061	1 852	456	23	:	1 553	1 553
P	2000	347	275	930	0	:	3 410	2 820
FIN	1999	:	:	196	:	:	1 446	:
S	2000	1 090	360	1 460	:	:	1 223	:
UK	1999	2 880	760	2 580	130	10	26 850	:

(1) Municipal waste includes waste originating from households, commerce and trade, small businesses, office buildings and institutions (schools, hospitals, government buildings), as well as selected municipal services (park and garden maintenance, street cleaning services) if managed as waste.
(2) Composting, 1997.
(3) Incineration without energy recovery, 1997.
Source: Eurostat, Environment statistics (theme8/milieu/waste).

Table 13.11

Treatment of hazardous waste (thousand tonnes) (1)

		Recovery (2)					Disposal operations						
	Year	Total	Incineration with energy recovery	Recycling and composting	Other	Prepa-ratory activities	Total	Physical/ chemical treatment	Biological treatment	Incineration without energy recovery	Landfill	Other	Prepa-ratory activities
B	1999	634	:	:	:	:	:	:	:	129	631	0	0
DK	2000	185	99	86	:	:	103	:	:	:	103	:	:
D	1998	1 361	:	1 361	:	:	10 012	1 975	2 395	1 113	3 741	:	787
EL (3)	1997	100	:	:	:	:	:	12	:	1	226	:	:
E	2000	1 300	204	982	114	:	:	950	140	:	:	:	:
F (4)	1998	222	:	222	:	:	2 466	302	:	1 361	803	:	0
IRL (5)	1998	153	5	115	25	6	120	3	10	66	41	0	0
I	1998	1 903	134	666	133	970	2 982	908	291	497	10	595	680
L	2000	72	:	68	:	4	11	11	:	:	:	:	:
NL	2000	339	:	:	:	:	1 406	627	:	389	390	:	:
A	1999	:	110	:	:	:	:	:	:	:	:	:	:
P		:	:	:	:	:	:	:	:	:	:	:	:
FIN (6)	1997	61	42	19	:	92	365	59	3	59	234	10	:
S		:	:	:	:	:	:	:	:	:	:	:	:
UK		:	:	:	:	:	:	:	:	:	:	:	:

(1) Hazardous waste refers to the categories of waste streams to be controlled according to the Basle Convention on the control of transboundary movements of hazardous wastes and their disposal.
(2) Recovery, recycling or re-use.
(3) Physical/chemical treatment, estimated.
(4) Excludes internal recovery/disposal; incineration without energy recovery includes incineration with energy recovery.
(5) Total recovery, estimated.
(6) Total excludes preparatory activities; recycling and composting includes other recovery activities.
Source: Eurostat, Environment statistics (theme8/milieu/waste).

Waste management operations can be considered as recovery or disposal. Recovery is defined as any waste management operation that diverts a waste material from the waste stream and which results in a certain product with a potential economic or ecological benefit. Recovery mainly refers to recycling (material recovery), incineration (energy recovery), composting (biological recovery) and re-use. Re-use is any operation by which end-of-life products and equipment or their components are used for the same purpose for which they were conceived. Disposal is defined as any waste management operation serving or carrying out the final treatment and/or disposal of waste.

Table 13.12

Estimated number of waste treatment facilities
Hazardous and non-hazardous waste

		Incineration plants	Landfill sites
B	1999	9	212
DK	1998	68	146
D	1996	154	2 926
EL		:	:
E	1998	13	195
F	1998	305	452
IRL	1998	6	126
I	1997	164	789
L	1995	:	1
NL	1999	14	38
A	1997	9	:
P	1999	4	120
FIN	1998	1	359
S (1)	1998	22	274
UK		:	:

(1) Landfill sites, 1995.
Source: Eurostat, Environment statistics (theme8/milieu/waste).

LABOUR AND PRODUCTIVITY

According to the LFS, the proportion of men working in recycling in 2001 was 81 %, higher than the manufacturing average of 72 %. Full-time employment was 90.6 %, lower than the manufacturing average of 92.5%.

Apparent labour productivity in the recycling sector in 2001 was lower than in manufacturing. Average personnel costs were also generally lower than the manufacturing average in most Member States in 2000. In 2000 [9] all Member States, except for Greece, France and Ireland, reported wage adjusted labour productivity ratios that were higher in the recycling sector than their respective manufacturing averages.

[9] IRL, A and S, 1999; DK, EL and F, 1998; NL, not available.

Table 13.13

Manufacture of furniture; manufacturing n.e.c. (NACE Division 36)
Main indicators, 2000

	B	DK	D	EL (1)	E	F	IRL	I	L	NL (2)	A	P	FIN	S (3)	UK
Production (million EUR)	3 861	3 067	27 012	335	12 183	14 217	:	22 547	62	2 688	2 975	2 300	1 596	2 794	15 261
Number of persons employed (thousands)	29	28	216	7	175	114	:	135	1	28	30	66	16	26	144
Value added (million EUR)	1 056	1 157	9 540	147	4 040	4 213	:	5 307	19	953	1 289	754	648	934	6 035
Purchases of goods and services (million EUR)	3 386	2 098	18 939	226	8 692	10 664	:	18 573	66	1 954	2 040	1 671	1 122	1 988	10 400
Personnel costs (million EUR) (4)	727	846	7 505	88	2 781	3 317	:	3 224	13	641	937	519	432	832	4 210
Gross investment in tangible goods (million EUR) (5)	190.5	:	964.1	:	445.6	:	:	835.7	:	:	186.1	202.9	87.1	122.5	:
App. labour productivity (thous. EUR/pers. emp.)	36.0	41.8	44.2	19.6	23.1	37.1	:	39.2	35.4	:	42.7	11.4	39.4	35.7	41.8
Simple wage adjusted labour productivity (%) (4)	145.2	141.5	127.1	167.1	145.2	127.0	:	164.6	141.2	148.7	137.5	145.3	150.0	112.2	143.3
Gross operating rate (%) (4)	7.5	11.8	7.2	16.8	10.1	6.3	:	9.0	6.5	10.8	10.8	9.9	12.9	3.5	11.1

(1) 1998, except persons employed, 1999. (2) All except persons employed, 1998. (3) 1999. (4) DK and F, 1999. (5) D, 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Table 13.14

Manufacture of furniture; manufacturing n.e.c. (NACE Division 36)
Main indicators, 2000

	BG	CY (1)	CZ	EE	HU	LV	LT	MT	PL	RO	SK	SI (2)	TR
Production (million EUR)	129	148	1 793	230	417	133	167	:	4 345	779	326	570	:
Number of persons employed (thousands) (3)	23	3	81	12	26	10	13	:	180	120	13	:	:
Value added (million EUR)	36	61	492	69	130	52	52	:	1 276	283	54	174	:
Purchases of goods and services (million EUR)	110	:	1 439	177	302	86	123	:	3 525	624	272	381	:
Personnel costs (million EUR)	27	:	325	49	91	28	40	:	778	190	52	145	:
Gross investment in tangible goods (million EUR) (4)	9.7	6.3	77.3	19.4	1.8	10.5	11.4	:	254.6	94.2	62.4	24.4	:
App. labour productivity (thous. EUR/pers. emp.) (3)	1.6	17.9	6.0	5.8	4.9	5.4	3.9	:	5.5	2.4	4.0	:	:
Simple wage adjusted labour productivity (%)	135.7	:	151.6	142.6	143.8	184.5	130.4	:	164.0	149.2	104.2	120.5	:
Gross operating rate (%)	7.3	:	9.0	8.5	8.2	18.4	7.0	:	10.9	11.9	0.7	5.1	:

(1) 1998. (2) 1999. (3) PL, 1998. (4) CZ, 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/enter_cc).

