Other manufacturing industries



The other manufacturing industries have witnessed a large growth in output and in value added over the last few years. Output increased by 76% in the 1980's to 17 billion ECU in 1989. Higher investment growth and a decrease in employment contributed to increased productivity. The emergence of the NIC's remains a threat to the competitive position of the sector, in both export markets and domestic markets.

The outlook for the sector remains favourable due to large domestic demand.

Definition

NACE class 49 - other manufacturing industries, consists of:

- 491 Manufacture of articles of jewellery and goldsmiths' and silversmiths' wares; cutting and otherwise working of precious and semi-precious stones;
- 492 Manufacture of musical instruments;
- 493 Photographic and cinematographic laboratories;
- 494 Manufacture of toys and sports goods;
- 495 Miscellaneous manufacturing industries.

This class is comprised of the manufacturing industries which have not been covered elsewhere and is as such highly heterogenous. For this reason extreme caution is demanded when comparing with other sections.

Production

The EC production of NACE 49 - other manufacturing industries amounted to 17 034 million ECU in 1989. This is a 12% growth in comparison to 1988, where since 1980, the annual growth rate averaged 6.5%. Distribution of production is concentrated in the four largest countries, which hold 82% of EC production. Figure 1 shows the distribution of EC production over member states. The relatively large output of Belgium is attributed to the jewellery sector, which reflects the importance of Belgium in the diamond market. The countries with the largest expansion during the 80s were the Netherlands, Italy, Denmark and Greece.

Value added

The value added generated by other manufacturing industries was 6 754 million ECU in 1989. Absolute figures are in line with production. However, growth figures for value added show some significant deviations compared to production growth. The EC average growth in value added trailed behind production growth. Only in Belgium and Ireland did the value added grow considerably faster than production, however, these coun-

tries have small growth figures. Contributions of the other manufacturing sectors to national GDP are all less than 1%. Even in comparison to the manuNACE 49





Source: Eurostat

facturing total, the sector is of limited importance. The largest contribution to manufacturing value added comes from Belgium, again due to Belgium's central position in the diamond market.

The EC in the global market

Trade of other manufacturing products expanded rapidly during the 1980s. The largest exporting regions are the EC (17% of world exports), South East Asia (16%) and the Pacific Rim (almost 13%). On the import side, North America and the EC are by far the predominant markets. The sector is relatively important in South East Asia, as more than 10% of its exports to the OECD countries consist of "other manufacturing" products. In the other regions, "other manufacturing products" only account for between 0.3% (the USSR) and

exports to the OECD. At the EC level, exports of other manufacturing products represent 4.7% of total exports. A closer look at trade trends for the different products included in the "other manufacturing" sector, namely jewellery, musical instruments, and toys and sports goods, shows a varied performance. Whereas the EC has been a large net exporter of jewellery, its trade balance has been increasingly negative for musical instruments, toys and games. This decline was mainly due to the rise in imports from South East Asia and the rest of the world. The trend in the price of gold as well as in the ECU/US\$ exchange rate, are major factors influencing jewellery production and exchanges. The sharp fall in the price of gold, which reached its lowest level for four years in mid 1990 and the good economic situation, was a bonanza for the jewellery industry. As regards musi-

5.5% (in the EFTA countries) of their total

Table 1Other manufacturing industriesMain indicators, 1980-90

(million ECU)	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 (²)
Apparent consumption	10 492	10 018	8 575	9 571	8 761	9 913	11 999	9 971	6 607	9 224	9 215
Net exports	- 802	- 527	1 575	1 717	3 403	3 609	1 231	4 054	8 657	7 810	8 330
Production (1)	9 690	9 4 9 1	10 150	11 288	12 163	13 523	13 230	14 025	15 264	17 034	17 545
Employment (1000) (1)	275	246	224	232	231	224	220	222	228	232	237

⁽¹⁾ Excluding Luxembourg

(²) Estimated Source: Eurostat (Inde)

Table 2 Other manufacturing Production, value added and investment in current prices, 1980-90 (')

(million ECU)	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 (*)
Production (1)	9 690	9 4 9 1	10 150	11 288	12 163	13 523	13 230	14 025	15 264	17 034	17 545
Index	71.7	70.2	75.1	83.5	89.9	100.0	97.8	103.7	112.9	126.0	129.7
Value added (2)	4 078	4 072	4 450	4 708	4 804	5 040	5 174	5 615	6 085	6 754	N/A
Index	80.9	80.8	88.3	93.4	95.3	100.0	102.7	111.4	120.7	134.0	N/A
Investment (3)	361	335	363	383	413	509	534	582	N/A	N/A	N/A
Index	71.0	65.9	71.4	75.2	81.2	100.0	104.9	114.3	N/A	N/A	N/A

(*) Excluding Edgembourg and Portugal (*) Excluding Belgium and Luxembourg

(*) Estimated

Source: Eurostat (Inde)



Table 3 Other manufacturing industries EC trade in current value, 1980-90 (¹)

(million ECU)	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 (²)
Exports extra-EC	8 707	8 572	10 910	11 647	16 671	16 215	15 604	15 747	23 028	26 339	24 534
Index	53.7	52.9	67.3	71.8	102.8	100.0	96.2	97.1	142.0	162.4	151.3
Imports extra-EC	9 509	9 099	9 336	9 931	13 268	12 605	14 373	11 693	14 370	18 529	16 204
Index	75.4	72.2	74.1	78.8	105.3	100.0	114.0	92.8	. 114.0	147.0	128.5
X/M	0.9	0.9	1.2	1.2	1.3	1.3	1.1	1.3	. 1.6	1.4	, 1 <i>.</i> 5
Trade Intra-EC	9 773	9 694	10 530	11 587	12 609	13 347	1 431	17 658	17 080	19 608	N/A
Index	73.2	72.6	78.9	86.8	94.5	100.0	10.7	132.3	128.0	146.9	N/A

(¹) 1980 EC9; 1981-83 EC10 (²) Estimated Source: Eurostat (Inde)

cal instruments, the recent emergence of the electronics segment has given an advantage to Japanese, South Korean and US manufacturers. The EC was the largest world producer in 1989. European producers are mainly specialised in traditional instruments with Germany and Italy being the market leaders. The toy industry evolves in an extremely volatile and competitive environment. Even more accentuated since demand growth prospects are limited in Western Europe and the United States (due to low demographic growth and the relatively slow growth of personal consumption expenditures).

Employment

Over the 80s employment in the other manufacturing sector has fallen. Only the countries with strong output growth like the Netherlands, Denmark and Greece were not faced with a decline. Whereas the EC output level in 1989 was 76% higher than in 1980, the level of employment in 1989 was 16% lower than in 1980 indicating a substantial growth in productivity. Since 1987, employment has started to increase once again, albeit rather slowly.

Investment

The 1980s have been a period of strong

Figure 2 Other manufacturing industries share in total manufacturing value added, 1989



Source: Eurostat

Table 4 Other manufacturing industries Outlook

	1989	1990	91/90	92/91	94/90
Production (million ECU)	17 034	17 545	3.5%	4%	4%
Employment (000's)	232	237	1%	1.5%	2%

Source: NEI

reorganisation, which is reflected in the investment figures. During the 1980's, investments for most countries grew faster than output, leading to substantial increases in productivity.

Outlook

Although present production and consumption trends are favourable, these are mostly driven by domestic demand. On the international markets, EC manufacturers are increasingly confronted by more competitive non-EC multinationals which will eventually threathen the EC manufacturer's domestic market share. Therefore the outlook will depend on the industry's ability to translate the upsurge in domestic demand into a restructuring of supply-side conditions. Production will continue to grow albeit more moderate than in the late 1980s. Since most products are luxury items with an income elasticity higher than one, domestic demand can increase faster



than real income growth. This means that in the medium term, the completion of the Internal Market with it's real income growth, offers a substantial potential for further development of this sector conditional upon existing or improved competitive conditions for the industry. In line with this there will also be increasing opportunities for growth of employment.

Written by: NEI



The jewellery sector has prospered under favourable market conditions, viz. a stable gold price and a strong domestic and export demand.

In 1989 total EC gold production grew by 26% to more than 495 tonnes, while the world-wide volume reached a tonnage of 1811.

In the same year, the value of EC production in the jewellery industry was estimated at nearly 5 600 million ECU, representing employment for more than 56 000 people.

In the near future market conditions are expected to become less favourable.

Definition of the Sector

In the NACE classification jewellery is defined in category 491 which embraces six subgroups:

- 491.1 manufacture of articles of jewellery containing precious metal or precious plated ware;
- 491.2 manufacture of goldsmiths' and silversmiths' wares;
- 491.3 manufacture of fancy jewellery;
- 491.4 diamond cutting;
- 491.5 working of precious and semiprecious stones;
- 491.6 striking of coins and medals. The line between jewellery and costume (fancy) jewellery is hard to draw. Usually, an article made of base metal and coated with precious metal, perhaps set with imitation stones, would be regarded as costume jewellery, but highquality plated metals may be set with natural stones, and so there is a grey area. In this monograph, figures and comments on jewellery and costume jewellery

have been separated as far as possible. The industry includes many articles made of precious metals - particularly articles of silver - that are not worn on the person. At the retail level, it is customary for the industry to have close ties with the clocks and watches industry, as well as with antiques not necessarily made of precious metals.

It should be noted that Eurostat data on production and employment used in the monograph, should indicate the relative volume of the industry in each country and the trend in production and employment. Otherwise, the absolute figures are underestimating the importance of the industry, as units employing less than 20 people are not taken into account by official statistics, and because of high taxation of jewellerv in most EC countries.

Current situation

The optimism in the industry referred to in Panorama 1990 has been fully justified. The demand for gold for jewellery fabrica-

Table 1 Production in the Jewellery Industry, 1980-90 Jewellery

(million ECU)	`	1980	1981	1982	1983	1,984	1985	1986	1987	1988	1989	1990(2)
Total	<u>,</u>	3 137	3 172	3 763	3 7.69	3 908	4 798	4 318	4 569	4 994	5 572	5 895
Belaiaue/Belaiĕ		635	614	768	580	485	601	590	602	649	685	723
Danmark	×	21	20	17	17	20	<u> </u>	11	13	10	14	15
BR Deutschland	× .	665	656	943	893	666	697	781	866	935	1 039	1 109
Helias		4	9	8	. 8	9	9.	8.	8	8	· 9.	10
España		195	203	173	184	183	194	212	214	235	269	284
France		604	669	693	725	674	720	780	752	824	911	969
Ireland		36	42	42	35	40	33	30	30	30	38	. 40
Italia		524	603	737	1 007	1 397	2 086	1 474	1 643	1 767	2 001	2 1 15
Nederland		15	17	17	18	19	29	32	24	28	26	28
United Kingdom		438	339	365	302	415	416	400	417	508	580	602
USA (1)		3 946	5 023	5 518	6 228	7 093	7 428	6 010	6 023	6 241	6 561	N/A
Japan (1)		661	996	1 058	<u>,</u> 1 344	1 631	1 794	N/A	N/A	N/A	N/A	N/A
······································						,		```	· · · · ·			· · ·

(*) Census of Manufactures and Eurostat estimates (*) Estimated Source: Eurostat (Inde)

tion, as a proportion of total gold fabrication, has risen markedly from 54% in 1980 to 87% in 1989. That has been one factor with a notable effect on the price of gold. In Italy, Germany, Spain and France demand for gold jewellery rose owing to a relatively low gold price in terms of domestic currency and an increase in general consumer purchasing power.

