



Statistics in focus

INDUSTRY, TRADE AND SERVICES

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The Transport equipment industries in the EU

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The Transport equipment industries can be divided into two groups: the motor vehicle industry (NACE Rev. 1, Division 34) and the industries producing other transport equipment, including ships and boats, railway locomotives, aircraft, motorcycles and bicycles (NACE Rev. 1, Division 35). These industries together employed over 2.6 million people in the European Union in 2000, according to the Structural Business Statistics (SBS), some 9% of total manufacturing employment, and were responsible for 10% of total manufacturing value-added (Graph 1). The share of the sector in manufacturing employment was similar in Japan and slightly higher in the US. Germany was the main contributor to the total value-added produced in the EU by the transport equipment industries, while the degree of specialisation in these industries as a whole was highest in Sweden (Table 1).

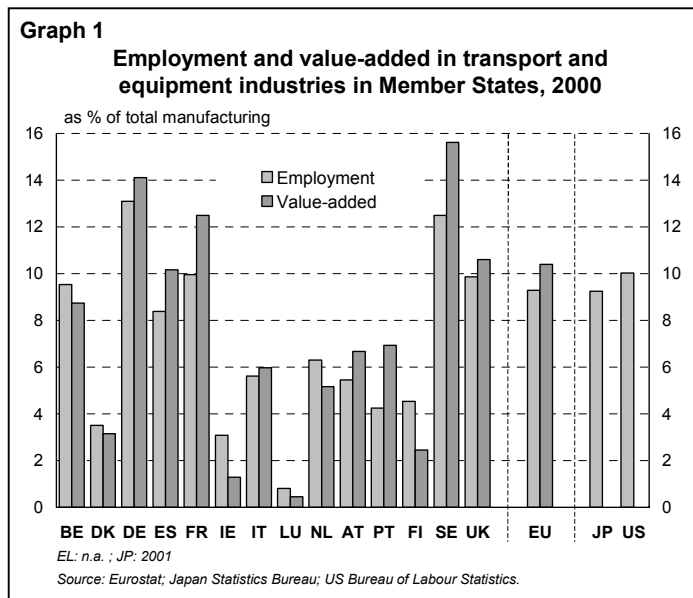


Table 1: Importance of transport and equipment industries in the EU and Member States, 2000

Sector	Total EU employment (in 1000)	Total EU value-added (EUR billion)	Main contributor to EU value-added	Most specialised Member State	Least specialised Member State
Motor vehicles, trailers (34)	1 943.7	109.5	Germany	Sweden	Finland
Motor vehicles (34.1)	1 078.5	66.7	Germany	Sweden	Denmark
Vehicle bodies, trailers (34.2)	165.1	6.7	Germany	Denmark	Portugal
Parts and accessories (34.3)	700.0	36.1	Germany	Germany	Finland
Other transport equipment (35)	678.4	42.2	UK	UK	Austria
Building, repairing ships+boats (35.1)	189.5	7.9	UK	Netherlands	Austria
Trains, trams, rolling stock (35.2)	85.9	3.8	Germany	Austria	Netherlands
Aircraft and spacecraft (35.3)	338.7	27.7	UK	UK	Austria
Motorcycles, bicycles, other (35.4+35.5)	64.3	2.8	Italy	Italy	Finland
Transport equipment (DM)	2 622.0	151.7	Germany	Sweden	Finland
Total manufacturing (D)	28 258.5	1 459.1	---	---	---

Notes: EL: n.a.; Most and least specialised Member State: see methodological notes for details, LU and IE excluded.
Source: Eurostat, unless mentioned otherwise.

Motor vehicles responsible for most of value-added and employment

The contribution of the transport equipment industries to employment and value-added varies significantly across the EU. In Germany and Sweden, they accounted for around 15% of manufacturing value-added in 2000 (slightly less in the former, slightly more in the latter) and in France and the UK, for 11-12% (Graph 1). In all four cases, their contribution to employment was slightly less but nevertheless 10% of more of those employed in manufacturing worked in these industries. By contrast, the transport equipment industries were responsible for under 3% of manufacturing value-added in Ireland and Finland, as well as in Luxembourg.

Within the transport equipment industries, over 70% of value-added at the EU level was produced by the manufacture of motor vehicles (NACE Rev. 1, Division 34), including parts and accessories, which accounted for around a third of the industry (Table 2). The importance of motor vehicles in relation to other transport equipment (NACE Rev. 1, Division 35), however, varies markedly between Member States. It is highest in Germany and Austria, where motor vehicles

accounted for around 85% of value-added (and employment) and also well above the EU average in Belgium and Sweden. Indeed the manufacture of motor vehicles alone was responsible for 12-13% of total manufacturing value-added in Germany and Sweden.

