

# 2 Small Firms in International Markets

## 2.1 Introduction

This chapter examines the recent export performance of SMEs in the manufacturing sector in Mauritius as a background to the study. It examines the following: (a) past achievements and the current climate for manufactured exports; (b) the magnitude of the SME and micro-enterprise population in manufacturing; and (c) the manufactured export performance of SMEs in the EPZ and non-EPZ sectors (where possible relative to large firms). This study defines SMEs as enterprises with 10-49 employees and micro-enterprises as those with less than 10 employees.<sup>1</sup> When SMEs and micro-enterprises are mentioned together, this means all firms with less than 50 employees.

## 2.2 Past Export Achievements and The Current Climate

### 2.2.1 HISTORICAL RECORD

The transformation of the Mauritian economy over the last thirty years from a low productivity, subsistence base to a producer of manufactures for export with an emerging services sector is an impressive developmental achievement. It has built up a significant base of export-related skills, information and institutions, far ahead of neighbouring countries in Africa and is regarded as a candidate for second-tier newly industrialising economy (NIE) status in the 21st century. It had double-digit export growth rates in 1970-92 and by 1996 its manufactured exports per head (\$1,022.5) were among the highest in the developing world.<sup>2</sup> Moreover, in relation to its per capita income it had relatively high living standards. A per capita income of \$3,800 (1997) places it within the 1998 World Bank *World Development Report's* category of upper-middle income economies and well above the average for Africa (\$500) and South Asia (\$390). The life expectancy of an average Mauritian was an impressive 72 years in 1996 while the average for Africa was only 53 years and for South Asia was only 51 years.

The causes of Mauritian export success have been well documented by policy makers and others.<sup>3</sup> In the mid-1960s, the country faced many gaps in its initial conditions including a small home market, geographical isolation from international markets and suppliers, and limited industrial experience. Sugar and tourism laid the foundations

<sup>1</sup> The definition was adopted at the request of SMIDO. The logic behind this is explained in Chapter 1.

<sup>2</sup> Calculated from World Bank, *World Development Report*, 1997.

<sup>3</sup> For a succinct exposition see MEDRC (1997).

for modern Mauritian development by providing a surplus for investment, a pool of managerial skills, and an international country reputation as an exporter. The main engine of structural transformation was export-oriented FDI in EPZs which brought in new technology, managerial skills, marketing contacts and capital. FDI inflows – largely from France, Hong Kong and the UK – averaged \$22 million per year in 1985-90 and increased slightly to \$23 million in 1991-97.<sup>4</sup> A combination of locational advantages can explain why export-oriented FDI invested in EPZs in Mauritius rather than in South Asia or Africa: cheap and literate labour; preferential access to the European Union market via the Lomé Convention; macroeconomic and political stability relative to competitor locations; a business friendly environment with minimal red tape problems; cost-competitive EPZs; and competitive investment incentives.

**Table 2.1:** Manufactured Export Performance in 1985-1996

Activity	Values	Annual growth rates (%)		% shares
	(\$millions)	1985-92	1992-96	1996
Fish & preparations	40.1	–	21.0	3.6
Pearls, precious stones	28.4	15.3	6.0	2.6
Textile yarn, fabrics	80.6	30.9	24.1	7.2
Clothing, accessories (a)	901.9	23.5	7.2	81.1
Toys, sporting goods	10.8	–	0.3	1.0
Gold, jewellery	15.9	34.1	-14.4	1.4
Optical instruments	11.8	–	–	1.1
Watches, clocks	22.6	15.0	-3.5	2.0
Other (b)	n.a	–	-42.4	0.0
<b>Total manufactured exports</b>	<b>1112.0</b>	<b>24.3</b>	<b>8.6</b>	<b>100.0</b>

Source: Based on Lall and Wignaraja (1998).

### 2.2.2 STRUCTURAL CONSTRAINTS

The early export success, however, was not sustained and several gaps in export performance became apparent in the 1990s. Table 2.1 provides data on recent manufactured export performance in Mauritius (1985-1996). The main findings are as follows:

- There was a deceleration in annual total manufactured export growth in 1992-1996 to about one-third its 1985-1992 rate. This is associated with a sharp fall in clothing (the dominant export) as well as falls in other important exports like textiles, watches and clocks, jewellery, and other manufactured

<sup>4</sup>UN (1998) p. 168.

exports. The slowdown in export growth has had an adverse impact on GDP growth, which fell from 6.2% per year in 1980-90 to 4.9% in 1990-96.