In France a reduction in the VAT rate from 33% to 25% added to the price effect. In comparison with the previous year, the use of fine gold by leading manufacturing Member States increased, for Italy by 32%, for Germany by 15%, for Spain by 25%, for the UK and Ireland by 16% and for France by 13%. Gold fabrication in Italy has reached the level of 345 tonnes.

Total gold fabrication in Germany, France and Spain totalled 107 tonnes against 91.4 tonnes in 1988, an increase of 17%.

Besides good domestic markets, these countries have recorded increasing exports of articles of jewellery to markets inside and outside the EC. Total exports rose by one guarter.

Diamond jewellery sales have increased steadily in the EC in recent years. Prelimi-

nary results for 1989 indicate an EC increase of approximately 14% over the 1988 ECU value. However, as the US dollar strengthened against the ECU in 1989 and rough diamonds are normally traded in US dollars, that age probably indicates a smaller increase than 14% in volume.

The 1988 growth rate was 18% in ECU value at a stable ECU/US dollar rate. The increase in 1989 resulted from greater sales of higher priced articles, the sales of lower price goods falling off slightly.

The largest market in the EC is Italy with total sales of 1 700 million ECU, followed by Germany with 1 200 million ECU. Substantial increases were recorded in France and Spain and particularly in the United Kingdom.

Production

None of the EC jewellery-producing countries showed a marked deviation in their production growth rate from the EC average, which was 5.8%.

The dominance of Italy in production was emphasised in 1989. In 1990 Italian production continues to grow at a rate of 5.7%, which is about the EC average.

Table 2 shows that the increase is mainly due to the rise in gold fabrication in carat



jewellery, which has risen from 262 to 345 tonnes.

Table 2 also shows the very high tonnage of gold fabricated in Italy: 70% of the EC total in 1989.

The growth rate of jewellery production value for Italy was 15% in 1989; for physical production it was 32%. The EC figures are 5.8% and 26.8%, respectively, which indicates that price changes lag behind volume changes.

The industry invested heavily in equipment to boost both capacity and productivity. Nevertheless some manufacturers still reported difficulty in keeping up with extraordinary growth in demand from both export and domestic markets.

In Germany and the UK there was a trend towards higher caratages, entailing a greater demand for fine gold. This trend has been reinforced by a trend in fashion towards heavier and chunkier jewellery. The total EC production greatly exceeds that of the USA and Japan together. On the other hand the combined total production of the EC, USA and Japan is substantially less than that of the rest of the world: the tonnages fabricated in the Middle East, the Indian subcontinent and the Far East are much higher. The demand for platinum jewellery increased (in weight) by 11% in 1989. Platinum for jewellery fabrication accounted for only 38.7% of total platinum mined in 1989, almost equivalent to the 37% recorded in 1988. Its use is overwhelmingly dominated by Japan which consumes 88% (35.8 tonnes) of it. Table 3 shows retail sales figures of diamond jewellery up to 1988.

This latter year shows an increase in ECU value of 18% over 1987 for EC countries, about midway between the 2% increase in the USA, and 30% achieved in Japan. With this remarkable growth, retail sales in Japan have become even higher in value than those in the USA. In pieces sold, the latter country remains by far the largest. In the EC, the average retail price paid for a piece of diamond jewellery in 1988 remained the same as in 1987, around 500 ECU. This is little different from the USA, but low in comparison to Japan where the average price is 1 284 ECU.

Consumption

In the EC, polished gold remains the most popular choice for general jewellery, although textured gold is gaining popularity for more 'avant garde' designs. Gold mixed with coloured stones has become increasingly popular, as has gold mixed with coloured enamel beads to give an ethnic feel. Earrings are the most popular item bought, with large round shapes or drops preferred. Groups of bracelets are being worn together. Brooches are coming back into fashion, miniature animal and bird shapes are popular and hollow gold beads are much in use for necklaces, bracelets and earrings. Diamond rings continue to dominate diamond jewellery retail sales throughout the world, although in some countries, especially where the tradition of giving a diamond ring for engagement is established, this domination is pronounced. For instance, in the UK, where 70% of brides receive a diamond engagement ring before their marriage, rings account for 83% of the total value of the market. In Japan, where 77% of brides receive a diamond engagement ring, although this is a relatively new tradition, rings account for approximately 76% of the total value. The USA, despite its strong tradition, has only 61% of its total value in rings. This is because of the popularity of mens diamond jewellery - nearly 25% of all men in the US own at least one piece, and because of the popularity of high priced diamond bracelets. In Germany and Spain where the

Table 2	
Gold Fabrication in Carat Jewellery (including se	crap), 1980-89

Belgique/België Danmark BR Deutschland Heitlas		`.	2.9	2.2	nà		······································	`				,
Danmark BR Deutschland Hellas					2.1	2	1.9	1.9	1.7	1.6	1.8	. 2
BR Deutschland Hollas			0.3	0.3	0.7	0.7	0.8	0.8	0.9	0.9	0.9	0.8
Hollas	w v v v		32	30.5	32.5	33	33	34.1	. 35	39.2	45.1	51.9
a traineach .	•		4.5	5.6	6.7	.7.9	9.1	10.5	. 9	8.2	8.3	. 8.6
España			18	17.1	15.8	13.4	12.6	15.7	15.6	17	24	30
France	N		13	14.9	18.8	17.4	·	17.6	19.9	20.4	22.3	25.1
Ireland and UK	· · · · · · · · · · · · · · · · · · ·		9.7	12.2	13.2	12	13.5	15,5	16.6	18.4	21.1	25.7
Italia			107	. 171	. 228	172	220	253	238	222	262	345
Nederland			0.6	0.5	0.8	8.0	0.8	8.0	0.9	. 1	. 1,1	1.3
Portugal			. 2.1	2.5	3	3.2	2.4	3.5	3.5	4	4.5	5.3
EC (')		, ,	190.1	256.8	321.6	262.4	310.8	353.4	341.1	332.7	392.1	495.7
(excluding scrap)			156.8	237.6	295.6	235.9	285.7	329.2	323.1	315,2	374.4	477.8
Rest of Europe		. 、 、	25	24.9	28.6	28.5	30.9	34.4	35.1	34.3	41.3	47,8
North America			69.3	73.7	81.8	90.2	94.5	99.8	103.2	104.1	110.7	119.2
(of which USA)	1	• • •	59.1	64.5	71.6	. 79.8	83,9	. 89	92.9	94.4	100,6	108.8
Latin America	11 (N. 1997)	÷.,	25.7	28.9	30.6	21,4	18.5	22.2	33.2	23.3	- 23	28.6
Middle East	A	·	65,6	178.4	168,5	155.8	208:7	213.9	206.2	195.8	210	257.3
Indian Subcontinent		í.	50	73.9	126.5	121.3	170.5	199.9	175.9	190.2	221.5	258.5
Far East	· · · · · ·		64.6	116	138	122.8	215.7	201.3	198	253	442.5	565.2
(of which Japan)		· ·	28.6	. 39	42.9	43.4	50.2	60.7	80.7	84	95	112.5
Africa		ž	19.6	23.1	18.7	17.8	18.3	17.8	21	22.4	32	33.8
Australasia			.3.3	3.9	5.3	4.7	2.6	3.2	4.4	4.2	4	5.1
Total (?)		•••	513.2	779.6	919.6	824.9	1 070.5	1 145.9	1 118.1	1 160.0	1477.1	1811.2
(excluding scrap)	· · · · · ·		283.5	608.7	752.3	636.5	865.1	904.6	817.8	883.7	1220.3	1593.4

(*) Excluding USSR and associated countries Source: Gold 1990, Consolidated Gold Fields

> P A N X O R X A M A X X X X

	Table 3	
Retail Sales ·	Diamond Jewellery,	Value and Pieces

		1980	1981	1982	1983	1984	1985	1986	1987	1988
EC (')	million ECU	2 474	2 712	2 917	3 055	3 387	3 542	3 989	4 443	5 232
	1,000 pieces	5 685	5 953	6 537	7 066	7 137	7 528	8 140	9 123	10 345
Belgique/België	million ECU	N/A	N/A	N/A	118	118	118	130	134	151
	1,000 pieces	N/A	N/A	N/A	250	250	250	260	268	292
Danmark	million ECU	9	15	20	27	.30	22	35	37	40
	1,000 pieces	44	58	77	93	86	79	72	73	76
BR Deutschland	million ECU	603	614	654	759	749	735	790	1 029	1 180
	1,000 pieces	1 707	1 723	1 707	1 756	1 656	1 714	2 039	2 640	3 036
España	million ECU	271	296	307	334	389	435	547	607	749
	1,000 pieces	576	642	696	795	827	857	919	950	1087
France	million ECU	468	596	- 579	533	485	488	542	499	564
	1,000 pieces	732	838	- 865	830	759	759	721	714	832
Italia	million ECU	768	806	973	834	1 065	1 139	1 347	1 489	1 676
	1,000 pieces	1 329	1 396	1 850	1 898	1 974	2 239	2 390	2 377	2 543
Nederland	million ECU	49	51	56	63	68	73	81	84	130
	1,000 pieces	170	179	189	191	194	196	233	276	325
United Kingdom	million ECU	306	334	328	367	483	532	517	564	742
	1,000 pieces	1 127	1 117	1 153	1 253	1 391	1 434	1 506	1 825	2 154
USA	million ECU	4 930	5 115	5 137	5 838	6 731	7 613	8 248	9 558	9 775
	1,000 pieces	13 502	15 129	14 575	15 241	16 054	17 407	18 155	19 843	18 863
Japan	million ECU	3 700	4 462	4 144	4 863	5 773	5 861	7 168	7 810	10 143
	1,000 pieces	4 128	3 943	4 449	4 630	5 257	5 591	5 953	6 795	7 900

(') Excluding Greece, Ireland, Luxembourg and Portugal; 1980-82 excluding Belgium Source: De Beers

giving of an engagement ring is not a tradition, rings only account for 52% and 41% respectively. In Germany, the next most important category is necklaces which sell at a high price, and in Spain earrings are very popular.

Trade

Trade figures are exhibited in Tables 4 and 5, which include only jewellery (as opposed to loose stones and their processing), goldsmiths' and silversmiths' wares and articles made of platinum.

As most international trade takes place in dollars, the ECU values are influenced by fluctuations in the dollar rate, which explains the volatility of the figures in Tables 4 and 5. The appreciation of the yen during the 1980s had an overwhelming impact on EC exports to Japan; by 1989 exports to Japan in ECU value were well over eight times the 1980 figure in ECU. At 3 681 million ECU, 1989 extra-EC exports considerably exceeded extra-EC imports at 1 077 million ECU. On the other hand, imports increased by more than 40% in the last two years, a far higher growth rate than for exports. Yet again, fluctuations in the dollar must be taken into account.

The breakdown of EC imports by country of destination in Table 4 emphasises the importance of Italy as a producer of jewellery. In 1989, Italy supplied 63% of intra-EC trade compared to only 42% in 1980. Despite a decline of supplies originating from France and Germany in 1988, these countries remained in second and third place of the intra-EC trade with 93 and 89 million ECU in 1989.

