

INVESTMENT INCENTIVES AND TRENDS OF MANUFACTURING INVESTMENTS IN MALAYSIA

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I. INTRODUCTION: THE MALAYSIAN ECONOMY

THE strength of the Malaysian economy has been largely due to the country's rich natural resources. Although the land area is only 330,434 square kilometers and has a population of about 14 million, Malaysia is the world's leading producer of a number of primary commodities. Malaysia exports 42 per cent of the world's supply of natural rubber, 80 per cent of palm oil, 35 per cent of pepper, and 36 per cent of tin besides exporting other commodities such as crude petroleum and tropical hardwood.

The Malaysian government has realized the danger of being dependent on the export of primary commodities alone. The country's fortune has depended too much on the vagaries of world demand for rubber, tin, palm oil, and crude petroleum. In the seventies, the Malaysian government decided to diversify the economic base of the country; among these measures were encouraging the development of the manufacturing sector. The industrialization strategy changed from one of import substitution in the sixties to one of export orientation in the seventies. As a result of deliberate government policy as well as due to the declining commodity prices in the world market,¹ the structure of Malaysian exports has shifted quite dramatically in recent years. The share of rubber in terms of total export value fell from 50 per cent in 1961 to 33 per cent in 1970; in 1982 rubber exports accounted for only 9.4 per cent of the total export value, due to the decline in the world price for rubber. The same is true for tin; its share in exports fell from 20 per cent in 1970 to only 5.28 per cent in 1982. Palm oil also has declined in importance, due also to the depressing world palm oil prices. The share of sawn logs and sawn timber, however, remained quite constant. The share of crude petroleum increased dramatically due to new discovery of the commodity as well as to the increase in the price of the product.

The contribution of manufacturing to export earnings increased rapidly in

¹ RSS 1 f.o.b. rubber fell from a high of 312 cents per kilogram in 1980 to a low of 201 cents in 1982. Crude palm oil declined from a high of M\$1,177 per metric tonne in 1981 to a low of M\$893 in 1982. Tin price reached a high of M\$35.71 per kilogram in 1980 but fell to M\$30.17 in 1982.

TABLE I
MALAYSIA: MAJOR EXPORT COMMODITIES

	(M\$ million)		
Commodities	1970	1975	1982
Rubber:			
Value	1,724	2,026	2,655
(% of total export)	(33.40)	(21.95)	(9.44)
Palm oil:			
Value	263	1,320	2,656
(% of total export)	(5.10)	(14.30)	(9.45)
Tin:			
Value	1,013	1,206	1,484
(% of total export)	(19.62)	(13.07)	(5.28)
Crude petroleum:			
Value	203	727	7,694
(% of total export)	(3.93)	(7.88)	(27.37)
Sawn logs:			
Value	643	669	3,377
(% of total export)	(12.45)	(7.25)	(12.01)
Sawn timber:			
Value	201	392	1,035
(% of total export)	(3.89)	(4.25)	(3.68)
Manufactures:			
Value	392	1,927	7,447
(% of total export)	(7.60)	(20.88)	(26.49)
Others:			
Value	724	964	1,765
(% of total export)	(14.02)	(10.44)	(6.28)
Total export value	5,163	9,231	28,113

Source: Malaysia, Ministry of Finance, *Economic Report, 1983/84* (1983).

recent years. As shown in Table I its contribution in 1970 was only 7.6 per cent of export earnings, but these increased to 20.9 per cent and 26.5 per cent in 1975 and 1982 respectively.

The growing importance of the manufacturing sector may also be seen by its contribution to the country's gross domestic product. The share of manufacturing in GDP increased from 9 per cent in 1961 to 13.6 per cent in 1970 and to 18 per cent in 1983. Value added in the manufacturing sector grew by 12.5 per cent per annum during 1971-80, making it the leading growth sector in the Malaysian economy. The rapid growth was due both to increased exports and to rising domestic demand.

There were drastic structural changes in the manufacturing sector during the seventies. The early seventies saw the expansion of import substitution industries, in particular, the food manufacturing industries. The food sector accounted for 15.3 per cent of value added in manufacturing in 1970, but declined to 9.3 per cent in 1980 as the domestic market became saturated. Import substitution then

shifted to consumer durables as the domestic market for these goods rose with the higher standard of living.

The seventies saw a shift towards the growth of export-oriented industries, such as electrical and electronics machinery, veneer and plywood, chemical and petroleum products, and rubber-based industries. Electrical and electronics machinery, appliances, and parts accounted for the largest share of manufactured exports in 1982, accounting for 52 per cent, followed by textiles, 11 per cent, food and chemical and petroleum products, 7 per cent each.

According to the Fourth Malaysia Plan 1981–1985, industrial development during the seventies generated 416,000 new jobs representing 24.5 per cent of the total employment created. Consequently, the share of manufacturing in total employment increased from 11.4 per cent in 1970 to 15.8 per cent in 1980. The textiles, electrical and electronics, food manufacturing, and wood-based industries together accounted for most of the new employment in the manufacturing sector.

In connection with the growth and development of the manufacturing sector, certain questions need to be answered. These include: what is the role of investment incentives in industrial development? Are these incentives important and necessary? What are their effects on the pattern of industrial growth? Do the incentives favor the growth and development of certain industries at the expense of others?

It is difficult to answer these questions in a vigorous and quantitative manner. Nevertheless, the subsequent parts of this study will be devoted to explaining the relative importance of the role of investment incentives in Malaysia. For this purpose the manufacturing sector is classified according to the following: Food; Beverages and Tobacco; Textiles; Leather; Wood; Furniture and Fixtures; Paper, Printing, and Publishing; Chemicals; Petroleum; Rubber; Plastics; Non-metallic Minerals; Basic Metal Products; Fabricated Metal Products; Machinery; Electrical and Electronics; Transport; Scientific Equipment; and Miscellaneous. Each of these sectors are in turn grouped into industries which receive "pioneer status" and "other tax incentives," and those "without tax incentives." It has been discussed earlier that besides "pioneer status" industries, there are a number of other incentives available to potential investors. Since industries granted other tax incentives are not many, it is more convenient to group industries receiving these other tax incentives into one category.

II. THE INDUSTRIAL DEVELOPMENT PROGRAM

Like many countries, Malaysia makes use of various investment incentives as instruments of industrial policy.