- There is a heavy dependence on a few labour-intensive export products, rendering the country vulnerable to unfavourable national and international developments in those activities. Compared to other developing economies, Mauritius is exceptionally vulnerable with its high dependence on one item (clothing) which has not declined over time.
- There is the virtual absence of more complex industrial goods, either sophisticated consumer or producer goods. It has 'missed the boat' on the semi-conductor assembly boom that drove the growth of Singapore (and later Malaysia) which led to a variety of related electronic and electrical exports. The lack of technological and skill upgrading in the export sector is a significant weakness – it hinders: (i) the realisation of technological spillovers and externalities from complex industries and (ii) the creation of new employment in technology-intensive industries.

Recent studies trace the gaps in export performance in the 1990s to an erosion in the country's locational advantages to FDI (and hence its competitiveness) as well persistent structural weaknesses.<sup>5</sup> The following locational advantages started eroding:

- labour costs had risen significantly, labour productivity declined, and absenteeism rates increased.<sup>6</sup>;
- a threat of the elimination of preferential access to the European and US markets with the expiry of the Lomé Agreement and the Multi-Fibre Agreement for textiles;
- residual bureaucratic procedures (particularly on FDI approvals and work permits for expatriate staff) become a barrier to more inward-investment;
- increased competition from lower cost producers in Africa and Asia which had liberalised their entry regulations for FDI and established EPZs;
- inflation starts to increase and with it came relatively high real interest rates and real exchange appreciation.

Some leading Hong Kong and French investors in textiles began to withdraw from Mauritius to other low cost locations like China, Sri Lanka and Bangladesh. About half the foreign-owned firms in a recent enterprise survey are considering, or are in the process of, re-locating to more attractive manufacturing locations.<sup>7</sup> Madagascar

<sup>5</sup> See World Bank (1994) and Lall and Wignaraja (1998) for a discussion of these issues.

<sup>6</sup> A recent study found that annual wages in Mauritius manufacturing went up three fold from \$1063 to \$2998 between 1985 and 1993. The country's 1993 wages were four times higher than those of Sri Lanka and China, three times higher than Bangladesh and twice that of India and Indonesia. In the same study, the enterprise survey reported that 61 per cent of firms felt that the decline in labour productivity was a negative constraint on competitiveness. See Lall and Wignaraja (1998).

<sup>7</sup> See Lall and Wignaraja (1998).

has been a particular beneficiary (due its cheap labour and preferential market access to Europe) and has induced about 40 Mauritius-based enterprises to engage in textile and garment production. Some of these are foreign-owned.

At the same time, several persistent structural weaknesses hindered the upgrading of existing foreign affiliates and the entry of new high skill FDI. These include: inadequate local demand for high technology products arising from a small local market; a lack of reliable suppliers of raw materials, parts and components; and a shortage of technical, engineering and information technology skills for high technology industries. Against this background, the Government of Mauritius began searching for new sources of export growth and SMEs seemed to be an attractive vehicle for future export dynamism.

## 2.3 The SME and Micro-enterprise Population

### 2.3.1 THE MAGNITUDE OF SMEs AND MICRO-ENTERPRISES

In Mauritius as in other developing economies, time series information on the size structure of manufacturing activity is difficult to ascertain. The standard data source, Central Statistical Office *Census of Economic Activities* 1992 (referred to as CSO 1994), has separate volumes on small and large establishments engaged in non-primary economic activities. Its coverage of enterprises is impressive and it contains useful data on many indicators of manufacturing activity at industry-level (including value added per person engaged and the average wage bill). However, it is somewhat dated for the purposes of this report and it adopts a restricted definition of small establishments “as those employing 9 or fewer persons inclusive of working proprietors” (CSO 1994, p.1, vol. 1). Typically, studies on SME development in developing economies would view this category of firms as micro-enterprises rather than as small and medium enterprises.<sup>8</sup> Interestingly, CSO (1994) does not provide a breakdown of the size distribution of large establishments, which are defined in aggregate “as those employing 10 or more persons” (CSO 1994, p.1, vol. 2). Manufacturing surveys in developed economies tend to provide a wide range of indicators for different size classes of firms such as <20 employees, 20-99 employees, 100-499 employees and >500 employees.

Given the limitations of CSO (1994), we attempted to make an assessment of the current magnitude and growth of different sizes of firms in the Mauritian manufacturing sector using other data sources and a simple forecasting technique. Table 2.2 provides data on the number of firms, total employment and their growth rates in micro-enterprises (<10 employees), SMEs (10-49 employees) and large firms (>50 employees) in 1992 and 1997. It also combines SMEs and micro-enterprises and provides information for the whole manufacturing sector. The 1992 data are from CSO (1994)

<sup>8</sup> See, for instance, Little et al., (1987) and Sengenberger et al., (ed. 1990).

and the database of the Ministry of Industry and Commerce, whereas those for 1997 are a mixture of actual information on SMEs and large firms and our estimates for micro-enterprises.<sup>9</sup> In the absence of recent information, economists commonly forecast trends from historical data on the relevant aggregates.<sup>10</sup> Therefore, the 1997 estimates for micro-enterprises should be regarded as indicative projections rather than real information. Projected data are useful as background inputs into an SME policy planning process but major policy decisions, which affect enterprises, should not be based exclusively on such data.

