South Bank University London

CENTRE FOR INTERNATIONAL BUSINESS STUDIES

THE COMPETITIVENESS OF THE EUROPEAN TEXTILE INDUSTRY

Maurizio Giuli

Paper Number 2-97

RESEARCH PAPERS IN INTERNATIONAL BUSINESS

ISSN NUMBER 1366-6290

THE COMPETITIVENESS OF THE EUROPEAN TEXTILE INDUSTRY

Maurizio Giuli

Abstract

This paper sets out to assess the ability of Europe's textile manufacturers to respond to the competitive challenge of low-cost producers from Eastern Europe and the Far East. In doing so it utilises Porter's framework of the competitive advantage of nations to analyse the changing conditions under which the industry operates. The paper highlights the differing structure of the textile industry in the UK and Italy in order to demonstrate that the impact of competition may vary across the EU market as a whole. The conclusion suggests that the ability of European producers to resist the threat from low cost producers of textiles will lie in their ability to extend the strategy of developing high value added products directed towards the top-end of the market to embrace the middle range of consumers and it argues that the industrial groupings which feature collaborative but independent clusters of firms are most likely to succeed in this objective.

I. Introduction

Textile manufacture is a highly adaptable and readily transferable form of activity, which recently has experienced an inexorable movement from Europe eastwards to Hong Kong, Japan, Korea and other regions of the Pacific Rim.

The intense international competition from newly industrialised producers has driven many European producers out of business. Despite the efforts of West European manufacturers to retain market share, increasing penetration is evident,[1] which has involved a marked secular decline in levels of output and employment in the countries of the EU community overall. In spite of its reduced size and its diminishing contribution to GDP, the textile (besides clothing) industry still remains a considerable employer of people, being ranked 11th in terms of expenditure on labour services in the EU manufacturing sector in 1992 (EUROSTAT 1995). In the EU the total employed in textiles and clothing is estimated at 2.7 million, of which 1.5 million are employed in textiles alone.

Official statistics clearly show that the European textiles sector has been steadily losing ground, as measured by share of world trade, despite the defensive intent of the various provisions of four successive Multi-Fibre Arrangements in textiles and clothing. However, the textile industry continues to be significant to the European economy, especially to some countries, and further decline would impact painfully on many EC economies.[2] For this reason there is growing concern in Western Europe over its ability to compete with manufacturers

1 To some extent the level of such incursions into Europe's markets has been supplemented by the delocalisation of West European textile and clothing manufacture to other regions of Europe where it is possible to exploit the advantage of low cost but increasingly skilled labour.

2 By far the greatest contribution to the total turnover of the EU textile industry has been made by Italy, accounting for about 36% in 1992, followed by Germany (18.3%), France (16.7%) and UK (11.1%). These four countries accounted for nearly 80% of EU textile production in 1993.

located in regions outside Europe, where not only is there the advantage of low labour input costs to be exploited, but also an increasing availability of highly skilled labour. No longer is West European industry able to protect itself by a superior technical ability, or certainly not for long; and the list of costly environmental and welfare requirements of EU regulations is encouraging manufacturers to look for alternative means of maintaining profitability.

One of the main purposes of the present work is to analyse whether the textile industry can survive and prosper in advanced high-wage economies, even in the face of the increasing pressures coming from the developing countries, or whether it is destined to be a *"sunset industry"*.

Many processes in textile and clothing production tend to be intensive in the use of unskilled labour, which is supposed to be relatively scarce in the advanced economies and abundant in the developing economies. This moves the comparative advantage toward the latter economies, in particular the newly industrialising countries (NICs), where now is to be found a modern, highly productive and thriving textile industry.

However, the relative abundance of cheap labour by itself, although important,[3] is not a decisive source of competitive advantage if it is not supported by other factors.

The thesis followed in the present work is that the competitive advantage in any industry is the result of a synergy between several factors, and not by a single one. The framework followed is based on the application of the Porter's "Competitive advantage of nations" theory, to the EU textile industry. The four

3 As Porter (1990:144) has pointed out, "in natural resource-intensive industries and those with low levels of technology, factor costs are frequently decisive".

"determinants" of the *"diamond"*, notably "Factor endowment", "Demand conditions", "Supplying and related industries" and "Rivalry conditions", will be used to compare two of the leading textile industries in Europe, Italy and the UK, in order to identify the competitive strengths and weaknesses of the European textile industry and to understand its future prospects.[4]

II. Factor Conditions

Each nation possesses what economists have termed *"factors of production"*. Porter considers as factor of production the following broad categories: (-) *Human resources* (quantity, cost of personnel, skills etc.), (-) *Physical resources* (land, water, mineral deposits, climate conditions, geographic location etc.),
(-) *Knowledge resources* (the nation's stock of scientific, technological and market knowledge bearing on goods and services), (-) *Capital resources*, and
(-) *Infrastructures.*

Given that: *a)* each nation is endowed with differing stock of factors and *b)* that the mix of factors employed differ widely among industries, the competitive advantage of a country in a specific industry results from the combination of these two conditions.

But, not all the factors have the same importance in order to determine the sustainability of a nation's competitive advantage. In relation to this Porter makes

4 Both Italy and the UK have an historical tradition in textiles and are still two of the main producers within the European Union. However, their development pattern, their structure and their competitive strategies are very different and, in one sense, can be considered at the two opposite extremes of the European industry.

a distinction between “*Basic*” and “*Advanced*” factors[5] and between “*Generalised*” and “*Specific*” factors.[6]

The most significant and sustainable competitive advantage results when a nation possesses factors needed for competing in a particular industry that are both advanced and specialised. In contrast, competitive advantage based on basic/generalised factors is unsophisticated and often fleeting, since it is easily imitable from the less developed countries, or difficult to add further value.

For its characteristics, the textile production primarily requires basic and generalised factors, such as unskilled labour, although there are some activities within it (such as technical and synthetic production) which need advanced and specific factors. This means that the forms of competitive advantage tend to favour the developing countries, where these kinds of factors are cheap and abundant. Tables 1 and 2 show the wide differences existing among countries[7] in labour cost, expressed respectively in terms of hourly wage costs and as the cost per minute of production of a standard textile item.[8]

This finding is in line with the Heckescher-Ohlin-Samuelson model of international trade, according to which, each country would specialise in

---

5 “*Basic Factors*” include natural resources, climate location, unskilled and semiskilled labour, and debt capital, while, “*Advanced Factors*” include modern digital data communications, infrastructure, highly educated personnel, University research in sophisticated disciplines.

6 “*Generalised factors*” include the highway system, a supply of debt capital, or a pool of well-motivated employees with college education. “*Specialised factors*” involve narrowly skilled personnel, infrastructure with specific properties, knowledge bases in particular fields, and other factors with relevance to a limited range or even to just a single industry.

7 Among the European countries the differences in labour costs are narrowed, but not insubstantial. In UK, for example, the KSA figures is at least 30% less than in Italy, and 40% less than in Germany and Denmark. However, this is by far to admit a competitive advantage of UK over its main European competitors. First, most of the EU producers compete on the top-end quality market, where lower is the importance and the influence of the labour cost. Secondly, even in the low and middle markets, where the prices and therefore the costs are important, a safe of 30-40% in labour cost does not involve a relevant competitive advantage, since it represents no more than the 30-35% of the wholesaling price and less than 10-15% of the retailing price.

