CHAPTER 5

MALAYSIAN ECONOMIC DEVELOPMENT, INDUSTRIAL POLICIES AND ENTREPRENEURIAL NETWORK ORGANISATIONS

After exploring the role, structure and characteristics of ENOs in the Asian economic development in Chapter 3, it is timely for this Chapter to investigate the position of similar entrepreneurial organisations in the Malaysian economy. The first section will show the macroeconomic performance of the economy with the significant contributions of the industrial sector. The next section follows by focusing on the government's commitment to promoting heavy industries. This effort has paved the way for the development of the Malaysian automobile industry.

The last few sections of this chapter also review promotional efforts of the government to foster ENO establishments in the entire economy and the automobile industry as well as the real performance of the organisational form.

5.1 Industrialisation Drive and Structural Changes

Malaysia has been able to achieve a remarkable economic development since its Independence in 1957. Its high growth rates in real GDP transformed itself from a less developed to a high ranking developing country. Its GDP growth rate in 1997 was still higher than that of Hong Kong (5.2 per cent), the Republic of Korea (5.5 per cent) and Taiwan (6.8 per cent); but comparable to Singapore with a 7.8 per cent growth rate (ADB 1998). Its real GDP and per capita GNP have increased dramatically since then, mostly generated from its external trade. With a considerably low level of inflation and unemployment rate, the people of this country enjoy a high level of socio-economic

prosperity, hence their standard of living. Table 5.1 indicates the selected macroeconomic performance of Malaysia.

In the early decades of Independence, Malaysia was characterised by a high dependency on the production of primary commodities for its economic development. High commodity prices, albeit fluctuating, in the international market granted advantages for this country to develop its economy. Foreign exchange inflow generated from commodity exports enabled the country to import consumer, intermediate and capital goods as well as food and non-food materials for local consumption and production.

The industrial policies in the 1950s and 1960s were directed at promoting firms, particularly foreign multinational corporations, to produce industrial products which were previously imported. By the end of the 1960s, an industrial policy was also introduced to promote export-oriented firms. However, the policy was not so much directed at accerelating economic growth but to preserve foreign interest in the country.

The recession that hit Malaysia in the early 1980s forced the government to reevaluate the existing policy on the country's overall economic development. The collapse of commodity prices in the international market plunged Malaysia into a long depression: the terms of trade deteriorated badly, current account deficits increased unprecedentedly, national and per capita incomes decreased significantly and both its national unemployment rate and external debt services increased (Siti Rohani 1990, Tan 1997). All-out industrialisation was inevitable. Since the mid-1980s, Malaysian economic policies were heavily geared toward the development of the industrial sector at the expense of the primary sector which ultimately changed the entire structure of the economy.

Table 5.1
Selected Macroeconomic Indicators of Malaysia

Year	Real GDP (RMb)	Real GDP Growth Rate (%)	GNP/capita (RM)	Inflation (%)	Unemployment (%)	Trade Balance (X-M in RMb)	BOP (RMb)
1976*	16.7	-	2050	-	6.8	2.2	1.5
1977*	18.4	-	2280	5.2	6.7	2.6	6.8
1978*	22.2	7.0	2490	5.0	6.3	3.1	6.9
1979	24.3	8.5	3200	3.6	5.6	6.7	1.9
1980	26.1	8.0	3650	6.7	5.3	4.6	1.0
1981	28.0	6.9	4022	9.6	5.7	-0.1	-1.1
1982	29.6	5.2	4079	5.8	5.2	-1.9	-0.6
1983	31.4	5.9	4304	3.7	6.0	1.4	0.06
1984	57.7	7.6	4867	3.9	6.3	6.9	0.3
1985	57.2	-1.0	4581	0.3	7.6	8.9	3.2
1986	57.9	1.2	4088	0.7	8.5	8.7	4.1
1987	60.8	5.2	4558	1.1	8.2	14.8	2.9
1988	66.3	8.7	5065	2.5	8.1	14.6	-1.1
1989	72.1	8.8	5558	2.8	7.1	10.6	3.3
1990	79.2	9.8	6176	3.1	6.0	5.2	5.4
1991	86.3	8.7	6796	4.4	4.3	-0.5	3.4
1992	93.1	7.8	7539	4.7	3.9	8.6	16.7
1993	100.8	8.3	8126	3.6	3.0	8.2	29.2
1994	109.9	9.2	8975	3.7	2.9	4.6	-8.3
1995	120.3	9.5	10058	3.4	2.8	0.2	-4.4
1996	130.6	8.6	11239	3.5	2.5	10.2	6.2
1997	140.7	7.7	12051	2.7	2.6	11.3	-10.9
1998	182.3	-7.5	12134	5.3	3.2	69.0	40.3
1999*	190.1	4.3	12369	3.0	3.0	74.1	26.1
2000**	199.6	5.0	12724	-	3.0	69.8	-

Note- * estimate
** forecast
Data on inflation rates from 1977 to 1986 refer to Peninsular Malaysia only
Source: Economic Report, Ministry of Finance (various issues)

Table 5.2, Table 5.3 and Table 5.4 show the structural changes in the Malaysian economy. The change is remarkable between the primary sector and the secondary sector, whilst the tertiary sector remains slightly unchanged. Prior to 1985, the contribution of the primary sector (particularly the agricultural sub-sector) to the GDP and the total value of exports was consistently above that of the secondary sector. The trend was reversed by the end of the 1980s, when the secondary sector (particularly the industrial sector) surpassed the contribution of the primary sector. Moreover, the share of the industrial sector in employment outpaced that of the primary sector by the mid-1990s.

5.2 Heavy Industrial Policy: Automobile Industry at Centre Stage

The heavy industrial policy was adopted separately from the previous import substitution industrialisation (1950s-1960s) and the export promotion strategy (since the end of the 1960s). Exemplifying the success of some advanced economies, specifically Sweden, Japan, Taiwan and the South Korea in their industrialisation drives emphasizing heavy industries that enabled them to achieve a more balanced and integrated development, the Malaysian government also took an earnest effort toward the development of heavy industries.

In June 1980, Heavy Industrial Corporation of Malaysia (HICOM) was established to plan, implement and manage projects which were classified as heavy industries - a set of industries that required a huge capital investment and a long gestation period. Including in these industrial projects were iron and steel, automobiles, cement, petrochemicals, paper products and general engineering (Malaysia 1981).

Table 5.2
Share of Gross Domestic Product by Sector of Origin, 1965-2000 (Percentage)

Sector	1965*	1970	1975	1980	1985	1990	1995	2000
Primary	40.5	37.2	32.2	26.8	30.4	28.4	21.0	18.4
Agr, Forestry and Fishing	31.5	30.8	27.7	22.2	20.3	18.6	14.0	12.8
Mining and Quarrying	9.0	6.3	4.6	4.6	10.1	9.8	7.0	7.0
Secondary	14.5	17.3	20.2	25.0	24.3	30.4	36.7	35.4
Manufacturing	10.4	13.4	16.4	20.5	19.1	26.9	32.3	34.7
Construction	4.1	3.9	3.8	4.5	5.1	3.6	4.4	3.5
Tertiary	45.0	41.9	46.5	45.0	44.0	42.6	45.2	46.2
Electricity, Gas and Water	2.3	1.9	3.7	2.3	1.7	1.9	2.3	2.9
Transport, storage and communications	4.3	4.7	6.2	6.5	6.4	6.9	7.5	8.2
Wholesale, retail, hotels and restaurants	15.3	13.3	12.8	12.6	12.7	11.1	12.9	12.8
Finance, insurance, real estate and business services	6.0	8.4	8.5	8.2	8.8	9.8	11.1	13.6
Government services	6.2	11.1	12.7	13.0	12.3	10.8	9.1	9.9
Other services	10.8	2.5	2.8	2.5	2.2	2.1	2.1	2.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: *Data for West Malaysia only.
Source: Various Five-Year Development Plans

Table 5.3
Share of Selected Goods in Total Value of Exports, 1970-1998 (Percentage)

Exported Goods	1970	1975	1980	1985	1990	1995	1996	1997	1998
Primary Commodities	95.8	76.3	76.3	63.7	38.0	17.4	16.3	15.4	14.1
Rubber	11.8	23.7	17.3	10.7	4.0	2.3	1.9	1.4	1.0
Tin	75.0	14.1	9.4	4.8	1.2	0.3	0.3	0.2	0.2
Sawn logs	4.4	7.8	9.8	8.1	5.3	1.3	1.2	1.1	0.7
Sawn timber	1.4	5.2	5.0	3.3	4.1	2.2	1.6	1.3	0.9
Palm oil	1.8	15.4	9.7	11.5	5.8	5.8	5.0	5.1	6.4
Petroleum (including LNG)	1.4	10.1	25.1	25.3	17.6	5.5	6.3	6.3	4.9
Manufactured Products	4.0	23.6	23.5	36.3	62.1	82.5	83.7	84.6	85.9
Electrical and electronics	0.4	5.9	11.3	18.9	35.1	54.3	55.1	56.2	58.5
Transport equipment	0.2	0.8	0.8	1.6	2.6	2.9	2.5	2.3	2.9
Food	0.6	3.2	1.8	2.2	2.6	1.8	1.7	1.8	1.7
Beverages and tobacco	0.1	0.3	0.1	0.1	0.1	0.2	0.3	0.4	0.3
Textile, clothing and footwear	0.2	2.6	3.0	3.8	5.2	3.7	3.7	3.6	3.4
Wood products	0.6	2.4	1.8	1.1	1.8	2.8	3.2	3.1	2.2
Rubber products	0.1	0.5	0.3	0.3	1.8	1.8	1.9	1.9	2.1
Paper and paper products	0.04	0.1	0.1	0.2	0.6	0.4	0.4	0.4	0.3
Petroleum products	1.1	1.2	0.7	3.0	1.7	1.8	1.7	1.6	1.1
Chemical products	0.2	1.0	0.7	1.8	1.9	3.5	3.5	3.8	3.8
Non-metallic mineral products	0.1	0.3	0.2	0.4	1.0	0.9	0.9	0.8	0.8
Metal products	0.2	0.7	0.9	1.0	2.1	2.6	2.6	2.7	3.0
Optical and scientific equipment	0.02	3.9	0.5	0.7	1.4	1.6	1.6	1.8	1.7
Toys and sporting goods	0.01	0.2	0.2	0.5	1.3	1.2	1.3	1.1	1.0
Other manufactures	0.1	0.5	1.1	0.7	2.9	3.0	3.3	3.1	3.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Some figures are not equal to 100 due to rounding errors
Source: Bank Negara Malaysia Statistical Bulletin, 1993 and 1999

