

The manufacture of electrical and electronic equipment in the EU

Statistics in focus

INDUSTRY, TRADE AND SERVICES

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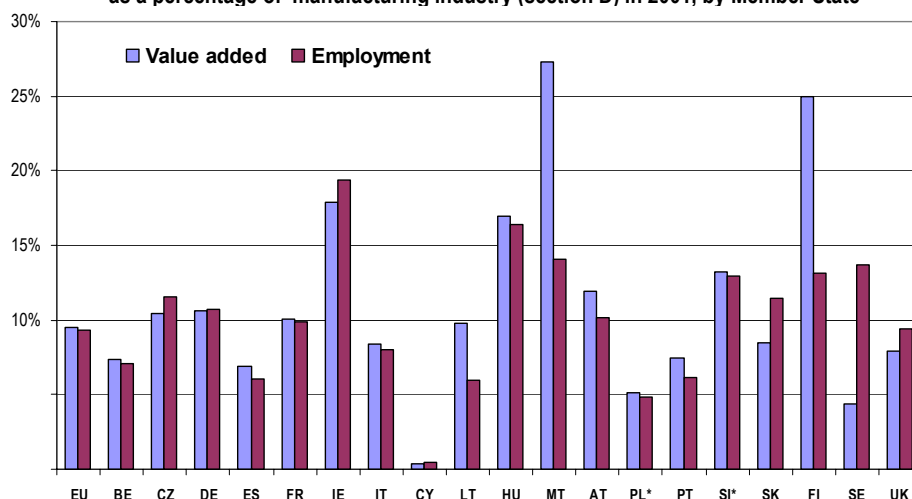


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Main findings

According to Structural Business Statistics (SBS), nearly 3.2 million persons were employed in the manufacture of electrical and electronic equipment. This corresponds to 9.3 % of the total number employed in manufacturing in the European Union. The manufacture of electrical and electronic equipment accounted for 9.5 % (€146 billion) of the EU's total manufacturing value added in 2001.

Graph 1: Value added and employment in the manufacture of electrical and electronic equipment, as a percentage of manufacturing industry (section D) in 2001, by Member State



Employment measured as the number of persons employed (see methodological notes).

EL: no data available - DK, EE, LV, LU, NL: aggregate not available - * PL, SI: number of employees.

Source: Eurostat (SBS).

Within the sector, the manufacture of electrical machinery and apparatus was clearly the most important, both in the EU as a whole and in most Member States. By contrast, the manufacture of domestic appliances is generally of lesser importance, except in Slovenia and Sweden.

Germany is the biggest single contributor to value added in this sector (€ 44 billion, a share of 30 %), far ahead of France (€21 billion, a 14% share) and the United Kingdom (€18 billion, or 13%). These three Member States alone recorded a total turnover of €346 billion, or 57% of the sector total in the EU in 2001.

About 110 000 enterprises were active in the sector in the EU. The majority (62 %) belonged to the manufacture of electrical machinery and apparatus. The share of micro-enterprises is high throughout the various sub-sectors. Female employment appears to be relatively high (54%). Especially in the Czech Republic, Hungary, Slovenia and Slovakia, women form the major part of the workforce. Generally, a high level of education is found in this sector, especially in the manufacture of office machinery and computers.

Definition: The manufacture of electrical and electronic equipment covered by this publication includes the manufacture of domestic appliances (NACE Rev. 1 group 29.7), office machinery and computers (division 30), electrical machinery and apparatus not elsewhere classified (division 31), and radio, television and communication equipment and apparatus (division 32).

Table 1: Importance of the manufacture of electrical and electronic equipment in the EU, 2001