8 This second figure can be considered more accurate than the simple “hourly wage costs”, since it takes into account the differences in terms of productivity of workers existing in the various countries.

production, and thus export, commodities which require more intensive use of the country's relatively abundant factors of production, and import those commodities which employ factors that are relatively scarce.

Many empirical studies based on time-series evidence seem to support this theory.[9] The share of textile and clothing in manufacturing exports declines at an increasing rate as a country's income per capita rises. Developing countries are supplying more than half the world's exports of clothing and a third of global textile exports, double their shares of the late 1960s. This is reflected in the dramatic increase in the penetration of textile imports into industrial country markets and consequently the worsening of their trade balance for these products.

In Europe, for instance, the share of imports of textiles from developing countries is rising twice as fast as equivalent EU exports to the region (KSA 1993).[10] The EU trade balance in textiles has been in deficit since 1987[11] and gradually has widened to reach the level of 2,914.7 million ECU in 1991. Over the period 1990 to 1993 as a whole, the value of textile exports amounted to only 70-80% of imports.

9 Many empirical studies are available with such evidence. For more detailed evidence, see Anderson (1992).

10 Asian countries, which has experienced a high grow rate in exports to the EC are India, Indonesia, Pakistan, and China.

11 Although accordin to EUROSTAT (Eurostat 1993) the EU textile still has a trade surplus in manufactured textile trade.

Table 1. Hourly wage costs in the textile industry, selected countries, 1993 (US$)

Denmark	17.29	Taiwan	4.61
Germany	17.22	Hong Kong	3.85
Belgium	16.20	Turkey	3.29
Sweden	15.84	Portugal	3.03
Netherlands	15.41		
France	14.84	South Korea	2.71
Italy	12.31	Mexico	1.08
Japan	10.64	Morocco	1.06
		Malaysia	0.77
Finland	9.25	Thailand	0.71
UK	8.42	Philippines	0.53
USA	8.13	Indonesia	0.28
		India	0.27
Ireland	7.44	Vietnam	0.26
Spain	6.41	China	0.25
Greece	5.85	Bangladesh	0.16

Source: European Commission, 1995, from Majmudar M. 1996

In an effort to reverse this growing deficit in textile trade, EU producers have attempted to develop more sophisticated forms of competitive advantage that can be sustained longer.

Their efforts have been directed in two main directions. On the one hand they have tried to move the source of competitiveness away from low cost, towards other more sophisticated factors, such as design, fashion, new materials etc. On the other hand, they have invested heavily in research and development and in technology in order to produce new techniques of production which enable them to reduce the incidence of labour cost.[12]

12 Among the companies which followed this path, it must be remembered the Benetton case.

Thus although, the developing countries have a wide competitive advantage over the West European countries in terms of basic "factor conditions", there are reasons to believe that the latter countries may circumvent this disadvantage by exploiting their competitive advantage in the other, more advanced factors.

Table 2 Adjusted Cost per minute to produce a standard textile item, selected countries, 1995'

Denmark	0.74	Tunisia	0.23
Germany	0.58	Morocco	0.22
France	0.57	Turkey	0.21
Italy	0.48	Hungary	0.25
Spain	0.41	Hong Kong	0.25
		India	0.24
Greece	0.35	Indonesia	0.21
Ireland	0.35	Thailand	0.20
UK	0.34	Vietnam	0.18
Portugal	0.29	South Korea	0.15
		China	0.14

Source: Compiled from KSA Factors Cost Comparisons Study, 1995

III. The Demand Factor

The second broad determinant of national competitive advantage in an industry is home demand conditions of the industry's products. In particular two broad attributes of home demand are significant:

i. the composition of home demand;

ii. the size and pattern of growth in demand;

III.1. The Composition of Home Demand

The home demand has an important impact on the local firm's ability to perceive and interpret buyer needs, because it is the most acutely felt and easy to understand by the firms. The composition of local market, therefore, can stimulate a nation's competitive advantage if it gives local firms an earlier picture of buyer needs and/or pushes local firms "to innovate faster and achieve more sophisticated competitive advantages" (Porter, 1990: 86) compared to foreign rivals.

During the 1970s and early-1980s the relative stability of demand (when styles changed no more than twice a year) in the main markets allowed production to be planned over a number of months. Long-run orders of standardised products promoted *price-competition*. This led to a transfer of price sensitive production away from European suppliers.

The 1980s was a period of fragmentation and multiplication of European life styles. As clothing and furnishing are among the vehicles by which these life styles are expressed, the result was a massive proliferation in the range of styles, patterns and colours of textile goods.

Disposable fashion was enormously popular in the 1980s as fashion cycles accelerated and increasing consumerism made one-season purchases seem normal. Competition transformed significantly, focusing more on style, quality and responsiveness to changing consumption preferences and less exclusively on price.

While this process has generally been a demand-led phenomena, European textile and clothing producers have been keen to promote its development because an acceleration of fashion-cycles allows them to have a competitive advantage over their low cost rivals from the developing countries.

The high rate of fashion change and a highly segmented demand is certainly more easily satisfied by local producers than by those several thousand miles away. The competitive advantage of local producers include: *(i)* speed of response to changes in demand; *(ii)* lower distribution costs; *(iii)* lower inventory costs. In addition, a more segmented market placed a premium on creativity, originality and, frequently, on quality. Consumers have increasingly come to associate goods bearing a brand name with style and quality. This marginalized “unknown” producers whose primary competitive advantage was based on low wage costs and/or long production runs. Finally, as the industry became increasingly demand-led and fashion oriented, retailers placed an increased emphasis on proximity, seeking suppliers who were able to respond quickly to style changes, and capable of innovation in design coupled with high standards of quality and reliability.

The overall factors allowed to EU producers to retain their competitive position and even more to expand their influence in other markets.

Among the characteristics of the composition of home demand, three are particularly significant:

i) *Segment structure of demand* - The more significant role of segment structure at home is in shaping the attention and priorities of a nation’s firms. Among the European countries, for example, the Italian textile companies are lead competitors in the top end, fashion-led segments, thanks to a domestic market which pays more attention to design, quality and creativity, than to price. Italy indeed, has the highest per capita rates of spending on clothing as a proportion of total household spending in the EU (9.3% in 1990). On the other hand, the UK firms are mainly specialised in particular market niches characterised by low-fashion content and middle-of-the-road quality, since their domestic market is less fashion-led than the Italian one (the per capita rates of spending on clothing as a proportion of total household spending was estimated at 5.9% in 1990 - Pitt, 1993, p. 24) and British shoppers have a reputation for putting low price before design.

