Chapter 2
Globalisation and Local Manufacturing

An analysis of local, micro-processes of capital accumulation needs to be situated within the dynamics of the global logic of capital. This is especially true of the garment sector, where low sunk costs, and relative absence of advanced technology and related skills, imparts a high degree of flexibility to the organisation of production and greatly enhances the mobility of capital across regions. A study of the accumulation process in Tiruppur, therefore, requires an understanding of how global conditions of production and distribution influence the organisation of production in Tiruppur. This exercise would enable us locate Tiruppur as a node in the network of world garment trade and identify the niche it occupies in the world market.

We begin this chapter with an overview of basic features of the structure and trends of world garment production and trade. Following this, we attempt to elaborate the various dimensions of garment exports from India, in comparison to exports from other economies, especially from the Asian periphery. Finally, we seek to identify the role played by Tiruppur industrial formation in India's garment exports and the defining characteristics of its product markets.

A. Features of the World Garment Industry

a) A leading Sector in Peripheral Industrialisation

Given its low technology and capital requirements, the garment industry has proved to be a successful entry-point for peripheral economies, pursuing a strategy of export-oriented industrialisation, into the world market. This industry’s ability to generate employment without much capital investment is another factor that has encouraged many ‘labour

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1 Literature specific to knitwear, especially cotton knitwear industry is scanty. Hence, we use existing studies of garment industry in general to understand this process, for, apart from fabrication, there is not much difference in the processes involved in the two segments of garment making. Knitting differs from weaving in the way in which the fabric is manufactured, vesting it with more elasticity and manoeuvrability in use. Further, knitwear accounts for nearly 50 per cent of world garment exports and expected to increase in the years to come (Indian Textile Journal, November 1971; Underhill 1998, 75).
surplus’ peripheral states to adopt and promote it.² The fact that the apparel industry was the leading export sector in all the newly industrialising countries (NICs) -- Hong Kong, South Korea, Singapore and Taiwan -- in the initial phases of their industrialisation is ample testimony to its significance (Ramaswamy and Gereffi 1998, 123). The development of garment industry helped these economies not only move upstream into textiles and fibre processing but also downstream into activities like marketing, besides providing the capital base for further diversification (Bonacich et al. 1994a, 366). Its significance to other, later peripheral industrialisation too has been observed (Elson 1994). Between 1975 and 1990, the share of the ‘Third World’ in the total output of global textiles has increased from 18.6 per cent to 26.1 per cent, and that of clothing from 11.7 per cent to 20.4 per cent (Kiely 1998, 153).³ During this period, the share of apparel in the exports of the newly NICs in fact declined. On the other hand, garment sector has become a growth pole for economies at lower levels of development like Bangladesh, China, Sri Lanka, Indonesia, India and Thailand (Gereffi 1996, 59).

The low resource requirements of the industry continues to favour the garment industry as a node around which industrialisation in peripheral economies can be promoted. Rhee (1993), for example, citing the case of Bangladesh where garment exports grew considerably in a very short span of time, posits the possibility of this sector serving as a catalyst for development. He argues for promotion of this industry, which can trigger growth in other sectors through linkage effects. The experience of the NICs too bears this out.

b) Wage Cost Differences and Strategy of Shifting Location

The characteristics of garment production as noted earlier -- low sunk costs, relative absence of advanced technology and skills -- have also induced apparel firms in the advanced capitalist countries to shift labour-intensive operations to peripheral economies.

² Its importance to peripheral industrialisation has been emphasised by Hoffman, “It was one of the first sectors where developing countries achieved a rapid growth of manufactured exports to the industrialised economies (more than 20% annually between 1968 and 1978). The developing countries’ share of world trade in the sector nearly doubled from 22% to 41% between 1970 and 1981 … . As a result, clothing now accounts for more than 21% of all Third World manufactured export ts.” (1985, 371).

³ According to Chatterji and Mohan (1993), the share of developing countries in garment exports has more than doubled from 21 per cent in 1970 to 56 per cent (M98).
Studies supportive of the 'New International Division of Labour' hypothesis, in fact, view the process of globalisation as a movement from high wage cost regions to low wage cost ones (Frobel, Heinrichs and Kreye 1980). While in the case of garment manufacture in Europe, shifting of production to low wage regions initially took place mostly within the continent, movement to other peripheral countries was largely initiated by apparel manufacturers from the United States of America (USA or US) (Bonacich and Waller 1994, 81). This process has its origins in the 1950s when manufacturers began to shift production to Japan to take advantage of the lower wages prevailing there. This sourcing of garments from Japan followed the earlier movement of US garment production from the northern part of the country to the less unionised and lower waged southern regions (Markusen 1987, 134). Subsequently, following the economic boom in Japan during this period, accompanied by rise in wage rates, manufacturers began to shift production to Hong Kong (Jones 1971, 140). From Hong Kong, capital migrated to South Korea and Taiwan to benefit from the still lower wages prevalent there (Bonacich and Waller 1994a, 23). This process of incorporation of other East Asian economies was also aided by the growing foreign direct investment by Japanese firms in neighbouring countries to take advantage of the prevailing low wage rates. The period thus witnessed a trend towards movement of Japanese apparel capital to offshore locations like neighbouring South Korea.

This process was also influenced by the political contingencies of the Cold War era that forced the US State to support the governments of these economies. Further, most of these governments provided conducive conditions for capital by allowing exploitation of cheap labour, and by rendering labour docile and pliable (Deyo 1987). Pursuing as they did an industrialisation strategy that relied on export growth during this period, these countries encouraged the creation of export processing zones, marked by easy access to imported inputs and lax labour laws (Markusen 1987, 136). In all these economies, by the 1970s, textiles and apparel had become the key export sector (Elson 1994). The

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4 Though they too did source from East Asia, the early phase was mostly characterised by relocation of production to the nearby East European economies. Frobel et. al (1980) give a detailed account of relocation of garment factories from Germany to the lower-waged non-EEC countries in Europe and Asia.

5 Around this period, manufacturers contracted out orders to producers in Latin American and Caribbean countries as well (Bonacich et al. 1994, 81).
combination of an enabling macro environment and sector-specific dynamics thus led to a rapid spread of this industry in these economies between the 1950s and 1970s.

Low wage costs, however, appears to be the prime mover of this industry (Elson 1994, 200). In 1975, while Hong Kong workers were paid 20 per cent of the wages of a US apparel worker, Taiwanese and Korean workers were paid only eight and six per cent of American wages respectively in this industry (Bonacich and Waller 1994a, 22). The 1980s witnessed the incorporation of other Asian countries with relatively low wage levels like China, Thailand, Indonesia, Sri Lanka, Pakistan, India and Bangladesh into the world garment trade.\(^6\) Table 2.1 details the market shares of the leading garment exporting countries over a 15-year period, from 1980 to 1995.

