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Industrial Development, the New Economic Policy in Malaysia, and the International Division of Labour

Wong Tai Chee

The redistributive approach of the New Economic Policy in Malaysia has influenced the manufacturing structure of the country. On the one hand, the government used heavy industry and large enterprises to accelerate the advance of the Malays in modern commerce and industry, the predominantly Chinese-owned small and medium scale industry made little progress, and consequently missed gaining a share in international markets for lack of political support. Conversely, multinational capital, focused on electronics, has been used to boost national growth and offset the mostly unlucrative public enterprises. Since 1986, however, the Malaysian Government has taken some measures to gradually readjust the distortions. This article studies how state-owned heavy industry, local small industry and the technologically superior multinational capital interact to give rise to Malaysia's present industrial structure.

Since 1970, Malaysia's industrial structure has evolved under the impact of the New Economic Policy (NEP) and international capital movements. Less constrained by the New Economic Policy are the multinational corporations, chiefly export-oriented, that have surged at times and have currently reached another 'peak' in the country. This article,* therefore, examines the interactions of industrial development, the New Economic Policy and the international division of labour in the Malaysian context. Derived conceptually from a socially justifiable 'growth with equity'

rationale, the New Economic Policy seeks to redistribute wealth along ethnic lines. Consequently, measures have been taken to promote Malay¹ entrepreneurship by setting up a large number of public enterprises. In parallel, international capital (focused on the electronics industry) and natural resources, notably petroleum and natural gases, have also been used to boost aggregate growth to compensate for the disadvantages of public enterprises. In analysing the interaction between growth and redistribution, attention is centred on how the industrial structure has evolved under the New

Economic Policy that has been constantly influenced by the highly mobile and site-selective international division of labour. An examination of the types of industry in Malaysia is followed by a discussion of constraints on their development and growth potential against a new international division of labour. Finally, the prospects of industrial development are examined and some suggestions are made.

Types of Industry in Malaysia

On the basis of ownership, there are three main types of industry in Malaysia: local and privately-owned small and medium-scale industry, state-owned large and heavy industry and, foreign-induced export-oriented manufacturing industry.

Small and Medium-Scale Industry

By definition, a small industry is a manufacturing firm which has fixed assets of less than \$500,000² or engages fewer than 50 full-time workers (Chee 1986, p. 3). Conversely, a medium scale firm has fixed assets of between \$500,000 and \$2.5 million. In 1985, there were some 3,720 small manufacturing firms and 1,640 medium scale firms, representing respectively 64 and 28 per cent of the total number in the country (Government of Malaysia 1988, p. 76). Earlier, the Incentive Act of 1958 to promote import-substitution had helped these industries expand substantially through the 1960s. Characteristically, products of this industrial type³ are mainly for domestic consumption. Few firms (less than 10 per cent) have the potential to produce for the export market given that their relatively inferior-quality goods, levels of production costs and prices are not competitive (Chee 1986, p. 30; *FEER*⁴, 14 February 1985). Most of these industries are operated by the ethnic Chinese. Supported by MARA, MIDF, and BPM (see list of abbreviations), Malay small and medium-sized enterprises focus on handicrafts, *batik*, furniture, motor workshops and food

processing. Despite their capacity in generating employment, owners of small and medium scale industries are normally not looked upon as an "entrepreneurial" class but as little more than "backyard workshop operators". With no strong political support, their expansion in overseas market has been sluggish.

Indeed, between 1970 and 1982, Malaysia made little advance in transforming domestic market-oriented products into exports while the bulk of the manufacturing exports was assumed by the multinationals. In sharp contrast, Thailand and the Philippines made significant progress from 1970 to 1983 in exporting their domestic market-oriented products — the former raised its share from 3.3 per cent of the national exports to 12.4 per cent while the latter from 4.6 per cent to 11.6 per cent (Hirata and Nohara 1989, pp. 452–54).

As small and medium-scale industries faced negligence, the Malaysian decision-makers began to extend substantially state-run large enterprises. To counterbalance the predominance of the Chinese entrepreneurs in commerce and industry, sizable state capital has been used since the mid-1970s to establish capital-intensive public enterprises to help improve the lagging position of the Malays — with the help of foreign technology and expertise. These public enterprises represent a large proportion of the locally financed large scale manufacturing companies with assets of more than \$2.5 million.