**Table 2.2:** Recent Growth of SMEs and Micro-enterprises in Manufacturing, 1992-1997

Firm size group	Number of Firms		Growth rate of firms (% p.a)	Total Employment		Growth rate of employ- ment (% p.a)
	1992	1997		1992	1997	
Large firms (>50 employees)	461	411	-2.3%	97,433	95,078	-0.5%
SMEs (10-49 employees)	487	467	-0.8%	11,856	10,771	-1.9%
Micro-enterprises (<10 employees)	3,932	(c) 4,853	4.3%	14,451	(c) 20,080	6.8%
SMEs and Micro-enterprises (a)	4,419	(b) 5,320	3.8%	26,307	(b) 30,851	3.2%
Total Manufacturing	4,880	5,731	3.3%	123,740	125,929	0.4%

Notes: (a) <50 employees. (b) Addition of actual data on SMEs and forecast data on micro-enterprises. (c) Calculated by extrapolating from 1985-92 compound growth rates.

Source: Our estimates based on data from the Ministry of Industry and Commerce; CSO (1994).

The main findings are as follows:

1. The industrial structure of the Mauritian manufacturing sector exhibits a distinct dualistic pattern, and consists of many small firms and a few large enterprises. According to our estimates, of the 5,320 establishments in 1997, micro-enterprises account for 84.7%, SMEs for 8.1% and large firms for only

<sup>9</sup> To obtain the 1992 data on manufacturing SMEs and micro-enterprises (less than 50 employees), we combined CSO (1994) figures on enterprise numbers and employment in micro-enterprises with Ministry of Industry and Commerce data on SMEs.

<sup>10</sup> We used a simple linear time-trend type forecasting method to obtain the 1997 estimates of establishments and total employment in micro-enterprises (<9 employees). To arrive at the 1997 estimates, yearly compound growth rates were calculated for the variables in 1985-92 (4.3% for establishments and 6.8% for employment) and applied to their 1992 value. Underlying this forecasting method is the assumption that the 1985-92 rate of change applies to the 1993-1997 period. In the absence of appropriate information to adjust the 1985-92 establishment and employment growth rates upwards (or downwards), this is a useful first approximation. The 1985 and 1992 data are from the CSO Census of Economic Activities. Further work is needed to explore the validity of the assumption of constant growth rates.

7.2%.<sup>11</sup> Hence, very small micro-enterprises are the largest group and are followed some way behind by SMEs and large firms.

2. However, this dualism is inverted when it comes to employment shares. Large firms (75.5% of employment) are the dominant source of employment in the manufacturing sector. The number of people employed in large firms (95,078 workers) is nearly five times that of micro-enterprises (20,080 workers) and nearly ten times that of SMEs (10,771 workers).
3. It appears that after many years of growth in the 1970s and 1980s, the number of large firms has declined in the 1990s. At the other extreme of the industrial structure, the number of micro-enterprises has increased. In between, SMEs also seem to have declined in number. The annual growth rates in the number of establishments in 1992-1997 are: large firms (-2.3%), SMEs (-0.8%) and micro-enterprises (4.3%). In part, this growth of micro-enterprises may represent a kind of income substitution whereby ex-large firm employees and redundant civil servants establish new firms to maintain their income.
4. A similar shift seems to be taking place in the structure of employment over time. During 1992-1997, large firms (-1.9%) and SMEs (-0.5%) have witnessed negative employment growth while micro-enterprises seem to have seen positive employment growth (6.8%).
5. These controversial findings should be viewed with caution because the downward trend in establishment numbers and employment for large firms and SMEs are based on actual data while the upward trend for micro-enterprises uses unadjusted forecasts. More primary data collection and empirical research is needed to substantiate these important findings.

<sup>11</sup> We were also able to estimate the population of non-primary SMEs and micro-enterprises, which in 1997, was predicted to be 25,761 establishments with about 91,888 people. Manufacturing SMEs and micro-enterprises account for 20.7% of all non-primary establishments and about 33.6% of employment.

**Table 2.3:** Employment Shares of SMEs in Manufacturing in Different Countries, Latest (a)

Country	Year	% of employment in SMEs
Norway	1985	14.1
Germany	1983	16.0
USA	1982	17.6
UK	1992	27.0
France	1979	28.6
Mauritius	1992	32.1(b)
Korea	1983	33.9
Switzerland	1985	41.2
Taiwan	1981	41.5
Japan	1983	47.7
Italy	1981	55.1

Note: (a) OECD definition of SMEs (<100 employees).

