Chapter 7

The Response to Global Shift – Strategic Imperatives and the Diamond Framework

A. The background environment

The review of the evolution of the textile pipeline carried out above has produced the following conclusions about the role of apparel manufacturing in advanced economies and about the circumstances within which future development must occur:

(1) That the industry is not the dominant partner in a pipeline which has long been characterised by adversarial relationships.
(2) That the industry does not occupy a strategic role in the UK or any developed economy.
(3) That the structure of the industry is almost uniquely unfavourable to profit generation.
(4) That global shift has been inevitable given the labour-intensive nature of apparel production. There is global overproduction.
(5) That the possibility of relocation of production back to the developed world is virtually nil.
(6) That import penetration has risen strongly over the last decade and continues to rise.
(7) That the UK industry appears to be entering a new period of contraction which is significantly different from that experienced over the last 20 years.

The economic environment is, therefore, extremely hostile. Additionally, the early years of the twenty-first century will witness the removal of the system of managed trade which has operated since 1974, as the Multi Fibre Arrangement (see Chapter 9) is finally dismantled. Against this pessimistic scenario a number of positive signs can be discerned. For example, production in the developed regions does still remain a significant proportion of global totals while most of

the world's major textile and apparel companies are based in developed countries. As Porter (1998, p. 37) points out, while structure is extremely significant it is not the end of the matter – strategic choices are also vital. As Singleton (1997, p. 97) comments, early studies of the sector's responses to crisis in the 1960s and 1970s clearly illustrated 'the importance of strategic decision making and shows how it relates to . . . elements of the diamond, such as perceptions about demand conditions and the choice of technology'. In order to achieve competitive advantage choices have to be made. These strategic competitive advantages can be created anywhere (not just in the home base) and at any stage of the process of converting inputs into profitable outputs – the so-called value chain. In particular, value advantage is not exclusively (or even primarily) created by or at the assembly stage of production. Therefore, the preoccupation with the sewing process in the apparel sector may not be particularly helpful – the difference in value added between a coat selling for £40 and one selling for £140 is almost certainly not the product of differences at the assembly stage. There are clearly examples of relatively more successful apparel sectors and companies in developed countries. The question for the future is to identify those strategies which offer the best opportunity of success.

A starting point might be to identify (on *a priori* grounds) a list of potential strategies – particularly those which appear to relate to the perceived problems faced by the industry. Figure 7.1 contains such a list. While recognising that there will be no single strategy that is universally appropriate or inappropriate it will be possible to indicate the probability of success of each strategy in a developed nation such as the UK. It has, at all times, to be remembered that there is a world of difference between an economy's suitability for apparel assembly and as an environment which is liable to promote the evolution of winning strategies so that it becomes the home base of globally successful operators as is made clear in Fig. 7.2. If the company based in A had garments produced in B but returned to base prior to supplying market C then the export statistics would reveal A as having comparative advantage. However, if goods were sent to C direct from B then the latter would be revealed by trade data as possessing the advantage (Jones, 2001).

B. Application of the Diamond Framework to the apparel sector

It has to be remembered that the Diamond Framework is meant to identify countries within which clusters of internationally successful companies will develop. In Porter's words (Porter, 1998, p. 71) 'nations succeed in particular industries because their home environment is the most dynamic and the most challenging and stimulates . . . firms to upgrade and widen their advantages over

Strategies		Issues
(1)	Investment in high technology and labour replacement; technological restructuring	Labour intensity. Low investment. Low knowledge-based content.
(2)	Protectionism.	'Unfairness' of low cost competition; inevitability of global shift.
(3)	Government subsidy and assistance.	Role of apparel sector in the economy; 'unfair' competition.
(4)	Co-ordination in the textile pipeline; organisational restructuring.	Adversarial relationships.
(5)	Manipulation of industrial structure; diversification.	Adverse industrial structure.
(6)	Product differentiation; branding; moving up market; marketing strategies.	Low cost competition.
(7)	Offshore production and OPT (geographic or spatial restructuring).	Labour costs.
(8)	International strategies and globalisation (including relocation of production and the identification of new customers).	Costs. Demand.
(9)	Restructuring of production of work organisation (team working; flexible manufacturing; local networks and external economies of scale).	Productivity. Flexibility.
(10)	Process re-engineering; operational improvements; lean manufacturing and logistics.	Costs. Productivity.

Fig. 7.1 Potential survival strategies.

time'. There are a number of issues which need to be clarified – first, that the emergence of an internationally successful cluster of firms in a particular industry in a country does not necessarily mean that it will conduct most of its operations or employ most people in that country. Indeed it is a major element in the Diamond Framework that successful strategies will probably incorporate a global view of events. The home base is important because it is the place where key decisions are made but (Porter, 1998, p. 577) 'a global strategy supplements and solidifies the competitive advantage created at the home base'. The most successful companies (p. 578) 'amplified their home-based advantages and offset home-based disadvantages through global strategies that tapped selectively into advantages available in other nations'. Secondly, in apparel production it may be the case, as Singleton (1997, p. 4) argues, that 'clustering may not be necessary for the initial attainment of competitive advantage which frequently stems from low labour costs'. This maybe the case in the respect of the growth of assembly activity in low cost countries but it is probably something of a misleading argument in relation to the evolution of truly successful global

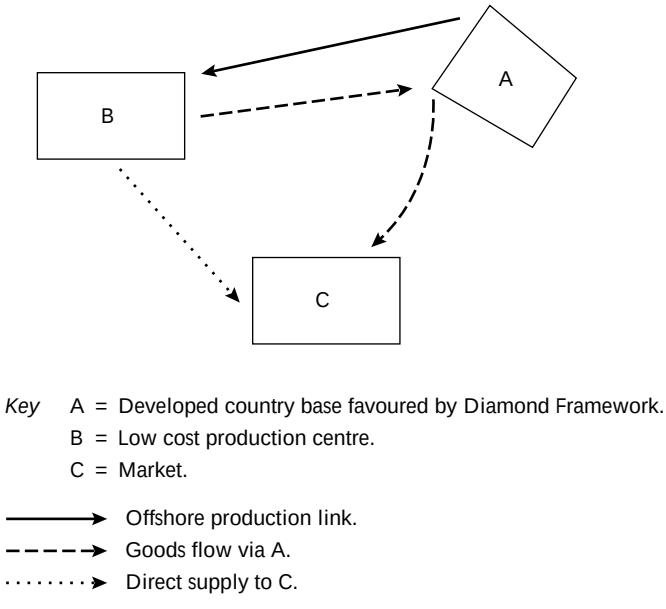

Fig. 7.2 Revealed Competitive Advantage.

apparel companies in the sense that the possession of (temporarily) low labour costs is both probably a temporary (or low order) advantage and one which is only relevant to one element of the apparel production value chain. As Singleton (1997, p. 125) and Dickerson (1995) demonstrate, the majority of the world's top textile and clothing companies are either American, European or Japanese. The location of assembly production within the value chain is not, of itself, an indicator that a specific country is likely to be the home base for the most successful companies. In Porter's words (1998, p. 577) the 'most important sources of national advantage must be actively sought and exploited, unlike low factor costs obtainable simply by operating in a nation'. The geography of world production will be altered as companies seek to offset one specific home base disadvantage (high semi-skilled labour cost) as part of dispersing particular activities to 'whatever country enjoys advantages. There is no excuse for accepting basic factor disadvantages'.

With these thoughts in mind the next step will be to examine the Diamond Framework's application to identifying locations where the framework is favourable (or not) to the emergence of internationally successful apparel manufacturers – in which countries does it seem likely that the Diamond Framework will promote companies which select and develop winning strategies? The individual components of the Diamond Framework are examined below. It is clear that other factors could equally be examined – in Chapter 12 a Pentagon Framework is preferred.

(i) Demand conditions

It has been demonstrated in Chapter 3 that the demand for apparel is a function of income and that, accordingly, the biggest markets are to be found in the developed countries. This may, of course, change over time, as is considered in Chapter 11. At the present time the size of the domestic market confers clear advantages on companies in the developed world. The issue is, however, somewhat more complex than simply being one of the size of the market – the *quality* of demand expressed in that market can also be vital. While the UK measures up quite well in terms of market size it exhibits a number of other, less promising features. First, the proportion of total demand devoted to apparel consumption has been falling over the long run even though it is now stable (see Chapter 10). Secondly, in the sense that demand is expressed through the retail system the somewhat unique structure of apparel retailing in the UK with its historical emphasis on long production runs and safe design has probably not been entirely helpful (see Chapter 10). There is, in a real sense, a parallel here with the decline of the cotton textile industry in that virtually all commentators agree that over-concentration on long runs and low quality was a major contributory factor to the eventual decline of the sector. Choice of strategies *is* important. Although it is difficult (if not impossible) to assess factors like the sophistication of consumers within the positivist framework identified in Chapter 1, it is generally accepted that, in Singleton's word's (1997, p. 66) 'sophisticated tastes in the home market contribute to the international success of the Italian ... clothing sector' and that 'the name of France as a centre for high fashion is a reputational asset'. On balance, therefore, demand conditions do not appear to be particularly favourable in the UK – in particular as an ageing population evolves in the next century. Owen (1999) argues that it was a particular element of the demand variable – lack of access to the EU market – which was primarily to blame for Britain's poor economic performance.

(ii) Factor conditions

In considering factor conditions there is an obvious danger, in the present context, of concentrating exclusively on the supply and cost of semi-skilled labour. As has been seen in Chapter 4, the UK is a relatively high cost country in terms of Asian wage levels. Additionally, the problems of attracting labour into the industry have been well documented. Given that the labour cost gap is unlikely to disappear; that the probability of a major technological breakthrough to reduce labour content is virtually nil and that the possibility of offsetting the cost disadvantage via higher productivity is remote (Singleton, 1997, p. 33) this factor disadvantage will remain one that has to be overcome by

relocation of activity. It is generally believed that the human factor is less mobile than non-human and that female, semi-skilled labour is among the least mobile of all factors. However, there are many other aspects of factor conditions which need to be considered, e.g. other categories of human labour, such as designers, entrepreneurial and managerial talent. Additionally, a range of non-human factors must be evaluated, e.g. capital; knowledge and information; and raw materials.

(iii) Related industries

In Singleton's opinion (1997, p. 73) the most important supporting industries to the textile and clothing pipeline are 'the production of textile machinery ... and chemicals (especially man-made fibres)'. In the case of apparel manufacturing the most important supporting industries are the primary textile industry itself, machinery and the design sector. As has been noted above (Chapter 1) the UK primary textile industry has suffered a severe decline over the years in addition to which the supporting relationship between the two sectors has been historically rather weak. The machinery industry has virtually disappeared in the UK. The major producers of electronic and computerised equipment for use in the design and preparatory process of apparel manufacture are French, German, Spanish, Canadian and American while the major producer of transport systems is Swedish. The leading manufacturers of sewing machines are American and Swiss. Singleton (1997, p. 79) shows that the UK was responsible for less than 3 per cent of world exports of textile and leather machinery in 1993. The UK does, in contrast, have a good reputation for training and educating designers. Finally, the concept of external economies of scale can be mentioned in this context. This is the ability of an industry to draw competitive advantage from a geographical concentration of related activities – the best example of this in the apparel sector is to be found in Italy (see Section D). The UK has little advantage in these areas.

(iv) Firm strategy

It has been noted in Chapter 1 that most commentators upon the decline of the cotton textile industry in the UK place some (if not all) of the blame upon a mistaken strategy, namely concentrating upon the wrong market and the wrong products. Clearly there are a range of global forces in the apparel sector which impact upon all the firms in the sector although not all firms react in the same way. Additionally, it is sometimes possible to identify 'favoured' responses within individual countries. Scheffer (1992, p. 193), for example, argued that it was possible to identify different strategies in the Netherlands, France, Belgium and the UK and that the industry in the UK made the wrong

choices in concentrating on relatively long production runs organised in the traditional Taylorist system; in largely ignoring (for a long time) overseas sourcing options and, in effect, becoming trapped in 'the rigidity of the obsolete production system . . . which is geared to large retailers'. It does appear that very significant changes in strategic options are now being made by UK-based apparel manufacturers – frequently under pressure from the major retailers. Singleton (1997, p. 119) singles out Germany's enthusiasm for off-shore processing. At this point, however, it will be important to observe that the role of international strategies is likely to be significant – in particular those strategies which go beyond direct exporting and incorporate elements of global sourcing and marketing. Singleton (1997, p. 22) concluded that irreversible decline 'can be avoided, it would seem, if firms in national economies are prepared to operate on an international level'. Historically it does not appear that the UK has been a particularly favourable environment in which to induce appropriate choices of strategy. These issues will be considered in more detail in Section D.

(v) Firm structure and rivalry

As has been seen in Chapter 2, the UK apparel sector is extremely atomistic in nature. Porter (1998) argues that strong domestic rivalry is a good thing in that it forces companies to become cost efficient and 'toughens them up' to face foreign competition. The possible conflict between this argument and the role of domestic rivalry in the Five Forces model has been noted in Chapter 1 and it seems to be true that, in the UK, while there are a large number of firms to provide rivalry, the way in which this has operated, particularly in relation to the retail customer, has been largely counterproductive. The pipeline is indisputably retail-driven. As Dicken (1998, p. 294) observes, the production chain 'is becoming transformed into a buyer-driven chain' and 'demand is becoming increasingly dominated by the purchasing policies of the major multiple retail chains'. The fragmented nature of the apparel industry has meant that firms do not have the market power to capture a significant (relative) proportion of the value added generated in the pipeline. In addition, the culture of individualism permeating the atomistic structure appears to have mitigated against the adoption of the sort of co-operative network strategy which has been so successful in Italy. As Porter (1998, p. 108) observes, nations will tend to succeed

> 'where the management practices and modes of organisation favoured by the national environment are well suited to the industries' sources of competitive advantage. Italian firms, for example, are world leaders in a range of *fragmented* industries . . . in which economies of scale are either modest or can be overcome through co-operation among *loosely affiliated* companies. Italian

companies most often compete by employing focus strategies, avoiding standardised products and operating in small niches ... and can adapt to market changes with breathtaking speed'.