On the other hand, motor vehicles were responsible for less than half the value-added generated in the transport industries in Denmark, Ireland, Finland and the UK. In the UK, most of the value-added produced in the other transport equipment sector came from the aircraft industry, which accounted for around 5% of total manufacturing value-added in 2000 (over 40% of the total in the transport industries), though for only 3% of manufacturing employment. In Denmark, the Netherlands and Finland, the ship and boat building industry produced most of the value-added in the other transport sector, but in all three countries, this was, nevertheless, responsible for only just over 1% of manufacturing value-added, but for a slightly higher share of employment (over 2% in Finland).

Table 2: Employment, value-added and value-added per person employed in manufacturing of transport and equipment, 2000

	BE	DK	DE	ES	FR	IE	IT	NL	AT	PT	FI	SE	UK	EU
<i>Division of employment in manufacturing of transport and equipment (%)</i>														
Motor vehicles, trailers (34)	83.6	44.1	86.5	76.2	69.1	43.0	66.1	48.7	84.8	70.8	37.8	78.4	57.2	74.1
Motor vehicles (34.1)	57.6	0.0	53.3	39.0	37.8	:	30.7	22.0	44.0	24.3	13.6	51.0	25.6	41.1
Vehicle bodies and trailers (34.2)	11.0	23.4	4.4	6.3	7.3	:	6.4	16.6	8.2	8.4	20.3	3.2	6.7	6.3
Parts and accessories (34.3)	15.0	20.7	28.8	30.9	24.1	29.2	29.0	10.1	32.6	38.1	3.9	24.2	24.9	26.7
Other transport equipment (35)	16.4	55.9	13.5	23.8	30.9	57.0	33.9	51.3	15.2	29.2	62.2	21.6	42.8	25.9
Building, repairing of ships and boats (35.1)	2.2	42.9	2.7	13.0	5.2	:	11.3	30.1	0.9	12.3	53.6	5.7	8.8	7.2
Railway, tramway locomotives, rolling stock (35.2)	:	:	2.6	3.5	3.5	:	3.2	:	10.9	7.6	3.3	3.6	3.0	3.3
Aircraft and spacecraft (35.3)	11.5	4.6	7.2	5.4	19.9	:	10.6	:	1.0	5.2	4.3	10.5	29.6	12.9
Motorcycles, bicycles and other nec (35.4+35.5)	:	:	1.1	2.0	2.3	:	8.9	6.2	2.4	4.2	1.0	1.7	1.4	2.5
<i>Division of value-added in manufacturing of transport and equipment (%)</i>														
Motor vehicles, trailers (34)	83.1	46.0	84.9	81.3	67.4	34.6	64.6	58.5	87.3	79.9	45.3	83.6	45.8	72.2
Motor vehicles (34.1)	60.4	0.0	53.1	47.4	45.0	:	30.4	37.3	45.4	48.5	17.2	65.1	22.2	44.0
Vehicle bodies and trailers (34.2)	8.3	24.9	3.3	4.4	4.2	:	5.3	12.7	5.2	3.9	23.6	2.0	4.5	4.4
Parts and accessories (34.3)	14.4	21.1	28.4	29.5	18.2	26.1	28.9	8.6	36.7	27.4	4.5	16.5	19.1	23.8
Other transport equipment (35)	16.9	54.0	15.1	18.7	32.6	65.4	35.4	41.5	12.7	20.1	54.7	16.4	54.2	27.8
Building, repairing of ships and boats (35.1)	1.5	40.5	2.1	6.7	3.8	2.6	10.2	26.6	0.7	7.6	44.9	3.4	7.4	5.2
Railway, tramway locomotives, rolling stock (35.2)	:	:	2.1	3.1	2.1	:	2.4	0.3	9.6	6.5	3.2	2.4	2.8	2.5
Aircraft and spacecraft (35.3)	13.3	4.0	10.1	7.5	25.5	:	14.1	8.3	0.3	3.8	5.6	9.4	42.9	18.3
Motorcycles, bicycles and other nec (35.4+35.5)	:	:	0.8	1.4	1.3	:	8.8	6.3	2.1	2.1	1.1	1.2	1.1	1.8
<i>Value-added per person employed (in 1000 EUR)</i>														
Motor vehicles, trailers (34)	59.9	47.1	56.7	50.1	63.8	44.3	44.0	61.3	71.2	35.6	45.7	81.9	51.2	56.3
Motor vehicles (34.1)	63.2	0.0	57.6	57.0	78.0	:	44.7	86.4	71.4	62.9	48.1	98.0	55.4	61.9
Vehicle bodies and trailers (34.2)	45.2	48.0	43.6	32.9	37.6	:	37.5	39.1	43.7	14.8	44.3	48.5	42.8	40.3
Parts and accessories (34.3)	57.9	46.1	57.1	44.9	49.4	49.3	44.8	43.0	77.8	22.7	44.5	52.2	49.1	51.6
Other transport equipment (35)	62.2	43.6	64.8	36.9	69.2	63.2	47.0	41.2	57.8	21.7	33.6	58.1	80.9	62.2
Building, repairing of ships and boats (35.1)	42.0	42.7	44.8	24.4	47.1	25.3	40.7	45.0	48.8	19.6	32.0	45.6	53.7	41.5
Railway, tramway locomotives, rolling stock (35.2)	:	:	47.4	42.2	39.9	:	33.5	:	61.1	27.2	37.4	49.8	58.7	44.2
Aircraft and spacecraft (35.3)	69.6	39.5	81.7	65.2	83.9	:	59.6	:	22.7	23.1	49.9	68.7	92.6	81.9
Motorcycles, bicycles and other nec (35.4+35.5)	:	:	43.0	32.8	36.3	:	44.7	51.9	60.9	16.3	38.8	52.9	50.5	43.5
Transport equipment (DM)	60.2	45.2	57.8	47.0	65.5	55.1	45.0	51.0	69.2	31.6	38.2	76.7	63.9	57.8
Total manufacturing (D)	65.7	50.4	53.7	38.7	52.2	132.2	42.3	62.1	56.6	19.3	70.6	61.4	59.4	51.6