State-Owned Heavy Industry

Creation of the Heavy Industries Corporation of Malaysia (HICOM) in 1980 marked the launching of a fully state-owned heavy industry in Malaysia. In an attempt to create a broad indigenous heavy industrial base by the end of the century, HICOM aims at a long-term programme to radically transform the national economy from being highly dependent upon a vulnerable commodity (*FEER*, 14 February 1985). Consequently, industrial points throughout Peninsular Malaysia were set up — steel in

Trengganu, cement in Kedah, motor-cycle engine manufacturing plants in Penang, Kedah, Selangor, shipbuilding in Labuan (Sabah), petrochemical plants in both Labuan and Bintulu of Sarawak as well as a car-making project in Shah Alam. By September 1983, the total Federal investment in heavy industry was \$3 billion, largely supported by oil revenues and international loans (*FEER*, 15 September 1983). Besides HICOM, there are other public enterprises involved in food processing, resource-based, building material and some other industries. As Table 1 shows, out of the Federal government's investment fund for the manufacturing sector, HICOM receives an overwhelming proportion — 76 per cent for the Fifth Malaysia Plan period (1986–90). The second largest recipient is the SEDCs, account-

ing for 10 per cent of the amount allocated to HICOM. There are also a few ASEAN joint-venture projects whereas small scale industry including handicrafts, have been accorded relatively little attention.

Foreign-Controlled Industry

The third type of industry is basically foreign owned or controlled. Before the introduction of the Free Trade Zones (FTZs) in the early 1970s, foreign industries used, on the whole, low levels of technology for producing food, beverages and tobacco, and basic metal products for domestic consumption (O'Brien 1989, p. 3). Export-oriented industry has been gaining momentum since 1970 as the NEP sought to boost aggregate economic growth. In 1972, generous incentives and the provision of free trade zones⁵, industrial estates (IEs) and licensed manufacturing warehouses (LMWs) began to attract footloose multinational industries to Malaysia's strategic points near to the ports in Penang, Melaka, Selangor, and Johore states. In early 1984, there were ninety-six industrial estates and eight free trade zones in the country producing more than half of total manufacturing exports. The current multinational interest is focused on electronics and electrical industries as a result of international shift of locations from technologically more advanced regions. As foreign manufacturing firms enjoy prosperity, local small and state-run large enterprises face multiple obstacles in their daily operations.

Constraints of Locally-Owned Small and Large Industries

Being labour-intensive, the small industry engages mainly unskilled and semi-skilled labour, and is highly resource and family-based. Since 1970, those operating with little capital and outmoded technology have declined in operations as a result of strong competition. They subsist in harsh conditions as most of them do not survive the fifth year of operation (Chee

TABLE 1
Malaysian Government's Allocation to the
Manufacturing Sector, 1986–90
(In M\$ millions)

<i>Public Agency</i>	<i>Allocation^a (\$M)</i>	<i>%</i>
HICOM ^b	1,111.50	76.8
SEDCs	110.79	7.7
ASEAN Projects	90.03	6.2
PKKM	36.34	2.5
MARA	32.50	2.2
National and Rural Development Ministry (Rural Industries)	32.50	2.2
Trade and Industry Ministry (Small Scale Industry)	24.01	1.7
Food Industries of Malaysia	9.00	0.6
MIDA	1.00	0.1
TOTAL	1,446.67	100.0

NOTES: ^a Revised after the *Mid-Term Review of the Fifth Malaysian Plan*. On average, about 20 per cent has been cut from the original budget.

^b See abbreviations.

SOURCE: Government of Malaysia (1989), Table 8-11 (adjusted).

1986, p. 19). Indeed, their scope of development has proportionally reduced. Between 1968 and 1981, as Table 2 shows, there was a marked decline of firms employing less than five workers. While firms having five to forty-nine employees increased in number, their proportion in employment and gross output fell, a clear indication that the development of firms with over two-hundred employees was

TABLE 2
Size Distribution in the
Malaysian Manufacturing Sector, 1968–81
(Percentages)

<i>Size of Firm (Work-force)</i>	<i>1968</i>	<i>1973</i>	<i>1981</i>
(A) Establishments			
0–4	68	58	43
5–19	19	22	34
20–49	8	10	13
50–199	5	7	8
200+	1	2	2
Total	100	100	100
(B) Employment			
0–4	5	8	4
5–19	14	10	11
20–49	18	13	13
50–199	31	26	28
200+	32	43	44
Total	100	100	100
(C) Gross Output			
0–4	5	3	1
5–19	10	7	5
20–49	14	12	9
50–199	36	32	36
200+	35	46	49
Total	100	100	100

NOTE: The above are industrial census data. More recent ones are not available. Latest statistical data shown in the Industrial Surveys conducted by the Department of Statistics, Malaysia cannot be used here because they were derived on a sample survey basis, with explicit cut-offs of small-sized firms.