A. *Pioneer Industries (Relief from Income Tax) Ordinance of 1958*

The earliest attempt of the government to promote the growth of the manufacturing sector was the introduction of the Pioneer Industries (Relief from

Income Tax) Ordinance of 1958. Under the ordinance, firms granted "pioneer" status were granted an initial tax relief (from the prevailing 40 per cent company tax) for two years, with an extension to: (1) three years where capital investments of more than M\$100,000 but less than M\$250,000 were incurred, or (2) five years where capital investments of M\$250,000 or more were incurred.

The 1958 ordinance was amended by the Pioneer Industries (Relief from Tax) (Variation) Act of 1965. The difference was in the higher qualifying levels of capital investment. Under the new act, "pioneer" firms were granted tax holiday of two years if they invested less than M\$250,000, three years if the investment was between M\$250,000 and M\$500,000, and five years if it was more than M\$1 million.

B. *The Investment Incentives Act of 1968*

Despite the attractiveness, the ordinance had its shortcomings in that it could not meet the needs of the changing economic environment of the late sixties and the decade of the seventies. First, as the domestic market became saturated by the late sixties, there was the need to encourage the promotion of export-oriented industries. Second, under the ordinance, manufacturing companies were not encouraged to utilize local raw materials and labor in their production. These shortcomings resulted in the formulation of the Investment Incentives Act of 1968, which gives three alternative forms of incentives: "pioneer" status, investment tax credit for "non-pioneer" companies, and export incentives.

"Pioneer" status is granted to an industry or for a product provided (1) that the industry is not already being carried out or the product is not at present produced in Malaysia on a commercial scale, (2) that there are good prospects for further development, and (3) that it is in the public interest to do so.

The pioneer status entitles a company to relief from company, development, and payroll taxes for two to five years depending on the amount of capital investment. A minimum of two-year tax holiday is given to any "pioneer" company, whatever the level of capital investment. The tax holiday would be extended to a third, fourth, and fifth year if the investment was increased by M\$250,000, M\$500,000, and M\$1 million respectively by the end of the third, fourth, and fifth years. The tax relief period may be extended by an additional year if the factory is located in a "development" area, or if it manufactures "priority" products, or if it uses a required percentage of Malaysian raw materials in production.

The maximum tax holiday for eligible companies is therefore eight years. In addition, losses incurred during the tax holiday period may be carried forward to the post-tax holiday period. Dividends paid out of profits earned during the tax holiday are also exempted from tax.

Like the previous investment incentive scheme, there was no deliberate attempt to promote certain industries. This can be seen from the fact that the definition of a "pioneer" industry is very broad and comprehensive.

Under the 1968 Investment Incentives Act, the investment tax credit is in-

tended for non-pioneer companies. It shall not be less than 25 per cent of the capital expenditure incurred in any one year and may be carried forward until fully utilized. The tax credit may also be increased by 5 per cent of the expenditure for each of the following conditions fulfilled by the company: (i) if the factory is located in a development area; (ii) if the company produces a priority product or establishes a priority industry; and (iii) if the manufacturer uses the required percentage of Malaysian content in the final product.

To encourage the establishment of export-oriented industries, three types of export incentives can be granted to companies which export their products. These are:

- (i) Export allowance: The amount of allowance is 5 per cent of the f.o.b. value of export sales of the year.
- (ii) Accelerated depreciation allowance: Companies exporting at least 20 per cent by value of their total production and incurring qualifying plant expenditure for the purpose of modernizing the company's production techniques or to set up a modernized factory are entitled to an accelerated depreciation allowance of 20 per cent.
- (iii) Deduction for promotion expenses overseas: These are deductions for expenses incurred for the purpose of seeking opportunities for the export of products manufactured in Malaysia.

C. *Labor Utilization Relief*

In 1971 amendments were made to the Investment Incentives Act of 1968 to encourage industries to utilize more local labor. This provision is the Labor Utilization Relief; it provides for exemption of company and development tax in the same way as in the case of pioneer companies, except that the granting of such exemption is based upon the number of full-time paid employees engaged in the company instead of on the amount of capital expenditure incurred. A company that employs between 51 to 100 workers enjoys tax relief for two years. The tax holidays can be extended to a third, fourth, and fifth year if the labor force is increased to more than 100, 200, and 350 employees respectively. As in the case of pioneer companies, an extension of a further year of tax relief is granted for each of the following conditions:

- (i) if the firm is located in a development area;
- (ii) if the firm produces a priority product;
- (iii) if the firm uses over 50 per cent Malaysian content in its manufactured product.

D. *Locational Incentives*

The locational incentives scheme has been designed to encourage industrialists to locate their factories in the less developed areas of the country. Under this scheme, a company locating its factory in an area specified by the government as a locational incentive area will be granted a maximum tax relief period of up to ten years, depending on the amount of capital investment or number of

workers employed. A minimum of five years tax relief is granted to a company with less than M\$250,000 capital expenditure or employment less than 101. The tax relief period would be increased to a sixth, seventh, and eighth year if the capital expenditure was increased by M\$250,000 (or employment not less than 101), M\$500,000 (or employment not less than 201), and M\$1 million (or employment not less than 351) respectively by the end of the sixth, seventh, and eighth years. The tax relief period may be extended for an additional year each if the company produces a priority product or if it incorporates Malaysian content in its production.

E. *Tariff Protection and Duty Exemption*

In addition to the liberal tax exemption incentives, appropriate tariff protection and duty exemptions may also be granted to companies catering to the domestic market as well as to those that manufacture for export. These incentives include the following:

- (a) Favorable consideration for protection of deserving local industries, either by way of quota/licensing or by the imposition of protective tariffs or both;
- (b) Exemption from import duty on raw materials and machinery required by manufacturing industries; and
- (c) Reduction of customs duties for raw materials and component parts used in the manufacture of goods for exports.

III. MALAYSIAN INDUSTRIAL INCENTIVES: CONTROVERSIAL ISSUES

A. *Biasness of the Incentives*

One of the controversies surrounding the investment incentives program in Malaysia is that they favor the growth of large establishments and discriminate both against small-scale establishments and long gestation projects. Furthermore, many of these incentives have been given to import substitution industries which are already enjoying tariff protection, thus making the fiscal incentives redundant. It has also been argued that incentives are also redundant in that they are given to companies which least deserve it, that is, those companies which have been making the most profits. Wheelright, for example, shows that out of ninety-two companies enjoying pioneer status in 1963-67, only fifty-nine qualified for tax relief. Ten companies (all foreign-owned), with an annual average rate of profit of over 18 per cent, received 78 per cent of the total tax relief granted [4, p. 63].