Table 13.15

Recycling (NACE Division 37)
Main indicators, 2000

	B	DK	D	EL (1)	E	F	IRL (2)	I	L	NL (3)	A (2)	P	FIN	S (2)	UK
Production (million EUR)	1 232	142	1 891	15	231	2 730	35	793	42	216	106	176	80	106	1 704
Number of persons employed (thousands)	4	0	8	0	2	14	0	4	0	:	1	1	0	1	8
Value added (million EUR)	252	33	448	2	60	656	13	209	19	69	35	30	23	34	454
Purchases of goods and services (million EUR)	1 134	123	1 934	14	181	2 329	23	573	23	170	74	157	78	72	1 498
Personnel costs (million EUR) (4)	107	12	282	2	34	371	6	104	8	42	21	15	10	17	268
Gross investment in tangible goods (million EUR) (5)	96.5	:	105.2	:	11.2	:	2.0	50.2	:	:	5.7	18.4	6.2	8.8	:
App. labour productivity (thous. EUR/pers. emp.)	64.6	82.1	55.2	14.8	36.9	46.9	57.5	49.5	75.8	:	60.8	25.5	63.9	65.4	58.5
Simple wage adjusted labour productivity (%) (4)	235.7	188.8	158.7	118.8	178.9	137.4	230.9	202.3	233.3	163.1	167.6	206.8	225.0	193.7	169.6
Gross operating rate (%) (4)	10.5	8.4	7.0	2.1	11.1	5.4	20.3	14.0	25.9	11.2	13.4	8.5	12.8	15.5	9.5

(1) 1998, except persons employed, 1999. (2) 1999. (3) 1998. (4) DK and F, 1998. (5) D, 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/ent_l_ms).

Table 13.16

Recycling (NACE Division 37)
Main indicators, 2000

	BG	CY (1)	CZ (2)	EE	HU	LV	LT	MT	PL	RO	SK	SI	TR
Production (million EUR)	39	2	259	6	62	29	31	:	348	186	38	:	:
Number of persons employed (thousands) (3)	0	0	6	0	1	1	1	:	7	9	1	:	:
Value added (million EUR)	1	1	52	1	13	3	8	:	111	36	14	:	:
Purchases of goods and services (million EUR)	39	:	294	5	126	26	26	:	483	210	48	:	:
Personnel costs (million EUR)	1	:	29	1	8	2	4	:	56	16	5	:	:
Gross investment in tangible goods (million EUR)	3.5	0.1	17.1	0.5	1.4	1.3	3.9	:	22.2	9.0	3.9	:	:
App. labour productivity (thous. EUR/pers. emp.) (3)	3.7	27.6	:	3.9	8.6	4.7	6.3	:	10.5	3.8	16.8	:	:
Simple wage adjusted labour productivity (%)	200.0	:	:	150.0	155.6	180.0	225.0	:	198.0	228.2	276.5	:	:
Gross operating rate (%)	1.5	:	3.5	6.9	2.4	4.3	13.6	:	9.5	8.2	14.3	:	:

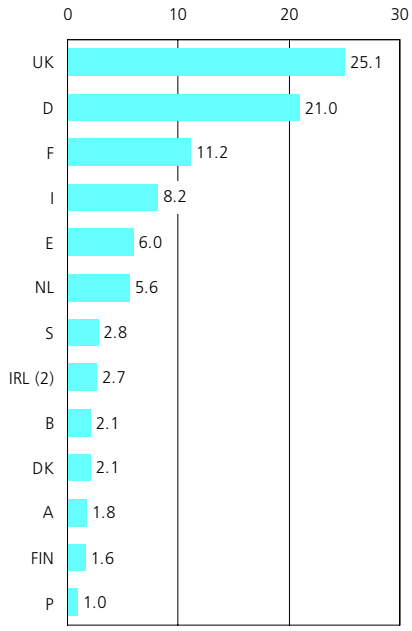
(1) 1998. (2) All except value added and purchases of goods and services, 1999. (3) PL, 1998.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/enter_cc).

Media

This chapter does not follow the usual structure adopted in the other chapters of this publication, as it groups together industrial activities (printing and publishing) with services (audiovisuals). The reason for this is the very definition of media, as a support for the transmission of information. As such, it covers both material goods, such as books and magazines, as well as services, such as radio and television. In the absence of SBS data for NACE Division 92, this overview concentrates exclusively on the activities of publishing, printing and reproduction (NACE Division 22).

Figure 24.1

Publishing, printing, reproduction of recorded media (NACE Division 22)
Value added, 2000 (billion EUR) (1)



(1) EL and L, not available.
(2) 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/enter_ms).

STRUCTURAL PROFILE

Publishing, printing and reproduction activities generated value added worth an estimated EUR 92 billion in the EU in 2000. As such it contributed around 2.0 % of total wealth creation in the business economy, and was twice the size of the pulp and paper sector. Furthermore, the publishing, printing and reproduction sector represented 6.3 % of manufacturing value added, a share that remained fairly stable over the period 1995 to 2000.

The publishing, printing and reproduction sector is to a large extent equally split between publishing and printing activities, while reproduction accounts for only a small percentage of the total (with the notable exception of Ireland – see below). Based on available data [(1)], the publishing, printing and reproduction subsectors accounted respectively for 49.2 %, 46.3 % and 4.5 % of total value added in 2000. In most countries publishing was the largest activity within this sector, although this was not the case in Belgium, Italy and Portugal, where printing prevailed as the largest activity. Ireland stood out from all other Member States with a totally different structure, as three quarters of the sector's value added was generated in reproduction activities (74.7 %, 1999), almost exclusively within the reproduction of computer media (NACE Class 22.33) – see Subchapter 24.6.

[(1)] IRL, 1999; EL, L and A, not available.

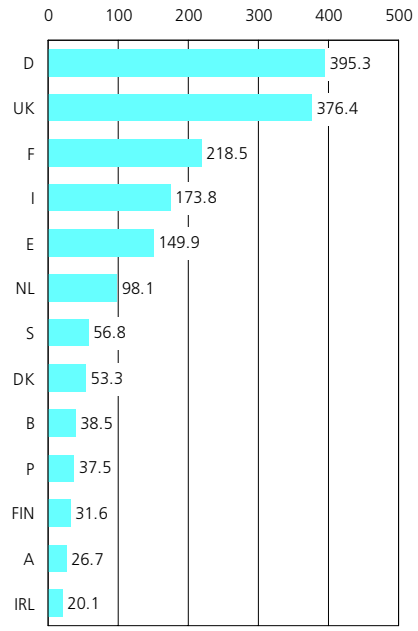
This chapter looks at several activities linked to the media sector. For the purpose of this publication, media is defined in terms of NACE coverage as the activities of publishing, printing and reproduction of recorded media (NACE Division 22), motion picture and video activities (NACE Group 92.1), and radio and television activities (NACE Group 92.2). The latter two are not covered by regular SBS data and hence the availability of official data is weak.

NACE

22: publishing, printing and reproduction of recorded media;
22.1: publishing
22.11: publishing of books;
22.12: publishing of newspapers;
22.13: publishing of journals and periodicals;
22.14: publishing of sound recordings;
22.15: other publishing;
22.2: printing and service activities related to printing;
22.21: printing of newspapers;
22.22: printing n.e.c.;
22.23: bookbinding and finishing;
22.24: composition and plate-making;
22.25: other activities related to printing;
22.3: reproduction of recorded media;
22.31: reproduction of sound recording;
22.32: reproduction of video recording;
22.33: reproduction of computer media;
92.1: motion picture and video activities;
92.2: radio and television activities.

Figure 24.2

Publishing, printing, reproduction of recorded media (NACE Division 22) Number of persons employed, 2000 (thousands) (1)



(1) EL and L, not available.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/enter_ms).

LABOUR AND PRODUCTIVITY

Employment in publishing, printing and reproduction activities was estimated at 1.7 million persons employed in 2000. This was practically equal to the level of employment in the chemical industry.