Table 3. Per capita expenditure on textile and clothing products, 1991

	Men clothing $	Women clothing $	Children clothing $	Total family clothing $	Furnishings $	Household Linen $	Total Household goods $	Total Family purchases $
Belgium	1,861	821	270	2,936	61	65	126	3,040
Denmark	2,099	895	231	3,274	45	77	121	3,471
Germany	1,568	798	290	2,646	51	52	104	2,730
Greece	1,554	805	366	2,732	36	59	94	2,782
Spain	1,586	676	332	2,590	42	56	98	2,657
France	1,724	981	283	2,968	66	96	161	3,097
Ireland	1,254	767	236	2,323	57	56	113	2,487
Italy	1,948	928	386	3,248	64	72	136	3,359
Luxemb.	1,550	900	286	2,726	54	79	132	2,935
Netherl.	1,515	612	266	2,380	39	44	83	2,444
Portugal	1,637	512	335	2,567	32	41	74	2,627
UK	1,072	626	180	1,848	53	56	109	1,962
Average EU	**1,620**	**781**	**289**	**2,690**	**50**	**62**	**112**	**2,802**

Sources: Comitextil, IMF

ii) *Sophisticated and Demanding Buyers* - The more sophisticated and demanding buyers are for the products, the more pressures the local firms are under to meet high standards in terms of product quality, features and service. Proximity, both physical and cultural, allows close contact in the development process and, when the buyers in question are clothing companies, close proximity creates opportunities to engage in joint development work in ways that are difficult for foreign firms to match.

This is what happens in Italy, where the close relationship between clothing companies and textile companies allows collaboration in the development of new fabrics, colours and models which in turn underlies the success of their competitive strategies. On the other hand, the high level of sophistication of Italian consumers, forces them to create new fashion waves and therefore clothes with various fabrics, design, materials and colours.

Besides the end users and the clothing firms, the role of sophisticated and demanding buyers can be played also by the "distribution channel".

Retailing represents the final stage in the various processes between the purchase of a product and its original conception and production. The particular conformation by which the retail sector is organised in any particular region or country, and the objectives which the retailers wish to achieve, are therefore critically important to the manufacturing sectors in the production chain between fibre and finished product.

The main opportunity for the EU industry lies in serving the retail sector and this relies on the building of strong relationships with retail organisations. Several aspects must be considered.[13]

Some changes in retail distribution systems are likely to have a major impact on manufacturing firms. One highly probable development in the 1990s is the *more permanent and more demanding relationships between manufacturers*

---

13 "There is a strong case for the building of co-operative relationships between the manufacturer supply chain and the retail sector, which requires an examination of retail objectives and log-term policies. There remains a case to answer that a policy of profit maximisation can lead to long-term damage to the surrounding economy and to the social communities which the retail sector services and relies on, that a policy for profit optimisation might prove in the end to be the more profitable one" (A. Walker, 1995, p.49)

and retailers (See Table 4). Comments from retailers interviewed for this study (Marks & Spencer, and Coin) indicate that some have recognised the value of developing long-term, collaborative relations with a small number of trusted supplier firms who can meet their quality and delivery schedules.

Table 4. The issues which are shaping retail buyer-supplier links

- **RETAIL BUYERS ALL VALUED A CLOSE, LONG TERM RELATIONSHIP WITH THEIR SUPPLIERS**
- **PROXIMITY TO THE RETAILERS' HEADQUARTERS WAS OF MINOR IMPORTANCE**
- **A MAJOR REASON FOR SOURCING FROM OVERSEAS WAS THE AVAILABILITY OF COMPARABLE PRODUCTS AT LOWER PRICE.**
- **THERE WAS A DESIRE TO SOURCE INTERNALLY WHERE POSSIBLE. THE VALUE OF THE SPEED OF DELIVERY AND FLEXIBILITY OF HOME SOURCING ARE IMPORTANT.**
- **NATIONAL SUPPLIERS WERE COMMONLY ASKED TO PRODUCE SMALLER BATCHES WITH HIGHER DESIGN INPUT THAN THEIR OVERSEAS COUNTERPARTS**
- **EXCHANGE RATES WERE AN IMPORTANT FACTOR IN SOURCING DECISIONS.**

A second trend concerns the strong development of *franchising* in many European countries (UK, Germany, Belgium, Italy). This form of retail has proved especially useful to textile and clothing manufacturers allowing them to penetrate the retail network without losing their autonomy. The Benetton operation is a well-known example of franchising, which has allowed the manufacturing operation to retain a high degree of control over the distribution network.

The increasing *concentration of retailing* with the spread of outlets owned by the largest retail enterprises is another feature which is characterising the distribution system (See Table 5). The more concentrated retail activity, the greater is its ability to influence and even to control the policies of their suppliers. This aspect is particularly perceptible in UK, where there exists the most concentrated distribution system of Europe and where the incidence of retailers over local producers is very powerful.[14] Over the last decade, the main UK retailers have begun to co-operate with their textile suppliers in order to achieve a long-term relationship able to compete in fashion-led markets. This allows both parties to achieve better performances in flexibility and quality, therefore to compete in the mid/up-market. Moreover, the international strength of the UK retailers gives a competitive advantage to those local firms which have achieved the "preferential supplier" status with them.

14 Over the 1970s and 1980s, their policy to rely on "value for money" products rather than on style and quality, pushed the producers to pursue lower cost strategies, based on the research of economies of scale, mass production and vertical integration. The result was the uncompetitiveness of the UK textile manufacturers. Their price-competitive in the middle market over their EU counterparts was not sufficient to assure them a competitive advantage, since that market was dominated by the cheaper products of developing countries.

Table 5. Market Share of Clothing Retailers in main EC Countries. Percentages.

	UK	France	Belg.	German.	Spain	Italy	Portug.	Greece	Avg. EU
Indep. Retail.	20	38	40	44	60	70	76	84	54.00
Chains	28	14	17	28	7	12	8	10	15.50
Dept.Stores	31	10	11	12	15	5	0	0	10.50
Cent./Hyper Mkts	1	18	13	3	4	1	4	3	5.75
Mail Order	10	10	9	10	0	1	2	0	5.25
Other	10	11	10	3	14	11	10	3	9
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Source: EG-Studies KSA / Texco, 1990

The *cross-community extension of national and multinational distribution* companies is a further tendency which is underway in the EU retail arena. Marks & Spencer and Benetton have led the way, and more retail multiples are following.

Concentration and internationalisation of distribution have already had, and will continue to have, repercussions on sourcing patterns. Manufacturers who already either supply own-label products or subcontract to the chains will find themselves in conditions of increased international competition. They will need to defend established markets against predators. Conversely, dynamic firms looking for new opportunities will seek to link into new patterns of distribution, either by direct dealing or through intermediaries. By implication, they will need to extend their information-gathering methods, to identify opportunities beyond their home customer base and find efficient ways of exploiting them. Developing local and international networks is one solution to these needs. Indeed changes in the linkages between manufacturers and distributors may well constitute the major innovation within EC markets over the coming years.

iii) *Anticipatory Buyer Needs* - A nation's firms gain advantages if the needs of home buyers anticipate those of other nations. Anticipatory demand is often related to buyers' sophistication, because buyers are generally early adopters of new products that will come to be demanded elsewhere. The French and Italians are known for their sophistication about clothes and household textiles. Their fashion has a strong image and is imitated in other countries, enabling their firms to be fashion-led, by taping the positive *"country-of-origin effect"* (COE).[15]

III.2. Demand Size and Growth Pattern

According to Porter, "the composition of home demand is at the root of national advantage, while the size and pattern of growth of home demand can amplify this advantage by affecting investment behaviour, timing and motivation" (Porter, 1990: 97).