The system of investment incentives in Malaysia is also said to have favored large over small companies since the period of tax exemption or investment tax credit granted is tied to the amount of investment or to the size of the labor force. It has been pointed out, for example, that of the total investment of M\$407.3 million by pioneer firms between 1959 and 1968, 53.2 per cent was concentrated in two typically capital-intensive industries, namely, manufacturing of petroleum products and manufacturing of chemicals and chemical products

[1, p. 188]. It has been argued that the investment tax credit favors projects with heavy investments and those that have a long gestation period before profits are made. In most cases these are projects undertaken by large, capital-intensive enterprises.

B. *Industrial Decentralization*

It has also been pointed out that the present system of locational incentives in Malaysia has not been effective in encouraging industries to locate their plants in the less developed areas. An empirical study on industrial location in Peninsular Malaysia showed that government tax incentives ranked low among the factors that had influenced location decision [2]. It may be that the main reason for the lack of response towards tax incentives is that they are simply not attractive enough to induce manufacturers to locate their plants in the less developed areas. Under the present locational incentives system an approved company locating its plant in an area specified as "locational incentive area" may be granted a maximum tax relief of up to ten years, depending on the amount of fixed capital expenditure or employment. Again, this system favors the capital-intensive and large companies because the larger the company in terms of capital and employment, the longer the tax relief period. It has also been argued that large industries tend to concentrate in the more developed areas of the country.

C. *Transfer of Technology*

One of the reasons why Malaysia is placing heavy emphasis on industrialization is that it offers prospects of a transfer of technology which should lead to an upgrading of skills and the quality of capital so crucial to economic development. In recent years, some critics have argued that the industrial incentives program in the country has not led to the desired pattern of industrialization; in particular, it has been argued that the incentive system does not encourage the transfer of appropriate technology. In fact, the transfer of often inappropriate technology from abroad has inhibited the development of local technological capability and therefore perpetuated technological dependence on the developed countries. For example, a study shows that technological transfer among electronics and electrical establishments in Malaysia is extremely limited [3]. The study shows that components companies are largely "turnkey" factories completely dependent on foreign technology.

D. *Investment Tax Incentives: Industrial Investment Patterns and Trends in Malaysia*

It would be interesting to analyze the impact of investment tax incentives policy on the trend of manufacturing investment in the country. The study on the effectiveness of investment tax incentives would require an analysis of how much each company receives from tax incentives, that is, how much the individual company saves in corporate income tax by utilizing the tax incentives. Then

TABLE II
MANUFACTURING INVESTMENTS BY TYPES OF INCENTIVES

	(%)						
Year	1975	1976	1977	1978	1979	1980	1981
Pioneer companies	73.89	71.44	56.30	50.83	48.97	45.16	42.66
Other incentives	9.60	7.91	15.38	13.91	14.34	14.97	15.69
Without tax incentives	16.51	20.65	28.32	35.26	36.69	39.87	41.65

Source: Calculated from Tables III-V.

a relationship can be established between the tax savings and the rate of investment. Unfortunately, data is not available for such a study—this explains why so far no attempt has been made to analyze the effectiveness of tax incentives on investment in Malaysia. Due to the lack of required data, this paper adopts a qualitative approach to the analysis of the relationship between tax incentives and investment trends in Malaysia. The analysis involves establishing a trend between the amount of tax incentives granted to each industry and the growth of investment of the industry over the same period. Of course, such an analysis has many weaknesses, but given the absence of required data it was felt that this was the best alternative approach to the study.

It has been pointed out earlier that different types of investment incentives have been made available to potential investors; these include pioneer status, investment tax credit, labor utilization relief, locational tax incentives, export promotion incentives, etc.

The information in this section has been compiled from unpublished data from the Malaysian Industrial Development Authority. Data was available only for the years 1975 to 1981. It was found to be more convenient, for purpose of analysis, to classify investment incentives into two major categories: (1) those granted pioneer status, and (2) those granted other forms of tax incentives. The second group had to be classified together because there were not many companies granted various tax incentives other than pioneer status. It may however be noted that investment tax credit is the most common in this category of tax incentives. A third category of industries is of course those not granted any tax incentives. It may also be noted that investment is defined here as paid-up capital plus commercial bank loans and advances to the sector.

Table II shows the share of manufacturing investment by industries with pioneer status, those with other tax incentives, and those without tax incentives. The table shows that the amount of investment in industries receiving various types of incentives has been consistently higher than investments in industries without tax incentives. However, the gap in investment between industries with incentives and those without incentives appears to be narrowing rapidly. For example, in 1975, about 83 per cent of the value of manufacturing investments was made by those receiving some form of tax incentives, with pioneer companies accounting for almost 74 per cent of the total. By 1981, the share of

