6 The Singapore Garment Industry: Competitive Adjustment Strategies and Development Trajectories

Introduction

While the previous chapters have focused on the literature, theorisation and conceptualisation of the research and secondary data, the remaining chapters will focus on the empirical data gathered for the research. Using the conceptual framework presented in chapter 3 as a basis and taking into account the general developments in both the global garment industry (chapter 1) and Singapore’s business environment (chapter 4) an analysis of these empirical data is presented.

In section 6.1 a general outline of the characteristics, structure and organisation of companies in the survey will be given. Based on these characteristics a categorisation of companies is presented. Subsequently we take a closer look at the changing environment in which companies have operated and how they have perceived this changing environment (section 6.2). In section 6.3 we then turn to the strategies implemented by the companies in the survey over the past 10 years and the main effects of these strategies in terms of company’s functions, capabilities and competitive positioning. In section 6.4 the main firm level development are identified and discussed, while section 6.5 finally turns to the industry level, taking a closer look at industry development trajectories.

6.1 Structure and Characteristics of Garment Companies in the Survey

An in-depth look at the characteristics of the companies in the survey gives an idea of their structure and organisation in terms of size, ownership, organisation structure, sales orientation, buyers, production organisation, etc. It must be noted that this is essentially a snapshot and can be seen as the outcome of changes and strategies in the past decades.

6.1.1 Ownership, set-up and Size Distribution of Companies in the Survey

Most companies in the survey were established in the 1970s and 1980s and domestically owned (see table 6.1).

Table 6.1 Year of Establishment by Ownership

<table>
<thead>
<tr>
<th>Year of establishment</th>
<th>Ownership establishment</th>
<th>Total Share</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Domestic</td>
<td>Foreign</td>
</tr>
<tr>
<td>&gt;1971</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>1971-1980</td>
<td>20</td>
<td>2</td>
</tr>
<tr>
<td>1981-1990</td>
<td>15</td>
<td>2</td>
</tr>
<tr>
<td>1991-1998</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>7</td>
</tr>
<tr>
<td>Share</td>
<td>79%</td>
<td>12%</td>
</tr>
</tbody>
</table>

Foreign ownership and joint ventures were less common. In addition, a number of these foreign investments (approximately half) had been part of the Singapore garment industry for a long time (see tables 6.1) and have become independently functioning establishments.

Before 1990 more such foreign owned companies and joint ventures were present in Singapore, however, most were closed or sold in the late 1980s and early 1990s. The majority of companies in the survey were part of a larger or multi-establishment company, and performed the function of parent or main establishment in these multi-establishment companies. Most foreign owned ones indicated they functioned as independent units - as opposed to (dependent) subsidiaries - within their larger company structures. Table 6.2 gives an overview of the ownership, set-up and status of companies in our survey.
Table 6.2 Ownership, Set-up and Status of Companies in the Survey (1998)

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Set-up</th>
<th>no. of comp.</th>
<th>Share</th>
<th>Status</th>
<th>no. of comp.</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic (45)</td>
<td>single establishment</td>
<td>14</td>
<td>31.1%</td>
<td>parent/main</td>
<td>14</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>multi-establishment</td>
<td>31</td>
<td>68.9%</td>
<td>subsidiary</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>parent/main</td>
<td>30</td>
<td>96.8%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>independent unit</td>
<td>1</td>
<td>3.2%</td>
</tr>
<tr>
<td>Foreign (7)</td>
<td>single establishment</td>
<td>1</td>
<td>14.3%</td>
<td>parent/main</td>
<td>1</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>multi-establishment</td>
<td>6</td>
<td>85.7%</td>
<td>subsidiary</td>
<td>2</td>
<td>66.7%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>parent/main</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>independent unit</td>
<td>4</td>
<td>33.3%</td>
</tr>
<tr>
<td>Joint-venture* (5)</td>
<td>single establishment</td>
<td>0</td>
<td>0.0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>multi-establishment</td>
<td>5</td>
<td>100.0%</td>
<td>subsidiary</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>parent/main</td>
<td>5</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>independent unit</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Total (N) (57)</td>
<td>total single establishment</td>
<td>15</td>
<td>26.3%</td>
<td>total parent/main</td>
<td>15</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>total multi-establishment</td>
<td>42</td>
<td>73.7%</td>
<td>total subsidiary</td>
<td>2</td>
<td>4.8%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>total parent/main</td>
<td>35</td>
<td>83.3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>total independent unit</td>
<td>5</td>
<td>11.9%</td>
</tr>
</tbody>
</table>

1 This company was part of a large Hong Kong owned group, but was part of a holding company listed on the Singapore stock exchange, hence its domestic ownership.
2 This company was formally Taiwanese owned, but functioned as main and only establishment of the company.
3 Includes 1 manufacturing branch and 1 regional manufacturing/sales & marketing branch
4 Of these five joint ventures, three had less than 50 percent foreign participation; for all five the Singapore establishment was the main establishment/headquarters of the company

As to the size of the companies in the survey, in terms of employment the majority of companies (almost 65 percent) could be classified as small, i.e. with less than 50 employees and almost 80 percent could be classified as SMEs (i.e. with less than 100 employees). Measured in terms of turnover, the picture is a little different, with average firm size somewhat larger. Thus half of the companies in the survey had an annual turnover of more than 5 million Singapore dollars (see figures A and B in the appendix to this chapter). Average number of employees for the interviewed establishment was 91, while the average annual turnover was approximately S$ 30.8 million.

However, it must be noted that because a large number of establishments in the survey were part of multi-establishment companies (see table 6.2), listed turnover was often consolidated, i.e. included the turnover of other establishments. If employment is also listed for all establishments, almost 54 percent of all companies fall into the larger company categories (more than 100 employees) (see figure C appendix). Average number of employees for the entire company was 1251.

Most of the multi-establishment companies extended beyond Singapore and included overseas investments and subcontractors.

Only approximately 10 percent of all companies in the survey produced exclusively in Singapore, while a third conducted all production outside of Singapore. More than 70 percent of the interviewed companies had over-seas investments, while almost 76 percent had overseas subcontractors. Approximately 39 percent of the interviewed companies did not, or no longer, produce in-house.
This is also reflected in employment numbers and ratios between the (interviewed) establishment and the entire company, and between Singapore and overseas locations. For every employee in the interviewed establishment there were on average 15 working in other establishments or subsidiaries, while for every employee in Singapore, there were on average 13 outside of Singapore within the same company (see table A in the appendix to this chapter). In addition, at 1:3.6, the ratio of non-production to production employees in the Singapore establishment was also very low (i.e. a low number of production employees per non-production employee). These non-production employees in the Singapore establishments performed activities for other establishments as well, e.g. management, administration, finance, procurement of inputs and buyer negotiations.

6.1.2 Markets, Buyers and Products

Almost all companies (93 percent) produced garments to the order of buyers and almost half sold all their output to buyers, while more than 80 percent sold at least half of their output to buyers.

Although more than half of the companies in the survey (29) indicated to manufacture their own brand, for only 12 of those did the manufacturing of their own brand account for more than 75 percent of their output, while only 4 focused exclusively on their own brand. It is only the group of companies with a share of more than 75 percent of own brands in output that can rightfully be considered OBM producers. In addition, in a number of cases the 'own brand' concerned the design and manufacturing of labels for wholesalers or local/regional department stores. The ownership of these labels was in hands of the wholesaler/department store though. In other words, the brand was not an owned brand at all.

The export oriented nature of the industry was reflected in the survey sample (see figure 6.1), with only 4 companies not being involved in any exports and approximately 30 percent of companies exporting less than 25 percent of their output.

**Figure 6.1 Sales Orientation of Singapore Garment Manufacturers (1998)**

On the other hand 62 percent exported more than 70 percent of their output and twenty-seven companies (or 47 percent of all companies), even produced exclusively for export. The companies with a low share of exports usually exported to regional markets, whereas companies with 100 percent export were more likely to export to US and/or European markets.

Notes:
- Non-response is 3
- Sales of entire company, including other establishments/subsidiaries
- Domestic = ≥70% of sales for domestic market; Export = ≥70% of sales for export markets; Domestic & export = <70% of sales for domestic and <70% sales for export markets

About 30 percent of exporting companies exported only to other Asian countries, while the rest exported to the USA or Europe, or combinations of these and, sometimes, Asian markets.
However, the US market was the dominant export destination, not just in terms of number of companies exporting their output to this market, but also in terms of average shares of output going there. For instance, for companies that exported to both the US and European markets, the average shares of output going to these markets was 73 percent and 27 percent respectively (see table B in the appendix).

This is mainly due to the fact that European buyers are usually smaller than US buyers and the European market is more fragmented\(^3\). Accordingly their orders tend to be smaller and more diversified. Therefore some producers preferred working with US buyers.

Most companies that produced to the order of buyers also indicated they preferred to spread orders over a number of buyers so as not to become too dependent on one or two buyers. Despite the fact that many companies had repeat orders from their customers and often had been working with the same buyers for a number of years, there was no binding contract and there was always a chance that a buyer might 'drop' its vendor (producer) at a moment's notice. This was the experience of one producer in the early 1990s, when one of its main customers (a European discounter) suddenly decided to source all its products from Bangladesh. Although the company survived the sudden drop in orders, it was a lot more careful not to "lay all its eggs in one basket" again (-Interview manager Singapore garment company, 1998).

Only approximately 13 percent of companies producing to the order of buyers worked with 1 or 2 buyers, while the majority of companies worked with more than 10 buyers. Of the producers that worked with as mall number of buyers, most exported to regional markets, whereas companies exporting to US and European markets tended to have a larger number of buyers (see table C in the appendix to this chapter). This may have something to do with the fact that US and European buyers were more likely to shift orders to other (lower cost) countries, making it necessary for producers not too become too dependent on these buyers, assigning only a limited amount of production capacity to each buyer.

As to the type of buyers Singapore contract manufacturers worked for (see table 6.3), the most popular ones were branded US and European marketers and retail chains, such as Nike, the GAP, Eddie Bauer, Warner Brothers, Polo Ralph Lauren, Yves Saint Laurent and Adidas.

Second were US and European department stores, such as Federated Department Stores, May Department Stores, JC Penney, Great Universal Stores (G.U.S.), La-Redoute, C&A.

### Table 6.3 Type of Buyers of Singapore Manufacturers (1998)

<table>
<thead>
<tr>
<th>Type of buyer</th>
<th>No. of comp.</th>
<th>Share (N=53)</th>
<th>Buyer combinations (^2)</th>
<th>No. of comp.</th>
<th>Valid % (N=48)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local/regional department store</td>
<td>11</td>
<td>21%</td>
<td>US brand/US Department store/US mail order 17</td>
<td>35%</td>
<td></td>
</tr>
<tr>
<td>US department store</td>
<td>13</td>
<td>25%</td>
<td>US brand/US Department store and European brand/ European department store 12</td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>European department store</td>
<td>2</td>
<td>4%</td>
<td>Local/regional department store only 9</td>
<td>19%</td>
<td></td>
</tr>
<tr>
<td>US branded marketer/retail chain</td>
<td>28</td>
<td>53%</td>
<td>European brand/European dept. store 3</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>European branded marketer/retail chain</td>
<td>14 26%</td>
<td>Local/regional department store &amp; US/European non-branded 3</td>
<td>6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian branded buyer</td>
<td>3</td>
<td>6%</td>
<td>US department store/brand &amp; local/regional department store/ brand 3</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>Local/regional non-branded</td>
<td>2</td>
<td>4%</td>
<td>Other not applicable (^1) 4</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>US/European non-branded</td>
<td>4</td>
<td>8%</td>
<td>non-response 4</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>US Mail order</td>
<td>3</td>
<td>6%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>European mail order</td>
<td>4</td>
<td>8%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>57</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^1\) Four companies were not contract manufacturers, hence did not work with buyers 
\(^2\) slash (/) denotes and/or
In addition a number of companies produced for local/regional department stores such as Metro, Takashimaya, Isetan and Robinson's. Sales to these buyers were often either on a consignment basis (own labels), or on an outright sales basis (department stores' own/private labels). Outright sales imply the department store buys products from a producer or wholesaler and then sells them in its stores. The department store thus takes the risk if products are not sold. Consignment on the other hand implies the producer or wholesaler retains ownership of the product until it is sold to the final consumer and pays the department store a royalty (or rather rent, as it owes the department store this money whether it sells its products or not) for the use of the retail space. Often he is also left with the responsibility of providing sales staff and the layout and furnishing of its corner in the department store (see also Hassler, 2003).

In terms of shares of sales, US buyers (either branded marketers, retail chains or department stores) are most prominent, as their orders tend to be bigger. Many manufacturers had relatively long standing relationships with their buyers, with approximately 62 percent having worked with one or more of the same buyers for 5 years or more. On average number producers had worked with the same buyers for about seven years.

**Products**

Although most companies in the survey indicated to produce a variety of products in the mid-to high-end market segments, most of these products were basic and casual wear products, with a predominance of knitwear. In other words, technical complexity and sophistication was not extremely high, nor was fashion content. This is partially because such complex products would require more skilled production workers, of which there is a lack in Singapore, and because of the kind of buyers Singapore manufacturers tend to work for: High-end basic and casual wear retailers and marketers, which require high-quality mass production. Quality and sophistication lie not so much in the technical complexity of products (as with e.g. ski-wear), but more in fabric use and what can be referred to as ‘benefiting’ (Meyer-stamer, *personal correspondence*, 2002). This involves special treatments, which can make all the difference in how long garments last, or may give a specific ‘feel’ to the fabric. There is in fact a large and renowned garment process finishing plant in Singapore, which can provide such benefiting services and is recognised by quite a few large buyers as a preferred supplier of such services. This designation has helped Singapore manufacturers as well and one member of the industry even attributed the industry’s survival in part to the presence of this process finishing plant in Singapore (*Interview manager Singapore garment company, 2003*). Thus despite the fact that Singapore garment companies still appear to produce very basic knitwear, they have in fact managed to develop into high-quality basic garments, for which they can command a higher price.

“It is costing top international fashion labels to produce their apparel here, but (…) manufacturers here are able to comply with their design demands. These requests range from making a shirt feel soft to sewing a skirt with a bias cut (…..) Such know-how is one reason American brand Eddie Bauer for example, is willing to pay 10 to 15 percent more to make its smart-casual outdoor wear for adults here rather than in places like Vietnam and Indonesia. (…..) (as) an account manager with the Singapore arm of Otto Versand (…) said ‘Some countries don’t know how to create the correct feel’” (*Interviews in The Straits Times, January 17, 2003*)

A small group of OBM suppliers on the other hand was involved in the production of more fashion sensitive items, such as women's fashion wear, i.e. dresses and blouses.

6.1.3 Production Organisation

As was illustrated in table 6.2, the majority of companies were part of multi-establishment companies. But even if they weren't, production often did not just take place in-house, but
rather was farmed out to subcontractors. Only three companies in the survey indicated to take care of all production in the interviewed establishment. Production organisation was generally more complex, as is illustrated in table 6.4. Often within this production organisation, there was a distinct division of labour between the different establishments and subcontractors, with production and non-production activities as well as lower and higher-end products being spread over different locations.

**Table 6.4 Production Organisation of Companies in the Survey (1998)**

<table>
<thead>
<tr>
<th>Production organisation</th>
<th>No. of comp.</th>
<th>Share total</th>
<th>Average share output by this establishment</th>
<th>Average share output by other establishments</th>
<th>Average share output by subcontractors</th>
</tr>
</thead>
<tbody>
<tr>
<td>All production in this establishment</td>
<td>2</td>
<td>3.5%</td>
<td>100%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Production in this establishment and by subcontractors</td>
<td>9</td>
<td>15.8%</td>
<td>62.5%</td>
<td>-</td>
<td>37.5%</td>
</tr>
<tr>
<td>Production in this establishment, and by subsidiaries/other est.</td>
<td>7</td>
<td>12.3%</td>
<td>34.8%</td>
<td>65.2%</td>
<td>-</td>
</tr>
<tr>
<td>Production in this establishment, by subsidiaries/other est. and subcontr.</td>
<td>16</td>
<td>28.1%</td>
<td>35.5%</td>
<td>48.9%</td>
<td>15.6%</td>
</tr>
<tr>
<td>Production in this establishment, by subsidiaries/other est.</td>
<td>6</td>
<td>10.5%</td>
<td>-</td>
<td>100.0%</td>
<td>-</td>
</tr>
<tr>
<td>Production in this establishment, by subsidiaries/other est. and subcontr.</td>
<td>10</td>
<td>17.5%</td>
<td>-</td>
<td>70.8%</td>
<td>29.2%</td>
</tr>
<tr>
<td>Production in this establishment,</td>
<td>7</td>
<td>12.3%</td>
<td>-</td>
<td>-</td>
<td>100.0%</td>
</tr>
<tr>
<td>Total (N)</td>
<td>57</td>
<td>100%</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

The last three columns in table 6.4 further illustrate the co-ordinating role of the Singapore establishment in the evolving division of labour in the regional networks they set up. In most cases the majority of output was taken care of outside the interviewed establishment.

**Production locations**

As indicated above, more than 70 percent of the interviewed companies had overseas investments, while almost 76 percent had overseas subcontractors. With large shares of total output being produced in other establishments or by subcontractors (see table 6.4), a substantial share of production output is in fact manufactured overseas. For 2001 it has been estimated that the value of total manufacturing output of Singapore owned textile and garment companies amounted to 4.2 billion Singapore dollars, of which approximately 3.15 billion dollars was generated by overseas factories (Straits Times, January 17, 2003). In other words, three-quarters of total output of Singapore garment companies is generated overseas.