The UK showed a steady growth to 61 million ECU in 1989.

Table 5 demonstrates that the UK is still the most important destination of intra-EC trade. Intra-EC trade based on export declaration increased by 29% in 1989 after a stabilising growth of 2% in 1988.



The figures indicate that deliveries to the UK, Germany, France and Spain accounted for the 1989 growth rate. In volume terms, exports of gold jewellery from Italy grew to over 200 tonnes in 1989, with the USA market alone taking nearly 80 tonnes.

Within the EC the Italian industry increased sales by some 20%.

In addition, exports to the Far East, especially Japan and Hong Kong, grew impressively.

A sharp rise in exports could also be noted for Germany, particularly to Switzerland and Austria.

The French export sector increased by some 20% in 1989. Spain's trade surplus in gold jewellery was narrowed by larger imports especially from Italy, and in the UK jewellery imports rose to 16 tonnes of fine gold.

Employment

Accurate employment figures are difficult

 Table 4

 EC Imports of articles of jewellery of precious metal or precious metal plated ware, and goldsmiths' and silversmiths' wares (1)

(million ECU)	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Origins										
Extra-EC12	244.1	322.1	401.6	444.9	687.4	503.9	576.9	543.9	766.3	1 076.6
USA	37.4	62.2	60.4	43.9	70.8	44.0	54.9	52.4	55.7	79.2
Japan	16.7	20.1	19.6	21.9	37.8	40.3	36.3	34.1	20.1	24.9
Intra-EC:	423.2	395.0	417.0	494.9	538.0	444.8	500.7	620.6	648.9	913.3
Belgique/België, Luxembourg	14.7	13.0	10.3	10.9	12.6	9.7	13.6	22.4	20.0	21.6
Danmark	3.4	2.8	2.0	2.3	3.8	3.1	3.4	2.6	3.4	4.0
BR Deutschland	49.2	46.5	48.5	48.0	46.7	54.3	60.4	66.2	62.6	89.2
Hellas	1,1	0.9	0.9	1.6	1.6	2.7	3.0	3.0	2.5	2.5
España	22.2	29.7	26.5	21.6	27.0	27.8	29.9	33.0	35.7	43.8
France	107.6	80.6	88.7	127.0	141.0	46.3	53.0	106.2	68.5	93.3
Ireland	1.9	1.8	4.8	2.8	1.2	1.2	1.1	0.4	0.9	2.5
Italia	177.2	183.4	205.1	245.5	266.1	262.9	299.9	342.3	393.8	574.9
Nederland	9.4	9.6	7.0	7.6	8.9	8.9	9.1	9.4	10.4	15.1
Portugal	2.8	2.1	2.2	3.2	2.7	2.4	2.9	3.4	4.0	5.8
United Kingdom	33.8	24.8	21.0	24.3	26.5	25.6	24.4	31.6	46.9	60.6

to obtain because of the large number of very small units in the industry. Many units employ fewer than 20 people, and many craftsmen and outworkers in the industry prefer to be self-employed. The figures show very little change in the numbers employed between 1985 and 1989. The substantial fall in number of persons employed in the early 1980s was probably caused by the slump in economic activity and more capital-intensive production methods. These methods have allowed a larger production in industry without a dramatic increase in the labour force.

Geographic features

The industry has a great need for specialists and therefore remains concentrated in places where the infrastructure has been built up through many years. By further specialised aggregation, some locations confine themselves to higher-quality jewellery, some to quantity production, and the larger silver articles may be produced by groups at yet another location. The main manufacturing centres in Italy are Arezzo and Vicenza followed by Valenza and Milan. In Germany about 75% of the fabrication is based in Pforzheim, with Idar-Oberstein being an import-

 Table 5

 EC exports of articles of jewellery of precious metal or precious metal plated ware, and goldsmiths' and silversmiths' wares (1)

					1000	1500	1307	1900	1303
1 344.5	2 288.5	2 854.6	2 822.5	3 840.8	3 849.6	3 253.4	2 999.0	3 044.7	3 681.0
268.3	459.2	657.9	672.1	1129.1	1489.8	1262.6	1037.6	1089.8	1303.5
28.8	37.7	63.6	58.3	67.2	76.1	118.3	153	187.3	244.8
512.7	478.2	485	553.8	659.9	557.3	622.1	754	770.8	993.5
35.4	28.9	32.2	29.8	34.8	34.6	42.6	58.3	54.9	69.3
7.1	6.8	7.8	8.6	13	13.5	17.5	14.1	12.1	13.3
152.2	129.6	97.3	129.8	144	133.8	157.2	189.6	202.3	255.3
0.5	1.2	2.4	2.6	2.5	3.5	2.3	2.8	5.3	8.3
9.2	5.3	6.4	5.1	5.3	7.5	13.5	13.7	31.7	53.7
117.4	90.9	109.9	137	172.9	91	117.6	175.1	124.8	161.9
7.2	5.6	5.5	4.3	4.7	4.7	3.4	4.5	8.7	11.4
9.8	15.8	19.3	17	21	20.5	20.5	25.7	34.6	44.7
55.5	48.9	47.4	50.6	57.2	56.6	58.1	58.2	62.1	70.1
1.3	3.2	2.1	2.6	4.6	3.5	2.7	6.6	8.9	15.5
117.1	142.1	154.6	166.3	200	188.2	186.6	205.4	225.2	290.1
	1 344.5 268.3 28.8 512.7 35.4 7.1 152.2 0.5 9.2 117.4 7.2 9.8 55.5 1.3 117.1	1 344.5 2 288.5 268.3 459.2 28.8 37.7 512.7 478.2 35.4 28.9 7.1 6.8 152.2 129.6 0.5 1.2 9.2 5.3 117.4 90.9 7.2 5.6 9.8 15.8 55.5 48.9 1.3 3.2 117.1 142.1	1 344.5 2 288.5 2 854.6 268.3 459.2 657.9 28.8 37.7 63.6 512.7 478.2 485 35.4 28.9 32.2 7.1 6.8 7.8 152.2 129.6 97.3 0.5 1.2 2.4 9.2 5.3 6.4 117.4 90.9 109.9 7.2 5.6 5.5 9.8 15.8 19.3 55.5 48.9 47.4 1.3 3.2 2.1 117.1 142.1 154.6	1 344.5 2 288.5 2 854.6 2 822.5 268.3 459.2 657.9 672.1 28.8 37.7 63.6 58.3 512.7 478.2 485 553.8 35.4 28.9 32.2 29.8 7.1 6.8 7.8 8.6 152.2 129.6 97.3 129.8 0.5 1.2 2.4 2.6 9.2 5.3 6.4 5.1 117.4 90.9 109.9 137 7.2 5.6 5.5 4.3 9.8 15.8 19.3 17 55.5 48.9 47.4 50.6 1.3 3.2 2.1 2.6 117.1 142.1 154.6 166.3	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1 344.52 288.52 854.62 822.53 840.83 849.6268.3459.2 657.9 672.1 1129.1 1489.8 28.837.7 63.6 58.3 67.2 76.1 512.7478.2485553.8 659.9 557.3 35.428.932.229.834.834.67.16.87.88.61313.5152.2129.697.3129.8144133.80.51.22.42.62.53.59.25.36.45.15.37.5117.490.9109.9137172.9917.25.65.54.34.74.79.815.819.3172120.555.548.947.450.657.256.61.33.22.12.64.63.5117.1142.1154.6166.3200188.2	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$



Table 6 Employment in the jewellery industry, 1980-89(1)

(thousands)	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total	70.2	63.1	59.5	63.7	57.1	56.4	56.3	56.2	57.1	57.2
Belgique/België	7.3	6.7	6.4	6	5.5	5.9	5	5.2	5.2	5.7
Danmark	0.6	0.5	0.5	0.4	0.4	0.2	0.2	0.2	0.1	0.2
BR Deutschland	15.2	14.6	13.8	17.7	12.4	12.5	12.9	13.1	13.3	13.4
Hellas	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2
España	9.5	7.8	6.4	7.3	7.3	6.6	6.4	6.4	6.6	6.6
France	13.5	13.1	13	12.5	12.5	12.3	12.1	11.2	11.7	11.7
Ireland	1.2	1.2	1.1	1.1	1.1	0.9	0.9	0.7	0.9	0.9
Italia	12.5	10.9	10.7	12.3	11.7	11.4	11.1	12.1	12	12.1
Nederland	0.5	0.5	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.4
United Kingdom	9.7	7.5	7	5.7	5.6	5.9	6.3	6.2	6	6

(¹) Excluding Luxembourg and Portugal. Source: Eurostat (Inde)

ant centre of the stone industry.

Other centres are Schwabisch Gmund, Hanau and Kaufbeuren. In France, Paris and Lyon account for a major part of the industry, as does St. Amand. In the United Kingdom the main centres are London and Birmingham, Sheffield being the centre for cutlery and a large portion of the table-silver industry. In Belgium, Antwerp is the centre of the jewellery industry and is an international centre of "dealing" in loose polished diamonds.

Harmonisation and 1992

Polished Diamond Grading Currently, four systems of grading are in use for polished diamonds, associated, respectively, with the Gemological Institute of America (GIA), the International Diamond Council (IDC), the Scandinavian Diamond Nomenclature Committee (ScanDN) and the International Confederation for Jewellery, Silverware, Diamonds, Pearls and Stones (CIBJO). Although there is a great deal in common in the existing four systems, and the GIA and CIBJO systems have been mutually agreed to be in harmony, there are some differences which will be difficult to resolve, as this will involve changes to existing usage, and impinge on many reports and certificates which have been issued and are in circulation.

A first meeting was held in London in May 1990 and it is believed that there is great determination to reach a successful conclusion, although the issues are complex, and a quick solution cannot reasonably be expected.

Precious Metals In June 1990 the European Commission announced its intention to put a proposal forward for a Draft Directive to control the major aspects concerning the sale of precious metal articles.

It is believed that the Draft Directive will contain proposals for articles to be marked with at least a Sponsor's mark which will be registered with a notified body, and with a fineness mark.

The degree of quality assurance which a sponsor must demonstrate before being allowed to register a mark will be a matter for discussion at the negotiating stages of the Directive. In addition all sponsors will have the alternative of having their articles certified and marked by a notified body which itself will be accredited for the purpose; in circumstances where the notified body has reason to be satisfied the sponsor may itself apply the notified body mark. The fineness mark will indicate the parts per thousand - by weight - of precious met-

al content of the article, and it is expected that the number of controlled finenesses will be limited, possibly to those recommended by the International Standards Organisation for discussion.

A controversial point will be whether gold of 375 standard should be included in the Directive. However, compromises are possible in that a description might be found for lower standards other than the unqualified use of the word 'Gold'. Alternatively, the 375 standard could be omitted from the Directive, which would leave it subject to Articles 30 to 36 of the Treaty of Rome, and therefore presumably vulnerable to an action before the European Court of Justice.

This is what the industry wanted to avoid and why it has welcomed the Commission's intention to produce a Draft Directive. There will be active discussions of these issues during 1991.

Outlook

Forecasts for the jewellery sector depend heavily on the price of gold. In 1988 and 1989 developments in the jewellery industry were particularly dynamic, and these years can be considered the most buoyant in the past decade.