SOURCE: Ariff and Hill (1985), p. 167.

particularly significant.

Small non-*bumiputra* firms have an added constraint stemming from the Industrial Coordination Act of 1975: if they have more than \$250,000 paid-up capital or twenty-five full-time workers, they are bound to the obligation of equity redistribution.⁶ Consequently, many Chinese firms have opted to remain small or divert their capital to other businesses. Indeed, a substantial number of small machinery and engineering enterprises traditionally closely associated with large industries have stagnated (*FEER*, 14 February 1985). With a small domestic market and weak ability to compete overseas, the small and medium scale industry will need modern equipment, higher skills in management, marketing and technological know-how to raise their productive capacity and product quality — essential conditions to establish linkages with large and joint-venture advanced manufacturing companies. Yet to date, financing remains a key problem. Much of their financial resources are still driven from personal savings and borrowings from relatives and friends (Government of Malaysia 1988, p. 77). They need stronger political support despite some favourable policies that have begun to emerge since 1986 — priority is still accorded to heavy industry.

The state-owned heavy industrial plants, being capital intensive, have the disadvantage of providing relatively few jobs. Because of a premature focus on heavy industry, inefficient allocation of resources affecting other resource-based industries has resulted (Ariff and Hill 1985, p. 235). To date, these heavy industrial firms have yet to perform well. When the national car — Proton Saga — was put on the road in 1986, it captured a domestic market of 22,000 units only with a cost-subsidy strategy. Subsidies to its sale overseas have been estimated at 10 to 30 per cent for many years to come. The state-owned steel industry, Perwira Trengganu, had not brought good news either. Up to March 1988, the company's debts totalled \$1.35 billion. An additional \$700 million had to be channelled to restructure and save

the plant (*FEER*, 1 June 1989). At Labuan, the state-run sophisticated shipbuilding plant capable of producing hot briquetted iron also ran deeply into debt. The Federal government in March 1989 considered privatization as a solution but the issue has not been decided (*FEER*, 23 March 1989).

Since 1970, within Malaysia's strongly interventionist "state-capitalist" model (White 1984; McGee 1986), there have been concerted efforts to promote a strong Malay commercial and industrial entrepreneurial class and large numbers of managerial jobs have been distributed through creating public enterprises in a relatively short span of time. A high-spending approach was also adopted to generate growth and to compensate for the shortfall of private investment. To achieve this, for instance, the oil conservation policy was reversed during the Third Malaysia Plan (1976–80) to acquire more revenue, and substantial domestic and foreign loans were also undertaken.

Indeed, substantial resources have been mobilized to meet aspirations of the New Economic Policy in disregard of economic inefficiencies or viability. Economic rationality has been sacrificed to political interests justified by the legitimacy of a more equitable wealth redistribution (Jesudason 1987). In 1986, the public sector spending reached \$23.7 billion or 36 per cent of the gross national product. Yet, the figure could have been higher if the state-owned "private corporations" such as PETRONAS, HICOM and Bank Bumiputra were included (Khor 1987, pp. 30, 49). Of over 1,000 public enterprises, more than a third of them have suffered financial losses (*New Straits Times*, 18 March 1990). The state-run heavy industry, in particular, has been characterized by high financial and management costs, coupled by, in some cases, low capacity utilization of plants. Consequently, the resulting high cost of input to downstream activities has been a barrier to linkages within the manufacturing sector itself (Government of Malaysia 1989, p. 196).