	Number of persons employed at EU level (in 1000)	Share of employment at EU level	Value-added at the EU level (million EUR)	Share of the value added at EU level	Main contributor to value-added	MS where the sector is	
						Most important*	Least important*
29.7 Manufacture of domestic appliances	293.5	9.2%	12 396.6	8.5%	DE	SI	BE
30 Manufacture of office machinery and computers	224.9	7.0%	14 482.4	10.0%	DE	IE	MT
31 Manufacture of electrical machinery and apparatus	1 720.7	53.9%	72 467.8	49.8%	DE	HU	LT
31.1 Manufacture of electric motors, generators and transformers	297.4	9.3%	12 749.1	8.8%	DE	DK	CY
31.2 Manufacture of electricity distribution and control apparatus	585.8	18.4%	28 443.6	19.5%	DE	FR	LT
31.3 Manufacture of insulated wire and cable	150.6	4.7%	6 131.2	4.2%	DE	SK	MT
31.4 Manufacture of accumulators, primary cells and primary batteries	45.1	1.4%	1 758.5	1.2%	DE	CZ	IE
31.5 Manufacture of lighting equipment and electric lamps	178.0	5.6%	6 481.0	4.5%	DE	BE	IE
31.6 Manufacture of electrical equipment	463.9	14.5%	16 904.5	11.6%	DE	MT	SE
32 Manufacture of radio, television and communication equip. & app.	952.4	29.8%	46 157.1	31.7%	FR	MT	CY
32.1 Manuf. of electr. valves and tubes and other electr. components	357.9	11.2%	17 776.3	12.2%	FR	MT	LV
32.2 Manufacture of television and radio transmitters and apparatus for line telephony and line telegraphy	398.6	12.5%	20 554.8	14.1%	FI	FI	CY
32.3 Manufacture of television and radio receivers, sound or video recording or reproducing apparatus and associated goods	195.9	6.1%	7 826.0	5.4%	UK	HU	IT
Total electrical and electronic equipment (NACE 29.7+30+31+32)	3 191.5	100.0%	145 503.9	100.0%			
Manufacturing industry (NACE Rev.1 section D)	34 202.6		1 534 509.7				

* Most/least specialised Member State: see methodological notes (page 7).

Source: Eurostat (SBS)

Employment and value added: Electrical machinery and apparatus dominate the sector

More than half of the 3.2 million jobs in the sector are linked to the manufacture of electrical machinery and apparatus (see Table 1), while the manufacture of radio, television and communication equipment and apparatus accounts for nearly 30 %. The proportions for value added generated in this sector are similar.

The share of total manufacturing accounted for by the manufacture of electrical and electronic equipment is shown in graph 1. At EU level, it accounted for just under 10% of the total in terms of both value added and employment in 2001. At Member States level, Ireland, Hungary, Malta and Finland stand out in this respect: the first two

countries recorded shares of between 15% and 20% for both value added and employment, while the value added of Malta and Finland were double the EU average (27 % and 25 % respectively).

The figures for Malta are explained by the presence of one major electronics manufacturer, which makes a significant contribution to the country's export revenue and employs well over 2000 persons there. Within the manufacture of electrical machinery and apparatus, the manufacture of electricity distribution and control apparatus is of considerable importance (close to 20 % in terms of both employment and value added).

Table 2: Main indicators in the manufacture of electrical and electronic equipment in the EU, 2001

Turnover - in million EUR	EU	BE	CZ	DK	DE	EE	ES	FR	IE	IT	CY	LV
29.7 Manufacture of domestic appliances	45 660	209	279	:	13 732	:	3 706	4 888	305	11 263	8	:
% in Total	7	2	4	:	8	:	13	5	1	19	16	:
30 Manuf of office machinery & computers	92 778	203	784	305	16 805	32	4 120	17 077	18 590	4 077	0	:
% in Total	15	2	12	:	10	:	14	19	64	7	0	:
31 Manuf. of electrical machinery & apparatus	239 885	4 757	3 814	4 368	94 183	110	13 977	28 795	3 460	29 372	42	75
% in Total	39	45	57	:	56	:	49	32	12	48	84	:
32 Manufacture of radio, TV & comm. equip. & app.	232 685	5 391	1 777	1 938	44 140	90	6 865	40 467	6 651	15 907	0.1	:
% in Total	38	51	27	:	26	:	24	44	23	26	0	:
Total (NACE 29.7, 30, 31, 32)	611 008	10 560	6 654	:	168 860	:	28 668	91 226	29 006	60 619	50	:
% in Total EU	100	1.7	1.1	:	27.6	:	4.7	14.9	4.7	9.9	0.0	:
Value-added at factor cost - in million EUR												
29.7 Manufacture of domestic appliances	12 397	60	70	:	4 225	:	952	963	133	2 723	3	:
% in Total	9	2	4	:	10	:	13	5	2	16	18	:
30 Manuf of office machinery & computers	14 482	47	65	119	3 235	3	703	3 149	1 632	1 122	15	25
% in Total	10	1	4	:	7	:	10	15	28	7	82	:
31 Manuf. of electrical machinery & apparatus	72 468	1 633	1 095	1 234	28 260	29	3 938	8 697	1 521	8 123	0	:
% in Total	50	50	68	:	65	:	55	42	26	48	0	:
32 Manufacture of radio, TV & comm. equip. & app.	46 157	1 522	391	565	8 014	34	1 595	8 113	2 595	4 988	0	:
% in Total	32	47	24	:	18	:	22	39	44	29	0	:
Total (NACE 29.7, 30, 31, 32)	145 504	3 262	1 621	:	43 733	:	7 188	20 923	5 881	16 956	18	:
% in Total EU	100	2.2	1.1	:	30.1	:	4.9	14.4	4.0	11.7	0.0	:
Number of persons employed												
29.7 Manufacture of domestic appliances	293 500	1 369	8 211	:	68 957	:	23 366	24 616	2 844	59 070	166	:
% in Total	9	3	5	:	9	:	14	6	6	15	23	:
30 Manuf of office machinery & computers	224 900	882	6 411	1 644	46 311	188	9 363	38 109	19 786	16 659	0	:
% in Total	7	2	4	:	6	:	6	10	41	4	0	:
31 Manuf. of electrical machinery & apparatus	1 720 700	26 239	111 618	23 842	529 806	2 638	95 016	171 257	13 200	209 854	565	2 862
% in Total	54	55	69	:	66	:	59	43	27	54	77	:
32 Manufacture of radio, TV & comm. equip. & app.	952 400	19 535	35 076	11 354	159 656	5 283	33 493	166 952	12 784	102 806	4	1 146
% in Total	30	41	22	:	20	:	21	42	26	26	1	:
Total (NACE 29.7, 30, 31, 32)	3 191 500	48 025	161 316	:	804 730	:	161 238	400 934	48 614	388 389	735	:
% in Total EU	100	1.5	5.1	:	25.2	:	5.1	12.6	1.5	12.2	0.0	:

EL, LU: no data available.

Source: Eurostat (SBS).

At EU level, its share exceeds that of the manufacture of domestic appliances and office machinery and computers combined.

When looking at the manufacture of radio, television and communication equipment, one sees that the manufacture of TV and radio transmitters and apparatus for line telephony and telegraphy is also important, as it generated value added of €21 billion (14 % of the EU total).

Germany is the main contributor to EU value added (see Table 1). France recorded the largest shares in the manufacture of radio, television and communication equipment. When the relative shares of individual sub-sectors in the Member States' manufacturing industries are observed, a number of countries are represented, highlighting the variedness of the sector as a whole: the manufacture of domestic appliances was most important in Slovenia, office machinery and computers in Ireland, electrical machinery and apparatus in Hungary, and radio, TV and communication equipment in Malta.

In 2001, the entire sector generated turnover of €611 billion and value added of €146 billion in the EU.

In absolute terms, Germany contributes most to EU turnover (28 %), followed by France, the United Kingdom (around 14% each) and Italy, with almost 10%.

In terms of turnover, the shares accounted for by the manufacture of electrical machinery and apparatus and of radio, television and communication equipment are quite similar (39 % and 38 % respectively); in

terms of value added, however, the manufacture of electrical machinery and apparatus predominates, accounting for 50% of the sector total.

In 2001, apparent labour productivity (value added per person employed, calculated from Table 2) in the manufacture of electrical and electronic equipment was €45 600 at EU level. Productivity in the manufacture of office machinery and computers and of radio, television and communication equipment was above the EU sector average, at €64 400 and €48 500 respectively. At the other end of the spectrum, this indicator comes in at just €42 200 for the manufacture of domestic appliances and €42 100 for the manufacture of electrical machinery and apparatus.

At country level, apparent labour productivity shows some noticeable differences. The Member States whose apparent labour productivity was significantly above the EU average in the manufacture of office machinery and computers are Austria, France and Ireland, with values of €85 500, €82 600 and €82 500 respectively. In the manufacture of radio, television and communication equipment, Ireland (€203 000) and Finland (€174 300) recorded apparent labour productivity levels which were substantially above the EU average. By contrast, in Germany, France and the United Kingdom, the Member States recording the highest employment levels in absolute terms, the corresponding values were €50 200, €48 600 and €42 000.

Table 2: Main indicators in the manufacture of electrical and electronic equipment in the EU, 2001 (continued)

Turnover - in million EUR	LT	HU	MT	NL	AT	PL**	PT	SI**	SK	FI	SE	UK
29.7 Manufacture of domestic appliances	60	570	4	378	602	868	522	847	218	163	1,417	4,464
% in Total	14	4	0	:	4	15	9	37	14	1	41	5
30 Manuf of office machinery & computers	10	2,505	3	2,204	686	706	48	148	56	117	796	23,496
% in Total	2	19	0	:	5	12	1	6	4	0	23	27
31 Manuf. of electrical machinery & apparatus	110	5,230	102	4,366	4,786	4,239	2,263	823	889	3,276	889	24,496
% in Total	26	40	8	:	36	73	37	36	58	11	26	29
32 Manufacture of radio, TV & comm. equip. & app.	239	4,849	1,183	:	7,404	2 544*	3,230	483	381	24,949	381	33,380
% in Total	57	37	92	:	55	30*	53	21	25	88	11	39
Total (NACE 29.7, 30, 31, 32)	419	13,153	1,292	:	13,478	5,812	6,063	2,301	1,544	28,505	3,483	85,837
% in Total EU	0.1	2.2	0.2	:	2.2	1.0	1.0	0.4	0.3	4.7	0.6	14.0