(b) The figure for <50 employees is 21.7%.

Sources: Mauritius (our estimates using CSO 1994 and MOIC data); Taiwan (Wade, 1990); Korea (Amsden, 1989); UK (DTI, 1996); remaining countries (Sengenberger et al., ed. 1990).

A closely related issue is the magnitude of the Mauritian SME and micro-enterprise sector compared with other economies. Table 2.3 provides the latest available information on the employment shares of SMEs in the manufacturing sectors of Mauritius, eight developed economies and two Asian NIEs (Korea and Taiwan). To ensure international comparability of the data, the Table adopts the OECD definition of a small enterprise as one with less than 100 employees.<sup>12</sup> The employment share of SMEs shows considerable variation across the sample countries without any obvious relationship to variables like per capital income, level of industrial development and population.<sup>13</sup> By international standards, Mauritius (32.1%) has quite a respectable SME sector (<100 employees), which is comparable to that of France, UK and Korea.<sup>14</sup> This means that the country has developed a respectable SME base to build on for future industrial and export expansion. Nevertheless, its employment share of SMEs is smaller than those economies – Taiwan, Italy, Japan and Switzerland – which are widely regarded as having the largest and probably most dynamic SME populations in the world.

<sup>12</sup> The Mauritian estimate combined employment data from CSO (1992) for firms with less than 10 employees with data from the Ministry of Industry and Commerce for those with 10-49 employees. The total manufacturing employment figure was the manufacturing totals from both volumes of CSO (1994).

<sup>13</sup> In attempting to explain cross-country differences in SME employment shares, we are inclined to the view of Loveman and Sengenberger (1990): "One has to dig deep into history to understand why and how the structures have developed in this way", (Loveman and Sengenberger, p. 7). This inevitably means looking at a country's initial conditions, factor endowments, entrepreneurial history and government policies.

<sup>14</sup> Defining SMEs and micro-enterprises as those with less than 50 employees results in the share of Mauritian manufacturing employment dropping to 21.7%. This is still quite large by international standards.

<sup>15</sup> See Mead and Liedholm (1998) for the results of SME surveys in several African economies including South Africa and Zimbabwe.

### 2.3.2 INDUSTRY-LEVEL ANALYSIS OF SMEs

The next issue to consider is the industrial distribution of SMEs in the Mauritian manufacturing sector. Surveys of African developing economies have found that three types of industrial activities have consistently been identified as the most important categories for SMEs and micro-enterprises: *food products, wood and furniture and textiles and clothing*.<sup>15</sup> Food products are widely seen as the ideal entry-level industry for SMEs because of strong local demand, conformity with local consumption patterns, availability of local raw materials and low skill requirements. Wood and furniture are attractive because of local raw materials, carpentry skills and relatively high transport costs that afford protection to local firms. Textiles and clothing have relatively low skill and capital requirements and can cater to local demand but are more import dependent than the other two industries. These surveys estimate that nearly 75% of SMEs and micro-enterprises in most African developing economies are engaged in these three activities. Our estimates suggest that Mauritius conforms to this general pattern but with a somewhat lower figure (51.9%). This may reflect differences in resource endowments, tastes and consumption patterns, skill-levels and degree of trade openness.

We are able to illuminate aspects of SME development at industry-level using data from the Ministry of Industry and Commerce (comparable figures were not available on micro-enterprises). These are:

**Table 2.4:** Size Structure of Firms and Employment in the Manufacturing Sector, 1997

Industry	All Firms:		10-49 employees: (a)	
	Number of firms	Employment	% of all firms	% of all emp.
Food	109	10,301	62.4	12.9
Textiles	52	5,517	55.8	12.9
Clothing	332	67,495	33.1	4.0
Footwear & leather	23	1,928	52.2	11.2
Wood & furniture	43	1,673	81.4	44.0
Precision equipment (b)	16	1,480	50.0	11.4
Jewellery	21	1,710	47.6	18.3
Other	282	15,655	69.1	29.2
<b>Total manufacturing</b>	<b>878</b>	<b>105,829</b>	<b>56.6</b>	<b>10.2</b>
Values	878	105,829	467	10,771

Note: (a) Defined as SMEs for this study (excludes micro-enterprises with <10 employees).

(b) Professional/scientific measuring equipment & optical goods.

Source: Our estimates based on data from the Ministry of Industry and Commerce.

<sup>15</sup> See Mead and Liedholm (1998) for the results of SME surveys in several African economies including South Africa and Zimbabwe.