Fig. 1. Manufacturing Investments by Types of Incentives

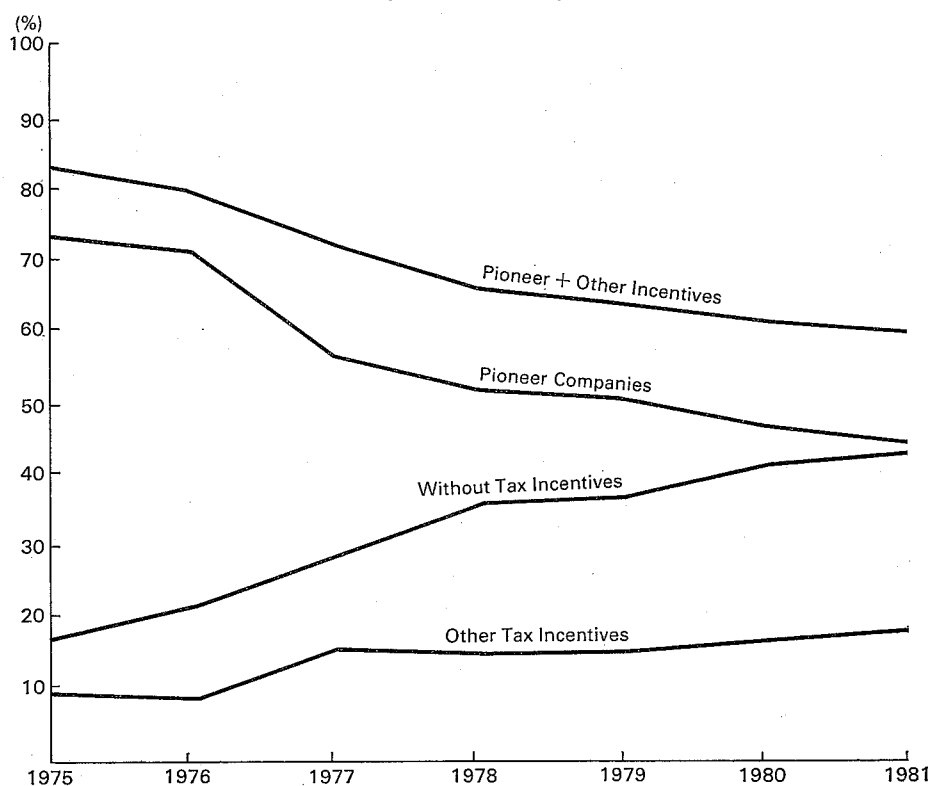


TABLE III
NUMBER OF MANUFACTURING ESTABLISHMENTS BY TYPES OF INCENTIVES

	Tax Incentives		Without Tax Incentives	
	No.	%	No.	%
1976	556	55.5	446	45.5
1977	644	43.4	840	56.6
1978	677	34.0	1,314	66.0
1979	686	33.1	1,386	66.9
1980	862	34.3	1,648	65.7
1981	1,077	37.4	1,804	62.6

Source: Tabulated from MIDA data.

investments of industries with tax incentives fell to 58 per cent. Figure 1 depicts such a trend of manufacturing investment by types of incentives.

Table III indicates the growth of manufacturing establishments by companies with and without investment incentives. It may be noted that since 1977 the share of industries without tax incentives has been consistently higher than those with incentives. The average annual rate of growth of the number of

establishments during 1976–81 was 14.1 per cent for those with incentives and 32.2 per cent for those without incentives.

A breakdown of value of investment by ownership (foreign or local) and types of incentives also indicates a general decline in the share of manufacturing industries granted tax incentives. The share of foreign investments with tax incentives declined from 43 per cent in 1975 to 33 per cent in 1981, registering an average annual growth rate of 11.1 per cent. The share of local investments with incentives however increased compared with those of foreign investments: local investments with tax incentives increased from 56.7 per cent in 1975 to 67 per cent in 1981, and recorded an average annual growth of 16.7 per cent. The share of local investments without tax incentives, on the other hand, decreased from 68.3 per cent in 1975 to 66.5 per cent in 1981; its average annual growth was 40.5 per cent. The share of foreign investments without tax incentives however increased from 31.7 per cent in 1975 to 33.5 per cent in 1981, recording an average annual growth of 42.4 per cent. The decline in the share of manufacturing investment with tax incentives can be attributed mainly to the fall in the share of foreign investment granted tax incentives.

The question that follows is: Why do investments without tax incentives continue to grow faster relative to investments with tax incentives? In other words, what contributed to the growth of the overall manufacturing investments?

From the general trend of manufacturing investment, it may be argued that investment incentive is becoming relatively less important factor in determining the level of overall manufacturing investment. The analysis above indicates a decline in the share of investments granted tax incentive and a steady increase in investments made without tax incentives. This may be explained by the fact that manufacturing investment is determined by several factors, besides the availability of tax incentives. Other important determinants of manufacturing investments include rapid economic growth (hence, a rapidly expanding market for manufactured products), political stability (thus ensuring a steady and profitable rate of return on investment), good infrastructure facilities (such as roads, availability of industrial estates, ready built factories, water supply, electricity, and telecommunication services). An empirical study on the factors determining manufacturing investment in Malaysia seems to support such an argument [2]. The study involved interviews with managers of 292 manufacturing companies which were established between 1970 and 1976. The result clearly indicates tax incentives have not been a major factor in determining manufacturing investments. The important determinants of investment were the availability of industrial estates, transport facilities for finished products, accessibility to main markets, and the availability of trainable labor. In fact, a large number of plant managers indicated that they applied for tax exemption after they had decided to make an investment and had decided on the location of the manufacturing plant.

An examination of the sectoral growth of manufacturing investment may shed further light as to why non-tax incentive investments have been growing more rapidly than tax incentive investments. Tables IV to VIII show the relative

TABLE IV
PIONEER COMPANIES: INVESTMENT

Industry	Year							Total
	1975	1976	1977	1978	1979	1980	1981	
Food	258.47	296.67	332.09	369.26	400.55	517.15	601.74	2,775.93
Beverages & tobacco	52.00	36.00	36.00	48.00	48.00	48.00	48.00	316.00
Textiles	411.90	473.94	661.38	739.01	713.55	799.96	827.68	4,627.42
Leather	1.75	6.55	11.30	8.32	8.17	8.17	8.18	52.44
Wood	240.77	434.48	270.87	300.57	293.94	403.76	432.16	2,376.55
Furniture & fixtures	—	—	5.37	—	15.32	15.97	18.63	55.29
Paper, printing & publishing	14.47	13.72	26.12	27.76	27.52	34.90	37.55	182.04
Chemicals	155.50	182.67	232.93	233.66	287.90	325.79	362.05	1,780.50
Petroleum	131.16	157.55	181.97	181.97	92.31	92.31	61.03	898.30
Rubber	120.04	139.94	159.63	169.27	193.82	200.71	258.97	1,242.38
Plastics	83.49	88.66	67.07	76.43	57.94	65.19	85.51	524.29
Nonmetallic minerals	121.72	133.01	211.38	243.42	291.87	298.85	364.92	1,665.17
Basic metal products	135.56	152.46	116.87	139.64	148.06	136.29	182.29	1,011.17
Fabricated metal products	92.34	112.62	117.78	132.29	165.83	207.76	226.73	1,055.35
Machinery	52.79	58.69	59.95	56.74	42.31	147.47	48.46	466.41
Electrical & electronics	221.47	264.37	298.70	292.53	302.26	285.62	434.31	2,099.26
Transport	32.43	39.35	40.60	49.65	49.08	60.12	96.19	367.42
Scientific equipment	12.79	26.47	31.55	39.73	39.09	38.59	50.12	238.34
Miscellaneous	28.92	39.12	44.24	43.38	45.89	47.11	67.94	316.60
Total	2,167.57	2,656.27	2,905.80	3,151.63	3,223.41	3,733.72	4,212.46	22,050.86

Source: MIDA unpublished data.

