Jurnal Ekonomi 29 (1995) 79 – 111

SMIs: Current Performance and Future Prospects

Pazim @ Fadzim Othman
Mohd. Rosli Mohamad

ABSTRACT

Following the experiences of the NIEs, the SMIs in Malaysia have made significant contributions to the growth and expansion of the industrial sector especially during the last two decades. Their performance based on the labour, capital and total factor productivities and capital-labour ratio indicate that the SMIs have moved in a similar direction as the large scale industries. With the launching of NDP, the SMIs are expected to contribute towards a more dynamic and competitive industrial sector through their supportive and complementary roles. Future expansion of the SMIs would greatly depend upon good financial support, adequate infrastructure and continuous effort in research and development (R&D).

ABSTRAK

Mengikut pengalaman dari NIE, IKS di Malaysia telah memberi sumbangan yang besar terhadap pertumbuhan dan perkembangan sektor perindustrian terutamanya dalam dua dekad yang lepas. Berdasarkan kepada produktiviti buruh, modal dan jumlah faktor dan nisbah modal-buruh, prestasi IKS telah bergerak ke arah yang sama sepertimana yang telah ditunjukkan oleh industri berskel besar. Dengan pelancaran DPN, IKS dijangka menyumbangkan ke arah perkembangan sektor industri yang lebih dinamik dan berdayasaing melalui peranan mereka yang bersifat sokongan dan pelengkap. Perkembangan IKS di masa depan amat bergantung kepada bantuan kewangan yang baik, infrastruktur yang mencukupi dan usaha yang berterusan dalam penyelidikan dan pembangunan (R&D).

INTRODUCTION

The growth of the Malaysian economy, particularly since the late 1980s, has been supported by rapid growth in the industrial sector. The two decades under the New Economic Policy (NEP), 1971-1990, have witnessed a rapid growth followed by structural transformation of the economy. Overall, Malaysia achieved growth rates around 6 per cent per year during the 1960s and rose to about 8 per cent during the 1970s and 1980s. The per capita growth in income grew by about 5 per cent per annum during 1970-1980. The economy transformed into a semi-industrialized state from one being highly-dependent upon the primary sector. The progress made by the manufacturing sector was so rapid that by as early as 1987, its contribution to the total GDP had increase to 22.4 per cent from a mere 10 per cent in 1970, thus outpacing that of agriculture by about one percentage point. The share of the industrial sector to GDP is expected to increase to 31.4 per cent in 1994 while that of the agriculture sector is expected to decrease to 14.89 per cent.

The second half of the NEP recorded a new facet of industrial activities in the country attributed by the emergence of SMIs (small and medium scale industries), a lesson learnt through the experiences of the Asian Dragons comprising Singapore, Taiwan, Hong Kong and Korea. These countries have achieved the status of Newly Industrialized Economies (NIEs) as a result of an effective and successful industrial policy. A review of their industrial structure plans reveal that the SMIs have made major inroads into the economy, hence becoming strong supporters of the industries producing for the export markets.

This paper attempts to elucidate the current performance and identify future prospects of the SMIs in the wake of industrial development and expansion in the country. The importance and significance of the SMIs to the Malaysian economy have to be analyzed with the view of formulating new policies and strategies which can provide a more conducive environment for future development and expansion of the SMIs.

SMIs IN THE MALAYSIAN ECONOMY

The success of the NIEs has led to many countries from all over the world to adopt similar strategies. Based on those experiences, the contribution of SMIs was incorporated as an important component in the development of Malaysia's overall industrial strategy. This was clearly stated in the Industrial Master Plan (IMP) launched during the Fifth Malaysia Plan which spanned between 1986-1990. The IMP's new strategy underlined several key elements which included improving the incentive system, expanding exports, upgrading and modernizing the small-scale industries, industrial dispersion, developing R&D activities, and strengthening the institutions responsible for the development of the manufacturing sector (Malaysia 1986). Specifically, the Sixth Plan emphasized the importance of SMIs in supporting and sustaining Malaysia's industrialization process through the implementation of several programmes such as market promotion, financial facilities, incentives, infrastructure, technical support and R&D. An important programme undertaken during the review period was the vendor development programme which was aimed at creating linkages between the multinationals and the SMIs – a programme whereby large corporations farmed out the production of finished products or components and parts to SMIs (Malaysia 1993). In order to enhance their contribution to value-added, various programmes will be undertaken to improve the investment efficiency and productivity of the SMIs, thereby creating and promoting a complementary role for SMIs under the umbrella concept for the public sector.

During the 1990s, the concept of global business became a major attraction and the SMIs are regarded as an important link in the attainment of that concept. Based on estimates provided by the Ministry of International Trade and Industry (MITI), there are currently more than 30,000 SMIs in the country. These SMIs, which are mostly owned by local entrepreneurs, account for 80 per cent of the total industrial establishments (Malaysia 1991).

The New Development Policy (NDP), 1991-2000 under the Second Outline Perspective Plan (OPP2) continue to pursue the new industrial strategy, which emphasizes growth and development of the SMIs. This was brought about by increased allocation for SMIs vis-a-vis those for other sub-sectors. Out of a total of RM1820.0

million of revised allocation under the Sixth Malaysia Plan period, 1991-1995, the SMIs and rural industries accounted for RM147.8 million (8.1 per cent). Of the total allocation geared for the development and expansion of SMIs, RM47.7 million was already utilized during the period 1991-1993 (Malaysia 1993). The allocation for industrial estates and industrial infrastructure development constitutes 36 per cent of the revised budget, emphasising the development of specialized industrial estates, in particular for SMIs and high-technology industries.

Definition There are no specific definitions for SMIs in Malaysia and most of the definitions used are based on a particular purpose or the respective government bodies. The Principle Guarantee Scheme (PGS) of the Credit Guarantee Corporation (CGC) defines a small-scale industry as one having paid-up capital and reserves of less than RM500,000. For tax-purposes, the Ministry of Finance also categorizes a small-scale industry as one having a shareholders' fund (net assets) of similar amount.

Majlis Amanah Rakyat (MARA) and Development Bank (DB) classify an establishment as a small-scale industry if it has a capital less than RM500,000. The Small Enterprise Division of the Ministry of International Trade and Industry (MITI) defines a small-scale industry as one which incurs an initial paid-up capital of RM500,000 or having less than 20 full-time employees; a medium-scale industry has an initial paid-up capital of between RM500,000 to RM2.5 million or having between 20 to 100 full-time employees. Alternatively, if an industry incurs an initial paid-up capital of more than 2.5 million, it is then considered as a large-scale or heavy industry.

After taking into consideration several other definitions adopted by countries such as Korea and Taiwan, this paper adopts the definition which has been extended by the Small Enterprise Division of MITI. Nonetheless, it seems impossible to incorporate both paid-up capital and employment size in the study of SMIs. If both concepts are taken into account, complications in categorizing may arise as a result of inconsistencies between the size of work force and the amount of paid-up capital attached to each particular establishment.

