The changing profile and map of the EU textile and clothing industry

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Introduction

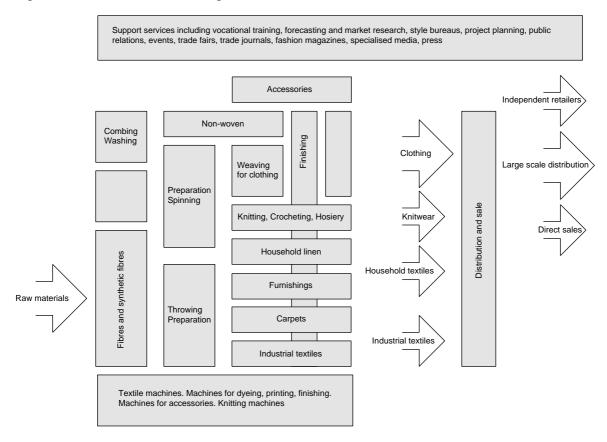
The aim of this paper is to outline the changing structure and geography of the European Union (EU) textile and clothing industry. To this end the evolution of the textile and clothing sector will be set in a slightly wider context of its position in wider textile and clothing value added chains. One reason why is that the structure of the sector can be viewed as a result of attempts made by enterprises to upgrade within the value added chain in order to catch-up and compete in wider markets and in order to pull ahead and secure surplus profits (Smith et al, 2002; Dunford, 2002). Another reason is that a value chain framework directs attention not just to the role of industrial enterprises but also to the increasingly critical role of design, marketing and distribution functions in the EU industry. After a brief account of the value chain, the functions performed by enterprises that comprise the sector will be identified. In the next two sections the main characteristics of EU textile and clothing firms will be outlined, and will be explained in the light of the distinctive technical and market characteristics of the sector. While these characteristics create conditions conducive to the development of small and medium-sized enterprises, I shall show in the next three sections that the size distribution of firms indicates the existence of quite strong processes of concentration. In recent years concentration has increased quite markedly as a result of the unprecedented recent growth of mergers and acquisitions, and is closely related to a profound restructuring of the distribution system that has given increased power to distributors and placing strong downward pressure on prices. The next section provides some evidence concerning the differential performance of the industries of different EU Member States and indicates how the changing structure and regulation of the chain help explain globalization and the new international division of labour. To conclude I indicate in what ways concepts of upgrading can contribute to an understanding of the recent functional and territorial reprofiling and the internationalisation of the EU textile and clothing sector.

The textile and clothing value added chain and the functional roles of clothing companies

The clothing industry is a traditional industry which lies upstream of clothing distribution and downstream from the textile sector for which it is the major outlet. The textile and clothing chain embraces several different sets of activities, occupations and roles (see Figure 2) whose characteristics shape the profile of the sector.

As an example, consider the clothing sector. Clothing design, making and distribution for example involves several activities. The first step is carried out by people responsible for product development and the planning of entire collections. At this stage market research is carried out, and advice is sought, with a view to deriving the knowledge required to adapt product lines to market demand. Criteria of profitability are applied to the making of preliminary decisions about the anticipated life cycle of these products and the steps that would be involved in continuing to make, modify or replace them. The second step is the design and prototyping of new models. Stylists sketch new models. Designers create detailed models of the different parts (collars. sleeves, cuffs, etc.) of the item of clothing. A production design department determines how each part is to be made, establishes quality standards for each part, determines how the product is to be assembled and costs the item. A prototyping department makes the item, which the stylists compare with their initial concept. Of course this account of the sequence is highly stylised. As soon as the costs of production are known, the commercial judgements of the product development staff will come into play, while each of these steps incurs costs which employers will seek to contain and which enterprises will seek to recoup through the sales of the products or of licenses, designs and models. These costs may comprise a non-negligeable share of the final product prices. The third step is the actual manufacture and assembly of selected products, which itself will involve a separate set of decisions by manufacturers concerning the investment in plant and equipment, the organisation of work, the recruitment, training and control of the workforce and relations with suppliers. The fourth phase is the marketing and distribution of clothing which exercises a pervasive influence over the evolution of the clothing sector.

Figure 2 The textile and clothing chain



The existence of these steps of designing, styling, cutting and assembling clothing and the wide range of ways in which they can be combined have an important impact on the organisation of the clothing sector. From this point of view organisation essentially depends on the extent to which these activities are integrated within individual enterprises and on where these activities are located. (Also important is the integration into the catalogues of clothing companies of non-clothing items such as glasses or eyewear, jewellery and footwear and the closer relationships with other fashion and apparel sectors). Some companies for example act as principals, purchasing fabric and carrying out product design and marketing but entrusting manufacture to subcontractors. Increasingly the relationship to marketing is a critical variable with some distributors establishing subcontract relationships with producers, while some industrial companies seek to move into distribution.