Table 5.4
Share of Employment by Sector of Origin, 1965-2000 (Percentage)

Sector	1965*	1970	1975	1980	1985	1990	1995	2000
Primary	54.7	53.1	47.4	42.3	32.1	28.3	19.5	16.5
Agr, Forestry and Fishing	52.1	50.5	45.3	40.6	31.3	27.8	19.0	16.1
Mining and Quarrying	2.5	2.6	2.1	1.8	0.8	0.6	0.5	0.4
Secondary	11.9	15.4	17.9	20.9	22.8	25.9	34.6	36.0
Manufacturing	8.4	11.4	13.5	15.8	15.2	19.5	25.7	27.5
Construction	3.5	4.0	4.4	5.2	7.6	6.4	8.9	8.5
Tertiary	33.5	31.5	34.7	36.7	45.1	45.7	46.0	47.5
Electricity, Gas and Water	0.6	0.8	0.8	1.0	0.8	0.7	0.8	0.9
Transport, storage and Communications	3.9	3.4	3.9	3.8	4.3	4.3	5.0	5.2
Wholesale, retail, hotels and Restaurants	11.1	10.9	11.9	12.7	16.3	18.7	16.4	16.8
Finance, insurance, real estate and business services	n.a	6.0	8.4	8.5	8.2	8.8	9.8	11.1
Government services	n.a	6.2	11.1	12.7	13.0	12.3	10.8	9.1
Other services	17.9	3.8	4.2	4.3	5.6	5.7	8.3	9.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: *Data on West Malaysia only.
n.a- Data are not available
Source: Various Five-Year Development Plans

Heavy industries, such as automobiles, iron and steel and cement were expected to be able to transform Malaysia into a newly industrialised country. Hence, it justifies the government to support such industries strongly (Jomo 1990).

The first phase of the heavy industrial projects was launched in the early 1980s, but the actual operation started at the middle of the same decade. The iron and steel project was launched with the establishment of Perwaja Terengganu Sdn. Bhd, involving a joint venture between Perbadanan Memajukan Ikhtisad Negeri Terengganu and a Japanese consortium led by Nippon Steel Corporation. Two cement plants were also developed in the decade. One was a joint venture project between HICOM, the Kedah State Development Corporation, Nichirin Holdings Sdn. Bhd. (a Japanese company) and Temasek Holding Ltd. (a government company of Singapore) at Langkawi, Kedah. The other project was in Perak, a collaborative project between the Perak State Development Corporation and a Korean company.

Unfortunately, the performance of heavy industries was adversely affected by the economic recession which hit the country sometimes about the same period. The existing industrial policy was revised in collaboration with the United Nation's Industrial Development Organisation (UNIDO). The First Industrial Master plan (IMP, 1986-1995) was introduced in 1985 to revitalise the industrial sector. An all-out industrialisation drive was introduced by the policy, incorporating all industrial strategies to include import substitution, export promotion and heavy industrialisation.

Pertinent to heavy industrialisation, the IMP argued that the present issue was no longer on whether Malaysia should or should not involve in heavy industries, but the prime issue was on what types of heavy industries should be developed.[1] This indicates

that the future development of heavy industries is more selective, owing to the fact that the industry requires extensive capital, technology and human resources.

Nonetheless, most heavy industries undertaken by this country have been running in excess capacity. Given the nature of the industry itself, which requires massive investments and a long gestation period, the private sector has been reluctant to involve itself in it from the outset (Jomo 1990). In the 1990s, heavy losses incurred by some heavy industrial projects were obvious. For instance, Perwaja Terengganu Sendirian Berhad incurred a pre-tax loss amounting to RM376.5 million for its financial year ended at 31 March 1995. Huge losses incurred by the project that reached billions of ringgit were debatable till recently.

According to the former Minister of Finance, the company's losses were due to high expenses on depreciation and interest rates and exacerbated by frequent cessation of its operation (Utusan Malaysia, 18 Oktober 1995). The reluctance of the private sector to get involved in such heavy projects compels public enterprises to take the lead in selective and strategic heavy industries, namely the automotive, petrochemical, iron and steel and cement industries (Malaysia 1991a).

Among the heavy industrial projects, the automobile industry has been continuously at the heart of government policy. Actually, Malaysia has long been involved in the automobile industry, but the emphasis then was different. During the first phase of the industrialisation drive (the Import Industrialisation Strategy), the emphasis was on assembly activities for both passenger and commercial automobiles in order to reduce import bills. The emphasis changed tremendously in the 1980s when government policy was geared towards building an industrialised nation that required giving special attention to heavy industrialisation. The major thrust of the Malaysian

automobile industry is to develop its own automobile industry by upgrading local capability in making parts and components, particularly through small and medium firms (UNIDO 1991).

The first national automobile project was introduced in 1983 through the establishment of Perusahaan Otomobil Sdn. Bhd (PROTON), a joint venture company formed between HICOM, Mitsubishi Corporation (MC) and Mitsubishi Motor Corporation (MMC). The first car, the Proton Saga, rolled out of the plant in Batu 3, Shah Alam in 1985. It now produces a number of car models and variants that include the Iswara, Perdana, Wira, Satria, Putra and, most recently, the Waja.

The second national car project followed with the establishment of Perusahaan Otomobil Kedua Sdn. Bhd. (PERODUA) in 1992. Its two wholly-owned subsidiaries, Perodua Manufacturing Sdn. Bhd. and Perodua Sales Sdn. Bhd, were set up to carry out manufacturing and distribution activities respectively. Its manufacturing plant is located in Sungai Choh, Mukim Serendah, Rawang, Selangor. Its first car, the Perodua Kancil, entered the local market on 29 August 1994. PERODUA now produces various models and variants that include small-medium passenger cars and the two multi-utility-vehicles (MUV) - vans and jeeps.

5.3 Power Coercion in the Automobile Industry

Since the implementation of the National Economic Policy (NEP) in 1971, the government has played a coercive role in shaping the contour of the Malaysian automobile industry through two principal policy measures: namely investment and protective measures. All policy measures have been directed at protecting the overall

industry and, more importantly, at preserving the interest of the Bumiputera. The ultimate policy direction of the government is to shape the industry to resemble the Japanese auto ENO.

5.3.1 Investment Measures

The government has strongly promoted the participation of Bumiputeras in the automobile industry through direct investments. Torii (1991) reveals that this measure involves both existing and new automobile firms. Since the 1970s, through the licensing policy, the government would approve licences for new assemblers subject to the condition that the majority of shares must be allocated to Bumiputeras or assembly plants operate in rural or gazetted areas. As a result, the investment of the State Economic Development Corporations (SEDCs) - the core government arms to promote economic development - particularly in Sabah and Sarawak appeared significantly in new assembling firms, namely Sarawak Motor Industries Sdn. Bhd. and Kinabalu Motor Assembly Sdn. Bhd. The government-linked Bumiputera firms also invested substantially in Tatab Industries Sdn. Bhd., a new auto-assembler in Pahang.

Another approach to investment was undertaken by Pernas Sime Darby Holdings (PSD Holdings), a holding company which was established in 1972 and controlled by two government-backed companies, PERNAS and Sime Darby Berhad. By 1987, the company through its aggressive investment measures acquired a number of auto sales companies, including AMIM Holdings Sdn. Bhd., Land Rover (M) Sdn. Bhd., Ford Concessionaires Sdn. Bhd., Pernas Sime Darby Motors Sdn. Bhd. and Auto Bavaria Sdn. Bhd., mostly with 100 per cent equity. It also had a majority equity in the

Associated Motor Industries (M) Sdn. Bhd., an assembler of passenger and commercial vehicles[2] and a 100 per cent equity in the IT International Sdn. Bhd., a manufacturer of car tyres.

In another move, government trust agency - Permodalan Nasional Berhad (PNB) -and individual Bumiputeras acquired shares in two Chinese-dominated companies: UMW Toyota Motor Sdn. Bhd. which in turn owned a number of automobile assembling and parts manufacturing firms as well as sales arms; and Oriental Assemblers Sdn. Bhd., an assembler firm. But the Bumiputera equity in each of the two companies was less than 50 per cent.

Of significance is the government investment in the first national automobile project. The government-backed company, HICOM, invested 70 per cent of the total equity, whilst the remaining shares were taken up by MC and MMC with 15 per cent equity each. In 1992, Perusahaan Otomobil Sdn. Bhd was listed on the Kuala Lumpur Stock Exchange (KLSE) and restructured as the Perusahaan Otomobil Nasional Berhad (still using the same acronym - PROTON). As of December, 1996 its shareholders were the HICOM Holdings Berhad (with 26.0 per cent shareholding), Khazanah Nasional Berhad (16.50 per cent), Mitsubishi Corporation (8.06 per cent), Mitsubishi Motors Corporation (8.06 per cent) and other local and foreign investors with 41.38 per cent shareholding (Malaysia 1998).

The proposed Bumiputera investment in the second automobile firm, the PERODUA, in 1992 was undertaken by PNB Equity Resource Corp. Sdn. Bhd. (with 10 per cent shareholding) and Med-Bumikar Mara (MBM) Sdn. Bhd. (20 per cent). The remaining shares were allocated to UMW Corp. Sdn. Bhd. (38 per cent), Daihatsu (M)

Sdn. Bhd. (5 per cent), Daihatsu Motor Co. (Japan) Ltd (20 per cent) and Mitsui & Co. Ltd. with 7 per cent shareholding (in Mohd. Rosli 1994a). The share structure of the company in the latest development remains the same; but there are discussions on the equity restructuring to enable the Japanese (Toyota-owned) Daihatsu holding more shares for strategic reasons (New Straits Times, 9 August 2000).