In view of the availability of data, this paper defines a small-scale industry as an establishment employing a full-time labour force of less than 20 employees, and a medium-scale industry as one

which employs a full-time work force of 20-99 employees. A large industry is therefore referred to as an establishment having a full-time work force of 100 employees or more.

Measurement of Performance In general, the ultimate concern of most economists is the performance of firms or establishments. The usual consideration lies in the productive efficiency of firms (Ferguson 1993). Various ways can be used to measure the performance of economic activities. Productivity, cost minimization and capital-labour ratios are among some indicators which can be highly applicable for evaluating the performance of SMIs. Further, the comparative performance between the small, medium and large scale industries will provide a clearer picture of the current performance of SMIs.

Productivity is the point where human skills and interest, technology, management, the social and business environment converge (Rugayah 1991). The measurement of productivity therefore goes to the heart of assessing the economic performance of a firm (Kravis 1976). It basically measures the extent to which a given input is capable of producing a certain amount of output. Of particular importance is the concept of partial productivity, a method widely used by many scholars in the study of industrial performance (Field 1983; Zhang 1990). Various partial productivity measurements have been adopted, using inputs such as labour, capital, land, raw materials, fuels and other utilities (Rugayah 1991). These partial productivity measures quantify the change in output due to the change in one input at a point of time, while other inputs are assumed constant. Of all the partial productivity measures, the most widely used is the labour productivity.

However, the productivity of labour does not always reflect the true change in labour productivity. Sometimes an increase in labour productivity is due to some other factors such as the substitution of capital for labour, or by technological advances and scale effects. This is particularly true for the case of capital-intensive industries where an additional increase in fixed asset may contribute to the increase in labour productivity instead of that of capital. Hence, capital productivity and, to a certain extent total factor productivity, must also be incorporated into this study. This will improve accuracy in measuring the performance of the SMIs. In fact, total or multi-factor productivity (TFP) index may be the most appropriate indicator for evaluating overall performance of SMIs and large firms

since it indicates the productive output accounted by the aggregate factors used in the production process (Yanrui 1993). For example, Dholakia (1978) applied the TFP approach in the study of relative performance of public against private enterprises in the Indian manufacturing sector.

Another indicator adopted in measuring the performance of SMIs is cost minimization. This measurement is used in view of the fact that the primary objective of manufacturing establishments is to maximize profits. At the same time, profit maximization is analogous to cost minimization, that is, assuming that firms face similar factor prices with no sizable economies of scale, then the lower the cost per unit of output for the industry the more favourable would be the performance of that industry. It should be cautioned here that a firm does not necessarily gain a handsome profit by just minimizing its cost; this is particularly true in a strong competitive market.

For the purpose of this study, some indicators used in measuring the performance of SMIs are shown below. All measurements are in nominal values.

Labour Productivity Productivity of labour or the average product of labour is defined as,

$$AP(L) = \frac{V}{L}$$

where,

AP(L) = Average product of labour in Malaysian Ringgit (RM) per year.

V = Value added (total gross output less cost of input) in RM per year.

L = Labour input, defined as the number of full-time and part-time workers. This measurement is used due to the lack of data for total man-hours used in the production line.

Capital Productivity Productivity of capital or the average product of capital is,

$$AP(K) = \frac{V}{K}$$

where,

V = Value added in RM per year
K = Capital input in RM per year, measured by net fixed assets.[1]

Indeed, capital is the most difficult variable to measure in an economy. It should reflect the value of capital employed per annum (Rugayah 1991). In other words, it calculates the annual cost of capital or its rental value. Depreciation value (reflecting diminishing value of capital stocks) and interest paid (reflecting real opportunity cost of holding capital) must be obtained before deriving the value of capital used during the year. Nonetheless, data on both cost components of holding capital are not available. The best alternative is to use net fixed assets as a proxy for capital (Kravis 1976). Net fixed asset is the value of fixed asset at the end of the year less the value as at the beginning of the year.

Total Factor Productivity Total factor productivity reflects output or value added per unit of total input, labour and capital. It is defined as,

$$TFP = \frac{V}{L + K}$$

where,

TFP = Total Factor Productivity.
V = Value added in RM per year.
L = Labour, measured as salaries and wage bills in order to standardize with the unit measurement for capital which is in Malaysian Ringgit (RM).
K = Capital in RM per year, measured as net fixed assets.

Total Unit Cost Total unit cost is defined as,

$$TUC = \frac{TC}{TQ}$$

where,

TUC = Total cost per unit of output in RM per annum.
TC = Total cost comprises total salaries and wage bills

and cost of input. Cost of input contains both cost of utilities and cost of materials and packaging.

TQ = Total value of output in RM per year.

Capital-Labour Ratio Capital-labour ratio is defined as,

$$CLR = \frac{K}{L}$$

where,

CLR = Capital-labour ratio
K = Capital, defined as fixed asset (RM).
L = Labour, defined as the number of full-time and part-time workers.

This index is used to gauge the capital intensity of SMIs; the greater the index, the more capital-intensive the industry would be. Conversely, a smaller index would indicate a labour-intensive mode of production.

DATA

In measuring the economic performance of SMIs, this paper uses extensively the data provided by the Department of Statistics (DOS). DOS has provided published data on the manufacturing sector through its Industrial Surveys which has been conducted since 1959. The latest survey available at the time of this study is 1991. Data for 1987-91 (covering both West and East Malaysia) were used to measure the overall performance of SMIs and large industries over the period. The analysis is however insufficient without identifying the performance in various sub-sectors. Hence, the data for 1991 was utilized for this purpose. Each SMI and large establishment is selected at the three digit level of the Malaysian Industrial Classification (MIC) in order to ensure homogeneity of products produced by the establishments. However, the data was only available for West Malaysia.

In addition, data obtained from personal interviews are also used, particularly for evaluating the future prospects of SMIs. A survey of 30 SMIs was conducted representing various sub-industries in Selangor and Kelantan in May 1994. These two states were selected to represent the East and West Coasts of Peninsular

Malaysia. Both Bumiputera and Non-Bumiputera entrepreneurs are included in the sample.

CURRENT PERFORMANCE

Based on the measurements used in this paper, analysis of the data offer some interesting results pertaining to the current performance of SMIs.

Table 1 summarizes the percentage share of small, medium and large scale industries for the period, 1981-1991. Compared to both medium and large scale industries, it is evident that the share of small scale industries to the total number of industrial establishments has undergone a significant reduction from 77.0 per cent in 1981 to 24.3 per cent in 1991. Similarly, a reduction in the percentage share of small scale industries is also seen for gross value of output, value added, total number of employees and fixed assets. The medium scale industries also experienced a continuous reduction in their percentage share in terms of the number of establishments, gross value of output, value added, total number of employees and fixed assets. This decrease was quite significant during the second half of 1980s, probably due to foreign investor's response towards the favourable fiscal incentives offered under the Industrial Master Plan (IMP) launched during the Fifth Malaysia Plan period, 1986-1990.