Notes: EL: n.a.; The data for value-added for Ireland are not comparable with those for other Member States.

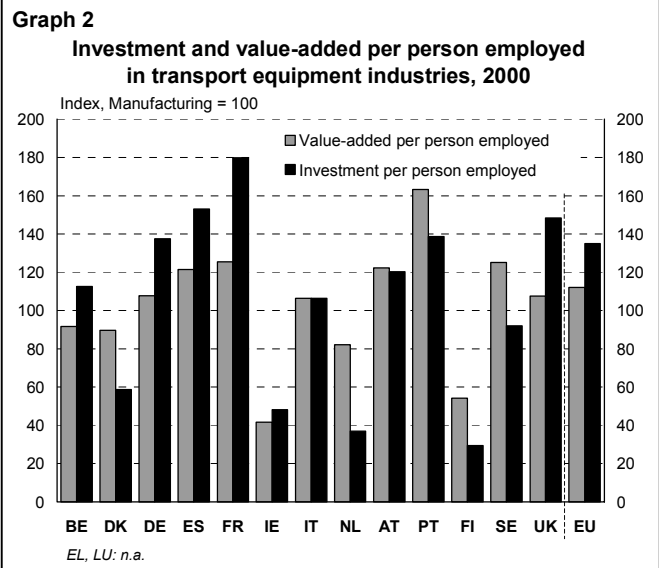
EU aggregate includes estimates for Member States for which data are not available.

Labour productivity higher than in the rest of manufacturing

Labour productivity in the transport equipment industries taken together is higher than in other parts of manufacturing. In 2000, value-added per person employed in the EU in these industries was 12% higher than in manufacturing overall (Table 2). Productivity was especially high in the aerospace industry (almost 60% above the average for total manufacturing) and was also high in motor vehicles (20% above the manufacturing average). In the rest of the sector, value-added per person employed was significantly below the average in manufacturing – in railway locomotives and rolling stock and motorcycles and bicycles, around 15% below and in ship and boat building, some 20% below.

The high labour productivity observed in transport equipment industries largely reflects a relatively high level of capital per worker (Graph 2) but also a relatively skilled labour force (see page 5). In 2000, investment per worker, which is indicative of the capital employed, was over 30% higher on average than in total manufacturing.

In Member States, the overall level of value-added per person employed in the transport equipment industries in relation to the level in manufacturing as a whole tends to reflect the composition of the sector. Most of the countries in which the level is lower than in manufacturing – specifically Denmark, the Netherlands



and Finland – are those in which a relatively large share of employment is in the other transport equipment sector, mainly in ship and boat building, as noted above, where productivity is comparatively low. In these countries, capital per worker in the sector is also low. By contrast, in Spain, France and the UK, where employment was concentrated in motor vehicles or aerospace, investment per worker was 50% or more above the average in manufacturing.