- (1) *The number of SMEs by industry-membership.* In 1997 there were 467 SMEs in the manufacturing sector in Mauritius (i.e., enterprises with between 10-49 employees). Textiles and clothing are the dominant industry (29.8% of the number of SMEs). This is followed some way behind by food products (14.6%), wood and furniture (7.5%), footwear and leather products (2.6%), jewellery (2.1%) and professional equipment (1.7%). There is also a large miscellaneous category called other manufacturing, which makes up 41.7%. This needs further analysis. However, the mission does not have additional information in this instance.
- (2) *The share of SMEs in manufacturing establishment numbers and employment.* Table 2.4 provides data on size structure of employment in the manufacturing sector in 1997 for three groups of firms: 10-49 employees (SMEs), 50-99 employees (large firms) and above 100 employees (very large firms).<sup>16</sup> Taken together, these three size groups accounted for 878 firms and 105,829 workers in 1997. The data suggest a highly skewed pattern of establishments and employment by firm size within individual industries. The striking fact is that SMEs account for a relatively high proportion of establishments in most industries (averaging 56.6%) but relatively small employment shares (averaging 10.2%). The only exceptions

50-99 employees:		>100 employees:	
% of all firms	% of all emp.	% of all firms	% of all emp.
10.1	8.1	27.5	79.8
19.2	14.4	25.0	72.7
18.7	6.5	48.2	89.5
26.1	19.3	21.7	69.6
9.3	18.4	9.3	37.6
18.8	16.4	31.3	72.2
28.6	28.1	23.8	53.6
19.1	24.0	11.7	46.8
17.8	10.6	29.0	79.3
156	11,168	255	83,910

are wood and furniture and, to a lesser extent, jewellery and textiles and clothing. In contrast, very large firms (above 100 employees) account for under one-third of establishments but nearly four-fifths of employment in most industries. In between these extremes, large firms (50-99 employees) are relatively unimportant in terms of establishments or employment.

It would be useful to analyse changes in the size structure of the number of establishments and employment over time in Mauritius. However, no data seems to be collected locally on the births and deaths of new firms. This is a major gap in current data collection and enterprise surveys.

## 2.4 Recent Trends in SME Manufactured Exports

Having looked at the magnitude of the SME population and its industrial distribution, we focus on SME export performance. A useful way of looking at the manufactured export performance of SMEs is by the trade and industrial policy regime, which governs the market-orientation of different enterprises. These regimes will be discussed in more detail in chapter 4, dealing with the policy framework for SME development. Suffice to note that the EPZ regime provides incentives and infrastructure that encourages export production while the non-EPZ regime emphasises domestic market production. No information is available on the export performance of micro-enterprises but our impression is that such firms are rarely engaged in exports. Table 2.5 categorises the total population of 467 SMEs (10-49 employees) according to their trade orientation and provides data for 1997 on number of firms, employment, exports, employees/firm and exports/firm for each group.

Taken together, in 1997 the 467 EPZ and non-EPZ SMEs generated manufactured exports worth \$23.5 million and 10,771 jobs. This represents a useful contribution to foreign exchange earnings and employment creation in the Mauritian economy. There are some important differences in the performance of the two groups of SMEs.

**Table 2.5:** EPZ and Non-EPZ SMEs in the Manufacturing Sector in 1997 (a)

	Number of firms	Total employment	Total exports (\$ m)	Employees per firm	Exports per firm (\$)
All SMEs	467	10,771	23.5	23.1	50,321.2
Of which:					
EPZ SMEs	153	3,802	20.4	24.8	133,333.3
Non-EPZ SMEs	314	6,969	3.1	22.2	9,872.6

Note: (a) SMEs are defined as those with 10-49 employees only. This excludes micro-enterprises with less than 10 employees

Source: Our estimates from based on data from Ministry of Industry and Commerce.

The number of non-EPZ SMEs (314) is more than double that of EPZ SMEs (153 firms). They also provide more overall employment than the EPZ SMEs – manufactured employment in non-EPZ SMEs (6,969 workers) is almost double that of EPZ SMEs (3,802 workers)

At the same time, non-EPZ SMEs appear less efficient than the EPZ SMEs.