In fact, only 6 companies had all output produced in Singapore. All of these companies were small-scale single establishment companies. Most companies (31) produced both locally and overseas while a substantial number (20) of companies only produced outside of Singapore (see table D in the appendix to this chapter). These figures support the production relocation observed in the official statistics in chapter 4. A shift of production out of the establishment almost automatically implies a shift of production overseas.

The first overseas investments by Singapore based manufacturers took place as early as the late 1960s and 1970s, when approximately 12 per cent of the multi-establishment companies indicated to have engaged in their first overseas investment. While more and more companies engaged in overseas investments during the 1980s (36 per cent of companies established their first overseas production location in this period) it wasn’t until the 1990s that overseas investment became common. In this period 52 per cent of the multi-establishment companies in the survey indicating to have invested in their first overseas establishment in this period. This is in part consistent with what was observed in chapter 4 regarding the decline of local garment
production from the early 1990s. Obviously this was in part a consequence of the fact that production was increasingly shifted out and relocated to overseas locations. Traditionally, preferred production locations included Malaysia and Indonesia, due to both the proximity and historical connection between Singapore and Malaysia, and the encouragement of the Singapore Government to relocate production within the SIJORI growth triangle. Especially investments in Malaysia tend to be older investments, with hardly any recent investments. Investments in Indonesia appear to be more recent, but this is probably not an accurate picture, as the non-response to this question (year of establishment of Indonesian facility) was relatively high. Other popular (older) production locations include Hong Kong (where some investments were in production co-ordination facilities overseeing actual production in both Hong Kong and China) and Fiji. The latter seems somewhat surprising, but can be explained by the fact that it had no quota restrictions (the same is true for Brunei) and the first overseas investments that took place in order to avoid quota limitations in Singapore were mostly destined for Fiji. The specific choice of location often had to do with the fact that one or two companies pioneered this location and the rest followed. More recently popular investment locations include China, Cambodia and Southern Africa (see table E in the appendix). By now production expansion all takes place outside Singapore and investment decisions do not so much involve relocation decisions (i.e. moving out of high-cost Singapore) but are more and more based on finding abundant labour sources to enable companies to expand. Although the difference seems trivial, it does mean investments are viewed in a different way. Not so much as an extension of production activities in Singapore, but as an expansion of a regional or international company. Proximity to Singapore has thus become a less important criterion.

Choices for the newer production locations were still motivated by their low cost, but especially by (the anticipation of) specific agreements and ongoing trade liberalization. Cambodia until recently was one of the few countries in Southeast Asia which was not burdened by quota or other forms of restrictions\(^4\). After years of conflict the international community applied very liberal trade policies to the country in order to help it recover. In addition, the establishment of garment factories was encouraged by Government to jump-start economic development. Southern Africa had a similar advantage, with abundant low cost labour and preferential access to the US market (see chapter 1). China on the other hand has only more recently attracted investments from Singapore, which is due not just to the country’s large reserve of low-cost and highly skilled apparel workforce but also to the country’s pending accession to the WTO and the phasing out of MFA by 2005. Entry into WTO will make investments and regulations a lot more standardised and therefore transparent, while the phasing out of MFA has been predicted to bring about a further shift of production towards China.

**Subcontracting**

Subcontractors form an important part of the production organisation of Singapore garment companies. Companies engaged in subcontracting for three (often overlapping) reasons: to increase flexibility, to cut cost and to make use of specialised skills. The first reason usually leads to the outsourcing of entire garment production or component parts to local subcontractors. This allows producers to deal with fluctuations in orders without having to adjust their own production capacity. Only when the fluctuations are more structural (e.g. a structural increase in orders) will the manufacturer invest in expanding its own capacity.

Subcontracting for reasons of cost reduction were more likely to involve overseas subcontracting of entire garments (often including the cutting process) with fabrics being supplied by the Singapore establishment. Finally most companies subcontracted activities such
as embroidery, washing and dyeing. These kind of activities were outsourced locally, as they needed to be done fast and sometimes in small batches.

In total 52 companies (91 percent) indicated to subcontract certain production activities. On average they worked with 2 to 4 subcontractors and sourced out 2 to 3 activities. Figure 6.2 gives an overview of the kind of activities most commonly farmed out. Of the 33 companies that outsourced production of entire garments (sometimes excluding cutting), 25 indicated to do so - at least in part - overseas.

**Figure 6.2 Activities Subcontracted Out by Companies in the Survey**

<table>
<thead>
<tr>
<th>Activities</th>
<th>Share of Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Embroidery</td>
<td>80</td>
</tr>
<tr>
<td>CMT</td>
<td>70</td>
</tr>
<tr>
<td>Finishing</td>
<td>60</td>
</tr>
<tr>
<td>MT**</td>
<td>50</td>
</tr>
<tr>
<td>Components</td>
<td>40</td>
</tr>
<tr>
<td>Washing</td>
<td>30</td>
</tr>
<tr>
<td>Sewing</td>
<td>20</td>
</tr>
<tr>
<td>Printing***</td>
<td>10</td>
</tr>
<tr>
<td>Cutting</td>
<td>0</td>
</tr>
</tbody>
</table>

* This low number is to a large extent due to the fact that most companies do not require printing for their products

** Production of entire garments on CMT basis

*** Production of entire garment on Make-Trim basis, i.e. excluding cutting

Preferred locations for such subcontracting were Malaysia and Indonesia, but China and Hong Kong were also popular. Only three companies indicated to subcontract in countries other than these four. Capacity subcontracting often took place locally or in nearby regions (Batam in Indonesia and Johor in Malaysia) and involved sewing or the production of components.

Subcontracting of specialised operations was also done predominantly locally or in nearby regions. Finally it is likely that overseas establishments/subsidiaries work with their own subcontractors locally for such activities as embroidery and perhaps even some sewing operations. This was however not included in our survey.

A more general look at sales orientation, overseas investment and subcontracting of companies in the survey combined, reveals a number of patterns (see table F in the appendix).

First, common combinations of production locations, regardless of sales orientation, include Malaysia, Indonesia and/or China. Second, the production networks of export-oriented companies tend to be more extensive, with 42 percent of these companies producing in three or more different locations. In addition their networks tend to spread out further, as is demonstrated by the fact that most of the companies producing outside of Southeast and East Asia fall in this category.

Third, only export-oriented companies had production in countries such as Brunei, Cambodia and Fiji. This is directly related to the quota advantages these countries have, which of course are of little concern to companies producing for local/regional markets.

Finally, for the domestically oriented companies China and Hong Kong are important production locations. This involved mostly production sourcing, as few had direct investments in these countries. It is likely that products sourced from Hong Kong subcontractors were in fact manufactured in China. Products for domestic markets tend to be lower to mid-end products, which sell at low price points. China is the most competitive production location for such products, which are either directly imported through wholesalers in China, or sourced
from subcontractors/affiliate companies, in which case the Singapore establishment usually still adds some value to the product in Singapore (e.g. finishing, benefiting, packing, labelling).

**Input supply**

Not surprisingly, Singapore garment companies sourced most of their fabrics as well as a large part of their accessories outside Singapore. Even if inputs were procured locally, this was usually through an importer of fabrics and/or accessories.

An overwhelming majority of companies (94 percent) sourced fabrics from the East Asian NIE's and/or Japan (see table G in the appendix), testimony to the strong position of the textile industries in Japan, Taiwan and South Korea and the trading centre function of Hong Kong (although Hong Kong itself does not have a very large textile industry, there is a large concentration of textile and accessories trading and merchandising companies located here). In addition many OEM producers worked with nominated suppliers, most of which were located in East Asia.

Remarkable is the still (relatively) strong position of Europe considering the fact that lead-times are such an important issue these days and fabric from Europe is often quite expensive. Fabric sourcing from Europe involved mostly high-end or special fabrics not found in Asia (or at least not the right quality). Again, OEM suppliers usually sourced inputs from Europe or the USA if these were nominated. However, the more expensive European, US, Australian, and Japanese fabrics were mostly sourced by local brand and label companies. Obviously for more fashionable special items, the developed countries still possess a strong advantage.

6.1.4 Categorisation of Garment Companies in the Survey

Based on the above given descriptions of the main characteristics it is possible to make a categorisation of the companies in the survey. In table 6.5 a description is given of the six different categories that were identified and the number of companies in each category. Categories are not always mutually exclusive, but group companies on broadly similar characteristics. As a consequence categories may overlap somewhat and particularly the 2nd (OEM II) and 4th (Local label) categories are in fact quite similar, with the exception of their export destinations and the fact that companies in the local label group claimed to have their own brand, which made up around 50 percent of their total output. These were mostly lower-end brands and labels sold in local department stores. None of these companies had own boutiques or outlets and none produced more than 50 percent of total output under their own brand name. This in contrast to companies in the OBM group.

The OEM I category also includes a small number of foreign owned companies (4) and joint ventures (2), which may have slightly different set-ups than the locally owned companies. However, the joint ventures only had minority foreign participation and Singapore as the location of their headquarters. The majority of foreign owned companies considered the Singapore establishment as a main or independent unit within the entire company.

The Regional office category consists of different types of companies, which all have in common that they are part of manufacturing based companies and are in fact foreign owned subsidiaries (or in one case a joint-venture). They play a more or less independent role within the entire company, related to production co-ordination and planning, sales and marketing, etc. and not so much to production perse.

Obviously, the OEM I category is the biggest group of companies in Singapore. Its dominance becomes even clearer if we compare the relative size of the different categories by considering the share of each in total employment and total turnover (see figures D through F in the appendix). Thus although approximately 39 percent of companies in the survey can be considered large scale OEM suppliers, they account for more than 84 percent of turnover in
and almost 70 percent of total employment (i.e. including employees in other establishments and subsidiaries).

**Table 6.5  Categorisation of Companies in the Survey**

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>No. of companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 OEM I</td>
<td>Medium to large scale OEM suppliers to Western buyers; multi-establishment companies, turnover &gt; 5 million S$; export oriented (export share of output &gt;75%), production takes place predominantly outside Singapore.</td>
<td>22</td>
</tr>
<tr>
<td>2 OEM II</td>
<td>Small/medium scale OEM suppliers (turnover &lt; 5 million S$ and employment &lt; 100) for Western non-branded buyers (wholesale, import/export, smaller department stores or lowest tier brands) and/or local/regional department stores and non-branded buyers; often single establishments, working with sub-contractors; production takes place predominantly (but not exclusively) in Singapore</td>
<td>9</td>
</tr>
<tr>
<td>3 OBM (local/ regional)</td>
<td>Local brand companies (OBM &gt; 75% of output) marketing locally and regionally (export &lt; 25%); little if any own production, usually small scale (turnover &lt; 5 million, employment &lt; 50)</td>
<td>11²</td>
</tr>
<tr>
<td>4 Local label</td>
<td>Local (lower-end) brand companies and label supplier for local and regional department stores and non-branded buyers (approximately 50/50); SME (turnover 1-5 million S$ and employment &lt; 100); often single establishments, producing both locally and overseas</td>
<td>7</td>
</tr>
<tr>
<td>5 OBM/OEM</td>
<td>Local brand producer (with own outlets) and OEM supplier for Western brand companies; large scale, multi-establishment company with overseas production</td>
<td>1</td>
</tr>
<tr>
<td>6 Regional office</td>
<td>Regional production co-ordination, sales &amp; marketing office for regional OEM and OBM producers, using Singapore as base. Part of multi-national, multi-establishment companies; two types: 1) Subsidiaries/independent units of NIE companies, large scale with global reach; 2) Sales/marketing/retailing offices of Malaysian/Indonesian OEM suppliers.</td>
<td>5</td>
</tr>
<tr>
<td>7 Other</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

¹ These categories also include local license holders of lower-end Western and Asian brands/labels. Some companies considered this to be their 'own' brand, while others considered the license owners as their buyers. Both are not really accurate, however, we have decided to add them to these categories, as in terms of their basic set-up and performance they are quite similar.

² All of these companies have their own outlets/shops. For one company only 50 percent of output was OBM, however, it was included in this category because it did have own shops.

³ Of manufacturing based company

⁴ Companies that fit neither category, in both cases producers of uniforms for the local market

Average annual turnover for the OEM I category is also highest of all categories and its contribution to total turnover is more than double its contribution in terms of number of companies. However, this did not imply it was the segments with the highest value added or profit margins, as turnover per employee was in fact below the average of 42,989 dollar per employee per year. Unfortunately this is a very crude measure, as a large number of companies in the 2nd, 3rd and 4th category had substantial amounts of their outputs produced through subcontractors. The employment in these subcontractors is not included in the employment number and since turnover reflects sales but does not include cost (for instance of engaging subcontractors) turnover per employee for these establishments will be relatively high. It is therefore impossible to make any definite assertions as to value added and profit margins per category.

The fact that most other categories (i.e. OEM II, OEM/OBM and Regional offices) are also essentially rooted in OEM roles, further underscores the dominance of this company role. The typical production organisation and distribution networks for companies in the OEM I category is depicted in figure 6.3. It includes not just production linkages, but also linkages with regional offices and agents of European and US buyers located in Singapore. These offices and agents do not place orders or are directly involved in the management of production, yet they play an important role in the management of production networks (see chapter 1). In essence they function as translators of
the requirements and standards of their parent company or client (in the case of an agent), ensuring closer control over their networks. The role of these offices extends beyond Singapore and may include regional and even extra-regional vendors. We will take a closer look at the role and function of these offices and their connections to local garment producers in the last section of this chapter.

Figure 6.3 Production and Distribution Networks of Singapore OEM I Suppliers

The production and distribution networks of the companies in the other main categories are usually less complex and extensive (see figures G and H in the appendix), while those of companies in the regional office category are not centred in Singapore. This is also the case for a few of the foreign owned companies in the OEM I category (as was discussed above). However, the latter were primarily set-up as manufacturing branches, whereas companies in the regional offices category were part of manufacturing companies, but their set-up in Singapore was not manufacturing based and their core functions therefore often different (e.g. sales and marketing).

In the remainder of this chapter we will often group certain categories together, as separately their size often makes a relevant analysis difficult, while in many respects their characteristics are broadly similar. Thus we will often group together the OEM I and OEM/OBM category, as the latter only consists of one company (see box 6.2), which does not warrant separate analysis, while 75 percent of its business is OEM, making it on the whole quite similar to the OEM I segment. Similarly the OEM II and Local label categories will be taken together where possible.

The regional office category finally will usually not be considered separately due to the low number of companies in it and the differences among these companies, and because they form a rather distinct category. This group will be considered in more detail in the last section of this chapter.
Before turning to the competitive adjustment strategies, first changes and developments in the Singapore business environment will be considered. This is done from the perspective of the companies in the survey, i.e. their views on main issues and problems that have forced them to adjust and restructure their operation.

6.2 The Singapore Business Environment: Factors Impinging on Competitiveness and Major Problems Experienced by Singapore Garment Companies

All companies were asked about a number of factors and elements in their business environment and which they considered to be an issue or problem in terms of negative effects for their business. The findings are summarised in table 6.6 for all companies and by main company categories.

Table 6.6 Issues and Problems in the Singapore Business Environment (1985/’98)

<table>
<thead>
<tr>
<th>Perceived issues and problems</th>
<th>Share all companies (N=57)</th>
<th>Share OEM I, Regional office &amp; OEM/OBM (N=28)</th>
<th>Share OEM II &amp; Local label (N=16)</th>
<th>Share OBM (N=11)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labour availability and cost</td>
<td>95%</td>
<td>93%</td>
<td>94%</td>
<td>100%</td>
</tr>
<tr>
<td>Other business cost</td>
<td>79%</td>
<td>75%</td>
<td>88%</td>
<td>73%</td>
</tr>
<tr>
<td>Regional competition and/or competition from niche producers</td>
<td>86%</td>
<td>89%</td>
<td>75%</td>
<td>91%</td>
</tr>
<tr>
<td>Changes in markets</td>
<td>58%</td>
<td>71%</td>
<td>44%</td>
<td>55%</td>
</tr>
<tr>
<td>Requirements buyers/clients/customers</td>
<td>79%</td>
<td>86%</td>
<td>81%</td>
<td>64%</td>
</tr>
<tr>
<td>Keeping buyers</td>
<td>58%</td>
<td>57%</td>
<td>56%</td>
<td>55%</td>
</tr>
<tr>
<td>Production technology</td>
<td>25%</td>
<td>36%</td>
<td>19%</td>
<td>9%</td>
</tr>
<tr>
<td>Local institutional context</td>
<td>60%</td>
<td>54%</td>
<td>63%</td>
<td>64%</td>
</tr>
<tr>
<td>Trade regulations</td>
<td>49%</td>
<td>75%</td>
<td>19%</td>
<td>27%</td>
</tr>
</tbody>
</table>

Not surprisingly labour cost and availability (including wage increases, shortages of skilled and unskilled labour and labour turnover), as well as other cost of operating in Singapore (including cost of land, facilities and inputs) were seen by all companies in all categories as major factors impinging on their competitiveness. Shortages of labour concerned mostly skilled labour, which in the cases of the different segments implied different things. For the segments that were still involved in actual production (even if just pre-assembly processes), this shortage concerned skilled production operators, markers and graders, cutters, supervisors, etc., whereas for branded companies, the shortage concerned more design and marketing personnel.

A number of companies also indicated that it was hard to find competent people at the management level. This was especially true for companies that had expanded or were planning to expand overseas and thus needed managers capable of managing factories overseas or even relocating there. One managing director (MD) of a company argued that "one of the main issues (for our company) is the fact that both managers and workers are often unwilling to relocate overseas" (Interview manager Singapore garment company, 1998).