In the textile and clothing industries however, the quality of demand is far more important than the volume of sales in determining competitive advantage, because the economies of scale are modest, as well as the investments in R&D.

Conversely, the rate of growth of demand plays an important role in determining the rate of investment. Rapid domestic growth permits a nation's firms to adopt new technologies faster, with less to fear from making their current investments obsolete, but when the rate of growth of demand is moderate, or even negative, individual firms tend to be more resistant to embrace new technologies that make existing facilities redundant.

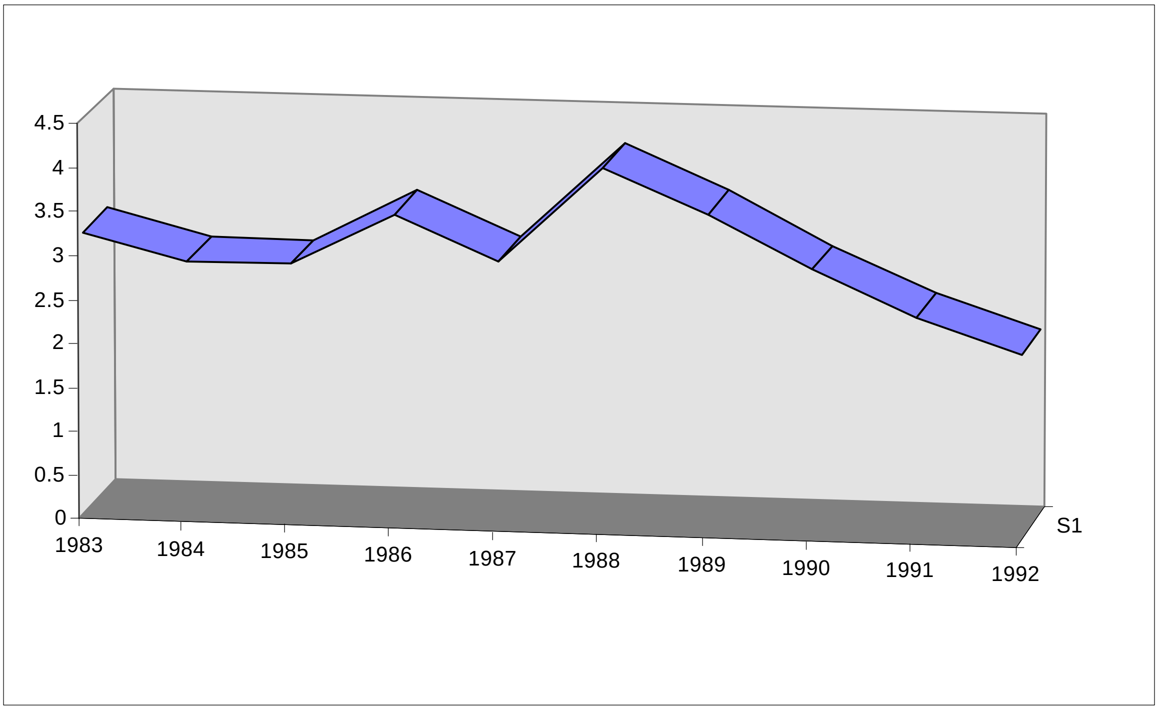
The EU textile industry reflects this relation. Indeed, in recent years, the value of investment in this industry has shown a steep fall, after several years of sustained growth.[16] Investment decreased by an annual average of nearly 6% between 1990 and 1993, in current prices. In 1993, investments was at its lowest since 1988 (See Fig. 1). Overcapacity in the highly capital-intensive short-staple sector of the textile industry, at a time of recession, has been among the main reasons for the fall. One consequence of the contraction of investments is that the remaining capacity is being utilised more and more heavily. For example, a recent survey illustrated that capacity utilisation in the UK actually increased between 1987 and 1992 from 88.8% to 93.8%, and in the European industry as a whole it has increased from a low point of 77% in 1993 to 82% in 1994.

---

15 The *country-of-origin effect* "can be defined as any influence that the country of manufacture has on a consumer's positive or negative perception of a product." (P.R. Cateora, 1996, p. 384)

16 In recent years, the EU teztile industry has had to face decreasing consumption in several end-markets. Apparent consumption of clothing decreased by nearly 6% in volume terms during 1992-3. EU consumption of household textiles and floors coverings contracted by 1.3% in volume between 1992 and 1993. These trends are compounded by the fact that in recent years the share of household expenditure on clothing has tended to decrease slightly, combined with the worsening balance of trade in clothing and depressed general economic conditions. (EUROSTAT, 1995, p.11)

Figure 1. Ratios Investments / Turnover in Textiles and Clothing in Europe. 1983 - 1992.



Source: Federtessile

Some authors argue that early saturation of local demand encourages firms to export. This hypothesis, however, is not always verified by empirical evidence. Indeed, some countries within the Europe (such as UK) experienced a slow-down in domestic demand before others (such as Italy), but their export growth rate did not increase, remaining lower than the Italian throughout. Another example is provided by the comparison between EU and East Asian countries. As a group, the latter countries are achieving a greater export growth than the EU countries, although they also have a greater expansion rate of domestic demand.

Therefore, the slow-down of domestic demand experienced by European markets in recent years will not necessarily stimulate the local industry to innovate and to upgrade its competitive position. On the contrary, it might play an unfavourable role, by reducing the investment rate and thus act to compromise its future competitive power.

However, it must be remembered that the EU market still remains one of the greatest world markets and that this feature will act in favour, ultimately of local producers. Production in the textile industry has expanded at an average annual rate of 2.1% over the 1980s. Between 1988 and 1992, the turnover of the EU textile industry grew steadily in real terms when it increased by 13.7%. But gross margins appear to have fallen from 27.3% to 25.8% of turnover over the five years, demonstrating that in general the apparent growth in turnover has been at the expense of profitability. Production started to decrease slightly in 1991 and has declined increasingly since then. In 1993, it fell by 10% in current prices, but it still accounted for 3.1% of value added generated by EU manufacturing industry (Eurostat 1995).

IV. Supplying and Related Industries

The presence of competitive supplier and/or related industries in a nation is the third determinant of national advantage. A company's *value chain*[17] for competing in a particular industry is embedded in a large stream of activities that Porter terms the *"Value System"*.[18] Competitive advantage is increasingly a function of how well a company can manage this entire system.

17 The *value-chain* is made-up by all the activities performed in competing in a particular industry which contribute to buyer value. "A firm's value chain is an interdependent system or network of activities, connected by linkages". (Porter M.E., 1990, p. 41)

18 The *value system* includes suppliers, who provide inputs to the firm's value chain. (Porter M.E., 1990, p.42)

Local-based suppliers provide linkages and interdependencies between firms and their suppliers, which allow a better co-ordination and integration of related activities. According to Porter (1990:43), “the ability of a nation’s firms to exploit linkages with home-based suppliers and customers will prove important to explaining the nation’s competitive position in an industry”.

Competitive advantage emerges from close working relationship between world-class suppliers and the industry. “Suppliers help firms gain quick access to information, to new technologies and perceive new methods and opportunities. Suppliers also tend to be a conduit for transmitting information and innovations from firm to firm. On the other hand, firms have the opportunity to influence suppliers’ technical efforts as well as serve as test sites for development work. The exchange of R&D and joint problem solving lead to faster and more efficient solutions” (Porter, 1990: 103).