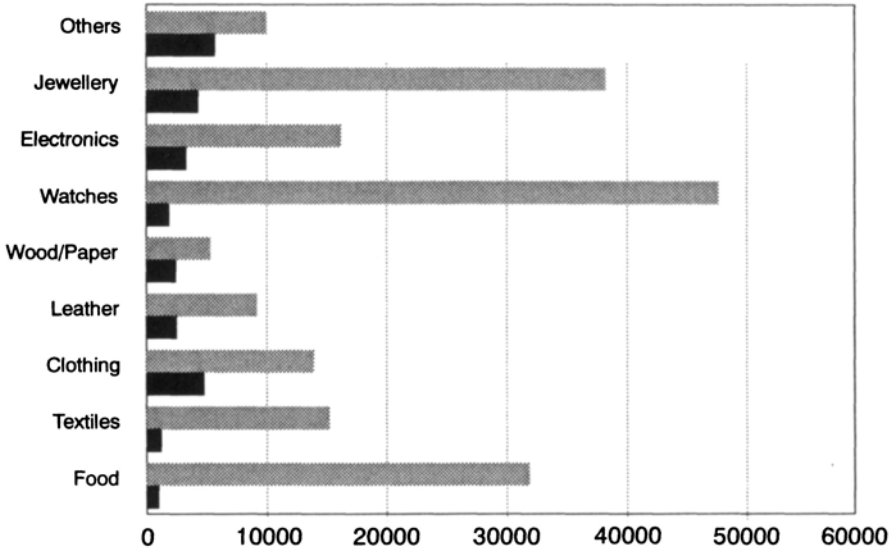
- One aspect of this is *jobs per firm*. The former had an average of 22.2 jobs per firm in 1997 compared with 24.8 jobs for the latter.
- Far more serious is the gap in *export performance*. The larger number of non-EPZ SMEs generates fewer exports, overall and per firm, than EPZ SMEs. The value of manufactured exports in non-EPZ SMEs is only 15.4% of EPZ SMEs. In addition, the value of exports per firm is much smaller in non-EPZ SMEs (\$9,873) compared to EPZ SMEs (\$133,333).

Thus, the EPZ SME sector seems to be more efficient in terms of generating exports and employment than the non-EPZ SME sector. The next two sub-sections examine the industry-level exporting behaviour of SMEs in the EPZ and non-EPZ sectors.

### 2.4.1 EPZ SME EXPORTS

Table 2.6 provides annual data on the value of manufactured exports in SMEs (\$ million) in the EPZ sector in 1995-1997 by industry and the cumulative shares of

**Fig 2.1** Exports/employee in the EPZ, \$ 1997



different industries during 1995-1997. This data is classified according to skill intensity into low and high skill industries.<sup>17</sup> The former is based on simple labour skills and technologies and the latter on more complex skills and technologies. The value of manufactured exports from EPZ SMEs was relatively stable during 1995-1997 and averaged \$21.6 million per year in this period. The following points can be made about the structure of manufactured exports from EPZ SMEs:

- The majority of such exports (96.6%) consist of low skill activities, which are based on simple labour skills and technologies.
- A single low skill export (clothing) dominates EPZ SME exports and alone made-up 42.8% of cumulative EPZ SME exports.
- Three other low skill activities – flowers, jewellery and wood/paper products – accounted for another 15.1%.

**Table 2.6:** Manufactured Exports in Large Firms and SMEs in the EPZ, 1995-1997

	EPZ Large Firms	
	Manufactured exports	Growth rate
	(\$ m)	(% p.a)
	1997	1995-1997
<b>Low Skill:</b>		
Food	44.3	-10.6
Flowers	0.0	n.a.
Textile Yarn	44.5	-12.3
Clothing	851.3	5.0
Leather & Footwear	11.5	-5.5
Wood & Paper Products	1.0	-0.3
Jewellery & Related Articles	37.8	-1.4
Toys & Carnival Articles	5.8	-28.4
Others	7.1	-36.6
<b>High Skill:</b>		
Optical goods	9.6	-15.0
Watches and Clocks	7.0	-47.7
Electric & Electronic Products	6.8	1.9
<b>Total Exports</b>	<b>1026.7</b>	<b>0.7</b>

Notes: (a) Compound growth rate.

Rupee figures converted into \$ at official rates given in the IMF *International Financial Statistics*.

Source: Our estimates from based on data from Ministry of Industry and Commerce, 1998

<sup>17</sup> In line with international practice, the average wage in US manufacturing industries was used to classify industries in low and high skill activities. Industries above the manufacturing average were classed as high skill and those below were low skill. See Wignaraja (1998).

- Apart from these, there were relatively small shares of food products, textile yarn, leather and footwear, and toys that together accounted for 6.1%. There was also a large category of miscellaneous manufactures.
- In contrast, high skill activities only accounted for 3.4% of cumulative EPZ SME exports. These consisted of very small shares of watches and clocks (2.3%) and electrical and electronics products (1.1%)

The previous section showed that EPZ SMEs had higher exports per firm than non-EPZ firms in 1997. We can further investigate the export dynamism of EPZ SMEs by comparing their performance with those of large EPZ firms using three sets of indicators:

First, *manufactured export growth rates* (in current \$) for 1995-1997 which show how fast overall EPZ SME exports and industry-level SME EPZ exports are changing relative to those of large firms. Table 2.6 also provides manufactured export growth rates for