Expectations for the coming period are



less optimistic.

It is not clear whether present fashion-

driven demand is saturated. Most European producers are expecting a deterioration in their competitive position due to rising labour costs and the drop of dollar and yen exchange rates threatens exports to the USA and Japan.

The expectation is that the production growth will stabilise and the export growth will slow down. Employment may grow a little to compensate for the labour shortage in the last few years.

CIBJO - International Confederation of Jewellery, Silverware, Diamonds, Pearls and Stones; Address: St Dunstan's House, Carey Lane, London, EC2V 8AB, United Kingdom; tel: (44 71) 726 43 74; fax: (44 71) 726 48 37.

Updated by: NEI - Nederlands Economisch Instituut.

Table 7Jewellery Forecasts, 1991-92

	1989	1990	1990/1991	1991/1992
Employment (thousands) Total exports (million ECU Production (million ECU	57.2 4 675 5 574	58.3 4 815 5 895	+2% +1% +4%	+2%- 0% +3%
Source: NET		· · ·		

Despite further intensifying competition, market prospects for costume jewellery manufacturers are positive. European integration as well as the developments in the Eastern European countries are expected to stimulate international trade and offer new possibilities for increased competitive manufacturing.

The industry has grown considerably in recent years. Costume jewellery has outgrown the stage of mere imitation and is now more closely connected with fashion, and fashion designers themselves are increasingly involved in the manufacturing of high priced costume jewellery.

Competition is likely to increase in the near future. Cheap products from the Far East, assembly practices of importers and the subcontracting of production to the Far East will put further pressure on prices, reducing profit margins.

Description of the sector

Sometimes it is difficult to differentiate between jewellery and costume jewellery. Usually, an article made of base metal and coated with precious metal, perhaps set with imitation stones, and other materials such as plastic, wood, leather alone or in combination, would be regarded as costume jewellery. Items made of highquality plated metals set with natural stones may also be considered costume jewellery.

Table 1Costume JewelleryEC trade in current value, 1980-89

(million ECU)	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
EC Trade:										
Exports extra-EC (1)	74.0	87.7	86.0	84.5	114,4	161.8	181.2	183.6	198.1	238.9
Index (²)	48.5	57.4	56.3	55.3	70.7	100.0	112.0	113.5	122.4	147.7
Imports extra-EC (1)	92.6	107.3	112.0	110.6	142.6	181.4	251.5	275.6	317.3	324.6
Index (2)	52.2	60.2	62.8	62.1	78.6	100.0	138.6	151.9	174.9	178.9
X/M	0.8	0.8	0.8	0.8	0.8	0.9	0.7	0.7	0.6	0.7
Trade intra-EC (1)	90.7	89.4	92.6	93	115.8	139.4	171.2	184.6	186.4	210.2
Index (2)	67.7	66.6	69.0	69.3	83.1	100.0	122.8	132.4	133.7	150.8
Share of total (%)	54.1	49.8	50.8	51.5	50.3	46.2	48.5	50.0	48.3	46.7

(') 1980 EC9; 1981-83 EC10"

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(*) Taking into account changes in EC membership Source: Eurostat (Comext).

Current situation

The past few years have proved to be very successful for the industry. All major producers in the EC-countries Germany, Italy, Spain and the UK have benefited substantially from economic growth. Competition on the EC market, however, is fierce especially through imports from Far Eastern countries. Cheap goods and imitations are being imported from these countries harming the position of EC-manufacturers. Cooperation between EC-importers and non-EC manufacturers with cheap production processes is of increasing importance.

Production and industry structure

The largest industries in the EC are in Germany, Italy, Spain and the UK. However, in most countries the industry is highly fragmented with many small and medium-sized enterprises.

Being of limited size allows manufacturers the flexibility of producing smaller quantities of many items to various specifications following frequent changes in style. Their production processes however, are vulnerable to competition. On the whole, products are labour intensive and labour costs are invariably undercut by the Far East, while production scales are too little to allow large investments in automation. The manufacture of costume jewellery includes a broad variety of products: brooches, earrings, necklaces, bracelets, rings, hair ornaments, hat ornaments, shoe ornaments, cuff-links, tieclips, dress accessories such as buttons, dress adornments such as belts and bags. Moreover, there is a whole industry making parts known as fittings and findings, used in further manufacturing processes. Then there are beads of all descriptions, sew-on stones, imitation pearls and imitation glass stones. Finally, religious articles, gift and advertising articles also need to be mentioned. Total EC-production is difficult to estimate as there are no data available. However, trade figures reveal that EC-production must at least amount to the total of intra-EC trade and extra-EC trade totalling about 450 million ECU in 1989. The size of domestic market production is unknown, but probably amounts to an equivalent figure.

Trade

Table 1 shows the positive developments in trade, in particular since the mid 80s the growth rates were high. For example, exports extra-EC increased by 47.7% between 1985-1989. The EC trade deficit. however, also increased as imports extra-EC shot up by 80% in the same period. In 1985 the trade deficit totalled 19.4 million ECU, whereas 1989 showed a deficit of 85.7 million ECU, an increase of more than 340%. Of total imports by the EC-countries, more than 55% was destined for France and the UK, with Germany accounting for only 20%. The intra-EC trade also boomed, although growth rates were lower than for extra-EC trade. The average growth for intra-EC trade during the 80s amounted to 9.8% a year, whereas for extra-EC trade the average was 14 to 15% annually. This explains a decreasing tendency in the share of intra-EC trade in total EC trade: in the beginning of the 80s this share was over 50%, whereas in 1989 it only amounted to 47%.

Although a fair part of total EC-imports still has its origin in the United States of America, the American share of total imports in the EC has decreased in recent years. While imports extra-EC increased at an average rate of 17.9% a year since 1984, EC-imports from the USA only grew at an average of 8.6% a year between 1985 and 1988.



Consumption

France and the UK are traditionally the major markets for costume jewellery in the EC. Germany has recently witnessed an upsurge in demand for costume jewellery which places the German market alongside the UK and French markets in importance. Demand within the EC grew fastest in Germany and Italy during the 1980s, followed by the Netherlands and Belgium/ Luxembourg. The development in demand during this period is considered to have run parallel with the trade-developments shown in table 1, at an average growth rate of more than 10% a year during this period.

Market structure

The market can be divided into three parts. At the upper end you find expensive but very well made products, often resembling pieces of real jewellery. In the middle of the market the fashion jewellery industry covers a broad spectrum. At the lower end are cheaper products of relatively lower quality. Not only at the manufacturing level, but also at the retail level the market is highly fragmented in most EC-countries. Retail outlets include specialized jewellers, gift stores, and special jewellery and accessory sections in department and variety stores. Important outlets are duty and tax free sales at airports and on intra-EC ferries. These outlets generally specialise in products of the upper market ranges. In the UK the principal outlets for imitation jewellery are fairly traditional, with independent specialised retailers having more than half of the market. These retailers obtain their supplies mainly from importer/wholesalers or pure wholesalers who receive their foreign requirements from importers and manufacturers. Since the early 1980s many importers in the UK have started either to manufacture finished articles to supplement their imports, or to assemble jewellery from imported pieces to meet the requirements of their customers. In France, importers who are also manufacturers are playing an increasingly crucial role in the development of the fashion and fancy jewellery market. Good prospects have appeared as they subcontract the production of pieces of fashion jewellery to manufacturers in developing countries. It seems that these developments will also appear in other EC-countries. A lot of market power will be put in the hands of importers/manufacturers. In order to counteract this threat, domestic manufacturers are increasingly supplying di-

rectly to the shops and department stores, cutting out the wholesaler. This enables lower price setting of products in the outlets.

Competition

A real threat to the industry is imitation of products by competitors in low-wage countries in the Far East. Leading countries are Hong Kong, the Republic of Korea, Taiwan and now also Thailand. They are quick at copying Western products to sell them at very low prices, due to negligible labour costs. This is especially the case at the cheaper end of the market, sometimes described as baubles, bangles and beads. It is understood that the Taiwan government has set up a bureau to assist in preventing copying practices by Taiwan manufacturers. Product quality of far Eastern competitors is improving considerably. also endangering the competitiveness of EC manufacturers. Far East competition is mainly price competition. EC-manufacturers try to overcome this by offering quality products in the medium and upper price groups. For example the quality of plating

has been greatly improved in Europe. However, EC manufacturers do not seem to be entirely successful, as they have to compete with lower pricing standards. Possibly this is caused by the industry structure containing a lot of small and medium sized enterprises. The consequence is that the quality image of EC merchandise can only primarily be maintained by being ahead of fashion.

Outlook

The costume jewellery industry is sensitive to conjunctural developments in the world economy and recession could negatively affect the costume jewellery industry. The integration of the European Community and particularly the opening of the Eastern European countries will create new opportunities for trade, probably of high class products to the East and cheaper ones to the West. However, competition is expected to intensify. This is not only due to the coming integration of EC-economies. In particular, costume jewellery made in the Far Eastern region will place pressure on the whole industry, not only in terms of the price-level but also in terms of the quality-level. The initiative of the Taiwan government to limit copying, and pressure to adverse publicity could encourage other Far Eastern nations to follow suit. Copying practices by Far Eastern manufacturers would only then diminish.

Another threat for domestic EC manufacturers is the assembly of imported pieces into products by importers. Furthermore, subcontracting to manufacturers in the Far East is also growing. These developments put pressure on prices. European integration also endangers sales via the duty and tax free outlets at airports and on ferries. The European Commission is inclined



to abolish duty and tax free allowances for people travelling within the EC. Recent developments however, show a postponement of the envisaged measures. To sum up, in future EC manufacturers are likely to follow the rapid change in style and fashion in the EC market more closely. Strategic changes will also include manufacturing articles of higher quality than the Far Eastern products and direct delivery to retail outlets. As a result the EC manufactured products can be sold successfully even against these lower prices.

UNEBIF: Union Européenne des Fabricants de Bijouterie Fantaisie; Address: Via Desenzano 8, I-20146 Milano; tel: (39 2) 404 3275/3277; fax (39 2) 487 014 19

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NACE 492

There has been an increasing demand for musical instruments in the 1980's as a result of changing lifestyles and the development of musical culture among the general public.

Asian imports account for a large portion of the supply of electronic instruments, which hold a fairly large share of the market.

Current trends in Community production are likely to continue into the 1990's with the emphasis on traditional, high-quality instruments, the gradual development of electronic instruments, and increasing activity in the restoration of old instruments.

Description of the sector

The manufacturers of musical instruments produce the following types:

- keyboard instruments (upright and grand pianos, organs, harpsichords and the like);
- wind instruments (such as oboes, flutes, saxophones, bagpipes);
- string instruments (such as violins, guitars, mandolins, banjos);
- other instruments (such as accordions, percussion instruments, electronic organs, synthesizers);

 accessories and parts (bows, strings, bridges, components for electronic music);
 The definition includes both traditional instruments, whether early or modern, and sophisticated electronic instruments.

Current situation

As is shown in table 1, the production of musical instruments in 1989 followed the growth trend of the 1980's. The EC is a net importer of musical instruments. In 1989 the balance of import over export



Despite production growth in the Community during the 1980's, the musical-instrument industry has failed to establish a firm position. Especially, the depreciation of the yen against the ECU had implications for the foreign trade with Japan, Japanese products becoming relatively cheaper in the EC, whereas EC-exports to Japan grew more expensive.