Competition and particularly regional competition was also a factor of concern for many companies. For the export-oriented OEM I & OEM/OBM segment, regional competition referred to competition for buyer orders and export markets, whereas for domestically and regionally oriented segments, it referred to competition for local and regional markets. Producers for the domestic market in particular felt it was hard to compete with cheap Chinese, but also Indonesian and Malaysian imports. In addition, for local brand producers, competition from other designer labels and brands (niche producers) were also seen as an issue.
Changes in markets (more rapid fashion changes and less standardised products) seem to affect OEM I producers more than companies in the other segments. This is probably due to the fact that their large scale set-ups make quick changes and more special items or treatments within product lines harder and more costly to achieve. This is further reflected in the fact that 83 percent of companies in this category found demands for increased flexibility (smaller batch-sizes, more mid-season adjustments and re-orders, etc.) hard to comply with, although this didn't mean they couldn't comply with the demands. Buyer/client requirements (demands for higher quality, increased differentiation and flexibility and shorter lead-times) were seen as a problem or issue in the sense that they increased pressures and impinged on profit margins of producers. Not surprisingly this factors played a minor role for companies in the OBM category. A more pressing problem for them was the small size of the local market, as opposed to buyer/market requirements perse. However, the issue of managing to 'keep' buyers, was seen as a problem by more than half of the companies and this was true for companies in all three major groups. Although this may have been expected for the OEM segment, it is somewhat surprising in the case of companies in the OBM segments particularly. In these cases what was implied was either final customers and/or retailers such as department stores, whose requirements and demands have increased over the years as well (see Hassler, 2003 for the Indonesian case).

The limiting role of trade regulations and particularly quota restrictions weighed most heavily for large scale OEM exporters, while it played a minor role for the other segments. However, even some of the large scale OEM companies had a more 'positive' view of quota, in terms of their general effect. As one manager asserted:

“All in all the quota system has been positive, as it has assured a reasonably stable market, where supply and demand are kept in balance and there is little overcapacity” (-Interview manager Singapore garment company, 1998).

The issue of keeping up with the latest production technology, although generally not considered a major issue of concern, scored highest amongst OEM producers. This is understandable in the light of their larger scale production set-ups and organisation and their customer base. US and European buyers usually required quality standards and short lead times, which can often only be achieved through the use of certain technologies or advanced equipment. Examples include specialised machines for certain processes, computerised pre-assembly machines, which easily linked to the designs and specifications of buyers, transport systems for work in progress, increasing efficiency and speed and information technology for faster and easier communication and information flows. Most of these technologies require substantial investments and can thus potentially form a problem for the producer.

The fact that many of the smaller, domestically and regionally oriented companies did not see production technology as a problem was probably in part due to the fact that they subcontracted substantial parts of production (hence were not so much involved in the actual production process) and quality requirements were often less for their products. In addition, in case they did have in-house production their small set-ups made many of the newest technologies useless, as they required large scale manufacturing to even be efficient.

Approximately 50 percent of all companies cited the local institutional context (Government policies, quality, health and safety standards and labour unions) as an issue of concern. However, among companies in the OEM I segment this was not seen as a very important issue. Generally speaking it seems more of an issue for the locally and regionally oriented companies than for the large export oriented companies. Perhaps this reflects the perception of the small-scale, domestically oriented segment of being somewhat neglected by Government in comparison to the export-oriented segment. Finally it must be noted that implied here were Government policies outside the high wage/high cost policies (see chapter 4), which to most companies obviously were a major issue.
Finally respondents were asked to rank the five main issues in order of importance, which resulted in the following overall ranking:

1. Increasing wages
2. Shortage of skilled labour
3. Cost of land/facilities
4. Regional competition
5. Buyer demands regarding products and delivery times
6. Quota limitations
7. Government policies

In the following section we will take a look at the responses of companies to these imperatives in terms of competitive adjustment strategies implemented.

### 6.3 Competitive Adjustment Strategies and Main Outcomes

**Table 6.7 Competitive Adjustment Strategies by Singapore Garment Companies (10 years)**

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Share all companies in % (N=57)</th>
<th>Share OEM I &amp; OEM+OBM in % (N=23)</th>
<th>Share OEM II &amp; Local label in % (N=16)</th>
<th>Share OBM in % (N=11)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Labour</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Increase) employment of foreign workers</td>
<td>65 37 78 18 56 9 45 5</td>
<td>37 65 15 63 10 73 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Increase) employment of female workers</td>
<td>67 38 65 15 63 10 73 8</td>
<td>37 65 15 63 10 73 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase labour flexibilisation (use of part-time or temporary workers)</td>
<td>33 19 17 4 50 8 45 5</td>
<td>19 3 19 3 36 4 36 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase overtime work</td>
<td>68 39 78 18 63 10 55 6</td>
<td>44 7 63 10 55 6 27 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change number of shifts</td>
<td>14 8 13 3 6 1 27 3</td>
<td>13 8 13 3 6 1 27 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Outsourcing</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase subcontracting</td>
<td>42 24 35 8 38 6 73 8</td>
<td>24 38 6 73 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subcontract overseas</td>
<td>58 33 61 14 44 7 91 10</td>
<td>33 61 14 44 7 91 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduction of labour saving technologies</td>
<td>40 23 57 13 19 3 36 4</td>
<td>23 57 13 19 3 36 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Invest in space saving technologies</td>
<td>37 21 43 10 38 6 36 4</td>
<td>21 43 10 38 6 36 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduce new technologies</td>
<td>53 30 70 16 38 6 45 5</td>
<td>30 70 16 38 6 45 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Increase) investment in overseas establishments</td>
<td>60 34 83 19 32 5 45 5</td>
<td>34 83 19 32 5 45 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Markets/clients</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Produce for different market segments</td>
<td>44 25 26 6 50 8 73 8</td>
<td>25 26 6 50 8 73 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Search for/venture into new (geographical) markets</td>
<td>68 39 61 14 69 11 73 8</td>
<td>39 61 14 69 11 73 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secured new buyers</td>
<td>35 20 26 6 44 7 36 4</td>
<td>20 26 6 44 7 36 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change buyer/client base</td>
<td>68 39 65 15 63 10 82 9</td>
<td>39 65 15 63 10 82 9</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Production organisation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change procurement patterns</td>
<td>53 30 39 9 44 7 73 8</td>
<td>30 39 9 44 7 73 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduce lead-times</td>
<td>81 46 87 20 81 13 73 8</td>
<td>46 87 20 81 13 73 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase flexibility (smaller batches, more rapid changes)</td>
<td>81 46 78 18 88 14 73 8</td>
<td>46 78 18 88 14 73 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Product</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improve product quality</td>
<td>98 56 100 23 100 16 91 10</td>
<td>56 100 23 100 16 91 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacture other products</td>
<td>70 40 78 18 56 9 82 9</td>
<td>40 78 18 56 9 82 9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Differentiate products</td>
<td>68 39 52 12 63 10 82 9</td>
<td>39 52 12 63 10 82 9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacture new products/extend range</td>
<td>56 32 43 10 63 10 64 7</td>
<td>32 43 10 63 10 64 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developed design capabilities</td>
<td>54 31 39 9 63 10 82 9</td>
<td>31 39 9 63 10 82 9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developed/introduced own brand</td>
<td>49 28 17 4 67 11 100 11</td>
<td>28 17 4 67 11 100 11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 the OEM I category and OEM+OBM category are taken together here, as the latte has large scale own production and produces about 75 percent for export. Its strategic behaviour is therefore more strongly geared towards its OEM function than towards its OBM function.
All managers were asked to indicate which types of strategies had been implemented in the past ten years and subsequently to explain some of these strategies in more detail. For instance why and how they were implemented and what the outcomes or effects of these strategies were. Implemented strategies are summarised in table 6.7. Strategies were grouped under a number of broad headings, corresponding with the categorisation in table 3.2 in chapter 3.

6.3.1 Defensive Strategies: Labour Intensification and Outsourcing

Labour strategies

Labour strategies, especially the employment of foreign workers and having employees work overtime, were common measures among all companies to deal with the issues of labour shortages and cost.

Overtime work was not always structural, but more often was used to cover peaks in orders, enabling flexibility. This is in fact a very common strategy in the industry in general.

The OEM I group seemed slightly more inclined to hire foreign workers, probably because they require more workers and therefore applying for foreign workers makes sense as they can apply for a sizeable batch at once. In addition smaller companies in the other categories may have more problems paying the levies for foreign workers. On the other hand companies in these categories were much more inclined to increase labour flexibilisation through the use of part-time or temporary workers.

Finally, a number of companies in the last two categories will not be involved in production directly, thus have no need for production workers (which foreign workers usually are). Recruitment of foreign skilled non-assembly workers is less common, although many companies indicated they would like to apply for such workers. However, Government’s policy of only allowing employment of foreign workers from so-called ‘traditional sources’ forms a limitation in this respect. For the garment industry traditional source countries include Malaysia and Indonesia. Skilled workers, however, are seen to come from non-traditional sources such as China and India.

Recent shifts in Government policies may enable such recruitment in the future though:

"... Government seems to be reconsidering its stance on the industry. Thus we just put in an application of 1000 foreign workers from non-traditional sources (Sri Lanka, India, China). These are higher skilled workers, i.e. not so much sewers, but for instance (embroidery) designers, etc. Government has reacted positively to this request" (-Interview manager Singapore garment company, 2003)

If recruitment of foreign workers is indeed aimed at acquiring higher skill levels among employees, this could in fact be considered more of an offensive than a defensive strategy. However, overall labour strategies are still predominantly defensive, although they are obviously no longer seen as sufficient for survival. More than 68 percent of companies indicated that cost had increased in the past ten years, despite labour and other cost saving measures. Defensive strategies such as labour strategies are thus in part applied to limit the increase in cost but seem incapable of actually bringing them down or even retaining them.

Outsourcing strategies

Although most companies worked with subcontractors (91 percent), only 24 companies (42 percent) indicated to have increased the amount of outsourcing they engaged in over the past ten years. Especially companies in the OEM I group were less inclined to increase outsourcing, which is probably due to the fact that on the one hand requirements regarding outsourcing on the part of the buyers have become increasingly strict, and on the other hand many of the larger OEM companies opted for overseas investments instead of subcontracting.

Several OEM producers indicated that they preferred not to subcontract for fear of not being able to control quality and labour standards, which could get them in serious trouble with their buyers. Of the subcontracting that does take place most does not involve core activities, such as
the production of entire garments, but rather specialised activities such as embroidery, washing, etc. One producer argued that this was not just because of buyer requirements:

"We only subcontract production of components or things like washing and embroidery. We don’t want to farm out the production of entire garments, because we would then in fact transfer our know-how to these subcontractors and what is to stop them from starting OEM themselves, and becoming our competitors?!" (Interview manager Singapore garment company, 1998)

To which extent such considerations are more common is not clear, but it is obvious that the choice to subcontract - or not - is usually not based on cost considerations alone. The fact that many OEM suppliers had overseas subcontractors, but were less inclined to increase subcontracting, indicates that outsourcing strategies used to be more popular, but have gradually become less so with increasing buyer requirements. Local/regional OBM producers were more inclined to opt for outsourcing as a competitiveness strategy. In addition companies in this group had almost all engaged in overseas subcontracting, mostly of entire garments. As they lacked the capital to invest in overseas facilities, subcontracting was the best option for these companies to internationalise. Moreover, as they were probably never (substantially) involved in production to start with, their inclination to set up their own production facilities overseas was naturally less than for companies that were production oriented.

6.3.2 Offensive Strategies

Relocation strategies
Although relocation strategies can also be considered defensive, they may be part of an overall, more offensive strategy, involving a shift towards becoming an important intermediary and co-ordinator of regional production networks for Western buyers (c.f. the example of OEM+ in the East Asian NIEs, see chapter 3). Generally speaking it is somewhat hard to designate location strategies as solely defensive, or solely offensive.

Not surprisingly companies in the first category (OEM I and OBM/OEM) were most inclined to invest overseas, which is in part related to their overall larger size (all companies in this category had an annual turnover of more than 5 million dollars). But this group of companies, also required larger numbers of workers than small size companies, making labour shortages an even more pressing issue. The most important reason for engaging in overseas investments were lower wage cost, with all companies citing this as at least one of the reasons for the decision to invest overseas. Other important reasons were availability and lower cost of land/property and the availability of labour. A number of companies also indicated quota limitations as a reason for investing overseas. As buyers of companies in the first category were often US buyers, quota considerations were only an issue for this group, and not so much for companies in the second and third category, which mostly exported to (quota free) Asian countries. However, quota limitations have mostly been a consideration for investments undertaken in the late 1980s and early 1990s. With the consolidation of the industry since the early 1990s, quota utilisation rates were in fact quite low at the time of the survey, so for more recent investments, this was a less cited reason. Quota restrictions do however still play a role in the decision for the actual investment location, which explains the popularity in the 1990s of investment locations such as Cambodia.

In 13 cases did overseas investments also entail a downsizing of production capacity in Singapore, with the Singapore establishment focusing increasingly on head-quarter functions and other non-production activities such as design, merchandising and sample-making.

Technology
Relatively few companies had introduced new technologies as a means to increase their competitiveness. This is not strange considering the nature of the industry and the limited
possibilities for automation. As far as automation in the production process itself is possible, it usually requires large scale production and substantial investments, at least for an industry in which most companies have limited capital at their disposal. Moreover, a large share of companies only produced a small part of total output in Singapore, took care of all production in other establishments overseas, or outsourced all of their production. For these companies investments in production technology makes little sense. What investments have taken place in these companies usually involve computer aided design (CAD) and marker systems. These were also the most common investments among all companies (24 companies had invested in at least one of these technologies), whereas only a few large companies had invested in computerised cutting (7 companies) and ‘transportation’ systems (e.g. conveyor belt or unit production systems (UPS).

Although it is possible that technology investments were made in overseas facilities, we did not ask managers any details about this.

Market/client strategies

Market/client strategies involve strategies aimed at changing either clients, markets segments or market as a means to expand business or increase value added. For instance by moving form lower-end buyers to higher end-buyers a company is able to command higher prices for its products. This kind of move - referred to as the upgrading forward (marketing) linkages - usually implies some forms of product and process upgrading, as "the higher price points of fashionable retailers reflect more complicated products and differentiated styles" (Gereffi, 1999, p.4).

Moving into different market segments is often related to changes in the buyer/client base, although it may also be a strategy implemented autonomously by the producer, either to secure new buyers or as part of the (further) development of own brands and marketing. Producing for different market segments thus entails some form of learning and is often also closely related to product changes, such as extending product range or diversifying. Extension of the product range may mean that a company which formerly only produced knitted tops, adds the production of woven tops or of bottoms/pants to its range, whereas diversifying refers to different markets segments, e.g. from sportswear to casual wear or street-wear or a focus on certain age and style groups of consumers. Again, buyer requirements and attempting a shift towards higher end buyers may play an important role un the implementation of these strategies for certain companies. Finally it is possible that a companies decides to expand into different markets, e.g. moving from local/regional to European/US markets, but also searching for new, non-quota markets. This too can be related to either a company's own initiative, but often also involves other drivers such as buyers or the international trade regime.

All in all, market/client strategies rarely stand alone, but are often strongly related to one another and to product changes. The most popular strategies in this market/client category appear to be changing the buyer/client base and searching for new markets, with 68 percent of all companies having engaged in at least one of these strategies. Of the companies that had changed their buyer/client base, almost 40 percent indicated this implied a move from lower-middle end buyers to higher-end buyers, whilst the rest had merely increased or decreased the number or buyers they worked for or had shifted towards own brand development. Approximately 64 percent of companies were actively trying to secure new buyers. On the one hand this was because most companies did not want to rely too much on just a few buyers/clients and on the other hand a single buyer often does not place a consistent amount of orders throughout the year. Within the large scale OEM group (including the regional offices an the OEM/OBM company), virtually none of the interviewed companies still produced for the lowest end Western buyers anymore (discounters such as WalMart from the US or HEMA from the
Netherlands). It appears this shift towards higher-end buyers has taken place in the late 1980s as at the time of the survey, the majority of large OEM suppliers had been with the same main buyers for a substantial number of years and market strategies were thus often implemented while continuing to work with the same buyers.

Of all companies that said to have started producing for different market segments, 64 percent indicated this was because (new) buyers required such shifts. Similarly, of the 39 companies that said to have started production for new markets, two-thirds indicated the information necessary for this strategy was obtained through linkages and contacts with buyers.

Thus although market/client strategies can be seen as pro-active strategies, for a large number of companies they were necessitated or at least encouraged by buyer demands. The exception of course being the small group of OBM companies, which have engaged in marketing strategies as a fairly autonomous choice, determined more directly by market (consumer) demands and preferences.

**Production organisation**

Due to market developments and buyer strategies (see chapter 1), producers are faced with increasing demands for shorter production runs and flexibility in production (i.e. smaller batch sizes, the capacity to produce re-orders in a very short time and supply mid-season if required, etc.). This necessitated strategies in the area of production organisation, these included most notably reducing lead-times and increasing flexibility in the production process. Both 'scored' high among all Singapore producers, although they were given form in different ways. For instance by sourcing inputs closer to home. However, this was only a small percentage, as quite a few key inputs suppliers were nominated and located in East Asia.

Other ways to increase flexibility included: increasing the skills and flexibility of workers (20 percent of companies said to have increased flexibility indicated this as the way they had achieved it); producing smaller batch-sizes (15 percent); introducing new machines or technologies (11 percent) and increasing the amount of outsourcing (7 percent). Unfortunately 46 percent of the companies that indicated to have increased flexibility, did not explain how this was achieved. It is likely that a lot of efficiency improvement and flexibility was also achieved through industrial engineering, i.e. improvement of the work-flow through time motion studies and perhaps a different layout of production lines.