Schematically, three main types of clothing enterprise can be identified. The first comprises principal enterprises that design and market clothing. These enterprises employ relatively few technical staff and achieve a high turnover per person employed. The second comprises manufacturers. Manufacturers are usually small and highly specialised. The third is made up of vertically-integrated own account enterprises that design, make and sell clothing perhaps through their own distribution networks. Amongst the third and first groups are companies

designing and perhaps making and marketing clothing carrying well-known brand names. Of these companies some are rooted in high fashion, top-end ready-to-wear and lingerie where the aim is usually to concentrate on the immaterial determinants of competitiveness (design, creativity, innovation and information) and where often aggressive strategies of international expansion are adopted.

A profile of the European Union textile and clothing sector

At a global scale the textile and clothing industry accounted in 1998 for 5.7% of the US dollar value of world manufacturing output, 8.3% of the value of world trade in manufactured goods, and more than 14% of world manufacturing employment (OETH, 2000). Europe accounted in 1998 for 29% of world textile production and 26% of world clothing production, lying well behind Asia which accounted for 39% and 45%, respectively (DG Enterprise, 2000). As far as trade was concerned, the large and affluent EU15 market was the world's largest importer of both textiles (40% of world imports) and clothing (more than 45%), and was the second most important exporter, accounting for 15.2% or world textile exports and 8.8% or world clothing exports. At the head of the textile and clothing export league table came China with 16.2% and 23.7% respectively (see Table 1 and 2).

Table 1 World exports of textiles 1990-1998 (million US\$) Source: OETH, 2000

	Expor		Change	Share of world exports		
	mıllıo	n US\$	%	9/	6	
	1990	1998	1990-8	1990	1998	
World	104520	150950	44.4	100.0	100.0	
China	13261	24467	84.5	12.7	16.2	
EU (extra)	15123	22921	51.6	14.5	15.2	
South Korea	6075	11279	85.7	5.8	7.5	
Taiwan	6128	11020	79.8	5.9	7.3	
US	5039	9216	82.9	4.8	6.1	
Japan	5858	5971	1.9	5.6	4.0	
India	2179	5243	140.6	2.1	3.5	
Pakistan	2662	4302	61.6	2.5	2.8	

Table 2 World exports of clothing 1990-1998 (million US\$) Source: OETH, 2000

	Expor		Change	Share of world exports		
	million US\$		%	9	6	
	1990	1998	1990-8	1990	1998	
World	108060	179640	66.2	100.0	100.0	
China	15809	42545	169.1	14.6	23.7	
EU (extra)	11338	15803	39.4	10.5	8.8	
Hong Kong	9266	9667	4.3	8.6	5.4	
US	2564	8793	242.9	2.4	4.9	
Turkey	3330	7058	112.0	3.1	3.9	
Mexico	587	6603	1024.9	0.5	3.7	
South Korea	7878	4651	-41.0	7.3	2.6	
India	2529	4343	71.7	2.3	2.4	

In the EU15 itself in 1999 there were nearly 114,000 textile and clothing companies (OETH, 2000). Together these companies had a turnover of €187 billion, equal to 4% of manufacturing turnover. More than 2 million people were employed in this sector, with some 1.2 million in textiles and 0.9 million in clothing. As a whole the sector accounted for 7.6 per cent of manufacturing employment.¹ Of the workforce a particularly large share is female and does manual work. Average firm size was small, with the average company employing just 19 people.

Explaining the structural characteristics of the textile and clothing sector

The structural characteristics of the textile and clothing sector are a result of a range of market and technological factors. Of particular importance is the fact that in clothing, in particular, demand is growing relatively slowly and is unstable and rapidly changing. The share of clothing in household budgets is in decline. The range of products is limited, and products are subject to rapid obsolescence and to strong seasonal or fashion-related fluctuations. Each range is made up of clothes for a man, woman, child, sport and so on, each with different sizes and colours, and with most ranges of products changing every six months. In market conditions of this kind enterprises must have a capacity to adapt constantly their product mix and product range. Economies of scope often exceed economies of scale, giving a certain advantage in manufacture to firms that are small and adaptable. Adaptability can be passive, involving capital valorisation strategies centred on a simple adaptation of the goods and services a firm offers to identified changes in the composition of demand, and active, with the firm taking the initiative and regularly launching products with new features that substitute for older ones and actively differentiating its products to secure niche markets. The most dynamic enterprises can therefore develop by constantly innovating (upgrading through product development) and constantly

¹ Euratex (European Apparel and Textile Organisation) estimates are slightly higher as their figures include the chemical fibres industry.

recreating (small) monopolistic rents.

A second feature of these markets and production systems is that the scope for strong dynamic learning curve and experience curve effects is limited, as are conventional economies of scale and some of the economies realisable through process-product iterations characteristic of models of dynamic flexibility and related approaches to the valorisation of capital. Clothing in particular relies on 'static' strategies, which draw in the main on the gains from economies of range and scope. Together these factors create a situation in which there is a space for large numbers of companies to share the market for manufactured goods with few having a particularly large market share. The companies themselves have flexible equipment, adaptable to the production of changing ranges of goods. If the need arises there is scope for relations of co-operation and partnership with other similar firms. Generally production is labour intensive. In these circumstances capital valorisation centres on strategies of flexible specialisation (Piore and Sabel. 1984; Coriat, 1991).