Table 1 Musical instruments Main Indicators, 1980-90

(million ECU)	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990(°)
Apparent consumption(1)	647	717	728	772	846	844	985	1 1 17	1 176	1 277	N/A
Net exports(2)	- 101	- 172	- 137	- 137	- 140	- 124	- 227	- 332	- 386	- 394	N/A
Production(1)	546	545	591	635	706	720	758	785	790	883	905
Employment (thousands)(1)	19	18	17	17	16	16	15	15	14	14	14

(1) Excluding Luxembourg; Belgium, Greece and Portugal estimated, Netherlands estimated for 1980-83. (2) Taking account of changes in EC membership; 1980 EC9, 1981-85 EC10.

(*) Estimated

Source: Eurostat (Inde, Comext)

Production

With production at 883 million ECU, the EC was the largest world producer in 1989 for the fourth consecutive year. Japan suffered from a slight decrease in production; and the USA showed a modest growth in 1989. It seems that Japan's high growth rate of 35% in the 1986-88 period has come to an end. EC production in current value grew by 62% between 1980 and 1989. In constant prices however, total production is only recovering from the decline in the early 1980's. The growth rate of added value has lagged behind production growth and the investments of EC producers have significantly decreased. The situation varies

greatly according to the type of musical instrument and the country concerned, as is shown in Table 3. The bulk of European production comes from Germany and Italy, which together account for 71% of EC production. Germany, however, suffered a slight decrease in production at constant value in the 1980's, while Italy's production grew during the 1980's. As a result the latter country has become the leading manufacturer of musical instruments within the Community.

Consumption

The Community industry has a large market, which is estimated at 1 277 million ECU in 1989. The fact is that the market is made up of individual national markets

with specific characteristics, which are still very marked. There is, nonetheless, a trend towards greater uniformity as far as electronic instruments are concerned. The development of electronical music instruments has lead to a wider range of products. A part of the market for traditional instruments has been lost, mostly in the segment of musical instruments which were designed to be played at home. In the professional market the trend in live music towards more sophisticated shows and video clips has lead to a demand for easy compatibility of instruments. Here the distinction between musical instru-

ments and public address (PA) systems is

diminishing.

Table 2 **Musical instruments** Production, value added and Investment

(million ECU)	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Production in current prices EC (') Index	546 75.8	545 75.7	591 82.1	635 88.2	706 98.1	720 100.0	758 105.3	785 109.0	790 109.7	883 122.6
USA (²)	804	1 020	935	1 062	1 028	950	754	725	715	782
Index	84.6	107.4	98.4	111.8	108.2	100.0	79.4	76.3	75.3	82.3
Japan (²)	304	639	494	500	472	520	544	604	700	669
Index	58.5	122.9	95.0	96.2	90.8	100.0	104.6	116.2	134.6	128.7
EC										
Production in constant prices(1)	800	743	738	731	760	734	731	736	726	781
Index	109.1	101.3	100.6	99.7	103.6	100.0	99.6	100.4	98.9	106.5
Productivity(3)	18.4	19.3	20.5	20	20.3	20	21.3	22	22	23.7
Index	92.0	96.5	102.5	100.0	101.5	100.0	106.5	110.0	110.0	118.5
Value added in current value(^a)	251	259	276	287	303	300	305	320	319	351
Index	83.7	86.3	92.0	95.7	101.0	100.0	101.7	106.7	106.3	117.0
Investment in current value(*)	20	16	18	22	16	22	18	15	N/A	N/A
Index	90.9	72.7	81.8	100.0	72.7	100.0	81.8	68.2	N/A	N/A

(1) Belgium, Greece and Portugal estimated; Netherlands estimated for 1980-83; Excluding Luxembourg.

(*) Census of Manufactures and Eurostat estimates. (*) Germany, France, Italy, United Kingdom and Spain only.

(*) Germany, France, Italy and United Kingdom only. Source : Eurostat(Inde)



Table 3 Musical instruments Production at constant value by country, 1980-89

million ECU)	1980	1981	1982	1983	1984	1985	1986	1987	1988(1)	1989(1)
Total	731	672	653	662	693	657	653	677	658	712
BR Deutschland	366	340	318	308	309	301	296	283	258	264
España(2)	13	12	15	12	12	12	13	13	13	15
France	55	65	61	75	62	57	59	59	64	68
Italia	209	191	187	191	241	216	224	260	252	290
United Kingdom	87	64	73	75	69	71	61	62	71	75

(2) 1987 estimated. Source: Eurostat (Inde)

Trade

EC industries are continuously faced with stiff competition from other European countries such as Austria, and Finland, in the field of traditional instruments, and from non-European countries such as the United States and Japan when it comes to up-market, sophisticated instruments. Increasing labour costs have had a negative impact on its competitiveness in the last few years.

There is also a growing challenge from Israel, the Republic of Korea, Hong Kong and China. Asian countries have succeeded in gaining a firm foothold in the EC market, mainly by selling technically sound products of consistent quality at lower prices.

In previous years, imports had grown substantially; they are mainly composed of electronical instruments, pianos, wind instruments, and accessories and parts. EC producers are faced with an absolute decline in market share.

The share of the EC market being supplied by non-EC producers has grown from 40% in 1980 to 52% in 1989. Exports of musical instrument accounted for 30% of total production in 1989. Exporrts consist mainly of string instruments, accordions, organs, and accessories and parts. In 1989 extra-EC exports grew again for the first time, being at the same level as in 1985. Intra-EC trade has grown since 1985, but markedly less than total trade.

The share of intra-EC exports in total exports has declined from 58% in 1980 to 48% in 1989.

Structural conditions High labour costs are a major handicap for an industry that has to compete with foreign companies which are sometimes larger, and use more efficient and more flexible production methods. Especially the most important competitors (Japan, Korea, Taiwan and other countries in the Far East) produce more efficiently and/or have lower labour costs. However, within the EC the production per employee increased from about 39 000 ECU in 1980 to 44 500 ECU in 1984 and 53 000 ECU in 1989.

European firms are small, individualistic and highly independent, with a tendancy toward national specialisation. As a result, investments in production and marketing are low for the sector as a whole, except for one or two larger companies which have achieved reasonable profitability levels. The case of electronic musical instruments is an illustration: investments in the EC grew initially but are still not sufficient to match the sums laid out by Japanese,



Korean and American firms.

Because of poor financial resources, production automation has developed only slowly, in contrast to the persistent streamlining efforts made in Japan and the United States in recent years.

These two countries have achieved large production runs by using computer-aided design and micro-computer and software developments to produce musical instruments at lower costs. In addition, American and Japanese firms have introduced greater manufacturing flexibility by subcontracting the manufacture of electronic components.

This has given them a further advantage over their European counterparts, to whom this type of flexibility is virtually unheard of. The EC industry may be outflanked in size and number, it boasts nevertheless a number of advantages, which a few dynamic firms with good technical and human potential are beginning to exploit.

Community firms concentrate on products in the top of the market range, with smaller production runs or even single instruments being made to order, addressed to an experienced clientele rather than the general public, while playing an important role in transmitting European musical culture through the manufacture of national instruments - baroque flutes in France,

Table 4 Musical instruments EC trade in current value, 1980-90 (')

(million ECU)	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990(³)
Exports extra-EC	159	173.1	182.6	209.8	231.7	266.2	233	231.5	231	269.2	283.0
Index (1)	59.7	65.0	68.6	78.8	87.0	100.0	85.9	85.4	85.2	99.3	104.3
Imports extra-EC	260	345.6	319.4	346.6	371.9	390.3	459.8	563.9	616.9	663	663.1
Index (²)	67.5	88.5	81.8	88.8	95.3	100.0	107.3	131.6	144.0	154.7	154.7
X/M	0.6	0.4	0.5	0.6	0.6	0.6	0.5	0.4	0.4	0.4	0.4
Trade intra-EC (³)	219.7	218.6	216.4	201.6	199.7	196.6	216.7	235.3	239.4	260.1	261.7
Index (²)	111.7	111.2	110.1	102.5	101.6	100.0	108.0	117.3	119.3	129.6	130.4
Share of total(%)	58.0	55.8	54.2	49.0	46.3	42.5	48.2	50.4	50.9	49.1	48.1
(*) 1980 EC9; 1981-85 EC10 (*) Taking account of changes in EC membership. (*) Estimated Source : Eurostat (Comeyt)											

pianos and violins in Germany and guitars in Spain.

Employment

In 1988, the Community's musical-instrument industry included some 180 firms with more than 20 employees. However, many firms, both cottage industries and larger concerns, had gone out of business in the previous six-year period as a result of commercial and financial difficulties. The number of people working in the industry fell from 19 258 in 1980 to 14 048 in 1989. The evolution varies from country to country. Reflecting the geographical location of production, employment is mainly concentrated in the Federal Republic of Germany (46% of the total), Italy (2 502 employees), the United Kingdom (1 897 employees) and France (1 620 employees). The greatest job losses since 1980 occurred in Italy, the

United Kingdom and Spain. The decreasing trend was smoother in the Federal Republic of Germany and France and only in the Netherlands have employment figures have been on the wax since 1985. Owing to large investments during the early 1980s in the Italian industry, productivity improved considerably, causing a serious drop in employment. Constant production value increased rapidly during the same period. The steady increase in productivity figures registered for Spain and the United Kingdom are reflected in the overall figure of the EC countries.

Industry structure and geographic features

The EC musical instrument industry is fragmented, with many small and mediumsized firms, lacking multinational firms similar to those of the United States and Japan. That situation has led to restructur-

Table 5Musical instrumentsEmployment by country, 1980-89

ing and mergers in all EC countries. An important development, which will raise the competitive pressure in the high quality market, has been the decision of Yamaha, the world leader in musical instruments, to set up localised production plants in the EC. Yamaha took control of Kemble piano company and brought the Premier drum business in the UK, and acquired interest in Schimmel in Germany. This should strengthen its presence in the EC, and allow Yamaha to offer better service and be better attuned to local preferences. The shift in markets and the development of new markets has led a number of companies, mostly Japanese and South-Korean like Casio, whose core activity is outside the market for musical instruments, to enter this market. An increasing use of computers in synthesizers and PA systems facilitated the entry of com-

	1980	1981	1982	1983	1984	1985	1986	1987	1988(1)	1989(1)
Total	19 258	18 273	17 318	16 708	16 150	15 938	14 651	14 390	14 106	14 048
Danmark	132	125	124	124	133	142	146	143	141	143
BR Deutschland	8 569	8 4 1 8	7 889	7 601	7 262	7 315	7 289	6 886	6 529	6 477
España	1 062	813	784	707	669	523	492	473	443	439
France	1 773	1 848	1 884	1 991	1 746	1 691	1 568	1 538	1 617	1 620
Italia	4 084	4 113	3 836	3 631	3 933	3 378	2 608	2 624	2 523	2 502
Nederland	394	380	363	343	334	809	819	820	955	970
United Kingdom	3 244	2 576	2 438	2 311	2 073	2 080	1 729	1 907	1 899	1 897

Source: Eurostat (Inde)



Table 6Musical instrumentsProductivity per employee, 1980-89

(1000 ECU)	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
EC (')	38.9	37.7	38.6	40.7	44.5	45.4	48.3	50.1	52.0	53.0
Danmark	32.8	42.7	48.7	45.7	40.0	28.2	26.3	25.9	27.3	30.4
BR Deutschland	42.5	40.3	41.0	41.7	43.2	41.1	42.4	43.9	45.6	43.7
España	17.4	18.9	20.8	18.7	19.3	23.1	22.5	23.2	28.3	29.5
France	32.9	38.0	33.2	37.4	35.2	33.6	35.8	35.1	38.1	37.9
Italia	48.6	41.9	44.1	50.2	61.0	64.0	84.0	93.5	97,4	106.5
Nederland	44.0	45.6	43.3	42.9	47.8	76.6	64.5	60.9	42.3	42.1
United Kingdom	27.4	26.8	31.0	31.8	33.0	34.0	32.3	29.0	38.2	39.4

(*) Excluding Belgium, Luxembourg, Ireland, Greece and Portugal

puter manufacturers in this market. The development of new electronical instru-

ments has mostly hit the lower quality market, EC companies still having an outstanding name for the higher quality products. There are only a few large companies in the EC musical instrument industry. They include:

- in the Federal Republic of Germany:
 Hohner, Schimmel, Steinway and Sons;
- in Denmark: Forbenius and Sonner, Drittel, Daneben;
- in France: Selmer, Savarez, Piano de France, Courtois, Promifi;
- in Greece: Ecorda;
- in Italy: Crumar, Elka, Farfisa;
- in the United Kingdom: Fletcher, Coppock and Newman, Grainger and Campbell, H.H. Electronic.