Overall, based on the answers given in the survey, it is a little hard to judge whether flexibility has indeed increased and particularly to what extent. When some of the buyers were asked to comment on the flexibility of their Singapore producers, several indicated it was not the industry’s strongpoint and lead-times could be better. This was attributed to the lack of local inputs, but also the inflexibility of production networks of Singapore producers, when compared to suppliers in e.g. Taiwan and Hong Kong. Singapore producers were thus seen more as 'followers', not pioneers. For instance, one of the buyers indicated that Taiwanese producers tend to work more through extensive subcontracting networks instead of setting up their own factories overseas. This, it was argued, made them more flexible and enabled quicker response to changes or certain requests from buyers, as setting up a whole new factory in a foreign country often takes up more time.

One of the large scale OEM suppliers with overseas production facilities more or less confirmed this issue of inflexible networks:

"large scale producers are less flexible. This is due to the increasing complexity of logistics in such a company, especially if different products are made in different locations, making it difficult to respond quickly to demands of buyers" (Interview manager Singapore garment company, 1998).

On the other hand, own investments are also seen by buyers as more reliable and in some cases this advantage will outweigh lead-time considerations.
Generally speaking Singapore producers scored less than Hong Kong and Taiwanese suppliers in terms of flexibility and lead-times, while being slightly ahead or at the same level as producers in Malaysia and Indonesia. The biggest difference with these countries lay in reliability and added services.

**Product**

All producers indicated to have increased product quality, but this seems to have been more of a general trend, in other words improving product quality was a minimum requirement for all companies in the industry. It is however likely, that such product quality improvements weighed much heavier for companies in the OEM I group, as their buyers will have been much stricter with regards to quality standards than for instance non-branded Asian buyers will have been. Also the consequences for non-compliance are often more serious for companies working with higher-end Western buyers. Product quality was improved in several ways;

1) Improvement of quality control (QC) (approximately 41 percent). Stricter and more comprehensive QC systems reduced the number of defects, thus reducing the risk buyer complaints or rejection of entire shipments.

2) The use of better, higher-quality fabrics (21 percent). In many cases this was directly driven by buyers as they specified the fabric quality and designated suppliers

3) The use of new, better machines

4) The use of more experienced workers

5) Through feedback of customers.

Product strategies have been implemented most frequently by companies in the OBM group. Not surprising considering their focus on branding, which revolves mainly around the product itself. For companies in the OEM I group product strategies (with the exception of quality improvement) were less common and often driven entirely by buyers.

The strategies implemented and discussed above were not all implemented at the same time but in most cases followed a certain sequence. Initial strategies often included the more defensive strategies such as labour intensification and relocation of production through subcontracting and overseas branch plants in Malaysia and Indonesia. The wage restraints advised by the National Wages Council in 1985 also provided some breathing space to the industry in terms of cost, enabling companies to continue their cost oriented strategies. From the late 1980s onwards, however, defensive strategies alone did not suffice and this is the first time major shifts within the industry and companies can be observed. Cost continued to increase and both buyers (directly) and the Government (mostly indirectly) put pressure on the industry to restructure and upgrade. It is therefore in the late 1980s and early 1990s that offensive strategies begin to take a more prominent place in overall company strategy. On the other hand, those companies that could not or did not want to further adjust beyond the low road strategic direction opted for exit strategies. This group included both foreign investors pulling out or selling their Singapore operations and local companies going bust or closing shop. Two trends are thus discernible from the early 1990s. At the industry level a strong consolidation of the industry and at the firm level the shift towards offensive strategies, such as internationalisation of production (as opposed to merely setting up branches in nearby Batam and Johor), the introduction of own labels and brands, a shift towards higher-end branded buyers and an increase in involvement and services to buyers. Other company categories, most notably the local label and OBM suppliers took advantage of the development of an increasingly fashion conscious and wealthy local population and Singapore’s development into a regional shopping centre to successfully launch and develop their labels and marketing networks and started setting up own stores locally and regionally. Simultaneously, as far as they were involved in production to begin with, many started moving out of this completely.
As offensive strategies thus seem to be implemented once the limits of defensive strategies are reached, it is likely development trajectories will not always be smooth but may display more discontinuous patterns, a point we will return to in the following sections.

We now turn to the actual outcomes of strategies in terms of products, production and production organisation and functions of individual companies in the survey.

6.3.3 Outcomes of Competitive Adjustment Strategies

An overview of quantitative changes is given in table 6.8 below. The darker the colour of the cell, the higher the percentage of companies that indicated to have experienced the amount of change denoted by the column heading. Thus it is possible to visualise how most companies and the companies in each category have performed in terms of turnover, etc.

### Table 6.8 Indication of Quantitative Changes in Singapore Establishment (1985-1998)

<table>
<thead>
<tr>
<th>Change</th>
<th>All companies (N=57)</th>
<th>OEM I &amp; OEM/OBM (N=23)</th>
<th>OEM II &amp; Local label (N=15)</th>
<th>OBM (N=12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual turnover</td>
<td>1</td>
<td>0.2 0.3 0.1 0.1 0.1 0.1</td>
<td>1</td>
<td>0.2 0.3 0.1 0.1 0.0 0.0</td>
</tr>
<tr>
<td></td>
<td>2-3</td>
<td>5 2 8 4 1</td>
<td>2-3</td>
<td>0 2 9 7 3 9</td>
</tr>
<tr>
<td>Sales</td>
<td></td>
<td>0.2 0.3 0.1 0.1 0.1 0.1</td>
<td></td>
<td>0.2 0.3 0.1 0.1 0.0 0.0</td>
</tr>
<tr>
<td></td>
<td>4-5</td>
<td>4 2 4 8 1</td>
<td>4-5</td>
<td>0 3 0 3 3</td>
</tr>
<tr>
<td>Value added</td>
<td>0.0</td>
<td>0.0 0.4 0.2 0.0 0.0 0.0</td>
<td>0.0</td>
<td>0.0 0.7 0.2 0.0 0.0 0.0</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>9 6 8 9 7</td>
<td>1</td>
<td>3 0 9 9 9</td>
</tr>
<tr>
<td>Fixed assets</td>
<td>0.1</td>
<td>0.1 0.2 0.3 0.0 0.1 0.1</td>
<td>0.1</td>
<td>0.1 0.4 0.2 0.0 0.0 0.1</td>
</tr>
<tr>
<td></td>
<td>2-3</td>
<td>6 8 3 2 4</td>
<td>2-3</td>
<td>3 0 7 7 3</td>
</tr>
<tr>
<td>Output</td>
<td>0.2</td>
<td>0.2 0.3 0.1 0.0 0.1 0.1</td>
<td>0.2</td>
<td>0.2 0.2 0.0 0.1 0.0 0.1</td>
</tr>
<tr>
<td></td>
<td>4-5</td>
<td>1 3 6 7 9</td>
<td>4-5</td>
<td>7 7 7 7 3</td>
</tr>
<tr>
<td>Employees</td>
<td>0.1</td>
<td>0.1 0.2 0.1 0.1 0.1 0.3</td>
<td>0.1</td>
<td>0.1 0.2 0.2 0.0 0.0 0.4</td>
</tr>
<tr>
<td></td>
<td>2-3</td>
<td>4 1 8 2 2</td>
<td>2-3</td>
<td>3 7 7 7 3</td>
</tr>
<tr>
<td>Profit margin</td>
<td>0.0</td>
<td>0.0 0.2 0.3 0.2 0.0 0.0</td>
<td>0.0</td>
<td>0.0 0.2 0.2 0.4 0.0 0.0</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2 6 3 6 9</td>
<td>1</td>
<td>0 6 3 0 0</td>
</tr>
</tbody>
</table>

1 Managers were asked to give an indication of change on a scale of 1 to 5 ranging from 1 = substantially increased; 2 = increased; 3 = no substantial change; 4 = decreased; and 5 = substantially decreased
2 Changes pertain to interviewed establishment

A white cell indicates ten or less percent of companies, the lightest shade of grey indicates 10-20 percent, the next shade 21-30 percent, while the darkest shade indicates more than 30 percent.

Most companies indicated to have experienced increases in turnover, sales, output, and value added, with especially the OBM segment having experienced increases in these numbers. This was also the only segment in which a large share of companies actually experienced an increase in the profit margin. Gross fixed assets on the other hand do not seem to have changed much and employment decreased especially in the OEM II & OEM/OBM segment. These quantitative changes give an indication of success in terms of growth, but say little about changes in terms of the production process and organisation or functions of companies.

### Changes in production

Respondents were also asked to indicate the main changes that had occurred in terms of production cost, quality and capacity, which were then related to implemented strategies. Despite the fact that most companies had implemented strategies such as labour intensification, outsourcing and relocation, more than two thirds of the respondents indicated cost of production had increased in the past ten years. Of this group, 62 percent had, however, also succeeded in maintaining profit margins, suggesting many companies were able to compensate cost increases by moving to higher value added activities and products.
More than 80 percent of the respondents indicated they had managed to improve their product quality, while the rest said to have at least maintained quality standards. Strategies aimed at the improvement of product quality were thus successful, yet may have just resulted in maintaining (international) levels and standards.

Most companies still made use of full production capacity, yet almost 40 percent had decreased their capacity. Of the companies that still used full capacity, almost two-third had decreased the number of employees, which may imply an increase in labour productivity.

Finally, more than half (54 percent) of all respondents indicated they had reduced the number of employees working in the Singapore establishment, while the need for skilled workers had increased. This also points to a shift away from production (assembly) activities to higher value added production and non-production activities (see table H in the appendix).

Overall it is not really possible to draw hard conclusions from these observations, as there were also companies that seemed to have experienced contradictory changes, such as a decrease in cost, an increase in workers and not being able to maintain the profit margin. Moreover, to give a better insight into the outcomes of strategies in terms of functions, capabilities and competitive positioning a closer look at shifting emphasis and changing functions within companies is necessary.

Shift in business emphasis and main functions

Despite growth and changes in the production process and organisation, overall only a small number of companies had been able to substantially change their function to another role within the commodity chain. Thus 65 percent of all companies indicated they had not substantially changed the emphasis or function of their business beyond manufacturing for third parties. They had either remained OEM I suppliers (20), OEM II suppliers (7), or regional offices of foreign producers supplying on an OEM basis (5). However, more subtle changes may have taken place within these roles, which may still have had the effect of changing at least to some extent the functioning of the Singapore establishment. Listed in table 6.9 are a number of such changes (outcomes of strategies) that signify a shift in core functions.

<table>
<thead>
<tr>
<th>Shift in emphasis and main functions</th>
<th>All companies in percentages</th>
<th>OEM I &amp; Regional office</th>
<th>OEM II</th>
<th>Local label</th>
<th>OBM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shift towards non-production activities (from production to co-ordination centre)</td>
<td>39</td>
<td>33</td>
<td>29</td>
<td>56</td>
<td>55</td>
</tr>
<tr>
<td>Internationalisation</td>
<td>65</td>
<td>89</td>
<td>22</td>
<td>43</td>
<td>54</td>
</tr>
<tr>
<td>Internationalisation &amp; shift to non-production activities</td>
<td>28</td>
<td>33</td>
<td>11</td>
<td>29</td>
<td>36</td>
</tr>
<tr>
<td>Organisation structure changed</td>
<td>51</td>
<td>67</td>
<td>11</td>
<td>57</td>
<td>55</td>
</tr>
<tr>
<td>New department added</td>
<td>12</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Production department abolished</td>
<td>30</td>
<td>33</td>
<td>0</td>
<td>44</td>
<td>36</td>
</tr>
<tr>
<td>Non-production department expanded (sales/marketing/merchandising/QC/admin.)</td>
<td>18</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Own brand development</td>
<td>44*</td>
<td>15</td>
<td>44</td>
<td>100</td>
<td>64*</td>
</tr>
<tr>
<td>Branding &amp; move to non-production activities</td>
<td>19</td>
<td>7</td>
<td>22</td>
<td>71</td>
<td>45</td>
</tr>
<tr>
<td>Shift emphasis towards own brand development</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>43</td>
<td>0</td>
</tr>
<tr>
<td>Shift emphasis towards own brand development and distribution/marketing of this brand</td>
<td>25</td>
<td>4</td>
<td>0</td>
<td>43</td>
<td>82</td>
</tr>
</tbody>
</table>
* Four companies that have had brand since start of business were not included, since branding in itself did not really represent a change in the company's functions or operations.

Several companies indicated they had shifted the focus of their Singapore establishment away from production per se and were focusing more on production co-ordination and control activities. In addition, a total of 37 companies (65 percent of all companies) had internationalised their operations, either through investments or subcontracting. Of these 37 companies, 16 had also started moving away from direct involvement in production, shifting towards a focus on non-production activities, retaining higher skilled and higher value-added jobs in Singapore. In addition, a number of local label and OBM companies have also actively shifted production out, usually in combination with a shift in emphasis towards marketing and/or retailing of their own brands. These changes are also reflected in the organisational structures of companies.

Overall, only a very small number of companies had successfully attempted a shift of emphasis of their entire business towards the development of their own brand, or towards own brand development and distribution/marketing of this own brand. The highest share (19 percent) of companies that had introduced their own brand and shifted emphasis in this direction was among OEM II companies. However, this still only involved three companies. Not surprisingly companies in the OBM group (all of which had had their own brand from the start or had introduced it more than ten years ago) were most inclined to implement these kinds of strategies. More than half had shifted away from production and more than 80 percent had moved towards more (direct) involvement in the distribution and marketing of their own brand.

Finally, table 6.10 presents the main competitive strengths of the companies in the survey, as viewed by the managers themselves.

**Table 6.10 Competitive strengths of Singapore Garment Companies**

<table>
<thead>
<tr>
<th>Main strength</th>
<th>Number of companies</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production process/organisation (flexibility, lead-times, regional production network, technology, etc.)</td>
<td>15</td>
<td>26%</td>
</tr>
<tr>
<td>Product (quality, range, design, branding, etc.)</td>
<td>13</td>
<td>23%</td>
</tr>
<tr>
<td>Production process/organisation and Product</td>
<td>10</td>
<td>18%</td>
</tr>
<tr>
<td>Low cost or good cost/quality ratio</td>
<td>7</td>
<td>12%</td>
</tr>
<tr>
<td>Good management</td>
<td>7</td>
<td>12%</td>
</tr>
<tr>
<td>Long standing buyer relationships</td>
<td>4</td>
<td>7%</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>2%</td>
</tr>
</tbody>
</table>

Clearly for most companies competing on the basis of cost is no longer considered viable. Most companies saw efficiency in production processes and organisation and/or the quality of their products as the main basis on which they were able to compete.

Competitive strengths were grouped under these 6 main headings. Several companies mentioned more than one competitive strength.

There was little difference between the companies in the different categories, although there was a slight tendency for large-scale OEM suppliers to emphasise their competitive strength in production processes and production organisation and to consider management and relationships with buyers as competitive strengths.

### 6.4 Firm Level Development Trajectories

Based on the analysis of strategies and changes elaborated in the above, it was possible to identify a number of common development trajectories. Table 6.11 gives an overview of these different trajectories with a brief description.
Table 6.12 presents a cross-tabulation of the company categories identified in table 6.5 and the company development trajectories identified in table 6.11.

**Table 6.11 Company Development Trajectories in the Singapore Garment Industry**

<table>
<thead>
<tr>
<th>Trajectory</th>
<th>Description</th>
<th>No. of companies</th>
<th>Share (N=57)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1) OEM I steady¹ (process &amp; production organisation specialisation)</td>
<td>Companies often started as local producers/trading companies, but entered into OEM supply at early stage of their existence, by-passing the OPT/CMT stages. Have stayed in this OEM role, upgrading products and processes within it. In some cases even operational excellence and internationalisation trajectory</td>
<td>26</td>
<td>46%</td>
</tr>
<tr>
<td>A2) OEM I → OEM+ (production organisation and buyer services specialisation)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B1) OEM II steady¹ (extra chain process &amp; production organisation specialisation)</td>
<td>Companies have started out in, and retained role as local/ regional supplier. Some have introduced their own brands and labels, but contribution of these local labels to total output has remained negligible and mostly lower end</td>
<td>11</td>
<td>19%</td>
</tr>
<tr>
<td>B2) Local label steady¹ (extra chain production and simple design specialisation)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C) OBM (local/regional) steady¹ (product design and marketing specialisation)</td>
<td>Company has started out with own brand and has retained this role, possibly expanding by setting up own retail outlets and marketing/retailing brand in other countries in the region</td>
<td>4</td>
<td>7%</td>
</tr>
<tr>
<td>D) OEM I → +OBM (Local/ regional)</td>
<td>Company has started out as contract manufacturer but has successfully added production and marketing of own brand to its activities. However, OEM supply remains main 'bread and butter'</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>E) OEM II → Local label</td>
<td>Company has started out as local producer/trading company and has successfully added production and marketing of own brand/label, although it takes up less than 70 percent of production and company does not have own retail outlets</td>
<td>7</td>
<td>12%</td>
</tr>
<tr>
<td>F) OEM II → OBM (local/ regional)</td>
<td>Company started out as local producer/trading company and successfully added OBM; emphasis shifting towards production/marketing and retailing of own brand. Companies have own retail outlets, some have expanded regionally</td>
<td>6</td>
<td>11%</td>
</tr>
<tr>
<td>G) OBM (local/regional) → +OEM</td>
<td>Company started out as local brand producer with own outlets and has added OEM supply for large Western buyers.</td>
<td>2</td>
<td>4%</td>
</tr>
</tbody>
</table>

¹ Steady trajectories refer to staying within the same role, but do not imply companies following these trajectories do not shift within this role, as is demonstrated in figure 6.4.