Yet, this approach to wealth redistribution

along ethnic lines is fundamental to social stability. More specifically, it has also served the chief ruling party — UMNO — to safeguard its political dominance, as evidenced by a series of electoral gains since 1970. But allocatable resources are not unlimited. Consequently, until the split within UMNO occurred in the mid-1980s, class coalition between the élites of UMNO and MCA (Malaysian Chinese Association) — its main coalition partner — became less compact than before the start of the NEP. On many occasions, UMNO leaders realized that the vitality of the cohesion within their own ethnic group was more important than their political coalition.⁷ Within relatively little access to public funds, some members of the MCA used their own methods as an alternative. The most serious case was the scandal related to Deposit-Taking Cooperatives.⁸ Presently, because of the need to preserve jobs and lack of profit-making potential of most public enterprises, it is unlikely that the government will implement effectively the privatization programme for fear of loss of political support. It would be a long process if privatization is to move ahead. Meanwhile, the priority issue rests with controlling the expenses of public enterprises.⁹

Generally speaking, the public enterprises have not placed emphasis on manufacturing of low and medium technology. With some exceptions, Chinese big capital has also avoided this subsector. Their common interest has been focused on acquisition of shares in the corporate sector, property purchase, housing construction and other service areas. Parallel to this, there has been substantial capital flight from the private sector to seek better investment opportunities overseas — at an average of \$3.0 to \$3.5 billion per year between 1976 and 1985 (Khor 1987). In sharp contrast to the dilemma of local industries and a severe capital flight, Malaysia is experiencing a large inflow of multinational capital into its manufacturing sector, marking a new phase of multinationals' global electronics business strategy as a strong stimulant to national growth.

Export-oriented Industrialization and New International Division of Labour

The foreign-induced export-oriented industries accelerated after the mid-1970s. Since 1987, recent world trade recovery has brought substantial foreign investment to Malaysia's electronics industry, notably from the United States, Japan, Taiwan, and Singapore. During 1988, largely because the electronics industry enjoyed a strong worldwide demand, manufacturing became the largest foreign exchange earner of the country (Table 3). The same year also saw the value of manufacturing export achieve a record-high level, reaching nearly \$27 billion or almost half of the total export value. The principal resource-based product — petroleum — declined in proportion as a result of falling price and slow growth in production. Malaysia, in fact, is currently the largest producer of semiconductors outside Japan and the United States. Nonetheless, is the foreign capital inflow sustainable or is it a transitional

TABLE 3
Share of Exports
by Commodities in Malaysia, 1970–88
(Percentages)

Commodity	1970	1980	1985	1988
Manufacturing	11.1	20.6	32.8	48.6
Rubber	33.4	17.1	7.6	9.5
Forestry ^a	16.3	12.9	10.3	10.5
Palm oil	5.1	9.1	10.4	8.2
Crude petroleum	3.2	25.3	22.9	11.1
Others ^b	30.9	15.0	16.0	12.1
Total	100.0	100.0	100.0	100.0
Value (\$ million)	5,163	28,445	38,017	55,334

NOTES:

^a Raw log and sawn timber.

^b Tin, cocoa, copper, canned pineapple, gold, etc.

SOURCE: Calculated from Government of Malaysia, 1981; *Mid-Term Review of Fifth Malaysia Plan* (1989).

phenomenon? This question leads us to investigate the contributing factors to such capital influx.

New International Division of Labour

Several factors have contributed to this phenomenon taking place in the East Asian and the ASEAN regions as part of a new international division of labour. First, large trade surpluses and the appreciation of the yen by more than 50 per cent from 1985 to 1987 had motivated Japan to adopt a multi-dimensional investment strategy overseas. With a much stronger yen and dollar reserves, the Japanese firms have purchased substantial amounts of bonds and landed property in the United States. To a lesser extent, they have also expanded direct manufacturing investment in the United States and Europe. In the West Pacific region, Japan has dispersed its sale of capital goods and the electronics circuit to notably the NICs¹⁰ and, on a smaller scale, to ASEAN. Having still a highly imbalanced industrial structure, the NICs badly need intermediate and capital goods from more advanced nations like Japan. Consequently, the Asian NICs have been "woven into the Japanese parts-subcontracting system as satellite producers" (*FEER*, 4 September 1986; 12 March 1987). Furthermore, favoured by a lower tariff accorded under the Generalized System of Preferences (GSP), the trade barrier to Japan, other than the institutional complications, has been reduced. Therefore, in addition to imports of resource-based non-durable consumer goods, Japan has also increased its intra-industry demand for labour-intensive parts and components from the neighbouring NICs and ASEAN. In the process, the Japanese investment in the Asian NICs started to replace labour-intensive investment with capital and technology-intensive investment in many areas (Awanohara 1989). From the NICs, components and finished goods are delivered back to Japan or sold in local markets and other industrial nations. Thus, in response

to the international pressure to expand domestic aggregate demand and the need to change its import structure, Japan saw its proportion of manufacturing intake expand sharply in terms of total imports — from 20 per cent in 1975 to 44 per cent in 1987 (Lo, Salih and Nakamura 1989; Hirata and Nohara 1989).