Value-added at factor cost - in million EUR

29.7 Manufacture of domestic appliances	13	114	1	118	230	282	118	162	26	54	348	1,480
% in Total	9	6	:	:	5	12	9	31	8	1	17	8
30 Manuf of office machinery & computers	3	202	0	479	86	182	11	22	12	21	207	3,181
% in Total	2	11	:	:	2	8	1	4	4	0	10	17
31 Manuf. of electrical machinery & apparatus	30	802	38	1,197	1,634	1,871	605	223	223	972	1,475	8,637
% in Total	23	44	19	:	38	80	45	42	67	13	73	47
32 Manufacture of radio, TV & comm. equip. & app.	88	695	164	:	2,330	418*	601	122	72	6,708	-186	4,907
% in Total	66	38	81	:	54	15*	45	23	22	86	-10	27
Total (NACE 29.7, 30, 31, 32)	134	1,813	203	:	4,280	2,336	1,335	528	333	7,756	2,030	18,204
% in Total EU	0.1	1.2	0.1	:	2.9	1.6	0.9	0.4	0.2	5.3	1.4	12.5

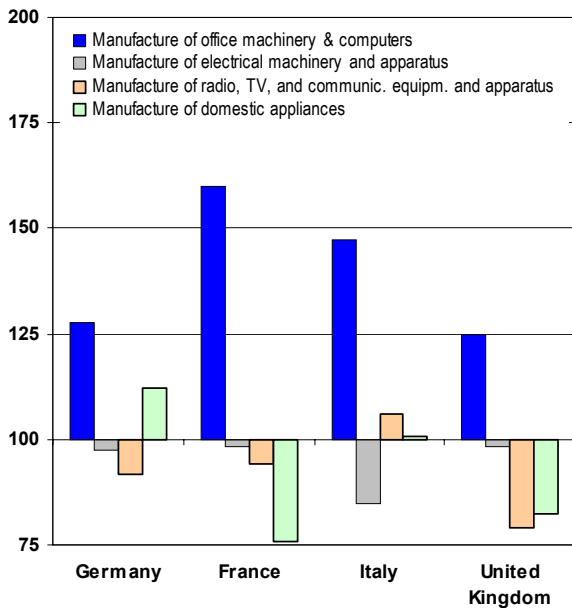
Number of persons employed

29.7 Manufacture of domestic appliances	2,325	10,447	40	:	4,427	14,202	4,463	10,108	4,068	1,279	8,953	33,734
% in Total	16	7	1	:	7	14	8	33	8	2	8	9
30 Manuf of office machinery & computers	347	13,788	16	8,730	1,008	4,839	342	918	1,798	485	4,380	47,839
% in Total	2	10	0	:	2	5	1	3	4	1	4	13
31 Manuf. of electrical machinery & apparatus	4,243	76,130	1,279	22,600	28,794	84,960	34,129	13,204	32,467	17,151	43,466	165,245
% in Total	29	53	29	:	45	82	61	43	67	30	40	45
32 Manufacture of radio, TV & comm. equip. & app.	7,733	43,641	3,051	42 518*	29,525	31 147*	16,681	6,778	10,003	38,489	52,900	116,757
% in Total	53	30	70	:	46	23*	30	22	21	67	48	32
Total (NACE 29.7, 30, 31, 32)	14,648	144,006	4,386	:	63,754	104,001	55,615	31,008	48,336	57,404	109,699	363,575
% in Total EU	0.5	4.5	0.1	:	2.0	3.3	1.7	1.0	1.5	1.8	3.4	11.4

* 2000 data. ** Employment: number of employees instead of number of persons employed.

Source: Eurostat (SBS).

Graph 2: Apparent labour productivity of the sub-groups in the manufacture of electrical and electronic equipment for selected countries, 2001 –(indexed) (manufacture of electrical and electronic equipment = 100)



Source: Eurostat (SBS).

The four Member States covered by Graph 2 are the most important in terms of persons employed in the sector of electrical and electronic equipment. Apparent labour productivity is highest in the manufacture of office machinery and computers, especially in France, where it was 60% higher than the whole sector. This sub-sector was more competitive than the others.