The question of size is of crucial importance in a number of other respects. In particular it has a major impact on access to financial markets and to the financial resources required for growth. Constraints on growth are therefore another reason for the predominance of small firms.

Structure of the EU textile and clothing sector: size distribution of firms

Although small and medium sized enterprises predominate in the textile and clothing sector, a small number of large enterprises account for a large percentage of turnover. As Table 3 shows, the degree of concentration varies considerably from one country to another. Concentration is greatest in the United Kingdom. Strikingly, it is the smallest in Italy, which has a company structure in which large firms play a much smaller role.

Table 3 The share of the top three and the top five companies in total textile and clothing industry turnover Source: EURATEX (2000)

	Textile	industry	Clothing industry			
Country	Share of top-three companies	Share of top-five companies	Share of top-three companies	Share of top-five companies		
UK	43%	52%	22%	33%		
France	21%	28%	28%	35%		
Germany	14%	20%	35%	46%		
Italy	9%	12%	20%	25%		
US	23%	31%				

A subsequent EURATEX survey of the clothing sector in 1999 (see Table 4) produced a number of further interesting results. Once again the share of large companies accounted for a large share of national clothing industry turnover. In most countries the top clothing companies accounted for a larger share of turnover than the equivalent number of top textile companies,

reflecting the high degree of involvement of clothing companies in international outsourcing (upgrading through the transfer of certain operations to areas where wage costs are lower) and the high degree of concentration in distribution. Of the larger countries, the degree of concentration of national turnover was particularly marked in Germany, Spain and France where the top ten companies accounted for 50 per cent or more. In some smaller countries such as Sweden, Norway, Denmark, the Netherlands, and Finland the share of turnover was particularly high, exceeding national turnover in Sweden and Norway. These high degrees of concentration reflect the strong degree of internationalisation of companies in these countries. In the Eastern and Central European (ECE) countries included in the survey there was also a high degree of concentration, with the top ten companies accounting for 63.7 per cent of national turnover in the Czech Republic, 64.2 per cent in Estonia, 63.4 per cent in Slovenia and 51.2 per cent in Slovakia. In these cases the high degree of concentration is in part a reflection of structures of corporate organisation inherited from the Communist era. In Turkey and Portugal, on the other hand, the degree of concentration is particularly small. Comparing the results for 1998 (Table 3) and 1999 (Table 4) concentration increased in France and Italy. In Germany, Switzerland, the United Kingdom, Spain and Turkey there were setbacks for large companies (EURATEX, 2001: 34-6).

Table 4 Share of the main companies in total 1999 national clothing industry turnover, in percentages Source: EURATEX, 2001: 36

Country		Number of	companies	
,	3	5	10	15
Sweden	198.5	235.4	288.3	325.3
Norway	191.5	210.6		
Denmark	86.0	113.3		
Netherlands	82.3	101.6		
Finland	70.9	82.1	89.0^{1}	
Germany	32.9	45.2	62.2	73.9
Spain	44.1	54.7	64.5	69.9
Czech Republic	47.1	56.3	63.7	67.7
Switzerland	57.4	66.31		
Estonia	42.2	53.2	64.2	
Slovenia	52.9	57.3	63.4^{1}	
France	34.9	42.0	52.4	59.8
Slovakia	37.3	43.7	51.2	
Italy	23.3	29.9	41.2	48.0
Belgium	41.6	43.8	47.5	
United Kingdom	19.4	27.7	37.0	40.5^{1}
Greece	13.6	20.0	30.3	38.7
Turkey	3.5	4.1	5.5	6.8
Portugal	3.2^{1}			

^{1 13} companies in the UK, 9 in Slovenia, 7 in Finland, 4 in Switzerland excluding Triumph Int. Spiesshofer, 1 in Portugal

The EU15 has however a rather small share of the world's global players. Of the 36 textile companies with a 1998 turnover of €1 billion, only six were European and the largest, Coats Viyella Textiles, ranked only eighteenth. In the clothing industry, 26 companies had an annual turnover of €1 billion. Six were in the EU, of which the largest were the Italian Holding di Partecipazioni which ranked fifth, the German Adidas Konzern Clothing which came eighth and Benetton Clothing which came ninth. (The top ten European companies in 1999 are listed in Table 5).