In the UK, the fragmentation of the industry has manifested itself in quite a different fashion.

(vi) The role of Government

Finally, in this section, brief reference will be made to the role of Government. Government support for the textile and apparel sectors in the UK has been extremely limited and has largely been restricted to a mild form of protectionism via the Multi Fibre Arrangement. Most research suggests that levels of UK Government assistance to the various elements within the textile pipeline were at a relatively low level by international standards. Singleton (1997, p. 182) concluded that 'British policy in this area has been modest in comparison with the efforts of German and Italian regional authorities' while Zeitlin (1988) argued that 'central Government schemes aimed at promoting the restructuring of the clothing industry have largely been conspicuous by their absence'. Singleton (1997, p. 185) concurs observing that 'Government intervention (in mature economies) has generally been defensive and half-hearted in nature'. Somewhat paradoxically, it might appear, Porter (1998, p. 128) argues that this largely 'hands off' stance should be seen as beneficial rather than deplorable in that 'Government ''help'' that removes the pressures on firms to improve and upgrade is counterproductive'. Singleton (1997, p. 185) concludes his exhaustive investigation of the global textile industry by agreeing that direct Government intervention 'has rarely generated a competitive advantage in textiles'. It might, therefore, be more productive to seek the influence of Government upon the Diamond Framework in a somewhat more indirect manner – through its impact upon other elements of the Diamond in such areas as support for the education system, innovation, entrepreneurship, risk taking, investment in industry and research, and support for small business.

(vii) Conclusion

The above analysis does not produce much in the way of comfort for seeing the UK as a potentially favourable environment for producing world class apparel manufacturing companies. Factor costs are, it is true, not high by developed country standards but are so in terms of comparison with the developing world. In addition, Porter (1998, p. 499) concludes that the UK's performance in education, investment in training and research is relatively poor. Owen

(1999) placed far less emphasis on the impact of these two factors on Britain's comparative economic performance. Likewise, in relation to demand conditions, he concludes (p. 502) that while the UK was once 'on the cutting edge of world demand for both consumer and industrial goods', it is no longer the case. In addition, as successful clusters have weakened they have become 'increasingly poor buyers for other British industries' – the lack of 'support' offered to the UK's primary textile sector by the apparel sector being a case in point. Strategic decisions are also criticised by Porter (1998, p. 499) in that too often 'British manufacturers drifted towards competing on price with obsolete or low quality products and processes'. A number of successful, internationally competitive clusters of industries are identified – especially in the service sector – but the overall conclusion drawn (p. 494) is that 'Britain lacks comparative advantage in most areas of textiles and apparel'. Finally, it will be instructive to consider Singleton's (1997, p. 18) analysis of revealed comparative advantage in the apparel sector (RCA). The measure is based on national export performance relative to the world average and is expressed numerically as the proportion of total national exports accounted for by apparel divided by the global proportion. Higher numbers would represent superior performance. Countries are ranked into three categories. The top rank (with RCA exceeding 2) includes a range of developing countries such as Hong Kong, Turkey, India, Indonesia, Tunisia, Thailand, Morocco, Pakistan and the Philippines which would be recognised as low cost producers. The lowest ranking group contains mainly developed countries such as Japan, the UK, the USA, Sweden, France, Germany and Spain. Italy and Portugal do appear in the first group but both – for different reasons – can be said to represent special cases in the developed world: Portugal because of its very low wages and Italy by virtue of its unique network of co-operative companies.

C. Consideration of alternative strategies

(i) Investment in research and high technology solutions

As has been recorded in Chapter 2 capital investment per head in the apparel sector in the UK is extremely low. In addition, expenditure on R&D is also notoriously low. In 1986 the entire textiles, clothing and footwear sectors were responsible (Jones, 1988) for only 0.4% of all industrial R&D expenditure. In 1997 the figure had fallen to 0.3%. The Sector Review (ONS, 1999) reveals that the total number of scientists employed in the industry was only 1000. The lack of technological innovation in the sector is not a particularly UK feature, however. The inability of the industry to automate has been documented by many authors and cannot seriously be doubted. Briscoe (1971, p. 4) observed that a UN study had shown that 'for all countries the amount of equipment

employed per person was lower for textiles and (author's emphasis) *very much lower for clothing*. This tends to favour production in countries which have a plentiful supply of labour relative to capital and where wages are relatively low'.

Little seems to have changed since that date in that Taplin (1997, p. 1) felt still able to record that there 'is a low level of technical innovation potential and those technical advances which have been made are only adopted by the most progressive enterprises' and proceeded to point out that the majority of the new technologies adopted have been 'mainly directed at the design and cutting stages, transport of garments between machines, the overall monitoring and control of production operations and *ad hoc* modifications to existing machines'. The most important (in terms of labour usage) area of assembly has remained largely immune to automation primarily because of the difficulty of automating a process using limp and varied fabric. In Winterton's words (1997, p. 1) the important element of 'garment assembly has not been appropriate for the extensive application of new technology in clothing for technical reasons'. The problems of automating the fabric handling process, for example, have been documented by Leung (1992) who concluded that the use 'of pick and place devices for handling limp fabric pieces has not been favoured by manufacturers because there is no universal ... device which can be relied upon to handle a large range of fabric types'.

It is true that investigations into the possibility of automating the sewing process have been carried out. For example, in Japan in 1982, MITI set the objective of creating a flexible, automated garment production system (Taplin 1997, p. 180). The project was spread over nine years and spent almost 13 billion yen. In addition, between 1987 and 1991 700 million Ecu was allocated, by the EU, to the area of handling flexible materials under the BRITE banner (Basic Research in Industrial Technologies for Europe). In the USA the Textile/Clothing Technological Corporation (TC^2) was set up in 1979.

In spite of these efforts it remains the case that large scale, commercial application of automated assembly remains elusive. Braithwaite (1991) concluded that 'full automation remains impossible'. It has to be concluded, therefore, that the assembly operation is likely to remain extremely labour-intensive. There is no evidence of widespread, commercial adoption of the technologies described above.

Winterton has also concluded (p. 15) that there was little or no evidence that 'low technology clothing companies are less profitable than those which have invested in new equipment'. Tyler (1989) agrees that 'evidence that the technological route leads to increased efficiencies are inconclusive'. It is probable that the impetus towards the development of new technology has been severely retarded by the continued availability of extremely cheap labour around the globe.

Therefore, while it is always clearly desirable to utilise the most efficient technology available, it is probable that technological solutions will operate at best at the margin. The probability of technology ever significantly reducing the labour cost content of apparel manufacture to the degree that it can be seen as a viable strategy for achieving competitive advantage of itself is virtually zero. As De la Torre (1986, p. 222) observed, technological solutions were rare in that the 'difficulties inherent in automating the clothing assembly process and the fact that innovations could be easily adopted by any country may have contributed to the relatively low ... commitment to R&D in the industry'. Consequently, while it could not logically be concluded that research must be abandoned, it seems obvious that by itself it could not solve the industry's problems. The final drawback of technological solutions is, of course, that they can be adopted anywhere and, as Hunter (1990, p. 148) astutely observed, the 'belief that the Far East cannot justify high technology because of low labour rates is simply not true'.

(ii) Trade controls and protectionism

The textile and apparel sectors have a long history of trade controls. In this text attention will be focused on the post 1974 arrangements embodied in the Multi Fibre Arrangement (MFA). Earlier forms of trade control are summarised in Khanna (1991), Dickerson (1995) and Moore (1999) and have been used, in the UK, over a long period as Singleton (1997, p. 176), for example, records in 1959 'for electoral purposes, the Macmillan Government ... imposed ceilings on imports of cotton cloth from Hong Kong, India and Pakistan, in what were euphemistically referred to as a "voluntary agreement" '. It is unlikely that trade controls will play as significant a role in the future as they have in the past.

The details of the removal of the MFA are considered in Chapter 9 but it can be noted at this point that interference in trade flows represents the main dimension of Government policy towards the textile and apparel sectors in the developed world since 1974. In the words of Zeitlin (1988, p. 228) the major 'form of state intervention in the industry over the past two decades has been the restriction of imports from low wage countries through participation in the MFA'.

From an economic standpoint trade barriers are normally viewed with distrust as leading to a non-optimal allocation of resources. The trend since the end of World War II – largely organised through GATT – has been to remove trade barriers on the assumption that an expansion of world trade brings general benefits (see Fig. 7.3). Trade barriers always carry with them a cost which ultimately has to be paid by the consumer and the tax payer. Porter, it will be no surprise to discover, also condemns all forms of subsidy and pro-

It is generally accepted that free trade in which each country specialises in producing only those items in which they have the *relatively* greatest superiority and obtain everything else by free trade produces the 'best' result for the *world as a whole* ('best' in the sense that resources are used most efficiently).

This is usually demonstrated by a numerical example such as the one below.

Production possibilities

	Countries	
Products	A	B
T	10	5
W	10	4

These figures are the units of resource required to produce one unit of W or one unit of T. Country B is therefore relatively superior in the production of W.

If both countries have 100 units of resource and devote 50 to T and 50 to W then a no trade scenario would be as follows:

No trade

Products	A	B	World production
T	5	10	15
W	5	$12\frac{1}{2}$	$17\frac{1}{2}$

If country A concentrates on product T in which it is the least disadvantaged we get:

	A	B	World total
T	10	5	15
W	0	$18\frac{3}{4}$	$18\frac{3}{4}$

B must produce 5 T to maintain the world total. This takes 25 units of resource (each 1 T takes 5 units). So B has 75 units of resource left to devote to producing W at a rate of 1 W taking up 4 units, i.e. it can produce $18\frac{3}{4}$ units of W. Therefore the world is better off by $18\frac{3}{4} - 17\frac{1}{2}$ units of W.

Fig. 7.3 The virtue of free trade. (*Source:* Daniels, J.D. and Radebough, L. (1998) *International Business*. Addison Wesley, Harlow.)

tection writing (1998, p. 120) that 'Governments should only play a direct role in those areas where firms are unable to act (such as trade policy)' but, even then the 'Government "help" that removes the pressures on firms to improve and upgrade is counterproductive' and that Government policies should not preserve old advantages while simultaneously deterring the upgrading process. It is recognised that, because of the pressures of short term requirements in relation to employment, governments 'are prone to choose policies with easily perceived short term effects, such as subsidies, protection ... such actions will

dampen innovation and erode competitive advantage in the economy'. In particular there is pressure to provide (Porter, 1998, p. 625) 'protection from foreign rivals, usually justified by citing the 'unfair' advantages they possess . . . Each of those tendencies . . . dooms a national industry in the long run'.

As will be seen in Chapter 9, the current system of trade controls which expires in 2005 is unlikely to be replaced. Therefore, relying on protection is unlikely to constitute a viable strategy in the future. As Winterton concludes (1997, p. 11) the 'removal of the MFA . . . constitutes a liberalisation of clothing product markets which will act as an impulse, causing an acceleration of restructuring of garment manufacture in high wage economies'. Historically it is probable that, as De la Torre (1986, p. 224) concluded, the search for alternative strategies was hindered by the preference of the industry to 'obtain a strengthening and extension of import protection through a reviewed MFA'. It is instructive to note that Gruber (1998) concluded a study of the speed of diffusion of new technologies with the observation that 'the slow diffusion of innovation observed for the textile industry may be due to the high degree of protection granted to the sector'.

(iii) Government assistance

In this section the provision of subsidy as opposed to the wider role of Government will be considered. As has been seen in Chapter 2, it is unlikely that apparel production will be seen as a strategically vital sector to the health of the economy in a developed country in which the total size of the manufacturing sector as a whole has fallen to some 20% of the total economic activity in the country. The level of Government assistance to the apparel manufacturing industry in the UK has never been large either in absolute terms or by international standards. Anson (1999) observed that in most Western, developed countries 'direct financial assistance to specific companies or specific sectors such as textiles and clothing has largely been eliminated'.

It is true that aid exists in other forms, such as via regional policies, but the apparel sector has not, historically, been a major beneficiary of such assistance. Jones (1990) studied the distribution of Regional Selective Assistance in the UK between 1977 and 1988 and found that share of such assistance attracted by the clothing sector ranged from 1.35% to 5.41% of the total aid distributed. As Singleton (1997, p. 165) observes, 'It is easy to understand the reasons for intervention in strategic industries. Engineering, electronics and aircraft industries may be deemed important for the preservation of national security. But textiles and clothing are not strategic industries.'

As was observed above, the industry has received (rightly or wrongly) very little in the way of subsidies – the main element of Government policy towards the sector having been, since 1974, a relatively mild form of protection.

In the UK it is true that there has been a number of specific schemes devoted towards the apparel and textile sectors such as the Wool Textile Scheme 1973–1979 and the Clothing Industry Development Scheme 1975–1977. These have been described by, for example, Hardill (1987), De La Torre (1986) and Miles (1976) but did not constitute such major aid programmes that Zeitlin's conclusion noted above would need to be revised. The announcement of a modest £15 million aid package in the UK in June 2000 would not negate this conclusion. The twelve point plan (TCSG, 2000) is strong on exhortation and expressions of desirable actions but contains little in the way of substance – especially when ranged against the strength of the forces generating the sector's problems although it has been more enthusiastically received by some (Horrocks, 2001).