Another form of investment promotional measure is through various incentives provided by the Promotion of Investment Act 1986. Pioneer Status and Investment Tax Allowance[3] are the two lucrative tax incentives granted to those firms which are involved in promoted activities or products that are, from time to time, determined by the Ministry of International Trade and Industry (MITI). As of January 1998, there were 25 activities and products included in the general list as promoted industries. For the automobile industry, its eligibility for incentives is listed under the transport equipment industry and supporting products or services (see Appendix C).

5.3.2 Protective Measures

The national automobile industry is crucial to be protected given the fact that the industry is still in its infancy. Some protective measures have been introduced to protect not only automobile producers, but also local parts suppliers. It is hoped that the measures would enable producers and suppliers to prepare themselves as well as to reorganise their position and eventually to compete internationally.

5.3.2.1 Tariff and Non-Tariff Barriers

Tariffs have been assumed an effective measure and widely used to promote industrial activities in Malaysia since the 1960s (Malaysia 1963). Severe competition

confronting new industries, lack of experience in the industrial sector (Malaysia 1963), high production cost in the country relative to other countries, lack of skills, limited domestic market, consumer preference for imported goods and the high cost of capital (Malaysia 1969) have added to the need for Malaysia to impose such a protective measure. In 1966, the first import duties were imposed on all completely-built-up (CBU) imported cars.

Protective measures were higher during the import substitution phase (1950s-1960s), but were lower during the export promotion phase (since the end 1960s). Table 5.5 and Table 5.6 show the nominal rate of protection (NRP) and the effective rate of protection (ERP) for selected industries.[4] Both the NRP and the ERP increased significantly in the 1970s compared to the 1960s. However, in 1987, the average rate of both the NRP and ERP decreased slightly.

While other industries were showing a decrease in protection in the 1980s when compared with the 1970s, the transport equipment industry showed an increase in the rate of protection (Table 5.5 and Table 5.6). In 1987, the NRP and ERP for the motor vehicle industry alone were 44 and 177 respectively (Table 5.7). This trend is related to the present industrial policy which is to promote the national automobile industry, both in automobile production and the component-system manufacturing.

The 1998 Budget increased further the rates of import duty on imported automobiles, whether in the form of CBU or CKD, to discourage their importation, while at the same time encourage the national automobile industry. Table 5.8 clearly reveals that the import duty on CBU and CKD for cars 2000c.c and above increased significantly simply to promote auto-assemblers to source out parts locally. The

Table 5.5
Nominal Rate of Protection of Selected Industrial Products, 1963-1987 (Percentage)

Selected Products	1963	1965	1970	1973	1978	1987
Processed Food	9.0	11.0	-	17.3	17.2	14.7
Beverage and Tobacco	21.0	46.0	-	159.5	146.7	111.8
Construction Materials	6.0	7.0	11.0	16.7	8.9	32.3
Intermediate Goods 1	4.0	4.0	-4.0	3.2	4.7	4.9
Intermediate Goods 2	14.0	13.0	11.0	21.2	24.2	21.8
Undurable Consumer Goods	14.0	14.0	12.0	28.2	24.2	8.0
Durable Consumer Goods	1.0	1.0	26.0	54.6	54.8	23.3
Machine	5.0	5.0	20.0	28.7	22.3	8.7
Transport Equipment	-	-	25.0	0.7	0.0	20.3
Average Rate	9.3	12.6	14.4	36.7	37.9	27.31

Source: Mohamed Aslam (1993), Table 8.1, p.312.

Table 5.6
Effective Rate of Protection of Selected Industrial Products, 1963-1987 (Percentage)

Selected Products	1963	1965	1970	1973	1978	1987
Processed Food	6.0	7.0	-	16.9	24.2	234.0a (37.2)
Beverage and Tobacco	17.0	73.0	-	105.3	44.1	357.5b (140.3)
Construction Materials	7.0	9.0	73.0	3.9	22.8	64.0
Intermediate Goods 1	8.0	9.0	-19.0	-7.2	0.1	4.5
Intermediate Goods 2	27.0	25.0	52.0	42.7	41.6	54.6
Undurable Consumer Goods	19.0	20.0	17.0	42.0	85.2	19.8
Durable Consumer Goods	-11.0	-5.0	103.0	193.9	172.6	33.0
Machine	6.0	6.0	64.0	82.7	38.6	5.3
Transport Equipment	-	-	164.0	- 7.3	-5.4	46.8
Average Rate	9.9	18.0	64.9	52.5	47.1	91.1c (45.1)

Note: a Not include preserved fish industry and other industries
b Not include tobacco product industry
c Not include a and b
Source: Mohamed Aslam (1993), Table 8.2, p.313.

Table 5.7
Some Protected Industries in 1987 (Percentage)

ISIC Code	Industries	NRP	ERP
31140	Canning, preserving and processing of fish, crustacea and similar food	31	1069
31330	Malt liquors	90	199
31340	Soft drinks and carbonated water	57	186
31400	Tobacco manufacturer	280	1009
33200	Furniture and fixtures, except primarily of metal	54	143
35600	Plastic products, n.e.c.	37	184
36921-36922	Hydraulic cement, lime and plaster	40	109
38430	Motor vehicle industry	44	177

Source: Mohamed Aslam (1993), Table 8.3, p.314.

Table 5.8
Rates of Import Duty on Various Automobiles by Engine Capacity (Percentage)

Engine Capacity	Cars		4WD and MPV		Van	
	CBU	CKD	CBU	CKD	CBU	CKD
Prior-1998 Budget						
< 1,800 cc	140	42	50	5	35	5
1,800 - < 2,000 cc	170	42	50	5	35	5
2,000 - < 2,500 cc	170	42	50	5	35	5
2,500 - < 3,000 cc	200	42	50	5	35	5
3,000 cc and above	200	42	50	5	35	5
Post-1998 Budget						
< 1,800 cc	140	42	60	10	42	5
1,800 - < 2,000 cc	170	42	80	20	55	10
2,000 - < 2,500 cc	200	60	150	30	100	30
2,500 - < 3,000 cc	250	70	180	40	125	40
3,000 cc and above	300	80	200	40	140	40

Note: The rate of import duty for new CBU diesel cars is 120%; whilst the rate for used/old imported diesel cars is similar to petrol driven car.
Source: Readapted from the 1998 Budget.

counter-cyclical budget that was introduced during the economic crisis at the end of 1990s meant a greater protection for the national automobile industry, a policy measure that was against the spirit of globalisation under the WTO.

Non-tariff barriers, such as licensing and import quotas (approved permits), are also enforced in the automobile industry. The first import licensing requirement for all distributors and dealers was also introduced in 1966. In 1967, assembly licences were issued to several firms for the assembly of passenger and commercial vehicles. Import licensing at the early stage was confined to imported CBU vehicles, but it was extended to CKD vehicles in the later period. For the automobile industry, MITI is the authority responsible for approving licences (see Appendix D for the list of products which are subject to import licensing).

Pertinent to the import quota, a 10 per cent import quota was imposed on CBU passenger cars and commercial vehicles from 1989 to 1990. The quota was reduced by 1 per cent a year from 1991 to remain at 5 per cent by 1995 (MACPMA 1996). For commercial vehicles, the quota is separated equally between dual purpose vehicles (7-9 seater vehicles) and other types of commercial vehicles.

5.3.2.2 Local Content Policy

Besides the tariff and non-tariff barriers, a local content requirement policy was also introduced to protect the national automobile industry. The programme sets a minimum value of local parts that automobile producers have to source from local parts suppliers to be assembled in their end automobile units. In this line, the 1980 Mandatory Deletion Programme prohibits local car producers, or franchisors from importing all automobile parts and components listed as "mandatory deleted components" for use in

local automobile assembly. As shown in Table 5.9, the minimum local content, as revised in 1991, is to increase progressively during 1992-1996.

The listed items comprise 13 components for motorcycles and 30 components for passenger and commercial vehicles (see the items in Appendix E). Recently, these local items have constituted over 70 per cent and 50 per cent for PROTON and PERODUA respectively and about 30-40 per cent for other passenger and commercial vehicles (MIDA, unpublished). The calculation of the local content is based on gross value; but the percentage is much lower if it is based on net value (see Chapter 6).

In the case of which the assemblers purposely use such imported items, the cost of the imported items will be deducted from the approved "net selling price" of the assembled automobiles (MACPMA 1996). Some exceptional cases to the regulation are provided only if the Joint Technical Committee or Local Content (JTCLC) chaired by the Chairman of Malaysian Automotive Components Parts Manufacturers' Association (MACPMA) is satisfied that locally available components are not suitable for the particular model.

5.4 Promotional Efforts for ENO Development: A Special Emphasis on Small and Medium Firms

Prior to the mid-1970s, most developed countries (including the U.K and U.S) believed that the centralisation and concentration of economic activities in the hands of large MNCs would bring about competitiveness. These corporations were undoubtedly responsible for most capital investment, technology transfer, mobilisation of resources such as raw materials, components, investment goods, entrepreneurial and managerial

Table 5.9
Local Content Programme for Passenger & Commercial Vehicles, 1992-1996 (Percentage)

Auto-Type	Local Content Target				
	1992	1993	1994	1995	1996
Category 1					
Passenger vehicle up to 1,850cc	30	40	50	55	60
Category 2					
Passenger vehicles 1,851- 2,850cc					
Commercial vehicles up to 2,500 GVW	20	30	35	40	45
Category 3					
Passenger vehicles above 2,851cc	Localisation of				
Commercial vehicles above 2,500 GVW	mandatory deletion items only				

Source: MACPMA (1996), MIDA (unpublished)

skills as well as marketing know-how. Together, they brought about significant impact on the economic systems of their host (Dhingra 1991) and home countries. As a result of this belief, most of their SMFs were consistently integrated and incorporated, either through mergers or acquisitions, into large-scale entrepreneurial organisations allowing the sector to be involved in larger operational activities. Thus, the relative importance of SMFs in the economy contracted steadily until the early 1970s.