Table 5 The top ten European clothing companies in 1999 Source: EURATEX, 2001: 36

Country	Company	Turnover	Sector
		€ million	
It	Holding di Partecipazioni Industriali	3111.00	Multi-product clothing
Fr	LVMH Gruppe	2300.80	Prêt-à-porter
Ger	Adidas	2198.60	Activewear
Sp	Zara	2026.40	Menswear
It	Benetton	1982.10	Knitwear
It	Marzotto	1031.90	Menswear
Ger	Nike Europe	925.03	Activewear
It	Max Mara Fashion	829.01	Womenswear
It	Giorgio Armani	867.85	Menswear
It	Gianfranco Ferré	826.35	Prêt-à-porter

... and the role of mergers and acquisitions

One of the most striking recent trends is the increasing degree of concentration in the textile and clothing sector, as a result of rationalisation and the unprecedented recent growth in acquisitions and mergers. As is shown in Table 6, which records recent textile and clothing mergers and acquisitions in which the buying company was from the EU15 or the United States, in 1988-2000 there was an almost fourfold increase in buyouts and mergers. Generally acquisitions were in the same sector and were more common in clothing than in textiles and knitting. Several mechanisms were at work. Designers seeking to gain future licence-related revenue from their creative activities, and companies seeking to valorise investments in brands and distribution networks were seeking to achieve higher volumes. At the same time there was some diversification towards the making and marketing of accessories and services including distributive services and e-commerce, while financial groups were showing a growing interest in the fashion sector.

Table 6 Mergers and acquisitions in clothing and textiles, 1997-2000 Source: EURATEX, 2001

Acquirer									
Year	Total	Clothing	Underwear/hosiery	Textiles	Holding	Merchant	Distribution	Other	
					company	Bank			
1997	21	8	2	7	0	3	1	0	
1998	44	25	3	4	6	4	0	2	
1999	62	28	3	6	13	4	4	4	
1980	78	19	6	17	23	3	0	10	

Changes in distribution: from producer- to buyer-driven value chains

In the past textile and clothing products were sold by a powerful industry to a distribution sector mostly composed of small and medium-sized retailers. Today, distribution is increasingly controlled by a small number of big players, who are in a position to put the upstream part of the textile and clothing chain under considerable pressure. Overall the system has therefore changed from one that was producer driven to one that is customer driven where the customers are large distributors.

In the current distributive order there are a number of different types of actor. First there are the traditional independent retailers, whose role is however diminishing. Second there are large department stores and specialised chain stores. Included are companies with large numbers of own-brand branch stores (Marks and Spencer, C&A, Next and Décathlon), franchise operations (such as Benetton and Phildar), and purchasing associations put in place to permit the survival of independent retailers. These specialised chain stores offer a wide range of products with regular stock changes and stock updating. Tastes and trends in sales are followed carefully though efficient systems of stock management. Third, there are large hypermarket and supermarket chains. For example, the French retailer Carrefour recently acquired several of its former rivals, and has become the market leader in Belgium, Spain, Portugal, Greece, Italy, Brazil, Argentina and Chile (OETH, 2000). Finally there are organisations that sell by mail order. Alongside these established distributive actors, new modes of distribution are taking shape including factory shops, sometimes located in city centres, telesales, other distance multimedia sales and shops equipped with computers to sell made to measure clothes.

Table 7 Sales of clothing by type of outlet (in percentages) Source: OETH, 1988:24, SESSI, 1998: 40, and Sistema Moda Italia, 2000: 30

	EU15			Fra	nce	Italy	
	1988	1996	2000^{1}	1986	1994	1986	1998^{2}
Independent retailers	48	41	37	39	27	67	54
Specialised chains	18	24	26	13	23		15
Department and variety stores	12	13	13				
Hypermarkets and supermarkets	5	6	7	17	19		15
Mail order	7	8	9	10	12		
Street vendors						14	9
Other	10	8	8				7
Total	100	100	100	78	82		100

1 OETH forecast

2 The 1998 figures for Italy are Sistema Moda Italia estimates. The 1986 figures and the 1996 figures cited in the text are OETH estimates.

The relative importance of these different distribution channels has changed sharply in the last fifteen years. As Table 7 shows, for the EU15 the market share of independent retailers is declining, with an increase in the roles in particular of chain stores and hyper and supermarkets. This restructuring of the distribution sector has led to profound changes in the relationships between the production and the retail sectors. The decline of small independent retailers has reduced the role of traditional relationships in which producers presented their collections to several intermediaries. In this older order power relations worked in favour of producers who set the rhythm for the design and presentation of collections and set prices. With the increase in the importance of specialised chain stores and hyper and supermarkets, power is transferred to the distribution sector. Consumers also have become more price conscious, and the chain stores forced down prices in the late 1980s and early 1990s, as Figure 3 shows for the French case where in 1986-94 specialised chain store prices fell by 33% in constant prices and those of hyper and supermarket prices fell by about 30%. In the French case independent retailers, markets and fairs, and department stores reduced their prices later and by a smaller amount. Independent retailers for example reduced their prices by 13%. These differences in relative price reductions help explain the rapid relative growth of chain stores and hyper and supermarkets. Through the downward pressure they have exerted on prices, distributors have taken almost complete control of the clothing sector and organise the whole value added chain in ways designed to guarantee their profitability. In doing so the distribution of value added has shifted decisively in their favour.

As Table 7 also suggests there are striking differences within the EU15 in the ways in which clothing is sold. In Italy in 1986 independent retailers which included independent boutiques and specialist shops had 67% of the clothing market, lying far ahead of street vendors who came second with 14%. By 1996 independent retailers had declined to 53%, whereas the share of

street vendors had increased to 15% (OETH, 1998: 24). In Italy Federabbigliamento forecasts that of the 70,000 outlets active in 1997 only 40,000 will be left by 2005. In 1984 there were 120,000 outlets. The UK has the most concentrated structure. In 1996 the combined share of specialised chain stores, department and variety stores, supermarkets and mail order stood at 76% compared with just 15% for independent retailers.