Most commentators on the textile and clothing sectors have concluded that direct Government intervention has been rare even on a global basis. Singleton (1997, p. 185) concluded his survey of the global textile industry by stating that in 'mature economies, Government intervention has been generally defensive and half-hearted in nature. Direct intervention has rarely generated a competitive advantage in textiles although it had strongly negative results in post independence India, for example'. The same author (1947, p. 170) argued that Government policies were rarely if ever a critical factor in the expansion of the industry in Asia and that 'market forces would have ensured similar outcomes'. Different developed countries have followed different paths and varying timetables as will be seen in Section D.

(iv) Organisational restructuring and the manipulation of industrial structure

It might be argued that if pipeline organisational and structural deficiencies have been identified it should, in theory, be possible to devise strategies which mitigate the worst effects of the observed weaknesses.

Historically, the biggest weakness in the textile-apparel pipeline has been (as was recorded in Chapter 1) the adversarial nature of the relationship between the various elements within the pipeline. There is very little published evidence on the existence of non-adversarial relationships within the apparel sector. Groves (1997, p. 20) studied the nature of relationships in a small sample of UK apparel manufacturers and found that in a range of performance indicators 'partnerships appear to achieve higher scores on average, thus implying a potential trend towards better performance'. In addition, in the UK, the DTI and other interested parties, established in 1995 the so-called Apparel and Textile Challenge which aims to develop more effective supply chain partnerships in the sector. Smith (1999, p. 6) argued that while it was recognised that the nature of supply partnerships had to change, there was 'still resistance to change'. It is clear, however, from evidence published relating to

other industrial sectors that partnership relationships can be made to work and do generate benefits. Whether or not it is now, in the UK, too late to 'save' the textile-apparel pipeline via this route is open to question.

In relation to the issue of the existence of a number of unfortunate structural characteristics (such as a low level of seller concentration) it is true that modern students of industrial economics place increasing stress on the ability of companies to manipulate structure actively, i.e. to seek feedback from conduct to structure. Hay (1991), for example, refers to the crucial distinction between 'active' and 'passive' firms. Unfortunately, it is difficult to envisage the apparel sector behaving in a very active manner to correct structural deficiencies because of its extremely atomistic nature.

(v) Marketing strategies

This group of strategies, which incorporates branding, niche marketing and related policies seems more promising. Many commentators have contrasted the failure of UK policy which concentrated on long runs of relatively standardised products with the more successful policy adopted in Italy of securing strong positions in niche markets. Such policies would also have the virtue of, in effect, partially correcting the observed structural feature (Chapter 10) that the industry, somewhat surprisingly, spends relatively little on advertising and promotion. In addition, from the point of view of the UK it would have the added benefit of playing to one of the national strengths identified for the UK within the Diamond Framework – the strength of the UK's advertising industry (Porter, 1998, p. 494). The main problem from the viewpoint of the UK apparel manufacturer is that this activity tends to be undertaken by the retailers. Nevertheless, a good case can be made for incorporating new approaches to marketing in future strategies.

(vi) Changes in work organisation

The traditional form of work organisation in the apparel sector is usually defined as Fordist or Taylorist. In essence this means that the production system is characterised by a high degree of division of labour and de-skilling and a low degree of self organisation as is expressed in the progressive bundle system in the apparel sector. An alternative view is represented by (Winterton, 1997, p. 15) who argues that 'changes in labour processes, reflected in the ... autonomy afforded to individuals and the division of labour between different categories of works' are epitomised by team working or modular manufacturing. A variety of terms exist in the literature to describe this concept, e.g. modular manufacturing; cellular manufacturing; flexible manufacturing and flexible work groups. The latter has been defined by Hill (1992) as 'a

management concept involving a team of apparel associates' working with minimum supervision and deploying multiple skilled operatives paid as a team, while NEDO (1991, p. 10) defined a modular system as 'a contained, manageable work unit ... performing a measurable task in which operations are interchangeable and incentives are based on group output'.

It is possible that some commentators would prefer to maintain a distinction between the concepts of modular manufacturing and team working on the grounds that the latter enjoy more autonomy but this distinction is not crucial in the context of the present discussion. Flexible manufacturing systems have as much to do with people and organisation as with new equipment, requiring (Bentham, 1998, p. 384) 'a significant cultural change ... and a move away from piecework systems, flow line production and heavy management presence'.

This does not mean that the technological input can be completely ignored (Tyler, 1989), e.g. semi-automatic machines may be incorporated into the modular groups as is exemplified by unit production system technology (transfer systems which deliver one item to work stations) while the ability to repair faulty equipment rapidly assumes even greater importance than within more traditional production systems. The key concept is, in essence, to try and retain the cost benefits of mass production while supplying markets which increasingly demand lower volumes, more variety and more responsive customer service. The main component of a flexible manufacturing system would include team working; multi-skilled operators; continuous training; delegated authority; minimum supervision; team responsibility for quality and team payment systems. The expected benefits include lower stocks and work in process; improved motivation; lower absenteeism; reduced inspection costs; fewer rejects; better quality and quicker throughput.

Hunter (1990, p. 157) who defined the modular plant as one 'made up of many product centres in each of which the complete garment is made by small groups of workers responsible for all operations' estimated that, according to some research, the introduction of modular systems could raise the return on capital by anything from 10–20%.

Flexible manufacturing is often seen as a component of the Quick Response and Lean Manufacturing philosophies which will be described in the next section. As Carr (1994) observes, 'at the heart of lean production is team working'. Alder (1997, p. 146), describing the recent evolution of the German apparel sector, comments that Germany is fortunate in having a pool of skilled labour with exceptionally good vocational qualifications which facilitate the adoption of team working in that element of production retained domestically. There is, therefore, little doubt that modular systems can produce benefits in appropriate conditions as described, for example, by Bentham (1998).

Lowson (1999, p. 103) produces a comparison of the time taken by traditional progressive bundle systems and team/modular systems which suggest

that production turn around times can be reduced from weeks to minutes. However, their introduction appears to have been limited in scope in the UK industry. NEDO (1991) concluded their study of modular systems with the observation that they were neither cheap nor instant solutions to the industry's problems but that there was sufficient evidence that they can produce substantial benefits if top management is sufficiently committed. However, the report estimated that, in the USA, only 5% of companies and 1% of factories were utilising such systems.

(vii) Quick response, logistical and supply chain management solutions

The major threat to apparel production in developed countries has come (see Chapter 3) from regions enjoying the benefit of extremely low wages. Most of these areas are relatively distant from the major apparel markets. Proximity to the market was, accordingly, seen as representing an advantage to domestic producers who could supply customers more quickly than distant producers and it was argued that customers would be willing to pay a price premium for this service. Strategies embodying this principle have evolved under a variety of titles such as quick response, logistics and supply chain management, lean manufacturing and time compression strategies.

These initiatives, while not all exactly the same, have substantial elements of commonality. Lowson (1999, p. 26), for example, recognises these terms as essentially 'euphemisms for the same basic group of theories'. As Forza (2000) observes, the sector is increasingly perceiving time as a crucial variable within competition. Hunter (1990, p. 1) argued that the industry could improve its competitive ability simply by making changes in management style which reflected the fact 'that textile manufacture, garment making and retailing are not separate businesses, but must operate as parts of an integrated consumer responsive supply system'. The essential elements of a quick response strategy were then identified as the integration of all parts of the supply chain; the utilisation of rapid data transfer and total quality management to reduce stocks and waste, and the sharing of information so that the supply chain can be collapsed.

It will be recalled from Chapter 1 that, in the traditional supply chain, the times at which decisions have to be taken within the chain and the quality of information available at those times produces enormous problems and potential for waste. Hunter (1990) estimated that, in the traditional supply system, out of 66 weeks lead time only 11 weeks were allocated to the processing element of the chain and of this only 1% was used for actual processing activity. Sewing time was usually measured in minutes. The vast proportion of the 66 weeks was taken up by storage. He estimated (1990, p. 31) that losses resulting from the inefficiencies of this system amounted to 25% of total retail sales value.

A Quick Response (QR) strategy is defined by Hunter (1990) as 'an operational philosophy and a set of procedures aimed at maximising the profitability in the apparel pipeline' and by Kincade (1993, p. 23) as 'a state of responsiveness in which a manufacturer seeks to provide a product to a customer in the precise quantity, quality and time frame required. In doing so lead times and expenditures for labour, materials and inventory are minimised; flexibility is emphasised in order to meet the changing requirements of a competitive market place', while Lowson (1999, p. 27) stresses its capacity to 'make demand driven decisions at the last possible moment ... Quick Response places an emphasis upon flexibility and production velocity [and] encompasses a strategy, structure, culture and set of operational procedures aimed at integrating enterprises in a mutual network'. This definition has the advantage of stressing the link with both flexible manufacturing (considered in the previous section) and with supply chain management.

The net effect of adopting this strategy is to reduce lead times and costs thereby improving competitiveness and performance. It is clear that there must be a close relationship between quick response, with its concern over relationships within the supply chain, and the concept of supply chain management. The latter is usually defined in terms of managing a network of legally independent but co-operative enterprises so as to reduce waste and time in the chain. Lowson (1999, p. 33) considers that 'Supply Chain Management describes the management of the entire chain of activity from raw material supply to final consumer in order to minimise the time taken to perform each activity, eliminate waste and offer an optimal response' and, accordingly, sees logistics as a sub-set of supply chain management. In effect a supply chain 'embraces all the activities associated with moving the goods from the raw materials stage to end use so that supply chain management can be considered to represent the task of ensuring that all of these activities run smoothly in collaboration with one another'. In the same way logistics is frequently defined in similar terms. Cooper (1994, p. 2), for example, argued that 'logistics is now widely used and understood throughout the business world, and refers essentially to the management of supply chains in commerce and industry' while Quayle (1997) sees logistics as 'the process which seeks to provide for the management and co-ordination of all activities within the supply chain from sourcing and acquisitions, through production ... and through distribution channels to the customer. The goal of logistics is the creation of competitive advantage through the simultaneous achievement of high customer service levels and value for money'.

It can be seen from the above discussion that one of the major aims of quick response, logistics and supply chain management is to remove waste and time from the system. This brings us into contact with two other related concepts of time-based competition and lean manufacturing. Stalk (1990) observed that

'many executives believe that competitive advantage is best achieved by providing the best value for the lowest cost ... Providing the most value for the lowest cost in the least amount of time is the new pattern for corporate success'.

The traditional view of the manufacturing process saw a dichotomy between long production runs of standardised products at low cost on the one hand and short runs of high quality, diversified products produced at relatively high unit costs, on the other. In a very real sense the objective of time-based competition is to capture the best of both worlds by having low cost, short production runs of high quality, differentiated products. This argument is captured diagramatically, for example, by Spanner (1993) and is further advocated by Lowson (1999, p. 32) when he argues the case for a new approach to production 'based on the use of information technology and customised, short-run manufacturing' which will reverse the principles of mass production which were based on reaping low costs over long runs but increasingly are found to be at odds with the demands of an ever more capricious market place.

The concept of time-based competition is closely connected to that of flexible manufacturing which was described above, in that the latter is seen as one element in the sequence of organisational, managerial and technical changes required to implement a time-based strategy. The main objective of all the above is to develop the so-called seamless supply chain in which waste, time and non-value adding activities have all been removed or minimised. Hines (1997) identified seven types of waste – overproduction, waiting, transportation, inappropriate processing, surplus stock, unnecessary motion and defects – while Towill (1996) identified seven types of cost (but not value) adding activities – counting things, inspecting things, finding and chasing things, storing items, and re-working items.

The aim is to remove all wasted time as far as is possible. The key, it is argued, to achieving this result lies in co-ordinated supply chain management which will remove the waste by better co-ordination, forecasting and sharing of data and will remove cost adding activities by increasing co-operation and trust within the supply chain.

The main elements within the quick response or seamless supply chain would include a reduction of demand forecasting errors; superior and all embracing sharing of more rapidly transmitted data; a substantial reduction in defects and inspection; a reduction of stock held at all stages in the supply chain; the introduction of new working practices such as modular manufacturing; some technological changes especially in relation to information transfer; the reduction of both internal and external transport times to a minimum; and the evolution of partnership as opposed to adversarial relationships within the supply chain. The major benefits anticipated from the introduction of these changes would be less end of season mark downs; greater productivity; fewer faults; reduced inspection costs; better quality; less forecasting risks; quicker

response times and improved customer service, all of which should theoretically be transformed into lower costs and higher profits.

Technological change does have a role to play in the implementation of QR strategy. New (1993) and Scott (1991), for example, showed that throughpull times could be reduced from 35 to 12 days in the case of underwear manufacture, simply by changing the fabric dyeing process. Forza (2000) also demonstrated that the textile delivery time for a product using fibre dyeing was 120 days (of which 30 was 'waiting time') but that the time allowed for actual garment manufacture was only 15 days and that even in this figure the proportion of time spent on real value added activity was very small. The introduction of CAD and Computer Controlled Cutting are examples of technological changes at the apparel manufacturing stage. In Forza's (2000) estimation, however, while some technical and work organisational changes are implied, the most important changes required relate to changing prevailing managerial attitudes and entrenched business cultures. It will be recalled from Chapter 1 that the history of co-operative behaviour within the textile supply chain has not been a good one. As Hunter (1990, p. 19) commented, each 'sector in the supply system has traditionally regarded itself as a separate business with its own strategies', noting that real interest in QR strategies only dates from the mid 1980s and even at the end of the 1990s (Forza, 2000, p. 141) most experts believe it will be a major task to overcome 'long standing sectorial traditions and cultural barriers'.