Some regions have gained a world-wide reputation. These include Paris and Mirecourt in the Vosges in France, Berlin and Baden-Würtemberg in Germany, and London in the United Kingdom.

Italy is the largest producer of musical instruments in the EC, followed by the Federal Republic of Germany. Italian production fell between 1980 and 1983, but has been increasing since 1985.

Outlook

The production of musical instruments in the EC grew markedly in 1989. This

growth reflects favourable domestic demand. These circumstances are likely to continue for the early 1990's. Demand is likely to reflect a gradual return to acoustic music and a steady development of electronic music through new applications. Three basic factors are likely to have a favourable effect on the musical-instrument market:

- the rise in purchasing power and changing life styles, which have revived interest in music-making;
- higher enrolment in national music academies and regional music schools;
- an increase in instrument playing stimulated by more music making at home, particularly in France and the United Kingdom and a diversification of outside musical activities in the Federal Republic of Germany, Benelux, Denmark and France, where there are relatively many concerts and festivals.

Therefore, expectations are for a further growth in demand to boost EC production. This will be accompanied by some growth of employment figures in the 1989-92 period.

Growing demand will also attract more imports from Asian countries (Japan, the Republic of Korea, and Taiwan). Technological advances in electronics

coupled with computerisation have enabled

the Japanese firms to develop a strong competitive edge in terms of price and quality over EC firms.

In spite of certain advantages, the EC musical-instrument industry is likely to face a number of difficulties in the next few years, owing to the nature of its professional structure and its lack of flexibility in responding to the latest consumer trends, which favour high-quality, reasonablypriced, all-electronic products.

Parallel markets, such as the second-hand piano market, which often distort competition, may also cause problems.



Source: NEI

Table 7Musical instrumentsForecasts

	1989	1990	1991/90	1992/90
Production (mio. ECU)	883	905	3%	3%
Exports (mio. ECU)	529	545	2%	1%
Employment (1000)	14.9	15.1	1%	1%

CAFIM: Confédération des associations des facteurs d'instruments de musique de la CE. Address: Hildastrasse 5, Wiesbaden, Germany. tel: (49) 61 213 080 96; fax: (49) 61 213 769 42

Updated by: NEI (Nederlands Economisch Instituut)

Source: NEI



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For the last two years the EC toy industry has recovered from difficulties. These were due to deficiencies in its industrial structure and the increasing competition from the Far East. The EC industry has to carry on its restructuring efforts to attain the critical mass required to compete internationally.

Employment has started to grow again - however only very slightly. Recovery is mainly due to an improvement in the domestic markets which have grown considerably since 1986. It is too soon to tell whether performance in the export markets will also improve, especially with the devaluation of the US Dollar and the Yen.

Sector definition

The toy industry consists of manufacturers of the following products:

- cars and wheeled vehicles for children, such as pedal cycles, scooters, hobbyhorses, pedal cars, doll's prams and similar toys;
- dolls of all types (made of plastic or other materials), accessories and spare parts for dolls;
- other toys and scale models such as wooden toys, trains and electrical circuits, weapons, projectors and other optical toys, musical toys, model kits, construction games, miniature models made of cast metal, toys for babies and toddlers, figurines, structures with characters, soft toys and all other toys made of plastic, metal fabrics, rubber and other materials;
- articles for parlour games, table-tennis equipment, billiards, video games;
- ✤ sports goods (sports goods will be the



subject of a more detailed description in the next chapter).

Current situation

Toy manufacturers in the EC produced toy products totalling a value of 5.3 billion ECU in 1989. Currently the industry is in a weak competitive position both in ECmarkets and internationally. This is underscored by the growing market share of non-EC producers. While in 1980 net imports were 15% of apparent consumption, the trade imbalance has grown to 30% of apparent consumption in 1989. Due to the strong growth of apparent consumption, which has almost doubled in the last decade, EC producers were none the less able to expand their production. There are signs of a gradual recovery of the competitive position of the industry in terms of employment, due to efforts to capitalise on the industry's strong assets. Additional efforts are necessary, however, to improve

Table 1 Toys and sports goods Main indicators, 1980-90(1)

(million ECU)	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989 1	1990(³)
Apparent consumption(2)	3 822	3 702	3 859	4 157	4 421	4 276	4 898	5 571	6 624	7 546	7 802
Net exports	- 586	- 749	- 707	- 856	- 860	- 752	- 823	- 1 279	- 1 869	- 2 290 -	- 2 402
Production (2)	3 236	2 953	3 1 5 2	3 301	3 561	3 524	4 075	4 292	4 755	5 256	5 400
Employment (1000) (2)	97	83	75	70	68	65	68	70	70	70	71

tion of output over the EC countries.

 (1) Taking into account changes in EC membership; 1980 EC9, 1981-85 EC10.
 (2) Excluding Luxembourg; France estimated for 1980-89; Denmark estimated for 1980-82; Netherlands estimated for 1985. (3) Estimated

Source: Eurostat (Inde, Comext)

its position in relation to American and Japanese multinationals.

Production

With an output of 4.8 billion ECU in 1988 and 5.3 billion ECU in 1989, the EC is the third largest producer of games and toys in the world after Japan and the United States. Production value in Community industries has risen by 5% a year during the 1980-89 period, but this is to be attributed to price rises rather than volume expansion. The strengthening of the EC's competitive position is made clear by the growth in productivity which exceeded the growth of production in constant prices. The share of value added in production has remained constant, so compared to other industries the toys industry has performed well. Figure 1 shows the distribu-

France is the largest producer of toys in the European Community. The current production value has reached a level of 1 756 million ECU in 1989. Over the last decade it succeeded in strengthening this position. Germany follows with a production value of 1 290 million ECU. The production value of the other three major producers, the United Kingdom, Italy and Spain, has steadily increased since 1985, but less so than in France and Germany.

Consumption

The Community toy industry has a large domestic market which was estimated to be 7546 million ECU in 1989. However, the apparent consumption of games and toys is two-and-a-half times lower than in the United States owing to a much lower

unit consumption.

Other factors negatively influencing apparent consumption are Europe's shrinking child population (9% fewer under-14s between 1980 and 1986) and stiff competition from other leisure products such as clothes, records, cassettes and travel for teenagers.

Trade

Table 3 shows the foreign trade in toys and sports goods so as to facilitate a comparison with production. It shows that imports have risen faster than exports with intra-EC trade developing in between. Germany and France show the largest share of exports, 29.3% and 24.4% respectively. For Italy, the Netherlands and the United Kingdom intra-EC exports are significantly larger than extra-EC exports. Produc-

Table 2	
Toys and sports goods	
Production, productivity and value added, 1980-89	Э

(million ECU)	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Production in current prices (1)										
EC(')	3 619	3 385	3 574	3 661	3 986	3 934	4 075	4 292	4 755	5 256
Index	92	86	90.8	93.1	101.3	100.0	103.6	109.1	120.9	133.6
USA(²)	5 124	7 359	8 427	8 405	10 644	9 941	7 820	8 772	9 079	9.241
Index	52	74.0	84.8	84.5	107.1	100.0	78.7	88.2	91.3	93.0
EC(')										
Production in constant prices	4 826	4 235	4 628	4 095	4 212	3 933	4 050	4 177	4 469	4 765
Index	122.7	107.7	117.7	104.1	107.1	100.0	103	106.2	113.6	121.2
Productivity(³)	18.6	19.5	21.3	21.4	21.9	21.9	23.8	24.4	25.9	27.6
Index	84.9	89.0	97.3	97.7	100.0	100.0	108.7	111.4	118.3	126
Value added in current value(3)	1 163	1 104	1 124	1 157	1 218	1 199	1 250	1 350	1 493	1 665
Index	97.0	92.1	93.7	96.5	101.6	100.0	104.3	112.6	124.5	138.9

(') Excluding Luxembourg, France estimated for 1980-89; Denmark estimated for 1980-82; Netherlands estimated for 1985."
 (') Census of Manufactures and Eurostat estimates.
 (') Excluding France, Luxembourg and Portugal; Denmark estimated for 1980-82, 1989; Netherlands estimated for 1985, 1988-89."
 Source: Eurostat (Inde, Comext)



tion in the United Kingdom is particularly export-oriented, due to a strong presence of affiliates of (American) toy multinationals, who use their British branches to export throughout Europe. As it concerns EC trade in toys, the discrepancy between exports and imports continues to widen, the export-import ratio being 0.4 in 1989 against 0.6 in 1985. Imports feature a dominance of Far Eastern countries. It is currently mainly the Far Eastern NIC's who are able to produce cheap toys. China's position is remarkable, as it is the largest supplier of EC imports. With regard to exports, trade relations exist mainly with the USA and the EFTA countries, notably Switzerland, Austria and Sweden. Although the situation has improved slightly, the Europeans hold only a meagre share of the American market which is the most promising in terms of size and growth potential.

Intra EC-trade has grown faster than exports and it accounts for 68.1% of total exports as compared to only 63.5% in 1985.

Employment

Employment in the EC toy industry has decreased by 35% in the last decade to 70 000 in 1989. Only Greece witnessed a growth of employment. Countries with a large number of SME's have been hit hardest. Notably Italy with a decline in employ-





ment from 11 835 in 1980 to 5 258 in 1987. This trend of declining employment ended for all EC countries in 1987/88: in 1986 employment reached its lowest level, then to rise by 1.1% a year in the 1987-89 period.