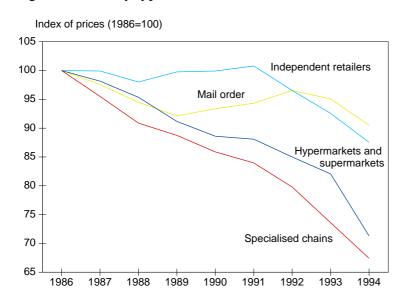


Figure 3 Prices by type of outlet in France, 1986-94

Differential economic performance, relocation, trade and the new international division of labour

These structural features of the industry are connected with the strong degree of globalization of this sector. In the EU the sector is characterised by strong import growth. In 1999 EU-15 imports exceeded exports by almost €23 billion (see Table 8). Europe's trade deficit in these sectors is a reflection of several interconnected facts. First, due to the structural characteristics of the sector and the fundamental nature of the needs it satisfies, countries in early phases of industrialisation tend to specialise in textile and clothing manufacture. Second, as wage costs in these countries are low and comprise a large share of total costs, there is a global relocation of production into these areas. Third, due in part to changing trade rules, trade is increasing. A striking characteristic of this new international division of labour is the large differences in the average value of imports and exports in more and less developed countries. In textiles the average value by weight of imports stood at €4.1 million compared with 6.5 for exports, while in clothing the equivalent figures were 16.5 and 34.8, indicating that Europe exports items of high unit values and imports items with low unit values.

Table 8 EU15 external trade (exports less imports in value and volume), 1990-9 Source: OETH, 2000

	Million €			(000 tonnes		
Textiles (excluding knitwear)	1990	1998	1999	1990	1998	1999	
Imports	11116	17009	16551	2507	3946	4042	
Exports	12102	21730	21554	1844	3285	3313	
Balance	986	4721	5003	-663	-661	-729	
Clothing (inc knitwear)							
Imports	19187	37964	40540	1106	2163	2454	
Exports	7773	13120	12662	178	358	364	
Balance	-11414	-24844	-27878	-928	-1805	-2090	
Textiles and clothing							
Imports	30303	54973	57091	3613	6109	6496	
Exports	19875	34850	34216	2022	3643	3677	
Balance	-10428	-20123	-22875	-1591	-2466	-2819	

An important consequence of competition from less developed countries is a high annual rate of growth of imports. For the EU12 exports increased in textiles (3.2 per cent per year in 1984-94) and in clothing (2 per cent per annum). As consumption growth was slow, output decreased -0.6 per cent per year in textiles and -2.2 per cent per year in clothing (see Table 9a and b). As a result there was a decline in the number of enterprises (as a result of rationalisation and merger activity, designed especially to increase the profitability of investments in brands and distribution networks) and a considerable decline in employment. In 1984-94 493,900 jobs were lost in textiles and 349,071 in clothing, while in 1984-99 the equivalent figures were 38% and 32%. In 1980-95 the EU15 lost as much as 47% of jobs in textiles and 45.8% in clothing. In textiles productivity growth was the main factor, while in clothing increases in productivity were reinforced by weak consumption and high imports.

Table 9a Textiles including knitwear output and employment in EU Member States, 1994-9

		ECU mil		Change	E	Employme	nt	Change
	constant	1990 pri	ces)					_
	1984	1994	1999	1984-99(1)	1984	1994	1999	1984-99(2)
Belgium	5112	5243	5612	9.8	61312	45326	41417	-27.8
Denmark	1375	1041	1069	-22.2	17395	12549	9941	-36.6
Germany	20166	16042	13451	-33.3	266690	175585	133175	-49.1
Greece	2177	1749	1387	-36.3	84563	43594	36494	-57.5
Spain	7838	7739	7316	-6.7	236487	148368	129206	-38.0
France	18332	14435	13482	-26.5	253218	140905	118470	-56.0
Ireland	574	718	527	-8.1	13220	10113	8486	-38.6
Italy	27861	32507	31874	14.4	434967	364324	338823	-22.4
Luxembourg		612	545		391	385	393	0.5
Netherlands	2171	2106	2232	2.8	23062	18200	15836	-34.7
Austria		2625	2741		37341	24100	20131	-42.5
Portugal	3682	4068	3941	7.0	173018	162405	145049	-20.3
Finland		567	608			6912	7328	
Sweden		732	651			9200	7592	
UK	12425	10549	8852	-28.8	253288	201957	172245	-45.8
EU12	101713	96809	90287	-11.2	1817611	1323711	1149535	-38.3
EU15		104990	94286			1363923	1184587	

Table 9b Clothing excluding knitwear output and employment in EU Member States, 1994-9