Table 2 summarizes the percentage share of SMIs to the total, by sub-industries for 1991. Based on the number of establishments, the small scale industries are relatively under-represented with the exception of certain sub-sectors where their relative percentage shares showed up to be slightly higher. These are industries producing food, textiles, leather and leather products, furnitures and fixtures, petroleum refineries, miscellaneous products of petroleum and coal, and other manufacturers. On the other hand, the number of establishments for the medium scale industries are more apparent in sub-sectors such as food, beverages, textiles, apparel, leather and leather products, footwear, wood and wood and cork, furnitures and fixtures, industrial chemicals, machinery and transport equipment. However, on the basis of gross value of output, value added, total number of employees and fixed assets, the small-scale industries are relatively insignificant except in the

TABLE 1. Malaysia: Percentage share in total by size of industries, 1981-1991

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Number of Establishments	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Small	77.01	44.94	31.55	34.38	32.54	34.24	33.18	31.39	29.28	26.47	24.33
Medium	17.71	42.18	49.31	47.38	48.44	46.82	45.81	44.59	44.85	44.70	45.84
Large	5.28	12.88	19.14	18.24	19.02	18.94	21.01	24.02	25.87	28.83	29.83
Gross Value of Output	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Small	6.44	4.23	1.92	1.95	2.06	2.13	1.76	1.40	1.22	1.07	1.08
Medium	22.49	21.74	20.67	19.88	20.48	21.31	20.26	17.81	17.87	15.94	13.81
Large	71.07	74.03	77.41	78.17	77.46	76.56	77.98	80.79	80.91	82.99	85.11
Value Added	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Small	7.65	3.50	1.94	2.18	2.24	2.29	2.03	1.52	1.31	1.17	1.14
Medium	17.03	14.54	19.90	17.92	17.49	18.40	17.57	15.54	14.97	14.10	12.59
Large	75.32	81.96	78.16	79.90	80.27	79.31	80.40	82.94	83.72	84.73	86.27
Total No. of Employees	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Small	14.84	8.10	4.25	4.58	4.43	4.53	3.92	2.74	2.27	2.01	1.08
Medium	26.37	28.89	25.97	26.10	26.69	25.84	23.27	18.64	17.52	16.92	13.81
Large	58.79	63.01	69.78	69.32	68.88	69.63	72.81	78.62	80.21	81.07	86.27
Fixed Assets	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Small	6.03	4.32	2.04	2.03	1.78	2.11	1.82	1.51	1.31	1.09	0.97
Medium	23.66	22.98	16.30	15.75	14.82	15.62	14.62	13.81	13.88	13.30	11.62
Large	70.31	72.70	81.66	82.22	83.40	82.27	83.56	84.68	84.81	85.61	87.41

Source: Computed from data provided by the Department of Statistics.

TABLE 2. West Malaysia: Percentage share in sub-total by size of industries, 1991

Industry	No. of Establish.	Gross Value of Output	Value Added	Total No. of Emp-loyees	Fixed Assets
Food	100.00	100.00	100.00	100.00	100.00
Small	33.37	1.21	2.11	5.42	1.90
Medium	44.29	25.54	22.80	27.72	21.51
Large	22.34	73.25	75.09	66.86	76.59
Beverage	100.00	100.00	100.00	100.00	100.00
Small	10.00	0.40	0.14	0.90	0.38
Medium	50.00	8.91	5.51	17.89	90.31
Large	40.00	90.69	94.35	81.21	9.40
Tobacco	100.00	100.00	100.00	100.00	100.00
Small	3.57	0.009	0.008	0.18	0.0009
Medium	28.57	1.36	1.26	8.17	1.46
Large	67.86	98.63	98.73	91.65	98.54
Textiles	100.00	100.00	100.00	100.00	100.00
Small	16.86	1.15	1.17	1.26	0.71
Medium	45.21	11.83	10.52	12.59	7.94
Large	37.93	87.02	88.31	86.15	91.35
Apparel (except Footwear)	100.00	100.00	100.00	100.00	100.00
Small	4.13	0.49	0.40	0.27	0.65
Medium	50.15	11.97	12.04	13.67	13.46
Large	45.72	87.54	87.56	86.06	85.89
Leather, Leather Products Leather Substitutes & Fur (Except footwear & wearing apparel)	100.00	100.00	100.00	100.00	100.00
Small	27.27	4.42	3.93	3.42	4.51
Medium	48.48	33.33	31.90	25.66	20.88
Large	24.25	62.25	64.17	70.92	74.61

(continued to next page)

TABLE 2. (*Continued*)

Industry	No. of Establish.	Gross Value of Output	Value Added	Total No. of Employees	Fixed Assets
Footwear (except vulcanised or moulded rubber or plastic footwear)	100.00	100.00	100.00	100.00	100.00
Small	0.00	0.00	0.00	0.00	0.00
Medium	57.14	29.62	28.81	21.15	22.38
Large	42.86	70.38	71.19	78.85	77.62
Wood and Wood & Cork Products (except furniture)	100.00	100.00	100.00	100.00	100.00
Small	12.53	1.51	1.08	1.29	1.49
Medium	51.51	25.03	22.09	23.77	16.31
Large	35.96	73.46	76.83	74.94	82.20
Furniture and Fixtures (except primarily of metal)	100.00	100.00	100.00	100.00	100.00
Small	25.51	4.07	4.76	4.26	1.56
Medium	52.67	26.43	24.99	30.25	18.03
Large	21.82	69.50	70.25	65.49	80.41
Paper & Paper Products	100.00	100.00	100.00	100.00	100.00
Small	5.43	0.89	0.73	0.70	0.52
Medium	60.47	25.88	7.09	27.00	21.12
Large	34.10	73.23	92.18	72.30	78.36
Printing, Publishing and Allied	100.00	100.00	100.00	100.00	100.00
Small	6.88	0.30	0.20	0.65	0.45
Medium	63.75	19.02	13.04	26.25	22.58
Large	29.37	80.68	86.76	73.10	76.97

(continued to next page)

TABLE 2. (*Continued*)

Industry	No. of Establish.	Gross Value of Output	Value Added	Total No. of Employees	Fixed Assets
Industrial Chemicals	100.00	100.00	100.00	100.00	100.00
Small	14.29	3.95	2.90	1.90	1.53
Medium	72.45	31.10	25.12	28.11	15.38
Large	13.26	64.95	71.98	69.99	83.09
Other Chemical products	100.00	100.00	100.00	100.00	100.00
Small	14.48	2.28	1.75	1.93	2.09
Medium	60.00	31.00	29.31	34.25	36.04
Large	25.52	66.72	68.94	63.82	61.87
Petroleum Refinery	100.00	100.00	100.00	100.00	100.00
Small	22.22	0.06	0.05	1.52	0.02
Medium	33.33	3.16	4.88	8.59	1.30
Large	44.45	96.78	95.07	91.41	98.68
Miscellaneous Products of Petroleum and Coal	100.00	100.00	100.00	100.00	100.00
Small	44.44	35.02	35.38	19.67	41.61
Medium	50.00	50.75	54.25	58.86	47.64
Large	5.56	14.23	10.37	21.47	10.75
Rubber Products	100.00	100.00	100.00	100.00	100.00
Small	2.01	0.07	0.11	0.14	0.13
Medium	45.69	29.29	11.67	14.88	10.54
Large	52.30	70.64	88.22	84.98	89.33
Plastic Products, n.e.c.	100.00	100.00	100.00	100.00	100.00
	6.40	0.81	0.75	0.47	1.13
Small	56.40	25.34	24.00	1.80	8.88
Medium	37.20	73.85	75.25	97.73	89.99
Large					