Job growth in motor vehicles, job losses in other transport equipment

Employment in the transport equipment industries in the EU increased over the second half of the 1990s by more than in manufacturing as a whole. More than all of this growth, however, occurred in motor vehicles (NACE Rev. 1), where the number employed rose by just over 1% a year between 1995 and 2000, in contrast to the

other transport equipment sector where it fell by around ½% a year (Table 3). The latter decline was common to most Member States and it was particularly marked in Denmark, Greece, Italy and Portugal, in all of which employment in ship and boat building fell substantially.

Table 3: Growth of employment in transport and equipment industries and manufacturing, 1995-2000

	BE	DK	DE	EL	ES	FR	IT	PT	FI	SE	UK	EU
Annual average growth rate (%)												
Motor vehicles, trailers (34)	0.1	0.7	2.2	3.1	3.5	-1.5	-2.2	3.6	2.4	2.5	-0.6	1.1
Motor vehicles (34.1)	-1.9	0.0	1.8	-2.3	2.0	-3.9	-5.3	5.7	-1.0	-0.3	-2.3	-0.1
Vehicle bodies and trailers (34.2)	6.7	0.7	-2.5	19.3	8.0	3.0	-0.9	2.9	7.9	5.7	-0.4	1.6
Parts and accessories (34.3)	4.9	0.7	3.8	13.7	4.6	2.1	1.8	2.6	-6.5	10.3	1.5	3.8
Other transport equipment (35)	4.9	-9.3	-1.4	-6.5	0.1	-0.6	-5.7	-6.5	0.3	-0.2	1.2	-0.6
Building, repairing of ships and boats (35.1)	0.0	-11.0	-8.1	-5.0	-1.0	2.5	-8.3	-11.8	0.2	-0.2	-1.5	-2.8
Railway, tramway locomotives, rolling stock (35.2)	:	:	-2.0	:	0.1	-2.3	-4.9	0.1	84.7	:	0.3	-0.6
Aircraft and spacecraft (35.3)	12.0	:	1.9	:	2.0	-0.9	-5.1	8.3	-3.7	:	2.4	0.6
Motorcycles, bicycles and other nec (35.4+35.5)	:	:	-1.5	:	2.1	-0.4	-4.0	-9.6	-18.5	:	-3.6	-2.4
Transport equipment (DM)	0.8	-5.5	1.7	-5.2	2.6	-1.2	-3.4	0.0	1.1	1.9	0.2	0.7
Manufacturing (D)	-0.2	3.3	-1.1	0.3	3.3	0.6	-9.6	-0.2	2.0	1.9	-1.2	0.2

Notes: IE, LU, NL, AT: data incomplete or not available ; EU aggregate based on Eurostat estimate for EU-15 except for Nace groups 35.3 and 35.4+35.5 where it includes only DE, ES, FR, IT and UK.

Employment also declined in railway locomotives and rolling stock and motorcycles and bicycles in most parts of the European Union. The main exception was Finland, where it rose markedly in the former industry but where the number of jobs involved was small. Employment increased, on the other hand, in the other transport equipment sector in Belgium and the UK, in both largely because of growth in the aircraft industry.

In motor vehicles (NACE Rev. 1, Division 34), mainly because of a large increase in parts and accessories, there was a growth of employment over this period in most countries, but not in France, Italy and the UK, where jobs declined. This experience mirrors that in the previous period of overall job growth in the second half of the 1980s, when employment in the motor vehicle industry also fell or remained largely unchanged in these three countries in the context of growth in most other parts of the EU. In addition, employment in other transport equipment, as in the latter part of the 1990s, declined across the Union, again largely because of job losses in ship and boat building.

The decline in employment in the other transport equipment sector accelerated during the recession years of the early 1990s, when it was accompanied by

job losses in motor vehicles. Within the latter sector, however, the losses were largely concentrated among motor vehicle producers as such (i.e. those classified to NACE 34.1) and employment increased in the parts and accessories industry (NACE 34.3). This reflects a shift in the organisation of vehicle production, with the large car manufacturers tending to contract out the supply of components to specialist producers, mostly much smaller than themselves. This tendency continued during the period of recovery between 1995 and 2000 when employment in parts and accessories increased throughout the Union, apart from in Finland, averaging almost 4% a year, while vehicle producers continued to shed jobs in most Member States, the only exceptions being Germany, Spain and Portugal.