At a more detailed level, data for those countries which are available show that printing was the largest employer in this sector, with 55.5 % of the workforce in 2000 [2]. Publishing accounted for 42.1 %, a share clearly below its contribution to value added, suggesting higher apparent labour productivity.

[2] EL, L and A, not available.

As with most manufacturing activities, publishing, printing and reproduction is a sector that has a majority of men making up its workforce. According to the LFS, about 6 out of 10 persons employed in this sector in 2001 were men (61.8 %), a proportion that was closer to the services' average (56.5 %) than to the manufacturing average (71.6 %). This can probably be linked to the presence in this sector of activities that have a large service content, such as publishing. The same can be said as regards work duration patterns: 17.3 % of the sector's workforce worked part time in 2001, more than double the manufacturing average (7.5 %) and only 2.5 points below the services' average (19.8 %).

SBS data provides information on the apparent labour productivity of the workforce. On average, each person employed in the sector in the EU in 2000 generated an estimated EUR 54 000 of value added, 8 % above the manufacturing average (EUR 51 400). Wage adjusted labour productivity was, however, usually below the manufacturing average in most countries. This productivity gap was negative in nine of the Member States and of these it exceeded 10 % in six of them [3].

[3] IRL, 1999; EL and L, not available.

Table 24.1

Publishing, printing, reproduction of recorded media (NACE Division 22) Labour force characteristics (% of total employment)

	Female		Part-time		Self-employed	
	1996	2001	1996	2001	1996	2001
EU-15	37.8	38.1	15.2	17.3	11.7	10.0
B	33.5	36.1	:	8.0	13.6	11.4
DK	37.8	37.6	24.7	17.3	7.2	7.7
D	42.9	46.2	18.9	28.7	10.3	7.4
EL	36.0	34.4	:	:	21.5	19.4
E	28.5	31.0	6.1	2.7	15.2	11.6
F	37.1	37.7	9.7	11.8	9.5	8.4
IRL	33.5	33.7	:	:	:	:
I	30.8	30.9	6.2	6.3	21.3	23.5
L (1)	:	24.0	:	:	:	:
NL	32.9	34.0	43.0	41.8	10.9	8.3
A	43.2	37.5	10.2	18.6	10.3	8.1
P	32.4	32.0	:	:	:	:
FIN	47.7	46.9	14.7	12.6	:	8.0
S	39.0	38.7	22.8	23.1	:	:
UK	39.2	36.5	14.4	12.7	9.5	7.4

(1) 1999.
Source: Eurostat, Labour Force Survey.

24.1: FILM AND VIDEO

The film and video industry is covered by NACE Group 92.1. It includes services of cinematographic and audiovisual production, including films, advertising, television fiction and documentaries and production services, such as special effects and dubbing. Distribution activities and the management of audiovisual rights are also covered within this subchapter, however activities relating to the reproduction of video recordings (NACE Class 22.32) are covered in Subchapter 24.3. The retail trade and renting of videos to the general public (NACE Groups 52.1, 52.4 and 71.4) are formally not included in the NACE categories covered by this subchapter, although some information is provided as regards the development of this market.

One of the most important developments that affected the cinema industry since the mid-1980s has been the explosion of television supply, following the deregulation of the audiovisual market. Private television channels have actively financed the film industry, with the objective of securing programming for their increasing number of channels. In addition, several Member States also support their domestic cinema industries, either by requiring television channels to invest in film production or through direct financing.

At an European level, the Commission is active in the film industry notably via the MEDIA programme [4], focusing on three priority areas: training, development of production projects, and distribution and promotion of cinematographic works.

The place of cinema exhibition in the business cycle of the film industry has been steadily decreasing over the years. Only a limited and decreasing proportion of a film's revenue comes from box office sales. The lion's share comes from the television market, both through the sale of broadcasting rights and through the sale and renting of video tapes and DVDs.

[4] Now in its third phase 2001 to 2005.

Table 24.2

Main indicators of cinema exhibition, 2001

	Number of cinema sites (1)	Number of screens (2)	No. of seats (thousand) (3)	Admissions (millions) (4)	Box office receipts (million EUR) (2)
EU-15	10 556	24 844	:	925.1	4 921.9
B	123	493	109.1	24.0	130.9
DK	165	361	55.2	11.9	69.4
D	1 815	4 792	884.0	177.9	967.0
EL	350	400	:	13.2	73.6
E	1 254	3 747	1 307.8	146.8	616.4
F	2 186	5 241	1 072.1	185.8	1 013.9
IRL	70	322	58.7	15.9	83.0
I	2 243	3 198	:	105.5	561.9
L	11	25	5.1	1.4	8.5
NL	173	565	97.8	23.9	141.0
A	206	587	106.7	19.0	119.5
P	238	455	102.0	19.3	69.2
FIN	219	339	58.4	6.5	46.3
S	811	1 155	193.8	18.1	138.6
UK	692	3 164	733.1	155.9	882.7

(1) B, EL, E, F, IRL, I, A and FIN, *Source:* Media Salles.
(2) B, EL, E, F, IRL, I, NL, A and FIN, *Source:* Media Salles.
(3) B, EL, E, F, IRL, I, NL, A and FIN, *Source:* Media Salles; IRL, 2000.
(4) B, EL, E, F, IRL, I, L, A and FIN, *Source:* Media Salles.
Source: Eurostat, Audiovisual services (theme4/auvis/quest/cinexm).

STRUCTURAL PROFILE

There were 10 556 cinemas in the EU in 2001, with a total of 24 844 cinema halls (or screens). Hence, each cinema had, on average, 2.4 screens. Belgium, Ireland and the United Kingdom had generally larger cinemas than the other Member States, with more than four screens on average, ahead of the Netherlands (3.3 screens) and Spain (3.0 screens). That was more than double the average size of cinemas in Italy and Sweden (1.4 screens). Greece reported a low presence of multi-screen cinemas, which resulted in an average of just over one screen per site (see Table 24.2).

Over the past decade there was a trend towards fewer but larger cinemas, as the number of cinema sites decreased in most countries, while the number of screens increased. This evolution is further evidenced in the growing importance of multiplexes, defined as cinemas with eight screens or more. According to Media Salles, more than half of the cinema screens in the United Kingdom in 2001 were part of a multiplex (56.2 %), twice the proportion of 1992 (25.1 %). Multiplexes accounted for more than 40 % of cinema screens in Belgium (48.7 % compared to 21.7 % in 1991), Spain (40.9 % compared to 3.6 % in 1991) and Luxembourg (40.0 % compared to 0 % before 1996). Multiplexes were, however, of far less importance in sparsely populated countries, such as Sweden (13.9 % compared to 9.9 % in 1990) and Finland (12.7 %, up from 3 % in 1998), but also the Netherlands (12.4 % compared to 3.5 % in 1996) and Italy (11.7 % compared to 0.4 % in 1991).

Table 24.3
Breakdown of cinema admission by country of origin of the film, 2001 (%)

	National	EU-15 (1)	US
B	1.4	16.5	81.0
DK (2)	30.5	9.2	55.6
D (3)	11.6	6.2	81.2
EL	:	:	:
E	17.9	13.7	62.2
F	41.7	7.3	46.6
IRL	:	:	:
I	19.3	17.1	59.9
L	0.1	30.7	68.0
NL (2)	9.5	23.2	60.2
A (3)	1.5	:	:
P	:	:	:
FIN	10.1	15.2	69.4
S (2)	23.5	10.4	62.5
UK (3)	21.0	:	77.0

(1) Other than national.
(2) *Source:* Eurostat, Audiovisual services (theme4/auvis/quest/cinexm).
(3) 2000.
Source: Media Salles.