**Table 6.12 Development Trajectories by Company Categories**

<table>
<thead>
<tr>
<th>Company development trajectory</th>
<th>Company category</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OEM I</td>
<td>OEM II</td>
</tr>
<tr>
<td>OEM I steady</td>
<td>21</td>
<td>9</td>
</tr>
<tr>
<td>OEM II steady</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Local label steady</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>OBM steady</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>OEM I → +OBM</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>OEM II → Local label</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>OBM → +OEM</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>OEM II → OBM</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>22</td>
<td>9</td>
</tr>
</tbody>
</table>
It gives an insight into the variation of development trajectories within the different company categories (which development trajectories are common for certain roles). In addition it may help put some of the earlier findings regarding strategies and imperatives in a broader perspective. The table illustrates that in terms of shifting positions, the OBM and local label categories appear to have followed the most dynamic trajectories, often coming from an OEM II basis.

Although a large number of companies in the OEM I category will also have started out as small-scale local producers, they shifted towards OEM for export supply at an early stage, and subsequently retained positions within this role, although within this role substantial changes and advancement can be made as well.

Development trajectories have been visualised in Figure 6.4. The arrows imply changes in time, while the horizontal lines demark transitions from one role into the other, which often imply a leap for individual companies. Some of these leaps, as we shall explain below, are apparently not always easy to make.

The trajectory letters in table 6.11 correspond with the trajectory letters next to the arrows in figure 6.4. Trajectories D) and G) were not included in the figure as only a very small number of companies (one and two respectively) had followed these trajectories. An example of trajectory G) is, however, depicted in figure 6.6 below.

The dotted lines in figure 6.4 represent the 'base trajectory' that has often been suggested in the literature, although perhaps not in such a perfectly straight route (see chapter 2).

It must be noted that a distinction has been made between local/regional OBM and international OBM. In fact the latter has often been implied in discussions of OBM supply, but this has been achieved by only a handful of companies in the East Asian NIE’s. Most own brand producers and marketers are still, however, very much locally/regionally focused, slowly trying to expand from there. It has been suggested that this local/regional OBM supply may precede entry into global networks and chains as an OEM supplier, but as we shall explain in more detail below, few if any companies in this category seem to have any plans of abandoning their own brand in favour of OEM supply.

The export roles depicted on the left hand side of figure 6.4 are based on the roles defined in chapter 1 (table 1.3). Different export roles imply different kinds of specialisations

- **International OBM role**: product & marketing specialisation
- **Local/Regional OBM role**: product & marketing specialisation
- **ODM role**: design, process & production organisation specialisation
- **OEM+ role**: process & production organisation specialisation
- **OEM role**: process & production organisation specialisation
- **OPT/CMT role**: process (assembly) specialisation
- **Local/regional label supplier**: extra chain product and production organisation specialisation
- **Producer domestic market**: extra chain production and production organisation specialisation
Figure 6.4  Company Development Trajectories in Singapore

1 Generally speaking these stages do not have to be linear, but there is a tendency for companies to 'catch up cumulatively' through time, with capabilities building systematically upon each other, especially once having entered into export networks, in which capability development is necessary to at least retain a position.

2 Process technology tends to become less important when garment companies shift to OBM roles, as generally speaking production activities are (gradually) abandoned once a company enters these roles, to the point where they start functioning as buyers, leaving actual production up to contractors. In the case of the garment industry the term original brand manufacturer is thus technically incorrect.

The depicted generic trajectories, may in reality take different forms for individual companies. There are even cases where several trajectories are in fact embodied in one company. A few of these individual company trajectories are visualised in figures 6.5 through 6.8.

Thus, figure 6.5 illustrates the case of a company that has attempted a move into ODM, but was unsuccessful and returned to its OEM+ role (see box 6.1). Similar observations have been
made by Gereffi (1999) in the case of Taiwanese computer makers and Korean electrical appliance companies. Moving from OEM to ODM/OBM functions proves to be quite difficult for established OEM suppliers.

**Figure 6.5 Individual Company Trajectory I:**

OEM → OEM+

**Figure 6.6 Individual Company Trajectory II:**

OBM → +OEM

The percentages behind the arrows indicate the share of total output each of the ‘roles’ take up. Thus the company in figure 6.6 supplies 75 percent of its output on an OEM basis to Western buyers, while the remaining 25 percent involves its own brand, which is marketed and retailed through its own shops locally and regionally.

All figures demonstrate that shifts may initially be somewhat abrupt, but often do not imply that the previous trajectory is abandoned completely, or at least not immediately. The emphasis may shift gradually though. Figure 6.7 illustrates a case of a company that started as a local retailer, moved into OEM for lower end Western buyers and eventually set-up its own brand, which it now markets and retails in local and regional markets. It still supplies on an OEM basis, but only a small share of its output. In addition (and this is not visible in the figure, but is more common among OBM companies) the company has diversified into other, more or less related products (in this specific case beauty products, but often local brands will also start designing and marketing shoes, accessories, bags, etc.).

**Figure 6.7 Individual Company Trajectory III:**

OEM II → Local/Regional OBM

**Figure 6.8 Individual Company Trajectory IV:**

OEM II → Local label
In figure 6.4 the generic trajectories embody 'aggregate' trajectories, where company that have gradually shifted from one trajectory to the other with substantial shares (i.e. more than 70 percent) of its output now accounting for one specific role, are grouped under that role. Thus the company in figure 6.7 is considered a local/regional OBM supplier having followed a trajectory from OEM II (in this case embodying local retailing) to OBM, as OEM I (the second trajectory) has never represented a substantial part of its business.

**Box 6.1 Case Study: The Sing Lun Group**

**Company background**
Founded in 1951 by the Lee family, Sing Lun's initial business activities comprised of importing, exporting and wholesaling of textiles. When the eldest son returned from Japan with a diploma in textiles in 1968, he led the company in diversifying into garment manufacturing. That same year the first production plant was set-up in Singapore. The focus was on the production of bed sheets and knitted garments for the domestic market. Expansion continued and in 1971 Sing Lun was the first Singapore garment manufacturing to set up a plant in neighbouring Johor Baru (Malaysia). Products (knit fabrics and garments) were still destined only for domestic markets. This changed in 1972, when the company managed to secure orders from a number of European mail order houses and retail stores, thus starting exports of its products to the European market. Soon the company was 100 percent export, however, exports were limited to European markets until 1982, when the company first started exporting to the USA. Its customers were major department stores and retail chains, such as Federated Department stores and the GAP. Exports to the US grew rapidly and eventually overtook exports to Europe, though exports to the latter still continued.

In 1985 Sing Lun diversified again, by acquiring a 50 percent share in Kaye Agencies (Pte) Ltd. Kaye agencies. This was seen as an extra service to existing European buyers, and in addition gave management of the group a better insight into ‘what else was out there’, i.e. the products and quality standards found in the market. This serves as a good benchmark for the company’s own standards and capabilities.

Besides diversifying, the company also continued to expand its garment manufacturing operations. Although the Singapore establishment retained manufacturing activities, all expansion took place outside Singapore. In 1994 a large manufacturing facility was set up in Sri Lanka and in 1998 the group set-up sourcing operations in Cambodia.

In addition, in 1997, with the request of one of its buyers (Walt Disney), a separate embroidery unit, FCA Lanka, was set up in Sri Lanka. This unit was to provide embroidery services for other Walt Disney vendors as well.

Finally, in the late 1990s Sing Lun tried venturing into ODM supply, designing and producing an entire collection for its buyers. This was done on the company’s own initiative. However, the response from buyers was not very enthusiastic. They requested so many adjustments and changes to the designs, that Sing Lun decided to stick with OEM supply. Although the company had introduced its own label (for local markets only), this only takes up about 1 percent of total output and is not seen as strategic to the company.

**Current structure and organisation of the company**
The core business of the company at this point consists of the manufacturing of knitted garments, buying house and distribution services and embroidery services.

Garment production takes place in four different locations, with the Singapore establishment taking care of the highest value added production processes and serving as a back-up facility to the other production locations.

The table below gives shares of employment, value added and output per location.

<table>
<thead>
<tr>
<th>Location</th>
<th>Number of workers</th>
<th>Value added</th>
<th>Share of total output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>400</td>
<td>52%</td>
<td>19%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>600</td>
<td>-</td>
<td>31%</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>1100</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>Cambodia</td>
<td>400</td>
<td>40%</td>
<td>10%</td>
</tr>
</tbody>
</table>

**Employment, value added and output per production location (1998)**
In 1998, all output was exported to the USA (56%), the UK, Germany and France (40%) and Japan (4%). The company had a diverse buyer base including for instance department stores, retail chains and mail order houses such as Federated Department Stores, GAP Inc., Walt Disney, Eddie Bauer (all US), La-Redoute (French mail order house), Great Universal Stores (UK) and Otto Versand (a German mail order house). Relationships with buyers have often been long standing (up to 24 years with some) and working relationships, especially with the US buyers are close, as the establishment of FCA Lanka illustrates. None of the buyers take up more than 25 percent of production capacity. The figure below presents a schematic illustration of the group structure.

**The Sing Lun Group Structure**

Agency and distribution services are conducted through Kaye Agencies and Bowen Distribution. Kaye Agencies is a sourcing company for garments and fashion accessories, managing the supply chain for its customers. Its functions include: conducting market research on the latest fashion and trends and most competitive rates; fabric and product sourcing; prototype product sample design; tracking of customers’ orders; quality control inspection on behalf of customers; and documentation and logistics services.

Kaye agencies has offices in Indonesia, Malaysia, Sri Lanka and Singapore as well as customer services centres in the United States and Europe to keep communication lines with customers short. The company had plans to launch a web based sourcing and tracking system by 2002.

Bowen Distribution specialises in the sale and distribution of lifestyle products such as apparel and home furnishing products. The home furnishing products are distributed mainly under the company’s own trademarks (labels) and sold in major department stores in Singapore. In addition the company has appointed distributors in Malaysia and Taiwan. Bowen Distribution also designs and manufactures various in-house labels for local department stores and retailers. In April 2000 a B2C portal (Fashion-On-The-Web) was set up for the sales and marketing of its products online.

In 2000 the company obtained a listing on the Singapore stock exchange, although the Lee family retained a 51% share in the company through an investment company and two of the sons still occupy key management positions.

**Strategic focus and firm development trajectory**

Over the years Sing Lun has focused its strategies on developing into a large scale, reliable OEM producer of quality basic garments (knitted), while retaining cost and prices at a reasonable level. The implemented strategies included:

- Expanding overseas to avoid labour cost and shortages in Singapore
- Retaining higher-end production and implementing the most advanced technologies in Singapore (reflected in higher value added of production in Singapore establishment).
- Establishing long lasting and close relationships with buyers by
  - upgrading product quality and especially improving reliability and lead-times
  - making sure to keep up with the newest buyer requirements and demands
- providing additional services such as embroidery and buying house activities
* Diversify into sourcing agency and distribution activities, complementing manufacturing activities

These strategies have resulted in a trajectory set within an OEM role and process and production organisation specialisation, yet advancing substantially within this role towards and OEM+ function. As an OEM+ supplier, the company has become an important partner for some of its customers and can provide additional services that go beyond mere contract manufacturing.


Let us briefly consider the generic trajectories in more detail.

1) Local OEM and Local label suppliers and entry into global production networks and chain

It has been argued that local label and small scale local/regional OEM producers may learn basic capabilities from producing and marketing in local markets, which may eventually enable them to enter into GCCs (Gereffi, 1999). This is what has been referred to in chapter 2, as the basic upgrading needed for entry into networks and chains (Meyer-stamer, 2002). However, there is little indication that this is a logical trajectory for these companies. Most have been around for a while (established in the 1970s and 1980s) but have not made a shift towards OEM for US and European buyers yet, and do not seem overly eager to do so either. In part this may be a consequence of limiting factors, such as access to quota and lack of capital or the fact that few buyers are still looking for new vendors in Singapore, making it harder for Singapore garment companies to enter into networks at this point. This would imply it is harder for later entrants to the industry in a specific location to become incorporated into global chains and networks. However, there have been several cases of late entrants, which have in fact been very successful in following the OEM trajectory (see box 6.3), so late entry in itself cannot be the only issue. It seems more a question of how quickly after a company's establishment it attempts to enter into the global networks and chains of lead firms. In other words, companies that made deliberate efforts in early stages of their development to do so, appear quite successful whereas companies that don't make this shift early on in their 'life' may not be able, or willing, to do so later on.

The idea that production for the domestic and regional markets may serve chiefly as a stepping stone for entry into global networks and chains implies the risk of exclusion from chains and consequently not having access to resources, markets and sources for upgrading (Gibbon, 2000a; Dolan & Tewari, 2001). In other words, because these local producers are not incorporated their capacity for further development is also limited. Thus it is almost assumed that these 'excluded' companies would in fact want to be included, and that development within a chain is the only alternative available. However, not many companies in this category in fact had plans or ambitions to become export oriented OEM producers for Western buyers. Moreover, if any moves in other directions have indeed been chosen by companies in this category, it is more often towards a shift of emphasis from producing labels and non-branded products for local and regional buyers towards (further) developing their own brand or labels, thus following the OEM II → Local/regional OBM, or OEM II → Local label trajectories. In other words achieving upgrading towards more independent and higher value added roles without necessarily going through stages of incorporation.

When asked about plans for the future, the still remaining OEM II suppliers, however, seemed little inclined to make any fundamental changes to their business operations in the near future (e.g. new technologies, overseas investments and changes to the function of the Singapore establishment). In this respect the OEM II steady trajectory is indeed the most conservative trajectory found, as even within this role, not many changes take place.
Company background
The Clothing Company was set-up in 1999 by the current Executive Director, who came from an advertising background. The story of the Clothing Company began earlier though, in 1997 when the current owner bought a local wholesaler, which also had 4 brands/labels (including its own), that was in trouble. The idea was to break the company up and sell it off in smaller parts. After having sold of part of the former company, it was deemed necessary to make the still remaining parts 'more attractive', in order to sell them off more easily and at a better price. Thus for instance, features were added (e.g. additional colours or styles) to the collection. Because of this the owner became more and more directly involved in garment business and finally decided to hold onto part of the company and establish it as Clothing Company (CC) in 1999.

With the increased involvement in the actual garment production process, the function of the company also started changing, from wholesaling to a contract manufacturer and supply chain manager for non-branded and lower-end brand customers and department stores. Production was not taken care of in-house, but further subcontracted, initially to Indonesia (1999), but due to political instability and unreliability of suppliers here, in 2001 production was shifted to China and to India (which had an advantage over China in terms of certain fabrics (rayon) and the capacity to produce smaller batches). In 2002 finally the Clothing Company also started working with subcontractors in the Philippines because of a favourable trade agreement between the Philippines and Europe: in this year the EU lifted quota for apparel from the Philippines. Usually only parts of the production process are outsourced to the Philippines, e.g. the adding of collars and buttons, which enables labelling of the products as 'made in the Philippines', granting it quota free access to the EU.

Current structure and organisation of the company
Currently the company is involved in two (related) main activities: contract manufacturing and supply chain management. Contract manufacturing initially involved orders whereby detailed designs and specifications were provided by customers, while the Clothing Company organised manufacturing for these customers. The main customers for the company were B- and C-brand buyers from Europe (Germany) and Asia. Orders were subsequently farmed out to subcontractors. To ensure a certain capacity with its subcontractors, the Clothing Company buys a part of the subcontractor’s production space/capacity, for instance on an annual basis. This capacity is then entirely dedicated to orders and products from the Clothing Company. Even though the company contracts out entire garments, its involvement in the actual production process may still be quite substantial. For instance the Clothing Company will often supply fabrics, if necessary will buy the required machinery and ‘teach’ subcontractors how to make products and live up to our quality standards.

As time to market considerations are becoming ever more important, even for the lower- and mid-end segments of the market, the Clothing Company felt that waiting for customer to come up with their designs and specifications took up too much time. Gradually the company therefore started pursuing clients by providing them with their own designs, leaving just very basic specifications to them. Thus the Clothing Company has essentially moved from an OEM to an ODM role.

Next to contract manufacturing, the Clothing Company is also involved in private label supply chain management, a role, which also evolved from its contract manufacturing role for local/regional retailers. Initially these customers placed orders with Clothing Company and specified which products to ship where. Again this system often took up too much time, so the Clothing Company decided to get in touch with local retailers directly and take charge of what to ship where at which time. This ‘direct line’ saves time and helps to avoid overstocking. In addition it enables the customer to concentrate on marketing, while the Clothing Company arranges manufacturing (sometimes with own designers) and logistics, and may even help with shop-floor layout, visual merchandising, etc.

Finally, from the leftover fabrics the Clothing Company also manufactures its own brands, under labels such as Royal Oxford and St Germain. These are sold to local department stores. However the company doesn’t really want to focus on its own brands, as there are limited human resources available in Singapore and in addition the company faces capital limitations.