Many commentators, such as Forza (1993), believe that the biggest single change that could be made would be to improve demand forecasting and the associated flow of information within the supply chain. The problems of demand forecasting in a fashion dominated sector are enormous and, as will be seen in Chapter 10, a well developed *predictive* model of the fashion process does not exist.

It can be noted that there is a clear link between the collapsing of the supply chain and the accuracy of demand forecasts in that, as was shown by Hunter (1990, p. 80), forecasting errors fall dramatically if lead times are reduced. Inaccurate demand forecasting requires retail margins to be high (Forza, 2000). The problem of data transmission within the supply chain is less severe (in a technical sense) and has been revolutionised by Electronic Data Interchange (EDI) which can be defined as (Riddle, 1999, p. 133) 'the transmission of data in structured formats between firms who normally do business with each other'. Hunter (1990, p. 70) argued that the importance of data transmission to QR 'cannot be overemphasised' but it must be recognised, as Forza (2000) points out, that EDI by itself cannot produce QR because saving a few days within the context of a 4-8 month cycle will never be very significant.

There is little doubt that the retail sector has been the driving force behind the implementation of QR strategy. As Riddle (1999, p. 134) observed, major

retailers 'are using their buying power to require manufacturers to implement EDI ... Consequently QR is becoming a competitive necessity for apparel producers, rather than a source of competitive advantage'. This raises the question of who has gained the most, within the supply chain, from the benefits associated with the adoption of QR strategies. The existence of these benefits is not in doubt. Forza (1993) gives examples of QR gains amounting to a 31% increase in sales and a 30% reduction in stocks together with a 50% reduction in forecasting errors in American textile supply chains.

An Ernst and Young survey (1990), on the other hand, reported that most gains were in 'intangibles' such as improved customer relations and reduced lead times rather than increased sales and profits. A large number of reports based both on simulations and trials have quantified these benefits. These are summarised in Hunter (1990) and report substantial gains amounting to (1990, p. 91) of some $12.5 billion for the USA in 1985 of which $8.2 billion was captured by the retail sector. Trials in three partnerships produced (1990, p. 113) results which 'were almost unbelievably good' in that the three retailers involved experienced improved margins of between 30% and 82%. Model building exercises also showed benefits to manufacturers. Another study by Arthur Anderson and Co in 1989 reported (Hunter, 1990, p. 141) a 'yield of $9.6 billion in improved performance for the apparel retailing industry as a whole'. A second study of the manufacturing sector also reported impressive results. It is noticeable, therefore, in the literature that the enthusiasm for QR does appear to be more deeply rooted in the retail sector and that gains to that sector usually outweigh gains to the other cells in the pipeline. This has generated a degree of scepticism on the part of certain commentators as to the real benefit of QR to the apparel manufacturer. Taplin (1995, p. 10), for example, argues that vastly increased buying power of major retailers 'forced manufacturers to develop complementary skills to match these buyer-driven changes' and that (1995, p. 12) many senior managers in the apparel sector see QR both 'as a necessary evil of the cost of doing business and one that is being forced upon them by retailers' and as a way 'to increase retailer value added at the expense of the manufacturers'.

This is, of course, not quite what is implied by true partnership sourcing. There are, for the UK, a number of small pieces of evidence which lend some support to Taplin's thesis. For example, Jones (1997 and 2002) found that the level of stocks held by UK apparel manufacturers was very high compared with the manufacturing average while Groves (1997) found that the evidence for improved performance in non-adversarial relationships in the textile pipeline was extremely mixed.

A review of the literature suggests that there is a long way to go before the objectives of QR can be achieved and that the greatest amount of work remaining is between the textile and garment manufacturing elements of the

chain. Riddle (1999) for example, found that most applications of EDI had taken place between manufacturers and retailers. Forza (2000, p. 142) identified the lack of involvement of fabric producers at the garment design stage as a residual weakness in the supply chain so that (p. 145) the reduction 'in textile supply lead time is the most critical intervention' remaining.

The task is formidable, some reports suggesting (Sako, 1995) that even in the car industry where supply chain co-ordination is generally felt to have progressed, the evidence that partnerships yield financial results is sketchy. It is still the case that UK retailers and suppliers are locked into a long product development cycle which means that there is very limited opportunity to reduce the risks of fashion retailing.

The potential for QR strategies to reduce the rush offshore will be considered in the final chapter, but it can be noted here that most estimates of the spread of QR strategy in the apparel manufacturing sector (Kincade, 1993) suggest that, in America, about half of the industry has taken up these concepts and that size was positively related to adoption. Lowson (1999, p. 113) concluded that the adoption of QR systems was still 'piecemeal and incomplete' and that, in respect of the argument that QR would counteract the cost advantage of offshore production 'the jury is still out' because offshore suppliers have themselves responded well to the use of QR philosophies. Somewhat unexpectedly Levy (1996, p. 96) considered that although it was normal for international supply chains to be characterised by longer lead times 'the reduction in defects ... associated with lean production can stabilise the supply chain' so that while 'lean production may be more difficult and expensive in the international context ... it may still be worthwhile'.

Homes (1995) found that, in a survey of UK companies, while 80% reported that supply chain management issues had increased in importance, concern with purely national chains had fallen to only 20% of the sample. The same author in an earlier study of small and medium sized apparel manufacturers in South Wales (Lowson, 1999) found that there was very little implementation of QR techniques and little evidence of partnership relationships in the supply chain. He argued that the firms needed (Lowson, 1998, p. 41) to 'challenge the traditional sourcing decisions of the retailers'. In view of the analysis carried out in Chapter 2 this would seem to represent a somewhat unrealistic scenario in the context of apparel supply chains although it does echo the conclusion of Holmes (1995) that increased integration between customers and suppliers was the key to progress.

(viii) Spatial restructuring and international strategies

A number of individual elements can be grouped under these two headings, e.g. offshore production or sourcing strategies; the use of Outward Processed

Trade; exporting; direct overseas investment; joint ventures; globalisation strategies and the exploitation of new or emerging markets. As will be explored in the remainder of the book this group of strategies almost certainly represents the only way forward for the UK apparel manufacturing industry. There are two main reasons for drawing this conclusion. First, there is some evidence that industries which went down this route have been relatively more successful than those which did not (see section D below) and, secondly, that all the alternative strategies, while holding out some limited expectation of gain in certain areas of the industry, appear to be inadequate to sustain domestic production in (relatively) high labour cost regions. *These policies therefore come to the fore almost by default* and will be examined in detail in Chapters 8, 9 and 11 given that they have achieved such an important role in the evolution of strategies for the future.

All the strategies reviewed above can make, in particular circumstances, a positive contribution to increasing efficiency and reducing costs and, thereby, enhancing international competitiveness. All have enjoyed periods of popularity and have their advocates, e.g. in 1994 a review of these policies was produced in *World Clothing Manufacturer*. However, by the end of the decade it had come to be increasingly recognised that these strategies would play a role at the margin while, increasingly, the main thrust of policy would be to increase the role played by offshore production.

D. The existence of national strategies

It is, or course, true that, in the absence of nationalisation, strategies are made by companies and not by Governments. However, it is clear from a review of the literature that the recent history of the apparel sector in the developed countries does reveal fairly distinctive intra-country variation in strategic imperatives. It is not possible in the context of the present text to give a comprehensive description of the evolution of policy in a wide range of countries but it is both possible and instructive to highlight the different emphasis placed upon the strategies identified above in a selection of countries where this appears to have impacted upon performance. More detailed descriptions of national strategies can be found in De La Torre (1986) and Singleton (1997).

In the UK the history of Government involvement with the textile and apparel sectors is a very long one dating (De La Torre, 1984) from the adoption of the Cotton Spinning Act of 1936. A summary of early interventions can be found in Miles (1968). De La Torre (1984, p. 219) also contends that the UK and Italy were the two European countries in which job support schemes in apparel were the most developed although this relative position must not be

taken as an indicator of extensive subsidy in absolute terms. Furthermore, it cannot be taken as an indicator that any consistent or long term strategy existed. As Singleton (1997, p. 182) observed 'British post-war policy on textiles has been rather inconsistent'. Throughout the 1950s and 1960s most UK Governments, according to De La Torre (1986, p. 217) 'paid little attention to their clothing industries'. This history of public intervention prior to 1970 was largely 'confined to Government support for industrial development programmes of a general nature and to the orderly marketing arrangements negotiated since 1955 to limit imports'. Largely as a result of its enduring labour intensity the UK apparel sector was the main beneficiary of an emergency measure – the Temporary Employment Subsidy – in the 1970s: by the middle of 1978 (De La Torre, 1986) half of the applications received had come from the textile and clothing sector. This seems, however, to have been the exception rather than the rule in that the same author (1984, p. 117) concluded that the use made by the sector of general and regional subsidy schemes was rather poor.

Jones (1990) studied the take up of Selective Financial Assistance by the apparel sector in the UK between 1977 and 1988 and found that apparel manufacturers received between 1.3% and 5.4% of total assistance granted. In general terms the deployment of regional incentives in the UK in relation to the apparel sector was (Singleton, 1997, p. 182) 'modest in comparison with the efforts of German and Italian regional authorities'. Therefore, while Government support did exist, it did not in practice amount to extensive support for the sector. There was a specific Clothing Industry Scheme between 1975 and 1977 but, in Zeitlin's words (1988, p. 228) 'central Government Schemes aimed at promoting the restructuring of the industry have largely been conspicuous by their absence'.

Local authorities, on the other hand, have supported a number of resource and fashion centres in Glasgow, London, and Nottingham, for example, and in 1986 the Local Action for Textile and Clothing group was formed. The impact of these initiatives, however, has been extremely limited. The main strategic response to the emergence of low cost competition was, first, 'the restriction of imports from low wage countries through participation in the MFA' (Zeitlin, 1988, p. 228) and, secondly, as Owen (1999, p. 57) argues 'to restructure industry through mergers and takeovers. This proved to be a mistake'.

This view is echoed by Toyne (1984, p. 153) who concluded that the 'lack lustre performance of the British textile industry . . . during the 1960s and 1970s can be traced to the strategic option initially selected and the method used for its implementation: development of an undifferentiated strategy concentrating on standard . . . fabrics while protected from low cost imports', and is further echoed by Scheffer (1992, p. 193) who concluded that while apparel manufacturers in the Netherlands, for example, concentrated on the development of

offshore sourcing the 'crisis in the UK can ... to some extent be put down to the rigidity of the obsolete production system it upholds which is geared to large retailers'.

The third element in the strategy was the emergence of large multiple retailers who supported the domestic industry via the purchase of relatively standardised long production runs of garments. The 1960s witnessed a series of mergers designed to bring about greater co-operation within the pipeline and to ensure economies of scale. Details of the merger movement in the textile sector can be found in Owen (1999), Singleton (1997 and Winterton who wrote (1996, p. 55) that the 'relationship between retailers, clothing manufacturers and textile companies are crucial to understanding the changes in the organisation of garment making. Between 1950 and 1975 increased concentration of the distributive trades brought long and consistent production runs in clothing'. This movement was not confined to the textile sector but was characterised by the formation of the Industrial Reorganisation Corporation in 1966. As Owen (1999, p. 76) relates, this grand design started to unravel in the 1970s and by the late 1980s and 1990s demergers were in vogue as exemplified by the flotation of Courtaulds Textiles in 1989/1990. In Owen's words (1999, p. 76) the entire strategy 'was based on a misreading of the market ... Instead of a growing demand for standard, mass produced fabrics, European consumers wanted more differentiated, more colourful and more stylish fabrics. This called for flexibility ... and quick response to changing fashions'.

Entirely the same arguments could be applied with even more force to the apparel market. In relation to UK experience a number of authors, notably Winterton (1996) and Winterton (1997), offer a somewhat pessimistic view of the extent to which responses designed to retain domestic employment represent a retreat into working practices and forms of work organisation which are, in various dimensions, undesirable. They argue that deregulation of labour markets in the USA and the UK (exemplified by the removal of Wages Councils in 1993) have promoted a replication, particularly in inner city areas, of conditions normally found in the low wage, developing economies.

Winterton (1997, p. 36) writes that because small firms have limited access to capital, 'competitiveness was sustained through sweated labour' and 'the replication of the employment conditions of the NICs'.

Other European countries adopted different responses to the common challenge. It is generally argued in the literature (Toyne, 1984, p. 127) that the German Government was the least protectionist. Germany and the Netherlands followed a policy of niche marketing and the heavy utilisation of offshore production. This is confirmed by Alder (1997, p. 133) who wrote that 'more and more German firms have looked to overseas production to achieve cost competitiveness' together with a focus on fashion-orientated production domestically. The ratio of OPT work to total turnover in Germany rose from

4% in 1970 to nearly 30% in 1995 (Alder, 1997, p. 146). In the Netherlands (Scheffer, 1992) overseas production already accounted for 61% of output in 1983, rising to 73% in 1992. The same author records that, in Germany, the proportion of total output produced domestically fell to about 30% in the early 1990s. French garment manufacturers, like the British, resisted the movement of production to low cost centres for a long time and, in parallel, relied upon the introduction of new technology to maintain competitiveness. In Toyne's words (1984, p. 124) this was not particularly successful and the desperate situation of much of the industry in France is recorded by Hetzel (1998).