The proliferation of economic problems, such as unemployment and inflation as well as the decline in investment confronting those countries as a result of the 1974 oil shock have totally changed the perception of governments and scholars in a large number of developed and developing countries about the potential importance of SMFs (United Nations 1993). Hence, irrespective of national economic status, the role of governments in most non-socialist countries in enhancing the development of SMFs became more visible.[5]

In Malaysia, the effort to develop SMFs[6] has been obvious since the introduction of the New Economic Policy (NEP) in 1970. However, the Malaysian experience in the promotion of the sector has changed its approach concomitant with the contemporary industrial policy and emphasis. Toward the end of the industrial policy, the government approach in SMF development has been to integrate this sector into a broader context of industrial linkages, or what the present study terms the ENO framework. This policy orientation involves the entire as well as specific industries.

5.4.1 Promotion in the Entire Industry

SMFs are expected to be an important sector in any economy. In Malaysia, the government expectation of the important contributions of SMFs[7] is clearly reflected in

almost all the five-year development plans, particularly since the NEP came into effect in 1971. Prior to the NEP, both the First and the Second Five-Year Malaya Plan as well as the First Malaysia Plan (1MP) definitely failed to recognise the potential role of this sector.

The First and the Second Five-Year Malaya Plan did not even mention small or medium firms. Although the First Malaysia Plan (1MP) was to support the small firms (particularly in the financial areas) the Plan completely failed to perceive the potential contributions of the sector. On the contrary, all the Plans under the NEP (1971-1990) and later under the National Development Plan (NDP, 1991-2000, also known as the Second Outline Perspective Plan, SOPP) highlighted consistently the important contributions of SMFs.

The government expected SMFs to bring about diverse advantages to the Malaysian economy. The Second Malaysia Plan (2MP) through the SOPP (1991-2000) proposed 11 contributions that would be offered by the sector (Table 5.10). The 2MP and the Mid-Term Review of the 2MP emphasised the promotion of small scale firms as an important area of attention in the manufacturing sector due to their increasingly important role in industrial development.

The sector was expected to contribute to output growth, support and complement larger firms by supplying intermediate inputs and component parts, utilise domestic raw materials in larger volume, generate employment, provide a practical ground for developing potential entrepreneurial talent and leadership and for industrial dispersal which would improve income distribution as well as develop and modernise the rural sector. The Third Malaysia Plan (3MP) reiterated three important roles which could be expected from small scale firms - to generate more employment, utilise

Table 5.10
Expected Contributions from SMFs from the Government View Point

Expected Contributions from SMFs	2MP	3MP	4MP	5MP	6MP	SOPP
1. Stimulating output growth and value added of the manufacturing sector	x		x	x	x	x
2. Industrial linkages- complementary and feeder services to larger firms by supplying intermediate inputs and components	x	x	x	x	x	x
3. Greater utilisation of domestic raw materials	x	x				
4. A practical venue for the dispersal of industries	x					
5. Broadening industrial base for the Bumiputera			x			
6. Generating employment opportunities	x	x	x	x	x	x
7. Improving income distribution	x				x	
8. Developing and modernising rural sector, including handicraft industries	x				x	
9. A practical venue for developing potential entrepreneurial talent and leadership	x		x			
10. Mobilising individual savings for investment			x		x	
11. Eradicating poverty and restructuring of society			x			

Note: -All the Mid-Term Malaysia Plans were incorporated into each plan.
-2MP stands for The Second Malaysia Plan; 3MP, The Third Malaysia Plan; 4MP, The Fourth Malaysia Plan; 5MP, The Fifth Malaysia Plan; 6MP, The Sixth Malaysia Plan; and SOPP, The Second Outline Perspective Plan.
-There has been no statement about the expected contribution from the SMFs to the economy in the Seventh Malaysia Plan 1996-2000. Several contributions were only mentioned indirectly.

Source: Tabulated from the various Five-Year Development Plans.

domestic raw materials and supply parts to larger firms. The Fourth Malaysia Plan (4MP) maintained the vital contributions of small scale firms in the development of industrial output growth and entrepreneurship as well as in the employment generation and complementary role to larger firms; it expected other roles, namely to broaden industrial base of Bumiputera, mobilise individual savings for investment, eradicate poverty and restructure the society.

The Fifth Malaysia Plan (5MP) conceded that the role of small firms was substantial. It would have a bright future to create inter-industry linkages. The Mid-Term Review of the 5MP and the Sixth Malaysia Plan (6MP) as well as the Mid-Term Review of the 6MP treated the SMFs quite differently. For the first time in Malaysian history, both the SMFs were combinely expected to play a greater role in the economy. In the words of the Mid-Term Review of the 5MP and the 6MP respectively:

> ".....the small and medium industries were crucial not only as a good source of employment absorption and the creation of higher value-added but of greater importance, SMI (*SMFs*) are expected to provide the much linkages and support to the heavy and large industries, as well as to industries located in the Free Trade Zones." (Malaysia 1989: 193).

> "The development of SMI (*SMFs*) will contribute towards a more dynamic and competitive industrial sector through its supportive and complementary role. Its development and modernization will also spearhead efforts to broaden and deepen the structural base of manufacturing sector. In addition, 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 1991a: 143).

The Seventh Malaysia Plan (7MP), however, did not state directly the contributions expected from the sector. Probably, what had been stated in the SOPP was

still applicable to the Plan. The expectation was not much different from several earlier plans, but some expectations were more specific. The SOPP stated that the SMFs were:

> "an important and viable vehicle for industrial expansion and the creation of inter-industry linkages and support. The SMIs (*SMFs*) are expected to contribute significantly in terms of value added and labour absorption in the manufacturing sector to the level of 40 per cent and 50 per cent respectively, within the next decade from the current position of 20 per cent and 30 per cent." (Malaysia 1991b: 133).

Indeed, all the five-year development plans since the implementation of the NEP touched on the important role of SMFs in industrial linkages, or ENO development (see Table 5.10). However, when the industrial policy is examined deeper, one would find that the emphasis has been quite different prior to the first half of the 1980s economic recession and the period after. Based on the contemporary national objectives and needs, the evolution of SMF-related policies could be divided into three phases: the first phase (1958-1970), the second phase (1971-1985) and the third phase (1986-2005).

5.4.1.1 The First Phase (1958-1970)

Prior to 1970, the post-colonial Malayan (later in 1963, Malaysian) government adopted an import substitution industrialisation strategy. During the industrial phase, the economy heavily depended upon market forces (*laissez-faire* mechanism). Large foreign firms were attracted by the 1958 Pioneer Industrial Ordinance to establish their manufacturing production, packaging and assembly plants for producing industrial goods, which were precedingly imported (Jomo 1990), for local consumption. Direct and indirect subsidies, protective tariffs and quotas were implemented merely to promote such industries.

Policy measures, which heavily favoured large foreign firms, particularly the British, neglected small local firms. Therefore, not surprisingly that this small sector was only significant in terms of the number of establishments; but, it merely contributed to 14 per cent of the total net output of the manufacturing sector (Malaysia 1965).[8]

An all-out industrialisation drive was not in a great need during the time, owing to a commodity boom in rubber and palm oil. In addition, if the promotion of small firms had been integrated into the national industrialisation policy, it would have led to a long domination of the Chinese in the manufacturing sector. As such, the economic imbalances between the Malays and Chinese would be further exacerbated (Fong 1990).

On the contrary, perhaps as an offset to Chinese domination, the Malays were promoted to participate in the modern sector, namely in commercial and industrial activities. Small firms were expected to provide an initial gateway for the participation of the Malays in the modern sector. The promotion of small firms was seen as a strategy to preserve native interests. Thus, Malaysia became one of the countries promoting its small firms in accordance with the equity-oriented approach (Sit 1982), but within the context of inward-looking or domestic-oriented development.

Nevertheless, the effort was far from enough. The economic imbalances were inevitable since the Malays had long been neglected by the colonial power. The "invisible hand" which was still strongly playing a role during the early years of Independence to inevitably create such economic imbalances. This situation, heated by a political crisis, eventually burst into the "black tragedy" of the May 13, 1969 (a racial riot) in the modern history of Malaysia.

5.4.1.2 The Second Phase (1971-1985)

The 1969 racial riot which broke out as a result of socio-economic tensions among ethnic groups, specifically between Malays and Chinese, cautioned the government of the importance of its intervention in the economy to rectify the socio-economic imbalance between the two major ethnic groups. This was accelerated by the introduction of the NEP in 1970. Besides promoting export-oriented industrialisation through the 1968 Investment Incentives Act, the Policy also seriously promoted the participation of Bumiputeras in the modern sector.

Owing to the important contribution of the manufacturing sector to the economy as well as its ability to foster inter-organisational networks, the industrial policy after the implementation of the NEP, has largely been devoted to promote the participation of Bumiputeras in SMEs. Industrialisation was used as a vehicle to achieve NEP objectives.[9] In addition, with the introduction of the heavy industrial policy and the First Industrial Master Plan in the 1980s, Bumiputera's SMEs were expected to play a greater role as supporting firms to heavy-industry projects initiated by the first national automobile company, PROTON.

Small industries based on their potential were, amongst others, recognised as an important sector in achieving more balanced geographic distribution of industrial activity (Malaysia 1971) as well as achieving NEP targets. It was assumed to be a vital sector for Bumiputeras to be first involved in the modern sector. Hence, they would meet not only the equity target as set by the NEP, but also the demand for domestic market. Therefore, the promotion of small firms was, as earlier, heading more towards an equity-oriented, inward-looking approach. With strong intervention of the

government, the working mechanism in the economy, on one side, changed from an "invisible hand" (market forces) to a more "visible hand" (planned economy with heavy government intervention).