		(ECU mil		Change	En	nployme	nt	Change
		t 1990 pri		_				
	1984	1994	1999	1984-99(1)	1984	1994	1999	1984-99(2)
Belgium	1459	2076	619	-57.5	35370	21772	11851	-66.6
Denmark	708	478	458	-35.3	13041	8854	5333	-57.5
Germany	14371	8295	5364	-62.7	217127	111307	66654	-57.0
Greece	890	694	502	-43.6	30744	28015	21209	-9.9
Spain	3294	3091	2878	-12.6	144932	133483	129898	-13.7
France	11904	7425	6510	-45.3	198577	139035	107820	-44.9
Ireland	325	212	158	-51.5	12344	8326		-40.1
Italy	18870	17338	17378	-7.9	326139	222751		-35.2
Luxembourg		3			961	376	202	-79.0
Netherlands	486	549	404	-16.8	10244	7183	6216	-27.9
Austria	0	563	301					
Portugal	1444	1831	2196	52.1	113763	121143	102858	14.5
Finland		290	216					
Sweden		229	196					
UK	5829	5805	4179	-28.3	216831	168757	129663	-19.9
EU12	59580	47797	40647	-31.8	1320073	971002	581703	-31.6
EU15		48878	41360					

These trends in output and employment are a consequence of the significant restructuring and

modernization efforts made by the European textile and clothing sector to cope with global competition. One of the reasons for the dramatic loss of jobs is the already mentioned huge gap in wages between countries such as Germany (US\$ 18 per hour) on the one hand and Poland (US\$ 2.77), Morocco (US\$ 1.36) or Romania (US\$ 1.04) on the other, not to speak of the even lower wages in Vietnam (US\$ 0.22) or China (US\$ 0.43). Given the size of these wage differentials, and given the fact that the estimated average proportion of labour costs in total production cost is 40% for textiles and 60% for clothing, employers often seek to subcontract operations to low wage countries. (The critical variable is the efficiency wage or the ratio of labour productivity, which is comparatively high in the EU yet less than US, Japanese and Swiss productivity levels, and the real wage in the subsector concerned).

Table 10 EU value added at factor cost per person employed in 1990 and 1998 (EU15=100) Source: OETH, 2000

	Tex	tiles	Clot	thing
	1990	1998	1990	1998
Belgium		133.4		137.5
Denmark	144.5	117.8	176.9	150.9
Germany	115.3	116.7	125.3	162.5
Greece	21.8	51.4	51.6	42.2
Spain	81.2	82.0	85.3	68.8
France	114.6	106.5	127.1	126.1
Ireland	86.1	69.9	72.0	54.9
Italy	140.8	123.4	136.2	146.5
Netherlands	141.7	136.0	114.1	73.0
Austria	120.5	156.3	106.7	109.3
Portugal	36.2	47.4	32.1	44.1
Finland	116.7	111.8	130.0	115.7
Sweden	116.5	117.1	123.2	141.8
UK	87.1	87.8	91.0	73.3

As Table 10 shows, however, there are wide differences in labour productivity within the EU itself. In 1998 average value added at factor cost per person employed in the EU15 stood at €34,190 in textiles and 23,670 in clothing. Table 10 records productivity as a percentage of the EU average. In clothing the highest levels of productivity in 1998 were achieved in Germany and Denmark. Next came Italy. The UK stood at just over 50% of the Italian score, while at the lower end of the spectrum came Portugal (30%) and Greece (29%).

Subcontracting accounts for an important part of activities of textile and clothing companies with work spread between thousands of small enterprises, often taking the form of cottage industries, which are often highly concentrated in particular regions. In the recent past much of this restructuring has involved the outsourcing of low value added and more labour- intensive operations to nearby accession candidate countries such as Romania and Poland and Mediterranean Rim countries such as Tunisia or Morocco. The advantage of these countries is

their proximity and the greater speed and the greater ease of exercising control over the outsourced activities.

A large number of such operations are carried out as outward processing transactions (OPT) (see Table 11). OPT transactions essentially involve the export of EU fabric, cuttings or semi-finished garments to neighbouring low-wage countries, which make them up into finished garments for re-import into the EU. A switch to overseas production dates from the 1970s, when it was partly a response to the emergence of Far Eastern competitors. Germany led the way through the OPT practice of exporting already cut garments to countries with low costs of production for assembly, and reimporting the finished product. OPT was established to permit, in a context of trade restriction, clothing producers in developed countries to take advantage of low wage costs in less developed areas, as duties are levied only on the added value produced abroad and not the full value of the imported product. Another advantage was that the finished products could carry a 'Made in' label of the country initiating the outward processing arrangement. More recently OPT reporting has declined due to the removal of all quotas and tariffs for imports from these countries into the EU. The OETH estimates that 1999 OPT imports of clothing amounted to €11.3 billion.