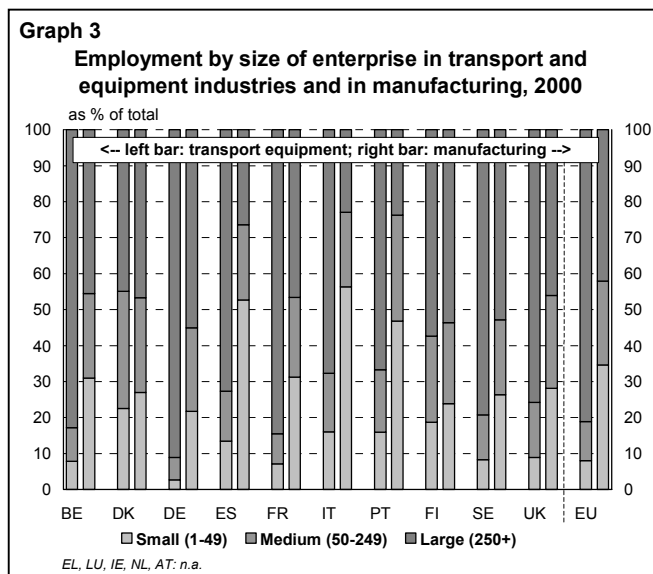
Data from the European Automobile Manufacturers Association (ACEA) indicate that between 1995 and 2000 the production of vehicles (comprising cars, light commercial vehicles, trucks and buses) increased by 3½% a year. Subsequent data show a slowdown in 2001 and a decline of 1½% in 2002. This will almost certainly have been accompanied by a renewed reduction in employment in the motor vehicle industry as a whole, though whether jobs have continued to increase in parts and accessories remains to be seen.

Large firms of dominant importance

The transport equipment sector is dominated by large enterprises. In 2000, firms with 250 or more persons employed accounted for just over 80% of total employment in the sector in the Union, twice their share of total manufacturing employment. By contrast, small firms with less than 50 persons employed accounted for just 8% of employment (Graph 3). The dominance of large enterprises is equally apparent in most Member States, the only exception being Denmark where large firms in transport equipment were responsible for only 45% of employment, slightly less than in manufacturing as a whole, reflecting the different composition of the sector as compared with most other countries. In Germany, 91% of those employed in the sector worked in large enterprises and in France, 85%.

Because of confidentiality reasons, the data broken down by size of firm, are not available in most Member States for industries within the transport equipment sector – i.e. precisely because of the dominant position of a few large enterprises. The data which are published, however, suggest that even in the parts and accessories industry, where average firm size tends to be smaller, large enterprises still accounted for a significantly larger proportion of employment than in

manufacturing as a whole (well over 80% in Germany and France and around 65% in Spain and Portugal). On the hand, in ship and boat building, which in the EU is now concentrated on smaller boats, most of the workforce were employed in SMEs in the countries for which data are published (the only exception being Germany).



A male-dominated work force with high productivity and wages

According to the EU Labour Force Survey (LFS), only 17% of those employed in the transport equipment industries in the EU were women in 2002. This was much less than the share of women in total manufacturing (28%) and less than in the US (22%) or Japan (18%) (Graph 4). Within the EU, women accounted for over 25% of the total employed in transport equipment only in Ireland and Portugal, while in Belgium, Greece, the Netherlands and Finland, their share was under 10%.

Those employed in the transport equipment industries tend to have, on average, slightly higher educational attainment than those employed in other parts of manufacturing. According to the LFS, 71% of the work force in these industries in the EU in 2002 had at least upper secondary education, as against 65% in manufacturing as a whole, and 20% tertiary – or university-level – qualifications (17% in manufacturing) (Graph 5). A similar difference is evident in most Member States, the main exceptions being Belgium,

Ireland and Italy, where education levels are slightly lower than in the rest of manufacturing. In most countries the share of the work force with at least upper secondary education was larger in other transport equipment than in motor vehicles.

The relatively high educational attainment of those employed in transport equipment is reflected in earnings. According to SBS data, in 2000, wages per employee in these industries in the EU were on average 25% higher than in manufacturing as a whole (Table 4). Wages were in general highest in industries in which labour productivity was also relatively high – in aerospace and motor vehicles.

A similar pattern is evident in individual Member States, the wages in transport being on average below those in manufacturing as a whole only in the Netherlands and Finland, two countries in which employment was concentrated in relatively low productivity parts of the sector.