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TABLE V
COMPANIES WITH "OTHER INCENTIVES": INVESTMENT
(M\$ million)

Industry	1975	1976	1977	1978	1979	1980	1981	Total
Food	172.88	195.63	443.50	476.38	436.17	695.28	875.92	3,295.76
Beverages & tobacco	—	—	—	—	—	—	—	—
Textiles	2.30	4.46	9.14	12.25	15.72	12.76	16.13	72.76
Leather	—	1.11	1.10	1.10	—	0.21	0.20	3.72
Wood	56.80	18.66	25.48	25.67	24.59	46.37	65.15	262.72
Furniture & fixtures	—	—	—	—	0.67	0.69	0.77	2.13
Paper, printing & publishing	6.40	2.06	12.45	12.08	11.60	21.39	19.32	85.30
Chemicals	6.88	18.49	14.96	24.41	45.57	31.54	37.02	178.87
Petroleum	—	—	—	—	—	—	—	—
Rubber	0.21	1.82	1.20	1.19	6.98	16.57	14.61	42.58
Plastics	1.51	9.91	1.89	2.17	2.60	7.98	10.66	36.72
Nonmetallic minerals	2.97	2.95	11.57	12.46	14.05	13.82	19.49	77.31
Basic metal products	0.01	0.01	0.00	0.02	—	—	50.82	50.86
Fabricated metal products	20.75	20.39	17.62	17.23	18.72	30.37	41.07	166.15
Machinery	3.63	4.81	16.39	15.84	20.81	29.73	24.82	116.03
Electrical & electronics	3.24	8.88	14.78	16.68	18.43	26.26	55.52	143.79
Transport	0.51	1.35	219.31	239.39	325.27	301.77	306.66	1,394.26
Scientific equipment	0.01	0.00	0.00	—	—	—	3.08	3.09
Miscellaneous	3.48	2.46	4.14	5.14	2.59	2.95	8.42	29.18
Total	281.58	292.99	793.53	862.01	943.77	1,237.69	1,549.66	5,961.23

Source: MIDA unpublished data.

TABLE VI
COMPANIES WITHOUT TAX INCENTIVES: INVESTMENT

Industry	Year										Total
	1975	1976	1977	1978	1979	1980	1981	(M\$ million)			
Food	55.58	206.08	272.31	355.93	392.90	629.13	788.79	2,700.72			
Beverages & tobacco	—	25.19	110.57	218.86	204.75	218.72	241.18	1,019.27			
Textiles	72.31	87.96	71.95	76.31	94.86	140.61	145.07	689.07			
Leather	—	3.41	15.08	26.04	24.92	27.53	37.29	134.27			
Wood	49.20	48.16	167.14	283.60	292.51	358.36	423.92	1,622.89			
Furniture & fixtures	—	—	1.86	20.27	23.51	28.62	34.03	108.29			
Paper, printing & publishing	9.44	15.78	54.63	94.41	131.92	162.97	196.61	665.76			
Chemicals	57.55	67.84	136.59	100.72	109.49	177.01	195.89	845.09			
Petroleum	3.94	2.44	3.95	5.13	42.97	77.28	80.88	216.59			
Rubber	7.71	9.33	50.64	67.45	67.73	68.71	87.20	358.77			
Plastics	16.69	23.98	38.67	80.85	85.95	93.30	104.78	444.22			
Nonmetallic minerals	87.71	98.42	156.45	262.69	347.65	544.86	598.33	2,096.11			
Basic metal products	13.00	18.78	81.16	104.31	98.83	111.41	203.93	631.42			
Fabricated metal products	36.77	65.04	74.21	133.53	127.06	156.41	199.56	792.58			
Machinery	5.89	17.21	21.90	38.01	41.06	65.62	124.88	314.57			
Electrical & electronics	10.22	19.42	34.42	53.93	63.20	92.06	127.65	400.90			
Transport	52.00	51.48	158.60	250.90	254.81	326.24	503.75	1,597.78			
Scientific equipment	3.95	3.95	4.28	4.53	4.28	4.33	4.18	29.50			
Miscellaneous	2.40	3.62	7.14	8.70	6.72	13.00	14.84	56.42			
Total	484.36	768.09	1,461.55	2,186.17	2,415.12	3,296.17	4,112.76	14,724.22			

Source: MIDA unpublished data.

TABLE VII
SHARE IN MANUFACTURING INVESTMENT BY INVESTMENT INCENTIVES

Industry	Year	Average Annual Rate of Growth of Investment (%)									
		1975	1976	1977	1978	1979	1980	1981	Total	Average Annual Rate of Growth of Investment	
Food	Pioneer status	53.08	42.48	31.69	30.73	32.58	28.08	26.55	31.52	15.12	
	Other tax incentives	35.50	28.01	42.32	39.65	35.47	37.75	38.65	37.33	31.06	
	Without tax incentives	11.41	29.51	25.99	29.62	31.95	34.16	34.80	31.15	55.60	
Beverages & tobacco	Pioneer status	100.00	58.83	24.56	17.99	18.99	18.00	16.60	26.25	-1.33	
	Other tax incentives	—	—	—	—	—	—	—	—	—	
	Without tax incentives	—	41.17	75.44	82.01	81.01	82.00	83.40	73.75	57.12	
Textiles	Pioneer status	84.66	83.68	89.08	89.30	86.58	83.91	83.70	85.78	12.33	
	Other tax incentives	0.47	0.79	1.23	1.48	1.91	1.34	1.63	1.35	38.35	
	Without tax incentives	14.86	15.53	9.69	9.22	11.51	14.75	14.67	12.87	12.30	
Leather	Pioneer status	100.00	59.17	41.11	23.46	24.69	22.75	17.91	28.70	41.95	
	Other tax incentives	—	10.03	4.00	3.10	—	0.58	0.44	2.06	-29.02	
	Without tax incentives	—	30.80	54.88	73.43	75.32	76.67	81.65	69.24	61.35	
Wood	Pioneer status	69.43	86.67	58.44	49.29	48.10	49.94	46.91	56.17	10.24	
	Other tax incentives	16.38	3.72	5.50	4.21	4.02	5.74	7.07	6.09	2.31	
	Without tax incentives	14.19	9.61	36.06	46.50	47.88	44.32	46.02	37.73	43.18	
Furniture & fixtures	Pioneer status	—	—	74.27	—	38.78	35.27	34.87	36.17	36.48	
	Other tax incentives	—	—	—	—	1.70	1.52	1.44	1.20	7.20	
	Without tax incentives	—	—	25.73	100.00	59.52	63.21	63.69	62.63	6.82	
Paper, printing & publishing	Pioneer status	47.74	43.47	28.03	20.68	16.23	15.92	14.81	19.30	17.22	
	Other tax incentives	21.12	6.53	13.36	9.00	6.78	9.76	7.62	9.18	20.22	
	Without tax incentives	31.14	50.00	58.61	70.32	76.99	74.32	77.57	71.52	60.76	