Table 24.4
Top ten movies in the EU, 2001

Title	Country	Admissions (million)
All origins		
Harry Potter and the Sorcerer's Stone	US	42.9
Bridget Jones's Diary	UK/US	26.4
The Lord of the Rings: The Fellowship...	US/NZ	21.1
Shrek	US	21.0
What Women Want	US	20.7
Hannibal	US	18.1
American Pie 2	US	17.5
The Mummy Returns	US	17.4
Cast Away	US	17.0
Pearl Harbor	US	16.9
EU productions		
Bridget Jones's Diary	UK/US	26.4
Le fabuleux destin d'Amélie Poulain	F/D	13.2
Der Schuh des Manitu	D	12.5
The Others	E	10.5
La vérité si je mens ! 2	F	7.9
Chocolat	UK/US	7.7
Le pacte des loups	F	7.0
Billy Elliot (1)	UK	6.7
Le placard	F	6.4
Torrente 2: Misión en Marbella	E	5.3

(1) 5.0 million admissions in the EU in 2000.
Source: EAO, Focus 2002.

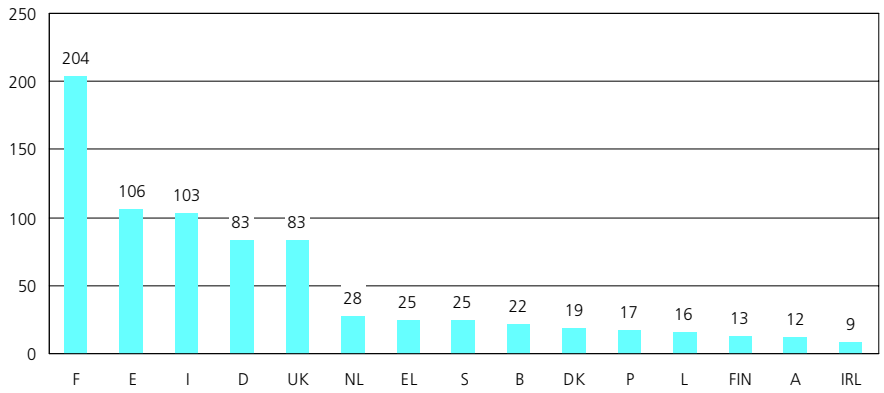
The average cinema auditorium in the EU had 225 seats [5] in 2001. The evolution over the past decade has been towards smaller auditoriums. In fact, according to Media Salles, every Member State recorded a decreasing average number of seats per screen over the period 1991 to 2001.

The largest cinema screens in terms of seating capacity were found in Spain, with an average of 349 seats per screen (down from 498 in 1991), while the average was half that size in the Nordic countries where they were the smallest: Finland (172 seats per screen in 2001, down from 190 in 1991), Sweden (168 seats, down from 187) and Denmark (154 seats, down from 164).

Box office revenues were on a rising trend in the EU over the past decade, supported by an increasing number of admissions. In this respect, 2001 was a remarkable year, total receipts reached EUR 4.9 billion (up 11.0 % on the year before), with 925 million admissions (up 10.5 %). Growth was consistent across the EU, except in Finland, where there was a drop from over 7 million spectators to 6.5 million (– 7.8 %). From 1991 to 2001, cinema admissions in the EU increased overall by 56 %.

[5] EL and I, not available.

Figure 24.3
Number of long length films produced, 2001 (1)



(1) IRL, 2000; B, DK, EL, E, F, IRL, I, NL, A and FIN, *Source:* Media Salles.
Source: Eurostat, Audiovisual services (theme4/auvis/quest/avprod).

Combining the above figures reveals that the average receipts per cinema seat was EUR 896 per year [6] (or EUR 2.50 per day). Luxembourg (EUR 1 667 per seat) and the Netherlands (EUR 1 442) boasted the highest return, more than double the figures reported by Portugal (EUR 678) or Spain (EUR 471).

EU inhabitants went on average 2.4 times to the cinema in 2001 and paid an average of EUR 5.30 for each ticket. France was the leading cinema market in the EU, both in terms of admissions, with 166 million, and in terms of box office receipts, with EUR 1.0 billion. Ireland was the EU country where people visited the cinema the most in 2001, with an average of 4.2 cinema tickets sold per inhabitant, followed by Spain (3.7 tickets), Luxembourg (3.2 tickets) and France (3.1 tickets). The countries which had the lowest attendance were also the countries where multiplexes were less developed: notably Italy (1.8 tickets per inhabitant per year), the Netherlands (1.5 tickets), Finland (1.3 tickets) and Greece (1.2 tickets).

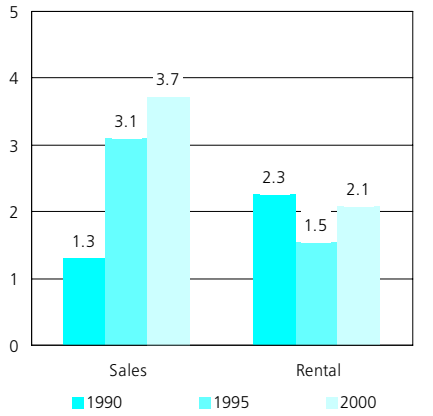
[6] IRL, 2000; EL and I, not available.

American productions dominate the European film marketplace. More than half of the cinema admissions concern films of American origin in every Member State [7], except France (46.6 %). The market share of American films exceeded four fifths in Belgium (81.0 %) and Germany (81.2 %), three quarters in the United Kingdom (77.0 %) and two thirds in Luxembourg (68.0 %) and Finland (69.4 %). According to the European Audiovisual Observatory (EAO), the estimated market share of American movies in the EU was 65.4 % of admissions in 2001, down from 73.0 % in 2000. For the purpose of comparison, 12.0 % of admissions in 2000 were to see French films and 7.5 % for British films [8] - see Tables 24.3 and 24.4.

Looking at the supply side, the largest contributor to the EU film industry was France, where 204 long-length feature films were produced in 2001 (see figure 24.3). Spain (106 productions) and Italy (103 productions) followed as the next most important EU film producers. On aggregate, there were 625 long-length feature films produced in the EU in 2001 (taking into account co-productions by different Member States), up from 595 in 2000 and 441 in 1995 [9].

[7] D and UK, 2000; EL, IRL, A and P, not available.
[8] *Source:* European Audiovisual Observatory, Focus 2002, available at ttp://www.obs.coe.int/online_publication/reports/focus2002.pdf.en.
[9] *Source:* European Audiovisual Observatory, id.

Figure 24.4
Receipts from pre-recorded video cassettes or discs in the EU (billion EUR)



Source: Eurostat, Audiovisual services (theme4/auvis) and Statistics in Focus '*Video and DVD statistics*', Theme 4 -21/2002.

Turning to the video market (video tapes and DVDs) receipts from sales and rentals developed rapidly in the 1990s to reach EUR 5.8 billion by 2000 (see Figure 24.4). This was split approximately two thirds for sales and one third for rentals. There has been a clear shift from rentals to sales over the past decade as their respective shares of turnover reversed compared to 1990. The development of the video retail network mirrored this evolution, as 40 % of the 40 000 rental outlets active in the EU in 1990 had disappeared by 1996. More recent data suggests that the number stabilised thereafter and even started to grow again in some countries, an upturn probably linked to the emergence of the DVD format.

24.2: RADIO AND TELEVISION

The radio and television sector consists of three major activities: the production of programmes, the compilation of schedules for those programmes, and their transmission to the final consumer. Following the NACE classification, the first two are included in Group 92.2, while the transmission of signals via hertzian relays, satellite or cable networks is covered by Group 64.2 (telecommunication services). There are no SBS data available for the activities covered in this subchapter.

The radio and television sector has been transformed in much the same way as telecommunications in recent decades, with what used to be a regulated market (based around state-controlled enterprises with a legal monopoly) turning into a highly competitive market with an upsurge in supply. Indeed, during the last 20 years, most Member States have opened their audiovisual markets to private operators. As a result, global and pan-European channels have emerged and transmission techniques such as satellite or cable have developed.