EPZ Small and Medium Enterprise				
Manufactured exports (\$ m)			% of cumulative total	Growth rate (% p.a)
1995	1996	1997	1995-1997	1995-1997
0.9	0.4	0.2	2.2	-56.3
1.6	1.2	1.0	5.8	-20.9
0.7	0.5	0.3	2.3	-29.4
7.5	10.8	9.4	42.8	12.5
0.0	0.1	0.1	0.3	23.6
0.9	0.9	0.9	4.1	1.9
0.4	1.9	1.2	5.2	80.7
0.4	0.5	0.0	1.3	-
8.7	7.0	5.4	32.5	-21.2
0.0	0.0	0.0	0.0	0.0
0.04	0.0	1.4	2.3	500.4
0.1	0.1	0.5	1.1	150.1
21.0	23.4	20.4	100.0	-1.5

EPZ SMEs and large firms by industry. Total EPZ SME manufactured exports had a negative growth rate (-1.5% p.a) during 1995-1997 compared with a low but positive growth rate for EPZ large firms (0.7% p.a). The weak performance of total SME manufactured exports could be due to negative growth rates in several core activities (other manufactured products, food, flowers and textile yarn), the total decline of toys, and slow positive growth in wood/paper products. Three other items (jewellery, watches and clocks and electric and electronic items) recorded high positive growth rates. But, as these were from a very small base, they had little influence on the overall manufactured export growth rate of SMEs.

Interestingly, clothing (the single largest SME export) had a respectable positive export growth rate. The large firm performance is more uneven than in the case of SMEs: only two activities recorded positive export growth rates (clothing and electrical and electronics products). The remainder had negative growth rates.

**Table 2.7:** Shares of SMEs and Large Firms in EPZ Exports, 1997

Sector	SMEs	Large Firms
<b>Low Skill:</b>		
Food	0.4	99.6
Flowers	100.0	0.0
Textile Yarn	0.8	99.2
Clothing	1.1	98.9
Leather & Footwear	0.6	99.4
Wood & Paper Products	47.6	52.4
Jewellery & Related Articles	3.0	97.0
Toys & Carnival Articles	0.0	100.0
Others	43.2	56.8
<b>High Skill</b>		
Optical Goods	0.0	100.0
Watches & Clocks	16.9	83.1
Electric & Electronic Products	7.0	93.0
<b>Total EPZ Exports</b>	<b>1.9</b>	<b>98.1</b>

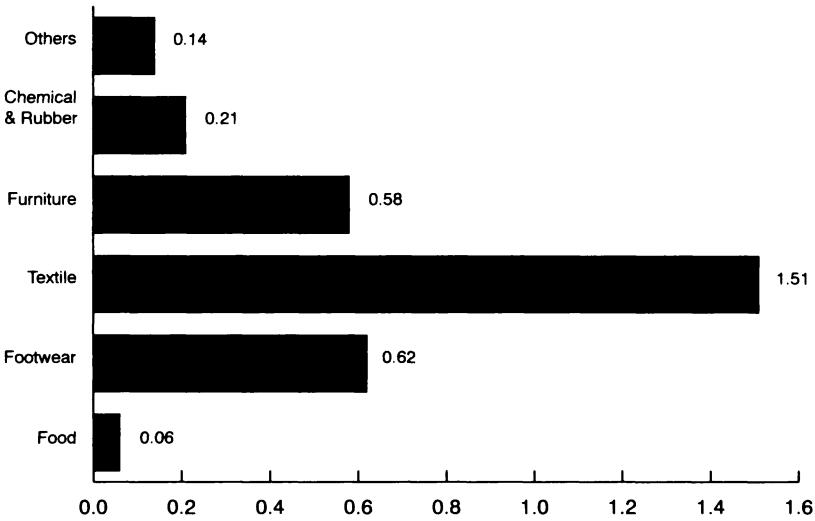
Second, *manufactured exports per employee for EPZ SMEs and large firms within the same industry*, which can be taken as a simple proxy for labour productivity in the manufacturing export sector.<sup>18</sup> Figure 2.1 shows exports per employee in EPZ SMEs and large firms in nine industrial branches in 1997. It is impressive that, EPZ SMEs have lower ratios of exports per employee than large firms do in all nine industrial branches. In the case of total EPZ exports, SME exports per employee are only 27.5%

<sup>18</sup> The lack of published information on value added per employee and capital per employee in SMEs and large firms prevented the use of more accurate measures of productivity in this report.

of that for large firms. This aggregate figure masks considerable inter-industrial variation between SMEs and large firms. The ratio of SME to large firm exports per employee is lowest in food (2.9%), watches and clocks (3.6%) textiles (6.2%) and jewellery (11.1%). It is highest in other manufactured items (54.2%) and wood/paper products (43.5%). In between fall clothing (32.1%), leather and footwear (25.1%), electrical and electronics items (21.0%).