In the manufacture of radio, television and communication equipment and apparatus, only Italy records slightly higher results than the sector's national average, whereas in the United Kingdom this sub-sector offers a notably lower productivity. In contrast to the situation in France and the United Kingdom, the productivity in the manufacture of domestic appliances in Germany remains over the nation's average. In Italy, the corresponding value is close to the value of the sector as a whole.

Large share of the workforce accounted for by women

54 % of the 3.2 million persons working in the manufacture of electrical and electronic equipment in the European Union in 2001 were employed in the sub-sector "manufacture of electrical machinery and apparatus". At Member State level, the share reaches or even exceeds 70 % in the Czech Republic, Cyprus and Poland.

The second most important sub-sector, "manufacture of radio, television and communication equipment and apparatus", accounted for 30 % of employment in the sector at EU level and was particularly important in Malta and Finland (70 % and 67 % respectively), but also in Lithuania (53 %) and Sweden (48 %).

The manufacture of office machinery and computers and of domestic appliances plays a less important role (share in employment in the EU of 7 % and 9 % respectively). The manufacture of office machinery and computers, however, is the most important sub-sector in Ireland with a share of 41 %. The manufacture of domestic appliances is of some importance in Cyprus (23 %, although the absolute numbers are very low), while other countries with noticeable shares (all around the 15 % level) are Spain, Italy, Slovenia and Lithuania.

EU Labour Force Survey (LFS) data suggest that part-time employment is generally more widespread in EU-15 than in the New Member States. The available data for three NACE divisions (30, 31, 32) show that Belgium and the Netherlands had the

highest share of part-time employment in 2002, (20 % and 14 % respectively). In the new Member States, part-time employment is not a common phenomenon. On the basis of the available data, Slovenia recorded the highest share among this group, at just over 3 %.

EU LFS data further suggest that, compared with other manufacturing sectors, the manufacture of electrical and electronic equipment is characterised by a fairly high level of female employment (often in the 30 -40 % range).

At Member State level, it appears that female workforce participation is fairly equally spread across the sub-sectors. In the Czech Republic, Hungary, Slovenia and Slovakia, female workforce participation is particularly high.

The highest single share is in Slovakia, where women made up close to 70% of the workforce employed in the manufacture of radio, television and communication equipment and apparatus in 2002. The corresponding figures for the Czech Republic and Hungary are 52 % and 53 % respectively. Another noticeable feature is the high level of female employment in Portugal, where women account for 54 % of the workforce employed in the manufacture of electrical machinery and apparatus and for 61 % in the manufacture of radio, television and communication equipment and apparatus.

As regards the educational attainment levels of workers in this sector, the EU LFS data show that, in most Member States, most people employed in the manufacture of office machinery and computers have a tertiary-level education. The percentages of the workforce with a tertiary education are highest in

Belgium, Spain and France, where the range is between 56% (Belgium) and 67% (Spain).

The highest proportion of persons with a lower-secondary level education can generally be found in the manufacture of electrical machinery and apparatus.

More than three out of every four enterprises are micro-enterprises

In 2001, 110 069 enterprises were engaged in the manufacture of electrical and electronic equipment at EU level. A large majority (68 289 enterprises, or 62 %) belonged to the manufacture of electrical machinery and apparatus.

The Czech Republic and Denmark were furthest above this average, with shares of 79 % and 71 % respectively, whereas the figure for Estonia was just 36 %. With 94 out of a total of 176 enterprises (53 %), however, the latter country had the highest share of enterprises involved in the manufacture of radio, television and communications equipment, a share that was double that at EU level (26 %, corresponding to 28 775 enterprises). Other countries with large shares in this sub-sector were Hungary and Malta, both on 41 %

In the manufacture of office machinery and computers, Ireland is the only Member State where the share is more than 20%, while the EU average is 8 %.

Relatively few enterprises were engaged in the manufacture of domestic appliances (4 450, or 4 % of the sector total). Austria and Lithuania were the only countries with shares of more than 10 % (12 % and 11 % respectively).

Observing the enterprises in the various sub-sectors by size class, one is struck by the high proportion of micro-enterprises. In NACE divisions 30, 31 and 32, micro-enterprises (between one and nine persons employed) accounted for between 77 % and 83 % of all enterprises in the sector (EU average). In the manufacture of domestic appliances, the proportion of micro-enterprises was somewhat lower, at 66 %.

Furthermore, large enterprises (250 or more persons employed) constitute only a fraction of the total number of enterprises. Their share is limited to around 1 % of all enterprises in NACE divisions 30, 31 and 32. Exceptions are Ireland, where 21 % of the enterprises in the manufacture of office machinery and computers are very large, and Austria, where 10 % of the enterprises in the manufacture of radio, television and communication equipment are very large.