While Japan seeks investment opportunities in the NICs, the change in internal industrial structure and rise in price levels of the production factors in the latter economies have called for intensification of investment to the ASEAN. In Taiwan, for instance, the island is facing an acute shortage of industrial land besides problems of currency appreciation, rising wages, industrial actions and pressure on environmental pollution. Lately, the demand for industrial sites has outstripped supply by many times, forcing many Taiwanese companies to relocate labour-intensive industries overseas (*FEER*, 26 January 1989). In fact, the pressure

to transfer investments abroad has been so great that, in 1988, Taiwan was the largest foreign investor to new projects in Malaysia (Table 4). Taiwan's investment surge was dramatic between 1986 and 1988 and enabled it to rank second after Japan as a source of foreign equity. Ranking third was Singapore, followed by the United States and Hong Kong. Like Taiwan, Singapore has also begun to face similar problems, although the dimension is still much less serious.

Handicapped by the lack of supporting industries to provide basic materials to large firms, Singapore is now looking towards Malaysia and Indonesia for a solution. Consequently, Johore of Malaysia and Batam Island of Indonesia have been chosen to become industrial backyards of Singapore, and apparently have been earmarked as sites which will benefit from tourism and industrial spillover, and be major food suppliers to the island state

TABLE 4
Source of Foreign Equity in Approved Projects in Malaysia, 1986-88
(In \$ million)

<i>Country</i>	<i>1986</i>	<i>1988</i>	<i>Cumulative 1986-88</i>	<i>% (Cumulative)</i>
Japan	58.065	561.100	850.012	26.8
Taiwan	5.040	384.300	507.800	16.0
Singapore	90.033	172.100	397.538	12.5
United States ^a	17.071	252.600	330.943	10.5
Hong Kong	27.518	129.500	184.845	5.8
Netherlands	180.250	2.500	182.750	5.8
France	8.500	131.750	155.300	4.9
United Kingdom	19.056	94.800	139.978	4.4
India	16.025	32.150	76.425	2.4
Australia	16.320	9.890	55.860	1.8
West Germany	1.379	25.570	37.005	1.2
Others	85.268	97.800	250.132	7.9
TOTAL	524.525	1,894.060	3,168.588	100.0

NOTE: Data for 1987 is not included.

^a The sharp rise is also a result of electronics investments by American firms, strongly concentrated in Penang's Free Trade Zones.

SOURCE: Government of Malaysia (1989), Table 8-7.

(*FEER*, 18 August 1988; *Straits Times*, 21 December 1989). The technology transfer from the NICs to other ASEAN countries is characterized by lower cost, and ease of adaptability including electronics (Chen, 1987). With advantages such as more highly skilled labour and infrastructural standards, Malaysia and Thailand offer favourable conditions for attracting foreign capital.

Hence, with a higher yen since 1985, Japanese investments abroad have a broader base, varying from real estate to a wide range of manufacturing industries. While new Japanese direct foreign investment overseas rose to a high level — from US\$12.2 billion in March 1986 to US\$47 billion in March 1989, the structure of labour force within the NICs and ASEAN have also been further affected by the Japanese industrial structural change (*Straits Times*, 29 March 1990). To save costs, the level of technological transfer from Japan has also risen. In possession of a higher technological level, the NICs would definitely be in a better position to absorb Japanese transferable technology. In the light of this new international division of labour, how far has Malaysia benefited from technological transfer is another key issue that needs examination.

Transfer of Technology

Basically, the extent of technological transfer depends on two factors. On the one hand, internal restructuring, arising from the labour-capital relationship and domestic industrial policy of the investing nation, determines the types of industry to be moved overseas. On the other hand, political stability, technical expertise, wage levels and other favourable conditions available in the recipient country also have to meet the demands of the multinationals in search of good profit margins. Thus, the extent of technological transfer will largely correspond with the criterion of whether any such transfer leads to gain or loss of profits.

