## Statistics n focus

#### **INDUSTRY, TRADE AND** SERVICES

16/2008

## Author **Guy VEKEMAN** Contents

Half a century in a nutshell 2
Low productivity and profitability3
Small shipbuilding enterprises matter5
Market specialisation5
Emphasis on repair yet production of cruise ships and yachts substantial6



Manuscript completed on: 12.02.2008 Data extracted on: 06.09.2007 ISSN 1977-0316 Catalogue number: KS-SF-08-016-EN-N

#### © European Communities, 2008

## Shipbuilding and repair:

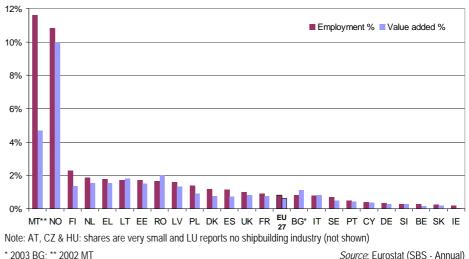
## From tankers to pleasure boats

Close to 290 000 persons were employed by the 19 000 enterprises that made up the EU-27's shipbuilding and repair industry (NACE DM 35.1 -Building and repairing of ships and boats) in 2004. These enterprises generated a value added of EUR 10 billion for a turnover of EUR 34 billion. Despite increasing maritime cargo transport, with trade flows spurred by globalisation, the share of shipbuilding in the total manufacturing industry throughout the EU-27 only made up around 0.6% of value added and 0.8% of employment. The shipbuilding and repair industry consists of both the construction and repair of ships (70% of value added and 80% of employment) and the construction and repair of pleasure and sporting boats.

Shipbuilding and repair is very unevenly distributed across the EU-27. It comes as no surprise, though, that this industry is virtually absent in the five landlocked Member States. It in fact only plays a major role in a small number of countries. Fig. 1 shows shipbuilding's share in the Member States' manufacturing industries, both in terms of value added and of employment.

Among EU-27 Member States, only in Malta<sup>1</sup> (2002 data) was more than 10% of the manufacturing workforce employed in shipbuilding and repair. Finland came in second position, with shipbuilding employing barely above 2% of the manufacturing total. The next five Member States just fell short of the 2% mark. The larger Member States ranged close to the EU-27 average, at 0.8% of manufacturing employment, with only Poland notably above that level. Also in Norway<sup>1</sup> the share of shipbuilding and repair exceeds 10% of the manufacturing total. With few exceptions, due to the industry's rather labourintensive nature, its share in manufacturing employment was larger than its share in value added.

Value added and employment of Shipbuilding and repair (NACE DM 35.1), 2004 Fig. 1: as % of the total Manufacturing industry (NACE Section D)



Source: Eurostat (SBS - Annual)

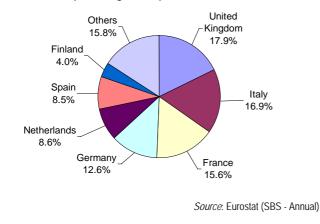
When evaluating which Member States contributed most to the EU-27 aggregate value added total, the larger economies obviously played a more dominant role. Fig. 2 shows the main contributors in terms of value added and Fig. 3. in terms of employment. The differences between the two are guite striking.

<sup>&</sup>lt;sup>1</sup> Both in Malta and Norway, the total manufacturing industry is relatively small, as it does not include oil and natural gas extraction (Norway) nor maritime transport or tourism (Malta). In its publications on manufacturing industry, Statistics Norway replaces the term 'shipbuilding' with 'production of oil-platforms', illustrating a highly specialised industry (see for example: http://www.ssb.no/english/subjects/10/07/sti\_en/).

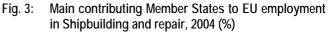
In terms of value added, concentration was quite pronounced, with the United Kingdom making up over 18% of the EU-27 total, followed by Italy and France. In contrast, the bulk of smaller contributors made up only 15.8% of the total.

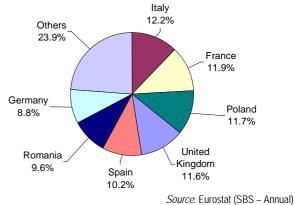
The concentration in terms of employment was less pronounced. The seven main contributors were led by Italy with 12.2%, ahead of France (11.9%).