(continued to next page)

TABLE 2. (*Continued*)

Industry	No. of Establish.	Gross Value of Output	Value Added	Total No. of Emp-loyees	Fixed Assets
Pottery, China and Earthenware	100.00	100.00	100.00	100.00	100.00
Small	0.00	0.00	0.00	0.00	0.00
Medium	51.72	9.15	9.11	10.96	6.22
Large	48.28	90.85	90.89	89.04	93.78
Glass and Glass products	100.00	100.00	100.00	100.00	100.00
Small	0.00	0.00	0.00	0.00	0.00
Medium	20.00	3.06	1.44	2.86	0.73
Large	80.00	96.94	98.56	97.14	99.27
Non-metallic Mineral Products	100.00	100.00	100.00	100.00	100.00
Small	16.22	2.41	1.68	2.23	0.78
Medium	56.76	15.96	13.39	29.91	9.30
Large	27.02	81.63	84.93	67.86	89.92
Basic Iron and Steel	100.00	100.00	100.00	100.00	100.00
Small	21.21	0.42	0.75	2.74	0.18
Medium	46.21	10.33	10.16	19.68	7.04
Large	32.58	89.25	89.09	77.58	92.78
Basic Non-Ferrous	100.00	100.00	100.00	100.00	100.00
Small	5.56	1.24	1.11	0.49	0.63
Medium	52.78	32.26	19.82	17.33	15.01
Large	41.66	66.50	79.07	82.18	84.36
Fabricated Metal products (Except machinery & equipment)	100.00	100.00	100.00	100.00	100.00
Small	11.11	1.60	1.47	1.27	2.47
Medium	62.17	27.97	27.77	30.70	24.41
Large	26.72	70.43	70.76	68.03	73.12

(continued to next page)

TABLE 2. (*Continued*)

Industry	No. of Establish.	Gross Value of Output	Value Added	Total No. of Employees	Fixed Assets
Machinery (expt. electrical)	100.00	100.00	100.00	100.00	100.00
Small	4.01	1.63	1.91	4.57	1.47
Medium	71.93	10.72	13.30	24.00	11.27
Large	24.06	87.65	84.79	71.43	87.26
Electrical Machinery, Apparatus, Appliances and supplies	100.00	100.00	100.00	100.00	100.00
Small	2.87	0.09	0.12	0.07	0.06
Medium	26.08	1.68	2.30	2.64	3.50
Large	71.05	98.23	97.58	97.29	96.44
Transport Equipment	100.00	100.00	100.00	100.00	100.00
Small	14.14	0.53	0.35	1.02	0.25
Medium	51.83	5.99	6.44	16.71	8.65
Large	34.03	93.48	93.21	82.27	91.10
Professional & Scientific Measuring and Controlling Equipment, n.e.c.	100.00	100.00	100.00	100.00	100.00
Small	0.00	0.00	0.00	0.00	0.00
Medium	22.86	2.22	2.78	2.40	3.22
Large	77.14	97.78	97.22	97.60	96.78
Other Manufactures	100.00	100.00	100.00	100.00	100.00
Small	35.67	9.65	2.25	2.96	3.60
Medium	46.20	12.55	14.69	18.22	31.91
Large	18.13	77.80	83.06	78.82	64.49

Source: Computed from data provided by the Department of Statistics.

production of miscellaneous products of petroleum and coal, furnitures and fixtures, and leather and leather products. Overall, the large scale industries dominate in most of the sub-sectors.

Table 3 shows the performance indicators for all industries for the period 1981-1991. Throughout the entire period, all three categories of industries, small, medium and large scale, indicated a significant increase in all the performance indicators – labour, capital and total factor productivities. Although all industries show an increasing trend in the performance indicators, the growth rates of these indicators are larger for SMIs compared to those of the large scale industries, indicating that the SMIs have performed much better than the large scale industries. For instance, the labour productivity of small and medium scale industries grew by 941 per cent and 983 per cent respectively between 1981-91, compared to 683 per cent growth rate for the large scale industries. The data also indicate that the large scale industries are more capital-intensive than the SMIs. Based on the total unit cost, the data also indicate that the large industries are relatively better at cost minimizing.

Table 4 illustrates the performance indicators for sub-sectors in West Malaysia for 1991. Overall, the large industries have higher labour, capital and total factor productivities than the SMIs. However, there are certain key industries where the SMIs performed better. Based on all the productivity indicators, the SMIs performed better in some resource-based industries such as leather and products of leather, furniture and fixtures, industrial chemicals, plastic products, basic non-ferrous and miscellaneous. Under the non-resources-based sub-sectors, SMIs demonstrated relatively better performance in the apparel and electrical machinery. Similarly, the SMIs in some of these sub-industries also showed impressive capital-labour ratio and are better at cost-minimizing than the large scale industries. This is probably due because of the SMIs's long involvement in such operations thereby achieving better skills by becoming more specialized than the large scale industries.

PROSPECTS FOR THE FUTURE

The current performance of SMIs offer clear evidence pertaining to their future potential in Malaysia's industrialization programmes. This is further supported by the government's policy which

TABLE 3. Malaysia: Performance of manufacturing sector by size of industries, 1981-1991