STRUCTURAL PROFILE

According to the AUVIS database, there were about 11 500 television and radio service enterprises in the EU in 1999. They employed 290 000 persons, of which about 200 000 were working in the television sector. Total turnover reached approximately EUR 52 billion, again this was generated principally in the television sector (EUR 42 billion). The United Kingdom dominated the EU's radio and television sector, with the second largest workforce (85 000 persons employed in 2001) and the highest level of turnover (EUR 20.5 billion in 2000) – see Table 24.5. Radio and television activities were larger than the cinema and video sector (NACE Group 92.1) in terms of turnover in every Member State except for Germany, France and Italy [10].

[10] EL, IRL and A, not available; NL and FIN, 1999; F and I, 1998; E, 1997; other Member States, 2000.

Table 24.5

Main indicators of radio and television services enterprises, 2000

	Number of enterprises (1)	Employ-ment (2)	Turnover (million EUR) (3)
EU-15	11 500	290 000	52 000
B	618	8 944	902
DK	330	7 750	861
D	676	94 000	8 614
EL	604	8 200	:
E	1 108	29 649	3 411
F	734	17 482	6 963
IRL	:	:	:
I	2 566	24 686	5 549
L	44	:	655
NL	:	:	1 788
A	:	3 000	:
P	372	6 044	510
FIN	167	6 199	718
S	590	8 715	1 364
UK	3 606	85 024	20 457

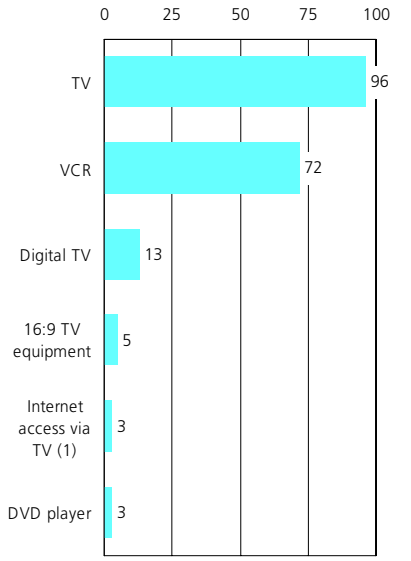
(1) L and S, 2001; EU-15, D and E, 1999; F, I and FIN, 1998; EL, 1995; EU-15, estimate.
(2) D, S and UK, 2001; EU-15 and FIN, 1999; F and I, 1998; E and A, 1997, EL, 1995; EU-15, estimate.
(3) EU-15, NL and FIN, 1999; F and I, 1998; E, 1997; EU-15, estimate.
Source: Eurostat, Audiovisual services (theme4/auvis/gedata) and Statistics in Focus '*The European TV Broadcasting market*', Theme 4 - 24/2002.

Television broadcasters can count on three main types of revenues depending on their legal status and commercial strategy: public funding through annual television licence fees and/or subsidies (for public operators); revenues from advertising and sponsorship (for public and commercial operators) and direct receipts from viewers (in the case of pay-TV operators). Advertising and sponsorship was the primary source of financing, accounting in 2000 for 47 % of the broadcasting turnover [11]. Public funding was the second most important source of income (32 %) before subscription fees (21 %). In general, public funding has remained relatively flat in recent years, while income from advertising and subscriptions increased at a faster pace. Note that Spain, Luxembourg, the Netherlands and Portugal do not levy a TV licence fee.

[11] *Source:* Eurostat, Statistics in Focus, '*The European TV Broadcasting market*', Theme 4 - 24/2002.

Figure 24.5

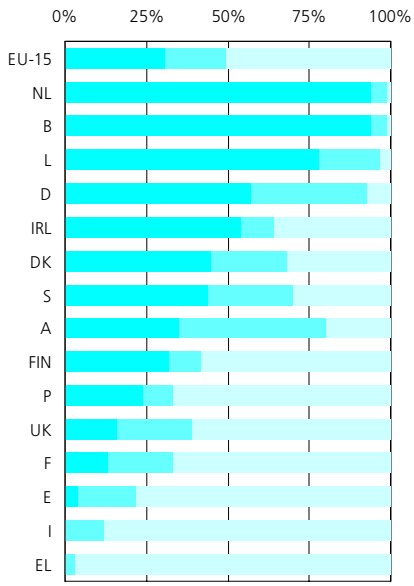
Equipment rate of households in the EU, 2000 (%)



Source: Eurostat, Statistics in Focus '*The European TV Broadcasting market*', Theme 4 -24/2002.

Figure 24.6

Cable and satellite penetration rates in TV households, 2001 (%)



Source: Eurostat, Statistics in Focus '*The European TV Broadcasting market*', Theme 4 -24/2002.

On the demand side, virtually all households in the EU were equipped with a television set in 2000 (96 %) - see Figure 24.5. Terrestrial (hertzian) reception of television signals is the traditional way of receiving television programmes, but cable and satellite have emerged as important alternatives. They generally provide a better quality of reception and a wider choice of programmes and often include additional services such as telephony or high-speed Internet access. Terrestrial reception remained the main access to television for the majority of the EU's households in 2000 (51 %), ahead of cable networks (31 %) and satellite dishes (19 %) - see Figure 24.6. At a national level, however, considerable differences can be highlighted. The Benelux countries had the highest cable penetration, with more than 90 % of television households connected. Satellite reception was predominant only in Austria (45 %), although it was also popular in Germany (36 %), Sweden (26 %) and Denmark (23 %), three countries that also reported relatively high cable penetration rates (57 %, 44 % and 45 % respectively). In contrast, Greece, Italy and Spain depended mostly on hertzian transmission (97 %, 88 % and 79 % respectively).

Turning to radio broadcasting, the process of deregulation initiated at the start of the 1980s resulted in the rapid growth of the number of radio stations up until 1994, when 7 600 existed in the EU. From 1995 onwards there was a period of consolidation when the number of radio stations declined to approximately 5 500 by 2000, of which about 5 100 were private and 400 public. It should be noted that the vast majority of radio stations have only regional or local coverage.

According to a recent Eurobarometer survey [12], almost 60 % of EU citizens listen to the radio practically every day. The most listened to programme types were (multiple answers allowed): music (86.3 %), news and current affairs (52.9 %) and sport (17.4 %). It should be noted that contrary to television, radio is considered as an accompanying media, in the sense that listening often takes place at the same time as other activities, for example, driving a car or working. Indeed, radio listening patterns generally show a peak in the morning between 7 a.m. and 9 a.m., although a second peak is also observed in the late afternoon in some countries.

[12] Eurobarometer 56, '*Europeans' participation in cultural activities*', 04/2002.

24.3: REPRODUCTION OF VIDEO RECORDINGS

Enterprises active in the reproduction of video recordings are covered by Class 22.32 of NACE. This class includes the reproduction from master copies of records, compact discs and tapes with motion pictures and other video recordings.

Undoubtedly, the most important development affecting this sector is the increasing success of the digital versatile disc (DVD) format, which has shifted focus away from video tapes toward DVD.

STRUCTURAL PROFILE

There is only partial coverage of SBS data available for this sector. In the 10 countries for which data are available for this NACE Class (note the absence of German data, as well as missing information for Belgium, Denmark, Greece and Luxembourg), value added was EUR 381 million in 2000 [13]. Note that both Ireland and Austria reported no activity in this field. The largest contributions came from the United Kingdom (EUR 155.8 million in 1999), Italy (EUR 88.9 million) and the Netherlands (EUR 69.5 million).

[13] IRL and UK, 1999; B, DK, D, EL and L, not available.