## Fig. 2: Main contributing Member States to EU value added in Shipbuilding and repair, 2004 (%)



Poland and Romania also provided a large contribution in terms of employment, although they did not rank among the top contributors in terms of value added. The bulk of smaller contributors made up 23.9% of EU-27 aggregate employment. In particular the United Kingdom, the Netherlands and Germany made much smaller contributions in terms of employment than they did in terms of value added.





#### Half a century in a nutshell

Among the current 27 EU Member States, there are only five landlocked countries. Maritime cargo transport has been increasing steadily over the past decade, with trade flows spurred by globalisation<sup>2</sup>.

This picture is not reflected in comparable growth of shipbuilding and repair in the EU-27. For several decades, fierce competition from mainly East-Asian shipyards led to an industrial overcapacity in shipbuilding and repair. With construction costs rising throughout the 1970s and 1980s, profit margins were strongly reduced.

Some Member States reacted by applying measures protecting their national naval construction, such as granting cheap credits to their shipyards' customers. Eventually this could only delay the closure of many of those shipyards.

Ample maritime transport capacity since the 1970s made tariffs lag cost increases for decades, also exerting downward pressure on the pace of fleet renewal. Reductions in transport costs were achieved through an increase in the tonnage of new vessels and by optimising logistics processes through reducing the time required for loading and unloading. This fostered growth in the volume of container transport and the demand for Roll-on-Roll-off vessels compared to dry-bulk carriers.

Maritime passenger transport has been declining steadily over the past sixty years as transatlantic migratory flows halted and passenger transport to Africa and Asia almost completely vanished following decolonisation. The rise in mass tourism mainly benefitted the explosive growth of air transport, short sea-ferry passenger transport eventually finding its market reduced due to its replacement by fixed links and to its further suffering the competition of cheapfare airlines.

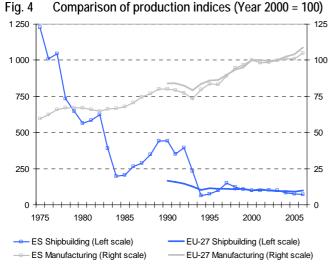
The market for small sporting and pleasure boats grew rapidly, fostered by the increase in leisure time, while the development of cruise tourism created a new growing market for the construction of large cruise vessels and luxurious yachts.

Data series on shipbuilding and repair spanning several decades are scarce. Short-term annual statistics provide production volume indices corrected for the change in output prices.

The indices spanning over three decades of total manufacturing industry and shipbuilding and repair in Spain (Fig. 4) illustrate the large drop in production, especially between 1975 and 1985. Whereas total manufacturing increased by over 75% between 1975 and 2006, shipbuilding and repair dropped to 6% of its 1975 level. Data available for Germany from 1978 onwards show a comparable trend.



<sup>&</sup>lt;sup>2</sup> See for example: Maritime transport of goods and passengers 1997-2005, URL: <u>http://epp.eurostat.ec.europa.eu/portal/page?\_pageid=1073,46587259&\_dad=po</u>rtal&\_schema=PORTAL&p\_product\_code=KS-SF-07-094

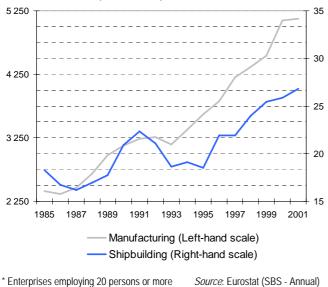


Source: Eurostat (STS)

EU-27 production indices are available only from 1990 onwards. Shipbuilding production declined by 40% throughout the 1990s. Since 2000, the index has remained more or less stable (-3%), whereas it continued to decline in Spain (-29%). The EU-27 total manufacturing index corroborates the increasing trend shown for Spain.

There are a few long-term series on structural business statistics that span the period 1985-2001. They cover several key characteristics such as production value, employment and added value.

## Fig. 5 EU-15\* Manufacturing and Shipbuilding and repair turnover (EUR Billion)



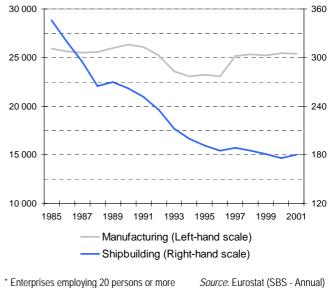
Since the data were collected prior to the EU enlargements of 2004 and 2007, the aggregates refer to EU-15. In addition, data refer to enterprises with more than 20 employees. Data are in current prices without any correction for increases in producer prices.