Factors behind the weak situation

The difficult situation in which the Community toy industry finds itself can be attributed to the characteristics and trends of the domestic market outlined above. However, the small size of EC companies limits their competitiveness in several ways:

- limited funds for advertising, R&D and innovation;
- limited ability to internationalise;
- limited ability to automate production;
- the absence of international-scale spe-

cialised design firms in the EC inhibits

Table 3 Toys and sports goods EC trade in current value, 1980-90

the promotion of innovation;

- economies of scale cannot be realised;
- high wage costs;
- low production flexibility hampers the ability to react to fashion trends;
- Weak international marketing capacity.

Positive features of the industry

Although the EC toy industry suffers from a number of disadvantages compared with its competitors, it nevertheless includes a number of young, dynamic firms capable of holding their share in both domestic and international markets. The success of such firms illustrates the strong points the EC toy industry should be concentrating on:

- its creativity;
- the quality of its products;
- * its ability to transmit European culture

EC trade in current value, 1960-90											
nillion ECU)	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990(²)
xports extra-EC idex(1)	591 57.3	665 64.2	715 69.0	785 75.8	925 89.3	1 036 100.0	1 042 96.0	1 075 99.1	1 131 104.2	1 331 122.7	1 400 129.0
nports extra-EC idex(1)	1 177 66.2	1 414 79.1	1 422 79.5	1 641 91.8	1 785 99.8	1 788 100.0	1 865 101.4	2 354 128.0	3 000 163.1	3 621 196.9	3 802
/M	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.4	0.4	0.0
rade intra-EC idex(')	915 70.2	1 021 77.6	1 134 86.2	1 213 92.2	1 271 96.6	1 316 100.0	1 650 121.4	1 793 131.9	1 879 138.2	2 296 168.9	N/A N/A
Taking into account changes in EC marks											

(') Laking into account changes in EC membership
 (2) Estimated

Source: Eurostat (Comext)



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Source: Eurostat (Inde)

through the traditional toys it offers (for instance, educational toys).

There is also room on the international market for the marginal production of ordinary, down-market products, an area in which a number of small and mediumsized EC businesses have operated with some success. This is a result of an agressive marketing policy and the combination of a flexible production facility and subcontracting to keep production costs down. In addition, technological development is important. The German industry for example has profited from their knowhow by developing a new digitalised system of electric train control.

Industry structure

In general, the Community companies specialise in traditional toys, whereas companies located in other countries produce fashion toys which require high publicity costs and have a short economic life-cycle. The EC toy industry suffers from two main structural handicaps. The first is the number and diversity of firms in the sector. It is estimated that 80 to 90% of the firms operating in the sector on a full-time basis (excluding seasonal activity) employ fewer than 20 salaried workers. The second problem is the absence of multinational firms comparable to American and Japanese groups, with the exception of Lego. This explains why production is so dispersed. The main American multinational firms are Hasbro, Mattel, Fisher Price and Kenner Parker Tonka. In Japan, Bandai and Tomy are the leading multinationals.

The share of the 10 largest companies (na-

Table 4

tional and foreign) is never more than 50% of national production in the EC's main producing countries. The sluggishness of the domestic market and the pressure of competition in the sector have caused a number of companies, even medium-sized ones, to go out of business in the past few years (-10 to -30% in the EC's five main toy manufacturing countries between 1980 and 1984).

The weak industrial structure has led to a fall in profitability levels in EC companies since 1980. This is mainly due to rising costs of production, marketing and advertising, which are difficult to pass on to the consumer because of strong competitive pressure in the sector.

Consequently, companies tend to have an unstable financial structure. They have a lack of equity, associated with a low selffinancing capacity which rarely covers more than 50% of financial requirements, and a high level of short-term debts, linked to the seasonal nature of sales and high financial costs. Financial costs on average represent 3% to 5% of turnover in EC companies. They remain high because of the strain of seasonal selling on company funds and the lack of equity.

Geographical features

The industry is highly concentrated geo-

EC trade in current value, 1980-90(1)											
(million ECU)	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990(³)
Exports extra-EC Index (²)	328 63.9	378 70.9	378 73.0	408 78.9	514 90.3	569 100.0	584 102.7	594 104.3	617 108.4	701 123.2	733 129.6
Imports extra-EC Index (²)	845 73.6	1 071 93.2	952 82.8	1 098 95.6	1 146 101.4	1 130 100.0	1 275 112.8	1 655 146.4	1 991 176.2	2 264 200.4	2 377 210.4
X/M	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.3	0.3	0.3
Trade intra-EC (³) Index (²) Share of total(%)	680 75.6 65.3	789 87.4 66.5	844 93.6 68	915 101.4 68.2	985 99.5 65.7	990 100.0 63.5	1 146 115.8 66.2	1 278 129.2 68	1 270 128.4 67.3	1 502 151.8 68.1	N/A N/A N/A
(1)Nimexe codes 9701-9704, not including s	sports goods; 1980 EC9, 1981	-83 EC10.			-						

(2) Taking into account changes in EC membership.

(3) Estimated

Source: Eurostat (Comext)



graphically. Some 95% of the firms, ac-

counting for approximately 90% of EC pro-

duction, are situated in the Federal Republic of Germany, Italy, France, the United Kingdom and Spain. Within those five countries, firms are often located in a particular region: Bavaria and Baden-Würtemberg in the Federal Republic of Germany, Lombardy in Italy, the Jura and Rhöne-Alpes (Ain) in France, and the Alicante and Barcelona provinces in Spain. Each country has its own specialisation:

- the Federal Republic of Germany: plastic toys, model trains and paper toys;
- Italy: bicycles, dolls and board games;
- France: die-cast and mechanical toys, board games and stuffed toys;
- the United Kingdom: metal and plastic miniatures, table and board games and die-cast.

The EC-countries should co-operate to develop the competitive advantages of major producers (the Federal Republic of Germany: technical know-how; Italy: great flexibility and high product quality; France: know-how in plastics transformation).

The internal market

The general advantages of the removal of the internal barriers hold true also for the toy industry. In addition, two specific measures which directly concern the toy industry have been taken.

In 1987 the CEC started an information and awareness campaign to prevent accidents at home which involve children from 0 to 14 years. In 1989 the European Council voted unanimously on a guideline for the safety of toys.

The guideline is to be effective from January 1st 1990 and lays down the basic safety measures for toys produced in the EC or toys imported from third countries.

Table 5 Toys and sports goods Forecasts, 1990-92

	1989	1990 19	90-91 1991-9	2
Production (million ECU) Exports extra-EC (million ECU) Employment (1000)	5 256 1 331 70	5 400 1 400 71	+3% +2% +3% +1% +1% +19	6
Source: NEI	 e set e se et e set e set	n in start of the		

The aim is to stimulate the production of high quality and safe toys and to facilitate free trade in the EC of dependable and safe toys.

Outlook

The EC toy market is not likely to expand much in the coming years, given the prospect of a further decline in the child population and stiff competition from other leisure products.

However, the main problem is the extent to which large South-East Asian companies have penetrated the EC market and the impact this has had on the organisation of the sector. With devaluations of both US dollar and Japanese yen the international competitive position of EC producers is expected to deteriorate. The present trends in EC toy production will continue in the short and medium term, carried only by domestic demand. Export growth will further trail behind import growth. Employment is likely to stabilise. In this difficult context, the survival of the Community toy industry depends on the development of a policy of co-operation among EC manufacturers so that they can reach the critical mass required to establish their position in the international market. It will also depend on their choosing one of two development strategies: leadership in traditional toys in the luxury and middle markets, or a strategy of marginal opportunities at the bottom end of the market to gain a foothold.



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21-26

After the USA and Japan, the EC is the world's third largest market for sports goods. The sector is generally a growth industry, although the individual product areas are experiencing highly varied developments. The demographic trend towards a growing proportion of older population groups is leading to shifts in demand in Europe, as in the USA. All year round recreation activities are gaining in significance.

The following trends characterise the market in the early 1990s:

- Factors affecting demand are:
- increasingly influenced by "life style";
- sporting activities are increasingly evolving from competitive sport into recreational activities becoming more individualistic:
- Factors affecting supply are:
- Growing concentration in trade and industry, with increasing market power wielded by a few multinationals;
- Small businesses try to survive by a high degree of specialisation and by cooperation in production and distribution;
- Competition by non EC suppliers, notably from the Far East, East and South East Asia, continues especially in the lower price sectors.

Description of the sector

Sports goods are covered by NACE 494.2, and by part of 451 and 453 for sports footwear and sports clothing respectively. Detailed statistics are not available at this level of disaggregation except for trade. Moreover, sports goods manufacturers produce other goods such as toys, camping equipment etc. and products with originally sporting functions which are employed for other uses as well. Thus, it is very difficult to categorise products and present homogeneous statistics for the EC.

Current situation

Positive factors for the development of the sports goods industry have been the generally good economic climate, at least in the long term, and the tendency of consumers to engage increasingly in activities with a sporting "touch", due to a growing amount of spare time and higher disposable incomes. Negative factors have been the increasing competition from the USA, Japan, East and South East Asia, the mild winters for winter sports equipment and the growing environmental awareness, which curb the expansion of certain sports activities such as motor sports and hunting.

The main product groups and brands/manufacturers in the European Community are:

- Adidas, Puma: sports clothing and footwear;
- Rossignol, Salomon: skiing and tennis equipment, golf clubs and equipment;
- Lacoste: tennis equipment, leisure clothing;
- Bogner: leisure clothing;
- Kettler: sports and keep-fit equipment;
- Dunlop/Slazenger: tennis equipment and clothing.



The largest manufacturers of sports goods in the EC rank among the world's leaders in product and production technology. Through constant R&D expenditure these manufacturers endeavour to use state-ofthe-art materials and technologies. Small and medium-sized enterprises try to secure market niches, but in particular small businesses from Spain, Portugal and Greece still have much progress to make in the use of modern production methods. This applies to both sports equipment and clothing. Internationally recognised European brands/manufacturers do not generally enjoy a competitive edge. With the exception of suppliers from the USA and Japan, many newly industrialised countries with advanced production methods produce first-class sports goods and have lately been gaining growing shares in the European market, particularly in the lower and middle price categories.

Intensified marketing efforts, notably by countries in the Far East, South-East and South Asia as well as the USA and EFTA nations, have led to increasing international competitive pressure. The main supplier countries outside the EC include Turkey, Taiwan, Hong Kong, Korea, the USA, China and Japan. Further major sources of imports are Yugoslavia, Switzerland, Czechoslovakia, Hungary, Finland, Pakistan, Sweden and India. The chief countries of origin are as follows for the main product groups:

- gymnastic and athletic equipment: Taiwan, USA, China, Finland;
- tennis rackets: Taiwan, Austria, USA;
- Solf equipment: USA, Taiwan, Japan;
- table-tennis equipment: Hong Kong, China, Japan;
- leather balls: Pakistan, Japan;

- roller and ice skates: Taiwan, Canada, Czechoslovakia:
- cross-country skis: Austria, Finland, USSR;
- downhill skis: Austria, USA, Yugoslavia, Switzerland, Finland;
- aquatic sports equipment (incl. windsurfing): Austria, Taiwan, Switzerland, USA, China;
- leather sports gloves: Pakistan, South Korea, Taiwan, USA;
- track suits: India, Turkey, Hong Kong, Yugoslavia, Austria;
- ski suits (woven): China, South Korea,
 Austria, Hong Kong, Switzerland, Yugoslavia, Taiwan, Hungary, Turkey;
- ski boots: Austria, Switzerland, Taiwan, Yugoslavia;
- sports footwear: Taiwan, South Korea, China, Yugoslavia, USA, Austria.
 Data are also available on the key production sectors in the chief producer countries. The data were provided by the national federations and do not follow a homogeneous definition.