The European industry seems to offer good opportunities for the development of these forms of linkages in textiles. On the one side, in the continent there is a wide concentration of some of the most competitive textile machinery producers, and some chemical giants, such as ICI, which are able to provide new technologies, new materials and fibres to local producers. On the other, some key features of the industry-structure promote the ideal conditions for a close working relationship between firms. In particular, two of them are important.

Firstly, the EU textile sector is mostly composed of *small and medium sized firms.*[19] Besides a limited number of large, vertically integrated firms (such as Courtalds, Coats Viyella, Marzotto etc.) the major part of the industry is

19 In 1993, the EU textile industry was made up of nearly 47000 firms, of which 72% where firms with less than 20 employees. These smaller firms employed 18% of the total workforce and generated 15% of total turnover.

composed of small firms.[20] The average number of employees per enterprise is very small and ranges from 34 in the UK to 16 in Italy. From the early 1980s, the structure of enterprises has become increasingly fragmented and, in the last five years, the average number of employees has fallen from 27 to 24 people.

It has frequently been stated that this feature could have serious implications for future competitiveness in Europe, since increased fragmentation of the industry may bring with it greater vulnerability to both price competition and higher quality production when continued by new investment from firms outside Europe, which are not only capable of enjoying economies of size, but are better placed in regions of cheap labour. However, in textiles industry the *firm size* is not very relevant in determining the level of competitiveness, since in this sector there exist no great facilities for economies of scale and the demand is very volatile. Therefore, it is more important for producers to be flexible and able to respond quickly to qualitative and quantitative changes. Moreover, when networks of small firms, collaborate and pool together their resources and knowledge, instead of acting in isolation from one another they can become at least as competitive as the large companies.

Secondly, the high level of *concentration* of this sector *at a regional level*, in combination with the frequent use of *productive decentralisation,*[21] creates the conditions for that phenomenon that Marshall (1966) termed "*industrial*

---

20 The concentration level in the industry, however, varies strongly between different countries. Indeed, the UK has by far the most concentrated textile industry, where three large firms account for more than half of all textiles output in the country, while the Italian textile industry is far more dominated by medium and smaller-sized firms. The advantages that some small firms have over many large ones in the textile and clothing sectors tend to be seen in terms of flexibility, creativity and fast response to fashion changes.

21 *Productive decentralisation* is characterised by a high level of disintegration of manufacturing processes, which are redivided among firms specialising in one or more stages of the production process. As Lanzara (1987, p.47) pointed out, "a *decentralisation system* is characterised by a large number of small and very small subcontractors or suppliers and by the final manufacturing firms. These latter firms carry out the assembling of the different parts that make up the product, or are responsible for the final stages of manufacturing, and the commercialisation of the product."

district".[22] Most of these "textile districts" (in particular in some countries, such as Italy) are characterised by a high local division of labour between firms, manifested in task specialisation in relatively small components of the value-adding chain (See Figure 2). This allows each firm to specialise in one phase of the production process and/or to concentrate on just one industrial activity or market.

An inter-firm division of labour, based on subcontracting by specialism within "industrial districts", has led to scale economies secured in a quite different way to "traditional" large firm strategies. Rather than trade on capacity *per se*, small firms exploit both highly specialised skills and low administrative costs, and a capability to respond rapidly to changes in demand. This allows them to catch up a high level of interdependence, and thus to profit from the so-called *"external economies"*.

As distinct from vertical integration where a number of successive manufacturing stages are undertaken within a single company, this type of integration occurs in a context of dispersed ownership where producers who are specialised in a single manufacturing activity successively pass products downstream for further processing.[23] In other words, the vertical integration of specialised firms over the

---

22 Alfred Marshall was the first to coin the term *"industrial district"*, by which he meant "a concentration of large numbers of small businesses of a simila kind in the same localty" (Marshall, 1966, p.230).

After that, many scholars analysed the phenomena and in some cases they coined new terms ("milieu", "network", "clusters", "system areas", etc.) in order to highlight the different aspects of it.

For further details, see Marshall 1966, Garofoli G. 1983, Brusco-Sabel 1981, Beccattini (1989), Porter M.E. 1990, Bull-Pitt-Szarka (1993).

23 The most famous example of the combination of high volume merchandising achieved through the co-ordination of small producers and retailers is that of the Benetton empire. Benetton has exploited this type of structure and is a prime example of a firm operating at the centre of a network. Benetton subcontracts most of its production (70-80%) to over 200 small specialist firms near its own plants. The diverse skills of these firms are channelled within the network. Many of the companies are immersed in a culture of short production runs for a variety of customers. Benetton harnessed the synergies with the structure through an efficient central design, marketing and distribution facility. All Benetton shops, factories and subcontractors are linked by an on-line computer system. Computerisation has three major advantages: it speeds transmission of orders; it facilitates management of inventory; and it permits "real-time" analysis of market trends. Fashion, style and

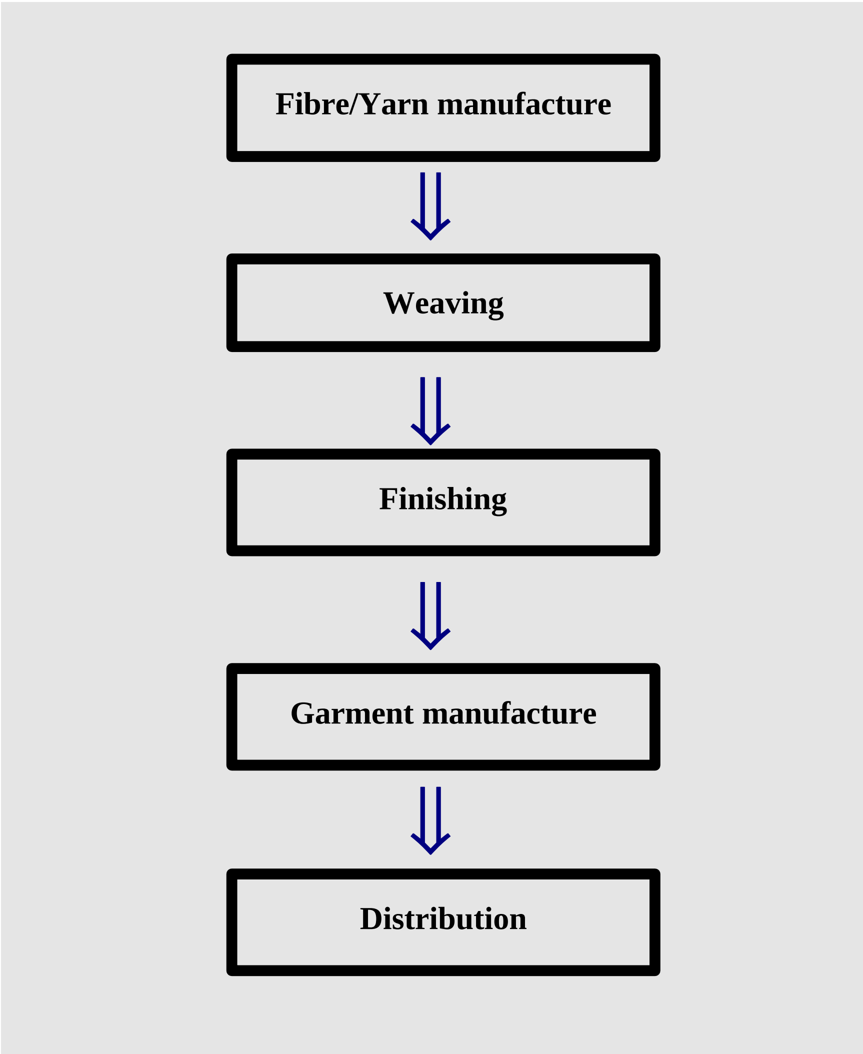
whole product value-chain ("value system") and their close working relationship allows firms to share information, to co-ordinate their activities and to compete externally as a single system even though it is made up of many small firms.