In Fig. 5, total manufacturing turnover is shown to have outgrown shipbuilding and repair by close to 66% over the observation period. As a result, the share of shipbuilding and repair in EU-15 total manufacturing fell from 0.76% to 0.52%. As one can expect from a relatively small sector that is highly dependent on the business cycle, turnover in shipbuilding and repair was more volatile than manufacturing turnover.

Employment in shipbuilding and repair (Fig. 6) declined rather dramatically, especially between 1985 and 1996. The rise in global maritime transport demand failed to bring much relief. In 1985 shipbuilding and repair still provided over 1.3% of EU-15 total manufacturing employment. That share had declined to 0.7% by 2001, which implied a loss of over 170 000 jobs. In contrast, total manufacturing employment in the EU-15 recovered from the cyclical downturn that took place in the early- to mid-1990s.

The labour-intensive nature of shipbuilding and repair is apparent from its share in total manufacturing employment which is significantly higher than its share in total manufacturing turnover.

## Fig. 6 EU-15\* Manufacturing and Shipbuilding and repair employment (Thousand)



#### Low productivity and profitability

Ratios such as the apparent or wage adjusted labour productivity, the average labour cost or the gross operating rate provide an indication of the competitiveness of an economic activity. Apparent labour productivity (value added per person employed) is systematically lower in labour-intensive industries, as compared to capital-intensive industries. In shipbuilding and repair it stood at EUR 34 500 in the

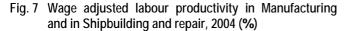


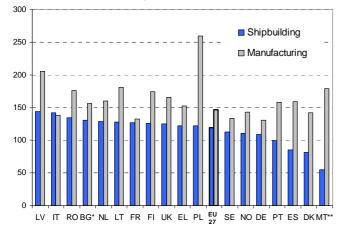
EU-27 in 2004, compared to EUR 45 500 in the manufacturing industry.

Dividing this productivity measure by average labour cost yields a wage adjusted labour productivity amounting to 119 % in shipbuilding and repair, compared to 147 % in manufacturing. The share of gross operating surplus in turnover is the gross operating rate. At 6.1 %, it was well below the average 9.5 % in manufacturing.

Among Member States contributing to above 1 % of EU-27 total value added in 2004, the industry appeared relatively profitable in Italy, Greece, the United Kingdom, the Netherlands and Romania. In contrast, the gross operating rate was negative in Malta (2002), Denmark and Spain, with value added being insufficient to cover labour costs. In Malta, the gross operating loss prompted the government to intervene in a merger and restructuring operation.

Shipbuilding and repair require a broad range of skilled labour and many of its tasks are non-repetitive. In





Countries with over 2 500 persons employed. Selected Member States account for 98% of EU shipbuilding employment; \* 2003 BG; \*\* 2002 MT

Source: Eurostat (SBS - Annual)

2004, the EU-27 average labour cost of 29 000 EUR in shipbuilding and repair fell short of the manufacturing industry average of EUR 31 000 (Fig. 7).

Shipbuilding labour costs in Malta (2002) and Portugal however significantly exceeded their manufacturing averages. Manufacturing activities in central Europe are still geared towards labour-intensive, low-wage industries. In consequence, shipbuilding paid relatively higher wages. Shipbuilding labour costs in Poland were 40 % above their manufacturing average and, in Lithuania and Romania, the labour cost wedge was above 50 %.

Both the apparent and the wage adjusted labour productivity were higher in the production of pleasure and sporting boats than in the construction of ships. The gross operating rate was substantially higher, showing that this part of the industry is prospering. Across the board, labour cost in the production of boats is close to that of shipbuilding, though important differences exist in individual Member States.