<table>
<thead>
<tr>
<th>Countries</th>
<th>Share in world exports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1980</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>11.5</td>
</tr>
<tr>
<td>China</td>
<td>4</td>
</tr>
<tr>
<td>Italy</td>
<td>11.3</td>
</tr>
<tr>
<td>Germany</td>
<td>7.1</td>
</tr>
<tr>
<td>South Korea</td>
<td>7.3</td>
</tr>
<tr>
<td>US</td>
<td>3.1</td>
</tr>
<tr>
<td>France</td>
<td>26.2X5.7</td>
</tr>
<tr>
<td>Turkey</td>
<td>0.3</td>
</tr>
<tr>
<td>Thailand</td>
<td>0.7</td>
</tr>
<tr>
<td>Portugal</td>
<td>1.6</td>
</tr>
<tr>
<td>Chinese Taipei</td>
<td>6</td>
</tr>
<tr>
<td>India</td>
<td>1.5</td>
</tr>
<tr>
<td>Indonesia</td>
<td>0.2</td>
</tr>
<tr>
<td>UK</td>
<td>4.6</td>
</tr>
<tr>
<td>Netherlands</td>
<td>2.2</td>
</tr>
</tbody>
</table>


\(^6\) "...while the NICs in E. Asia and other regions were shifting into more advanced export industries, textiles and clothing became a key growth sector for countries at lower levels of development like Pakistan, Bangladesh and Indonesia. At present, China, India, Bangladesh, Indonesia, Sri Lanka and Pakistan, with their low wage advantage begin to establish themselves as major players in world garment trade" (Gereffi 1996, 59).

"In the most recent years apparel export industries in Thailand and Indonesia have exploded past the 3 billion dollar mark, and India, Sri Lanka and Malaysia have topped one billion dollars in apparel exports" (Christerson and Appelbaum 1995, 1363).
As the table indicates, while the market shares of more industrialised or the core economies and the semi-peripheral regions like Hong Kong and South Korea have declined in most cases, that of peripheral economies like China, Thailand, Indonesia, Turkey and India have increased.

These two concomitant processes have enabled garment manufacture to attain the status of the most globalised industries. As the leading sector of globalisation, the garment industry continues to increase its share in world trade for manufactured commodities. World garment trade has grown faster than trade in manufactured goods as a whole (Ramaswamy and Gereffi 1998, 124). Accompanying this global expansion, changes in the organisation of production have taken place, with important implications for garment production in peripheral economies.

c) Changes in Mode of Organisation

The globalisation process was paralleled by important changes in organisation of the apparel commodity chain. While the initial phase of globalisation was dominated by manufacturing capital in the advanced capitalist economies, from the early 1970s it was replaced by retail capital (Bonacich and Waller 1994, 83; Fine and Leopold 1993, 107-110). The requirements of low investment and technology in the industry facilitated the growth of this process. Earlier too, the manufacturers did not produce the entire output in-house. They sourced a substantial portion of their output through ‘contract manufacturing’, whereby they contracted production to local small producers. The bigger manufacturers focussed on supplying designs to the producers in the low-waged regions, and ensured control over quality of the output sold to wholesalers and retailers in the metropolitan regions.8

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7 Trade in apparel has grown at a rate of 10.2 per cent per annum (in US dollars) while overall world trade grew only at 4.9 per cent during the period 1980-92. In fact, the growth rate of world garment trade since the mid-eighties has been much higher at 15 per cent per annum during the period 1985-92 (EXIM Bank of India 1995, 16).

8 The term ‘metropolitan’ is used synonymously with ‘core’ throughout the study.
Since manufacturers themselves sourced their output through contract manufacturing, it was easy for merchant capital to do the same. Thus, instead of sourcing from domestic manufacturers, they increasingly began to enter into contracts directly with overseas low-cost producers. By eliminating one node in the production-distribution chain, viz., the domestic manufacturers, merchant capital in the core economies increased the trading margins accruing to it. This sourcing process virtually squeezed out the profit margins of manufacturers in the core and consequently diminished their role in imports.

Importantly, this process transformed the mode of pricing in this industry. Previously, pricing was primarily based on cost of production, but as trading capital became dominant, pricing was based increasingly on what the customers could afford to pay (Bonacich and Waller 1994, 83). Since, they could aggressively market the output, merchant capitalists pegged the prices at a level that was substantially higher than the cost of production. This, in turn, led to an increase in the prices quoted by the overseas producers, which further prevented producers in the core from competing with the retailers. Their sale price would have to include margins accruing to them, which again made them uncompetitive. This process had important ramifications for the modes of organising production in the sector since then.

The sourcing of garments from distant locations was found profitable, not only because of the low wages, but also due to changes in technologies of transport and communication. Technological innovations enabled capital to facilitate co-ordination of production in distant locations to take advantage of lower factor costs that prevail in these areas without much increase in transaction costs. Countries with better infrastructure in these areas would therefore gain over those that lacked it. Fundamentally, though, lower wages continue to be a big 'pull factor' (Table 2.2).

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9 Here, we alternately use the terms 'merchant' or 'trading' capital to denote wholesale and retail capital that dominates the industry globally.
Table 2.2
Labour Costs in Apparel Industry across Regions (in US $/hour)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>7.99</td>
<td>NA</td>
<td>Hong Kong</td>
<td>3.39</td>
<td>3.85</td>
<td>Brazil</td>
<td>0.76</td>
<td>NA</td>
</tr>
<tr>
<td>W. Germany</td>
<td>14.81</td>
<td>NA</td>
<td>South Korea</td>
<td>2.75</td>
<td>2.71</td>
<td>Mexico</td>
<td>1.17</td>
<td>NA</td>
</tr>
<tr>
<td>France</td>
<td>12.41</td>
<td>NA</td>
<td>Taiwan</td>
<td>3.74</td>
<td>4.61</td>
<td>Argentina</td>
<td>1.81</td>
<td>NA</td>
</tr>
<tr>
<td>Netherlands</td>
<td>14.95</td>
<td>NA</td>
<td>India</td>
<td>0.25</td>
<td>0.27</td>
<td>Perú</td>
<td>0.88</td>
<td>NA</td>
</tr>
<tr>
<td>Italy</td>
<td>13.5</td>
<td>NA</td>
<td>Indonesia</td>
<td>0.18</td>
<td>0.28</td>
<td>Uruguay</td>
<td>1.59</td>
<td>NA</td>
</tr>
<tr>
<td>Ireland</td>
<td>7.5</td>
<td>NA</td>
<td>Malaysia</td>
<td>0.62</td>
<td>0.77</td>
<td>Venezuela</td>
<td>1.38</td>
<td>NA</td>
</tr>
<tr>
<td>Belgium</td>
<td>12.57</td>
<td>NA</td>
<td>Pakistan</td>
<td>0.24</td>
<td>0.27</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>15.91</td>
<td>NA</td>
<td>Philippines</td>
<td>0.46</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greece</td>
<td>4.26</td>
<td>NA</td>
<td>Sri Lanka</td>
<td>0.39</td>
<td>0.35</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portugal</td>
<td>2.65</td>
<td>NA</td>
<td>Thailand</td>
<td>0.59</td>
<td>0.71</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Spain</td>
<td>7.11</td>
<td>NA</td>
<td>China</td>
<td>0.24</td>
<td>0.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Japan</td>
<td>7.44</td>
<td>10.64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>6.77</td>
<td>NA</td>
<td>Singapore</td>
<td>NA</td>
<td>3.06</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Bangladesh</td>
<td>NA</td>
<td>0.16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mauritius</td>
<td>NA</td>
<td>1.04</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: NA = not applicable
Source: Moore 1997, Table 2; Ramaswamy and Gereffi 1998, 123.