In the 1970s and the early 1980s, multina-

tional investment was concentrated in capital-intensive and high levels of direct foreign investment, contributing little to local industrial deepening. The Malaysian workers were primarily engaged in low-skilled labour-intensive products (O'Brien 1989, p. 13; Chee 1987; *FEER* 7 August 1986). They absorbed only a small part of the whole electronics manufacturing, making the transfer of technology difficult. Moreover, foreign firms in the Free Trade Zones and the Licensed Manufacturing Warehouses used relatively little local materials — less than 5 per cent. Foreign-owned "enclaves" had few linkages with the local economy (Warr 1986, pp. 189–94).

Since the mid-1980s, however, the situation has changed as Malaysia began to move up the technological ladder and, more notably as a result of the investment strategy of the multinationals. Of late, the multinationals have been increasingly driven to subcontract more to local firms to cut cost, and to train local engineers and workers to improve productivity so that local products are upgraded for the competitive international market. Following the rise in skill content of local input, the extent of local component sourcing has also increased.

But it remains uncertain whether current huge foreign investment and expansion in the electronics industry will continue at a high rate or decline substantially in the near future. Indeed, markets in Japan, United States and Western Europe as well as Malaysia itself as a preferred site of foreign investments are variables which are likely to change over time. The serious trade deficit problem in the United States will possibly compel it to curb its role as the chief absorber of Asian exports. The capacity of the Japanese market, albeit very substantial, may have to depend on the commodity prices and the exchange rate of the yen, which determine the profit margins of firms. As a natural resource-poor nation, Japan's current high levels of profit are derived significantly from relatively low prices in raw materials and energy sources.

Hence, the current surge in multinational activities in Malaysia can be fragile once the boom is over. Multinational capital is very mobile — the liberalization in Eastern Europe has moreover added an alternative investment site for multinational capital. Malaysia's present comparative advantages may be lost when other countries offer better conditions of investment or when the electronics industry is hit world-wide by a severe recession. Already signs have started to emerge of a weakening world demand in electronics products — the annual manufacturing growth in Malaysia had dropped from 20.8 per cent in 1988 to 14 per cent in 1989 while all the other sectors were experiencing further growth (*Straits Times*, 30 March 1990).

Thus, the crux of the growth factor in manufacturing remains with the orientation of the local capital and the technological and management skills that the Malaysian nationals have acquired in the last two to three decades. It is imperative that more resources from the public enterprises and the private sector be directed towards light resource-based industry and other industrial subsectors that already have a strong link to supply parts and components to multinationals. Once this base is consolidated, they will be in the position to shift their capital to high technology.

Prospects of Industry in the 1990

As a developing nation rich in natural resources, there is much scope for Malaysia to develop initially its resource-based light industry. This not only serves to consolidate an industrial base but it also can provide jobs to unskilled and semiskilled workers. Taiwan's experience may serve as a precedent.

An island poor in resource endowments, Taiwan underwent the stage of developing labour-intensive small and medium industry in the 1960s before going for high technology (Tsiang 1986). Initially, the small Taiwanese entrepreneurs faced many problems such as the lack of an organized distribution system, access to foreign markets, bank loans and in-

novation research ability. These problems were dealt with by the Small and Medium Business Administration set up by the Taiwan Government to assist them. By 1983, small and medium enterprises still accounted for 55 per cent of the gross national product and engaged 70 per cent of the labour force (Yu 1986, p. 115). The need to accumulate technical know-how and manpower training in the process of industrialization is fundamental. Conversely, a hasty plunge into modern and heavy technology may bring about poor results if an initial build-up of technical knowledge and experience is lacking. Unequivocally, the return of skilled technicians from the United States has contributed substantially to Taiwan's advancement in technology. Conversely, the NEP's "positive discrimination" has induced a serious brain-drain to Malaysia. Since 1970, large numbers of non-*bumiputra* graduates have chosen to stay or migrate abroad — the exact figure remains unknown. Yet, this loss of technical skill to the nation has been assessed by the NEP as an achievement of the policy because the yardstick is measured against the change of ethnic proportion in each profession. At the present stage, however, the shortage of highly qualified technicians and engineers has been a source of complaints from foreign investors, and remains a barrier for more effective technological transfer (*FEER*, 20 February 1986; 4 September 1986). The time is now appropriate to reassess the situation for the benefit of the whole nation.