The small size of the reproduction of video recordings' subsector can be demonstrated by the fact that it accounted in 2000 for only 0.6 % of the value added generated in the publishing, printing and reproduction sector [14] (NACE Division 22), although Italy (1.1 %) and the Netherlands (1.2 %) reported shares twice as high. As a share of manufacturing, this subsector never accounted for more than 0.1 % of value added. Nevertheless, the Netherlands clearly stood out as the most specialised country in the reproduction of video recordings, as the contribution of this subsector to manufacturing value added was three times the average reported by the 10 countries for which data are available.

LABOUR AND PRODUCTIVITY

There were 6 179 persons employed in the reproduction of video recordings' subsector in the same ten countries in 2000 [15], most of them were working in the United Kingdom (2 170), France (1 246) or Italy (1 028).

[14] IRL and UK, 1999; B, DK, D, EL and L, not available.
[15] IRL, 1999; B, DK, D, EL and L, not available.

Apparent labour productivity was equal to EUR 59 100 per person employed [16], or 20 % above the manufacturing average for these countries (EUR 48 800). This result was mainly the consequence of particularly high ratios reported in the Netherlands (EUR 91 600), Italy (EUR 86 500) and the United Kingdom (EUR 63 900).

Average personnel costs were also, in most countries, above the respective manufacturing averages, particularly in Portugal, where they reached EUR 25 400 per employee against an average of EUR 11 900 for the manufacturing sector. In Spain (EUR 34 400) and Italy (EUR 39 400), average personnel costs were more than one third above their level in manufacturing, while in the Netherlands they were one fifth higher (EUR 45 700).

Wage adjusted productivity was also generally higher in the reproduction of video recordings' subsector than it was for the manufacturing average. This ratio exceeded 200 % in the Netherlands (200.3 %), Portugal (207.1 %), Italy (219.2 %) and the United Kingdom (228.8 %, 1999).

[16] IRL and UK, 1999; B, DK, D, EL and L, not available.

24.4: PUBLISHING AND REPRODUCTION OF SOUND RECORDINGS

The music recording industry includes activities that range from the selection, management and production of artists to the manufacturing, marketing and distribution of recorded media in the form of compact discs, vinyl and cassettes. Two classes of the NACE classification cover this industry, Class 22.14 for the publishing side and Class 22.31 for the reproduction side.

The music recording sector is dominated by a small number of multinational distribution companies, known as the majors, (VivendiUniversal, Sony Music, EMI, Warner and BMG), all of which are part of larger entertainment conglomerates. Each major owns, in part or in full, various labels, enterprises that sign and groom artists, guide the production process and market the final product. Independent labels account for approximately one fifth of the market, increasingly they are distributed by the majors.

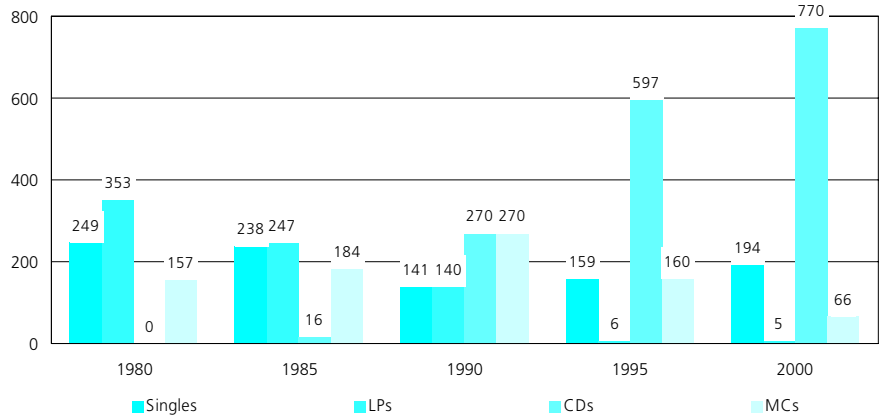
STRUCTURAL PROFILE

There were 1.04 billion units of music sold in 2000 in the EU (see Figure 24.7). The publishing and reproduction of music recordings (NACE Classes 22.14 and 22.31) generated some EUR 2.3 billion of value added in the EU in 2000 [17]. The sector accounted for less than 0.1 % of manufacturing value added in most Member States; however, its share rose to 0.3 % in the United Kingdom, 0.4 % in the Netherlands and up to 0.7 % in Austria (due to the presence of a large reproduction enterprise for compact discs). The United Kingdom had the highest value added among those countries for which data are available (EUR 700 million, 1999), followed by France (EUR 520.6 million) and Germany (EUR 335 million). Reproduction activities boosted the contribution of Austria (EUR 204 million, 1997) and the Netherlands (EUR 202 million), while no other EU country generated more than EUR 100 million of value added.

[17] EL, not available; IRL and UK, 1999; A, 1997; DK, 1998 for NACE Class 22.31; IRL, excluding NACE Class 22.14; L, excluding NACE Class 22.31.

Figure 24.7

Evolution of the number of music recordings sold in the EU (million units) (1)



(1) Excluding L.
Source: Eurostat, Audiovisual services (theme4/auvis) and Statistics in Focus '*Statistics on sound recordings*', Theme 4 -18/2002.

The breakdown of this activity between publishing and reproduction was slightly to the advantage of the latter, based on the available data [18]. The reproduction of music recordings accounted for 56 % of total value added in this sector, although considerable differences existed at a national level. The reproduction of recorded media accounted for almost all of this sector in Austria (98 %, 1997), Germany (84 %) and Belgium (81 %), and a clear majority in the Netherlands (68 %) and the United Kingdom (67 %, 1999). On the other hand, publishing was responsible for generating 97 % of value added in Sweden, 82 % in Finland, 81 % in France and 63 % in Italy and Spain.

LABOUR AND PRODUCTIVITY

Publishing and reproduction of music recordings was a relatively small labour market. There were 35 500 persons employed in this sector in the EU in 2000 [19]. Almost one third of them were working in the United Kingdom (10 000), followed by France (7 200) and Germany (5 500). A small majority (52 %) of those employed in this sector in 2000 [20] were working in reproduction activities rather than music publishing. The largest workforces for the reproduction of music recordings were in the United Kingdom (6 100 persons employed), Germany (4 200 persons), the Netherlands (2 100 persons) and France (2 000 persons). As regards music publishing, France employed 5 200 persons, the United Kingdom 3 900 and Sweden 2 300 persons.

Each person employed in the publishing and reproduction of music recordings sector generated an average of EUR 69 900 of value added in the EU in 2000 [21], which was significantly above the manufacturing average (EUR 50 000). Apparent labour productivity for reproduction activities (EUR 68 200) was on average higher than for the music publishing sector (EUR 59 000). Looking at the wage adjusted labour productivity ratio, Austria had the highest rate (454.8 %, 1997), followed by the United Kingdom (206.7 %).

[18] EL, IRL and L, not available; UK, 1999; DK, 1998; A, 1997.
[19] EL, not available; IRL, 1999; A, 1997; DK, 1998 for NACE Class 22.31; IRL, excluding NACE Class 22.14; L, excluding NACE Class 22.31.
[20] EL, IRL and L, not available; DK, 1998; A, 1997.
[21] EL, IRL and L, not available; UK, 1999; DK, 1998; A, 1997.

24.5: PUBLISHING AND PRINTING

Publishing can be defined as the act of producing and issuing informative material. Printing involves placing the published material on paper or other materials. These activities are covered by NACE Group 22.1 (publishing) and NACE Group 22.2 (printing). Note that the publishing of sound recordings (Class 22.14) was treated in the previous subchapter (24.4) but that the statistics presented in this subchapter are based on an aggregate of NACE Groups 22.1 and 22.2 and hence also include the publishing of sound recordings.