A similar pattern can be observed for the manufacture of domestic appliances, the number of large enterprises representing 3 % of all enterprises in this sub-sector. The highest proportion of very large enterprises was recorded in Denmark, France and Slovakia.

Table 3: Number of enterprises in the manufacture of electrical and electronic equipment, by enterprise size class, 2001

	Domestic appliances (29.7)					Office machinery and computers (30)					Electr. machinery and apparatus (31)					Radio, TV, & commun. equipm. (32)					Total (NACE 29.7, 30, 31, 32)
	1-9	10-49	50-249	>250	TOTAL	1-9	10-49	50-249	>250	TOTAL	1-9	10-49	50-249	>250	TOTAL	1-9	10-49	50-249	>250	TOTAL	
EU	2 932	898	422	198	4 450	7 127	955	337	136	8 555	52 866	10 955	3 348	1 120	68 289	23 178	3 681	1 325	591	28 775	110 069
BE	49	16	8	0	73	92	14	4	0	110	552	133	43	22	750	190	25	18	10	243	1 176
CZ	525	37	12	5	579	397	32	8	5	442	14 620	541	227	83	15 471	2 910	115	51	29	3 105	19 597
DK	33	16	9	6	64	79	15	10	0	104	718	168	45	17	948	121	49	30	13	213	1 329
DE	157	88	:	:	344	:	:	:	:	646	:	:	877	321	6 762	1 573	:	:	:	2 449	10 201
EE	2	1	0	0	3	9	7	0	0	16	33	16	11	3	63	66	14	11	3	94	176
ES	284	109	:	:	443	846	56	:	:	916	2 095	1 069	215	60	3 439	729	259	:	:	1 082	5 880
FR	161	40	30	23	254	402	100	21	16	539	2 903	861	272	120	4 156	1 813	623	241	83	2 760	7 709
IE	:	:	:	:	14	13	23	23	16	75	52	70	:	:	181	11	17	23	12	63	333
IT	520	250	88	36	894	1 423	240	34	7	1 704	14 983	3 520	452	85	19 040	8 219	866	165	52	9 302	30 940
CY	:	:	0	:	46	0	0	0	:	:	76	:	:	:	:	3	0	0	0	3	:
LV	5	0	0	0	5	16	4	0	0	20	39	17	6	4	66	30	13	6	0	49	140
LT	26	11	1	1	39	42	5	1	0	48	149	28	12	2	191	49	12	8	4	73	351
HU	84	:	16	:	131	366	23	:	:	404	1 369	215	77	57	1 718	1 370	129	:	:	1 582	3 835
MT	:	:	:	:	5	9	0	0	0	9	:	:	:	:	41	:	:	:	:	38	93
NL	65	30	15	0	110	195	20	15	5	235	770	185	45	20	1 020	220	50	25	5	300	1 665
AT	62	18	8	5	93	20	10	6	0	36	230	109	76	24	439	105	44	19	19	187	755
PL	358	:	:	:	416	770	:	15	:	818	3 921	293	191	76	4 481	2 404	:	62	:	:	:
PT	:	:	12	:	91	:	:	:	0	25	717	:	44	:	918	:	:	17	13	288	1 322
SI	:	:	:	:	43	89	19	4	0	112	581	:	23	:	674	225	23	:	:	274	1 103
SK	:	:	:	:	33	24	:	:	:	44	205	:	43	:	409	56	:	:	:	117	603
FI	21	14	6	0	41	45	11	1	0	57	351	105	45	15	516	232	57	22	15	326	940
SE	73	12	7	7	99	363	34	14	3	414	948	219	65	21	1 253	526	95	24	28	673	2 439
UK	378	123	57	28	586	1 486	175	79	37	1 777	3 670	1 263	502	121	5 556	2 076	549	226	89	2 940	10 859

LU, EL: no data available.

Source: Eurostat (SBS)

High levels of trade, with big differences in trade performance

The various categories covered in this publication show that the manufacture of electrical and electronic equipment is a fairly heterogeneous sector. In 2003, taking all sub-sectors together, the EU recorded a trade deficit of almost 30 % of the total value of trade.

At EU level, the domestic appliances sub-sector shows a modest surplus (1.5%). At Member State level, Italy excels, with a surplus of 62.2%. Slovenia and Slovakia also have healthy surpluses.

A more substantial trade surplus was achieved for electrical machinery and apparatus (8.4 %). Here, 11 out of 25 countries had a positive balance, with Denmark and Germany coming first (19.2 % and 16.3 % respectively).