The situation in Italy is somewhat unique as was seen in Chapter 3. Belussi (1997) argues that the competitive power of the Italian industry rests on 'mature product specialisation' and (1997, p. 81) a high degree of systematic integration exploding geographic or external economies of scale. Nolan (1997, p. 275) similarly argues that supply chain collaboration is the main reason for the success of the Italian apparel industry in which 'vertically integrated companies were replaced by co-operative small scale production units'. The concept of the Italian regional district with its network of collaborating micro-firms 'combining design flair, product quality and flexible specialisation' has, in Scheffer's words (1992) become a model for European clothing production. There is little doubt that (Nolan, 1977, p. 280) the 'strategic network business system appears to match the needs of the business environment, allowing flexibility, responsiveness and control of quality to co-exist in a most efficient way'. A thorough description and analysis of the concept of the Italian industrial district is provided by Pyke (1990).

These districts are defined (Pyke, 1990, p. 2) as 'geographically defined productive systems, characterised by a large number of firms that are involved at various stages, and in various ways, in the production of a homogeneous product. A significant feature is that a very high proportion of these firms are . . . very small'. Typically the firms are characterised by the flexible specialisation mode of production. In the context of the textile sector the best known examples would be Prato and Carpi-Modena. A detailed study of these industrial districts, however, reveals quite a degree of heterogeneity between them and (Amin, 1990, p. 213) it is by no means obvious that 'blanket solutions based upon the experiences of particular areas' will travel successfully to other localities in other countries. In particular, it is clear that (Pyke, 1990, p. 2) the success of the Italian districts is not purely an economic phenomenon but is also a reflection of 'broader social and institutional aspects'. This opinion was confirmed by the work of Digiovanna (1996, p. 373) who also emphasised the great diversity of industrial districts, stressing that 'the success of industrial districts . . . depends on the institutionalised social compromises which exist in the region'. It is probably not insignificant that (Brusco, 1990, p. 142) many of the Italian districts 'are located in regions . . . dominated by the Communist Party'.

Rabellotti (1998) highlighted the differences between supplier/buyer relationships in the Italian and Mexican footwear sectors, for example, demonstrating that while co-operative relationships were common in the former they were not in the latter. Therefore, it is clear that the concept of the industrial districts is far more complex than is often alleged and that the possibilities of duplicating their success in other societies is far from a foregone conclusion. It must not be forgotten that the industry, in earlier years, received massive amounts of state aid and that, in De La Torre's words (1984, p. 209) within Western Europe 'only Italy ... was actively involved (prior to 1970) in trying to salvage a number of important textile and clothing companies for political reasons'. One indirect effect of this policy was to retain a skilled workforce in place. In addition, as Scheffer (1992) makes clear even in Italy, from the late 1980s, a movement to overseas production was beginning to gather pace.

The situation in Portugal is likewise rather idiosyncratic in that it enjoys labour costs closer to Asian than European levels. Historically, therefore, (Ussman, 1999, p. 85) the 'main basis of Portugal's competitive advantage has been low wages'. This may not be sustainable in the future and Portugal's experience, accordingly, probably does not contain many lessons for other developed countries.

Finally, the experience of the apparel sector in the USA must be noted, given (Chapter 3) the remaining importance of that country as a manufacturing sector. Dickerson (1995) documents in detail the breadth of responses made by the domestic industry to low cost competition but records (1995, p. 290) that many US firms are 'participating increasingly in offshore production of their garments'. This is confirmed by Taplin (1999, p. 364) who noted that the 'highly competitive nature of the industry has forced many domestic apparel manufacturers to move production facilities to lower cost locations outside the US'. The special position of Mexico after 1994 has already been noted in Chapter 3 and Taplin (1999, p. 365) records that Mexico, by 1998, was 'fast replacing China as the principal source of imported apparel'. The US industry has made extensive use of the so-called 9802 (ex-807) production facility which is similar to the OPT system described in Chapter 8. Taplin (1999) identifies Mexico, the Dominican Republic and Honduras as the main beneficiaries of this arrangement. The extent to which American companies have increasingly participated in foreign assembly is reflected, according to Dickerson (1995, p. 309) in the increasingly soft line taken against imports by the domestic trade association. She concluded that (1995, p. 311) world wide 'sourcing is basic to many US firms and offshore assembly ... is one of the most common strategies'. A second response to foreign, low cost competition has been identified by Taplin (1999), namely, in certain regions of the USA a resort to illegal and exploitative working practices.

It can be seen therefore, that the responses of a range of developed countries to the challenge of low cost competition exhibit both similarities and differences. The range of strategies employed – investment incentives; employment subsidies; decommissioning incentives; technological incentives; inducements to mergers; regional incentives – can be found in most countries at some point in time. Historically most countries appear to have had some enthusiasm for trying to preserve the sector but this policy was eventually found to be both very expensive and incapable of stemming the tide of global forces. In the mid 1970s more and more reliance was placed – in most countries – upon the mild form of protection afforded by the MFA. A number of countries effectively abandoned domestic production more quickly than others, notably Germany and the Netherlands. Taplin (1997, p. 198) concluded his extensive survey of national policies by stating that 'the differences between the patterns of restructuring of clothing in high wage economies are more of degree and emphasis than of fundamental principle'.

This is clearly correct in the sense that it is possible to identify similar elements of policy in most countries – even if adopted at different points in time – but it probably understates the somewhat unique reliance within the UK upon a strategy based on long production runs coupled with a relatively belated acceptance of the necessary role of offshore production. Most developed countries' producers have now swung around to reliance upon offshore production as a major element in their production strategies.

Is there any evidence that different strategies were more or less successful in meeting the challenge posed by low cost competition? Clearly there is no point in examining employment data as strategies which focused on offshore production would by definition have the effect of reducing domestic employment and, as was shown in Table 3.5, employment fell in most European countries. One indicator which might offer guidance would be success in world markets as indicated by shares of world trade, as both OPT and 9802 production is recorded, if subsequently sold abroad, as an export and would, therefore, affect the share of world trade captured by a country.

This approach would be in line with the advice of Porter (1998, p. 7) that 'the ability to compete successfully against foreign rivals' be regarded as a key indicator of success. In a European context the relative fortunes of the UK, France, Germany and the Netherlands might be instructive – the first two being more reliant upon domestic strategies while the latter two pioneered the movement offshore. The data in Table 3.15 is somewhat inconclusive. For example, over the long period 1980–97 all lost share of world exports with the exception of the Netherlands. Germany's loss was greater in proportionate terms than that of the UK. France performed most badly. Support for the offshore option is, therefore, somewhat qualified. In the period 1980–93 the evidence is rather more in favour of the offshore solution in that the losses

(proportionately) experienced by Germany and the Netherlands were much smaller than those experienced by the UK and France. In the latest period 1993–97 the Netherlands gained share while the UK and Germany suffered a broadly similar proportionate loss. This could reflect the increasing amount of offshore activity taking place in the UK sector following the opening, for example, of OPT in 1991. Italy's performance was superior to that of the UK, France and Germany but not as good as that achieved by the Netherlands although (Table 3.14) Italy, the Netherlands and somewhat paradoxically, the UK did well, in terms of the value of apparel exports. The USA achieved positive results both in terms of the absolute value of exports and the share of world apparel trade captured.

Therefore, the evidence is no more than partially supportive of the hypothesis that the UK apparel industry would have been better served by an earlier adoption of offshore production on a large scale, although Alder (1997, p. 147) does claim that 'compared with the clothing industries of other EU member states Germany's clothing industry has shown a relatively good performance' and that, at least in the 1970s and 1980s the industry's profitability was above that of most other industries. As was shown in Chapter 2 this could not be claimed for the UK. Nevertheless, it is clear that by the end of the 1990s, the pressure upon UK apparel manufacturers to embrace offshore production had reached irresistible levels. Accordingly in the next two chapters the major issues associated with utilisation of production facilities outside the home base will be examined.

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Chapter 8
Issues in Offshore Production Strategies

A. Introduction

It has been argued in the preceding chapter that a review of the evolution of the apparel industry reveals three dominant trends – first, as Taplin (1996, p. 4) puts it, 'Economic logic would suggest that clothing manufacture is increasingly an inappropriate industry for a high wage economy'; second, that some 30 years ago the industry in the UK responded to burgeoning foreign competition by following a strategy of consolidation of production into large units producing long runs for major retailers while at the same time sheltering behind the mild protective barrier afforded (to a greater or lesser degree) by the Multi Fibre Arrangement (Winterton, 1996, p. 25); and third, that this policy has become increasingly vulnerable to changes in the market place to the point where it is hardly viable. With the benefit of hindsight, that this should have proven to be the case is, perhaps, hardly surprising. It is more surprising that the logical inconsistencies in this strategy have taken so long to develop to breaking point. The reasons for advancing this view would be that it was not obviously sensible to aim for economies of scale in an industry such as apparel manufacture in which the minimum economic size of unit seems to be small and in which the application of new technologies has been so (relatively) slow; that the concentration on relatively long runs of 'safe' products was not, given the way the consumer market evolved, appropriate although whether or not this could have been foreseen is another question; that following EU entry the strategy was liable to be undermined by the liberal trading tendencies of that institution; and that improvements in global logistics were bound to facilitate global sourcing.

It was becoming clear by the early 1990s that the policy of (relative to other developed countries) eschewing offshore production was becoming unsustainable. This was recognised by Anson (1993b, p. 12) who wrote that the 'use of Outward Processed Trade on the continent contrasts sharply with UK practice; where a policy of local sourcing by some of the major retailers has

until recently provided a reasonably secure ... market for the UK clothing industry's products' but that the time had arrived when producers should contemplate how they were going to adapt to new circumstances. The same author (Anson, 1993a) concluded that 'competitive pressures ... will force European clothing manufacturers to undertake more outsourcing to take advantage of lower labour costs' and that 'the principle for trading pay for job security is difficult to defend in Western Europe in the 1990s. Besides, it serves merely to postpone the inevitable'.

It will be the theme of this chapter that the argument over the role of offshore production in future strategies is effectively over and has been decided in favour of the offshore option. As Moore (1999, p. 280) observed, the majority of the largest UK-based apparel manufacturers have recently announced plans to increase the proportion of their output produced offshore. In following this trend the industry would not be ploughing a new path – the same trend has been evolving in many other sectors. Edwards (1984) conducted a major survey of offshore manufacture and concluded that costs achieved were normally 20-30% lower than the UK despite lower productivity, but that transport costs rose. The three main factors which appeared to govern the identity of the optimum location were operating costs, the potential for minimisation of global tax payments and the security of the operation.

The word 'sourcing' is often used to describe , as Newberry (1993, p. 105) puts it 'a conscious decision on the part of a manufacturer or retailer to obtain merchandise from other countries'. However, the term is not always used consistently: Blyth (1996, p. 112), for example, describes 'sourcing as an alternative to own manufacture' which could, obviously, take place within the base country. Furthermore, in a more general sense the word 'outsourcing' is often used simply to describe the decision to subcontract part of an operation (e.g. physical distribution) to a third party specialist. Therefore, in this text the decision to utilise capacity in a country which is not the country in which the head office of a company is based will be termed 'offshore production'. This chapter will start from the point of view that an increase in offshore production is now inevitable and will explore a number of key issues raised by this trend. The main impetus towards an increased use of offshore locations is the labour cost gap between countries which has been dealt with in Chapter 4.

B. Operational issues

(i) Types of offshore production

If the decision has been taken to abandon autochthonous production in favour of production in another country there exists a wide range of alternative forms

of organisation to implement this change, see for example, Dickerson (1995, p. 294) who lists eight sourcing options. These would include:

(1) Outward Processed Trade arrangements (OPTs).
(2) Simple contractual arrangements with a supplier in another country into which category can be included CMT (Cut, Make, Trim) arrangements.
(3) Joint ventures – in which two companies join together in the formation of a new company.
(4) Direct investment in capacity in another country – usually termed FDI or Foreign Direct Investment.
(5) If the market is also in the second country licensing arrangements can be used. In this case the product is produced offshore by another company under license granted by the originator.

These alternatives have individually both strengths and weaknesses and their appropriateness in specific instances must be judged on a case by case basis – there is no single 'best' option universally. OPT arrangements are discussed in more detail in Section C(i) below. The advantage of contractual arrangements lies in their flexibility while the main disadvantage is a potential lack of control. Joint ventures have experienced a growth in popularity and have the virtues of spreading the risk and of promoting cultural awareness via the involvement of (normally) a local partner. The main danger is of unintended technological transfer and the training of a potential competitor. A similar danger arises with licensing arrangements.

(ii) Manufactured cost variations and the concept of hidden costs

In Dunning's (1988) words 'enterprises will engage in foreign production whenever they perceive it is in their best interests to combine partially transferable factors with at least some mobile factor endowments in other countries'. The extent of the labour cost gap has been explored in Chapter 4. This gap will be reflected in the final cost of manufacture in alternative locations and, as was seen in Chapter 4, there is quite a close correlation between labour costs and manufacturing costs. Tables 8.1 and 8.2 illustrate the gains to be realised from offshore production in the apparel sector.

Hunter (1990, p. 37) reports Boston Consulting Group estimates which suggested that the expected advantage of offshore operations (in terms of gross margins) fell by 1–4% after allowing for hidden costs.

The concept of 'hidden costs' has been invoked by a variety of commentators to suggest that the advantages of offshore production are in part an illusion – the result, in effect, of an inadequate comparison of the real costs. Blyth (1996) lists items such as co-ordination costs and the costs of maintaining offices overseas. A report on the French textile sector (Clautier, 1993) included extra

Table 8.1 Cost comparisons by location (1993).