TABLE VII (Continued)

Industry	Year	Average Annual Rate of Growth of Investment (%)									
		1975	1976	1977	1978	1979	1980	1981	Total	Average Annual Rate of Growth of Investment	
Chemicals	Pioneer status	70.70	67.91	60.58	65.12	65.00	60.97	60.85	62.86	15.13	
	Other tax incentives	3.13	6.87	3.89	6.80	10.29	5.90	6.22	5.64	32.38	
	Without tax incentives	26.17	25.22	35.53	28.07	24.71	33.13	32.93	31.50	20.59	
Petroleum	Pioneer status	97.08	98.47	97.88	97.26	68.24	54.43	43.01	83.19	-11.97	
	Other tax incentives	—	—	—	—	—	—	—	—	—	
	Without tax incentives	2.92	1.53	2.12	2.74	31.76	45.57	56.99	16.81	65.47	
Rubber	Pioneer status	93.81	92.62	75.49	71.15	72.18	70.18	71.78	75.31	13.67	
	Other tax incentives	0.16	1.20	0.57	0.50	2.60	5.79	4.05	2.83	102.80	
	Without tax incentives	6.03	6.18	23.94	28.35	25.22	24.02	24.17	21.86	49.82	
Plastics	Pioneer status	82.10	72.35	62.32	47.93	39.55	39.16	42.55	54.10	0.40	
	Other tax incentives	1.48	8.09	1.76	1.36	1.77	4.79	5.30	3.76	38.50	
	Without tax incentives	16.41	19.56	35.92	50.71	58.68	56.05	52.14	42.14	35.82	
Nonmetallic minerals	Pioneer status	57.31	56.75	55.71	46.94	44.66	34.35	37.13	44.02	20.01	
	Other tax incentives	1.40	1.26	3.05	2.40	2.15	1.61	1.98	2.14	36.83	
	Without tax incentives	41.29	41.99	41.24	50.66	53.19	63.54	60.89	53.84	37.72	
Basic metal products	Pioneer status	91.24	89.03	59.02	57.24	59.97	55.02	41.71	60.21	5.06	
	Other tax incentives	0.01	—	—	—	—	—	11.63	3.08	—	
	Without tax incentives	8.75	10.97	40.98	42.76	40.03	44.98	46.66	36.71	58.22	
Fabricated metal products	Pioneer status	61.62	56.86	56.19	46.74	53.22	52.66	48.51	52.08	16.15	
	Other tax incentives	13.85	10.30	8.41	6.09	6.01	7.70	8.79	8.43	12.05	
	Without tax incentives	24.53	32.84	35.40	47.17	40.77	39.64	42.70	39.49	32.57	

INVESTMENT INCENTIVES

TABLE VII (Continued)
(%)

Industry	Year	Average Annual Rate of Growth of Investment									
		1975	1976	1977	1978	1979	1980	1981	Total	Average Annual Rate of Growth of Investment	
Machinery	Pioneer status	84.72	72.72	61.02	51.31	40.61	60.73	24.46	53.27	-1.42	
	Other tax incentives	5.83	5.96	16.68	14.32	19.98	12.24	12.52	12.71	37.77	
	Without tax incentives	9.45	21.32	22.29	34.37	39.41	27.02	63.02	34.02	66.37	
Electrical & electronics	Pioneer status	94.27	90.33	85.86	80.56	78.74	70.71	70.34	81.06	11.88	
	Other tax incentives	1.38	3.03	4.25	4.59	4.80	6.50	8.99	5.02	60.56	
	Without tax incentives	4.35	6.64	9.89	14.85	16.46	22.79	20.67	13.92	52.32	
Transport	Pioneer status	38.18	42.69	9.70	9.19	7.80	8.74	10.61	11.99	19.87	
	Other tax incentives	0.60	1.46	52.40	44.35	51.70	43.85	33.83	40.50	190.52	
	Without tax incentives	61.22	55.85	37.90	46.46	40.50	47.41	55.56	47.51	46.01	
Scientific equipment	Pioneer status	76.36	87.02	88.05	89.77	90.13	89.91	87.35	87.91	20.21	
	Other tax incentives	0.06	—	—	—	—	—	5.37	1.20	—	
	Without tax incentives	23.58	12.98	11.95	10.23	9.87	10.09	7.28	10.89	1.54	
Miscellaneous	Pioneer status	83.10	84.68	79.68	75.81	83.14	74.71	74.50	78.40	15.30	
	Other tax incentives	10.00	7.49	7.46	8.98	4.69	4.68	9.23	7.67	15.87	
	Without tax incentives	6.90	7.84	12.86	15.21	12.17	20.61	16.27	13.93	35.48	
Total	Pioneer status	73.89	71.44	56.30	50.83	48.97	45.16	42.66	52.35	11.71	
	Other tax incentives	9.60	7.91	15.38	13.92	14.34	14.97	15.69	13.59	32.87	
	Without tax incentives	16.51	20.65	28.32	35.26	36.69	39.87	41.65	34.06	42.83	

Source: Tabulated from Tables IV, V, and VI.