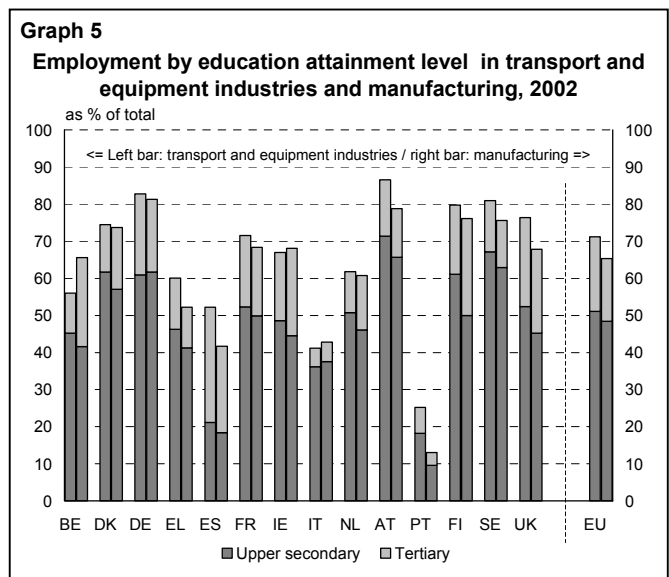
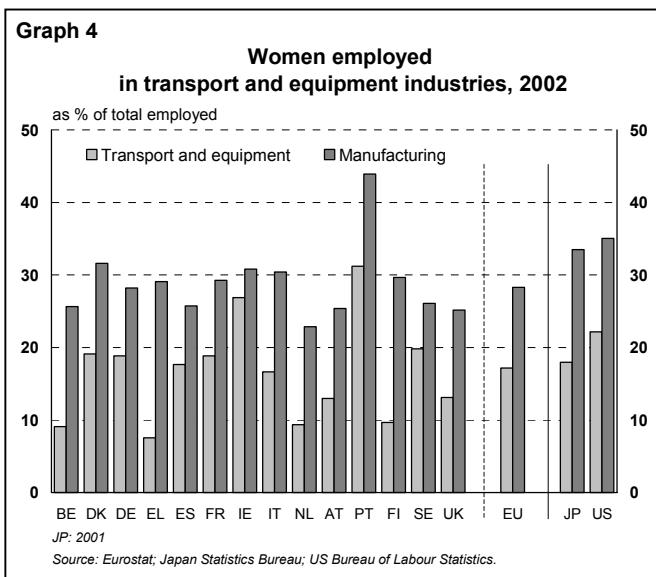


Table 4: Wages per employee in transport and equipment industries in Member States, 2000

	BE	DK	DE	ES	FR	IE	IT	NL	AT	PT	FI	SE	UK	EU
Wage per employee in manufacturing=100	105.3	103.5	126.7	126.5	109.7	89.3	110.9	97.5	106.4	130.7	93.4	105.3	115.5	126.0
Motor vehicles, trailers (34)														
Motor vehicles (34.1)	111.9	136.9	139.8	119.5	115.0	111.3	168.2	98.2	111.3	132.3	91.3	91.3	91.3	139.7
Vehicle bodies and trailers (34.2)	84.2	102.5	87.4	89.0	83.3	103.0	82.2	78.7	96.1	90.8	90.8	91.8	91.8	91.3
Parts and accessories (34.3)	94.5	104.7	113.6	116.9	102.1	91.9	108.1	92.6	99.4	114.1	90.1	94.6	104.4	112.8
Other transport equipment (35)	107.0	109.4	125.1	123.8	127.3	134.0	117.5	86.7	129.6	153.5	92.9	105.5	126.7	124.4
Building, repairing of ships and boats (35.1)	89.4	108.6	100.4	107.6	88.5	84.9	98.4	99.1	95.9	152.1	92.1	92.2	101.5	97.4
Railway, tramway locomotives, rolling stock (35.2)	118.9	141.3	120.6	119.9	145.7	172.7	90.3	113.0	128.3	125.5	125.5	125.5	125.5	125.5
Aircraft and spacecraft (35.3)	107.4	118.2	142.9	155.4	142.9	145.5	93.2	174.9	107.8	111.5	135.2	148.8	148.8	148.8
Motorcycles, bicycles and other nec (35.4+35.5)	74.9	104.2	83.1	106.5	87.2	103.1	85.5	83.5	95.6	83.0	91.1	96.7	85.8	85.8
Transport equipment (DM)	105.6	106.8	126.5	125.8	115.1	114.9	113.0	92.1	109.9	137.3	93.1	105.3	120.3	125.6

Notes: EL, LU: n.a.

High levels of trade with big differences in trade performance

A substantial proportion of the output of the transport equipment industries in the EU is exported, while imports account for a relatively large share of the domestic market. Trade flows between EU Member States tend to be larger than trade between the EU and the rest of the world. Although data on trade flows cannot be directly related to SBS data collected from enterprises, an indication of the importance of trade can be gained by comparing the share of exports and imports of manufactures accounted for by transport equipment with the share of the latter in manufacturing value-added.

According to Comext data, trade in transport equipment between EU Member States accounted for 20% of total trade in manufactures in 2002. This is substantially more than the share of transport equipment in EU trade with the rest of the world, which amounted to 12-13% of the total exports and imports of manufactures (Table 5). This, however, is more than the share of the industry in total manufacturing value-added (10%), though it should be noted that a large part of the trade of this sector, consists of trade between plants of the same enterprise.