Country	Shirts + Suits
UK	100
Hong Kong	82
Portugal	77
Tunisia	62
Malaysia	59
E. Europe	50

Source: Newberry, M. (1993) A Balanced Sourcing Strategy for the UK Market, *Textile Outlook International*, **49**, 105–121.
Note: Figures converted to an index based on UK by the author.

Table 8.2 Manufacturing cost variations: jersey knit sweatshirt.

	Landed cost (£)
UK	13.00
Hong Kong	8.40
Indonesia	7.46
Korea	9.01
Morocco	8.20

Source: Blyth, R. (1996) Sourcing Clothing Production. In: *Restructuring in a Labour Intensive Industry* (Ed: I. Taplin & J. Winterton) pp. 112–42. Avebury, Aldershot.
Notes: (1) Data is for 1993.
(2) UK figure is for own factory.

financial and documentation costs, such as those associated with international financial instruments. Other costs could include export taxes, additional warehousing, transport and insurance charges and the costs of maintaining extra buffer stocks. Finally, there is the risk factor – that the product will fail to arrive on time and to specification.

It is argued that if these costs are properly taken into consideration the cost advantage of the low labour cost locations is greatly reduced. Hergeth (2000) argues, from the results of a survey of 28 smaller American companies, that the biggest deficiencies of locational cost comparisons were related to mis-allocation of overhead charges specifically associated with offshore operations, such as the extra costs of mobile quality inspectors so that such costs 'are hidden because they are assigned to the wrong product or to a general time period and no specific product at all'. The problem with this argument is that it is a fact that most overhead costs are not scientifically allocated and that if, for

example, a company has moved to a position in which, say, some 70% of output is produced offshore then allocating these costs as overhead over the entire output will not produce a result which is substantially invalid. The present author believes that it is difficult to sustain the argument in the face of the seemingly remorseless rise in the use of various forms of offshore production. This would imply that vast numbers of decision makers are continually taking the wrong decision either out of stupidity or a failure to appreciate the realities of global costing. This seems a somewhat farfetched notion. A more plausible explanation would be that some sort of risk assessment exercise is being undertaken in that the probability of securing the main benefit of offshore production – cheap labour – is seen as one, while the probability of something going wrong to an extent which outweighs the labour cost saving is perceived as much less than one. Table 8.3 which is based on Kwok (1998) clearly indicates that competent management can easily take some of these factors into account in drawing up a comparison of landed costs from various sources.

Table 8.3 Sourcing costs ($ per piece).

	Far East	Mexico
Price (FOB)	8.00	8.00
Duty	1.34	0.54*
Risk/Letter of Credit (5%)	0.40	—
Agents' commission	0.40	0.50**
Transport	0.50	0.40
Landed duty paid price	10.64	8.99

Source: J. Kwok and R.M. Jones (1998) HIgh Kicking Chorus Line *Journal of Fashion Marketing and Management*, **2**, 177–194.
Notes: * At NAFTA lower duty paid rate.
** No agent's fee but there is an inspection cost.

At the end of the day the crucial factors are, first, the overall profitability of the operation and, second, the demands of the retailers who drive the pipeline. It is unlikely that the concept of hidden costs can ever be invoked to support a relocation of the assembly operation back to high cost centres (Jones, 2002).

(iii) Switching costs

The global pattern of cost advantage is constantly changing. Locations which were once the cheapest (particularly in terms of labour costs) lose that competitive advantage as they become more developed. Locations may become disadvantaged by political instability, the imposition of trade barriers or by exchange rate fluctuations. It is unlikely, therefore, that the decision on where

to produce or source can be taken once and the resultant pattern of activity remains fixed for all time. However it has to be recognised that constantly shifting the location of activity in pursuit, for example, of the lowest priced labour will incur so-called 'switching' costs. These are reviewed by Blyth (1996) and include start up costs, learning costs, reputational costs and cost of failure when dealing with a new partner. Blyth concluded that it would be sensible, on the basis of experience, to expect that 'it is not until at least the third year of co-operation that the full benefits and mutual respect ... in the sourcing arrangement begin to form'.

In line with the research/philosophy outlined in Chapter 1 it would clearly be desirable to obtain a test of the hypothesis that a policy of chasing low labour costs by constantly switching production leads to superior (or inferior) long run performance. Unfortunately no such evidence seems to be available for the apparel sector but at a time when the value of developing sound buyer-supplier relationships is increasingly recognised, running all over the world looking for cheap labour does not appear to represent an efficient strategy. The danger is that one would end up as a sort of economic refugee and a buyer on the run with very little influence. As Eenennaam (1996, p. 91) observed, relocation 'is an expensive proposition ... if the relocated activity is not successful and increases costs even further ... The important thing is to identify those value chain activities which are mobile and to identify locations where a comparative advantage exists for these activities'.

(iv) Choice of offshore location

In the apparel sector any company based in a developed country would have an extremely wide range of options which would provide the benefit of lower labour costs. This list has to be screened and a choice made. A variety of techniques exist to assist in this decision making process and it is normally argued that a choice of location would normally precede the choice of supplier. A list of the major factors to be taken into account would include the following:

(1) Labour costs.
(2) Labour supply.
(3) Material costs and availability.
(4) Training costs.
(5) Local labour laws.
(6) Communications.
(7) Political stability.
(8) Ownership possibilities.
(9) Local government aid packages.
(10) Local tax and profit regulations.

(11) Market access.
(12) Cultural compatibility.
(13) Exchange rate risks.

It is unlikely that any one location will be the 'best' under all headings – some trade offs will probably have to be made. Various devices are suggested to assist in the selection process. A relatively simple example is the selection grid illustrated in Fig. 8.1. This can contain as many variables as is desired and each must be weighed in order of particular importance to the company making the decision. Each country is then given a score under each variable. The main problem is that many of the variables – such as political risk – are hard to measure in an objective sense. However, it is possible to obtain country rankings which offer expert opinion on a wide range of factors as can be seen from Table 8.4.

		Score		
Factor	Weight	Country A	Country B	Country C
Labour cost	0.5	3 (1.5)	2 (1.0)	1 (0.5)
Labour supply	0.3	1 (0.3)	3 (0.9)	2 (0.6)
Stability	0.2	2 (0.4)	1 (0.2)	3 (0.6)
Final score		2.2	2.1	1.7

Notes: (1) Weights are subjective but must total to 1.0.
(2) Best score = 3.
(3) ( ) = weight × score.
(4) Final score = total of ( ).

Fig. 8.1 Country selection grid.

(v) Which products to produce offshore?

The conventional wisdom is that suitability for offshore production depends primarily on two factors: (a) the sewing time involved and (b) the complexity of the product. Blyth (1996, p. 139) concludes that the 'advantage of sourcing is greatest therefore when the garment ... involves high amounts of labour time'. Additionally, it can be argued that time-sensitive products would be less suited to offshore production. This view is captured by Fig. 8.2 which suggests that product A with low labour intensity, high time sensitivity and high complexity would be produced at home. Lead times for production in various regions fluctuate markedly as can be seen from Table 8.4. Therefore, a three-way relationship can be envisaged as illustrated in Fig. 8.2. Walwyn (1997, p. 255) reflects this viewpoint when he states that the choice of sourcing location will 'be based on an assessment of product and service characteristics', namely price, responsiveness and quality. The attempt to accommodate the varying

Table 8.4 Country ratings – non financial data.

Country	Political stability	Cultural barriers	Transport	Communication	Raw material	Shipping time (days)
Bangladesh	5	5	2	2	4	18/2
Cambodia	4	2	1	1	4	24/2
China	7	5	3	6	5	24/2
Czech Republic	8	8	7	6	5	3–4 (truck)
Egypt	5	4	3	4	2	16/2
Hong Kong	7	9	10	9	9	24/1
Hungary	8	8	7	8	5	3–4 (truck)
India	7	7	3	4	6	18/1
Indonesia	4	6	4	5	6	25/2
Mauritius	9	8	8	9	6	20/2
Morocco	6	4	4	7	5	14 (3 truck)
Pakistan	5	6	3	7	6	18/2
Poland	8	8	6	8	5	3–5 (truck)
Sri Lanka	6	7	3	4	5	18/2
Taiwan	7	7	8	9	8	22/1
Tunisia	6	4	4	5	6	14 (3 truck)
Turkey	7	7	5	7	8	4–6 (truck)

Source: KSA (1999) *Sorting Your Sourcing: the Fifth Cost Comparison Study*. KSA, Manchester.
Notes: (1) In the final column the first figure is for transportation by ship; the second is for air unless otherwise stated.
(2) High numbers indicate good performance.

demands of the marketplace and production facilities is sometimes known as balanced sourcing which will be described in the next section.

(vi) The concept of balanced sourcing

Kotabe (1992) defines balanced sourcing as the 'management of the interfaces among Research and Development, Manufacturing and Marketing on a global basis . . . such that the firm can exploit its own competitive advantages and the comparative advantages of various countries'. This definition captures the essence of Porter's (1998) use of the Diamond Framework described in Chapter

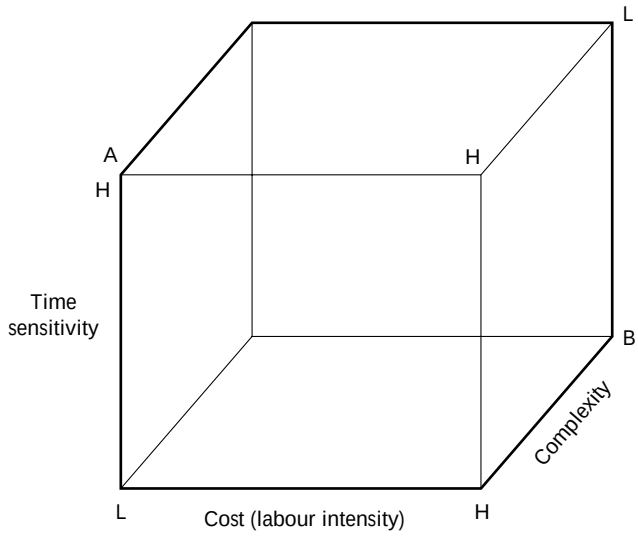

Fig. 8.2 Offshore *vs* domestic selection.

1 and highlights the main reason for the use of offshore production to offset the disadvantages (predominantly high wages) inherent in developed economies. Newberry (1993) defines balanced sourcing as 'balancing fabric availability against cost; and balancing the merchandise buying mix between product development and product replenishment to maintain stocks'. Kwok (1998) demonstrated how one Californian apparel manufacturer implemented a balanced sourcing policy in a variety of regions to maintain and develop a competitive position in the American women's wear market across the five product divisions which comprise the company. Products requiring quick response tend to be made in Mexico while those for whom the main drive is price tend to be sourced in the Far East.

(vii) The basis of the transaction

There are a range of internationally recognised definitions which describe the division of responsibility as between buyers and sellers (see Fig. 8.3). Locke (1996) recommends using ex-works or DDP. It is clearly important that all quotations are made in the same format. A further complication, which is likely to increase in importance as international production spreads, is that of international transfer pricing between units of the same organisation located in different countries. Domestic transfer pricing is in itself a complex issue and is

(1) Ex-works: the seller places goods for collection by buyer at the time and place specified. Buyer loads.
(2) FAS (Free Alongside Ship): seller places goods alongside vessel. The buyer is responsible for everything else.
(3) FOB (Free On Board): the seller moves the product onto the ship and clears it for export.
(4) C + F (Cost and Freight): the seller is responsible for all costs and freight to a named port of destination.
(5) CIF (Cost, Insurance, Freight): as above but the seller also pays for insurance.
(6) DDP (Delivered Duty Paid): the seller bears all the costs and delivers the product duty paid to a specified destination.

Fig. 8.3 Terms of sale.

covered in most standard economics textbooks (Pappas, 1993). However, the addition of the international dimension significantly complicated the issue as differential rates of taxation have to be taken into account. Elliott (2000, p. 220) concluded a survey of transfer pricing in the global sector with the warning that 'international transfer pricing is set to become a major concern [as] compliance costs and the threat of audit ... increase'.

(viii) Methods of payment

A variety of financial instruments have been developed to facilitate payments related to international transactions. The most commonly encountered are the Letter of Credit and the Bill of Exchange. A letter of credit is defined as a written undertaking by a bank (by prior agreement with a client) to honour a withdrawal by a third party (the seller). It is usually at the request of the buyer but is in favour of the seller. The bank promises to pay money out of the account of the buyer into the account of the seller after certain documents have been received, i.e. the bank allows the seller to withdraw from the buyer's account the agreed sum. A bill of exchange is drawn by the seller (the drawer) on the buyer (the drawee) who signs it. It obliges the buyer to pay the seller an agreed sum upon fulfilment of certain conditions. The buyer accepts a liability when he or she signs it. It is a request for payment and carries with it a risk that the buyer will not be able to make the payment at the time specified, but with a Letter of Credit, the buyer's bank is obligated to accept an instruction to pay money out to the seller, i.e. the bank is in effect guaranteeing that payment will be made. Locke (1996) contends that technological change means that there are now superior alternatives to the above, such as wire transfers.

(ix) Information flows and quality control

In an age of ever improving systems of electronic data transmission it is increasingly probable that problems associated with ensuring an efficient flow

of data within a global supply chain will diminish over time. Cooper (1994) observes that improvements in the information network enables control over global supply chains to be exerted in ways which would have seemed inconceivable a few years ago. It is clear that the dispersion of production was initially cost-driven but (Popp, 2000, p. 141) argues that 'reflection makes it clear that it will impact in a complex way on a wide range of business functions' and that, among these, the impact on quality procedures has been relatively poorly researched. Thus the increasingly international nature of apparel supply chains controlled by companies based in developed countries is not only a matter of relocating assembly operations but is becoming part of (or initiates) a more complex process of change in company structure, evolution and the process of inter-company relationships.