On the other hand, the trade balance was negative for office machinery and computers: the EU's deficit amounted to 47 %, with only four countries recording a surplus (Ireland, Luxembourg, Hungary and the Netherlands).

Table 4: Trade performance of the electrical and electronic equipment industry, 2003

Exports–imports as a percentage of exports + imports

	Domestic appliances (29.7)	Office machinery and computers (30)	Electrical machinery and apparatus (31)	Radio, Television and commun. equipm. & apparatus (32)	Electric and electronic equipment (29.7 + 30 + 31 + 32)
BE	-31.6%	-11.2%	-0.1%	-2.7%	-6.1%
CZ	-32.2%	-70.7%	4.7%	-33.3%	-20.1%
DK	-12.8%	-38.2%	19.2%	-10.1%	-7.9%
DE	18.5%	-24.2%	16.3%	-1.7%	-0.6%
EE	-72.9%	-82.7%	-32.0%	-47.2%	-49.9%
EL	-50.2%	-85.0%	-51.8%	-71.7%	-66.3%
ES	-6.0%	-57.2%	-16.9%	-29.0%	-28.2%
FR	-25.4%	-35.3%	9.8%	-1.4%	-7.9%
IE	-44.6%	30.3%	-8.4%	1.1%	18.5%
IT	62.2%	-51.4%	8.5%	-28.3%	-6.3%
CY	-98.6%	-91.7%	-91.5%	-93.5%	-93.2%
LV	-80.9%	-87.2%	-59.4%	-71.5%	-72.3%
LT	-9.0%	-71.1%	-69.5%	-8.8%	-33.5%
LU	-72.4%	2.0%	-9.5%	-4.1%	-1.0%
HU	22.4%	20.8%	9.5%	-26.8%	-5.1%
MT	-26.3%	-5.7%	7.2%	9.2%	7.6%
NL	-20.3%	2.1%	-3.6%	-0.8%	-0.2%
AT	-8.4%	-25.8%	3.1%	-4.6%	-6.0%
PL	8.5%	-88.8%	7.3%	-40.8%	-23.5%
PT	-19.6%	-34.2%	0.6%	-18.7%	-15.4%
SI	35.1%	-79.5%	-0.7%	-17.3%	-10.8%
SK	30.5%	-75.3%	-15.9%	-34.7%	-24.4%
FI	-26.8%	-62.0%	6.5%	40.0%	21.0%
SE	10.5%	-48.0%	-0.1%	23.7%	4.8%
UK	-55.3%	-21.6%	-3.5%	-8.9%	-14.4%
	1.5%	-47.0%	8.4%	-20.1%	-29.5%

Note: Member States: intra- and extra-EU trade; EU: extra EU-25 trade.

As an aid to interpretation, the divisions in which a trade surplus was generated are marked in **bold**.

Source :Eurostat (Comext).

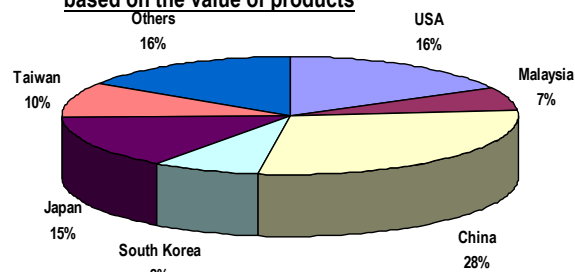
In the sector "radio, television and communication equipment and apparatus", the trade deficit stood at 20 %. Only three Member States turned in a surplus in this sub-sector: Finland, Sweden and Malta.

In 2003, the EU's main source of imports was China, which accounted for 28% of the total value of all electrical and electronic equipment imported by the EU. The USA and Japan were the other main partners, with shares of 16% and 15% respectively.

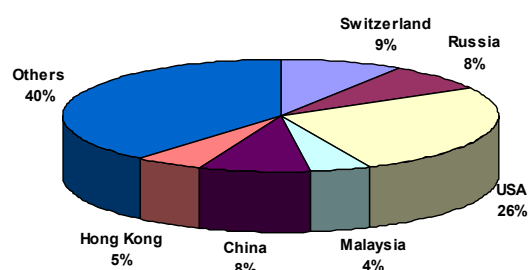
As regards EU exports, the USA took the largest share, accounting for 26% of the total value of all electrical and electronic equipment exported from the EU, followed by Switzerland, with a share of 9%. Russia and China each took 8 %

Shares of both imports and exports relate to the total value of trade; however, the values of imports and exports are not in balance: in 2003, the value of the EU's imports of electrical and electronic equipment was 52% higher than the value of its corresponding exports.