The achievement of Bumiputeras in acquiring corporate wealth over the first five-years of the NEP was unfavourable (Fong 1990). The government believed that in order to create a viable and thriving Malay commercial and industrial community, partnership with non-Malays was, among others, an essential measure. For this purpose, the 1975 Industrial Co-ordination Act (ICA) was enacted. The Act required all new and existing manufacturing enterprises with an equity of more than RM250,000 or a full-time labour force of more than 24 employees to apply for a licence from the Licencing Officer (MIDA 1994).[10]

To be granted approval, a company must comply with the NEP requirements where at least 30 per cent of its equity and employment should be allocated to the Bumiputera. The ICA, however, increased its equity requirement to RM1.0 million and above (or a full-time labour force of more than 49 employees) in 1985 and subsequently to RM2.5 million or above (or engaging 75 or more full-time workers) in 1986 due to the adverse effects of recession on the economy.[11] Some manufacturing activities, such as the milling of oil palm fresh fruits into palm oil, the production and processing of natural rubber of all types and the milling of paddy into rice, were exempted from the Act (Economic Report 1993).

The Heavy Industrial Policy initiated in the early 1980s had little changes in the policy towards SMFs. The Mid-Term Review of the Fourth Malaysia Plan (1981) still emphasised the government's commitment to conform with the NEP objectives - to

encourage the participation of Bumiputera in some industries, particularly metal-based products.

5.4.1.3 The Third Phase (1986-2005)

When recession hit Malaysia in the early and the mid-1980s, existing and new direct investments, especially from large foreign MNCs were severely deteriorated, directly leading to the contraction of the national income. Acknowledging the adverse effects of heavy dependence on foreign capital and the imbalance created by the large firms, the government conceded that domestic capital formation through SMFs had to be intensified. In addition, compared to some NIEs such as Taiwan, Hong Kong and the Republic of Korea, Malaysia lagged behind in the promotion of its SMFs.

The Industrial Master Plan (IMP) introduced in 1985 recognised that the existing policy measures such as the Pioneer Status, had long discriminated small-scale firms because the incentive offered was mainly linked to the size of investment and employment. At the same time, industrial estates did not sufficiently cater for the needs of the small sector (Malaysia 1984).

The IMP proposed that Malaysia should gear towards developing resource-based industries which were substantially carried out by local SMFs in consonance with export-oriented industrialisation in addition to non-resource-based industries which had long been developed by foreign MNCs. Although the IMP fully supported the creation of the Bumiputera Commercial and Industrial Community (BCIC) through the promotion of small firms, it stressed that the sector should be developed as an all-out national commitment and not merely to preserve the interest of a certain group. Such a

policy approach would bring about spillover effects to the Bumiputera and would further strengthen the development of Bumiputera entrepreneurship.

The IMP indicated the change in the government policy approach, albeit at the expense of national aspiration, from promoting SMFs merely for the interest of Bumiputeras to the interest of the entire economy. The SMF policy approach was, for the first time, geared towards an all-out industrialisation (Fong 1990) with outward-looking or export-oriented approach (MITI 1985). The new approach treated SMFs as a potential engine of development, particularly for the industrial sector in the future. The policy on SMFs became an integral part of the national industrialisation policy.[12] The government's emphasis on small firms has been shifted to the expansion, improvement, rasionalisation and modernisation of small firms (Chee 1990), in order to ensure the development of a sound industrial structure for long-term sustained growth (Malaysia 1986) and for strong inter-firm networks.

All the latest government's industrial policies have been clearly incorporated in the Second Industrial Master Plan (SMIP, 1996-2005). The ten-year SMIP has stressed the government's strong commitment to sustain and enhance the growth momentum of the industrial sector. The plan is directed to adopt the Cluster-based Industrial Development Programme. In the cluster development, local SMFs have been presumed to play an important role as key suppliers and service providers to leading firms. Such a policy apart from developing and strengthening cluster formation, would also increase domestic manufacturing value-added and improve balance of payments through the reduction in import of intermediate inputs and components as well as capital goods.

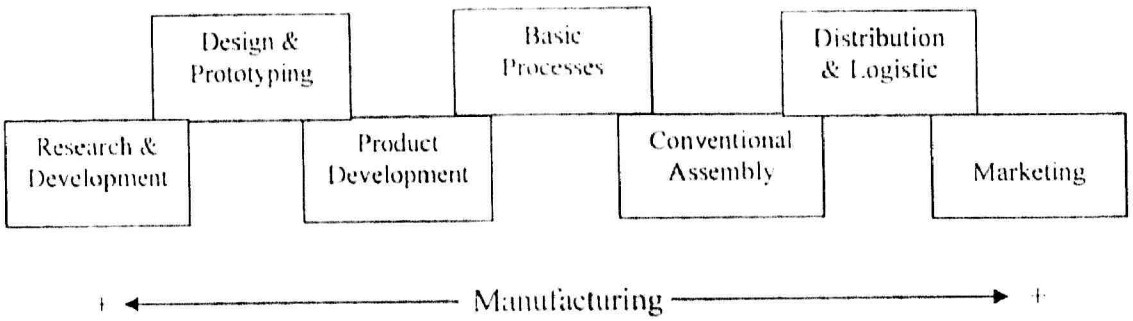
In the SMIP, an integrated development of industrial-related activities is adopted by means of manufacturing ++ (read plus plus) orientation. It is an integration of manufacturing operations through a value-chain, which would enhance industrial linkages, increase productivity and competitiveness (MITI 1996).

The value chain as shown in Figure 5.1 is a range of activities undertaken by an industrial group.[13] Using the value-chain conception, a cluster-based industrial development could be established in which suppliers and assemblers (core producers) would specialise in certain activities in which they are more efficient. For example, smaller firms would focus on up-stream activities, including in the supply of parts and components (the left side of the figure) whilst larger firms would concentrate on the core and down-stream activities, including the assembly activity (the right side of the figure).

For the cluster-based industrial development, the SMIP identified three industrial categories that have the potential to form their own cluster. They are 1) internationally-linked cluster, a group of industries that are primarily dominated by MNC's; 2) resource-based cluster, a group of industries that mostly involves indigenous firms; and 3) policy-driven cluster, a group of industries that is strategic and critical for the development of a particular technological capability and competency which requires government support. Table 5.11 shows the present achievement of each industrial group in terms of its value added.

Special incentives for inter-firm linkages were introduced in favour of both large core firms and supplier (vendor) firms. Expenditure incurred by large firms for the training of employees, product development and testing and factory editing specially to

Figure 5.1
Value Chain of Manufacturing Activities and Operations



Source: MITI (1996), Chart 1.

Table 5.11
Share of Manufacturing Value-Added and Growth
of Identified Industrial Groups by Clusters (Percentage)

Cluster	Internationally-linked Industrial Group				
	1994	1995-2000 (average)	2000	2001-2005 (average)	2005
Electrical and Electronics					
Semiconductors					
Share in total manufacturing value-added	19.0	20.5	21.1	21.5	21.6
Growth of real value-added	19.5	12.2	9.9	5.6	4.2
Computers/Peripherals					
Share in total manufacturing value-added	0.6	0.6	0.6	0.6	0.6
Growth of real value-added	14.5	10.7	8.9	5.8	4.8
Consumer Electronics					
Share in total manufacturing value-added	5.2	6.4	7.2	7.7	8.1
Growth of real value-added	20.7	16.0	13.8	9.2	8.0
Electrical Appliances					
Share in total manufacturing value-added	0.5	0.5	0.5	0.6	0.6
Growth of real value-added	14.1	11.6	9.7	7.7	4.3
Electrical Apparatus					
Share in total manufacturing value-added	2.3	2.3	2.3	2.4	2.4
Growth of real value-added	14.0	10.6	8.5	6.1	4.9
Chemicals					
Petrochemicals					
Share in total manufacturing value-added	4.7	6.0	6.8	7.9	8.6
Growth of real value-added	20.7	17.1	14.9	10.3	9.1
Pharmaceuticals					
Share in total manufacturing value-added	0.4	0.5	0.6	0.8	1.1
Growth of real value-added	18.6	20.0	18.5	18.7	17.4
Textiles and Apparel					
Textiles					
Share in total manufacturing value-added	2.7	2.8	2.9	3.0	3.1
Growth of real value-added	15.4	11.9	9.8	6.6	5.4
Apparel					
Share in total manufacturing value-added	2.6	2.8	2.8	2.9	3.0
Growth of real value-added	14.9	11.5	9.4	6.1	4.9

ıble 5.11 (continued)

uster	1994	1995-2000 (average)	2000	2001-2005 (average)	2005
	Policy-Driven Industrial Group				
ansportation					
Automotive					
Share in total manufacturing value-added	4.2	4.8	5.1	5.7	6.1
Growth of real value-added	18.5	14.4	12.2	8.9	7.7
Aerospace					
Share in total manufacturing value-added	0.1	0.1	0.1	1.3	1.8
Growth of real value-added	19.6	18.9	17.6	22.6	23.8
Shipbuilding and Repair					
Share in total manufacturing value-added	0.7	0.8	0.8	1.0	1.1
Growth of real value-added	16.2	13.5	11.8	10.2	9.6
laterials					
Ceramics					
Share in total manufacturing value-added	2.7	1.8	2.0	2.2	2.4
Growth of real value-added	15.4	14.3	12.1	9.2	8.0
Metals					
Share in total manufacturing value-added	2.6	7.3	7.8	7.9	8.2
Growth of real value-added	14.9	11.4	9.4	7.2	6.1
lachinery					
Share in total manufacturing value-added	5.8	6.6	7.0	7.8	8.4
Growth of real value-added	14.2	14.4	12.2	8.7	7.5
	Resource-Based Industrial Group				
Resource-Based and Food Products					
Wood					
Share in total manufacturing value-added	6.8	7.7	8.1	8.6	8.9
Growth of real value-added	23.1	16.8	13.9	11.2	10.3
Rubber					
Share in total manufacturing value-added	4.3	4.5	4.6	5.0	5.3
Growth of real value-added	20.6	14.8	12.8	12.0	11.6
Palm Oil/Oleochemicals					
Share in total manufacturing value-added	3.7	4.5	4.8	5.5	5.9
Growth of real value-added	19.6	15.6	12.7	9.2	8.0
Agro-based and Food Products					
Cocoa					
Share in total manufacturing value-added	1.1	1.1	1.1	1.2	1.2
Growth of real value-added	13.9	11.0	9.6	6.2	5.0
Fruit and Vegetables					
Share in total manufacturing value-added	0.3	0.3	0.3	0.4	0.5
Growth of real value-added	11.6	15.8	13.6	12.2	10.9

Source: MITI (1996), Table 1.

prove the quality of products of their suppliers is eligible for a deduction in ir income tax. Suppliers, including SMFs, which produce intermediate goods in the ority area are eligible for Pioneer Status for five years with up to 100 per cent emption on their statutory income. A Pioneer Status with 100 per cent tax exemption r 10 years is also allowable for supplier firms in which their intermediate goods are pable of achieving world class standards in price, quality and capacity (MIDA 1998).