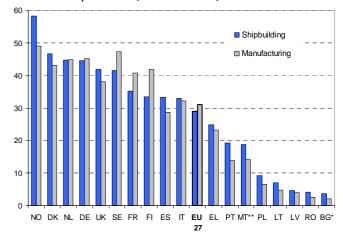


Fig. 8 Unit labour cost in Manufacturing and in Shipbuilding and repair, 2004 (EUR Thousand)

Countries with over 2 500 persons employed. Selected Member States account for 98% of EU shipbuilding employment; \* 2003 BG; \*\*2002 MT

Source: Eurostat (SBS - Annual)

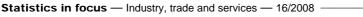
#### Table 1: Main characteristics of Building and repair of ships and boats (NACE DM 35.1) in the EU and Norway, 2004

	EU-27 <sup>(1)</sup>	EU-25	BE	<b>BG</b> <sup>(2)</sup>	cz	DK	DE	EE	IE	EL	ES	FR	IT	CY
Number of enterprises	19 359	18 682	168	284	183	268	560	87	22	814	2 131	2 482	3 628	28
Turnover - EUR Million	34 000	33 083	212	94	21	1 064	5 163	100	33	563	3 068	5 988	5 655	9
Value added at factor cost - EUR Million	10 000	9 793	75	24	5	191	1 258	21	14	219	852	1 563	1 690	4
Total purchases - EUR Million	25 000	24 565	142	75	17	877	4 451	80	20	464	2 254	4 108	4 434	5
Personnel costs - EUR Million	7 900	7 800	62	18	5	227	1 135	18	12	155	952	1 208	1 032	3
Gross investment - EUR Million	1 000	980	7	5	2	37	109	4	1	45	73	265	170	0.3
Number of persons employed - Thousand	290	260	1.7	5.2	0.8	5.0	25.9	2.3	0.42	7.2	30.0	35.1	36.1	0.16
Turnover per person employed - Thousand	117.2	127.2	123.3	18.0	26.0	211.6	199.1	44.5	78.3	77.7	102.2	170.4	156.8	53.8
Apparent labour productivity - EUR Thousand	34.5	37.7	43.7	4.7	6.4	38.0	48.5	9.2	32.1	30.2	28.4	44.5	46.8	25.3
Wage adjusted labour productivity %	119	118	110	130	79	82	109	117	106	122	86	127	142	149
Unit labour cost - EUR Thousand	29.0	31.8	39.8	3.6	8.1	46.6	44.5	7.9	30.3	24.8	33.2	35.1	32.9	17.0
Gross operating rate %	6.1	6.0	6.1	7.1	3.3	-3.4	2.4	3.2	3.6	11.4	-3.3	5.9	11.6	16.5
Value added in production value %	29	29	34	26	25	18	23	23	43	33	28	29	28	54

Note: No Shipbuilding reported by Luxembourg (1) Estimated values and, in some

(1) Estimated values and, in some cases, approximations (2) 2003: BG

Source: Eurostat (SBS - Annual)





#### Small shipbuilding enterprises matter

The historical picture of gigantic shipyards has grown outdated in most European Member States. Some data on size-class breakdown are available. Fig. 9 shows the share of large shipyards (above 250 persons employed) in total shipbuilding and repair industry employment, compared with the equivalent ratio for the total of the manufacturing industry.

Large shipyards were the shipbuilding industry's main employers in Romania, Poland, France, Lithuania and the United Kingdom in 2004. Their contribution to employment was below 50% in Greece, Spain, Italy and the Netherlands. There were no large shipbuilding and repair enterprises in Belgium nor in Cyprus. EU aggregates are not available.

Fig. 9 Employment share of large enterprises (> 250 persons employed) in Shipbuilding and repair and in Manufacturing, 2004 (%)



A few more Member States also provide information on employment in enterprises employing up to 20 persons. Their share in total employment is shown in Fig. 10, both for the shipbuilding and repair industry and for the entire manufacturing industry. Enterprises employing up to 20 persons significantly contributed to the total number of persons employed in shipbuilding in the Netherlands, Sweden, Italy and Greece. In those countries, the number of non-remunerated workers (owners or family members working in their small enterprise) was also above the 5.2% EU-average. In Sweden and the Netherlands, the relative importance of small shipbuilding enterprises differs much from that in the rest of their manufacturing industries.