In some cases, the presence of regional *textile machinery-manufacturers* alongside the concentration of textile producers, has allowed a close collaboration between them which upgrade constantly their efficiency and create a very competitive model, difficult to imitate. The technology has been developed according to specific requirements and has taken into account the firms' operational characteristics. In this way it has been possible to create technology suitable for relatively simple manufacturing operations and flexible manufacturing schemes, which have contributed in no small measure to the achievement of a competitive pattern based on high quality, high capacity of adaptation to market changes and differentiation of products.

---

the ability to satisfy diverse and rapidly changing markets have been the major forces propelling the expansion of Benetton.

Figure 2. A typical production route in textiles



In synthesis, the "industrial districts" not only profit from flexible specialisation of member firms, but also promote the innovation process and achieve a degree of mutual co-ordination which resembles that of large integrated firms, while retaining their capacity to instigate innovation and react quickly to changes.

By contrast, when firms are locally concentrated, but act independently of one another, controlling all the major necessary stages of production as is the case in most of the UK's clusters, they tend to suffer the disadvantages of limited size without enjoying the advantages that the "district atmosphere" can offer them.

V. Domestic Rivalry

Porter has consistently stated the importance of the competitive mechanism in the survival and "upgrading" process. A group of capable domestic rivals generate a fertile environment for creating and sustaining competitive advantage that is difficult to replicate through competition with foreign rivals. The role of the former three determinants (factor endowment, sophisticated buyers and world-class suppliers) in stimulating improvement and innovation is accentuated by the active domestic rivalry.

Rivalry among a group of domestic competitors creates pressures to improve and innovate and may well lead to more sustainable national advantage since any particular source of competitive advantage may not endure for long periods.

The structure of the EU textile industry, characterised by a geographic concentration of producers in a single city or region, reinforces the local rivalry. A mixture of collaboration and competition within and across networks operating within the industrial districts provides the best environment for local industry to thrive.

With reference to geographically concentrated industrial cluster, Porter (1990: 170-1), argues that: "... loss of domestic rivalry is a dry rot that slowly undermines competitive advantage by slowing the pace of innovation and dynamism. ... If rivalry ebbs ... there is tendency for the local cluster to become insular, a closed and inward-looking system."

Within the textile districts, competition takes place in two forms: *a)* between similar firms within the networks (*"lateral competition"*); and *b)* between two networks as entities (*"inter-network rivalry"*). Even though the lateral competition rarely reaches levels above which it can compromise and destabilise the network itself, the inter-network rivalry is very often fierce, because of many overlaps existing, both in terms of products and market segments.[24]

Among the positive effects of the local rivalry[25] in order to upgrade the competitiveness of the EU textile industry it must be remembered:

i. a strong local competition forces firms to seek higher-order and more sustainable sources of competitive advantage. The presence of domestic rivals nullifies the types of advantage that come simply being in the nation;
ii. a group of domestic rivals tries alternative approaches to strategy and creates a range of products and services that cover many segments;

---

24 According to some scholars, competition between rival firms can be replaced by competition between rival networks.

25 This is because of a variety of reasons:

- Strong domestic competitors creates particularly visible pressures on each other to improve;
- Rivalry among domestic firms often goes beyond the purely economic and can become emotional and even personal;
- Domestic competitors fight not only for market share but for people, technical breakthroughs and, more generally, "bragging rights";
- Vigorous local competition pressures domestic firms to sell abroad in order to grow;
- Domestic rivalry forces nation's firms to seek higher-order and more sustainable sources of competitive advantage. The presence of domestic rivals nullifies the types of advantage that come simply from being in the nation.
- The process of domestic rivalry also creates advantages for the entire national industry that are external to any particular firm. A group of domestic rivals tries alternative approaches to strategy and creates a range of products and services that cover many segments.
- The benefits of domestic rivalry are greater still when account is taken of the ways in which a group of domestic rivals can favourably affect the availability of home-based suppliers, the pool of skilled human resources, and other parts of the diamond.

iii. the process of domestic rivalry pressures domestic firms to sell abroad in order to expand themselves.

VI. Conclusions

As international competition increases, with the emergence of new "players" such as China and eastern Europe, firms must establish a strong base from which to compete, one which recognises that successful competition can no longer hinge on cost advantage and will increasingly centre upon market proximity, quality, design and flexibility. Smaller, under-resourced firms will be unable to improve efficiency, quality, flexibility and market awareness unless they have access to vital intelligence, facilities and services.

A key feature emerging from the experience of the EU textile industry is the importance of local agglomerations of activity. The large number of spectrally related firms in the various textile districts has enabled the development of a sophisticated division of specialisation. The wide range of services and products on offer has enabled local firm linkages to develop. This is important since it allows the development of an integrated supply chain, from sourcing of fabrics through to final sale. Such localised buyer-supplier-sourcing chains make easier the quick response to fast fashion cycles and production of small batches of products manufactured and distributed with short lead times, thus giving firms a considerable competitive advantage over foreign suppliers.

At present, the EU textile industry is uncompetitive in terms of factor cost (in particular labour cost), but is better positioned in terms of other factors, notably composition of demand, local supported industries and local rivalry. This allows local producers to be competitive in the top-end quality, high-fashion segments of the market.

To better understand the future perspectives of the textile industry in Europe, two questions must be considered.

a) To what extent is the top-end market large enough to encompass all existing producers from developed countries?
b) Can the competitive advantage of European industry in the top-end market be considered safe from the advance of developing countries?

Probably, the future fate of European industry is concentrated in these two questions. At moment there are no elements to predict the future, but it is possible to assume that the competition in the top-end quality market is becoming more and more fierce. The move-up market by most of EU producers has intensified the struggle to retain market share. In the future, much will depend on how the market evolves.

Over the 1980s there has been an upward movement of the demand from low and middle to the top-end market. This has created room for the EU producers and therefore has allowed them to avoid the head-on engagement with the NICs manufacturers.

In the future, if current trends were unchanged, then there would be further opportunities for EU companies to survive and even to expand themselves. However, reasons are emerging to suggest that the market is now moving in the opposite direction.

During the first half of 1990s there has been some marked changes in the customer profile, which might involve changes in the competitive arena.