Belgium There are 39 manufacturers of sports goods, toys and sports clothing, resulting in the value of production in 1987 being 18.1 million ECU.

FR Germany There are 294 manufacturers of sports and recreational goods (1988), 250 manufacturers of sports clothing and 34 manufacturers of sports footwear with the value of production (factory prices) in 1988 reaching 2.46 billion ECU. The market volume in 1988 was 3.81 billion ECU. The country's exports, including 33.5% to the EC, were 732 million ECU in 1988. Sports clothing accounted for approximately 200 million ECU of that sum, sports footwear for 80 million ECU, and camping and trecking equipment for almost 50 million ECU. Imports, including 32% from the EC, had a value of 1.4 billion ECU.

France In 1987 there were 130 manufacturers of sports goods, however no figures are available for the number of sports clothing manufacturers. In 1988 there were 37 manufacturers of sports footwear. The production value of sports goods in 1988 was 476 million ECU, whereas the production value of sports clothing reached 543 million ECU.

The production value of sports footwear is not known although a total of 15.4 million pairs were produced in 1988. Exports, including 32% of sports goods to the EC, had a value of 384.2 million ECU in 1988 (including ski boots). Exports of sports clothing had a total value of 121.5 million ECU, with 64% destined for EC countries. Exports of sports footwear (excluding ski boots) had a total value of 129 million ECU, with 57% destined for the EC. Imports amounted to 263 million ECU for sports goods, 456 million ECU for sports clothing and 271 million ECU for sports footwear. The EC share was roughly 33%. Italy There are about 550 companies who manufacture goods worth a total of 1.99 billion ECU. Sports goods make up 23% of this sum, sports clothing 44% and sports footwear 33%.

Netherlands There are 147 manufacturers of sports goods, including sports clothing and the value of production is 75 million ECU. Exports have an annual value of 190 million ECU with imports reaching 410 million ECU.

United Kingdom There are 360 companies who are members of the British Sports and Allied Industries Federation (BSAIF). The estimated total number of sports goods manufacturers is 250-10 000 depending on the product definition. UK



Table 1 Sports goods EC trade in current value, 1980-89

(million ECU)	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Exports extra-EC	323.4 46.5	378.6 54.5	417.3 60.0	472 67.9	606.1 87.2	695.3 100.0	655.8 94.3	631.1 90.8	619.4 89.1	690.3 99.3
of which: USA Japan	64.9 23.0	71.5 27	87.0 32.1	111.2 35.1	172.5 48.1	208.9 58.0	187.8 61.1	175.1 64.6	165.4 70.6	167.1 111.0
Imports extra-EC Index	468.8 69.5	456.1 67.6	512.6 76.0	569.9 84.5	654.2 97.0	674.3 100.0	698.8 103.6	815.9 121.0	1000.2 148.3	1132.8 168.0
of which: USA Japan	63.6 42.9	76.7 49.8	84.6 46.3	94.8 49.6	87.8 55.4	84.1 56.3	73.5 54.5	92.0 51.5	138.8 54.1	183.5 56.1
X/M	0.7	0.8	0.8	0.8	0.9	1.0	0.9	0.8	0.6	0.6
Trade intra-EC Index	327.7 62.5	341 65.0	410.4 78.3	428.4 81.7	491.8 93.8	524.3 100.0	574 109.5	605.5 115.5	605.9 115.6	655.3 125.0

(*) 1980 EC9; 1981-83 EC10 Source: Eurostat (Comext)

manufacturers' sales totalled about 482 million ECU in 1988, and 280.6 million ECU in the first half of 1989. Sports goods accounted for 30%, sports clothing for 38% and sports footwear for 34%. In 1989 the United Kingdom exported sports goods worth 187 million ECU, including 54% to EC countries. UK imports in 1989 totalled 271 million ECU, including 16.8% from the EC. In comparison, Japan has roughly 1,500 manufacturing companies with some 28,000 employees, according to MITI. In the USA, the last official census of 1982 recorded 1,452 companies engaged in the production of sports goods.

Trends

In general it can be stated that throughout the industry technical and fashion-related innovations are taking place involving R&D investment and increased marketing efforts. The creation of European-wide distribution systems increase the market power of dealers to the disadvantage of manufacturers. The European sports goods industry has until now consisted mainly of small and medium-sized enterprises. To combat the increasing competitive pressure exerted by multinationals and by low-price suppliers, small and mediumsized companies are seeking increased cooperation within and outside the EC. A number of manufacturers who have pursued diversification policies in the 70s and 80s (producing sports/leisure clothing and footwear for highly varied activities) to improve profitability, are now streamlining their product ranges, focusing again on their strengths and disposing of loss-making divisions.

Demand for sports goods is generally rising, albeit at different levels and growth rates in individual EC countries, depending on their economic performance.

High degrees of saturation are already detectable on the large markets, i.e. FR Germany, France, the United Kingdom and Italy, as well as in other countries with high purchasing power, e.g. the Netherlands, Belgium/Luxembourg and Denmark. In many cases, growth rates occur in connection with fashionable trends or technical innovations, e.g. mountain bikes. Furthermore, socio-demographic changes in industrial nations are leading to a relative and absolute increase in older population sections with high purchasing power and a strong interest in sport; an example of this is the golfing boom. In Spain, Portugal and Greece, where sport as a recreational activity is less developed than in the other countries, the market offers good development prospects for the few manufacturers there, most of them operating with foreign licences. Further differences are attributable to geographical and climatic conditions in the EC countries, with the emphasis being placed on winter sports and mountain climbing in the Alps and other mountainous regions, whilst in regions near seas, lakes and rivers the focus lies on aquatic sports as well as other mainly summer and all-year sports.

Trade

EC trade in sports goods has increased significantly in recent years. EC exports rose from 323.4 million ECU in 1980 to 690.3 million ECU in 1989. In the same period, EC imports increased from 468.8 million ECU to 1.133 billion ECU. In 1989 the main importer was FR Germany, followed by the United Kingdom, France, Italy and the remaining EC countries. The chief exporter was France, followed by FR



Table 2 Sports footwear EC trade in current value, 1980-89 (1)

(million ECU)	n 1914 - S	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Exports extra-EC Index		130.2 26.8	249.6 51.4	295 60.7	351.1 72.9	417.2 85.9	485.7 100.0	489.7 100.8	439.9 90.6	453.8 93.4	574.1 118,2
of which: USA Japan		39.1 6.9	66.1 16.3	94.0 23.0	117.5 31.8	149.6 35.2	172.7. 46.3	141.6 59.6	129.5 55.7	140.0 66.9	155.4 107.7
Imports extra-EC Index	· · · · ·	297.7 49.3	384.9 63.7	380.5 63.0	502.8 83.3	529.4 87.7	603.8 100.0	605.6 100.3	708.4 117.3	739.6 122.5	759.1 125.7
of which: USA Japan		5.5 0.8	9.3	7.5 1.3	9.9 2.0	11.0 2.9	10.2 3.3	16.2 2.7	19.8 2.4	30.2 1.8	22.8 2.0
Х/М		0.4	0.6	0.8	0.7	0.8	0.8	0.8	0.6	0.6	0.8
Trade intra-EC Index		204.8 32.7	279.5 44.7	371.9 59.4	437.9 70.0	487.5 77.9	625.9 100.0	643.1 102.7	577.4 92.3	474.8 75.9	560.8 89.6
(°) 1980 EC9; 1981-83 EC10 Source: Eurostat (Cornext)	in an	5.0 1.0 1.0 1.0			a)						، در بر می در بر می

Germany, Italy and the United Kingdom followed by the other EC nations. EC exports to the USA in 1989 were worth 167.1 million ECU, compared with 64.9 million ECU in 1980. EC imports from the USA amounted to 183.5 million ECU in 1989 (1980: 63.6 million ECU). Trade in sports goods with Japan is considerably lower. However, EC exports to Japan rose from 23 million ECU in 1980 to 111 million ECU in 1989. In the same period, EC imports from Japan increased from 43 million ECU in 1980 to 56 million ECU in 1989. Intra-EC trade mainly occurs between the countries where most sports goods manufacturers are based and where the population has high purchasing power. The main suppliers are France, FR Germany, Italy and the United Kingdom, followed by the Netherlands, Belgium/Luxembourg and finally, of minor significance in this respect, Ireland, Spain, Portugal and Greece. The structure and volume of EC trade in sports footwear are shown in table 2. The chief importers are FR Germany and France, followed by the United Kingdom, whereas the exporters are headed by Italy and France, followed by FR Germany. The strength of

EC deliveries to the USA and Japan is visible. Sports footwear worth 22.8 million ECU was imported from the USA in 1989, whereas the EC exports to the USA amounted to 155.4 million ECU. In the case of Japan, the difference was even greater: Imports from Japan totalled 2 million ECU in 1989, whereas the exports reached 107.7 million ECU. No precise figures are obtainable for intra-EC trade in sports clothing because such products are included in the overall data on clothing (women's, men's, children's clothing, etc.).

The impact of 1992

Sports goods manufacturers are dealing intensively with the anticipated consequences of the completion of the single European market by the end of 1992. The following areas of EC law and policy are at the forefront of their interest:

- harmonisation of product standards;
- * competition policy and distribution arrangements;
- intellectual property;
- import quotas;
- company law;
- consumer protection.

Small and medium-sized enterprises are

trying to face the growing concentration in this sector by means of increased cooperation. Domination of the market by European-wide distribution systems (department stores and cash-and-carry stores) may pose a threat to smaller manufacturers as market conditions could be unilaterally set by dealers.

Outlook

In light of the present situation, the market for sports and recreational goods is likely to be characterised by a slow but steadily increasing demand in 1991.

Long-term forecasts (Frost & Sullivan) anticipate steady growth continuing into the second half of the 1990s. Sales of sports and recreational goods to final consumers, are expected to rise by 3.6% on average annually until 1997.

Increasing environmental consciousness will benefit sports like cycling, hiking, windsurfing and sailing, but will adversely affect motor sports.

Individual sports will probably gain ground as opposed to team sports. The growing proportion of women involved will have an even greater impact on the appearance of sports clothing in terms of colour and at-

tractiveness.

Italians spend the most on sports and recreational goods (11.44 billion ECU in 1988), followed by the Germans (9.70 billion ECU in 1988). By 1997 such spending is expected to reach 15.86 billion ECU in Italy, 12.99 billion ECU in FR Germany (excluding the GDR), 9.50 billion ECU in France, 9.48 billion ECU in the United Kingdom, 4.0 billion ECU in the Netherlands, 3.80 billion ECU in Spain and 811.5 million ECU in Belgium. Substantial growth is also anticipated in the market for sports clothing. Considering that the markets for the United Kingdom, FR Germany, France and Italy together achieve sales totalling 6.4 billion ECU, sales in excess of 7.4 billion ECU are forecast for 1994. Of this amount, FR Germany is likely to account for 2.80 billion

ECU, France for 1.80 billion ECU, Italy for 2.05 billion ECU and the United Kingdom for 0.90 billion ECU.

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