Table 11 Outward processing of clothing, 1988-98 Source: elaborated from Sistema Moda Italia (2000)

	Outward processing of clothing Euros million 1988 1990 1994 1996 1997 1998					Average annual rate of growth %				Share of total extra-EU imports 1998		
	1900	1990	1994	1990	1997	1998	1988-90	1990-94	1994-96	1996-97	1997-98	1998
France	200	347	463	489	501	466	31.7	7.5	2.8	2.5	-7.0	9.0
Germany	1216	1830	3246	3579	3553	3196	22.7	15.4	5.0	-0.7	-10.0	24.3
Italy	6	21	316	613	693	689	87.1	97.0	39.3	13.1	-0.6	20.5
Netherlands	161	209	369	440	366	266	13.9	15.3	9.2	-16.8	-27.3	8.0
United	41	35	145	326	334	444	-7.6	42.7	49.9	2.5	32.9	6.9
Kingdom												

In ECE the geographical relocation of production resulted in an increasing intensity of largely non-equity involvement of western European producers (particularly German) in the clothing sector. There are also however signs of a more direct involvement of larger EU15 companies in ECE. In the last few years Miroglio, which had started a wave of acquisitions in the EU in 1987, invested in Bulgaria, acquiring the Slitex conglomerate at the end of 1999, and opening a weaving and printing plant. Marzotto, which includes the Hugo Boss group of companies, invested in Lithuania, while Mario Boselli increased yarn production in Slovakia. The English Shiloh Spinners invested in Lithuania. (Shiloh PLC had formerly divested itself of its cotton spinning interests to concentrate on healthcare and hygiene products). Dewhirst, which formerly sold 90 per cent of its output to Marks and Spencer, invested in the same country, as part of its strategy which involved transferring its manufacturing operations overseas. In 2000 it closed English factories employing 1,000 people in Winsford in Cheshire and Peterlee in Durham,

continuing an earlier wave of closures and job cuts. At the root of these changes was increased competition and the compression of its profit margins despite increases in turnover. Benetton was finalising its plans to create an industrial platform in Croatia. At the same time within ECE some producers are drawn by locations in lower cost adjacent countries (EURATEX 2001).

Within the EU15 the most important centre of the textile and clothing sector is Italy accounting in 1999 for 31% of EU15 activity as measured by a composite index derived from the average figures for national shares of EU15 turnover, value added and employment (Euratex, 2000). Next came the United Kingdom (15%), Germany (14%), France (13%), Spain (9%), Portugal (6%), Belgium (4%), Greece, Austria and the Netherlands (2% each) and Denmark, Finland, Ireland and Sweden (1% each). These figures understate the importance of the textile and clothing industry in some smaller countries, especially in southern Europe, where the relative importance of textiles and clothing in total manufacturing is substantial. And whereas in the large producing countries the relative importance of the textile and clothing strands is close to the EU15 average of 60 and 40% respectively, in the southern Member States (such as Spain, Portugal and Greece) there is a strong concentration on clothing. Also the averages conceal some important details. In clothing, for example, Italy accounted for 34% of turnover and 30% of value added, yet just 26% of employment. In Germany the corresponding figures were 15%, 15% and 9%, and in France they were 13%, 14% and 11%. By contrast in the UK the clothing sector accounted for just 15% of turnover and value added but 18% of jobs, and in Spain, while the shares of turnover and value added were 9% and 10% respectively, the share of jobs stood at

The delocalistion of manufacturing operations to Mediterranean countries and more recently to Central and Eastern Europe is leading to a remaking of the map of textile and clothing production in Europe and its environs. In some of these neighbouring countries textiles and clothing have traditionally been a leading manufacturing sector, accounting for 15.5% of manufacturing production in Turkey, over 11% in the Baltic States and just beneath 10% in Romania and Slovenia (see Table 12). As a share of manufacturing employment it is particularly significant in Turkey (40%), Lithuania (24%), Slovakia (15%), Estonia (14%), Poland (13%) and the Czech Republic (10%). Turkey, Poland and Romania rank amongst the top 10 EU15 suppliers, while Poland is the EU15's third largest market, with a share of 7% of total EU exports. Of the other Candidate Countries Romania ranks sixth, with 5%, Turkey eighth, with 4% and Hungary ninth, with 3%. It was the combination of these industrial traditions, which guarantee adequate quality and low labour costs, and their proximity to the EU that have led to the rise in particular of outward processing transactions. In 1996, 68% of EU exports to the candidate countries of ECE were OPT, as were 71% of EU imports from ECE countries. More recently imports have become duty free, facilitating OPT-type activities.

Table 12 The (pan) EuroMediterranean zone, 1994-98 Source: Euratex (2000)

Country	Textile and	Share of total	Share of national	Share of national
	clothing	employment	manufacturing	manufacturing
	employees	in zone (%)	employment (%)	production (%)
	('000s)			
EU	2330	36.0	7.6	4.2
EFTA (Switzerland, Norway)	35	0.5		
Total ECE	1253	19.3		
Bulgaria	89	1.4		6.1
Estonia	23	0.4	14.0	11.0
Hungary	103	1.6	3.0	2.0
Latvia	23	0.4		11.0
Lithuania	60	0.9	24.0	14.0
Poland	331	5.1	13.0	4.4
Slovakia	51	0.8	15.0	5.5
Czech Republic	112	1.7	10.0	3.5
Romania	430	6.6	4.0	8.0
Slovenia	31	0.5	14.0	9.0
Mediterranean	2859	44.1		
Egypt	500	7.7		13.6
Israel	23	0.4	16.0	
Jordan			20.0	
Malta				
Morocco	187	2.9	39.0	17.6
Tunisia	220	3.4		
Turkey	1930	29.8	40.0	15.5
Total zone	6477	100.0		

Strategies for upgrading

As indicated in the last section, in the face of global competition EU textile and clothing industries must engage in a permanent process of restructuring and modernization.