Firstly, there has been an *increase in market volatility*. The customers have become more unpredictable in their preferences. This has increased the uncertainty of market conditions, whereby retailers prefer to place smaller, more frequent orders rather than to commit themselves to large orders. Inevitably, this places particular demands upon manufacturers in terms of order-book unpredictability and required flexibility in production. Small firms, proving more nimble in adapting to rapidly changing markets, are generally more adept at responding to fluctuating order sizes, although large firms are increasingly trying to achieve levels of flexibility. Given that decreasing order sizes are one ingredient in the new climate of competition which demands flexibility, rapid response and exclusivity, it is not surprising to discover that design-led, high quality distributors typically place small order sizes, whilst orders sizes tend to increase as cost and quality fall.

Secondly, the trend towards purchases on whim rather than need has allowed *consumers to be much more selective* in their rates of purchase. In time of recession consumers have tended to make cuts in the clothing and furnishing budget rather than in other outgoings. A rapid compression of consumer demand in the late 1980s and early-1990s led to crisis in the clothing industry. In turn, clothing firms reduced their purchases from the upstream textiles firms and so aggravated the problems of the industry as a whole.

Thirdly, the *consumer is more expert*, therefore it is better able to assign the right relationship Quality-Price.

Finally, there has been a *growth* in the relative importance *of middle market segment* at the expense of the top-end quality market.

All these factors together have upgraded the complexity of the market and therefore has required new strategies able to mix together high standards of style, quality, flexibility and responsiveness to low production costs.

If these trends are confirmed in the future, the situation for the EU producers will become increasingly complex. This means that they must adopt new strategies which are capable of mixing together high standards of style and quality, with flexible production and responsiveness increased responsiveness to lower production costs.

Another aspect must be considered. Even if the top-end market continues to grow, the EU producers must pay attention to the increasing threats coming from the move-up market by many of the low labour cost producers of the Far East. Although up to now their local environment does not allow them to be competitive in the European market, it must be recognised that both *innovation* and *life-style* clothing will become more and more widespread in the near future.
European companies, therefore, must adopt strategies that will enable them to reinforce their local *"Diamond"*, remembering that "sustained competitive advantage in an industry grows out of the self-reinforcing interplay of advantages in several areas, which creates an environment difficult for foreign competitors to replicate" (Porter M.E. 1990). European producers will need to develop multifaceted competitive strategies in relation both to demand trends and to the behaviour of national distribution systems.

BIBLIOGRAPHY

Anderson, K., 1992, *New Road Silk. Toward The East Asia*, Polity Press

Anson, R. And Simpson, P., 1996, 'World Textile Trade And Production Trends' In *Textile Outlook International*, Jan.

Antonelli, C., 1987, 'Dall'economia Industriale All'organizzazione Industriale', In *Economia Politica* Anno Iv N.2

Bain, N., 1996, 'World Economic Forum' In *Textile Horizo*, Feb.-March

Barnes, P., 1990, 'Profile Of Courtaulds Plc: Strategies For The 1990s' In *Eiu Textile Outlook International*, January

Bartezzaghi, E., 1992, 'I Nuovi Modelli Del Manufacturing', In *Filippini* (A Cura Di), Etas, Milano.

Beccattini, G., 1979, 'Dal Settore Industriale Al Distretto Industriale. Alcune Considerazione Sull'unita' Di Indagine Dell'economia Industriale' in *Economia E Politica Industriale*, No.1 pp.7-21

Beccattini, G.,1987, 'Mercato E Forze Locali: Il Distretto Industriale' *Il Mulino*, Bologna

Beccattini, G., 1989, 'Riflessioni Sul Distretto Industrial Marshalliano Come Concetto Socio-Economico' in *Stato E Mercato*, No. 25, pp 118-28

Benassi, M., 1989, 'Per Una Variante Organizzativa Alla Teoria Del Network', in *Economia E Politica Industriale*, No. 64

Benassi, M., 1992, 'Le Joint Venture Difensive' in Lorenzoni (A Cura Di), *Etas*, Milano.

Blackwell, D., 1995, 'Courtaulds Textiles Forecasts Cut Back' in *FT*, 20/12/1995

Boari C., Grandi A., Lorenzoni G., 1989 'Le Organizzazioni A Rete: Tre Concetti Di Base', in *Economia E Politica Industriale*, No. 64

Boari C., 1992, 'Lo Sviluppo Dei Rapporti Tra I Partner Delle Joint Venture: Le Famiglie Di Accordi', in Lorenzoni (A Cura Di), *Etas*, Milano.

Boari, Grandi, Lorenzoni, 1992, 'O*rganizzazioni A Rete: Tre Concetti Base"*, in Lorenzoni (A Cura Di), *Etas*, Milano.

Boffey T., 1995, 'The China Syndrome' in *Management Accounting*, Vol. 73 November
Brown, A., 1994, 'Hugo Boss' in *International Management* - Vol. 49

Brusco, S., 1986, ‘Small Firms And Industrial Districts: The Experience Of Italy’, in Keeble, D. and Wever, E (Eds), *New Firms And Regional Development In Europe*, Croom Helm, London

Bull A., Pitt M., Szarka J.
1993 - *“Entrepreneurial Textile Communities”* - Chapman & Hall Press, London

Camagni, R., 1989, ‘Cambiamento Tecnologico, Milieu Locale E Reti Di Imprese: Verso Una Teoria Dinamica Dello Spazio Economico’, in *Economia E Politica Industriale*, No. 64.

Capello, P.V., 1991, ‘La Valutazione Dell'integrazione Verticale’ in *Economia & Management*, No. 21.

Cateora, P.R., 1996, *International Marketing* (9th Edition), Irwin, Boston

Cheeseright, P., 1994, ‘The Textile Industry Offers Good Prospects For Jobs. A Focus For Revival’ in *FT*, 4/6/1994

Darwent, C., 1992, ‘The Weavers’ Yarn’ in *Management Today*, January

Dicken P., 1992, *Global Shift: The Internationalisation Of Economic Activity*, (2nd Ed.) Paul Chapman Publishing, London

Dyer G., 1995, ‘*Coats Sees Underlying Downturn*’ in *FT*, 20/12/1995

Euro-Info, 1991, ‘*Textile Industry; An Overall Strategy To Increase Competitiveness’, Euro-Info*, No.44

Eurostat, European Commission, 1995/96, ‘Textiles’, in *Panorama Of Eu Industry* 95/96

Federtessile, 1994, ‘The Textile Industry And Its Evolution’ (It. - Il Ta E La Sua Dinamica Evolutiva)

Fua’, G. & Zacchia, C., 1983, ‘Industrializzazione Senza Fratture’, *Il Mulino*, Bologna

Garofoli, G., 1983, ‘Aree Di Specializzazione In Europa’ in *Economia Marche*, No.2, pp3-46

Glover, J., 1993, ‘Benetton Bucks The Trend’ in *International Management*, Vol. Sept.

Gobbo, F., 1989, *Distretti E Sistemi*, *Produttivi Alle Soglie Degli Anni ‘90’* Angeli, Milano
Gottardi, G., 1992, Piccole E Medie Imprese Nella Transizione Tra Localismo E Globalità, in Filippini (A Cura Di), *Etas*, Milano.