“If we wanted to get more involved in design and product development we would have to develop ‘design and product development teams’, made up of design, resources and production specialists (....) At this moment, however, finding good designers in Singapore that actually know something about production (i.e. can design and develop products for mass production) is difficult, making it hard to integrate them into the mainstream industry. At this moment we therefore do most of our (very basic) design and product development in China. (.....). With regards to own brand development this also poses limitations. In addition, brand development requires substantial investments and is not all that
profitable, also because in doing so we may risk loosing our customers, which would consider our brands as directly competing with theirs. (…) There is, however, an increasing trend for branded companies to even outsource (parts of) the design (about 30%). This is especially true for c- and b-brands. In time developing our design and product development teams are therefore important objectives"

Most products are exported and sold through agents or distributors. 40 percent of total output is sold in Germany via a distributor, 30 percent in Russia via an agent, 20 percent in Taiwan and Korea via distributors and 10 percent in Singapore and Malaysia, where products are marketed by the Clothing Company or directly by its customers (local brand manufacturers such as Yangtzekiang and Casserini).

**Strategic focus and firm development trajectory**

In the 4 years of its existence, the Clothing Company has evolved from a wholesaler/contract manufacturer into a flexibly organised manager of front-end and back-end activities surrounding actual production. One of its main strategic focuses throughout this development (and the driver behind its diversification into other parts of the chain) has been on achieving highly competitive lead times and logistics. In addition it has focused on the higher value added, non-production activities, without necessarily moving, or wanting to move into own brand development and marketing perse, as it considers production and distribution organisation (from design to logistics) as its main strengths. The trajectory followed by this company is perhaps a good example of on the one hand an ODM trajectory, whereby the company may eventually move from the lower end B- and C-brands it works for now to higher end A- and even Boutique-brands. On the other hand it demonstrates the high value added that lies in between production and marketing/retailing. Organising production flexibly through subcontractors means the company did not have to invest in production capacity, while it also does not have to take the risk and cost involved in branding and retailing. Therefore it has achieved substantial growth with a relatively small number of employees. Sales value per employee in the Singapore establishment is therefore impressive.

Through its pro-active attitude towards its customers the Clothing Company has become more to them than just a contract manufacturer. Although its role is presently confined to lower-end segments and brands, its offensive strategies, incorporating and anticipating new trends and needs, in combination with low investments and risk, may enable the company to continue it rapid progress towards becoming a supply chain manager for more, higher-end brands and international brands (essentially an OEM+ role). Again this trajectory demonstrates that moving towards a higher position in the chain (OEM+ and ODM) does not necessarily have to follow a logical smooth route. In this case, large scale OEM manufacturing was basically 'skipped' altogether.

*Source: Interview, 2003*

2) OEM II to OEM I and OEM+

Over the past decades, among OEM suppliers extensive capability development in terms of quality and services has taken place and most Singapore garment companies by now command impressive regional and international production networks (reaching as far as Africa and Latin America). Although most of these OEM suppliers started as domestic producers, all of them shifted towards OEM supply at an early stage of their 'life', bypassing the simple assembly stages, moving directly to full packages supply. Exceptions were the companies that were set-up as branch plants of East Asian NIE producers. However, most of these have by now disappeared (closed, merged or sold to local investors). Subsequent changes and development of these companies have all essentially remained within an OEM trajectory and to date the majority of companies - and the largest contributors to the industry’s performance in dollar terms - have remained firmly rooted in their OEM roles. The OEM trajectories may take different forms though, with some producers focusing on investments in technological upgrading, while others focus primarily on the development of extensive and flexible regional networks. The opportunities for moving towards other trajectories in the future must be seen in the light of these variations within the OEM trajectory, as they determine future strategies (path dependency). For instance, the OEM suppliers that has invested heavily in production technology is less likely to move out of production altogether.
Within the OEM steady trajectory a number of companies have however gradually moved from just an OEM role to an OEM\+ role (as is illustrated by the case in box 6.1 and in figure 6.8), specialising and increasing services to buyers to include product development and design (though not necessarily ODM), sourcing, logistics, etc. These trajectories have proven to be successful in not just retaining buyers under increased competitive pressures but more importantly in increasing dependency of buyers on them by taking on more responsibilities within the chain.

Although only a handful can be said to have fully engaged in OEM\+ trajectories, many OEM companies have implemented strategies that may eventually put them on such trajectories as well. This is particularly true since for most OEM companies, their development trajectories seem to inevitably have included extensive internationalisation. Internationalisation has become more than just a relocation strategy, but more and more a competitiveness strategy (see box 6.3), that may enable firms to eventually offer other services and advantages to buyers, outside just low cost production locations, thus making themselves less dispensable.

**Box 6.3 Case Study: Ocean Sky Textile Pte Ltd/Ocean Sky International Ltd**

**Company background**

Ocean Sky Textile was set-up in 1995, when two brothers bought out a small Taiwanese owned factory. The company's total turnover was less than $1.7 million at that time and was operating out of a single factory in Singapore. Ocean Sky's customers then were mainly local exporters. As business grew and the limitations of high costs of operations in Singapore became more pressing, the company started its regional expansion by setting up and acquiring cost-competitive production capacities in the region. In 1997, an operations base was set-up in Malaysia with the acquisition of a first subsidiary, Eng Soon, in Johor. Subsequently a subsidiary was established in Cambodia, which enabled expansion of production capacity by almost fourfold.

In 1998, in response to increased customer demand, the company expanded further into the region by incorporating two establishments in Brunei, increasing total capacity by more than 70%.

A sales and marketing subsidiary was set up in Hong Kong in 1999, giving the company a presence in the region's biggest apparel buying centre.

In 2000, a large factory building was established in Singapore, to house the company's management headquarters and production base in Singapore. Operations in this Singapore factory were upgraded, while production efficiency was increased through consolidating of operations.

In that same year the company established factories in El Salvador and Honduras in order to take advantage of the close proximity to the US market (which is the company's major market), reducing transport cost and shortening delivery times to major customers in the United States. In addition, the company was able to enjoy the tax- and quota-free benefits in these two countries.

In the first half of 2002, the company set-up a marketing- and sourcing office in Los Angeles, further increasing its foothold in the US market.

With the accession of the People's Republic of China (PRC) into the World Trade Organisation, the company wanted to position itself for (future) opportunities in the PRC and therefore began setting up subsidiaries in the PRC in 2002 (two subsidiaries) and an additional subsidiary in Hong Kong (also in 2002).

While continuing to concentrate on the core business of being a specialty garment manufacturer, the company is expanding into related activities, such as providing supply chain management (SCM) solution services ranging from sourcing of raw materials prior to the manufacturing process to logistic management. Since 2000 the offices in Singapore, Hong Kong and the US have started providing such services, mainly to customers served by the Central American operations. In FY2001, one quarter of sales generated from Central American orders included the provision of SCM services.

In addition Ocean Sky's management felt that the company would have better control over raw material supply if it produced these itself. Therefore the functions of the US marketing and distribution facility were expanded to include the manufacture of fabric. In October 2002 a knitting plant was set-up in the United States to provide knitted fabric to the Central American production operations. By operating its own knitting plant, the company is able to ensure consistent quality and timely delivery of fabrics.

Finally, in 2002, three more subsidiaries were set-up in El Salvador, the US and Honduras respectively, to facilitate the further development of SCM services in Central America.
In February 2003 Ocean Sky Textile Pte Ltd became a publicly listed company and changed its name to Ocean Sky International Ltd.

Current company structure and production organisation (2003)
Within a period of 6 years, Ocean Sky managed to develop from a small OEM suppliers with one Singapore based factory and an annual turnover of approximately 1.7 million, into a globally operating large scale manufacturer and manufacturing services provider operating in nine different countries with twelve production and sourcing operations and approximately 6,900 employees. Total annual production capacity had reached 2.9 million dozens and annual turnover was almost S$180 million in FY2001. The two brothers still run the Group, one as Executive Chairman, one as Manager Operations. By January 2003 the company had operations and subsidiaries in Singapore, Brunei, Cambodia, Malaysia, the PRC, El Salvador, Honduras and the USA. The sourcing and manufacturing bases in the three regions, namely, Southeast Asia, Hong Kong/China and Central America/US, complement one another in terms of competitive strengths (e.g. quota availability, market proximity, material sourcing, strategic information, low cost and direct services to customers)

Each of the Group’s subsidiaries operates in close and constant consultation with one another to maximise business and cost efficiencies. An order taken in one country may be manufactured in another. All production plants and offices are integrated through an online computer system that allows for real-time tracking at every stage of production and operations, and are linked centrally to the headquarters in Singapore. The Singapore headquarters thus serve as the nerve centre for the entire company, providing management, financial, production, technological, logistics and SCM planning support. The company prefers not to subcontract production, so as to ensure quality levels and reliability.

Main clients include: Gap Inc., May Department Stores, Sears, Mervyn’s, Target, Foot Locker, Inc., Phillips-Van Heusen and Eddie Bauer, Inc.

Strategic focus and development trajectory
Ocean Sky’s rapid growth and expansion are remarkable and resulted from a focus on:

- Aggressive internationalisation strategy.
  Geographic expansion into global strategic locations has enabled the company to take advantage of lower labour, productions and transportation costs. Ocean Sky’s sourcing functions are centered in the key hubs of the garment industry, Singapore, Hong Kong and the USA where quality raw materials can be sourced globally from for maximum cost efficiency. In addition, its global presence has allowed the company to shorten lead and delivery times by moving closer to final markets.

- Vertical integration and supply chain management services to clients
  Expansion into related activities such as pre-manufacturing SCM services (e.g. design of garments and the sourcing of materials) as well as post-manufacturing SCM services (e.g. logistic management and customs declaration and documentation) and the integration of fabric production for the company’s Central American operations has increased customer loyalty, reduced lead-times and increased value added. The company has moved beyond being an OEM suppliers and ventured into OEM+ where it controls a vast global networks and provides the kind of services that buyers are increasingly outsourcing to global agents or capable manufacturers. This results, in the company’s own words “...in tangible benefits in terms of better margins, as well as intangible benefits in terms establishing closer working relationships with our customers. We will have better understanding of our customers’ needs and more control over their logistic arrangement, all of which would in turn lead to improvement in delivery time and productivity. The SCM arrangement also strengthens the relations and mutual trust between our customers and us and enhances our competitive edge in the apparel industry” (www.oceansky.com.sg, 2003)

The company has thus clearly chosen its strategic direction, competencies and core strengths, and defined strategies accordingly. Despite its relatively late entry into the industry it has thus been able to develop into one of the largest garment producers of Singapore


Further expansion seems to have been something all still existing OEM companies have been quite successful in achieving despite, or perhaps in part thanks to, the limitations of the local business environment. In fact companies, which have followed the OEM steady trajectory have achieved the highest turnover and growth, and this segment as a whole has made the Singapore
garment industry one of the most internationalised industries in the country, with investments in approximately 20 different locations world-wide. An impressive feat, which has turned (Government) attention back to an industry that by the mid-1990s had become "the forgotten industry" (-Interview manager Singapore garment company, 2003). The vast production networks of Singapore producers enable buyers to cover a large number of locations from Singapore, without having to engage in the scouting for these locations and the learning and other investments in the new producers in such locations.

2) From OEM to OBM?
As becomes clear from the trajectories described and visualised, the 'base trajectories' was not really found in Singapore. Firstly, most OEM suppliers had bypassed the OPT/CMT stage and had gone straight from local production into OEM. Secondly, the subsequent move from OEM into OBM obviously was a lot less easy than the first shift.

Some of the companies in the OEM I group had attempted to venture into ODM for Western suppliers, designing entire collections and presenting these to buyers. These attempts have not been very successful though, to the extent of the companies in question abandoning these trajectories again. They found that buyers were not very open to their designs and if they did accept suggested so many adjustments to them, the whole purpose of ODM was more or less defeated.

Another problem faced was the difficulty in finding suitable local designers, able to design and develop products for mass production (see box 6.2). The gap between local designers and local producers appears to be somewhat of a two-sided problem though. On the one hand local designers may not be interested in, or capable of, designing for mass production, on the other hand producers view on incorporating design and branding into their activities may be somewhat simplistic. Developing into an ODM or OBM supplier takes a substantial commitment in terms of investments, manpower and changes in the organisation (thus a commitment beyond just hiring a designer) while the effects (rewards) of are often not noticeable in the short term.

Moving into OBM has proven to be equally hard for large-scale OEM suppliers. Although many had introduced their own brands, these would have to be classified as labels in most cases, which are intended for local and regional department stores or non-branded buyers and often do not make up a substantial amount of business for the company.

There are several limitations to moving from large scale OEM supply to OBM supply:
1. It is hard for large scale manufacturers to go back to small scale production or small batch sizes and short runs, as they have often invested substantially in production capacity, hence sunk cost are high.
2. There is a substantial 'capability gap' within the GACC between design, marketing and retailing on the one hand and production on the other. Competencies in one area don't imply competencies in the other will come easy. A move from large scale production to design, marketing and retailing of an own brand to many producers therefore is somewhat of a quantum leap with substantial investments, learning and perhaps unlearning and risk. Although many producers will develop competencies in the area of design and product development, most don't see original designing, marketing and retailing as their core business and seem to prefer staying in dependent roles, while working towards a position where they form more of a partner than a dependent producers to the buyer.
3. Finally, as has been observed by Schmitz & Knorringa (1999) in the case of the footwear industry, buyers are usually not interested in assisting their suppliers to develop into OBM, as this goes against their own interest. In some cases they may even discourage such development. Some producers indeed mentioned they were afraid their clients would be upset if they introduced their own brands and effectively started competing with them.
One OEM manager summarised it well when he remarked:

"OEM suppliers and branded companies (OBM) are two very different and distinct groups. They (OBM suppliers) are aimed at (and appeal to) a relatively small number of people and are thus niche producers. OEM suppliers on the other hand are into mass production and are not too keen on high design content of their products. Although several OEM suppliers have tried to venture into design and OBM over the past few years, as of yet this has not been very successful. There are several reasons for this. First very different types of skills are needed and you cannot just hire one designer and expect to all of a sudden be able to supply OBM. You also need to invest in marketing, distribution, etc. These are long-term investments, with very little direct returns. Second, in the cases where companies have attempted ODM, this has been met by little enthusiasm form the buyer’s side. Thirdly (OEM) companies often introduced their own brand or label (e.g. for local department stores) as a means of spreading risk. It provides them with something to fall back on. This has also meant they have engaged in it rather half-heartedly. Companies who have started out as OBM and put all their resources and heart and soul into it are much more successful" (Interview manager Singapore garment company, 2003).

3) Alternative development trajectories

Only three companies seem to have been successful in combining OEM and local/regional OBM supply (for an example see box 6.4), yet this trajectory was not established by moving from OEM via ODM into OBM, but rather by starting with OBM supply and then moving into OEM supply. The two roles were subsequently maintained somewhat separate from one another. Although this may fit into idea of using local supply and brand development as a learning ground to eventually move into OEM, it does not appear that this move into OEM was seen as a shift into a different direction, merely as an addition to its business (and one that enabled scale production).

Box 6.4 Case Study: Bodywork Concepts Pte Ltd

Company background

Bodynits International was set-up in 1984 as a small family business, producing and marketing/retailing its own brands, Bods (for men) and Bodynits (for women). The brand started as a fitness and aerobics wear brand, but over the years has been extended and now also includes active and casual wear as well as underwear and swimwear. All products are knitwear. Production was initially all taken care of in-house, but as the company grew, in-house production was insufficient to meet demand and part of production was outsourced to subcontractors. The Bods/Bodynits brand was initially sold in department stores, but in the course of the 1980s the company started successfully setting up its own retail outlets in Singapore, eventually even expanding regionally. In the early 1990s the company also started contract manufacturing on an OEM basis for US and European sports brands such as Nike, Adidas and Puma as well as for retail chains such as the GAP. Orders and exports grew rapidly, necessitating a substantial expansion of production capacity. Due to the high wage cost and labour shortages in Singapore, the company chose to expand overseas and set up a factory in China in 1994. Despite contract manufacturing having become more important in terms of share of output and sales, the company has firmly held on to design, production and marketing/retailing of its own brand and still sees this as one of the core businesses. In the late 1990s, with the assistance of the TDB, Bodynits started operating its retail outlets under a franchise. This implies the stores are no longer owned by the company, but by franchisees. Bodynits, which was subsequently renamed Bodywork Concepts Pte Ltd advises and assists with the selection of the site, the design concept and layout for the store and the setting up of merchandising and points-of-sales systems. In addition it provides training programs and ongoing support in the running of the store, which of course is only allowed to retail the Bods and Bodynits brands.

Current structure and organisation of the company

The core business of the company currently consists of two rather distinct activities: on the one hand design, production and marketing of the own brand sold in local and regional markets (25 percent of the business), and on the other hand contract manufacturing on a full package basis for Western sports- and casual wear buyers (75 percent of the business). The figure below gives a simplified illustration of the company structure
The two activities do of course overlap (both the OBM and OEM products are manufactured in the same factories) and can also be leveraged to benefit one another. Thus information and knowledge of international quality standards through working for high-end Western buyers can be applied to the own brand, while the large scale OEM production allows for efficiency and productivity gains which can be leveraged for the own brand as well. At the same time, the intricate knowledge of design and branding allows the company to manufacture products with a relatively high design content enabling them to supply to higher-end buyers and the higher-end product lines of these buyers. The company's specialisation in sports and casual wear also pertains to both its OEM and OBM activities. Franchising retail operations enabled the company to focus on the development and marketing of the brand, while retaining control over shop layout and presentation, thus over the brand's retail image. In addition it is seen as a good way to expand internationally and the company opened its first franchise shop in the USA at the end of 1999.

**Strategic focus and firm development trajectory**

Bodywork Concepts is a design oriented company, which has however followed two distinct strategic directions and thus in fact embodies two different development trajectories at once: an OBM and an OEM trajectory.