Among the most important trends that affected the publishing and printing sector in recent years has been the widespread adoption of information and communication technologies (ICTs). On the one hand, ICTs have created a number of electronic alternatives to traditional printing. Newspapers, magazines, books and reference materials are increasingly consulted on-line or through some other type of electronic medium, for example CD-ROMs. On the other hand, advances in technology have also led to more cost-efficient production, for example thanks to more affordable desktop publishing (DTP) solutions, resulting in lower and more flexible print-runs and an increasing number of titles. Details on the reading habits of the EU's inhabitants are provided in table 24.6. Within printing activities, ICTs have also led to a widespread change in production processes. For example, much of a document's preparation and setting is now controlled by computers.

STRUCTURAL PROFILE

The publishing and printing sector generated EUR 86.9 billion of value added in the EU in 2000 [22]. Among reporting countries, this represented on average 6.0 % of total manufacturing value added. Three countries were relatively specialised in publishing and printing: Denmark (8.2 % of manufacturing value added), the Netherlands (9.5 %) and the United Kingdom (9.9 %). The least specialised Member States included Italy (4.0 %) and Ireland (2.5 %, 1999).

The publishing sector was generally larger than the printing sector as it accounted for 51.3 % of their combined value added in 2000 [23]. Nevertheless, a few countries showed a clear predominance for printing activities, notably Austria (61.7 %, 1999), Portugal (60.5 %), Belgium (58.6 %) and Italy (57.3 %).

[22] EL and L, not available; IRL and A, 1999.
[23] EL and L, not available; IRL and A, 1999.

This sector is characterised by a relatively high number of micro-enterprises with between one and nine persons employed. These accounted for 14.6 % of the value added [24], exactly twice their weight for total manufacturing (7.3 %).

In recent years, publishing and printing boasted considerable growth (in current price terms) in several countries, chiefly in the United Kingdom where value added expanded from EUR 14.4 billion in 1996 to EUR 24.2 billion in 2000, equivalent to an average increase of 13.8 % per annum. Spain and Italy also enjoyed considerable growth, equal to 9.4 % and 6.5 % per annum respectively over the period 1995 to 2000. France (1.7 % per annum between 1996 and 2000) and Belgium (1.1 % per annum between 1995 and 2000) reported the slowest growth.

LABOUR AND PRODUCTIVITY

There were 1.6 million persons employed in the EU's publishing and printing sector in 2000 [25], or 5.8 % of total manufacturing employment. Most were working in printing activities (57.1 %). Several countries with fairly lengthy time-series [26] reported at best stable employment in the second half of the 1990s while employment declined in the majority of Member States, notably Austria (down 1 500 persons between 1995 and 1999) and Portugal (down 2 700 persons between 1995 and 2000). In only two countries did the publishing and printing workforce increase significantly: the United Kingdom (from 338 000 in 1996 to 365 000 in 2000) and Spain (from 115 000 in 1995 to 148 000 in 2000).

Apparent labour productivity in the EU's publishing and printing sector was equal to EUR 53 100 of value added per person employed in 2000 [27], which was 6 % above the manufacturing average. This result is largely influenced by the United Kingdom where productivity was highest at EUR 66 300 per person employed, 12 % above the national manufacturing average (EUR 59 400). Only four other countries reported a level of apparent labour productivity that was higher for the publishing and printing sector than it was for total manufacturing [28]. All others displayed productivity below their respective manufacturing averages, sometimes to a large extent, as for example in Sweden (– 21 %), Denmark (– 23 %), Finland (– 27 %) and Ireland (– 53 %, 1999).

[24] EL and L, not available; B, IRL and A, 1999; P and FIN, 1998; NL, 1997.
[25] EL and L, not available; A, 1999.
[26] All Member States except D, EL and L.
[27] EL and L, not available; IRL and A, 1999.

Table 24.6
Reading habits of EU citizens, 2001

	No	Yes
Read a book in the last year	42.1	57.9
Read magazines	18.4	81.6
Read newspapers	12.7	87.3

Source: Eurobarometre 56 '*Europeans' participation in cultural activities*', 04/2002.

EXTERNAL TRADE

The EU was a net exporter of published and printed goods in 2001 (CPA Groups 22.1 and 22.2), with a trade surplus equal to EUR 3.1 billion and a cover ratio of 182.1 %. Germany was the biggest contributor to this result as its trade surplus was by far the highest among the Member States, reaching EUR 2.0 billion (including both intra-EU and extra-EU trade). Ireland followed (EUR 858 million), ahead of Italy (EUR 741 million) and the United Kingdom (EUR 701 million). The largest deficits were registered in Portugal (EUR 220 million) and Austria (EUR 230 million).

The United States (18.1 %) and Switzerland (17.3 %) were by far the most important markets for EU exporters of published and printed goods in 2001, with no other country accounting for more than 5 % of total exports. Furthermore, some 38.6 % of the EU's publishing and printing imports originated from the United States in 2001. China recorded the most rapid growth, as its share of EU imports rose from 2.7 % in 1991 to 10.3 % some 10 years later, mainly at the expense of Switzerland whose share was almost halved over the same period, from 19.6 to 10.3 %.

[28] E, I and A, 1999; P, 2000; EL and L, not available.

24.6: OTHER REPRODUCTION

This subchapter completes the coverage of NACE Division 22 and addresses the activity of reproduction of computer media (NACE Class 22.33). This Class includes the reproduction from master copies of software and data on discs and tapes.

STRUCTURAL PROFILE

Reproduction of computer media in the EU is carried out almost exclusively in Ireland. In 2000, this sector generated EUR 2.4 billion of value added [29], of which EUR 2.0 billion were accounted for by Ireland (1999). Three countries (Luxembourg, Austria and Portugal) reported no activity at all in this sector. In all countries reporting reasonably long time-series growth was extremely fast in the late 1990s albeit from quite low levels. For example, between 1999 and 2000 value added was multiplied by approximately a factor of six in Spain (from EUR 3.7 million to EUR 21.2 million), and a factor of four in Italy (from EUR 3.0 million to EUR 12.2 million) and France (from EUR 6.4 million to EUR 25.3 million). Ireland, which was already the most developed in this activity, recorded a doubling of value added between 1998 (EUR 1.1 billion) and 1999 (EUR 2.0 billion).

[29] EL, not available; IRL, 1999; DK and A, 1998; B, DK and D, including NACE Class 22.32.

LABOUR AND PRODUCTIVITY

There were 14 400 persons employed in the reproduction of computer media in the EU in 2000 [30], of which 5 600 were working in Ireland. The predominance of this country in terms of employment is challenged only by the United Kingdom, where 3 600 persons were employed in this sector. The development of employment mirrored the fast expansion recorded in terms of value added, although to a lesser extent. Between 1999 and 2000, the number of persons employed in this sector was multiplied fivefold in Spain (from 127 to 663) and more than threefold in France (from 256 to 875). Slower but still significant job creation was reported in Italy (from 224 to 342), the United Kingdom (from 2 400 to 3 600) and Ireland (from 5 000 to 5 600).

[30] EL, not available; IRL, 1999; DK and A, 1998; B, DK and D, including NACE Class 22.32.