Clearly, the government can assist in inducing local capital to invest in manufacturing using resource-based materials, help raise management and productivity levels of small and medium enterprises and, at a later stage, lead the nation towards high technology. But the public enterprises will need to be reoriented in their business strategy. As Kamal Salih¹¹ argued, the public sector must not just create "a narrow band of tycoons living off investments" (*Straits Times Weekly*, 21 January 1989). Speaking on the Malaysian Incorporated Concept in 1983, Dr Mahathir (Moham-

mad Nor *et al.* 1984, pp. 4–6), Prime Minister of Malaysia, also noted that the public enterprises had more responsibility than the creation of jobs:

The government cannot forever run [business] institutions in order to sustain or create employment . . . Malaysia's future depends on improved productivity and the ability to sell more and more goods to the world.

In his foreword to the *Mid-Term Review of Fifth Malaysia Plan*, Mahathir promised to reduce the role of the government in commerce and industry, and stressed that the main source of economic dynamism should come from the private sector. How far this promise will be implemented remains to be seen. With a very open economy, Malaysia's future will, in the long run, be strongly associated with international trade. Once the economy is committed to productivity, the latter's effectiveness will have to rely upon competition in a free market. From 1975 to 1985, however, the domestic private sector had been discouraged by the NEP and had lost the initiative in long-term manufacturing investments.

Hence, improvement of the present local investment climate in industry is needed. Indeed, with more liberal legislations being enacted since 1986,¹² the private sector has resumed confidence and has shown much stronger interest in the manufacturing activities. Between 1988 and 1989, its growth in domestic investment outpaced substantially that of the foreign investors — 110 per cent as against 30 per cent of the latter (*Straits Times*, 13 March 1990).

Also, in an attempt to restore the important role of small and medium-sized industries, the Trade and Industry Ministry has set up an Industrial and Technical Aid Fund to help modernize their activities. In this programme, the government will initiate four development schemes by allocating \$50 million for that purpose. These include general planning, product and design development, quality improvement and productivity development, and marketing development (*China Press*, 21 March 1990).

Such positive measures will undoubtedly promote industrial output for both the domestic and the world market.

Recommendations for the Manufacturing Industry

In order to reduce the flight of capital and to stimulate more active involvement of the private sector in manufacturing, the following measures are recommended:

1. The New Economic Policy

From 1990 onwards, there should be an alternative to replace the present NEP to provide a more reassuring investment climate in the manufacturing sector. While *bumiputra* firms will still need to be assisted, the whole orientation of development must be set on the basis of productivity and efficiency, in disregard of the ethnic origin.

2. Small and Medium-Scale Industry and Private Sector

To assist modernization of the resource-based light industry, small and medium-scale industries, the government should help strengthen their linkage with the heavy industry at home and abroad. Currently, the linkages are very weak between them. But the linkage can only be strengthened if the small and medium-scale industrial sector produces high-standard components and capital goods. Thus, it is essential to set up a central authority to oversee its development and modernization (Chee 1987, p. 145). Incentives should be given to encourage spending on technological improvements or innovations, especially to firms aimed at competing in the international markets (Government of Malaysia 1986a, p. 354).

3. State-Owned Heavy Industry

At the present stage, the role of state-run heavy industry should be played down to the minimum. Hence, capital saved can be used for

supplying basic infrastructure and other goods and services. These will help pave the way for or stimulate future participation of private capital in the industry in the form of joint ventures with the government or otherwise.

4. Foreign Investment in High Technology

Despite low tax returns, foreign investment in Free Trade Zones should continue. Local entrepreneurs, however, should be encouraged to seek opportunities to joint venture to increase local input in components and parts, marketing and management. Such joint-venture projects will also assist local entrepreneurs access multinational corporations' international market network and participate in transfer of technology.

5. Technical and Management Training

Technical and engineering courses at the tertiary level should be expanded to absorb more students for professional and skills training. Large firms should be given incentives to provide on-the-job training facilities. The present ethnic quota system used to recruit students can only hinder the rational growth of the national economy. Moreover, strong incentives should be used to attract graduates back from overseas. Only with a larger group of technical staff at the national level can a firm base of Research and Development (R&D) efforts be established and create a conducive environment for industrial development.

6. Bumiputra Participation and Public Enterprises

Manufacturing companies of the *bumiputra* should be encouraged to compete in a free domestic and export-oriented market. Such an endeavour will help consolidate the *bumiputra* entrepreneurship in a wide range of manufacturing activities. More capital of the public enterprises should be used to help *bumiputra* participation in the manufacturing industry. Nevertheless, to relieve public burden¹³ after

1990, the public enterprises should be gradually released in a privatization process. By then, much public funds will be made available to benefit the country's lower income groups of all races.