Performance Indicator	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Labour Productivity (RM'000)	3.38	2.87	21.47	24.65	25.44	25.38	25.72	27.16	29.50	29.04	31.88
Small	1.74	1.24	9.78	11.74	12.87	12.80	13.30	12.73	14.12	15.02	18.11
Medium	2.18	1.45	16.45	16.92	16.67	18.07	19.41	20.92	23.69	23.37	23.71
Large	4.33	3.74	24.05	28.42	29.65	28.91	28.41	29.42	31.41	30.67	33.92
Capital Productivity (RM'000)	5.51	3.78	19.72	19.88	16.66	16.72	17.01	19.32	21.78	20.34	19.93
Small	7.00	3.06	18.74	21.35	20.94	18.07	18.97	19.39	21.79	21.94	23.62
Medium	3.97	2.39	24.07	22.62	19.66	19.69	20.43	21.74	23.48	21.58	21.59
Large	5.91	4.26	18.87	19.32	16.04	16.12	16.36	18.92	21.50	20.13	19.67
Total Factor Productivity (RM'000)	0.62	0.53	2.85	2.98	2.79	2.79	2.79	2.86	3.09	3.28	3.12
Small	0.54	0.27	1.98	2.15	2.22	2.24	2.22	2.30	2.21	2.39	2.60
Medium	0.43	0.25	2.59	2.43	2.38	2.30	2.38	2.56	2.66	2.90	2.59
Large	0.69	0.70	2.96	3.19	2.93	2.94	2.93	3.96	3.21	3.37	3.23
Capital-labour Ratio (RM'000)	18.04	22.33	32.02	36.48	44.90	44.65	44.48	41.35	39.84	41.98	41.03
Small	7.33	11.91	15.34	16.17	18.07	20.83	20.62	19.31	19.06	20.13	22.55
Medium	16.18	17.77	20.10	22.00	24.93	27.00	27.95	28.30	29.68	31.86	32.31
Large	21.57	25.77	37.48	43.27	54.37	52.75	51.05	45.72	42.97	44.81	50.71
Total Unit Cost (RM'000)	1.02	1.02	0.82	0.81	0.81	0.80	0.81	0.82	0.81	0.81	0.81
Small	1.04	1.07	0.82	0.83	0.83	0.81	0.81	0.84	0.83	0.82	0.82
Medium	1.04	1.06	0.84	0.85	0.86	0.84	0.85	0.85	0.85	0.85	0.84
Large	1.01	1.01	0.81	0.80	0.80	0.79	0.80	0.83	0.80	0.81	0.81

Source: Computed from data provided by the Department of Statistics.

TABLE 4. West Malaysia: Performance of manufacturing sub-sector by size of industries, 1991

Industry	Labour Productivity (RM'000)	Capital Productivity (RM'000)	Total Factor Productivity (RM'000)	Capital-labour Ratio (RM'000)	Total Unit Cost (RM'000)
Food	33.12	19.73	3.22	49.38	0.90
Small	12.89	21.96	2.28	17.26	0.81
Medium	27.23	20.91	3.00	38.31	0.94
Large	37.20	19.34	3.46	56.57	0.89
Beverage	103.69	27.35	5.45	111.51	0.63
Small	16.06	10.14	1.77	46.78	0.92
Medium	31.96	1.64	1.22	563.06	0.79
Large	120.46	277.15	6.87	12.78	0.61
Tobacco	70.89	47.57	4.98	43.83	0.70
Small	3.22	414.29	1.07	0.22	0.98
Medium	10.98	41.09	2.26	7.85	0.81
Large	76.36	47.66	5.06	47.12	0.70
Textiles	23.91	18.24	2.71	38.55	0.79
Small	22.11	29.88	3.12	21.78	0.40
Medium	19.99	24.17	2.80	24.33	0.81
Large	24.51	17.64	2.69	40.87	0.79
Apparel (except Footwear)	12.24	49.31	1.85	7.30	0.85
		30.36	2.36	17.41	0.85
Small	17.93	44.14	1.70	7.19	0.87
Medium	10.79	50.27	1.87	7.28	0.85
Large	12.45				
Leather, Leather Products Leather Substitutes & Far (Except footwear & wearing apparel)	9.03	20.74	1.89	12.81	0.86
Small	10.38	18.74	2.11	16.91	0.86
Medium	11.23	31.69	1.72	10.43	0.85
Large	8.17	17.83	1.97	13.47	0.86

(continued to next page)

TABLE 4. (*Continued*)

Industry	Labour Productivity (RM'000)	Capital Productivity (RM'000)	Total Factor Productivity (RM'000)	Capital-labour Ratio (RM'000)	Total Unit Cost (RM'000)
Footwear (except vulcanised or moulded rubber or plastic footwear)	13.37	26.09	1.88	15.08	0.80
Small	0.00	0.00	0.00	0.00	0.00
Medium	18.22	33.51	2.15	15.95	0.78
Large	12.07	23.94	1.79	14.84	0.81
Wood and Wood & Cork Products (except furniture)	18.60	24.72	2.27	22.13	0.81
Small	15.46	17.85	1.92	25.49	0.88
Medium	17.29	33.47	2.02	15.19	0.85
Large	19.07	23.11	2.36	24.27	0.80
Furniture and Fixtures (except primarily of metal)	14.48	21.66	2.18	19.66	0.78
Small	16.19	65.98	2.52	7.20	0.73
Medium	11.96	30.03	1.86	11.72	0.74
Large	15.53	18.92	2.30	24.14	0.80
Paper & Paper Products	30.23	15.62	2.86	56.91	0.77
Small	31.42	21.99	3.20	42.14	0.81
Medium	7.94	5.25	0.85	44.51	0.43
Large	38.54	18.38	3.48	61.68	0.89
Printing, Publishing and Allied	50.42	39.69	3.64	37.36	0.59
Small	15.33	17.19	1.87	26.23	0.81
Medium	25.05	22.93	2.24	32.14	0.77
Large	59.84	44.74	4.02	39.34	0.54

(continued to next page)

TABLE 4. (*Continued*)

Industry	Labour Productivity (RM'000)	Capital Productivity (RM'000)	Total Factor Productivity (RM'000)	Capital-labour Ratio (RM'000)	Total Unit Cost (RM'000)
Industrial Chemical	93.52	8.86	3.44	310.54	0.72
Small	142.97	16.76	7.05	250.54	0.77
Medium	83.56	14.46	3.54	169.93	0.79
Large	96.18	7.67	3.34	368.62	0.69
Other Chemical Products	63.78	38.05	4.14	49.30	0.70
Small	57.99	31.97	4.83	53.34	0.76
Medium	54.58	30.95	3.86	51.88	0.72
Large	68.88	42.40	4.25	47.78	0.69
Petroleum Refinery	472.81	15.09	6.82	921.38	0.87
Small	14.88	36.14	2.48	11.59	0.93
Medium	268.38	56.62	12.31	139.52	0.80
Large	499.94	14.54	6.86	1011.45	0.88
Miscellaneous Products of Petroleum and Coal	66.29	34.75	4.97	56.12	0.76
Small	119.18	29.55	6.45	118.68	0.74
Medium	61.09	39.56	4.73	45.42	0.75
Large	32.05	33.58	3.27	28.12	0.85
Rubber Products	25.09	18.85	2.78	39.15	0.81
Small	20.57	16.16	2.27	37.58	0.74
Medium	19.68	20.89	2.50	27.72	0.93
Large	26.05	18.62	2.82	41.16	0.76
Plastic Products, n.e.c.	20.44	20.21	2.68	29.74	0.77
Small	32.69	13.34	3.20	72.03	0.76
Medium	272.28	54.60	2.95	146.66	0.78
Large	15.73	16.90	2.59	27.38	0.77

(continued to next page)

TABLE 4. (*Continued*)