TABLE VIII
NUMBER OF MANUFACTURING COMPANIES IN PRODUCTION

Industry		Year					
		1976	1977	1978	1979	1980	1981
Food	Tax incentives	75	96	105	106	105	157
	Without tax incentives	61	117	181	195	262	278
	Total	136	213	286	301	367	435
Beverages & tobacco	Tax incentives	2	2	2	2	2	14
	Without tax incentives	2	16	38	41	45	38
	Total	4	18	40	43	47	52
Textiles	Tax incentives	48	59	63	59	63	74
	Without tax incentives	59	88	111	122	165	164
	Total	107	147	174	181	228	238
Leather	Tax incentives	3	4	4	3	5	7
	Without tax incentives	5	8	12	11	15	14
	Total	8	12	16	14	20	21
Wood	Tax incentives	60	68	75	70	82	66
	Without tax incentives	19	112	213	220	250	270
	Total	79	180	288	290	332	336
Furniture & fixtures	Tax incentives	—	1	—	6	7	8
	Without tax incentives	—	4	16	19	25	30
	Total	—	5	16	25	32	38
Paper, printing & publishing	Tax incentives	12	12	12	12	13	20
	Without tax incentives	21	54	92	95	124	128
	Total	33	66	104	107	137	148
Chemicals	Tax incentives	58	67	70	71	74	94
	Without tax incentives	43	67	84	82	120	112
	Total	101	134	154	153	194	206
Petroleum	Tax incentives	5	5	6	5	3	6
	Without tax incentives	1	2	3	3	7	6
	Total	6	7	9	8	10	12
Rubber	Tax incentives	24	27	32	33	46	52
	Without tax incentives	14	26	42	46	48	51
	Total	38	53	74	79	94	103
Plastics	Tax incentives	25	26	27	26	30	31
	Without tax incentives	43	62	89	98	132	140
	Total	68	88	116	124	162	171
Nonmetallic minerals	Tax incentives	24	32	31	34	35	44
	Without tax incentives	35	63	92	98	123	127
	Total	59	95	123	132	158	171
Basic metal products	Tax incentives	20	16	17	18	18	27
	Without tax incentives	16	26	44	48	53	57
	Total	36	42	61	66	71	84

TABLE VIII (Continued)

Industry		Year					
		1976	1977	1978	1979	1980	1981
Fabricated metal products	Tax incentives	47	54	51	53	161	65
	Without tax incentives	58	88	132	137	64	168
	Total	105	142	183	190	225	233
Machinery	Tax incentives	26	30	31	28	42	31
	Without tax incentives	16	24	47	51	69	72
	Total	42	54	78	79	111	103
Electrical & electronics	Tax incentives	75	85	84	90	97	121
	Without tax incentives	22	33	46	52	62	65
	Total	97	118	130	142	159	186
Transport	Tax incentives	19	29	33	32	37	47
	Without tax incentives	18	30	49	49	58	59
	Total	37	59	82	81	95	106
Scientific equipment	Tax incentives	10	10	11	11	12	16
	Without tax incentives	1	2	3	2	2	2
	Total	11	12	14	13	14	18
Miscellaneous	Tax incentives	23	21	23	26	30	35
	Without tax incentives	12	18	20	17	24	23
	Total	35	39	43	43	54	58
Total	Tax incentives	556	644	677	685	862	915
	Without tax incentives	446	840	1,314	1,386	1,648	1,804
	Total	1,002	1,484	1,991	2,071	2,510	2,719

Source: MIDA unpublished data.

growth of manufacturing investments classified by types of industries and by types of investment incentives.

Table VII indicates that the growth rate of manufacturing investments without tax incentives was most rapid in consumer-oriented industries in particular in the food and consumer durable sectors. For example, food industries without tax incentives registered an average annual growth rate of 55.6 per cent between 1975 and 1981. The rapid increase in income and hence an increase in the purchasing power has led to the rapid expansion in the food sector, which includes food canning (such as fruit, vegetable canning and bottling drinks), manufacture of chocolate and sugar confectionary, manufacture of noodles and related products, bakeries, biscuits and ice-cream manufacturing. Table VIII shows that the number of food establishments without tax incentives increased from 61 (45 per cent of total food establishments) in 1976 to 278 (64 per cent) in 1981.

Another consumer-oriented industry without tax incentives which registered impressive growth is the transport industry (which includes car assembly, motor cycle and scooter assembly, and the manufacture of motor vehicle bodies, parts, and accessories); the sector registered an average annual rate of growth of invest-

ment of 46 per cent between 1975 and 1981, while its share of manufacturing establishments increased from 18 in 1976 to 59 in 1981.

The share of electrical and electronics establishments without tax incentives increased from 23 per cent in 1976 to 35 per cent in 1981; it registered an average annual growth of investment of 52 per cent, compared to only 11.9 per cent achieved by pioneer investments. The source of growth in this sector was in the production of televisions and radios, electric lamps and bulbs, dry cell batteries, cables and wires, and communication equipment.

Machinery investments without tax incentives increased at an annual rate of growth of 66 per cent between 1975 to 1981; its share of total investment increased from 9 per cent in 1975 to 34 per cent in 1981, while its share in terms of number of establishments increased from 38 per cent in 1976 to 70 per cent in 1981. This sector includes the manufacture of refrigerator, air conditioner, agricultural machinery, and industrial machinery.

Other consumer-oriented industries without tax incentives which registered relatively rapid growth compared to industries with tax incentives include the manufacture of plastic products (mainly housewares), nonmetallic minerals (such as cement manufacturing), wood products (including sawmilling, manufacture of plywood and veneer, and other wood-based products), basic metal products (iron and steel manufacture), and paper, printing, and publishing.

The relative slow growth in the share of tax incentive industries could be attributed to a number of reasons. One of the factors is that although new manufacturing establishments may be producing "priority" products, they are no longer granted tax holidays or other incentives. This is because the number of such industries is already large relative to the domestic market and therefore tax incentive is no longer necessary to encourage more of such enterprises. Examples of such industries include the petroleum industry, beverages and tobacco, wood products industry, printing and publishing, and plastic products industry.

E. The Effect of Investment Incentives on Sectoral Growth of Industries

Are the investment incentives in Malaysia neutral in that they encourage the growth of all types of industries or are they biased in that they only encourage the development of certain industries? Tables IV to VII indicate that the share of manufacturing investment has been consistently higher in some industries which have been receiving tax incentives, in particular those that have been granted pioneer status. An example is the textile industry. The share of the volume of investment under pioneer status in the textile sector has been well above 80 per cent between 1975 and 1981, as shown in Table VII, although textile pioneer companies' share in terms of the total number of textile establishments declined from 45 per cent in 1976 to 31 per cent in 1981. This indicates that in recent years, textile pioneer companies have become larger in terms of size of capital investments.

Another industry whose growth seems to have been influenced by tax incentives is the electrical and electronics industry. A large number of establishments

in the industry have been granted some form of tax incentives; since 1976 between 61 and 77 per cent of the establishments have been granted tax incentives annually. The volume of investments of tax incentive companies accounted for over 70 per cent every year between 1975 and 1981.

The scientific equipment industry has also benefited from tax incentives. In 1975, 76 per cent of the volume of investment in this sector was granted tax incentives; its share increased to 87 per cent in 1981.