Third, the shares of SMEs and large firms in industry-level and overall manufactured exports, which represents a way of gauging the importance of different enterprise size groups in national exports. Table 2.7 provides data on the respective contributions of SMEs and large firms to EPZ exports in 1997. SMEs (1.9%) make a negligible contribution to total EPZ exports compared with large firms (98.1%). However, SMEs seem to produce all the EPZ's flower exports and significant shares of EPZ exports of wood/paper products (47.6%), other manufactured exports (43.2%) and watches and clocks (16.9%). SMEs contribute little to the remaining EPZ exports (including clothing, the leading national export). Thus, with a few exceptions, large firms seem to dominate EPZ exports.

**Fig 2.2:** Non-EPZ SME Exports



**2.4.2 NON-EPZ SME EXPORTS**

Previous studies have noted that non-EPZ SMEs “are not major exporters of manufactures and have few linkages with EPZ firms”(World Bank, 1994, p.v). Most non-EPZ SMEs produce entirely for the domestic market. A few non-EPZ SMEs might have made an occasional export in response to an export order but usually this was not sustained. A survey undertaken by SMIDO for the Commonwealth mission indicated

that out of 314 non-EPZ SMEs in 1997 only about 26 enterprises were engaged in exports (8.3%). The total value of exports from these 26 firms increased from \$1.7 million to \$2.4 million between 1995 and 1996 and still further to \$3.1 million in 1997. This is clearly a healthy start. In spite of this progress, even the 1997 value of exports from non-EPZ SMEs remains small as a ratio of either EPZ SME exports (1.9%) or total EPZ exports (0.3%). Figure 2.2 provides a breakdown of non-EPZ SME exports in 1997. Nearly half of these exports consist of textiles (\$1.5 million). Footwear (\$0.62 million) and furniture (\$0.58 million) also account for reasonable shares. The remainder (food, chemicals and rubber and other manufactures) is negligible.

## 2.5 Conclusions

The Chapter highlighted many aspects of the magnitude and dynamism of SMEs and micro-enterprise in the Mauritian manufacturing sector in the 1990s. At the request of SMIDO, the study adopted the following definitions: SMEs (10-49 employees), micro-enterprises (<10 employees) and large firms (>50 employees). When SMEs and micro-enterprises are mentioned together, this means all firms with less than 50 employees.

The most significant findings are:

- The industrial structure of the Mauritian manufacturing sector has a distinct dualistic pattern made up of many small firms and a few large firms. Our estimates suggest that of the 5,320 manufacturing establishments in 1997, 84.7% were micro-enterprises, 8.1% were SMEs and 7.2% were large firms. The relatively few large firms account for the bulk of manufacturing employment.
- After many years of expansion in the 1970s and 1980s, the annual average growth rate of the number of large firms (-2.3%) and SMEs (-0.8%) has declined in 1992-1997 while that of micro-enterprises (4.3%) has increased. These trends should be viewed with caution because the figures for large firms and SMEs use actual data while those for micro-enterprises are unadjusted forecasts.
- In 1997, there were 467 SMEs, which collectively made a useful contribution to the Mauritian foreign exchange earnings by generating a total of \$23.5 million worth of manufactured exports.
- However, as a group EPZ SMEs have been much more efficient in generating exports than non-EPZ SMEs. The value of manufactured exports from EPZ SMEs (\$20.4 million) is over six times that of non-EPZ SMEs (\$3.1 million) in 1997.
- EPZ SMEs (1.9%) made a negligible contribution to total EPZ exports in 1997 compared with large EPZ firms (98.1%). The aggregate figure masks the fact that SMEs seem to produce all the EPZ's flower exports and useful shares



of EPZ exports of wood/paper products, other manufactured exports and watches and clocks.

- Total EPZ SME manufactured exports had a negative growth rate (-1.5% p.a.) in 1995-1997 compared with a low but positive growth rate for EPZ large firms (0.7%).
- The weak performance of EPZ SME exports is due to negative growth in several core activities (other manufactured products, food, flowers and textile yarn), the total decline of toys, and slow positive growth in wood/paper products. Three other items (jewellery, watches and clocks and electric and electronic items) had high positive growth. But, as these were from a small base, they had little influence on the overall export growth rate of SMEs. Interestingly, clothing (the single largest SME export) had respectable positive export growth.
- EPZ SMEs had lower ratios of exports per employee than large firms in most industrial branches in 1997. This simple and crude measure of labour productivity suggests that productivity in SMEs lags behind large firms in the EPZ.
- Survey estimates suggest that most non-EPZ SMEs produce entirely for the domestic market. Out of a total of 314 non-EPZ SMEs, only about 26 were engaged in exports in 1997. These firms exported very small shares of the country's exports of textiles, footwear and furniture.
- No data was available on the manufactured export performance of micro-enterprises but they were believed to be nearly all domestic market-oriented.