Within the sector, motor vehicles (NACE 34.1) alone accounted for around 12% of manufacturing trade between Member States, well over twice their share of manufacturing value-added, while they accounted for around 5% of EU exports of manufactures to the rest of the world, only slightly more than their share of value-added. In addition, parts and accessories were responsible for just under 5% of trade between Member States and 3% of EU manufactured exports to other countries, both figures higher than their share of manufacturing value-added. Similarly, aircraft made up 3% of both internal trade and external exports of manufactures, again more than the share of the industry in manufacturing value-added, and for 7% of total UK manufactured exports.

In other parts of the transport equipment sector, internal trade between EU Member States was less important. In the case of ship and boat building, exports and imports to the rest of the world accounted for a substantially larger share of total EU external trade in manufactures than value-added, while this was also true of imports of motorcycles (though not exports). As a result, there was a large EU trade deficit in motorcycles and bicycles in 2002, with only Spain, Italy and Austria having a surplus (Table 6). In other parts of the sector, EU trade with the rest of the world was in surplus except in aircraft. The surplus in trade was particularly large in vehicle bodies and parts of accessories, though this was concentrated in a small number of Member States.

While there was a surplus in the EU in trade in transport equipment overall, in most Member States, trade was in deficit in 2002. Only in Germany, France and Sweden was trade in significant surplus, while for manufacturing as a whole, only 5 Member States had significant deficits.

Table 5: Share of exports, imports and value-added of transport and equipment in total manufacturing in the EU, 2002

	Imports		Exports	Value-added
	EU intra	EU extra	EU extra	EU
<i>as % of manufacturing total</i>				
Motor vehicles, trailers (34)	16.8	6.8	8.4	7.5
Motor vehicles (34.1)	11.9	4.7	5.1	4.6
Vehicle bodies, trailers (34.2)	0.4	0.1	0.3	0.5
Parts and accessories (34.3)	4.5	2.0	3.1	2.5
Other transport equipment (35)	3.5	5.3	4.1	2.9
Building, repairing ships+boats (35.1)	0.1	0.8	1.1	0.5
Trains, trams, rolling stock (35.2)	0.2	0.2	0.2	0.3
Aircraft and spacecraft (35.3)	2.8	3.7	2.7	1.9
Motorcycles, bicycles, other (35.4+35.5)	0.3	0.6	0.2	0.2
Transport equipment (DM)	20.2	12.1	12.6	10.4

Note: extra-EU exports and imports correspond to EU trade with the rest of the world; intra-EU imports represent imports by Member States from the other Member States, which is equivalent to intra-EU exports.

Table 6: Trade performance of transport and equipment industries, 2002

	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	EU
<i>Exports-imports as a % of exports+imports</i>																
Motor vehicles, trailers (34)	3.9	-34.8	31.1	-93.1	1.4	13.2	-69.9	-22.1	-47.8	-12.5	-1.7	-10.7	-32.3	19.9	-33.4	15.7
Motor vehicles (34.1)	11.6	-54.2	32.5	-97.7	13.7	13.9	-72.8	-40.8	-51.1	-12.6	1.7	-6.4	-32.8	33.4	-37.8	9.1
Vehicle bodies and trailers (34.2)	1.2	-26.7	45.6	-77.7	-27.2	4.8	-44.4	26.2	-26.0	-36.2	-7.2	-66.5	10.3	52.4	-14.9	38.9
Parts and accessories (34.3)	-24.3	6.5	26.3	-79.0	-24.2	12.0	-48.1	25.6	-25.4	-6.3	-8.6	-22.6	-38.4	-5.7	-22.4	26.5
Other transport equipment (35)	9.1	-29.9	17.1	-82.4	4.8	2.3	-74.3	20.8	-71.7	2.3	4.3	-32.6	51.2	4.9	0.1	-7.5
Building, repairing of ships and boats (35.1)	33.4	70.7	48.5	-95.8	17.0	19.9	-36.7	57.0	-65.2	51.8	4.9	18.8	95.4	54.0	43.9	20.3
Railway, tramway locomotives, rolling stock (35.2)	0.5	-45.3	32.6	-98.9	50.6	36.2	-61.9	33.9	-37.1	-26.3	35.9	-66.9	-40.0	5.7	-40.6	20.3
Aircraft and spacecraft (35.3)	19.0	-49.1	17.0	-28.5	-5.2	2.0	-77.8	-8.0	-72.4	-14.1	-17.2	-60.5	-76.6	2.1	2.4	-11.9
Motorcycles, bicycles and other nec (35.4+35.5)	0.0	-30.9	-36.8	-85.6	3.3	-39.1	-12.6	24.6	-70.6	-13.5	0.7	-15.9	-56.5	-20.0	-59.1	-50.4
Transport equipment (DM)	4.3	-33.5	28.0	-87.1	1.8	8.9	-71.5	-13.9	-56.6	-10.1	-0.8	-12.0	-5.1	17.6	-22.2	6.8
Total manufacturing (D)	5.7	4.4	13.8	-52.4	-10.0	0.8	26.7	8.4	-9.1	5.0	0.0	-14.8	22.0	14.2	-13.7	4.8