Graph 5A: EXTRA-EU IMPORTS of electrical and electronic equipment, 2003
based on the value of products



Graph 5B: EXTRA-EU EXPORTS of electric and electronic equipment, 2003
based on the value of products



Source: Eurostat (Comext).

➤ ESSENTIAL INFORMATION – METHODOLOGICAL NOTES

ABBREVIATIONS

EU: European Union, including the 25 Member States (EU-25): Belgium (BE), the Czech Republic (CZ), Denmark (DK), Germany (DE), Estonia (EE), Greece (EL), Spain (ES), France (FR), Ireland (IE), Italy (IT), Cyprus (CY), Latvia (LV), Lithuania (LT), Luxembourg (LU), Hungary (HU), Malta (MT), the Netherlands (NL), Austria (AT), Poland (PL), Portugal (PT), Slovenia (SI), Slovakia (SK), Finland (FI), Sweden (SE) and the United Kingdom (UK).

SYMBOLS

“-” not available or confidential.

Total electrical and electronic equipment in this SiF covers NACE Rev.1, group 29.7 and divisions 30, 31 and 32.

DEFINITIONS

Division of employment and value added by sector of activity

Employment and value added in the Structural Business Statistics (SBS) are divided into sectors of activity according to the NACE Rev. 1 system of classification, which categorises activities by section (1-letter codes), subsection (2-letter codes), division (2-digit codes), group (3-digit codes) and class (4-digit codes). All activities relating to the manufacture of electrical and electronic equipment are included under NACE Section D. The manufacture of electrical and electronic equipment analysed in this publication includes the following divisions and groups:

- 29.7 Manufacture of domestic appliances not elsewhere classified
- 30 Manufacture of office machinery and computers
- 31 Manufacture of electrical machinery and apparatus n.e.c.:
 - 31.1 Manufacture of electric motors, generators & transformers
 - 31.2 Manufacture of electricity distribution & control apparatus
 - 31.3 Manufacture of insulated wire and cable
 - 31.4 Manufacture of accumulators, primary cells & batteries
 - 31.5 Manufacture of lighting equipment and electric lamps
 - 31.6 Manufacture of electric equipment n.e.c.
- 32 Manufacture of radio, television and communication equipment and apparatus:
 - 32.1 Manufacture of electronic valves and tubes and other electronic components
 - 32.2 Manufacture of television and radio transmitters and apparatus for line telephony and line telegraphy
 - 32.3 Manufacture of television and radio receivers, sound or video recording or reproducing apparatus and associated goods

Number of persons employed: defined as the 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). It includes part-time workers, seasonal workers, apprentices and home workers who are on the pay roll. 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’*.

Number of employees: 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. A worker from a temporary employment agency is considered to be an employee of the temporary employment agency and not of the unit (customer) in which they work.

Turnover: Turnover comprises 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.

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 the value added accounted for by the manufacture of electric and electronic equipment or a sector thereof is highest in relation to the manufacture industry (NACE D) of that country. The least specialised Member State is the country where this share is the lowest.

Apparent labour productivity: Value added at factor cost/number of persons employed (expressed in thousand EUR per person employed).

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, grouped into three levels in the analysis:

- lower secondary, 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.

The level upper secondary includes GSCE levels for UK.

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

Enterprise: the enterprise is the smallest combination of legal units that is an organisational unit producing goods or services, which benefits from a certain degree of autonomy in decision making, especially for the allocation of its current resources. An enterprise carries out one or more activities at one or more locations. An enterprise may be a sole legal unit. Enterprises in this article are classified by their main activity.

DATA SOURCES

Structural Business Statistics (SBS): collected within the framework of Council regulation on structural business statistics (EC, EURATOM) No. 58/97 of December 1996. The SBS Regulation governs the transmission of data to Eurostat from the reference year 1995 onwards and covers all market activities in sections C to K of NACE Rev. 1. For further information, please visit:

http://forum.europa.eu.int/Public/irc/dsis/bmethods/info/data/new/main_en.htm

EU Labour Force Survey (LFS): a survey of private households which provides data on the population living in these by nationality and by work status as well as by sex and age. The main focus is on employment, unemployment and inactivity and the various aspects of these, including the sector of activity in which people are employed and the highest level of educational attainment reached.

COMEXT is 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 the electric and electronic equipment sector.

Data extraction for this publication: October 2004.

Further information:

➤ **Databases**

[EUROSTAT Website/Industry, trade and services/Industry, trade and services - horizontal view/Structural Business Statistics \(Industry, Construction, Trade and Services\)](#)

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