Popp's research (2000) concentrates upon the concept of information costs as expounded by Casson (1997) who argues that 'as technological progress drives down communication costs over long distances, so institutions adapt by increasing the geographical scope of their activities'. Therefore distant and diversified operation of the supply chain is facilitated by developments in information technology and electronic communications.

It has been demonstrated in Chapter 1 that, in historical terms, the members of the textile apparel supply chain do not have a good record of meaningful co-operation. It has also emerged from the review of potential strategies carried out in Chapter 7 that improving logistical and supply chain management capability has emerged as a significant factor. Internationally configurated supply chains are, by definition, more complex than domestic ones and, therefore, the internationalisation of the apparel industry exemplified by the increased use of offshore production introduces contradictory pressures which have to be resolved by the development of appropriate institutional structures and practices.

The area of quality control is a particularly good example of this point. Quality can be a critical element in competition and there is a significant body of research (Wong, 1988; Jacobson, 1987; Ouchi, 1981) which highlights the role of quality in securing and retaining customers. The word 'quality' can have a range of meanings. The British Standards Institute (1987) defines quality as the 'totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs'. Garvin (1988) identifies five concepts of quality: (a) the transcendent view which equates quality to excellence; (b) the product-based view which assumes that quality is measurable in an objective sense; (c) a user-based view which relates to fit to consumer preference; (d) a value-based view which refers to excellence at an affordable price and, finally, (e) the conformance view which defines quality as conformance to a specification. It is the latter viewpoint which is normally utilised in studies of supply chain performance.

Popp (2000, p. 142) argues that 'the location within the supply chain, in geographical and institution terms, of responsibility for assessing quality may constitute a significant difference between supply chains'. Clearly the ability of competing supply chains to manage the information flows associated with quality control could form the basis of a competitive advantage. Popp's initial research indicated that quality issues had played an important role in the evolution of all the supply chains examined despite the diversity of markets served. Supply chains which, for example, concentrated on chasing low price and ignoring information issues appeared to risk encountering severe quality problems. The early conclusion drawn from the research was that (Popp, 2000, p. 160) while a wide range of strategies had emerged to deal with global supply chain issues, prominent amongst them has been the 'assignment of responsibility for monitoring quality to third parties, most often located in the source country and sharing national or at least cultural and linguistic affiliations with that country'.

(x) Global versus domestic logistics

Global supply chains tend, almost by definition, to be longer and more complex than domestic ones. In the opinion of Bowersox (1996, p. 126) while 'domestic logistics focuses on performing value-added services in a relatively controlled environment ... Global logistics operations must accommodate all domestic requirements and also deal with the increased uncertainties' of the international trading environment. The issues which are either only present in global supply chains or which are of greater importance in them are summarised in Fig. 8.4. Locke (1996, p. 128) considers that the issues are not as big an impediment as they might appear and that the optimum solution is to subcontract the task to a specialist logistics provider because 'there are a lot of organisations ... to co-ordinate a lot of these steps at a cost most people accept as reasonable'. The major questions of the impact of trade barriers and exchange rate fluctuations are considered in Chapter 9.

Cooper (1994) has produced an extremely useful taxonomy which assists in identifying the extent to which global logistics will be important elements in a company's operations. He divides companies into five so-called clusters: (a) invaders, (b) settlers, (c) cloners, (d) barons and (e) outreachers. Invaders enter a foreign market with the aim of supplying it using external sources of supply. Therefore, their demand is mainly for inbound logistics. Settlers, in contrast, utilise local suppliers and, as a consequence have little demand for either inbound or outbound logistics. Cloners tend to duplicate production operations within each market they supply and have limited needs for global logistics. Barons concentrate both sourcing and production in one place and consequently have a high level of demand for both inbound and outbound

More important issues	New issues
Distance barriers	Trade barriers
Logistics	Exchange rates
Communication barriers	Language issues
Lead times	Postponement
Co-ordination issues	Cultural issues and conflicts
Multiple production sites	Multiple markets
Diversity in supply and demand conditions	Political issues
Stock levels	Duties
Multiple freight modes	Subsidies
Quality control	Break bulk and multiple consolidation options
Information flows	
Extended transit time	

Notes: Most of the terms will either be self-explanatory or will relate to issues discussed in the text. The following may require some explanation: 'break bulk and multiple consolidation' refers to the fact that there is a wide range of choice available in gathering products together from suppliers and then breaking them up into smaller lots.

Fig. 8.4 Domestic *vs* global supply chains.

logistical services. Finally, outreachers concentrate production in one location but sell globally and have a high demand for both types of global logistics.

The concept of logistics reach is also of use in determining the locational flexibility of the various elements of the supply chain and this is related to the physical characteristics of the product, such as weight and bulk. The term 'value density' is used to relate the value of an item to its weight and volume. If an item is said to have a high value density it can be transported over long distances, e.g. a watch. If it has a low value density, production and use tends to be localised. Therefore, the logistics reach (the propensity to move the item) is positively related to value density – if value density is high then logistics reach will be great.

One implication of this concept within the textile apparel supply chain would be that activity is likely to be pulled more towards the fabric production centres than towards the final market as it is probable that garments have a higher logistics reach than basic fabric. The essence of this issue is nicely illustrated by Taplin's (1995, p. 3) observation that other than 'items with a high weight to labour ratio the majority of items could be more inexpensively manufactured overseas'.

Finally, global supply chains afford the opportunity to engage in what is known as 'postponement' of activities. This refers to the existence of opportunities to delay carrying out certain activities within the value chain so as to delay the point at which a product becomes irretrievably dedicated to a specific customer, e.g. belts could be added to trousers when the product reaches the final market so as to save weight during transport; pressing can likewise be postponed; and differential packaging can be carried out in the final market

place. Cooper (1994) considers that opportunities for postponement are related to the answers obtained to three simple questions: (a) is the brand global?; (b) is the product formulation global? and (c) are the peripherals (such as packaging) common to all markets? If, for example, all three questions can be answered in the affirmative then the most appropriate logistics strategy would be a concentrated one with fully centralised (in one location) production and distribution – with a correspondingly high demand for both inbound and outbound logistics and little or no postponement. If the answer to the second and third questions was, by way of contrast, negative then deferred assembly would be indicated and postponement increased.

(xi) Vendor selection and the issue of ethical sourcing

The identification of an overseas supplier is clearly a major decision which will determine whether or not a supply chain will function efficiently. Popp (2000) has produced a number of case studies which clearly indicate the impact of mistakes in this area. A number of devices exist to assist in the selection process many of which are similar to the grid illustrated in Fig. 8.1 although in this case the selection factors would incorporate elements crucial to supplier choice such as price, quality and dependability. Locke (1996) suggests that country selection should precede supplier selection and that subsequently a short list of potential suppliers should be drawn up on the basis of an ex-works price quotation from which landed costs can be calculated. This is defined as (1996, p. 203) 'the total cost to buy the products, bring them to your receiving point and finance the inventory required both in your stock room and in the shipping pipeline'.

It does not follow that the supplier with the lowest landed cost will inevitably be selected. A number of other factors must be taken into account, e.g. exchange rate risks, trade barriers, premium freight requirements, political risks and so on. Finally, it seems obvious that managing global supply chains is likely to call for different skills than are involved in managing domestic chains. These issues are considered in section xii below.

An issue which has received increased attention is the reputation suppliers and/or locations enjoy for adhering to recognised standards of employment conditions. This issue is generally referred to as that of ethical sourcing. Ethical sourcing can be defined as the utilisation of offshore sourcing locations and suppliers in compliance with a set of pre-determined standards of employment conditions including such factors as wage levels, working time, age restrictions and hygiene and welfare conditions.

The question of ethical sourcing has attracted a lot of attention in the developed countries. In the UK, for example, the Ethical Trading Initiative sets out to encourage retailers to establish best practice. A number of charities have

also become involved such as 'Labour behind the Label' in the UK and the National Labour Committee in the USA. In addition, a large number of companies such as New Look, Debenhams, Gap, Levis, Reebok, Nike, IKEA and Liz Clairbourne have developed ethical sourcing policy statements (Parker, 1998, p. 355). The company which made the most positive move towards monitoring suppliers was C&A which, in 1996, launched an independent auditing unit called the Service Organisation for Compliance Audit Management (SOCAM). This, in the UK, was not rewarded by customer loyalty.

These issues are extensively covered by Ross (1997) and Jarnow (1997) and it clearly is theoretically possible for a concern over ethical sourcing practices to be developed as part of a company's competitive advantage provided that consumers are willing to take this into account. In essence, this issue is part of a wider question concerning the relationship between product origin, brand name and consumer perception of quality and value. As Usunier (1993, p. 249) states, there 'is an important relation between images of products and the symbols diffused by this materiality'. In order for consumers to reject apparel made under unacceptable working conditions they must first, be able to identify accurately which countries have poor practices; second, they must be able to recognise the country of origin of the garment or the brand and to be able to distinguish between country of manufacture and country of brand origin; and, third, they must be willing to pay extra for products made under better and (usually) more expensive conditions.

Clearly it is possible to manipulate 'made in' labels and brand names and to exploit positive associations related to country images as part of the marketing mix. There is a mass of research evidence – summarised by Usunier (1993) – to support the argument that consumers do associate country of origin with product attributes but that they do so in rather complex ways and not in isolation of other product characteristics such as price. Lumpkin (1985) in a study of the apparel and shoe market in the USA, for example, found that consumer perceptions of the risks associated with products from various sources varied according to product type. Similarly, a number of studies of ethnocentric consumerism (the desire to buy own nationality products) suggest that this is also related to product type so that while Usunier (1993, p. 254) can conclude that it 'has been persistently demonstrated that in most developed countries domestic products generally enjoy a more favourable evaluation than foreign-made products' this has clearly not happened in the apparel sector in that import penetration rates in most developed countries are extremely high and rising.

The important commercial questions from the point of view of an apparel manufacturer or retailer planning to switch production away from a domestic base to an offshore one are: first, will the country of origin have to be stated on the garment and, if so, is there any danger that consumers will associate specific

locations with poor quality?; second, is there a danger that relocation will affect the price consumers are willing to pay?; and third, is there any real danger that revelations about poor employment practices in certain low cost countries will result in consumer boycotts of products from those areas? These are questions upon which research evidence can be consulted.

With regard to the first question, it is not a legal requirement within the EU that the country of origin (which would normally be defined in law as the place in which the last significant manufacturing process was carried out) be identified on the garment, although in practice it often will be. It could be an offence to use a logo or brand name that was liable to mislead the consumer as to the country of origin.

There is evidence in Usunier (1993) that relocation of production has damaged the sales of certain products (usually relatively high technology items) in the USA and that brand names can convey country and quality associations. Seaton (1999) in a study of automobile values, found that moving production from mainland USA to Mexico resulted in a 12% fall in the value of the product. This confirms early research by Johansson (1986) who demonstrated that the status and quality images of American cars fell when production was moved to low labour cost countries: he estimated the price premium for made in the USA vehicles to be around 30%. A similar result was found by Jaffe (1989) in relation to electronic products.

In relation to the third question there is a limited amount of evidence that consumers do identify certain countries with low quality apparel production. Lea-Greenwood (1999) found that consumers were able to articulate beliefs about inter-country variations in standards of working practices but the evidence for concern being translated into an unwillingness to purchase was extremely flimsy, e.g. only 55% of the sample stated they would pay more for goods produced under superior working conditions. Dickson (1999) also found that, in an American study, even 'in the most altruistic apparel purchase situation consumers . . . place more importance on quality criteria than they do on social issues' in that 57% of the respondents said they would only buy from socially responsible businesses if they really liked the product while 39% said they did not usually check where the product was made if it suited their needs. Zolka (1997) found that brand-conscious men were more sensitive to ethical isues than other men while women were more concerned with these issues than men. The problem for retailers and manufacturers is further compounded by the observation (Creyer, 1997, p. 429) that ethical behaviour 'may be a multi-dimensional concept – different ethical corporate acts could result in different consumer responses'.

Therefore, while it may be the case that (Wong, 2000, p. 72) ethical consumerism 'is predicted to become a significant trend in the future' and that there 'is a growing awareness of human rights and environmental issues in the

textiles and apparel industry' the actual amount of hard evidence of consumer action which damages sales is somewhat limited.

The issue is further complicated by the necessity to distinguish – in a world increasingly characterised by global supply chains – between the influence of country of manufacture and that of country of brand origin. The research evidence is relatively clear on this issue in that, for example, Min Han (1988) found that the sourcing country had more influence than the brand name. Iyer (1997) investigated the difference between country of brand origin and actual country of manufacture on consumer perceptions of quality and value and also found that there was 'a strong effect of country of manufacture ... in all product categories' but that 'the relative salience of country of manufacture and country of brand origin varies according to whether the product is a non-technical fashion product or a low technology technical product'. Somewhat counter-intuitively they found that country of manufacture was more important for fashion products. Knight (1999) likewise found that consumer preferences were more likely to be influenced by the country of manufacture than by the company's country of origin and concluded (1999, p. 159) that this 'reflects a particular degree of maturity on the part of consumers in an era where global manufacture has become commonplace'.