Notes: Member States: intra- and extra-EU trade, EU aggregate: extra-EU trade only.

➤ ESSENTIAL INFORMATION – METHODOLOGICAL NOTES

Symbols “:” not available or confidential.

Definitions

Division of employment and value-added by sector of activity

Employment and value-added in the Structural of Business Statistics are divided into sectors of activity according to the NACE Rev.1 system of classification. This categories activity are broken down by section (1-letter codes), sub-section (2-letter codes), division (2-digit codes), groups (3-digit codes) and classes (4-digit codes). All manufacturing activities are included under Section D. The transport and equipment industries analysed in this publication include the following sub-sections, divisions and groups:

DM	Transport equipment
34	Motor vehicles, trailers and semi-trailers
34.1	Motor vehicles
34.2	Bodies for motor vehicles; trailers and semi-trailers
34.3	Parts and accessories for motor vehicles and their engines
35	Other transport equipment
35.1	Building and repairing of ships and boats
35.2	Railway and tramway locomotives and rolling stock
35.3	Aircraft and spacecraft
35.4	Motorcycles and bicycles
35.5	Other transport equipment n.e.c.

Number of persons employed: total number of persons who work in the observation unit (inclusive of working proprietors and 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). The observation unit for aggregating data is the enterprise, which is defined as *‘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’*.

Value-added: Value-added measured at factor cost, which is the gross income from operating activities after adjusting for operating subsidies and indirect taxes (including value-added tax).

Degree of specialisation: The most specialised Member State is the country for which the share of total manufacturing value-added accounted for by transport equipment industries is highest in relation to the average share in the EU. The least specialised Member State is the country where this ratio is the lowest. Because of uncertain data for Luxembourg and Ireland, these two countries have been excluded from the ranking.

Educational attainment levels:

Educational attainment levels are based on the International Standard Classification of Education (ISCED), as revised in 1997. This divides education into 7 main levels. These have been grouped into three levels in the analysis here:

- basic schooling, defined as ISCED levels 0 to 2, pre-primary, primary and lower secondary education;
- upper secondary, defined as ISCED levels 3 and 4, upper secondary and post-secondary, non-tertiary education;
- tertiary, defined as ISCED levels 5 and 6, first stage of tertiary education and second stage of tertiary education.

Data for the UK are grouped in a similar way, despite the fact that agreement has yet to be reached over the appropriate classification of national qualifications. For this country, therefore, the results are subject to change.

The data are taken from the EU Labour Force Survey (LFS), which classifies those employed to NACE 2-digit industries.

Data sources

Structural Business Statistics (SBS): collected within the framework of Council regulation on structural business statistics (Council Regulation (EC, EURATOM) No. 58/97 of 20 December 1996). This, in principle, covers all market activities in sections C to K and M to O of NACE Rev. 1, but, in practice, the data available are confined to NACE Rev. 1 sections C to K, excluding section J, financial services. For further information, please visit: http://forum.europa.eu.int/Public/irc/dsis/bmethods/info/data/new/main_en.html

The SBS data used in the analysis for 2000 are taken from the SBS\ENTER_MS series. The data available for Greece cover only enterprises with 20 persons or more employed and are, therefore, not included in the series.

The data used to describe changes in employment over time are taken from the SBS\ENTER_L_MS long time series which covers enterprises with 20 or more persons employed.

The data used for employment and value-added by size of enterprise are taken from the SBS\INDUS_MS series, which breaks data down by the employment-size of enterprise.

EU Labour Force Survey (LFS): a survey of private households which provides data on the population living in these according to a number of characteristics, including by sex and education attainment.

COMEXT: Eurostat’s reference database on external trade statistics. Data for Member States on exports and imports include both intra-EU trade and extra-EU trade and are broken down by detailed product group, which in the analysis have been aggregated to correspond as closely as possible with transport and equipment.

ACEA : the European Automobile Manufacturers Association regroups thirteen European car, truck and bus manufacturers and represents their interests at the European level.

Further information:

➤ Databases

New Cronos: Theme 4

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