This table, read along with Table 2.1, reveals the growing share of the lower-waged regions in world garment trade. Countries with lower wage costs like China, Indonesia, Thailand and India have increased their share in world trade whereas economies with higher average wage costs have witnessed a decline in their shares.

d) Persistence of Dominance of Core Economies

Though the trend depicted above does lend empirical support to the 'New International Division of Labour' (NIDL) hypothesis discussed earlier, other developments in this sector do not lend credence to this view. First, domestic private firms, and not multinational firms from the core regions, commission most exports from East Asian countries. This belies the standard argument that it is manufacturing capital in the core that relocates production to the periphery and semi-periphery. Indeed, some firms in the semi-periphery have proved to be major competitors to retail capital in the core, successfully innovating new designs and marketing. Gereffi highlights the role played by agents within the US in this process, wherein they facilitate firms in these countries to
market products in the US under their own label (Gereffi 1996, 225). Firms in the semi-periphery like Hong Kong have even bought up US firms and compete with other US brands for a share of the US market (Bonacich and Waller 1994, 85). Thus, while the initial impetus originated in the core, it is not true that 'development' in this sector is completely 'dependent' as argued by some 'dependency' theorists. In fact, the model of development that we have in these instances lends credence to the multiple export role model formulated by Gereffi, with manufacturers in these countries having moved from undertaking specification contracting to own design manufacturing (ODM).

To understand this phenomenon, an important aspect, we need to consider the predominance of contract manufacturing since the 1950s and 1960s, as opposed to foreign direct investment evident in other sectors. As stated earlier, instead of investing capital in the peripheral economies, manufacturers in the US and Japan chose to give out contracts to manufacturers in the latter to produce. Samples with clear specifications of the product were given, and prices fixed through negotiations, after which it was left to manufacturers in the peripheral regions to produce within the scheduled time. This strategy enabled capital in the peripheral countries to upgrade the quality of garment production and enhance productivity through acquisition of skills, apart from sustaining a process of industrial capital accumulation. Cheap, skilled labour and quality production enabled these economies to soon emerge as leading players in world garment production and trade. Though this process led to a rise in wages over a period, wage rates in the periphery continued to be low when compared to that of the importing core countries. 10

Second, though the past three decades have witnessed the growth of garment production and exports from many peripheral economies, there has not been much change in the composition of the top exporting nations as Table 2.3 reveals.

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10 Wages in the Hong Kong apparel industry was only 31 per cent of wages in the US industry, while Taiwan's wage rate was 27 per cent and South Korea's only 21 per cent in 1988 (Bonacich and Waller 1994a, 23).
# Table 2.3

## Ranking of Leading Apparel Exporting Countries

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hong Kong</td>
<td>Italy</td>
<td>China</td>
<td>China</td>
</tr>
<tr>
<td>2</td>
<td>Italy</td>
<td>China</td>
<td>Italy</td>
<td>Hong Kong, China</td>
</tr>
<tr>
<td>3</td>
<td>South Korea</td>
<td>Hong Kong</td>
<td>Hong Kong</td>
<td>Italy</td>
</tr>
<tr>
<td>4</td>
<td>Germany</td>
<td>Germany</td>
<td>Germany</td>
<td>USA</td>
</tr>
<tr>
<td>5</td>
<td>Chinese Taipei</td>
<td>South Korea</td>
<td>USA</td>
<td>Mexico</td>
</tr>
<tr>
<td>6</td>
<td>France</td>
<td>France</td>
<td>Turkey</td>
<td>Germany</td>
</tr>
<tr>
<td>7</td>
<td>United Kingdom</td>
<td>Chinese Taipei</td>
<td>France</td>
<td>Turkey</td>
</tr>
<tr>
<td>8</td>
<td>China</td>
<td>Portugal</td>
<td>South Korea</td>
<td>France</td>
</tr>
<tr>
<td>9</td>
<td>USA</td>
<td>Turkey</td>
<td>Thailand</td>
<td>South Korea</td>
</tr>
<tr>
<td>10</td>
<td>Netherlands</td>
<td>United Kingdom</td>
<td>United Kingdom</td>
<td>India</td>
</tr>
<tr>
<td>11</td>
<td>Portugal</td>
<td>Thailand</td>
<td>India</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>12</td>
<td>India</td>
<td>USA</td>
<td>Portugal</td>
<td>Indonesia</td>
</tr>
<tr>
<td>13</td>
<td>Thailand</td>
<td>India</td>
<td>Chinese Taipei</td>
<td>Belgium</td>
</tr>
<tr>
<td>14</td>
<td>Turkey</td>
<td>Netherlands</td>
<td>Indonesia</td>
<td>Bangladesh</td>
</tr>
<tr>
<td>15</td>
<td>Indonesia</td>
<td>Indonesia</td>
<td>Netherlands</td>
<td>Thailand</td>
</tr>
</tbody>
</table>

Source: Calculated from Ramaswamy and Gereffi 1998, 124, Clothesline 2001 April, 44.

Table 2.3 reveals a number of interesting features. First, and the most obvious has been the rise of China, a hitherto peripheral economy, to the status of world’s leading exporter in 1995 from its eighth rank in 1980. Further, its share of 15.2 per cent is the highest held by any country during the entire period (Table 2.1). A related observation is the increase in shares of peripheral economies like India, Indonesia and Thailand. The shares of semi-peripheral economies, viz., South Korea, Hong Kong and Taiwan (Chinese Taipei), the premier exporters in the 1970s have declined. On the other hand, importantly, despite decreases in their shares (Table 2.1), core economies continue to have a significant presence in the global garment exports. In 1999, six core economies figure among the top 15 exporters. USA has not only increased its share during this period, but has also improved its rank. Moreover, many of these economies meet a substantial portion of their internal demand for clothing through domestic production. USA, for instance, manufactured 50 per cent of its requirements domestically in 1990, though it had shrunk from the 70 per cent share it had in the domestic market in 1980 (Bonacich and Waller 1994a, 23).
To understand this apparent paradox, we need to comprehend other forces that have influenced the geography of apparel production; that is, on the prospects of peripheral regions that seek to industrialise through exports of garments. In the following sections, we highlight a few other important features of the apparel product market.

e) Protectionism in the Advanced Capitalist Economies

Despite the continued presence of core economies in the top ranks of garment exporters, as revealed in Table 2.3, their shares (other than that of USA) have declined. Further, these economies have witnessed a certain degree of import penetration, especially from the semi-peripheral economies. To illustrate: between 1983 and 1991, the share of domestic market catered to through imports has risen from 30 to 45 per cent (Taplin and Winterton 1998, 20). To add, as the authors observe, the rise in cheap imports of apparel from the lower-waged peripheral economies has coincided with a phase of growing unemployment in the advanced capitalist economies. In the UK, employment in the apparel sector declined by over 50 per cent in the period 1973 to 1993 (27), while in Germany, employment declined by 2,70,000 during the period 1970 to 1994 (131). This has led to the view that imports have resulted in loss of employment opportunities in these economies (Hoffman 1985). More importantly, a strong lobby of domestic manufacturers and workers has forced core governments to insulate the domestic industry from such imports. Hence, trade restrictions by the advanced capitalist states, both in terms of price and quantity, have created a noticeable impact in the industry over a considerable period.  