Industry	Labour Productivity (RM'000)	Capital Productivity (RM'000)	Total Factor Productivity (RM'000)	Capital-labour Ratio (RM'000)	Total Unit Cost (RM'000)
Pottery, China and Earthenware	14.25	16.72	1.96	25.08	0.72
Small	0.00	0.00	0.00	0.00	0.00
Medium	11.84	24.50	1.65	14.22	0.78
Large	14.55	16.20	2.00	26.41	0.72
Glass and Glass Products	66.69	13.47	3.19	145.63	0.63
Small	0.00	0.00	0.00	0.00	0.00
Medium	33.44	26.49	2.06	37.01	0.88
Large	67.67	13.37	3.21	148.83	0.62
Non-metallic Mineral Products	52.81	13.27	3.52	117.01	0.64
Small	39.81	28.46	3.53	41.15	0.76
Medium	23.64	19.11	2.53	36.38	0.75
Large	66.09	12.54	3.75	155.03	0.62
Basic Iron and Steel	56.95	8.51	2.97	196.80	0.85
Small	15.52	34.87	1.70	13.08	0.85
Medium	29.40	12.29	2.20	70.38	0.88
Large	65.40	8.17	3.12	235.35	0.85
Basic Non-Ferrous	31.94	8.98	2.19	104.60	0.91
Small	72.07	15.78	4.11	134.17	0.90
Medium	36.52	11.86	2.57	90.55	0.94
Large	30.73	8.42	2.10	107.39	0.89
Fabricated Metal products (Except machinery & equipment)	29.80	19.63	2.81	44.65	0.81
Small	34.49	11.69	3.22	86.77	0.80
Medium	26.96	22.33	2.58	35.51	0.82
Large	30.99	18.99	2.90	47.99	0.80

(continued to next page)

TABLE 4. (*Continued*)

Industry	Labour Productivity (RM'000)	Capital Productivity (RM'000)	Total Factor Productivity (RM'000)	Capital-labour Ratio (RM'000)	Total Unit Cost (RM'000)
Machinery (expt. electrical	43.00	27.45	3.47	46.07	0.77
Small	17.99	35.69	1.93	14.84	0.82
Medium	23.83	32.39	2.15	21.64	0.78
Large	51.04	26.67	3.92	56.28	0.77
Electrical Machinery, Apparatus, Appliances and supplies	27.72	25.02	2.87	32.59	0.85
Small	47.86	46.79	4.05	30.01	0.79
Medium	24.07	16.40	2.65	43.17	0.85
Large	27.81	25.31	2.88	32.31	0.85
Transport Equipment	59.99	32.91	4.57	53.60	0.77
Small	20.65	45.31	2.25	13.37	0.89
Medium	23.11	24.47	2.48	27.75	0.81
Large	67.96	33.68	4.87	59.35	0.77
Professional & Scientific Measuring and Controlling Equipment, n.e.c.	23.73	19.27	2.61	36.23	0.82
Small	0.00	0.00	0.00	0.00	0.00
Medium	27.54	16.64	2.74	48.65	0.76
Large	23.64	19.36	2.61	35.92	0.82
Other Manufactures	20.36	51.39	3.28	11.65	0.75
Small	15.45	32.07	2.11	14.18	0.96
Medium	16.41	23.65	2.35	20.41	0.75
Large	21.45	66.20	3.59	9.53	0.73

Source: Computed from data provided by the Department of Statistics.

emphasizes the development of SMIs. As outlined in the NDP, the SMIs are expected to contribute towards a more dynamic and competitive industrial sector through its supportive and complementary roles. Its development and modernization will also spearhead efforts to broaden and deepen the structural base of the manufacturing sector. In this respect, the setting up of an extensive network of modern ancillary firms will enable them to play a significant role in providing the feeder and technological linkages and ensure the successful development of the larger enterprises (Malaysia 1991). Some of the major current development trends which could provide opportunities for future enhancement of the SMIs will be discussed below.

Industrial Development The Malaysian economy has undergone a major structural transformation with the manufacturing sector taking over the agriculture sector as the country's engine of growth. The manufacturing sector's contribution to the Gross Domestic Product (GDP) increased from a mere 10.0 per cent in 1965 to 20.2 per cent in 1980 and 26.8 per cent in 1990. Its contribution is expected to increase further to 31.4 per cent of GDP in 1994 (Table 5). In terms of employment generation, its share to the total employment in the country increased from 30.8 per cent in 1970 to 49.8 per cent in 1990.

The current development trend would undoubtedly offer great potential to industrial establishment especially those involved in the manufacturing and processing activities – it directly calls for a greater role from the existing SMIs. More importantly, the SMIs in the country now accounts for 80 per cent of the total industrial establishments and are mostly owned by local entrepreneurs (Malaysia 1991). These SMIs would have to be nurtured before they can become strong supporters of and complements to large scale industries and heavy industries. The success of SMIs will also strengthen the utilization of local resources in the future industrial development and expansion. To this effect, the recent industrial policies which give special emphasis on SMIs, would therefore provide the necessary avenues towards their development and progress within the entire industrial development programmes.

Financial As part of the strategies to promote the development and expansion of SMIs in the country, the government has appointed four ministries and two departments to monitor the development

TABLE 5. Malaysia: Origins of GDP at factor cost (% of total)

Sector	1965	1970	1980	1990	1994[f]
Agriculture	31.5	33.6	22.2	18.6	14.9
Mining and quarrying	9.0	7.2	9.2	9.7	7.4
Manufacturing	10.0	12.8	20.2	26.8	31.4
Construction	4.1	3.8	4.5	3.6	4.1
Wholesale, Retail Trade & Hotels & Restaurants	15.3	13.7	12.6	11.1	12.4
Finance, Insurance & Real Estate	6.0	6.0	8.2	9.7	10.9
Government Service	19.1	19.3	13.0	10.8	9.5
GDP total (incl. others) at factor cost	100.0	100.0	100.0	100.0	100.0

Note: [f] Forecast
Source: Economic Reports (various years); Annual Reports 1993 and 1994.

and management of the SMIs. This is quite different compared to the previous situation whereby similar role was undertaken by 13 ministries and 30 departments (Ishak and Wook 1989). Under the present system, this responsibility is shouldered by MITI, Ministry of Technology, Science and Environment, Ministry of Human Resources and Ministry of Finance and two departments. Together, these "lead agencies" and implementing agencies are directly in charge of marketing and promotion, incentives, technical expertise and R&D, training and management services, infrastructures and financial services. The dissemination and implementation of these services are undertaken by several agencies - Standards and Industrial Research Institute of Malaysia (SIRIM), Perbadanan Usahawan National Berhad (PUNB), Malaysian Technology and Development Corporation (MTDC), and Credit Guarantee Corporation (CGC). The activities of these lead agencies are summarized in Figure 1.