In a world characterised by the presence of increasingly dispersed supply choices it could be argued that the very concept of 'made in' is losing any real meaning in that it is unlikely that all the components or all the processes are carried out in one place. But it does appear from the evidence that country of manufacture is significantly more important than country of brand origin in determining consumer perceptions. Therefore while it may be true that as Wong (2000, p. 79) puts it, increasingly 'companies are being held accountable for the policies and practices in this entire supply chain' it does somewhat surprisingly seem to be the case that the country of actual manufacture is more important than the country of origin of the brand, i.e. than the reputation of the company perceived to be the leader of the supply chain. Verschoor (1998, p. 1515) studies those companies from the top 5000 in the USA which claimed commitment to ethical behaviour in their annual reports and found that there was a 'statistically significant linkage between a management commitment to strong controls that emphasise ethical and socially responsible behaviour ... and favourable corporate financial performance' although it is not clear how (or if) companies were standardised for variations in other significant variables.

It is not easy to arrive at a simple statement of the operational implications of the research. Clearly it is important that companies protect their good name but equally it would – on the basis of the available evidence – not be sensible to reject the offshore production option because of concerns over consumer perception of the product. The market remains price-driven and origin issues

cannot be divorced from other factors in the consumer decision-making process. The trade figures clearly indicate that apparel consumers in developed countries have few problems with the purchase of apparel made in a wide variety of non-domestic locations. The question of the desirability of withdrawing production from countries perceived to adopt standards below Western expectations is somewhat outside the scope of the present text but it can be observed that as Basu (1998) concluded, if the labour market is somewhat primitive and rigid, which is very likely in very poor countries, then a ban can worsen the condition of the workforce.

This conclusion was also reached in later research by the same author Basu (2000) who, in an investigation to the link between the use of child labour and the existence of a minimum wage, concluded that 'the suggestion of using minimum wage legislation in developing countries as a form of international labour standard has the risk of exacerbating the problem of child labour'.

A thorough review of labour issues arising from globalisation is provided by Parker (1998, Chapter 6). As is stated in Chapter 9, the standpoint taken in this text is that, as a general rule, more and freer trade is to be preferred to restricted and reduced trade. Frankel (1999, p. 379), for example, concluded that 'trade has a qualitatively large and robust ... positive effect on income' while Lee (1997) observes that while there is some consensus about the universal observance of core ILO standards there remain substantial differences of opinion about such issues as how to deal with problems caused by job destruction if such standards are applied.

(xii) Remaining problems with offshore strategies

It would be difficult to find any commentator on the apparel industry who did not regard the debate over the efficiency of offshore production as settled. The net benefits are now widely recognised. It is true that organising a supply chain which is spread over several countries will be more complex than organising a purely domestic chain but most of the disadvantages are declining or becoming more soluble over time. For example, transport costs and times are falling; global communications are improving; and revolutions in information technology enhance the ability of companies to co-ordinate geographically dispersed activities. However, if companies increasingly engage in globally dispersed production chains a number of issues will assume greater importance in the future. Two such issues are the differences between domestic and global logistics and the question of ethical sourcing dealt with above. A third will be covered in this section.

The impact of culture on global business has been examined at length by Parker (1998), Flaherty (1996) and Locke (1996). The main impetus for offshore production remains the comparatively low wages. The vast majority of

the countries with very low labour costs are countries which exhibit significant religious, linguistic and cultural differences from the UK. Ignorance of these differences can have severe negative impacts upon the efficiency of offshore operations so that there is a danger that, in Parker's words (1998, p. 175), differences 'in cultural dimensions often are expressed in business behaviours that become the source of culture clash'. Locke (1996) identifies two main areas of cultural impact on business transactions: values (how people think) and behaviour (how people act).

The most important issues in the first area are attitudes to inequality and power which may affect the status of the customer; attitudes to uncertainty avoidance which may generate masses of regulations and a lack of flexibility; attitudes to traditional as against new forms of behaviour; attitudes to individualism; gender relationships which may make it impossible for women to conduct business; the need for harmony and concern over guilt, shame and face. In relation to behavioural issues some of the most important dimensions of inter-cultural activity seem to be the style of communication adopted; the relative inability of some cultures to say 'no'; the extent of the distinction between personal and business relationships; attitudes to time and the concept of urgency; attitudes to physical closeness and touching and, finally, variations in the rules for conflict resolution and the existence of so-called 'escape hatches' which prevent disputes from getting out of control.

Parker (1998, p. 210) considers that it is vital that managers 'increase their cultural sensitivity' and, as international activity increases, adopt a 'broad, non-parochial view of the company'. Managers' operation across cultural boundaries will require certain skills and attributes such as the ability to work with people from diverse backgrounds; the ability to read and be sensitive to cultural signs and to avoid cultural mistakes. Parker (1998) draws a picture of divergent business practices in the USA, Asia and Europe, for example, contrasting the emphasis on individualism in the USA with the group or collectivist theme dominant in Asia. Pitta (1999) points out that even a simple word such as 'yes' has different meanings across cultures – in China, for instance, it means I'm listening, not that I agree. It cannot even necessarily be assumed that all countries in a region will be culturally homogeneous. Parker (1998) draws distinctions between Japanese and Chinese values and between prevailing practices in Southern and Northern Europe, for example. There is quite a lot of research evidence on the existence of national cultural values. Hofstede (1984) identified four dimensions of national culture (individualism; power distance; uncertainty avoidance and gender issues) while Trompenaars (1994) isolated five variables (universalism; individualism; emotional displays; concepts of time; the importance of personal space and meritocracy). A ranking of countries according to a number of these variables is presented by Parker (1998, p. 172) so it is partially feasible for companies entering new countries or regions

to prepare to deal with these issues and to avoid costly problems and failures. In the context of the apparel industry it may be significant for Western manufacturers utilising offshore facilities in Asia that Kwan (1996) found that even Hong Kong-based companies utilising production facilities in China discovered that cultural problems were surprisingly severe.

(xiii) Quick response and offshore production

In Chapter 7, potential survival strategies were reviewed and the concept of 'quick response' was introduced. At first sight it might appear that the concepts of quick response and offshore (i.e. distant) production are mutually exclusive. However, it is important to note that the benefits to be derived from a quick response system achieved through integrated supply chain management do not entirely depend on the reduction of physical distribution costs, i.e. the achievement of a quick response result does not rest entirely upon quick physical transportation of product. Therefore, while it is true (as was seen in section x) that global supply chains are usually longer and more complex than domestic ones, they do not necessarily invalidate the benefits of quick response. Companies and countries have made great strides in reducing the wastes in global systems so that (Levy, 1996) lean production may still be feasible within internationally dispersed systems. Many low cost locations are relatively near to the UK market, for example.

C. The future development of offshore production and the role of buying offices

(i) The extent of offshore production

It has been argued above that the increased use of offshore production by the UK apparel industry is inevitable. This conclusion is based upon analysis of the extent and persistence of the labour cost gap (Chapter 4); an assessment of the probability that the labour cost content within total production costs will fall; and a series of announcements in the trade press concerning the increased use of offshore sources by major UK companies. For example, Coats Viyella announced (*Sunday Times*, 2000) that they were moving production overseas and were advertising for staff willing to move to Sri Lanka while (Tait, 2000) reported that since 1979 'CV and Courtaulds have both eliminated more than 10 000 positions each, and Dewhirst more than 2000 because of overseas sourcing policies ... All have increased their capacity abroad (in Morocco, Sri Lanka, Indonesia, China etc.) and, it has been said, now employ more abroad than they do in the UK'. Marks and Spencer has announced (Tait, 2000, p. 20)

that it would be sourcing 70% of all its apparel from lower cost countries by 2002.

There is no neat statistical source, however, which indicates the use of offshore production by UK apparel manufacturers but there is data on one specific form of offshore production known as Outward Processed Trade (OPT). This is a special form of offshore production which allows EU garment manufacturers to export fabric to low labour cost locations so that the assembly process can be carried out at low cost. Garments can be re-imported back into the EU at reduced duty payable only on the 'value added' component. In Europe OPT regulations can (Zhou, 1997) be traced back to the 1970s but were not formally rationalised until 1982. OPT is largely limited by quantitative restrictions and a regime of prior authorisation. In the case of some Eastern Bloc countries, securing prior authorisation ensures duty free entry into the EU. In 1994 these special arrangements were made available to the Czech Republic, Hungary, Poland, Romania, the Slovakian Republic and Bulgaria. Therefore, the proposed enlargement of the EU to include a number of these low cost producers will not have a significant impact on imports from these areas. The fabric should be EU-sourced and companies should also produce similar items within the EU.

It is generally accepted (Scheffer, 1994) that the biggest users of OPT arrangements have been Germany and the Netherlands e.g. Scheffer estimated that German OPT activity accounted for 62% of all OPT imports into the EU in 1993. In 1988 (Zhou, 1997) it was estimated that OPT accounted for about 17% of the volume and 24% of the value of EU apparel imports. In 1996 (Scheffer, 1992) it was calculated that EU imports from OPT activities in Eastern Europe rose from 65 000 tons in 1990 to 180 500 tons in 1995 so as to represent some 70% of all EU apparel imports from that region. In 1996 it was estimated (Eurostat, OETH, 1997) that OPT activity accounted for 9.3% of all EU clothing exports – ranging from 20% in Germany to 2.4% in the UK. In the case of the UK the first OPT quotes were opened as late as 1990 but no prior authorisations were issued until 1991 (see Table 8.5).

The relatively late introduction of OPT arrangements into the strategies of UK-based apparel manufacturers reflects the evolution of policy towards the industry in the UK which is reviewed in Chapter 5. Specifically, it most probably was a product of the relatively low level of labour costs in the UK and the policy of relying on the support of a number of larger retailers to purchase domestically produced products.

The figures in Table 8.6 confirm the breakdown of these arrangements in a spectacular fashion. If 1991 is taken as a base year the 1999 figure represents an increase by a factor of 354 in just eight years! In addition, the use of OPT by UK companies now spans the whole range of garments whereas, in 1991, 70% was accounted for by trousers. In 1999 the major UK OPT locations were

Table 8.5 The growth of OPT in the UK 1991–1999.

Year	Quantity (pieces)
1991	608,539
1992	1,569,568
1993	5,417,145
1994	11,509,370
1995	13,975,862
1999	215,595,000

Source: DTI Import Licensing Branch.
Notes: (1) These figures are the maximum totals available.
(2) The author could not agree the 1999 figure with staff at the DTI who insisted the total was 77 million, not 215 million (see Table 8.6).

Table 8.6 OPT locations 1999.

Year	Quantity (pieces)
Belarus	33,332,000
Boznia-Heregovina/Croatia	44,141,000
China	18,811,000
India	9,561,000
Indonesia	2,515,000
Macao	959,000
Malaysia	1,270,000
Pakistan	15,340,000
Philippines	1,064,000
Singapore	695,000
Sri Lanka	10,188,000
Thailand	2,158,000
Ukraine	50,138,000
Vietnam	11,504,000
Yugoslavia	13,919,000
Total	215,595,000

Source: As Table 8.5.

Belarus (15%); Bosnia-Herzegovina/Croatia (21%); China (9%); Pakistan (7%); India and Sri Lanka (5%) and the Ukraine (23%) (see Table 8.6). OPT-produced garments show up as imports in the UK trade statistics. If they are subsequently sold outside the UK they are treated as exports in the normal way and appear in the export figures. This is also true of the USA (Taplin, 1995). Therefore, while OPT use may reduce UK employment it can also influence favourably the share of world markets taken by UK-based producers (see Chapter 7).

To the extent that OPT activity increases it most probably represents

replacement of domestic activity. In the USA practices similar to OPT are carried out under the so-called 9802 system (Dickerson, 1995, p. 170) which, although not limited to the Caribbean region, is heavily concentrated in that area. The special position of Mexico has been considered in Chapter 3.

(ii) The role of buying offices

As the trend towards sourcing products offshore gathers pace the role of the offshore buying office in co-ordinating and managing the activities of the increasingly global supply chain will be enhanced. Humphrey (1996) defines the role of a buying office as being to 'liaise with the manufacturer on the importing company's behalf and [to be] responsible for ensuring that the goods meet the quality specifications, delivery dates and prices agreed in the contract'. Clearly the offshore buying office has to fit within the overall configuration of the textiles-apparel supply chain structure and it is by no means certain that their role will remain limited to that specified in the quotation above. The functions carried out by the offshore buying office could expand to include vendor selection, fabric sourcing, quality control and monitoring of ethical manufacturing standards and logistics management, for example. Locke (1996) considers buying offices to represent an excellent solution to the difficulties introduced by distance, culture, currency fluctuations and geographic distance.

(iii) The strategic role of offshore production

The historical impetus to the utilisation of offshore production has normally been the desire to obtain low cost labour so as to reduce the cost of manufacture of a given product range. In a more modern context a slightly different stance is increasingly being adopted by regarding the decision to produce offshore as a starting point in determining which products to make and which markets to supply rather than as a final, cost-reducing act postdating these strategic considerations. In the words of Walwyn (1995, p. 3) sourcing then becomes 'a vital element in a product supply strategy that will respond to the demand for value. The extent to which sourcing is used and the locations chosen will reflect product type, price level and volume to allow for a fully competitive performance' so that the idea that sourcing is simply used to lower cost is progressively abandoned in favour of recognising its strategic and dynamic role in creating consumers and price points which can be achieved.

The decision to adopt a global sourcing perspective will also influence the sorts of problems a company encounters with exchange rate and trade barriers issues. In Walwyn's (1995, p. 6) words it is becoming increasingly clear that the 'real winners will be those who apply the principles and practices of fulfilling

consumer demand on a global basis'. The issues raised by exchange rate fluctuations and trade barriers will be considered in the next chapter while those related to identifying consumers in the global market place will be covered in Chapter 11.

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