At the time of the survey, there was no intention to give up either one of these roles, as they complemented one another. Instead of becoming incorporated into global networks and chains led by US/European buyers and subsequently moving into OBM, the company in fact started out with the latter and later added OEM supply. What Bodywork Concept's development trajectory illustrates is firstly that not all roles necessarily logically follow one another up in a specific order and secondly new roles do not always completely replace old ones. Bodywork Concepts thus in fact incorporated two different development trajectories within the same company and appears to have been quite successful at both.

Sources: UU Producer Survey 98/99; www.franchisesingapore.com/happening/6sep1999.htm

Another quick and relatively cheap way to start OBM, is by merging with an existing OBM supplier. It has the added advantage of enabling a company to use the expertise gained through OEM production for high-end western brands for the further development of its own brand. Some larger OEM suppliers also suggested such a strategy as a possible option for the future.

“Own brand development is still very hard, especially with such a small market. We see more opportunity in perhaps buying an existing brand company in e.g. Europe or setting up a joint venture. This would in fact be much easier and cheaper than developing know-how, image, networks, marketing, etc.” (Interview manager Singapore garment company, 1998).

It is not exactly clear why more companies haven’t already applied such a strategy, although the above made remarks regarding the core business of companies and reluctance to engage in direct competition with clients most likely are applicable here as well.
To the extent that successful alternative routes have been followed, this was usually by companies that did not start out as contract manufacturers to begin with. This is the case for most ‘true’ OBM producers (category 3). These companies either started as OBM producers or moved into this role soon after their establishment, coming from a position as a small-scale domestic producer or retailer. In terms of significance within the industry as a whole (turnover and employment) the contribution of this OBM group is still very modest though and growing beyond the limits of the local and regional markets has proven to be difficult (see box 6.5). However, it seems more likely that these companies will move towards international OBM supply, than companies currently in an OEM position.

**Box 6.5 Case study: Song & Kelly**

**Company background**

Song & Kelly was established in 1994 by designing partners Wykidd Song (Singaporean) and Ann Kelly (British). Song was educated in fashion design in London, while Kelly came from a graphic design background. Originally they started a 'wholesale' clothing business, designing and producing their own collections. Actual production was subcontracted to a manufacturer in China. Through contacts they managed to secure orders from a London based buyers in the first year. Unlike many other local design/brand companies, who's aim ids to expand regionally before taking on the world, Song & Kelly thus leapfrogged local and regional markets and immediately moved into international markets. In the following years they managed to expand their customer base to include higher-end fashion buyers from Japan and the West. These were mostly high-end and exclusive department stores such as Neiman Marcus in the United States and Harrods in London. In the mid 1990s the designer duo opened a flagship store in Singapore and became directly involved in retailing. In addition they opened showrooms in London and Italy and participated in fashion shows in London and New York - in part supported by local institutional and private sponsors - to try and establish their name in the major fashion capitals.

The story thus seemed one of great success, but turnover was not extremely high and the company hardly made a profit. Orders kept coming in, but capital and manpower constraints made it hard for the company to deliver. Administrative hassles multiplied, cash-flow was a perennial problem and although the company had hired 2 more designers, the owners still handled all administration, handling, documentation, etc. by themselves. They couldn't afford to hire separate staff for these functions. Moreover, the boutique operation could not produce in volume, as became painfully clear when they failed to deliver an order from New York's famed Barney's Department Store in 1999.

Therefore, in 2000 the company decided to restructure its operations, by selling a majority stake to Club 21, a lifestyle-products company owned by the wife of a major property tycoon. Club 21 provided necessary capital and in addition functioned as an agent, managing much of the overhead. Moreover, Club 21's owner had close contacts with other fashion brand owners, such as Giorgio Armani, for whom she operates stores in London, and Donna Karan, whose fashion empire she helped bankroll. In other words, she is well connected in the fashion world and thus may provide more than just capital for Song & Kelly.

**Current structure and organisation**

As part of the deal with Club 21, Song & Kelly closed their wholesale operations in Europe and instead focused on the local market first, opening a larger flagship store in Singapore. The idea is to expand again from there, but this time starting with regional markets, establishing retail operations in Kuala Lumpur and Bangkok. In addition wholesale offices will be set-up in Europe. The brand was renamed Song+Kelly21

Joining Club 21 has also meant Song & Kelly can focus on their core strength: design and product development, while leaving marketing and retailing up to management of Club 21. This has enabled them to further develop and extend the brand, introducing a shoe-line and fashion accessories under the same name and introduce new product lines (e.g. men's wear). The company plans to continue brand stretching and product line development, and develop Song+Kelly21 into a lifestyle brand. Production is still all outsourced to China, while virtually all inputs are sourced from Europe, through agents and importers in Hong Kong. The higher-end and specialised fabrics and accessories needed for their products, the designers claimed, were not available in Singapore.
Strategic focus and development trajectory
Obviously the strategic focus of the company throughout has been on design and product development. In this role as OBM suppliers they managed to gain both local and international recognition. However, educated as designers, the owners soon discovered the difficulty of taking on different functions. In addition, the limitations of leapfrogging into international markets without establishing a certain productive capacity and capital base became clear when orders started growing. The company therefore decided to go back to the basics, or rather its core competencies and back to establishing a solid base locally. From there it will attempt to venture out into the region. In international markets the company has toned down its ambitions somewhat, looking to focus initially on wholesale activities (essentially on an ODM basis).
While thus having remained in an ODM/OBM trajectory, within this trajectory, the companies has had to refocus its business operations, as an international OBM role was still essentially beyond the reach and capacity of the company.

Sources: Interview (2003); Asiaweek (June 15, 2001)

4) (Partial) Exit Trajectory
Although not incorporated in figure 6.5 and not listed in table 6.23, quite a number of companies appear to have followed exit trajectories as well. This became clear when comparing lists of companies from 5 to 10 years back to current (i.e. 1998) lists and is also obvious from the fact that in our original database we found quite a few companies that were no longer in operation/not traceable. According to the industry association TaFF, in the late 1980s and early 1990s a large number of companies went bust, sold their Singapore operations or shifted all operations to other countries. Especially investors from the East Asian NIEs, which had originally set-up branch plants in Singapore moved out again in this period, selling their operations to Singapore owned companies, or just closing them, although some did retain a presence as a marketing and distribution office.
What took place was therefore a consolidation of the industry, resulting in a smaller, but reasonable stable number of larger manufacturers. This consolidation was also noticeable among small domestically oriented companies. Many of these were faced with continuity issues (no second generation to take over, retirement of owners) and increased competition from lower cost countries such as China and Indonesia. A large number either closed (exit trajectory) or became trading companies (partial exit trajectories) sometimes of more than just garments.
Looking at the overall picture, for all groups and trajectories, some form of lock-in into acquired role or path dependency is apparent, with the most obvious one being the OEM II steady trajectory. From the starting point of the local producer/trading company, basically three trajectories can be identified: the shift into OEM supply, into local/regional label supply and into OBM (local and regional) supply. In addition there are the steady trajectories. It appears that once a choice has been made for either of these three at an early stage in the company's development, shifting towards another trajectory becomes increasingly hard, and less likely over time.
This is illustrated in figure 6.3. Neither group appears very successful in fundamentally shifting roles or functions, nor very inclined to attempt such a shift. This does not necessarily mean being 'stuck' completely, as upgrading (towards higher value added and higher quality products) and improvement of capabilities and competencies are achieved within the main trajectories, especially the OEM trajectory. In addition a small number of companies do appear to have been reasonably successful in at least combining different trajectories.

For a complete picture of the development trajectories of the Singapore garment industry the last part of this chapter deals with developments at the industry level.
6.5 Singapore Garment Industry Development Trajectories

In the above an extensive overview was already given of the development trajectories of existing producer companies. As became clear the largest group of companies has remained rooted in (dependent) OEM roles, yet quantitative and qualitative analyses pointed to the fact that within these roles shifts have taken place. In addition a number of extra-chain trajectories were identified. Thus, although in production terms the development of the industry could be seen as characterised decline, from a commodity chains perspective the picture may in fact be more positive.

This may be further illustrated by the entry and development since the mid 1980s of two new segments within the industry, although it is perhaps too early to say whether they present viable new sources of growth and diversification for the industry in the future. These new segments include on the one hand companies performing functions in the core of the commodity chain (buyers, agents) and local design-oriented companies (e.g. local OBM producers and fashion retailers). In addition a number of garment or garment related companies from outside Singapore have located their regional co-ordination and control, sales & marketing or distribution centres in Singapore, enhancing the City State's regional hub function in relation to apparel, while local intermediaries too have played a role in this respect.

6.5.1 Buyers as Local Actors

Presence

Singapore’s geographic location, infrastructure and accessibility, as well as its high quality human resources, bode well for a function as a regional trading and sourcing hub. Combined with the efforts of the government to promote and further develop Singapore as a hub, this has indeed encouraged a number of international buyers and agents to set up regional branch offices — buying houses or sourcing offices — in Singapore. At the start of our research, approximately 34 such companies were found to have offices in Singapore. In addition a group of locally owned sourcing agents was identified (consisting of approximately 20 companies). These agents function as intermediaries between regional producers and international buyers. Of these 54 companies, 26 were interviewed (for a detailed overview of database and coverage see annex A).

The international sourcing offices interviewed (11) included branded companies such as Polo Ralph Lauren (see box 6.6), retail chains such as Federated Department Stores and mail order houses such as Otto International. Nine of these offices were branches of US buyers and only two were owned by European buyers. The group of international buying agents (9) included both companies involved in a variety of agency services to buyers, such as sourcing, distribution and marketing and agents which focused more exclusively on sourcing and purchasing services only. Examples include Danish owned Jebsen & Jessen, Li & Fung from Hong Kong, and Swire & McClain from the UK. Ownership in this group was more diverse, with 2 US owned, 3 European owned and 4 Asian (Hong Kong and Japan) owned companies. Companies in the third group - local agents - were generally smaller than companies in the first and second group. Their main clients (i.e. buyers) were lower-end brands, European department stores and discounters such as WalMart.

Most of the international buying offices (8) were set up between 1984 and 1994, whereas most of the international buying agents (8) had established in Singapore before 1988. The trend for setting up own facilities is thus a more recent one, which is in part explained by the fact that when a buyer first starts sourcing from a country or region it usually does so through agents (see also Gibbon, 2000b).

Establishment of agents from Northeast Asia moreover reflects changes in the industry in the East Asian NIEs from the late 1970s onwards, with production shifting out and local producers developing into co-ordinators of regional production networks.
Local agents were established during the 1980s, reflecting the tendency of an ever-growing number of garment retailers and even producers from the West sourcing products from Asia and Singapore's evolving role as a regional centre for such sourcing, as most of these 'new' buyers still lacked the knowledge and capital to engage in direct sourcing. In addition to this group of local agents, another group of intermediaries can be distinguished, which was however not explicitly included in our database. This is a highly diverse and fragmented group consisting of local licensees, wholesalers and trading companies, which often form a link between regional producers (mostly Malaysian and Indonesian producers) and non-branded wholesalers and trading companies in the West (in turn distributing product to small local, lower-end retailers in their respective countries) or distribute products to regional markets. These constitute 'extra-chain distribution networks', which in fact form an important channel for small local and regional companies to engage in exports.

*Size and functions*

Production or product sourcing was the main function of the companies in all three groups, although for the first group this was of course restricted to the own brand or stores/catalogue. Although some sourcing offices of branded buyers and department stores also engaged in third party sourcing activities, a general tendency of focusing on the core business, usually meant such activities were of minor importance or had even been cast off (see box 6.6).

Sourcing activities generally included: Vendor (manufacturer) selection and factory evaluations, order placement and negotiations (letter of credit, or L/C negotiations), follow up and quality assurance or control. Generally speaking, guidelines, designs and orders came from the headquarters (in the case of international buying offices) or from clients (in the case of agents, although for international agents sometimes via headquarters). Most of the companies that were part of larger organisations indicated that they functioned reasonably independently from their parent company. Strategic decisions and guidelines were set by the HQ, but selection of vendors for instance, was often left to the discretion of the regional offices. In the case of agents approval by the buyer was of course still required.

Functions of these buying offices were reflected in their employment, which consisted mainly of skilled personnel, such as technical and professional staff (mostly quality assurance officers) and merchandisers. Although highest management functions in the buying offices were often still filled by expatriates, this picture seems to be changing and for all other functions locals are employed. On average the interviewed companies employed about 32 employees and altogether the 26 interviewed companies employed 844 people in Singapore. However, the sales value of products sourced through these companies averaged S$140.4 million and totalled more than 2.53 billion in 1998. This is of course in stark contrast with turnover of companies in the producer survey, which averaged approximately 30.8 million and totalled over 1.63 billion in 1997 and illustrates the higher value added in upstream activities. It must be noted that the international buying offices, were not considered profit centres and numbers only indicated value of sales been sourced through these offices.

*Table 6.13 Contribution to Company Turnover and Sourcing of Singapore Office (1998)*

<table>
<thead>
<tr>
<th>Share Singapore office:</th>
<th>Share</th>
<th>No. of relevant companies (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- in total company turnover</td>
<td>18%</td>
<td>(12)</td>
</tr>
<tr>
<td>- in all sourcing from Asia</td>
<td>36%</td>
<td>(13)</td>
</tr>
<tr>
<td>- in world-wide sourcing</td>
<td>27%</td>
<td>(10)</td>
</tr>
</tbody>
</table>

Finally, table 6.13 pertains to international buying offices and agents and gives an idea of the importance of these offices within the entire company.
Case Study: Polo Ralph Lauren's Global Sourcing Office

Company background, structure and organisation

General
See chapter 1, box 1.1

Singapore establishment
The Polo Ralph Lauren (PRL) Corporation established its Singapore subsidiary in 1989 as a quality control office. At that time, the Hong Kong office was the regional headquarters of the corporation and Asian sourcing predominantly took place through this office. However, as the company's sourcing base shifted towards Southeast Asia, sourcing activities also started gravitating towards Singapore. This shift was also caused by a number of location specific circumstances in Hong Kong, such as higher cost of business and the turnover of Hong Kong to China in 1997. By 1998, the Singapore office employed 200 people (against 50 in Hong Kong) and approximately 60 percent of all products were sourced through the Singapore office.

Initially the Singapore office also sourced products for third parties, through its sourcing agent arm, Mountain Rose. However, as part of a global philosophy of centralisation and focus on the core business, the company reduced this sourcing for third parties and the Mountain Rose office was no longer active by 1998.

As part of this same global philosophy, Singapore became the global headquarter for manufacturing, implying it managed the global sourcing network of PRL. This strategy was to maximise efficiency and seize the best opportunities globally available.

Functions of the Singapore establishment
Polo Ralph Lauren (Singapore) Pte Ltd takes care of regional sourcing, quality control, monitoring of compliance with the company's own requirements regarding labour, environmental and human rights issues as well as with local legal frameworks, and most importantly regional production co-ordination and planning, co-ordinating schedules, shipping, etc. to ensure smooth and timely product flow and delivery. In addition the Singapore establishment is involved in the sourcing, screening and selection of new vendors, in which it has a relatively high degree of autonomy from corporate headquarters.

Products are sourced from more than 15 different locations spread over Asia and the Pacific. To protect the image of the brand, the company is generally speaking cautious and somewhat conservative as to its sourcing locations in the sense that it will not source from countries it considers too risky in terms of political instability or human rights violations. Such countries include for instance Myanmar, Bangladesh, Pakistan, Cambodia, Laos and even Vietnam.

Relationships with most vendors have been reasonably long and the Singapore establishment is actively involved in production through specifications, quality control, approval requirements for subcontractors and stipulation of input suppliers. It has been a policy of the company to establish partnerships with its vendors, so as to be able to achieve shorter lead-times and more consistent quality levels, reduce risk of human rights violations and overcome problems regarding quota limitations. Only a very small share of total products is sourced directly from Singapore vendors, but PRL does look at Singapore as an important logistical base, a function, which it does not think will change anytime soon.

Views on Singapore and Southeast Asia as sourcing locations
Obviously Singapore is seen by PRL as a major hub in its global production and distribution network, given its development into the global sourcing office for the entire company. Approximately 60 percent of all products (in units) are handled through the Singapore office, with the remaining 40 percent of products being sourced within North America.

PRL's positive view on Singapore is centred around the country's function as a strong logistical base, not as a manufacturing base. However, the company has retained its Singapore vendors and follows a global philosophy of consolidation, implying it will work with existing producers to obtain the kind of quality, price and efficiency levels desired.

Although all its vendors must pass the same stringent quality controls, PRL does admit there are still vast differences in competencies between producers in different regions. Sourcing will thus take place according to particular strengths of the region. For Singapore this includes mostly knitwear, while more sophisticated products, such as outerwear and other specialised products tend to be sourced from the Northeast Asian region, which is generally seen as the region furthest ahead in terms of export competitiveness.

Source: Interview (1999)
**Sourcing base**

Illustrating the sourcing base of buying offices and agents in Singapore, table 6.18 presents an overview of the main sourcing regions and countries covered from Singapore.

On average, companies sourced from 6 different locations, with half of the companies sourcing from 7 or more different locations. Not surprisingly the main sourcing region covered from Singapore is Southeast Asia. As such Singapore can still be seen as a sub-regional hub, functioning as a centre for Southeast Asia, but not necessarily Asia as a whole. However, more than 40 percent of the interviewed companies also indicated to source part of their products from South Asia. Not all companies were capable (or willing) to indicate exact shares of products sourced from each location, but it was clear that even if companies did source outside the Southeast Asian region, the largest share was still sourced within the region (see table I in the appendix).