Lead Agency	Implementing Agency	Function & Responsibility
MITI	MITI, MATRADE, FAMA PERDA, MTIB, KPU, PUNB, MARA	Promotion Marketing
MITI	MITI, Ministry of Finance, Ministry of Domestic Trade and Consumer Affairs, MIDA	Incentive
Min. of Science Technology and Environment	KSTAS, MITI, Ministry of Domestic Trade and Consumer Affairs, SIRIM, FRIM, MARDI, PORIM, MIMOS, Taman Teknologi Malaysia, Taman Pertanian, RRIM, BPM	Technical Support and R&D
Min. of Human Resource	Min. of Human Resource, MARA, SIRIM Min. of Education, MEDEC, MTIB	Training and Management
Min. of Finance	Min. of Finance, MITI, Bank Negara Malaysia, CGC, CB, DFI, PUNB, BPM	Financial Service
UPP, JPM	KPA, MITI, Department of Urban and Rural Planning, LKW, KPLB, PKEN	Infrastructure Services

FIGURE 1. Lead agency and implementing agencies involved in the development of SMIs.
Source: Ahmad Tajuddin Ali. Membangunkan IKS yang Berdaya Saing: Peranan SIRIM (adapted).

Although many services are offered for the development of SMIs, this section will focus specifically on financial aspects. For most SMI entrepreneurs, especially those belonging to the small scale categories, financial matters have become the major constraint in promoting and expanding their industrial operations. Their smallness coupled with the lack of technical know-how and other characteristics have led to their limited access to credit.

According to available sources, about 25 per cent of the total annual grant of RM50 million allocated for SMIs has been utilized as of March 1994. A total of 591 applications for the grants were received but only 368 of them approved. The remaining 232 applications were rejected because of improper filing of information

and failure to adhere to application procedures. Of the 368 approved applicants, Bumiputera entrepreneurs account for 143 (39.0 per cent) while non-Bumiputera accounts for the remaining 225 or 61.0 per cent. However, further probing into this matter revealed that a significant proportion of the 368 approved applicants belonged to the medium scale industries with initial paid-up capital of more than RM500,00 or employing more than 20 full-time workers.

The experience of CGC is similar. The Bumiputera small scale businesses continue to enjoy access to the CGC's guarantee under the Principle Guarantee Scheme (PGS). Of the 2,302 loans guaranteed during 1993, 43 per cent was granted to the Bumiputera community while in terms of value, 37 per cent or RM76.3 million of the total value of RM205.8 million of loans approved and guaranteed under the PGS were granted to Bumiputeras (CGC 1994). Generally, loans granted to Bumiputera businesses were relatively small. Loans to Chinese small businesses represented 52 per cent of the total number of new loans granted, with a total value of RM123.1 million (60 per cent of the total), whereas loans to Indian small businesses represented 4 per cent of the total number of new loans with a value of RM5.7 million (3 per cent of the total).

The above examples indicate some of the constraints faced by small scale entrepreneurs in that most of the loans provided for them have not been utilized. Hence, most of the loans have instead benefited the medium scale industries which have relatively larger amount of self-financed funds to start and operate their industries.

The recent survey conducted on SMIs in Kelantan and Selangor offer further interesting results. The results show that 26.2 per cent of the small scale entrepreneurs still depend of self-raised funds to start their businesses while 52.2 per cent used self-raised funds to run their businesses. However, only 40.3 per cent of them have been granted loans under the CGC loan schemes to start their businesses while none have utilized loans to run their businesses (Tables 6 and 7).

The results also reveal that most of the small scale entrepreneurs have relied upon past savings to start and run their businesses and borrowings are only made through agencies which require no collateral (Table 8 and 9). The entrepreneurs interviewed provided some reasons for not borrowing – of major importance are high fees attached to loans and difficult administrative procedures

TABLE 6. Sources of capital to start business

Sources of Capital	No	Percent	Amount (RM'000)	Percent
Own	29	40.85	371	26.23
Parents	-	-	-	-
Other Family members	9	12.68	97	6.86
Friends	-	-	-	-
Shareholders	-	-	-	-
Bank/Financial Inst. Government Loan Assistance	1	1.41	40	2.83
– MARA	11	15.49	200	14.14
– Rancangan Belia Niaga	7	9.86	136.5	9.65
Loans under CGC	14	19.71	570	40.30
Total	71	100.00	1,414.5	100.00

Note: Most of the respondents have more than one source.
Source: Based on survey data.

TABLE 7. Sources of capital to run business.

Sources of Capital	No	Percent	Amount (RM'000)	Percent
Own	28	71.79	223	52.35
Parents	-	-	-	-
Other Family members	1	2.56	20	4.69
Friends	-	-	-	-
Shareholders	-	-	-	-
Bank/Financial Inst. Government Loan Assistance	4	10.26	60	14.08
– MARA	5	12.83	113	26.53
– Rancangan Belia Niaga	1	2.56	10	2.35
Loans under CGC	-	-	-	-
Total	39	100.00	426	100.00

Note: Most of the respondents have more than one source.
Source: Based on survey data.

TABLE 8. Sources of own capital

Source	No	Percent	Amount (RM'000)	Percent
Past Savings	29	93.55	343	93.97
Sale of Assets	2	6.45	22	6.03
Total		100.00		100.00

Note: Some respondents have more than one source.
Source: Based on survey data.

TABLE 9. Reasons for borrowing from certain sources.

Reason	Oth Family Members	Bank	Government Bodies/CGC	Total	%
No collateral	1	-	20	21	40.4
Easy Access with/without collateral	7	-	-	7	13.5
Easy acess with collateral/ Guarantors	-	5	8	13	25.0
Simple Procedure	-	-	3	3	5.8
No Risk	1	-	-	1	1.9
No Interest	1	-	-	1	1.9
Offered	-	-	6	6	11.5
Total				52	100.0

Note: Some respondents have more than one reason.
Source: Based on survey data.

(Table 10). It is also worth noting that the respondents made some valuable suggestions to the implementing agencies for reducing the barriers and limitations encountered by the small scale entrepreneurs. Some of the important suggestions are shown in Table 11.

The above data suggest that the SMIs, particularly the small scale categories, have great potential for improvement. If the barriers and constraints can be removed, then the SMIs will be able to secure larger loans for expanding their industrial and business activities.

Quality Control and Product Development Similar to larger scale industries, the SMI need to produce output of good quality in order

to remain competitive in both the local as well as the export markets. This necessitates quality control and product development. To this end, SIRIM could offer the necessary avenues for the SMIs. In meeting with the requirements of SMIs, SIRIM specifically provides a number of programmes aimed at product development such as the Industrial Incubator, Quality Enhancement Procedures (APK), Industrial Technical Support Fund (ITAF), and Regional Quality Programmes (PKW). These programmes are basically aimed at providing SMIs with the necessary inputs that would prescribe certain standards and quality for the products.

Infrastructure The provision of adequate physical infrastructures are also equally important for the development and expansion of the SMIs. Currently, the locations of newly approved industrial companies, industrial estates and Free Trade Zones (FTZs) are mostly concentrated along the established West-Coast Corridor of Peninsular Malaysia. In terms of the number of newly approved companies for the period 1991-1993, Selangor, Johor, Pulau Pinang, Perak and Negeri Sembilan accounted for 75.1 per cent of the total,Perak and Negeri Sembilan accounted for 75.1 per cent of the total, with an accumulated RM34,387.2 million or 53.3 per cent of the total proposed capital investment. Conversely, Kelantan, Perlis, Pahang, Terengganu and Wilayah Persekutuan Labuan, accounted for only 4.1 per cent of the total approved companies during the same period, with an accumulated total of RM13,227 million or 19.7 per cent of the proposed investment.