- 60% 50% 40% 30% 40% 20% 10% 10% NL IT SE EL BE PT ES LV EE UK FR PL DK\* NO DE LT\* RO \* 2005 50% \* 2005
- Fig. 10 Employment share of enterprises with less than 20 persons employed in Shipbuilding and repair and in Manufacturing, 2004 (%)

#### Market specialisation

Building and repairing of Ships (NACE DM 35.11) accounted for about 79% of the industry's EU workforce in 2004, pleasure and sporting boats (NACE DM 35.12) making up the remaining 21% (see Fig. 11). Market specialisation is however quite different among Member States, with almost all employment in Romania being devoted to shipbuilding while, in Sweden and the Netherlands, production of pleasure and sporting boats employs more than 50% and 40% respectively. This correlates well with the high share in employment that small enterprises have and with the large number of self-employed in these two countries.

Table 1:(continued) Main characteristics of building and repair of ships and boats (NACE DM 35.1) in the EU and Norway, 2004

	LV	LT	HU	MT <sup>(3)</sup>	NL	AT	PL	PT	RO	SI <sup>(4)</sup>	SK	FI	SE	UK	NO
Number of enterprises	98	85	162	65	1 595	52	2 552	271	396	89	9	577	1 249	1 507	1 093
Turnover - EUR Million	69	112	11	65	3 267	39	1 477	268	451	54	38	1 211	693	3 941	5 706
Value added at factor cost - EUR Million	18	41	3	38	862	19	388	82	156	16	11	399	258	1 789	1 807
Total purchases - EUR Million	58	74	7	25	2 551	21	1 154	190	346	44	31	839	447	2 287	3 977
Personnel costs - EUR Million	12	32	3	68	588	11	298	81	116	10	6	312	205	1 392	1 615
Gross investment - EUR Million	5	8	1	0.4	29	1	54	32	35	6.2	0.4	29	25	80	79
Number of persons employed	2.7	4.6	0.48	3.7	14.9	0.39	34.5	4.3	28.4	0.69	1.0	9.5	5.5	34.2	28.1
Turnover per person employed - Thousand	25.5	24.4	21.9	17.5	219.0	100.5	42.8	62.8	15.9	78.0	37.7	128.2	125.5	115.2	203.2
Apparent labour productivity - EUR Thousand	6.6	9.0	5.2	10.3	57.8	48.4	11.3	19.2	5.5	22.7	10.6	42.2	46.7	52.3	64.3
Wage adjusted labour productivity %	143	128	84	54	129	145	122	99	134	151	178	126	113	125	111
Unit labour cost - EUR Thousand	4.6	7.0	6.2	19.0	44.8	33.3	9.2	19.3	4.1	15.0	6.0	33.5	41.5	41.8	58.2
Gross operating rate %	8.0	8.1	-1.0	-47.3	8.4	18.6	6.1	0.2	8.9	11.3	12.7	7.2	7.6	10.1	3.4
Value added in production value %	24	36	32	63	26	51	26	30	32	29	26	32	37	44	32

(3) 2002: MT (4) SI Gross investment: 2003



Source: Eurostat (SBS - Annual)

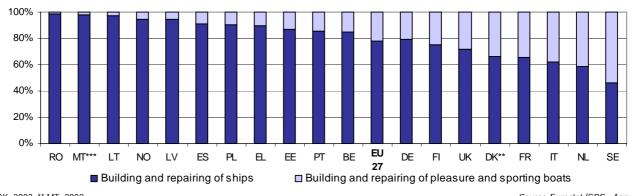


Fig. 11 Number of persons employed by sub-sector, 2004 (%)

#### Emphasis on repair yet production of cruise ships and yachts substantial

Annual Production Statistics (PRODCOM) provide information on the value and volume of industrial production by product type. There generally is a sizeclass threshold, such that at least 90% of the shipbuilding industry's production is covered. Table 2 gives an insight into the content of the two main production categories of EU-27 shipbuilding in 2006. In some production categories, the European aggregate is confidential (Flag C). A minimum indication of size is then given based upon the sum of available country data.

Considering the relatively high values of items such as yachts and motor- or sailboats, or of maintenance and repair, it is obvious that EU shipbuilding output in the EU does not reflect the global fleet's product distribution. While the demand for most types of cargo ships increased, spurred by the persisting globalisation trend, the European shipbuilding industry has been unable to regain its historic market share. The production value of crude oil tankers in the EU was only 733 Million EUR in 2006, whereas outside the EU Croatia alone has produced over half that value (375 Million EUR).