The most important sourcing countries, outside Singapore itself, are Malaysia, Indonesia, Thailand and Cambodia in Southeast Asia and Sri Lanka in South Asia. Although as a whole this group of countries has more or less retained its global export position, the regions share in global exports is modest at 6 to 7 percent (see table J in the appendix). Moreover, other regions have far outstripped Singapore's sourcing base in terms of share of world exports. Thus China increased its share from 9 percent in 1990 to 16.2 percent in 1999, and together with Hong Kong exported 21.3 percent of total world exports in 1999 (WTO, 1999).

Singapore's sourcing base is thus neither big, nor particularly a growth region. Cost and labour shortages in Malaysia have been increasing rapidly in recent years, reducing the country's attractiveness as a production sourcing location. Although Indonesia still has an abundance of cheap labour, the countries political instability has made many buyers somewhat hesitant of sourcing here. Cambodia, although only quite recently having entered into global production networks and chains, seems to be losing its attractiveness already. The country has had quota limitations imposed on its exports as well (part of the country's initial attraction was the fact it had no quota limitations), but more serious in the longer run is the country's limited population base, implying labour shortages are likely to form an obstacle in the near future. In addition, political instability is an issue for Cambodia as well, scaring away potential investors and buyers. With Thailand's share declining and Sri Lanka's tapering off, the outlook for Singapore's position as a sourcing hub thus seems somewhat gloomy. Particularly with China's entry into WTO and the pending abolishment of the global quota system, which is likely to cause an even greater shift of gravity towards China and Northeast Asia as the main sourcing region in Asia and the world.

**Singapore's position in global production and distribution networks**

The main advantages of setting up an office in Singapore were seen by buyers to include most notably the geographical location and the high quality and efficient physical (port facilities) and communications infrastructure in place. In combination with a highly educated, multi-lingual labour force, and political and economic stability this made Singapore an attractive location for the kind of activities performed in regional sourcing offices, involving a skilled workforce and frequent travel throughout the region. In addition, with the increasing internationalisation of Singapore producers, dealing with them implied buyers were able to cover a large region from the (comfortable) Singapore base. Direct Government incentives and schemes on the other hand played a less important or even negligible role (only one garment company and one textile company had made use of the OHQ scheme).

Several buyers (buying offices) played an active role within the Singapore garment industry. Many were members of the industry association and participated in seminars, workshops and other initiatives, working together closely with their local vendors and looking for ways to
improve products, efficiency and compliance, in partnership with local (and regional) producers. As was observed before, US buyers were often most involved.

Buyers' sourcing networks extend well beyond Singapore and for most buyers only a relatively small share of total product is sourced locally from Singapore producers. Buyers therefore often have extensive knowledge of the capabilities and competencies of companies in the region and, through their linkages with other parts of the company, international standards. As such they may thus form a valuable source of information regarding strengths and weaknesses of countries and regions (see also Schmitz & Knorringa, 1999, for similar observations in the case of the footwear industry).

Singapore's strengths were usually seen in quality and reliability, specialisation in knitwear, capabilities in terms of finishing and spread of producer's regional production networks. Lead times and flexibility were considered reasonable, yet not as strong as compared to the East Asian NIEs (most notably Taiwan and Hong Kong). Moreover, opinions about flexibility varied somewhat, as some buyers argued Singapore producers tended to operate more rigid networks (investments instead of subcontracting), making them reliable, yet not necessarily fast or flexible. Not surprisingly high prices were seen as a major problem for sourcing from Singapore. As to the sourcing base covered from Singapore, quality levels of producers in Malaysia and Indonesia was also considered good, although several buyers mentioned quality varied between countries in the region. Prices were much better than those of Singapore producers, yet they were often higher than prices in China, while lead-times, flexibility and reliability in general were considered less (although this was more true for Indonesia than for Malaysia).

To which extent the location of this segment of buying offices in Singapore will help transform the City State into a regional sourcing and trading hub is as of yet unsure. In recent years, a number of buyers have in fact pulled out or reduced their presence in Singapore, usually in favour of Hong Kong. These include for instance Tommy Hilfiger (pulled out completely), Land’s End (back to sourcing through agent), Phillips & van Heusen and Liz Claiborne (reduced presence from regional sourcing to QC office; all regional sourcing now through Hong Kong). It seems Singapore is struggling to compete with Hong Kong (see also Gereffi, 1996) for the function of regional trading/sourcing centre. Most buyers – and producers for that matter – still see and use Hong Kong as their main regional base for Asia (either through presence or representation) and consider Singapore a sub-regional hub.

On the one hand this is due to the relatively limited sourcing base covered from Singapore (see above), which also does not stand out particularly in terms of speed, flexibility and prices when compared to East Asia (especially China). On the other hand trends of network consolidation strategies of buyers do not seem to benefit Singapore. Increasingly (although this doesn’t apply to all types of buyers) buyers seem to operate through a few central nodes instead of through networks of global, regional, and sub-regional nodes (see also Gibbon, 2000b). With the gravity of production sourcing now in Northeast Asia, many buyers looking to reduce presence in the region will probably close down Singapore operations. Although most buyers indicated they would keep sourcing from Southeast Asia in the near future, its relative importance in global sourcing patterns is decreasing. None of the buyers considered expansion of sourcing activities in Southeast Asia, although some hinted at the potential of Indonesia if the social and political situation would become more stable there. Although most claimed to maintain their offices in Singapore, even in the course of the research a number of offices did in fact close down or reduce their functions and presence. All in all Singapore's role as a sourcing and trading hub seems somewhat volatile.

In addition it is a somewhat 'one-sided' trading hub, as there are relatively few sales and marketing offices of regional producers located in the City-State. Only a few such companies were identified in our survey (the Regional office category). No specific incentives exist for such offices, while they could greatly contribute to Singapore's role as a hub and attraction of
buying offices. For a market place to work, both buyers and sellers are needed, or as the Secretary of the industry association put it "It takes two hands to clap" (Interview, 1998). Most regional producers still seemed more inclined to opt for a sales and marketing office in Hong Kong, also because Hong Kong has the added advantage of being host to a large number of suppliers, meaning regional producers could do both their merchandising and input sourcing as well as their sales and marketing form these offices. Thus the lack of local linkages and specialised input suppliers and support services also negatively affected Singapore's function as a sourcing and trading hub (see box 6.7).

Box 6.7 Case Study: Converse Incorporated Singapore Representative Office

Company background, structure and organisation

General
Converse Inc. is a US sportswear brand, established in 1908 and mostly known for its All Stars basketball shoes. However, in recent years changes in markets and consumer preferences have caused a shift in the focus of both products and markets. First of all there was a shift from emphasis on shoes alone, to one including apparel. Thus, where the business used to consist for 90 percent of shoes, currently shares have changed to approximately 60 percent shoes and 40 percent apparel. In addition there was a shift in emphasis from just sportswear (e.g. basketball shoes) to a lifestyle brand (skate, outdoors). This strategy was adopted in response to market trends: increasingly, what people wear is considered an image statement, at least in certain segments of the market. Because of this shifting emphasis on lifestyle and image, technical finishing, (synthetic) fabrications and accessorising are becoming more and more important.

Converse works through licensing agreements, i.e. does not source and distribute directly and centrally, but selects licensees in different countries and regions, which pay a royalty for the right to produce/source, market and retail products under the Converse brand in specific markets. Licensees are overseen by representative offices, of which there are usually one or two per region. Asia has two: one in Japan and one in Singapore.

Functions of the Singapore establishment
Converse's Singapore representative office was set up in 1994, to oversee licensing activities in the region. It provides licensees with information and guidelines regarding corporate standards and general company directions, and with seasonal designs. In addition it is involved in the approval of licensee designs.

Converse licenses its products from Singapore to 7 licensees, who cover 11 countries in Asia Pacific. Licenses are given to both producers and wholesalers, who then take care of production or sourcing of the products and marketing and sales in local markets. Converse receives royalties and supplies designs, although in some case licensees come up with their own designs/samples, which Converse may then approve. Converse's designs thus come both from the US office, the representative office (externally hired free-lance designers) and licensees.

Licensing has both positive and negative sides. On the positive side, there are little overhead costs and in rough times the biggest blows are taken by the licensees. In addition, because the licensees operate close to their markets and are local/regional it's easier to get access to markets and to adjust products to local taste and requirements (regional focus).

On the negative side, control of quality and standards is harder and global sourcing is not possible. This means all orders are relatively small, which puts you at a disadvantage both in terms of price and in terms of competing for orders with the large corporate buyers, such as Nike etc.

The Singapore office is mainly involved in footwear (80%) and very little in apparel (20%). However, in the future shares should be in the range of 60 and 40 percent respectively.

Views on Singapore and Southeast Asia as sourcing locations
Due to its set-up and organisation, sourcing and marketing through licensees, Converse views Asia more from the perspective of a market than from the perspective of sourcing region, although a large share of its products is also made in Asia. Sourcing for Converse involves sourcing for licensees though and not directly for products.

Although originally a US brand, European and especially Asian (including Australia) markets have grown in importance relative to US. At this moment 42% of Converse’s total income is generated in Asia. Japan in particular is a very important market and the representative office there is very
successful (licenses directly to manufacturers and these have great marketing and distribution capabilities). Success in Asia and Europe is contributed to management and regional focus, while the one sided concentration on just a few products in the United States, has led to a marked decline in this market.

Considering the entire company's performance and its increasing concentration on Asian and Australian markets, Singapore is considered an important location, although in comparison to Japan only of secondary importance.

However, some drawbacks of Singapore's business environment were noted by management. Thus it was argued that:

"The Singapore workforce is well educated, but not very pro-active. They just do what you tell them to do, but display very little own initiative. ..... (we) have to go to HK for designers, as we can't find the right people here.(....) Singapore is very small market, thus in that sense not very important for our company. (Finally) there is little vertical integration and only knits are made here, so the rest has to be imported. Malaysia and Indonesia are a lot more aggressive in this respect." (Interview manager Singapore garment company, 1999)

Moreover, with the increased emphasis on technical finishing, (synthetic) fabrications and accessorising, the lack of local specialised input suppliers presents a disadvantage vis-à-vis countries like China, Korea and especially Taiwan, which are way ahead in terms of such capabilities.


6.5.2 Development of a local fashion industry

Although few of the existing production companies were successful in establishing their own brand and moving towards an OBM role, the survey results indicate that companies starting out as design and brand companies may play a more important role in this respect. Institutional and media-attention for this group has also increased substantially over the past decade, although ideas and claims for that matter regarding the development of a local fashion industry date as far back as the early 1980s. However, not until the early 1990s did attention for this segment become more focused. This was due to the fact that it fitted the image Singapore was trying to create for itself from the early 1990s onwards, as a centre of fashion and lifestyle industries. Recent years have thus for instance seen a surge in fashion shows and festivals.

An inventory of this segment (limited to garment designer labels and branded retailers), revealed as many as 70 local designer/label companies selling their product in Singapore and sometimes even regionally, through own boutique or outlets, retail chains or department stores. Many were centred on one or two local designers. However, the actual size of this segment in terms of output and turnover is in fact limited, with some companies reporting an annual turnover of just S$ 3000.

The limited size of the fashion segment is also reflected in the fact that although local design and boutique companies by 2002 formed the biggest membership group within the industry association TaFF, their monetary contribution to the association (which is proportionate to size) was far less than that of the large export OEM members. This in fact posed a bit of a dilemma for the industry association, as demands from producers companies was often different than demands from designer companies and TaFF was thus faced with the difficulty of dealing with this split in interest between the largest group in numbers and the largest group in terms of contribution.

To which extent this segment will be able to make a real difference in the broader industry development remains to be seen, due to a number of limiting factors both within these companies and in the national business environment. An issue we will return to in more detail in the case study of the local fashion industry segment in chapter 8.
Conclusion

In this chapter, the structure and characteristics of the Singapore garment industry, competitive adjustment strategies and firm and industry development trajectories were outlined based on the results of a survey conducted between the end of 1998 and June 1999.

As to the structure and characteristics of the Singapore garment industry, what stands out most are:

- the relatively small average size of companies (locally) and the predominance of local ownership;
- the dominance, in numbers, but particularly in shares of total turnover and employment of OEM suppliers and the strong export orientedness of most companies;
- the relatively small shares of output produced in the Singapore establishments, while status within larger companies is usually that of HQ or parent;
- highly export oriented, with USA as main destination and US branded marketers and department stores as main buyers
- despite high export orientedness, quite a few OEM suppliers have introduced own labels, which they sell to local department stores or retailers
- true OBM segment still relatively small though
- extensive internationalisation, particularly, yet not exclusively among export oriented OEM suppliers
- local backward linkages are virtually absent, and only a few vertical set-ups exist (in which textiles production usually does not take place in Singapore).

An analysis of firm competitive adjustment strategies and development trajectories revealed that although most companies still apply defensive strategies, these no longer form the core strategies. Rather a distinct sequencing was observed, where defensive strategies have given way to more offensive strategies such as internationalisation and increasing services and responsibilities towards buyers, particularly from the early 1990s onwards. Although most OEM suppliers have remained firmly rooted in their OEM roles, Singapore's high cost environment and general hub function have encouraged a number of OEM suppliers to reconfigure their production organisation to the extent of moving out of production locally and towards OEM+ roles built on the management of regional and increasingly global production networks. Such strategies entailed not just relocation of production but the development of internationally operating corporate structures with headquarter and strategic functions in Singapore, while at the same time setting up factories, service centres, and other facilities in different locations to take advantage of specific strengths of different locations, including not just low cost, but also market access, proximity to buyers and final markets, etc.

Thus a number of OEM companies have not just upgraded products and processes, yet have started to move in the direction of upgrading their roles within networks and chains, indicating a move beyond achieving mere operational efficiency, towards real upgrading. However, the shift towards fundamentally different roles, most notably OBM, but even ODM, has proved to be difficult for companies that had assumed OEM roles. In fact, moving to OBM roles, essentially to extra chain positions, was mostly achieved by companies starting out from extra-chain positions.

Finally, the relatively pro-active strategies and the fact that several upgrading trajectories were indeed observed, was most likely also a result of the fact that many companies that had followed steady and exploitative trajectories had in fact already exited the industry in the early 1990s, when an acute competitiveness crisis made defensive strategies redundant. The decline of the production segment in the early 1990s was thus a result of both extensive internationalisation and exit of existing companies. The surviving companies were obviously...
the ones with the more pro-active attitudes that had succeeded in shifting their bases of competitiveness.

At the industry level, the entry of two new segments, buying offices and a local fashion segment, appear to present new sources of industry growth and diversification. However, although these new entrants have to an extent changed the face of the industry, their role should not be overestimated, as their presence is on the one hand volatile and circumscribed by external factors such as the sourcing base (buying offices), while on the other hand their growth potential is limited (fashion segment). Moreover, policy initiatives to encourage these segments appear less successful than the restructuring and adjustment policies of the past.

Before analysing the dynamics behind the observed strategies and development trajectories more closely, in the next chapter we first consider the characteristics and development in the Malaysian garment industry in the basis of survey results, enabling the analysis of dynamics in a comparative perspective in chapter 8.

Notes

1 All data presented in this chapter were derived from the producer- and buyer surveys conducted by the main researcher in Singapore between September 1998 and June 1999, unless otherwise noted.
2 The main producer survey was completed in January 1999, and results presented in this chapter thus pertain to the period up until 1998. "Current" implies as of 1998, and in the past ten years implies the period from 1987/1988 till 1998, unless otherwise noted.
3 In addition intra-EU trade is high and European companies often source from Eastern European and Northern African countries as well as Turkey, leading to a lower share of sourcing from Asia in general (see chapter 1).
4 Myanmar still presented problems in terms of its political situation, which made Western buyers wary of allowing their contractors to produce here, while Vietnam until recently did not fall under the US General system of preferences scheme. Laos on the other hand lacked the people and infrastructure to support large-scale production.
5 With the exception of a small segment of high-end international fashion brands sold in the main shopping areas and malls and catering to the affluent local population and tourists.
6 Due to the small number of companies per category, it was not possible to test whether observed differences were statistically significant. However, the differences were double checked and confirmed through qualitative data, such as the observations made by the main researcher in the different companies, conversations and interviews with important industry members and representatives (e.g. those with years of experience and active participation in the industry), garment buyers, institutional representatives, etc.
7 Due to these levies foreign workers were on average not that much cheaper to employ than local workers, and served mainly to solve the labour shortage problem. However, it has been argued that the use of foreign labour has kept wages artificially low and although many companies (approximately 75 percent) had increased wages over the past ten years, the industry average was still low by manufacturing sector standards and companies were not willing to pay wages above the industry average to attract labour.
8 These nine included AMC from the USA, a co-operative between a number of smaller US retailers, serving as a sourcing agent for the group. This co-operative is a non-profit organisation, which is why it was included under buying offices rather than agents. Buying offices are usually not profit centres, whereas agents are independently operating, profit driven companies.
9 Differences become even more pronounced if one considers that the number for buyers was based on only eighteen companies (unfortunately these were the only ones willing or able to provide turnover or sales value data), while the number for producers is based on 53 companies.
10 For instance, newspaper clippings on the industry from the late 1970s onwards strongly reflected policy directions of the time. Throughout the eighties therefore, trade related and restructuring/upgrading issues often surface in articles on the industry. However, fashion designers, fashion shows and the development of a fashion centre are also recurring themes in these newspaper articles.
11 Although many OBM suppliers were already included in the original database set up, an additional inventory of the fashion segment was deemed necessary for a complete picture, as not all of these design oriented companies were included in the initial database, either because they were not listed under apparel or clothing companies, or because they were very small, non-incorporated business companies.