If the SMIs were to utilize the full advantage of the external economies offered by the established industrial locations, then there is a higher tendency for the SMIs to be located close to or within the vicinity of the established areas. Such a decision may only result in the worsening of the existing regional disparity problems, whereby the rates of economic growth among the various states have been biased towards those along the West Coast of West Malaysia. Hence, the government has emphasized industrial dispersion within the various states as clearly stated in the Sixth Malaysia Plan, 1991-1995. In line with this concept, the state governments have now mobilized efforts to provide certain areas specifically for the operations of SMIs. The SMI entrepreneurs should not view this strategy as a limitation. In fact, this would enable the SMIs to take advantage of the situation by utilizing the available local resources

TABLE 10. Reasons for not borrowing from established implementing agencies

Reason	CGC	NEF	PUNB	No	Percent
Net/Shareholder assets less than stipulated	6	-	-	6	4.1
2 percent interest on Base Loan Rate is high	1	-	-	1	0.7
5 percent Guarantee Fees on loans guaranteed by CGC are felt too high	9	18	-	27	18.1
Difficult administrative procedures	8	17	-	25	17.0
High Cost involved	6	4	-	10	6.8
No collateral	-	2	-	2	1.4
Not qualified	-	18	-	18	12.2
Loan guaranteed is low for no-collateral cases	-	1	-	1	0.7
Limit of minimum loan set is too high	-	1	-	1	0.7
Business does not meet stipulated industry/export requirements	-	16	-	16	10.9
Projects are not viable	-	-	3	3	2.0
Lack of entrepreneurship values	-	-	8	8	5.4
Paid-up capital is less than RM250,000 as stipulated	-	-	13	13	8.8
Cannot afford to provide 20% own capital of total equity as stipulated	-	-	13	13	8.8
No detailed information	-	-	2	2	1.4
Knowledge about shares needed cannot be met	-	-	1	1	0.7
Other reasons	-	-	-	-	-
				147	100.0

Note: Most of the respective respondents gave more than one reason
Source: Based on survey data.

TABLE 11. Suggestions to established implementing agencies and commercial banks

Suggestion	CGC	PUNB	NEF	MTDC	MARA	Commercial Banks	Total	%
Abolish collateral for certain amount of Loans	-	-	-	-	4	-	4	7.7
Abolish/revise Guarantee Fees	4	-	1	-	-	-	5	9.6
Extend more loans	1	-	-	-	2	-	3	3.8
Reduce stipulated paid-up capital	-	1	-	-	-	-	1	1.9
Educate the staff with better business mentality	1	1	-	-	2	-	4	7.7
Give opportunity for all entrepreneurs	-	1	4	-	1	-	6	11.5
Reduce/revise interest rate	1	-	4	-	1	-	6	11.5
Lengthen repayment period	-	-	-	-	2	-	2	3.8
Accelerate the processing of loan	-	-	-	-	4	1	5	9.6
Reallocate the amount of borrowing depending on entrepreneurs' capability and industry types	-	-	-	-	3	-	3	3.8
Provide/disseminate clearer information of loan advantages	1	1	3	1	1	-	7	13.5
Easier administrative procedures	-	-	1	-	1	-	2	3.8
Lower collateral	-	-	1	-	-	-	1	1.9
Widen industrial priority (and not only concentrate on some selected industries)	-	-	-	1	-	-	1	1.9
Abolish/revise loan with guarantors	-	-	-	-	2	-	2	3.8
							52	100.0

Note: Most of the respondents gave more than one suggestion for respective agencies.

Sources: Based on survey data.

such as labour and other necessary inputs to improve their competitiveness. This policy will not only lessen the regional disparity among various states but will at the same time reduce some of the critical problems associated with rural-urban migration.

CONCLUSION

The SMIs have made considerable contributions to the industrial programmes in the country. This was speeded up by the government policies that are specifically designed to promote SMIs. In the current industrial programmmes, the SMIs are expected to complement the roles of the large scale industries. Various agencies – government and private bodies, are being assigned specific roles aimed at ensuring an effective effort for the development and expansion of SMIs. These include financial, management supervisory and R&D services.

Although the large scale industries are generally better performers, there are certain sub-sectors, especially those associated with resource-based industries, where the SMIs performed relatively better. SMI entrepreneurs should take this opportunity and utilize the available local resources to excel in their industrial activities. The future prospect for the SMIs is bright if they can maintain their competitiveness in both local and export markets.

NOTES

[1]Due to data deficiencies, fixed assets are used as a proxy for capital input in most capital productivity measurements. As a result, Kravis (1976) argued that capital productivity may yield higher values since output is only divided by the stock of fixed capital without taking into account the flow of capital services.

REFERENCES

Credit Guarantee Corporation (CGC). 1994. *Annual Report 1993*. CGC.

Dholakia, B.H. 1978. Relative Performance of Public and Private Manufacturing Enterprises in India, Total Factor Productivity Approach. *Economic and Political Weekly Review of Management* 2(13) : 4-11.

Ferguson, P.R. 1993. *Industrial Economics: Issues and Perspectives*. London: The Macmillian Press Ltd.

Field, R.M. 1983. Slow Growth of Labour Productivity in Chinese Industry 1952-1981. *China Quarterly 96: 641-644.*

Ishak Shari & Wook Endut. 1989. Industri Kecil Di Malaysia: Perkembangan, Struktur dan Masalahnya. In *Industri-Industri Kecil*, Ismail Mohd. Salleh, ed. Kuala Lumpur: AMK Interaksi Sdn. Bhd.

Kravis, I.B. 1976. A survey of International Comparisons of Productivity. *The Economic Journal* 86:1-44.

Malaysia. 1993. *Mid-Term Review of The Sixth Malaysia Plan, 1991-1995.* Kuala Lumpur: National Printing Department.

Malaysia. 1991. *Sixth Malaysia Plan, 1991-1995.* Kuala Lumpur: National Printing Department.

Malaysia. 1986. *Fifth Malaysia Plan, 1986-1990.* Kuala Lumpur: National Printing Department.

Rugayah Mohamed. 1991. *Comparative Performance of Public and Private Enterprises in Malaysia.* Ph.d. Thesis, University of Bradford.

Yanrui, Wu. 1993. Productive Efficiency in Chinese Industry. *Asian-Pacific Economic Literature* 7(2): 58-66.

Zhang, Delin. 1990. Analysis on the Changing Trend of Productivity in China. *Economic Research 1:44-53.*

Faculty of Economics and Administration
University of Malaya
Lembah Pantai
Kuala Lumpur