More specific programmes for inter-firm linkages in the entire industry were so introduced, namely through the Vendor Development Programme (VDP), the tegrated Marketing Programme (the Umbrella Concept) and the Sub-contract xchange Scheme (SCEx). Under the "Tripartite Arrangement" concept introduced in 993, the VDP is expected to create a linkage and greater integration among SMFs, rge firms and/or MNC's and financial institutions. With MITI acting as the ordinator, it would provide opportunities for the SMFs to be reliable suppliers of ndustrial inputs, machinery or equipment to large firms or MNCs. The large firms or MNC's would, in return, provide market assurance for their small and medium supplier irms; while financial institutions would provide financial needs based on the market ssurance.

The Integrated Marketing Programme or the Umbrella Concept is slightly similar to the VDP. The only difference is that this programme is primarily catered for he Bumiputera to gain market access through government procurement and eventually nto the open market. Non-Bumiputera manufacturers are greatly encouraged to source components from Bumiputera suppliers. This programme has currently been spearheaded by three anchor companies, namely Besta Distributors Sdn. Bhd. (BESTA)

in food-based industries, Guthrie Furniture Sdn. Bhd. (GFSB) in furniture-based industries and the Guthrie Malaysia Trading Corporation (GMTC) in stationery products. All the schemes have been deliberately catering for SMF vendors. BESTA and GFSB alone successfully increased their vendors from 121 in 1992 to 155 in 1994. The Standard and Industrial Research Institute of Malaysia (SIRIM) has supported the programme by providing technical assistance, particularly for the sector to attain standardisation, the ISO 9000.

The SCEx is a computer matchmaking database and an information-related centre that enables the potential SMFs to supply industrial related-inputs to large firms or MNC's, including the manufactures of rubber, plastic, light engineering, automobile as well as electrical and electronics products. It was introduced in 1986, but the response from large firms, particularly MNC's, was then poor. Only lately, there was an increase in the number of companies registered with the scheme from a total of 2,763 companies in 1993 to 2,973 companies in 1994, of which 2,605 were small and medium companies (MITI 1995).

5.4.2 Promotion in the Automobile Industry

The changing policy approach in the automobile industry is of interest for debate based on the perspective of an ENO. The promotion of the automobile industry in the early industrialisation phase was merely to provide an employment opportunity for the growing population of Malaysia and to reduce the import bill on imported CBU vehicles. Concomitant with the growing market for automobiles, the government

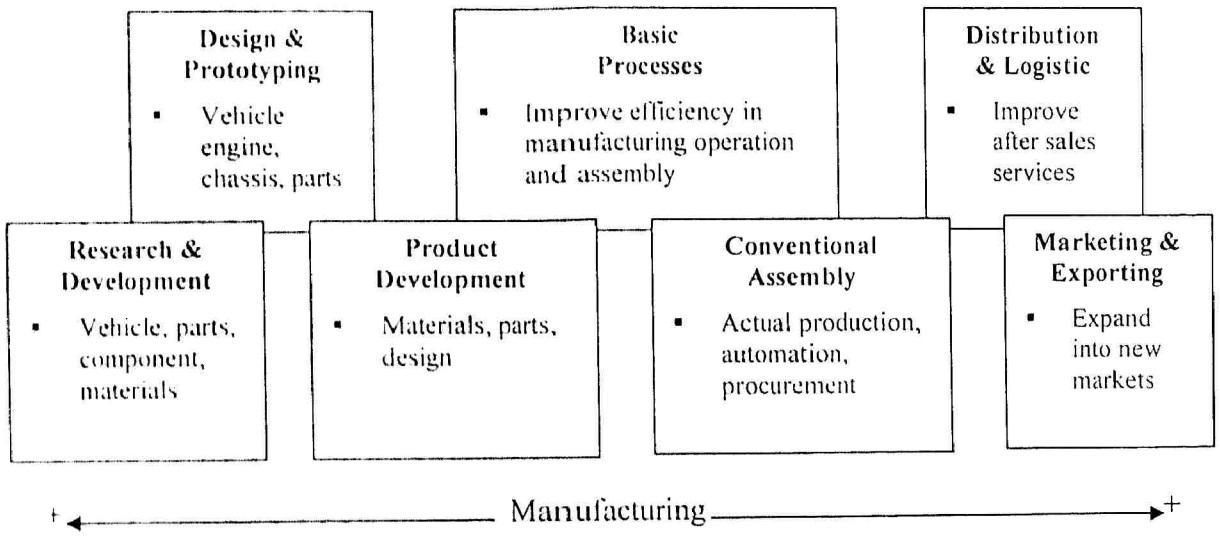
ɔmoted local firms to produce replacement parts. This promotion has been extended support existing and new firms, particularly SMFs, to produce manufactured parts d components for locally assembled automobiles.

The recent approach in the industrial-specific policy could be traced with the ıplementation of the first national car project undertaken by PROTON. In line with e growing maturity of the project, the government realised the importance of an tegrated development of the industry that links it to various manufacturing, processes, ıgineering, technological development and service activities as well as several actors, ıcluding the prime producers and parts suppliers. This orientation is in line with the IMP approach to enhance industrial development through the manufacturing ++ .rategy (as in Figure 5.2).

Indeed, developing the local parts and component industry is crucial for the ıture development of the national automobile industry, particularly when the full ıplementation of AFTA and WTO is in force. Acknowledging this challenge, the ,overnment initiated a special treatment for the industry by providing generous ıcentives. All small firms producing any type of automotive component and accessory .re eligible for the Pioneer Status under the 1986 Promotion of Investment Act (MIDA 998; see the note in Appendix C).

The government also introduced the VDP through the Proton Component Scheme in December 1988 before it was extended to other industries in August 1992. Based on the Cabinet decision on 6 July 1988, the programme was introduced as an initiative to develop SMFs as vendors (suppliers) of intermediate and capital goods as well as service products to PROTON in the process of manufacturing its national car,

Figure 5.2
Manufacturing ++ Strategy for Automobile Industry



Source: MITI (1996), Chart 8-1.

the Proton Saga. It was also in line with the export requirement under the Generalised System of Preference (GSP) of developed countries that local end products should contain at least 60 per cent local content. PERODUA has undertaken a similar vendor development programme since the early 1990s (MIDA, unpublished).

There has been an exclusive programme under the Proton Component Scheme that is known as the Proton Bumiputera Vendor Scheme. It was specially designed for nurturing Bumiputera SMEs in the auto-component industry. Many Bumiputera firms, under the scheme, were granted financial facilities through the Proton Technical Assistance Programme for purchasing capital goods and intermediate inputs as well as for acquiring technology. Bumiputera firms could also participate in the Quality Improvement Programme (QIP) organised by SIRIM with potential grants provided by the Industrial Technical Assistance Fund (ITAF).

It was reported that the local content in Proton cars has increased steadily since the launch of VDP: from 18 per cent in 1985 to 40 per cent in 1987 and 70 per cent in 1989 (Meyanathan and Ismail 1994). The local content in Proton cars increased further to 65 per cent in 1990 and 80 per cent by 1992 (Abdul Aziz 1994). The Proton cars were qualified for export to certain developed countries such as the United Kingdom, under the special treatment facility - the GSP.

Lately, the government promotes a multi-sourcing and a multi-marketing programme in an effort to integrate the automobile industry into a global framework. Under the multi-sourcing programme, assemblers are allowed to import directly certain components and parts from cheaper sources, particularly from regional suppliers rather than through CKD kits from principal firms. This means that the later development allows the formation of auto ENO transcending national boundaries. The multi-

marketing programme, on the other hand, encourages principal firms (auto-assemblers) to export parts and components of their local suppliers (MIDA, unpublished).

5.5 Performance of Domestic Entrepreneurial Network Organisations

Many studies, although not analysed in the present ENO framework, discovered that inter-firm networks (or industrial linkages, in the words of many researchers) in the Malaysian industrial sector is still insignificant. Lim (1992) finds that there has been a number of small firms being sub-contractors to international brand names in clothing and consumer electrical and electronics sub-industries. Rasiah (as quoted in Meyanathan and Ismail 1994) discovers that domestic sourcing in electrical machinery and electronics production increased in the 1980s. For example, MNCs producing electrical, consumer electronics and computers outsource between 10 and 70 per cent of their inputs locally.

Mohd. Nazari (1995) observes an increasing trend in local outsourcing among large foreign electronics transnational corporations (TNCs), not only for simple low value added, but also for more sophisticated high value-added component inputs and tools. Acknowledging the capability of some local suppliers and the cost saving advantages of local outsourcing, many TNCs were prepared to assist local suppliers, particularly in technical aspects, to ensure that the parts supplied would meet the price, quantity, quality and time delivery set by them.

Moha Asri (1996) in his study of the textiles and clothing industry identifies that about 60 per cent of the 51 small-firm samples sold between 76 and 100 per cent of their total output to large MNCs and local firms. He finds that most sample firms sold

their products through a special arrangement (contract) with the large firms. Of the total sample firms, about 40 per cent were involved in sub-contracting work. He concludes that the inter-firm linkages, whether in the form of market-based interaction, contracting, or sub-contracting, help small firms to succeed. Angeline and Sieh (2000) also observe that there have been large apparel MNC's and merchandisers that contract out their low-end production and making processes to local sub-contractors.

Nonetheless, the Malaysian ENO, measured against international standards, is still undeveloped. A survey conducted by University of Malaya in 1986 found that merely 14 per cent of 167 firms in the study had a sub-contract or transaction with large firms and foreign joint venture firms (Fong 1990), compared to 60 per cent in Japan. It also observed that large upstream firms in Japan, South Korea and Taiwan had actively provided financial support, quality control and technical services to small and medium downstream firms (Abdul Ghani 1992).