Concluding Remarks

Under the New Economic Policy in Malaysia since 1970, local and foreign industrial investments have experienced varied effects. The impact upon small local private capital has been particularly great since the 1980s when the government focused on state-run heavy industry — aimed as a primary means of promoting a modern Malay entrepreneurial class and to transform an economy highly dependent on commodities. Basically, local private small industry receives little attention compared to heavy industry. Conversely, foreign manufacturing capital has been accorded considerable incentives to boost growth needed by the redistributive New Economic Policy. While public enterprises generally encounter problems of deficit, small industry declines *vis-à-vis* an expanding export-oriented foreign manufacturing industry. Yet, despite its capacity to bolster national growth and a successful transfer of technology lately, the foreign capital is highly mobile and site-selective — there is a risk in relying on it as an important source of long-term growth. Consequently, there is a need to downgrade the role of state-run heavy industry and place emphasis on resource-based light industry and skills training. The latter will be essential to meet the qualitative demand if Malaysia is to supply sophisticated parts and components to the world market.

Since 1986, corrective and more liberal measures have been undertaken by the Malaysian Government to release the constraints imposed upon private capital. Positive results have also begun to be seen, and consequently it is believed that the industrial sector will experience market forces more rigourously in the 1990s.

ABBREVIATIONS		MIDA	Malaysian Industrial Development Authority
ASEAN	Association of Southeast Asian Nations	MIDF	Malaysian Industrial Development Finance Berhad
BPM	Bank Pembangunan Malaysia (Development Bank of Malaysia)	NEP	New Economic Policy
FIMA	Federal Industrial and Marketing Authority	PETRONAS	National Petroleum Corporation
HICOM	Heavy Industries Corporation of Malaysia	PKKM	Perbadanan Kemajuan Kraf-tangan Malaysia (Handicraft Development Board)
MARA	Council of Trust for Indigenous People	SEDC	State Economic Development Corporation
MCA	Malaysian Chinese Association	UMNO	United Malays National Organisation

NOTES

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1. Including other indigenous people.
2. Unless otherwise indicated, the currency unit is in Malaysian Ringgit — US\$1 is equivalent to Malaysian Ringgit 2.7.
3. Most of the firms are small and are involved in rice milling, manufacture of spices, curry powder, brooms, brushes, cooking oils, ice, furniture, wooden and can containers, wood and cork products, lime, plaster, non-metallic mineral products, motor vehicle bodies, noodles, confectionery, chocolate, bakeries, rubber products, basic metal, garments and other manufactures.
4. *Far Eastern Economic Review*.
5. Firms in the free trade zones are entitled to duty-free imports of raw materials and capital equipment, concessions in land and tax duties, and relaxed customs formalities.
6. On 24 October 1986, the requirement was relaxed to companies with more than 75 full-time employees or a paid up capital in excess of \$2.5 million.
7. Evidence can be obtained from the disputed purchase of shares of Public Bank Corporation in 1981 between PERNAS and Multi-Purpose Holding Corporation (an economic arm of the MCA). In early 1989, there was an attempt by the Hume Corporation to buy the Multi-purpose Holding Corporation. The act was supported by UMNO given its close business link with the Hume Corporation (*FEER*, 27 April 1989).
8. In August 1986, 24 out of 35 cooperatives of this nature went out of fund due to mismanagement and abuses, affecting 588,000 depositors who were mainly small Chinese wage earners. About M\$1.5 billion of deposits was suspended.
9. A remark made by the Finance Minister, Daim Zainuddin (*FEER*, 1 November 1984).
10. The newly industrializing economies of South Korea, Taiwan, Hong Kong, and Singapore.
11. Kamal Salih is executive director of the Malaysian Institute of Economic Research (MIER) — a think-tank to the government decision-makers.
12. A series of measures has been undertaken to encourage private investment in the manufacturing sector. This includes: (1) adoption of the Promotion of Investment Act, 1986; (2) relaxation of the regulation on manufacturing licence; (3) revision of the guidelines on foreign equity participation and on the employment of expatriates; and (4) improvement of the Export Credit Refinancing Schemes (ECR) to facilitate international competition for products of Malaysian exporters (MIDA 1986, pp. 20–23).
13. In 1986, the outstanding loans of the public enterprises to the Federal government accounted for \$32.8 billion, equivalent to 44 per cent of Federal Government's debt—\$74 billion (See Khor 1987, p. 138).

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