Table 24.7

Publishing, printing, reproduction of recorded media (NACE Division 22)
Main indicators, 2000

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Number of enterprises (units)	4 963	3 065	19 769	:	21 920	29 612	524	27 803	180	7 035	1 551	4 146	2 812	8 457	29 890
Turnover (million EUR)	6 307	4 781	51 416	:	15 146	34 189	9 715	24 633	:	13 594	4 157	2 472	3 939	7 940	54 620
Number of persons employed (thousands)	39	53	395	:	150	219	20	174	:	98	27	37	32	57	376
Value added (million EUR) (1)	2 122	2 071	21 032	:	6 026	11 175	2 702	8 240	:	5 629	1 750	951	1 619	2 764	25 090
Purchases of goods and services (million EUR)	4 261	2 804	29 897	:	9 753	23 370	5 911	17 196	:	7 950	2 414	1 582	2 425	5 326	29 526
Personnel costs (million EUR) (1)	1 341	1 550	14 189	:	3 615	8 810	628	4 669	:	3 302	1 117	598	1 088	2 150	14 430
Gross investment in tangible goods (million EUR)	501	395	2 694	:	1 019	1 024	217	1 201	:	573	279	319	195	365	2 583
App. labour productivity (thous. EUR/pers. emp.) (1)	55.1	38.8	53.2	:	40.2	51.1	138.7	47.4	:	57.4	65.6	25.4	51.3	48.7	66.7
Wage adjusted labour productivity (%) (1)	135.5	129.5	147.5	:	151.4	124.0	426.7	138.7	:	149.1	150.9	151.6	145.9	118.3	163.8
Gross operating rate (%) (1)	12.4	10.9	13.3	:	15.9	6.9	26.2	14.5	:	17.2	15.2	14.3	14.1	7.7	19.5

(1) IRL, 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/enter_ms).

Table 24.8

Publishing, printing, reproduction of recorded media (NACE Division 22)
Main indicators, 2000

	BG	CY (1)	CZ	EE	HU	LV	LT	MT	PL	RO	SK	SI (2)	TR
Number of enterprises (units)	1 251	:	7 106	401	1 007	584	856	:	16 400	2 469	518	1 845	:
Turnover (million EUR)	195	94	1 476	152	1 299	104	189	:	3 867	538	343	605	:
Number of persons employed (thousands) (3)	12	2	39	6	24	5	10	:	84	42	12	:	:
Value added (million EUR)	56	44	385	51	286	49	69	:	1 575	174	89	199	:
Purchases of goods and services (million EUR)	147	:	1 106	103	861	58	118	:	2 435	405	246	369	:
Personnel costs (million EUR)	28	:	230	38	136	26	49	:	669	75	64	172	:
Gross investment in tangible goods (million EUR) (4)	15	10	65	11	3	4	16	:	304	49	18	36	:
App. labour productivity (thous. EUR/pers. emp.) (3)	4.6	25.7	9.8	9.2	11.8	10.3	6.9	:	14.1	4.1	7.4	:	:
Wage adjusted labour productivity (%) (3)	178.8	:	140.7	130.9	210.1	190.5	135.3	:	181.8	150.8	137.4	:	:
Gross operating rate (%)	15.0	:	10.5	8.5	11.6	22.7	10.6	:	23.4	18.5	7.3	4.5	:

(1) 1998.
(2) 1999.
(3) PL, 1998.
(4) CZ, 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/enter_cc).

Table 24.9

Publishing (NACE Group 22.1)
Main indicators, 2000

	B	DK	D	EL	E	F	IRL	I	L	NL	A (1)	P	FIN	S	UK
Number of enterprises (units)	1 162	1 286	5 933	:	5 925	12 008	115	6 974	91	2 740	490	1 063	1 367	4 297	9 633
Turnover (million EUR)	2 875	2 724	29 033	:	7 141	19 506	578	11 368	:	7 096	1 498	1 147	2 370	4 595	29 177
Number of persons employed (thousands)	13	35	190	:	51	89	4	45	:	44	8	11	18	30	164
Value added (million EUR) (2)	870	1 167	10 857	:	2 895	5 949	301	3 464	:	2 971	569	372	936	1 509	12 737
Purchases of goods and services (million EUR)	2 017	1 616	17 465	:	4 742	14 039	270	8 168	:	4 103	921	808	1 503	3 190	16 490
Personnel costs (million EUR) (2)	534	887	7 118	:	1 566	4 467	157	1 856	:	1 614	350	251	633	1 207	6 927
Gross investment in tangible goods (million EUR)	230	146	851	:	261	335	91	270	:	168	31	61	78	139	794
App. labour productivity (thous. EUR/pers. emp.) (2)	68.6	33.8	57.0	:	57.1	66.6	73.9	77.0	:	67.8	73.5	32.3	52.8	49.8	77.5
Wage adjusted labour productivity (%) (2)	148.2	129.0	152.2	:	172.2	132.2	190.7	149.6	:	157.6	158.9	140.5	146.0	114.2	176.9
Gross operating rate (%) (2)	11.7	10.3	12.9	:	18.6	7.6	27.9	14.1	:	19.2	14.6	10.6	13.6	6.6	19.9

(1) All except number of enterprises, 1999. (2) IRL, 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/enter_ms).

Table 24.10

Printing and service activities related to printing (NACE Group 22.2)
Main indicators, 2000

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Number of enterprises (units)	3 728	1 736	13 584	:	15 445	17 114	372	20 386	86	4 140	1 045	3 056	1 368	3 951	18 937
Turnover (million EUR)	3 379	1 936	21 338	:	7 827	14 136	878	12 852	135	5 886	2 086	1 299	1 543	3 285	23 639
Number of persons employed (thousands)	26	18	198	:	97	125	9	127	1	51	18	26	14	26	200
Value added (million EUR) (1)	1 232	862	9 744	:	3 066	5 063	381	4 644	75	2 446	982	571	672	1 241	11 439
Purchases of goods and services (million EUR)	2 211	1 106	11 818	:	4 893	8 941	461	8 715	57	3 444	1 116	755	907	2 087	12 148
Personnel costs (million EUR) (1)	797	628	6 823	:	1 998	4 221	246	2 761	43	1 589	699	343	450	933	7 163
Gross investment in tangible goods (million EUR)	260	233	1 741	:	750	651	67	911	:	393	180	256	116	224	1 685
App. labour productivity (thous. EUR/pers. emp.) (1)	48.3	49.1	49.2	:	31.6	40.5	41.1	36.6	62.5	47.7	56.1	22.2	49.1	47.6	57.2
Wage adjusted labour productivity (%) (1)	128.3	130.1	141.7	:	138.1	116.0	152.9	131.5	165.3	137.6	134.8	159.1	145.3	124.0	148.6
Gross operating rate (%) (1)	12.9	12.1	13.7	:	13.6	6.0	16.3	14.7	23.4	14.6	13.6	17.5	14.9	9.4	18.1

(1) IRL, 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/enter_ms).

Table 24.11

Reproduction of recorded media (NACE Group 22.3)
Main indicators, 2000

	B	DK	D	EL	E	F	IRL	I	L	NL	A (1)	P	FIN	S	UK
Number of enterprises (units)	73	43	252	:	550	490	37	443	3	155	15	27	77	209	1 320
Turnover (million EUR)	53	121	1 046	:	178	548	8 259	414	:	611	368	26	26	60	1 805
Number of persons employed (thousands)	0	1	7	:	2	4	7	2	:	3	2	0	0	0	12
Value added (million EUR) (2)	20	41	430	:	66	163	2 019	132	:	213	155	8	11	14	913
Purchases of goods and services (million EUR)	34	82	614	:	118	390	5 180	312	:	402	216	19	16	49	888
Personnel costs (million EUR) (2)	10	35	248	:	50	122	225	52	:	100	56	4	5	10	340
Gross investment in tangible goods (million EUR)	11	16	102	:	8	38	60	21	:	12	55	2	2	2	104
App. labour productivity (thous. EUR/pers. emp.) (2)	55.6	35.0	62.4	:	28.6	39.4	329.5	64.8	:	69.5	102.8	33.3	59.7	33.4	77.0
Wage adjusted labour productivity (%) (2)	162.4	114.8	173.2	:	98.4	130.3	896.1	179.4	:	175.0	277.2	192.6	195.4	91.6	231.8
Gross operating rate (%) (2)	18.9	5.4	17.3	:	8.9	7.4	27.3	19.3	:	18.4	27.0	15.0	21.0	7.4	31.7

(1) All except number of enterprises, 1999. (2) IRL and A, 1999.
Source: Eurostat, Structural Business Statistics (theme4/sbs/enterpr/enter_ms).