Empirical evidence suggests that inter-firm networks in Malaysia are much dependent upon the government-supported programmes, namely the VDP, umbrella concept and SCEx. The VDP, as of December 1994, involved 43 large firms and MNCs (as anchor companies), 13 financial institutions and 59 vendors (suppliers); mostly in the manufacture of plastic injection moulding, metal stamping or fabrication, telecommunication equipment, sub-assembly, wire-harnessing, automotive components, electroplating and wood-based furniture components (MITI 1995). Successful VDP was realised through the cooperation of large local corporations such as; PROTON in the automobile industry, Sapura Holdings and Sharp Corporation in the electrical,

electronics and telecommunications industries, as well as Land and General Berhad in the wood-based and furniture industries (Malaysia 1993).

PROTON has been among the best performers in the VDP. Its sub-contracting firms increased from merely 17 in 1985 to 134 in 1994 and 186 in 1999 of which 80 per cent were members of Proton Vendor Association (Proton, n.d), supplying over 3,000 automobile components (MITI 1994). About 50 per cent of the vendor firms were SMEs; and 50 per cent of these SMEs were Bumiputera-owned (Mohd Shah 1995). The vendors produce original equipment manufactured (OEM) parts and components, such as metal stamped and pressed parts, plastic injection moulded parts, wire harnesses, wipers, lamps, radio cassettes and air-conditioners (MIDA, unpublished).

The overall VDP seems to have reached a saturation point. There has been not much development over time, though the programme was taken over and coordinated by the Ministry of Entrepreneur Development (MED) since 1995. The number of large anchor firms increased to 61 firms (until September 1996), whilst the number of vendors increased to 94 firms in the same period. On average, there were only 1.54 vendor firms for each anchor firm. Only some large anchor firms, namely PROTON, Sapura Holdings, General Lumber Furniture and the Urban Development Authority, had a good number of vendors; while other firms had only a few.

For the Umbrella Concept programme, a total of 72 Bumiputera firms were created in the furniture industry in the period of 1991-1993 and 60 Bumiputera firms in the food industry. Most firms were dependent on government procurements; however, there were 19 Bumiputera firms in the furniture industry that were capable of surviving in the open market (Malaysia 1993).

5.6 Reasons for the ENO Poor Performance

Chapter 3 has demonstrated that the outstanding performance of the East Asian ENOs was attributable to a mix of factors. Such mixed economic and socio-cultural factors that forged benevolent cooperation in the Confucian-dominated region may exist minimally in Malaysia; hence it has led to poor cooperation among its economic actors. Multi-ethnic and multi-national economic actors as well as political segregation in Malaysian society may make it difficult for the entire economy to prosper within the context of ENO in near future.

Meyanathan and Munter (1994) observe that recent changes in the industrial structure of developed countries is followed by vertical disintegration of their large multinational organisations. Many tasks or processes of the large organisations have been sub-contracted out to smaller units of organisation, but it is not the case in Malaysia. The changes in its industrial structure are not followed by such a disintegration. The process is too slow due to the fact that the structure of entrepreneurial organisations in Malaysia itself is significantly distinguished by economic activities and national status of the owners.

The shallow and narrow economic activities of the country discourage the development of ENO. The Malaysian agricultural sector, which until lately, caters for exporting raw or semi-processed materials provides little ground for inter-firm networks. Its industrial sector is too weak to create linkages among firms, whilst the services sector still offers low value-added products. Hence, their products tend to be produced by a single organisation.

The industrial sector as the lead sector in the Malaysian economy today is weak in its own structure. Compared with Japan where the industrial activity is well-developed and equally distributed and goes down to deep upstream and downstream activities (Smitka 1991), the Malaysian industrial activity is quite shallow and narrow and restricted to low value added processes or simple assembly (MITI 1996). According to Anwar (1993), a similar industrial structure that is limited to simple assembly and labour- and import- intensive production of manufactured products as well as processing of natural resources applies to all ASEAN member countries. This condition leads to a contradictory phenomenon between core industrial firms in Japan and ASEAN countries. While a core firm in Japan can easily outsource parts and components from its surrounding counterparts, a Malaysian-based firm has difficulty in outsourcing industrial-related inputs locally.

It was described by an officer of MIDA that the difficulty for outsourcing is not confined only to intermediate inputs but also simple materials. In the context of the automobile industry, he described that "We don't even have the chemicals and steel to be used in the auto industry and as a solution we have to import the materials" (Based on the author's own interview). Plastics, iron and steel are the two raw materials that Malaysia is highly dependent on Japan; the trade account deficits for these two materials widen over the years (Tham 1997). The situation is an impediment to the development of ENO even in the government-sponsored programmes (e.g the VDP) of several heavy industrial projects such as the automobile and aerospace industries.

With respect to organisational ownership, there is a dichotomy between local-owned and foreign-owned entreprenuerial organisations that ultimately brings about significant implications on the overall development of ENO. Again, in contrast to the East Asian economies where entrepreneurial firms, irrespective of their size and activity, are mostly owned by the same group of entreprenuers - their own people; the ownership of firms operated in Malaysia is, however, distinguished by economic activities and national status. Most large entrepreneurial firms in Malaysia are owned by foreigners; hence the problem of business networks with local firms develops.

Industrial activities are not part of the Malaysian culture. Local entrepreneurs are unfamiliar with modern industrial production systems and technology. As a natural resource-rich developing country, local entrepreneurial organisations are more familiar with resource-based industries (RBIs); when they decide to involve themselves in industrial activities, the first and best choice for them is to produce resource-based products. Definitely, RBIs have also assisted Malaysia in transforming its economic base from agricultural to industrial economy; but this type of industry does not provide a good platform for the development of ENO.

RBIs outputs (including agriculture and mining) are single-based products. Since the products are more standardised, they require the least complementary parts and processes and can be mass-produced by any single firm. Local firms involved in this industry produce less processed products for local consumption or export market. In other words, outsourcing does not much arise from this type of industry.

Compared with RBIs, the non-resource-based industries (NRBIs) provide better platforms for the development of ENO. Many products of this industry, such as textiles and clothing, electrical and electronics as well as automobiles are well accepted internationally. They are differentiated products involving many stages of production and assembly and containing a variety of parts and components. A large portion of industrial outputs and export earnings stems from NRBI products, indicating faster growth than that of the RBIs. It also means that NRBIs are capable of generating more opportunities for local entrepreneurial firms to supply parts and components to larger firms. But again, locally-based networks are not the case in Malaysian industrialisation due to several factors, particularly the weaknesses from within and the foreign domination.

Table 5.12 clearly displays the domination of large firms (particularly MNCs) in the core export-oriented NRBIs which eschews the participation of local SMFs. Though the government has taken serious efforts to promote local SMFs in the industrial sector since the last few decades, a large portion of these local firms are still involved in RBIs (Mohd. Rosli 2000). A surprising fact is that there are only 18 per cent of the SMFs registered with the SCEx are involved in fabricated metal and machinery and equipment industries; the two industries that are typified by the government as having the most potential to supply inputs to large firms (MITI 1995). Therefore, there has been a mismatch in the Malaysian industrialisation programme since most of the local products are not suitable to be used as inputs in the production processes of large firms.

Table 5.12
Key Players in Malaysian Export-Oriented Industries

Export-oriented Sub-industries	Key Players
lectrical, electronic machinery nd appliances	The electrical industry is dominated by joint-ventures or foreign firms, e.g. Sanyo, Matsushita, Sharp, Roxy and Union Carbide. The electronic industry (consumer, industrial and component electronics) is also dominated by subsidiaries of large MNCs, e.g. Motorola, N.S., Hitachi and Intel. The involvement of SMFs is largely confined to supply inputs to these MNCs.
extiles, clothing and footwear	In textiles and clothing, SMFs participation is significant in number (over 70% of total establishments). But their output and exports are dominated by large joint-ventures and foreign firms. Many SMFs supplied inputs like buttons, zips to large firms. In the footwear sub-sector, contributions of SMFs and large firms are quite fair- Bata, Marco Shoe Sdn. Bhd. Fung Keong Shoes, Kasut Kulim Malaysia, the International Footwear Group and Viking-Askim
Pulp and paper and scientific nstruments	Dominated by large firms- Sabah Forest Industries, Asean Security Paper, Scott Papers and Muda Holding in paper milling sub-sector; Computer Foams in paper conversion sub-sector; and Tien Wah Press, Times, South Island Packaging and Hong Kong Printing in the printing and packaging sub-sector. SMFs are involved in conversion, printing and packaging sub-industries
Other machinery and transport equipment	Dominated by large joint-venture firms, particularly in transport equipment. SMFs are largely involved in supplying parts and components
Chemicals and petroleum	Dominated by large MNCs. SMFs are more active in perfumes and toiletries
Iron, steel and metal	SMFs participation is not significant

Source: Extracted from Yeoh (1991) with little adaptation;
MITI (1996) identified electrical and electronics, chemicals and textiles and apparel industries as internationally-linked clusters which means that these industrial types are dominated by MNCs (see Table 5.11 above).

Foreign domination in the NRBIs is rooted from the generous government licy to attract foreign firms into a number of Free Trade Zones (FTZs) and Licensed nufacturing Warehouses (LMWs) located throughout Malaysia. Unfortunately, reign-dominated NRBI firms provide little room for domestical inter-firm networks, rticularly with local entrepreneurial firms because they prefer to import parts and mponents from their home country, or from their subsidiaries and affiliated firms erseas. The rapid inflow of foreign direct investment (FDI) into the region and the gional operations of foreign multinationals over the last decade and the inclination of e firms to source out components from their subsidiaries in the region impeded the ter-firm linkages domestically (Takeuchi, quoted in Tham 1997).