Consequent to a reduction in tariffs by the US and EEC, the 1950s witnessed a strong growth of imports from countries like Japan and Hong Kong into these economies (Chatterji and Mohan 1993, M 112). Initiated originally as a Short-Term Agreement

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1 However, imports were not the primary reason for job losses in this sector in the core economies. In Germany, for every job loss due to imports, 50 were lost due to productivity gains. Further declining demand constituted job losses 20 times of that which can be attributed to imports from the periphery (Underhill 1998, 57).

2 Among others, Keesing and Wolf (1981) have examined the impact of trade restrictions on import penetration from the less industrialised regions.

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in 1961 to prevent more import penetration from these countries, it was extended into a Long term Agreement (LTA), and then made more comprehensive with its successor, the Multi-Fibre Agreement (MFA), introduced in 1972. Under the MFA, developed countries negotiate with individual trading partners to limit the amount of garments that the latter can export to the former. The earlier list of cotton based products discriminated under LTA was made exhaustive and extended to all textile and clothing products. Though they were initially imposed to discriminate against the major East Asian exporters, viz., Japan, Hong Kong, Taiwan and South Korea, over time, restrictions have been extended to other peripheral economies as well.

The MFA has been revamped thrice since its creation, with each renewal meant to increase the coverage and intensity of the restrictions (Goto 1989, 204). It however needs to be remembered that initial restrictions were only on textiles and not on apparel. With the growth of imports of apparel from both the semi-periphery and periphery, restrictions were widened to include them. Imports from other OECD countries were however permitted, as also imports from other countries with which core countries had entered into preferential trade agreements. While the MFA sought to impose restrictions on the quantity of different apparel that can be imported from each country, price restrictions were also imposed in the form of duties on other textile products. Discrimination was hierarchical. ‘Sensitive’ products, i.e., items with higher import penetration met with higher quantitative restrictions. Apart from such quantitative restrictions, tariff restrictions also exist in these countries. The levels are higher for the garment sector as compared to other manufactured goods (Chatterji and Mohan 1993, M 113). In fact, even within the textiles and clothing industry, there is a gradation in tariffs imposed as we move from processed to the final finished garment (Goto, 206-207).

The quota system that evolved under the MFA has exerted considerable influence on the structure of apparel production. While the main objective of the quota regime was to

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3 It was intended to last only a year and aimed primarily at cotton goods from Japan (Chatterji and Mohan 1993, M-112).

4 "....The MFA was and remains the most spectacular and comprehensive protectionist agreement in existence and became accepted practice within the trade regime" (Underhill 1998, 3).
restrict imports into the European and US markets, it has set in motion a process of quota-imposed economies seeking to avoid the restriction by shifting production to other low wage economies that are yet to face quota restrictions. The rise of Bangladesh as a garment exporter is a classic example of this phenomenon (Rhee 1990).\textsuperscript{5} Many other Asian economies like China, Thailand and Indonesia too benefit from the relocation of manufacturing by firms in NICs to these countries.

\textit{f) Rise of Triangular Manufacturing}

Another important impact of the MFA is the rise of what has been termed as ‘triangular manufacturing’ in the garment industry. This occurs when American and European firms place orders with firms in Hong Kong, Taiwan and South Korea. To avoid quota restrictions, these firms, in turn, contract orders out to firms in Bangladesh, Sri Lanka or Thailand, where they are manufactured and exported to the buyer under quotas available to the respective countries. Hong Kong and Taiwanese firms, for instance, get orders processed in China, Singapore firms in Malaysia and Indonesia, and South Korean firms in Indonesia, Honduras, Guatemala, and the Dominican Republic (Gereffi 1996, 225). Firms in the NICs act merely as trading agents in this network, linking firms in the advanced capitalist countries to low wage factories in the periphery.

While this process has definitely influenced the movement to relatively low wage cost countries, it has also helped to perpetuate market hierarchies in the industry. Manufacturers in the quota-imposed countries are forced to move into more value added products whose competitiveness is not based on low wages but on quality and fashion. Since there are restrictions on quantity, producers seek to increase their turnover by enhancing the value added to each garment. Segmentation in the apparel market therefore, influences location of production. This is of course not to imply that the quota system is the key determinant of market segmentation. Firms in these countries only seek to move up existing market hierarchies, created on the basis of quality, fashion and price.

\textsuperscript{5} Exports from Bangladesh began when a big exporting firm from South Korea set up production facilities in Bangladesh and trained Bangladeshi workers in Korean factories. After a period of time, these trained workers moved on to set up factories of their own that were primarily manufacturing for the export market. Garment exports at present account for more than 90 per cent of manufactured exports from Bangladesh as compared to its near absence prior to the 1980s (Rhee 1990).
**g) The Fragmentation of the Apparel Market**

Fashions have always influenced creation of demand in this industry, especially after the rise of retailers' control of the commodity chain. Given their closeness and greater understanding of the market than manufacturers, these traders sought to compete through market innovations like new designs and fashion marketing, rather than through cost reductions by innovations in production techniques. Here again, there are differences across various segments. Women and children's wear is subject to more fashion-based design changes, when compared to men's wear (Fine and Leopold 1993, 109). Further, since the 1970s, socio-economic and related cultural changes have created a general trend in clothing towards more informal and casual wear. Consumption-based identities have begun to play a bigger role in marking one's position in the social hierarchy, thereby facilitating the creation of market niches (Underhill 1998, 77). All these factors have led to the rise of distinct segments in the apparel market.

This trend has accentuated in recent years, when it is said that the recession in advanced capitalist economies has led to a more skewed distribution of income, creating two distinct market segments (Mody and Wheeler 1987; Hoffman 1985). Others point to the rise of post-Fordist life-styles, with consumption being an important marker of one's identity, as responsible for this phenomenon (Underhill 1998; Lash and Urry 1987). The causes notwithstanding, the apparel industry has been divided into two key segments with different characteristics; i.) a vibrant and growing upmarket fashion segment and ii.) a relatively stagnant, low-priced and standardised segment.