This restructuring involves, first, the adoption of new technologies, and new modes of work organisation to increase the number of commodities produced in an hour of work, to increase productivity, to reduce costs and to keep ahead of producers in low wage countries. In distribution, similarly, there is pressure to improve logistic methods by developing new and more effective ways of managing material flows. In managing the commodity supply chain electronic exchange of information can speed up to sectors's reactions to changing market conditions (through point of sales information and automatic replenishment) and can cut distribution and stock management costs.

Second, as indicated in the last section, cost-sensitive operations that are difficult to automate are transferred to low wage areas to keep costs down. Activities can also be relocated to seek out new cheaper sources of materials and components, while attempts to contain wage costs also occur in developed countries themselves with in some cases a resort to sweatshops and

informal work.

Third, to preserve its role in global markets emphasis is also placed first on the development of new brands that command higher prices relative to costs or that can secure a larger market share or second on the development of new products perhaps involving the use of new man-made fibres and technical textiles. Technical textiles are particularly significant in that they involve the development of new kinds of product and and are suited to new uses in, for example, the transport sector, furniture and furnishings and construction. A related strategy involves simply seeking to break into new markets/market areas (such as the transition economies where increasing inequality is contributing to the growth of elite and designer clothing markets) to increase the firm's sales.

At a political level producers can mobilise in order to shape the framework of regulation which has a profound impact on the evolution of the sector. Reference has already been made to the importance of the framework of trade regulation. In the past trade restrictions protected European producers. Today European producers have a strong interest in the removal of tariff and non-tariff restrictions on access to export markets and especially to the high-income markets found in all economies with the growth of internal economic inequality and in preventing governments in other countries from subsidising or protecting their indigenous industries. Trade unions are anxious to prevent open competition with producers who do not respect core employment standards established by the International Labour Organisation. The establishment of technical standards aimed at protecting the environment or consumers, through for example, labelling or privileged access to the public procurement markets also have an important impact on the degree of competition and on access to markets. The establishment of common standards is an important feature of the internal market in the EU, and control over technical standards which might fragment this market is a major objective of the EU, though one which brings it into conflict with a range of industrial and consumer interests. Additionally as European producers and distributors seek monopolistic rents through strategies centred on design, fashion and branding there is a strong mobilisation to protect the 'intellectual property rights' of the European industry through, for example, campaigns against counterfeiting which causes a loss of revenues and generates detection and legal costs.

A fourth strategy, closely related to changes in the distributive order, is to change the weight attached to different functional roles in the value added chain, by concentrating for example on knowledge intensive activities and marketing. Essentially EU producers seek to reposition themselves in the overall value added chain, with a specialisation on what are seen as core competences in the areas of design and marketing. This change helps explain the rise in the unit values of the products the EU exports relative to the ones it imports.

Conclusions

There are a number of conclusions that emerge from this account of the changing profile of the

EU textile and clothing sector. First, although the textile and clothing sector is one subject to strong competition from newly industrialising countries, the EU15 still accounts for a large share of world exports and employment. Second, at the end of the millennium there were some 114,000 textile and clothing firms which in clothing in oparticular tended to fall into three categories: enterprises concentrating on design and marketing; manufacturing subcontractors; and integrated firms (involved in creativity, design, and the making and selling, perhaps via their own distribution networks, of clothing. Third, the structure of the industry is a result of a number of distinctive market and technological factors: the fact that demand grows slowly, is often unstable and rapidly changing; the fact that the product range is limited and subject to rapid obsolescence; and the limited scope for economies of scale outside of design and for learning curve effects. In these circumstances firms tend to be small, while small firms in turn have limited access to finance. Fourth, however, the size distribution of firms reveals some concentration, due to the unprecedented recent growth of mergers and acquisitions, and changes in distribution leading to a shift from producer-driven to buyer-driven value chains. Fifth, these structural features help explain globalization and the new international division of labour. Globalization involves a relocation of activities that is associated with increased trade, with a concentration of low value added per head activities in low wage countries and a specialisation of richer countries in knowledge-intensive design and distribution, while this new division of functions is reflected in the fact that the average value of EU clothing imports stood at €16.5 compared with an average export unit value of €34.8. Finally emphasis was placed on the sharp differences in the economic performance of the textiles and clothing sectors across different EU member States, which itself reflects the differential success of strategies for upgrading which rely on technological and organisational innovation and quick response, outward processing and delocalisation to find cheaper sources of materials and labour in cases where enterprises seek to compete on costs, functional upgrading and product upgrading.

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