The over dependence of certain industrial firms on imported parts and mponents as well as materials and capital goods is clearly indicated in the Malaysian ade balances over the years. Besides having a deterioration in the trade balance for achinery and textiles industries (Tham 1997), the electronics industry, as the Malaysian largest industry in terms of employment, output and export value, also shows similar trend. In 1994, the value of electronics imports amounted to RM28.2 million, gainst its export value of RM24.8 million. This resulted in a trade deficit amounting to RM3.4 million (Utusan Malaysia, 19 Ogos 1995).

Sieh (2000) finds that more than 40 per cent of the European, American and Japanese electronics MNCs are mostly dependent on their parent companies in respective home countries for inputs sourcing. They also source out input components from affiliated and independent firms located in other third-party countries.

In another ocassion, the foreign MNCs source out the inputs from foreign firms located in the host country. For example, it was found that domestic outsourcing for electrical and electronics MNCs in Malaysia has increased; but 5 to 40 per cent of the inputs were soureed out, either from their own subsidiaries, or other foreign subsidiary firms in Malaysia (Rasiah, quoted in Meyanathan and Ismail 1994).

According to Lim (1992), voluntary effort of the MNCs to form industrial networks with local firms is rare. He finds that the only company which takes the initiative is Intel (M) Sdn. Bhd. This American Intel subsidiary company, producing electronics products in Penang Free Trade Zone, supports its small and medium sub-contractors in various aspects, including in quality management for achieving an international standard. However, Lim (1992) also asserts that it is irrational to hope for another Intel because the MNCs have to obtain the "green light" from their headquaters in their home country before such an initiative would take place.

Such an attitude is not an unusual issue. The famous examples are the poor performance of the VDP programme and the Umbrella Concept under the MED and the SCEx mechanism organised by MITI since 1986. The performance of the VDP programme is far below the MED target for creating 1,000 vendor (supplier) firms by the year 2000.

It was recognised that the reasons for poor performance of creating new vendor firms were: the poor response from large anchor firms to appoint new vendor firms, the failure of large anchor firms to submit their proposal for appointing their new vendor

ms to the Vendor Development Committee, and the poor guidance of large anchor ms to their vendor firms. Some large anchor firms were not committed at all with the ogramme, hence leading to its abandonment (The Edge, 29 April 1996). The ıfavourable development of the Umbrella Concept programme is associated with the oblem facing the core firms themselves. They could not carve a niche even in the)mestic market, leave alone the international market.

The response from MNCs for the SCEx was poor; only 3.1 per cent of the :gistered supplier firms reached an agreement with MNCs (Malaysia 1989). Although was recently reported that the interest of both buyers (particularly the Japanese 4NCs) and suppliers in the SCEx increased favourably, the translation into real ooperation was a fantasy.

Enquiries from both sides for the programme increased by 386.0 per cent)etween 1992 and 1993, but the increase in the number of firms registered with the)rogramme was merely 8.0 per cent in the same period (MITI 1994). Probably, the)ercentage of the firms which ultimately reaches bilateral agreements in buyer-supplier ıetworks is much lower than the registered number.

Fong (1990) identifies many reasons that are given by the large firms for not sourcing out from local SMFs. As shown in Table 5.13, most of the large firms (25.4 per cent) had sufficient self-production capacity, hence they need no outsourcing. All the other reasons lay in the inability of small firms to meet the expectations of large firms, namely related to quality, delivery and management.

Table 5.13
Reasons for Poor Response of Larger Firms to Local Outsourcing (Percentage)

Reasons	Large Firms (71)	Joint Venture (56)
Late Delivery	2.8	n.a
Lack of quality	16.9	18.5
Shortage of qualified small firms	2.8	11.1
Instability in management of small firms	2.8	3.7
Sufficient self-production capacity	25.4	n.a
Others	8.5	33.3
Total	100.0	100.0

Note: n.a. not applicable
Source: Fong (1990).

The recent influx of investments of foreign small and medium firms in this country puts the local SMFs and the government policy on the national-based ENO development in jeopardy. In 1987, there were only 31 foreign SMFs with total investments worth RM61.7 million, but that increased drastically to 439 firms by October 1992 with RM926 million of investments (Business Times, 17 December 1992). It means that the number of foreign SMFs in the country increased by 1,316 per cent in the five-year period. The foreign SMFs, particularly from Singapore, Taiwan and the South Korea obtained contracts from their large MNCs to supply industrial inputs; narrowing the opportunity for the local SMFs to be suppliers to the giant firms.

5.7 Conclusion

This Chapter has displayed that the outstanding performance of the Malaysian economic development in the last few decades had been largely led by her industrial sector. Strong support from the Malaysian government since the mid-1980s has transformed the economic structure from agricultural to industrial-based economy. Special support was given to heavy industrial projects of which the automobile industry became the centrestage of this support. Various stimulatory, protective and legislative measures were adopted by the government to pave the way for the development of the industry, particularly the government's "pet projects" – PROTON and PERODUA.

With respect to ENOs, the government has given special attention to enhance the development of local small and medium firms. This effort is made to enable local

firms to be suppliers or sub-contractors to larger firms, including the national automakers. Ironically, the heavy support by the government have not much assisted the performance of the locally-based ENOs. The weak structure of the economy and the clear dichotomy between local and foreign entrepreneurial organisations were among the factors identified as deterrents to the establishment and further development of domestically-based ENOs.

[1] In fact, the contribution of heavy industries to the economy was already significant: more than 40 per cent of Malaysian industrial production was originated from the industry; a large portion of the existing resource-based industries also fell in its category (UNIDO 1985)

[2] It assembles various makes to include Ford, BMW, Mazda, Chrysler Jeep, Land Rover, Suzuki, Scania and Tata (see Table 6.5).

[3] Pioneer Status is a tax facility in which the eligible firms will have only to pay tax by 30 per cent of their statutory income (equivalent to 70 per cent tax exemption) for five-year exemption period. Tax exemption up to 85 per cent (equivalent to 15 per cent tax payment) is given to those firms located in Sabah, Sarawak and the designated "Eastern Corridor" of Peninsular Malaysia. Any losses incurred during the exemption period cannot be carried forward to post pioneer period. Investment Tax Allowance (ITA) is given to those firms which are not eligible for Pioneer Status. Under this facility, firms are allowable to have a 60 per cent allowance in respect of qualifying capital expenditure incurred within five years. Unutilised allowances for a particular year can be carried forward to subsequent years until the whole amount is used up. Those firms located in Sabah, Sarawak and the Eastern Corridor of Peninsular Malaysia are granted up to 80 per cent allowance. Under the ITA, the firms are subjected to 30 per cent tax payment on their statutory income.

[4] The NRP is the percentage differential between domestic price and international market price as a result of a tax, including a tariff imposition. The ERP is the percentage differentials between value added of domestic goods and value added of the goods at international markets as a result of the tax. ERP is a best indicator for a country to develop its industrial sector because it insinuates the producers to make decision on improving value added hence relocating the existing resources; whilst the NRP hints consumers to decide their consumption.

[5] In the United States itself, the failure of the large scale firms in generating employment (Birch 1981) prompted the first identification of the emergence of small firms (Acs and Audretsch 1990). Except for Japan which had traditionally promoted this sector, some other governments of developed countries initiated drastic steps to promote the sector. In the United Kingdom, a Commision decided that small industries must be stimulated to sustain the vitality of the manufacturing sector. The U.S. through its Small Business Administration introduced various stimulatory measures, including government purchases to develop the SMFs (Sit 1982).

[6] Much literature does not distinguish between industry (ies) and firm (s). Thus, industry in the literature always takes double meaning, either it refers to certain manufacturing/industrial activity (industry) and/or certain scales of manufacturing player (firm). In contrast, the present study attempts to distinguish the two concepts in which industry means manufacturing/industrial activity, whilst firm means the player behind the industrial activity.

[7] There was no official clear-cut definition of SMFs that could be traced from the goverment five-year development plans prior to the Seventh Malaysia Plan (7MP). The preceding plans up to the Fifth Malaysia Plan (5MP) only mentioned the SMFs once - in the Third Malaysia Plan (3MP). In this period, the five-year plans emphasised solely the development of small firms. Only starting from the Mid-Term Review of the 5MP, the notion of SMFs has consistently appeared in all the later five-year development plans. Yet, until the Sixth Malaysia Plan (6MP), there was no official definition dedicated to the sector. Not surprisingly, scholars and government agencies adopted their own definitions for SMFs. Only the 7MP defined SMFs as manufacturing establishments with a paid-up capital of less than RM2.5 million and employing between 5 and 75 full-time workers. The definition is compatible to the definition used by the 1975 Industrial Co-ordination Act (Amended). For different definitions adopted in Malaysia, see for example Fong (1987), Fong (1990), Ismail (1990), TGC (1991), Kassim (1995), FMM (1994) and the Seventh Malaysia Plan 1996-2000.

[8] The industrial organisations engaging 10 full-time employees alone accounted for 82 per cent of the manufacturing establishments.

[9] The NEP (1971-1990) had a two-pronged objective of reducing and eventually eradicating poverty by raising income levels and increasing incomes opportunities irrespective of race and accelerating the process of restructuring of society in eliminating the identification of race with economic function (Malaysia 1971). The twenty-year period policy set a target that at least 30 per cent of the total commercial and industrial activities in all categories and scales of operation should have Bumiputera

participation in the form of ownership and management (Malaysia 1971). The target was later redefined more precisely in which at least 30 per cent of the equity of all limited companies approved, except for those export-oriented, should be reserved for the Bumiputera (Malaysia 1973).

[10] The Licensing Officer is the Secretary General of the Ministry of International Trade and Industry (MITI).

[11] The Act was, amongst others, seen as a hindrance to the development of new and existing investments. By the amendments and by the definition adopted by the ICA, it means, the SMEs were no longer required to restructure their businesses merely to comply with the NEP.

[12] The Third Malaysia Plan had stated that "The development of small-scale industries is an integral part of Malaysia's industrial development." (Malaysia 1976: pp. 315); but the policy was never implemented prior to the Third Phase due to strong government sentiments on preserving the interest of Bumiputera.

[13] An industrial group is a group of industrial firms, in a geographical area, which are mutually-linked and complementary to one another in their industrial activities, particularly in the manufacturing process or making a product from its earliest conception to its final sale