The former market is highly volatile and characterised by short production runs, fast-changing fashions and designs, aggressive marketing and higher mark-ups. In response to market instability, firms target smaller, more rapidly changing market niches, which require quick alteration of product designs. Here, cost advantages do not matter as much as in the mass-market segment. More important is the 'quick response' factor (QR), the ability to deliver in time and adjust production to changing designs and quantities. In other words, 'flexibility' becomes an essential characteristic of production for this segment. Thus, the cost advantage gained in dispersing production to low wage areas tends to be offset by slowness in supply response. Production in distant locations is not
suited for such markets, where reorders\textsuperscript{16} and fashion obsolescence are common.\textsuperscript{17} Further, the quality requirements of the fabric meant for such up-market garment production necessitates confinement of production to countries with better processing technologies.

In sum, despite dispersal to low wage economies, the fragmentation of the apparel market into fashion-determined smaller and smaller niches has enabled the core economies to retain their competitive edge in these segments of the apparel industry. Another important explanation for the simultaneous dispersal and concentration of apparel production takes into consideration the social embeddedness of production processes and their part played in reducing transaction costs of firms in this sector.

\textit{h) High Transaction Costs and its Implications}

A key factor that works against greater dispersion of garment production globally is the amount of transaction costs involved in co-ordinating a global network of decentralised producers and traders. The high vertical and horizontal disintegration in this industry increases the volume and rapidity of inter-firm transactions. The location of production is thus determined and influenced by their geographical proximity to suppliers, contractors and final markets, particularly when transactions are “small scale, irregular and involve production for quickly changing niche markets” (Storper and Scott 1990, cited by Christerson and Appelbaum 1995, 1364). Further, vertically integrated firms that internalise their transactions are better placed to disperse production to low-wage locations because the costs and risks of these transactions are minimal.

In a cluster of firms in a region, the social embeddedness of production organisation creates extra-economic ties that facilitate transactions. Community and ethnic relationships provide certain regions with economic advantages in such a milieu. This is more relevant to the garment sector dominated by vertically disintegrated firms. Firms

\textsuperscript{16} "...volume production in many branches of the clothing industry is observed by the repeated re-ordering of small branches of successful styles ...rather than by the continuos production of standard goods", (Fine and Leopold 1993, 223).

\textsuperscript{17} "Reorders require a 10-14 day turnaround which is possible if the original order was placed with a local factory, but impossible if placed with an Asian factory, since transportation time alone for East Asia to Los Angeles ranges from 13 to 30 days. While the turnaround time for a Los Angeles firm is 4 to 5 weeks, for a firm in Asia it takes around 12 to 16 weeks..." (Christerson and Appelbaum 1995, 1368).
tend to cluster in regions that have a common ethnic or communal identity that enable entrepreneurs to enter into long term contracts with less risk. The importance of this factor in the operation of industrial clusters has been well documented (Beccatini 1990; Brusco 1990; Schmitz 1995; Granovetter 1985). Christerson and Appelbaum’s study on locations of garment industry in East Asia also provides empirical support to this argument (1995). Gereffi, et.al also observe that it is easier for Taiwanese and Hong Kong firms as compared to the Korean firms to enter into contracts with overseas Chinese businessmen because of these social networks (Bonacich et al. 1994, 138).

To sum up, though there are various forces at work in influencing the location of garment production, it is still possible to envisage a hierarchy of producers, a hierarchy defined by levels of development, wage levels and quality of garments produced. Elson presents six tiers of garment producers, with each country trying to move into the tier above them (1994, 194). Gereffi’s depiction of the sourcing of different products from different regions by American retailing firms reproduced below is also very useful to understand this hierarchy (Table 2.4)

Table 2.4 clearly points to the dominance of core and the semi-peripheral economies in the premium up-market segment (Rings one and two), leaving the rest to compete for shares of the lower end of the market segment. Further, the table reveals differences even among the peripheral economies in the niches that they cater to in the global garment market. These differences, it is reasonable to argue, are conditioned by variations in technology and skill levels, and level of control over product markets. In order to identify these characteristics with regard to Indian garment producers, we provide an overview of garment exports from India.
### Table 2.4
Types of Retailers and Major Global Sourcing area

<table>
<thead>
<tr>
<th>Representative firms</th>
<th>Type of retailer</th>
<th>Main global sourcing area</th>
<th>Characteristics of buyers orders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fashion oriented Companies</td>
<td>Armani, Donna Karan, Polo, Ralph Lauren, Boss, Gucci</td>
<td>First and second rings</td>
<td>Expensive designers' products requiring High levels of craftsmanship; orders are in small lots</td>
</tr>
<tr>
<td>Department stores</td>
<td>Bloomingdale's, Saks Fifth Avenue, Neiman Marcus</td>
<td>Second, third &amp; fourth rings</td>
<td>Top quality, high-priced goods sold under a variety of national brands and private labels (i.e. store brands)</td>
</tr>
<tr>
<td>Speciality stores brand named companies</td>
<td>Macy’s, Norstorm, J.C. Penny, The Gap, The Limited, Liz Claiborne, Calvin Klein</td>
<td>Second, third &amp; fourth rings</td>
<td>Medium to large-sized orders, often co-ordinated by department store buying groups (such as May department store company and Federated department store)</td>
</tr>
<tr>
<td>Mass merchandisers</td>
<td>Sears Roebuck, Montgomery Ward, J.C.Penny, Woolworth</td>
<td>Second, third &amp; fourth rings</td>
<td>Good quality, medium-priced goods predominantly sold under private labels; large orders</td>
</tr>
<tr>
<td>Discount chains</td>
<td>Walmart, Kmart, Target</td>
<td>Third, fourth &amp; fifth rings</td>
<td>Low-priced, storebrand products; giant orders</td>
</tr>
<tr>
<td>Small importers</td>
<td></td>
<td>Fourth &amp; fifth rings</td>
<td>Pilot purchases and special items; sourcing done for retailers by small importers who act as ‘industry scouts’ in searching out new sources of supply; orders are relatively small first, but have the potential to grow rapidly if the suppliers are available.</td>
</tr>
</tbody>
</table>

Ring 1: Italy, France, United Kingdom and Japan  
Ring 2: Taiwan, Hong Kong, South Korea and Singapore  
Ring 3: Indonesia, Philippines, China, India, Malaysia, Thailand, Brazil, Mexico, Egypt and Turkey.  
Ring 4: Sri Lanka, Pakistan, Bangladesh, China, Tunisia, Morocco, Gulf and Caribbean countries, Eastern Europe, Mauritius, etc.  
Ring 5: Fiji, Maldives, Cambodia, Myanmar, N.Korea, Madagascar, Vietnam, Nicaragua, Bolivia, Peru, etc.  
Source: Gereffi 1994a, 222.

**B. Characteristics of Garment Exports from India**

*a) India’s Relative Performance in Garment Exports*

As depicted in table 2.4, India falls under ring 3 along with a few other Asian peripheral economies. The growth in India's share however has been relatively slow, having moved from 1.5 per cent in the 1970s to around 2.4 per cent in 1992 (Exim Bank of India 1995,
7) and then to 2.6 per cent by 1994 (Ramaswamy and Gereffi 1998). Even the latest figures for India's exports place it at only around 2 per cent (TEA 2000). Though the growth of its exports has moved in tandem with world garment trade, its performance does not compare too well with that of other peripheral economies.