Thriving segments of the shipbuilding industry generally owe their success to specialisation in a specific niche. The main category of vessels produced in France, Finland and Italy were cruise ships and yachts. Norway focused on the production of drilling platforms and oilrigs, for which there is a strong domestic market. Amounting to EUR 3 billion, the value of Norway's production in this category was ten times that of the EU-27.

Table 2: Production of ships and boats in the EU-27, 2006: p	product categories with sales value above EUR 300 Million
--	---

Code	Flag	j / Value	Flag /	Volume	Unit	Label			
35.11 Building and repairing of ships and boats									
35112470		4 574		3 140		Bulk carriers, general cargo ships, container ships, ro-ro vessels, car carriers, gas carriers, etc., and other vessels for the transport of both persons and goods, sea-going			
35119100	:C	> 4 195		n/a		Repairing of ships, boats and floating structures (excluding yachts, other pleasure or sports vessels, rowing boats and canoes)			
35112130	:C	> 3 700	Е	> 765	GT	Cruise ships, excursion boats for people, ferry boats, sea-going			
35112230		733		444	GT	Crude oil and other tankers, sea-going			
35119350		514		n/a		Fitting out services of ships and floating platforms and structures			
35113393		466		> 2	P/st	Other vessels (including lifeboats) other than rowing boats, sea-going			
35113230		408	С			Tugs			
35115000		345		> 643	P/st	Floating structures (including rafts, tanks, coffer-dams, landing-stages, buoys and beacons)			
35119200		340		n/a		Conversion of ships, boats and floating structures (excluding yachts, other pleasure or sports vessels, rowing boats and canoes)			
35113130		337	Е	> 42	P/st	Sea-going fishing vessels, factory ships and other vessels for processing or preserving fishery products			
35112190		329	Е	> 1	P/st	Non-sea going ferry boats, cruise ships, excursion boats and similar vessels			
35.12	Build	ing and re	pairing	of pleas	ure ar	nd sporting boats			
35121330		2 539	С	<u> </u>		Sea-going motorboats for pleasure or sports (excluding outboard motorboats)			
35121130	:C	> 1 266	С			Sea-going sailboats for pleasure or sports			
35129000		1 068		n/a		Maintenance, repair, reconstruction, fitting out services of pleasure and sporting boats			
35121357	:E	642	Е	> 5	P/st	Non sea-going motorboats for pleasure or sports, > 7.5 m in length (excluding outboard motorboats)			
35121397		465	Е	> 6	P/st	Rigid boats > 100 kg in weight and 7.5 m in length (including outboard motorboats, rowing boats and canoes)			
35121157		396		5	P/st	Non sea-going sailboats for pleasure or sports, > 100 kg in weight and 7.5 m in length			

C: total confidential; n/a not applicable; E: Estimate; GT: Gross registered tons; P/st: Number of items

Source: Eurostat (PRODCOM)



<sup>\*</sup> DK: 2003; \*\* MT: 2002

Source: Eurostat (SBS - Annual)

### **>** ESSENTIAL INFORMATION – METHODOLOGICAL NOTES

#### DATA SOURCES

The source of all figures presented is Eurostat (unless specifically stated otherwise). Most data sources are continually updated and revised where necessary. This publication reflects the state of data availability in Eurostat's reference database as in September 2007.

**Structural Business Statistics (SBS)** is the main data source for this publication. This and other SBS data sets are available under theme 'Industry, trade and services' on the Eurostat website <u>http://epp.eurostat.ec.europa.eu/</u> (select 'Data' / 'Industry, trade and services' / 'Horizontal view' / 'Structural Business Statistics'). Selected publications, data and background information are available in the section dedicated to European Business, located directly under the theme 'Industry, trade and services' on the Eurostat website. Statistics are presented by economic activity according to the NACE Rev. 1.1 classification system. As such, Shipbuilding and repair (NACE DM 35.1) are one group, with a possible detail into the building and repair of ships (35.11) and that of pleasure- and sporting boats (35.12). Comparisons are made with the manufacturing industry (NACE Section D).

Short-Term Statistics (STS) were used to complement SBS data with information on the 'Industrial production index', which shows the evolution of value added at factor cost at constant prices.