Gray, C., 1992, ‘Small Business in The Big Market. Small Firms Owners’ Views On The Likely Effects Of The Single Market’ *Small Business Research Trust Monograph*, Milton Keynes

Grinwade, N., *International Trade. New Patterns Of Trade, Production And Investments*, (Routledge, 1989, London)

Ietto-Gilles, G., 1992, International Production. Trends, Theories, Effects, Policy Press Cambridge

Jarillo, J., 1988, ‘On Strategic Networks’, in *Strategic Management Journal*, No.9 P31-41

Key Notes, 1993, ‘Clothing Manufacturing’ in *Key Notes - Report A Market Sector Overview*

Kibazo, J., 1993, ‘Coats In Further Chinese Ventures’, in *FT*, 6/9/1993

Kurt Salmon Associates, 1993, ‘Scenario. The Textile And Clothing Industry In The Ec Untill 2001’ in *KSA*, June

Lanzara, R., 1987, ‘Strategic Differentiation and Adaptation Among Small and Medium-Sized Italian Exporting Manufacturers’ in Rosson, P.J. and Reid, S.D. eds, *Managing Export Entry And Expansion*

Lorenzoni, G. & Ornati, O.A., 1988, ‘Costellations Of Firms and New Ventures’ in *Journal Of Business Venturing*, No.3, pp 41-57

Luesby, J., 1995, ‘Clothing Companies Are Targeting Niche Markets. Repositioning Aids Textiles’, in *FT*, 20/6/1995

Luesby, J., 1995, ‘Courtaulds Says Price For Textiles Has Peaked’ in *FT*, 3/8/1995

Luesby, J., 1995, ‘Coats Viyella Static At £71m’ in *FT*, 15/9/1995

Majmudar, M., 1996, ‘The Mfa Phase-Out and Eu Clothing Sourcing: Forecasts To 2005’ in *Textile Outlook International*, March

Mintzberg, H., 1979, *The Structuring Of Organizations*, Prentice Hall, Englewood Cliffs.

Nardin, G., 1994, ‘From The Crisis To The Recovery: New Opportunities And New Challenges For The Italian Textile Industry’ *(It.)* In Fec. Economy Dipartment Modena University

Nardin, G., 1995, ‘The Key Determinats of the Internationalisation Process’ in *The Textile Industry*, (It.) In Citer, Bologna

Newbery, M., 1993, ‘A Balanced Sourcing Strategy for the UK Textile and Clothing Market’ in *Textile Outlook International*, Sept.

Nottinghamshire University, 1994, *The Nottinghamnshire Textile And Clothing Sector. A State Of The Industry Report* By Nottinghamshire European Textiles And Clothing Bservatory

OECD, 1983, *Textile And Clothing Industries: Structural Problems And Policies In OECD Countries’* OECD, Paris

OECD, 1989, ‘The Importance Of Technological Innovation In The Clothing Industry’ in *Textile Leader*, No.5

Paci, M., 1975, ‘Crisi, Ristrutturazione E Piccola Impresa’ in *Inchiesta*, No.5, pp.20

Payne, M., 1992, ‘Profile Of Coats Viyella Plc’ in *Textile Outlook International,* March

Phillips, P.,1995, ‘Profile Of Courtauld Textiles’ in *Textile Outlook International*, Sept.

Piorie, M. & Sabel, C., 1984, *The Second Industrial Divide: Possibilities for Prosperity*, Basic Books, New York

Porter, M.E., 1979, ‘How Competitive Forces Shape Strategy’, in *Harvard Business Review*, Maggio-Giugno, N.

Porter, M.E., 1979, ‘Come La Strategia Può Dipendere Dai Concorrenti’ in *Harvard Espansione* N. 4.

Porter, M.E., 1990, *The Competitive Advantage of Nations*, Macmillan Press Ltd, London

Rich, M., 1995, ‘M&S Supplier Expands Operating Margins from 4.5 To 6.7 per cent’ in *FT*, 12/4/1995

Roach, R., 1991, ‘Changing Attitudes to the Management of Quality’ in *EIU Textile Outlook Internat*ional, Sept.

Rosson, P.J. and Reid, S.D., 1987, *Managing Export Entry And Expansion,* Praeger Press - London

Rullani, E., 1989, ‘Economia Delle Reti: I Linguaggi Come Mezzi Di Produzione’, in *Economia E Politica Industriale*, No. 64.

Rullani, E., 1993, ‘La Conoscenza E Le Reti: Gli Orizzonti Competitivi Del Caso Italiano E Una Riflessione Metodologica Sull'economia Di Impresa’, in *Sinergie*, No.31

Rullani E. and Di Bernardo B., 1990, ‘Il Management E Le Macchine’, *Il Mulino*, Bologna.

Scheffer, M., 1994, ‘Internationalisation of Production by Ec Textile and Clothing Manufacturers’ in *Textile Outlook International*, Jan.

Sciarelli, S., 1985, ‘Nuove Tendenze Nell'organizzazione Della Funzione Di Produzione’, in *Finanza, Marketing E Produzione*, No. 2.

Sciarelli, S., 1990, ‘Nuove Tendenze Nell'organizzazione Della Funzione Di Produzione’, in *Finanza Marketing E Produzione*, No. 1.
Silberston, A., 1991, ‘The Consequences Of Abolishing the MFA’ in *Textile Outlook International*, May, pp.62-70

Silvestrelli, S., 1978, ‘Modello Di Sviluppo Industriale Per Disintegrazione Verticale Del Settore’ in *Economia E Politica Industriale*, No. 18

Silvestrelli, S., 1989, ‘L'impianto’, in Rispoli M. (A Cura Di), *Il Mulino*, Bologna.

Silvestrelli, S., 1990, ‘Atti Del Convegno’ *La Funzione Tecnico-Produttiva Nell'economia D'azienda*, Clueb, Bologna.

Stogdon, R., 1996 ‘Denim and Jeans: Trends in Eu Production and Trade’, in *EIU Textile Outlook International*, March

Survey, 1995, ‘Sector Review. Clothing, Footwear and Household Textiles’ in *Retail Business Market Survey*, Jan.

Thorelli, H.B., 1986, ‘Networks: Between Markets and Hierarchies’, in *Strategic Management Journal*, No.7, pp37-51

Thoney, B., 1984, *The Global Textile Industry* Allen and Unwin, London

Varaldo, R., 1987, ‘The Internationalization of Small and Medium-Sized Italian Manufacturing Firms” in Rosson, P.J. and Reid S.D. eds, *Managing Export Entry and Expansion*

Walker, A., 1995, ‘West European Textiles To 2000 Markets and Trends’ *FT Management Reports*

Watkins, P., 1993, ‘Profile Of Ratti Group’ in *Textile Outlook International*, March

Watkin, P. and Buxton, A., 1989, ‘Profile of the Biella Wool Textile Industry’ in *Textile Outlook International*, Jan.

Williamson, O., 1975, ‘Transaction Cost Economics: The Governance Of Contractual Relations’, in *Journal of Law and Economics*, 22, pp233-61

Zanoni, A., 1989, ‘La Gestione Dei Materiali’ in Rispoli, M. (A Cura Di), *Il Mulino*, Bologna.

Zanoni, A., 1992, ‘Accordi Fra Impreese Nell'area Di Produzione’, in Lorenzoni (A Cura Di), *Etas*, Milano.