Economies like Thailand, Indonesia, Bangladesh, Mauritius, Pakistan and Sri Lanka have achieved higher growth rates during this period as compared to that of India (Exim Bank of India 1995, 8; Ramaswamy and Gereffi 1998, 124). China, for instance, has tripled its share from 4 per cent in 1980 to 15.2 per cent in 1995 (Ramaswamy and Gereffi 1998, 124). Bangladesh has increased its share to 0.9 per cent from near nil exports in the early 1980s. As a result, India’s share in ‘developing' countries' exports has not improved beyond the 4 per cent mark achieved in 1974 (Chatterji and Mohan 1993, M 96). To add, India’s rank among ‘developing and NIE' country exporters has fallen from 5 in 1980 to 8 in 1992 (Exim Bank of India 1995, 8).

This relative stagnation assumes further significance in the context of India’s advantages in terms of cheap cotton production and availability of large pools of labour. In fact, substantial quantities of cotton fabric and yarn are exported from India to some of these economies from where they are made up into garments and exported. Thus, it would appear that India’s increase in world garment market share has been largely a result of decline in the shares of some core and semi-peripheral economies like South Korea, Taiwan and Hong Kong.

**b) Changes in Export Composition**

While Indian garment exports does not compare well with many other peripheral economies, garment exports as a share of manufactured exports from India has risen from 0.3 per cent in 1960/61 to 17 per cent in 1992/93 (Chatterji and Mohan 1993; Exim Bank of India 1995, 5). Chatterji and Mohan distinguish two phases of this growth, based on

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19. "During the last decade, (i.e. 1983-93) garment exports have expanded at the rate of 19.1 % per annum in US dollar terms which is more than double the rate of growth for exports as a whole (8.2%)." (Exim Bank of India, 1995, 5)
composition of garments exported, their destination and demand vagaries. The first one, during the late 1960s and early 1970s, was led by a tremendous surge in demand for handloom garments due to fashion requirements in the US and Europe. In fact, in the mid-1970s, handloom garments accounted for more than 50 per cent of apparel exports from India. However, even within this segment, there were sharp changes in demand pattern. While the late 1960s witnessed a sharp hike in demand for 'Bleeding Madras' shirts only to fall suddenly in 1970, this was soon followed by a boom in demand for 'cheese' cloth (M104). Knitwear, accounting around 10 per cent of garment exports, was largely woollen, with the erstwhile USSR and East Europe constituting the major markets (M 99).

The second phase, according to Chatterji and Mohan (1993), begins from 1983/84 and has been marked by a relatively more steady growth. From around Rs. 640 crores in 1983/84, it has increased to around Rs. 10,700 crores in 1993/94 (Exim Bank of India 1995). However, the share of handloom garments has fallen steadily from 6.9 per cent to 0.3 per cent while that of mill-made garments continues to be high at around 70 per cent (Chatterji and Mohan 1993, M-104). This remains so, despite a slow but steady decline in the share of mill made garments. The decline in both these product categories has been compensated by a steady increase in the share of knitwear products. From 22.1 per cent in 1991/92, their share has gradually increased to 30.97 per cent in 1999 (AEPC). With respect to fibre use, there has not been much change. Though the share of woollen wear has declined, it has been compensated by an increase in the use of synthetic and blended fabric. Exports, therefore, appear to be an outcome of exogenous changes in demand and less due to an active competitive strategy of domestic manufacturers and exporters.

Another important feature has been the predominance of cotton-based garments in the export basket. Cotton-based garments accounted for 71 per cent of value of garment exports from India in 1992 (Exim Bank of India 1995, 5). Synthetic and woollen garments constituted 28 per cent and 1.2 per cent respectively in 1992 (12) as compared to 9.1 per cent and 6.6 per cent in 1983 respectively (Chatterji and Mohan 1993, M105). In fact, the share of cotton garments in quantity terms is even higher at 81 per cent, indicating a lower unit value of cotton garments as compared to that of synthetic and woollen wear (Exim Bank of India 1995, 12), especially synthetic garments.
the composition of Indian exports with that of South Korea and Hong Kong. Chatterji and Mohan find that there is a “predominance of woven clothing” (M105). Further, they also note a high concentration of items exported. While the leading product category of Indian exports accounted for 46 per cent of total garment exports, the same contributed to only 29.5 and 22.8 per cent for Hong Kong and South Korea respectively in 1987 (M106 – 107). The Exim Bank study notes that five products, viz., women’s blouses, dresses, skirts, men’s shirts and knitted undergarments constitute 61 per cent of total Indian garment exports in 1991 (1995, 12). Since almost all these garments are cotton-based, they argue that Indian products compete for only 15 per cent of the global market for clothing (24).

c) Destination Characteristics

The change in the composition of garments exported also partly reflects changes in the destination of Indian exports. In the initial phases of Indian apparel exports, USSR and Eastern Europe were the biggest importers. From the mid-1960s through the mid-1970s they accounted for roughly over 50 per cent of the market for Indian apparel exports (Chatterji and. Mohan 1993, M 99). Exports to this region consisted mostly of woollen cardigans sold on the basis of weight. Since the late 1970s and the beginning of the 1980s, there has been a gradual shift to US and European markets along with the decline of the former East European and USSR markets. By 1992, a major share of Indian garment exports catered to the US and European markets, 27 and 43 per cent respectively (Exim Bank of India 1995, 35).

Indian exports to these countries have been subject to quantitative restrictions. Along with currency depreciation, restrictions have determined the relative share imported by these regions from India. While during the early 1980s, the share of the EEC market was around 50 per cent, during the late 1980s and early 1990s it declined in proportion to increase in the share of US market, only to again increase and stabilise at 43-44 per cent (Chatterji and Mohan 1993, M 102; Exim Bank of India 1995, 35). In 1993, 54 per cent of product categories of Indian exports are governed by such quota restrictions. Since

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20 The share of this category has however come down to 40.8 per cent in 1991. Further, by 1991, there has been a marked improvement in certain synthetic fibre based product categories like men’s shirts and headgear (non-textile) (Exim Bank of India 1995, 34).
quotas given in most countries have been fulfilled, analysts expect that the removal of MFA restrictions would enhance the ability of Indian exports to penetrate these markets. Moreover, there has been a slight diversification into non-quota markets in recent years, with quota markets' share declining from 82 per cent in 1987 to 74 per cent in 1993 (Exim Bank of India 1995, 7). These new markets are UAE, Switzerland, Japan, Russia, Saudi Arabia and Australia. However, 75 per cent of the garments exported continue to be governed by quota restrictions (AEPC).

While garment exports have registered impressive growth rates, relative to the rest of manufactured exports from India, their performance, when placed against that of other peripheral economies, is poor. Even in the leading categories, other peripheral economies have a bigger market share than India. Various reasons have been cited for the relatively poor performance of the Indian garment sector in the world market. One, garment export from India is largely confined to cotton garments. Two, though the data on wage rates would indicate that Indian wage rates are not too different from other peripheral economies, it is found that the cost per standard minute in India is higher than that of Indonesia, Thailand and China (Majumdar 1996, cited in Ramaswamy and Gereffi 1998, 129).