Annual Industrial Production Statistics (PRODCOM) were used for an overview of production value of the main product categories.

#### **COUNTRIES**

This publication covers 26 of the Member States (EU-27): Belgium (BE), Bulgaria (BG) (2003 data), the Czech Republic (CZ), Denmark (DK), Germany (DE), Estonia (EE), Ireland (IE), Greece (EL), Spain (ES), France (FR), Italy (IT), Cyprus (CY), Latvia (LV), Lithuania (LT), Hungary (HU), Malta (MT) (2002 data), the Netherlands (NL), Austria (AT), Poland (PL), Portugal (PT), Romania (RO), Slovenia (SI), Slovakia (SK), Finland (FI), Sweden (SE) and the United Kingdom (UK). Also included is Norway (NO). Bulgarian 2004 data are confidential and Luxembourg (LU) has no shipbuilding industry.

#### EU AGGREGATES

At the time of data processing for this publication, EU aggregates had been compiled for the EU-25 and the EU-27. Since 2004 Bulgarian data are confidential, EU-27 estimates are less accurate and rounded data. EU-25 and EU-27 aggregates include estimates for missing components where necessary.

#### **EXCHANGE RATES**

Financial data are presented in ECU/EUR terms, with national currencies converted using average exchange rates prevailing for the year in question.

#### **SYMBOLS**

":" not available or confidential.

#### **OBSERVATION UNIT**

The observation unit is the enterprise. An enterprise carries out one or more activities at one or more locations. Enterprises are classified into sectors (by NACE) according to their main activity. The enterprise should not be confused with the local unit, which is an enterprise or part thereof situated on one location.

#### STRUCTURAL BUSINESS STATISTICS VARIABLES

Variables are defined according to Commission Regulation No 2700/98 and include:

#### Number of enterprises

The number of enterprises active during at least part of the reference period.

#### Number of persons employed

The total number of persons who work in the observation unit, as well as persons who work outside the unit but who belong to and are paid by it. It includes employees, part-time workers, working proprietors, unpaid family workers, seasonal workers etc.

#### Value added at factor cost

The gross income from operating activities after adjusting for operating subsidies and indirect taxes (including value added tax).

#### Turnover

The totals invoiced by the observation unit during the reference period, and this corresponds to market sales of goods or services supplied to third parties.

#### Apparent labour productivity

This is a simple indicator of productivity calculated as value added divided by persons employed.

#### Average personnel costs

Personnel costs are the total remuneration, in cash or in kind, payable by an employer to an employee for work carried out. This is divided by the number of employees (paid workers), which includes part-time workers, seasonal workers etc, but excludes persons on long-term leave.

#### Wage adjusted labour productivity (%)

is obtained by dividing apparent labour productivity by average personnel costs.

#### Gross operating surplus

The gross operating surplus is the surplus generated by operating activities after the labour factor input has been recompensed. It can be calculated from the value-added at factor cost less the personnel costs.

#### The gross operating rate (%)

This is an indicator of profitability where the gross operating surplus (above) is related to the turnover generated.

#### Gross investment in tangible goods

All new and existing tangible capital goods, whether bought from third parties or produced for own use, having a useful life of more than one year including non-produced tangible goods such as land.



## Further information:

#### Data: EUROSTAT Website/Home page/Industry trade and services/Data

# Industry, trade and services Industry, trade and services - horizontal view Structural Business Statistics (Industry, Construction, Trade and Services)

Journalists can contact the media support service:	European Statistical Data Support:						
Bech Building Office A4/125 L - 2920 Luxembourg	Eurostat set up with the members of the 'European statistical system' a network of support centres, which will exist in nearly all Member States as well as in some EFTA countries.						
Tel. (352) 4301 33408							
Fax (352) 4301 35349 E-mail: eurostat-mediasupport@ec.europa.eu	Their mission is to provide help and guidance to Internet users of European statistical data.						
	Contact details for this support network can be found on our Internet site: <u>http://ec.europa.eu/eurostat/</u>						

A list of worldwide sales outlets is available at the:

#### Office for Official Publications of the European Communities.

2, rue Mercier L - 2985 Luxembourg

URL: <u>http://publications.europa.eu</u> E-mail: <u>info@publications.europa.eu</u>