The scenario, as depicted above, only reflects the effect of policies that condition the pattern of industrial development. An industrial strategy based on import substitution, with emphasis on growth of heavy industry, has borne rather heavily on the fortunes of the garment industry. Since heavy industries are capital-intensive, the state had to resolve the problems posed by huge labour surpluses in India. Thus, the state assigned a few light goods industries, including the garment sector, the role of labour absorbers. Further, since there already existed a strong traditional artisanal garment sector, it was felt that it needed protection from the more ‘efficient’, modern capital. Consequently, sectors like the garments were reserved for firms that fell under the ‘small scale’ sector. Firms with a capital investment limit of less than Rs. three crore are now categorised as ‘small’ and any firm with greater investment need to consent to an export commitment of more than 75 per cent of its output. \(^{21}\) Since no time frame is provided for this requirement, it

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\(^{21}\) It has been revised to Rs. three crores only since 1998, and the limit was Rs. one crore during the 1990s.
is said that big firms do not will to risk entry into this sector (Chatterji and Mohan 1993, M117). Further, small firms too would be unable to upgrade their technology, as this would invite a movement beyond the capital ceiling fixed for the small-scale sector. As a result, the Indian garment sector is found to consist of smaller firms when compared to other exporting peripheral nations, thereby placing limits on the sector’s ability to compete on the basis of productivity (M 116). Moreover, given the importance of market information in this industry, traders exert a dominant influence in the export market. Out of 10,000 exporters registered with AEPC, only 250 are manufacturer exporters (M114). As a result, incentives to improve production techniques have not been forthcoming.

Another factor has been the primacy of USSR and East European markets in the initial phases of Indian garment exports. Since these markets were not competitive and accessed more due to political considerations of the Cold War era, it is plausible to reason that there was no competitive pressure on the exporters to augment quality or efficiency in production. It is therefore said that Indian exports depend more on fashion changes than on any inherent competitive strength based on quality or productivity. For instance, garment exports from India to Europe and USA during the 1970s was sustained primarily due to the fashion-led demand for handloom garments (Chatterji and Mohan 1993). Despite these limitations, Ramaswamy and Gereffi (1998) find that India has improved its market share in 9 out of its 17 main product categories (129) and further that, there has been an increase in the unit values realised. The important observation for our purpose is, however, the growth in the share of knitwear exports.

As we observed in Chapter 1, the share of knitwear, from 16.9 per cent in 1983/84 has risen steadily to 35.41 per cent in 1999. Cotton knitwear accounts for 90 per cent of this (Table 1.3). The share of knitwear, especially cotton knitwear has steadily increased during the 1990s. In the next section, we delineate the defining characteristics of the knitwear product market.

22 "In the case of export of cotton garments to the US in 1989, the average unit value realisation for Indian products was $ 3.50 as against a figure of $ 4.61 for Hong Kong, $4.73 for Taiwan and $5.1 for Korea." (Chatterji and Mohan 1993, M115).

23 It is also argued that instead of diversifying into many product categories, Indian exporters ought to take advantage of their niche specialisation to improve export performance, especially when the MFA ceases to operate in the future (Ramaswamy and Gereffi 1998, 129).
C. Characteristics of the Market for Knitwear

The growth in exports of cotton knitwear coincides with a greater demand for both knitwear and cotton fabric at the global level. Two factors have contributed to the growth of knitwear consumption. One, it is easier and quicker to produce fabric by knitting than by weaving. While woven garments have a production turnover time of nearly six months, knit garments have a turnover period of only four months. Second, knitted fabrics provide easier manoeuvrability in production with regard to design. Further, ease of maintenance and the growth of the 'casual wear' segment as a part of changes in demand patterns have all contributed to this phenomenon (Underhill 1998). Cotton-based garments, which came into vogue when the oil shock of the 1970s curbed the production of synthetic fibres, continue to be in demand. This is especially true of cotton knitwear (Chatterji and Mohan 1993). The 'success' of Tiruppur indeed owes partly to these factors. Nevertheless, the primary characteristics of the export market to which Tiruppur caters needs to be understood on its own terms. For it is not only the output market that exerts a key influence on the overall level of production. The size of firms, modes of labour mobilisation and use, association between different units of capital, and technology use are all equally pertinent.

D. Characteristics of the Output Market of Tiruppur Knitwear Cluster

a) Seasonality of Demand

Tiruppur's products are mostly exported to the EEC, USA and Canada. In the late 1970s, in the initial phases of exports, there was a small quantity of innerwear exported to Afghanistan, the Czech Republic and Africa, but the boom period was characterised by exports to the above mentioned zones. The cotton knitwear industry in Tiruppur basically caters to the summer-wear demand in these countries. Production is highly seasonal, with the peak season being the period September to February. From then on, it declines steadily until July, after which there is a gradual revival. Key informants interviewed

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24 Secondary literature with regard to the nature of the market for knitwear from Tiruppur is scanty. Hence, this section also draws from firm studies undertaken and interviews with key respondents.
confirm the presence of wide variations between peak and off-season demand. According to them, many firms work for only six to eight months in a year. Even the quantum of output per year depends upon the duration of summer in the countries. The late onset of summers results in reductions in the annual flow of orders into Tiruppur. In addition, year-to-year fluctuations due to weather, yarn prices, etc place limits on an individual firm's ability to expand.

b) Variability of Operations from Order to Order

The range of operations required varies greatly from order to order. For instance, some orders may require embroidery while some other garments require printing or yarn dyeing. Again, orders may require special stitching or fancy collars, while some may not. Moreover, in recent years, there has been a need for better quality dyeing and printing that necessitates use of new methods. The kind of fabric needed for each garment too varies. As Parker says, "Indian knitwear is now graduating into the middle and upper class international markets. Very few are looking at basics now. There are at least 20 top exporters who have shifted to hi-fashion products where the essence is on value-addition" (1992, 67). Thus, the process requirements for the output of the cluster are highly flexible and diversified.

c) Highly Diversified Production Range

Though there has not been much change in the destination of its exports, there has been substantial diversification in the product profile of Tiruppur's exports. In the early 1980s, there were few firms in Tiruppur, which were exporting innerwear. The initial phase of Tiruppur's export boom, roughly 1985-90, was, however, dominated by production of cheap, large volume basic T-shirts, slotted at the lowest end of the knit-garment market segment. During this phase, Tiruppur's success appears to be largely based on its low wage labour.25

From the late 1980s onwards, there has been a gradual diversification of its output. Though T-shirts continue to dominate the output profile, they are no longer 'basic' T-shirts. Orders requiring complicated printing, better dyeing, embroidery, etc. for T-shirts

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25 Prices are competitive enough to compensate for the long lead time and bulk orders which need to be placed" (Cawthorne 1995, 51).
have grown considerably. The variety of fabric required has also grown. Earlier, the fabric was exclusively confined to the 'fine' variety. At present, interlock, single jersey, loop knit, waffle and jacquard have all become common. Apart from T-shirts, women's wear, children's wear and sportswear constitute an increasingly greater proportion of the output basket. The latter product categories, in general, are fashion-intensive and involve more number of operations per garment. In recent years, Tiruppur has therefore moved into production of 'fancy' products that require a number of ancillary operations (Parker 1992). Producers, however, continue to manufacture and export basic T-shirts as well, rendering high diversity to the output profile.

Apart from the diversified product profile, there are also wide variations in the quantity required of each type of garment (Swaminathan and Jeyaranjan 1997, 132). Each order placed with a firm by a buyer would consist of two or more kinds of garments of divergent quantities.

d) Design and Fashion

It has been observed that the world garment market consists of three segments.

- The 'use and throw' segment
- The 'casual wear' or 'semi-fashion' segment
- The 'designer wear' segment

The first segment comprises cheap, standard and low quality garments meant for mass consumption. The second segment consists of relatively more sophisticated designs and is less standardised. The third one is characterised by fast-changing fashions and high quality fabric. It is observed that Tiruppur had catered to the first segment till the late 1980s, after which it has slowly moved in to the second segment (Swaminathan and Jeyaranjan 1997, 131-132). At present, 40-50 per cent of Tiruppur's output would fall under the casual wear category and the rest would be 'use and throw' garments.

As stated earlier, fashion-oriented apparel production tends to be more labour-intensive, which makes sourcing from low-wage areas more attractive (Christerson and Appelbaum 1995). While production can be automated for products that tend to be highly standardised, and which change little in style over time, for styles that continually change,
work becomes more labour-intensive, and volumes, smaller. This makes cheap labour, flexibility and adaptability in organising production more important. Further, the movement to production of fashion garments entails fast turnarounds and adherence to delivery schedules critical. Thus, cheap labour, better quality and faster delivery tend to be all-important factors when buyers choose the location to source from.

e) Quota Restrictions

The quota system places limits on the quantity and types of garments that can be exported to Tiruppur's major markets, viz., Europe, USA and Canada.

Table 2.5
Destination of Exports from Tiruppur

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Countries</td>
<td>1663</td>
<td>3908</td>
<td>1947</td>
<td>4391</td>
<td>2272</td>
<td>4780</td>
</tr>
<tr>
<td>Outside Bilateral Agreement</td>
<td>508</td>
<td>1039</td>
<td>683</td>
<td>1303</td>
<td>711</td>
<td>1373</td>
</tr>
<tr>
<td>Total</td>
<td>2171</td>
<td>4947</td>
<td>2630</td>
<td>5694</td>
<td>2983</td>
<td>6153</td>
</tr>
</tbody>
</table>

*Quantity - in lakh pieces; **Value - in lakh dollars
Source: Handbook of Export statistics, AEPC, 1999

As can be seen from Table 2.5, most exports from Tiruppur are governed by quota restrictions. To circumvent this system, some firms export to Gulf countries, Bangladesh, Taiwan and Hong Kong to be re-exported from there. This also works to the advantage of Taiwanese and Hong Kong exporters who find it more profitable to get certain products manufactured in India. Though exports are mostly confined to quota countries, few exporters export to quota countries, garments that are not subject to quota restrictions.

f) Dominance of Merchant Exporters

Just as merchant capital dominates retail and other forms of trading capital at the global level, in India too, exports are undertaken largely through merchant exporters, i.e., exporters with no manufacturing facilities. They are responsible only for receiving orders from buyers abroad, contracting production to local producers and shipping finished goods back. In fact, of the 3200 exporters registered with AEPC, Tiruppur, less than 20
per cent are manufacturer exporters and the latter's share has increased only marginally with time. The movement to direct exports, by moving from the producer-agent-buyer chain to producer-buyer contract would therefore constitute an important step for the local producers in enhancing their position to undertake independent production.

**g) Competition**

The market for knitwear is marked by stiff competition in the advanced capitalist countries where retailers have to continuously create new demand by rapid changes in design and fashion. Manufacturers in Tiruppur are completely dependent upon buyers for orders and they cannot foresee the changes in demand that are likely to take place. Our key informants state that while competition between firms within Tiruppur is the most serious, internationally, China, Bangladesh, Pakistan and Sri Lanka are considered to be the major competitors. The reasons cited are: one, wage rates are cheaper in China, Bangladesh and Pakistan than in Tiruppur. Two, the minimum firm size is very large in these countries as compared to Tiruppur and hence they have an edge over Tiruppur in bulk orders with standard designs/patterns.

Knitted fabric from Tiruppur is exported to Bangladesh in significant quantities, which feeds into garment exports from Bangladesh. Such garments are generally low-cost, high-volume orders that, quota restrictions notwithstanding, are more economically produced in Bangladesh than in Tiruppur. Informants indicate that the larger firm size in the former gives an advantage to producers to Bangladesh in this segment. Tiruppur's advantage, therefore, according to all our respondents, lay in its ability to produce small volume orders, involving complicated designs as well as large orders, at relatively lower costs.

**Summary**

The world garment industry is a highly heterogeneous sector, characterised by multiple segments, with the basis for competition varying across these segments. While, in the lower segments, low wage costs play an important role, in the up-market premium segments, fashion creation, innovation through design, an ability to continuously adapt to market changes and cater with time-effectiveness constitute key factors. As a result,
while the low-end segments are dominated by peripheral economies, producers in the core economies and to some extent dominate other segments by those in semi-peripheral regions. Thus, the market to which a firm or region caters plays an important role in conditioning the mode of organising production.

The Indian garment industry is primarily confined to production for the low-end segment and, to an extent, dependent on niche markets like that for handloom. Though its share in the world market has not increased much, we do witness changes in composition, with a rapid increase in the share of knitwear. Lately, knitwear exports have been confined to cotton-based garments, with Tiruppur knitwear formation playing a leading role in this segment. We also observe that, since the beginning of its export phase, there has been a change in the characteristics of market for knitwear exported from Tiruppur. While the initial phase was confined to cheap, low-quality and uniform sets of garments like men's basic T-shirts, over time, producers in Tiruppur have diversified into more value-added and fashion determined markets like women's and children's wear. Not only is demand seasonal, and dependent on the duration of summer in Europe, Canada and the USA, the orders are also of varying quantities, varying quality requirements and require varied processes. Thus, flexibility has become an important characteristic of production requirements in Tiruppur knitwear formation.

It still remains to be seen how production in Tiruppur could successfully cater to the growing global demand for cotton knitwear, albeit marginally. Though the market does influence organisational change, organisational forms are also a process of history. The path traversed by a region in the past would strongly influence the present modes of organising production in the region. As a prelude to understanding the contemporary methods of production organisation, in the subsequent chapter, we seek to examine the factors behind the evolution of the knitwear industry in Tiruppur and its structural peculiarities as compared to other production centres in India.