The growth of the rubber manufacturing sector also seems to be due mainly to investments in pioneer status companies. The share of pioneer status rubber manufacturing investments has been above 70 per cent; it has also a consistently high share of rubber manufacturing establishments.

It is obvious that government investment incentive policy seems to have led to the growth of certain manufacturing sectors. These sectors are being encouraged and being given special treatment because of several factors. First, it may be noted that most of them are labor-intensive industries (in particular, the textile and electronics and electrical sectors); such type of investment would therefore contribute significantly to reducing the unemployment problem in the country, especially among the unemployed youths. Second, they are also export-oriented industry (such as the electronics and electrical industry), and therefore in line with the official export expansion policy. Third, most of the textile and electronics establishments are relatively "footloose"; hence, a large number of these establishments are located outside the developed regions. Therefore, the establishment of such industries is also being encouraged.

F. *Capital Intensities of Industries by Types of Investment Incentives*

It was mentioned earlier that one of the criticisms against the present system of investment incentives in Malaysia is that it tends to favor large industries over small ones, hence encouraging the establishment of large-scale capital-intensive industries. Tables IV-VIII provide some indication of the relative size of industries with and without tax incentives in terms of size of capital investment. It can be noted from the tables that although non-tax incentive establishments were more numerous compared to tax incentive establishments, the share of the former in terms of the volume of investment was relatively lower thus indicating to some degree that industries without tax incentives were relatively small in terms of capital investment. Studies seem to indicate that small-scale industries are more labor-intensive compared to large industries.

Table IX supports the view that tax incentives may have favored the development of capital-intensive industries. It can be noted in the table that except in three cases (that is, nonmetallic minerals, electrical and electronics, and scientific equipment industries), all industries granted tax incentives had higher capital-labor ratios relative to those without tax incentives. For example, the capital-labor ratio for food industries with incentives is M\$51.45 per employee compared to M\$27.68 in food without tax incentives; beverages and tobacco with incentives has a ratio of M\$78.7 compared to M\$37.42 in those without tax incentives. The difference in the petroleum sector was even more obvious: M\$207.75 for

TABLE IX
CAPITAL-LABOR RATIOS BY INDUSTRIES AND TYPES OF INCENTIVES, 1981

	Tax Incentives	Without Tax Incentives	Total
Food	51.45	27.68	39.05
Beverages and tobacco	78.70	37.42	43.52
Textiles	16.99	5.50	12.82
Leather	16.52	5.53	6.75
Wood	20.63	16.15	18.18
Furniture and fixtures	17.48	8.71	12.57
Paper, printing, and publishing	30.00	15.88	18.05
Chemicals	33.09	26.62	30.26
Petroleum	207.75	44.28	144.22
Rubber	25.10	11.87	20.42
Plastics	27.84	12.73	16.91
Nonmetallic minerals	46.49	58.30	53.38
Basic metal products	32.95	25.56	29.94
Fabricated metal products	33.98	16.15	22.58
Machinery	23.09	11.67	17.25
Electrical and electronics	10.42	12.18	10.54
Transport	43.55	19.54	27.83
Scientific equipment	10.70	22.88	11.10
Miscellaneous	15.73	6.31	13.41

Source: Tabulated from unpublished MIDA data.

those with incentives compared to M\$44.28 for those without incentives. It may therefore be said that big capital-intensive industries were more able to take advantage of the investment incentives available than were small-scale industries. Since it is the policy of the government to encourage the growth of the industrial sector, it tries to encourage the growth of as many industries as possible. Therefore, the government does not specifically discriminate against the growth of any industry. Unfortunately, the structure of the present system of tax incentives is such that it is more conducive to the growth of capital-intensive enterprises.

G. *Summary and Conclusion*

Despite the global economic recession in recent years, total manufacturing investments in Malaysia have been increasing steadily. Overall, food manufacturing recorded the highest amount of investment between the period 1975 and 1981, followed by textile and wood products. The furniture and fixtures and leather products sectors, on the other hand, recorded the lowest volume of manufacturing investment over the same period.

The share of investments with tax incentives has been consistently higher than the share of investment without tax incentives, but the gap between them has become narrower. For example, in 1975 investment granted incentives accounted for 83 per cent of the total volume of investment, but its share declined

to 58 per cent in 1981. Since 1977 the total number of establishments without tax incentives has been more than those with incentives.

During the period 1975 to 1981, manufacturing investment without tax incentives increased at an average annual rate of 42.8 per cent compared to 15.3 per cent for those with tax incentives.

One conclusion which may be derived from the analysis is that investment incentives do not play an important role in the growth of some industries in Malaysia. Other factors which play a more crucial role in investment decisions include the availability of industrial estates, good transport facilities, market for the finished products, and the availability of labor.

The importance of market can be seen from the fact that the growth of industries without tax incentives was most rapid among the consumer-oriented sector, both for food and consumer durables. For example, food industry without tax incentives grew at an average annual rate of 55.6 per cent over the period 1975 to 1981, while transport industry without incentives grew at an average rate of 46 per cent over the same period. Other industries without tax incentives which grew rapidly include the electrical and electronics, and machinery manufacturing.

The relatively slow growth of industry with incentives, on the other hand, has been due mainly to the fact that the traditional "priority" industry has become almost saturated, and therefore fewer and fewer new establishments are granted tax incentives. Such industries include beverages and tobacco, wood products, and plastics products.

It must also be noted that the present system of investment incentives in Malaysia is biased in at least two respects. First, it favors the growth of certain industries, in that these industries consistently get a high share of tax incentives. Examples of such industries include electrical and electronics, textiles, and scientific equipment. This seems to be in line with the policy to promote labor-intensive, footloose, and export-oriented industries.

Second, the present system of tax incentives also favors the development of capital-intensive industries. It has been noted that except in three cases, all industries granted tax incentives had higher capital-labor ratios relative to those industries without tax incentives.

What conclusion can be derived from the above analysis and what role will investment incentives play in the future development of industries in the country?

In recent years, it has been argued that there is a need to promote the development of small-scale industries and resource-based industries; it has also been pointed out that industrial decentralization can be used as one of the strategies to promote balanced regional development. These objectives are unlikely to be achieved if the present system of investment incentives is not revised. It has been pointed out that these incentives favor the growth of only certain types of industries as well as capital-intensive industries; other studies have also indicated that the present system of investment incentives does not encourage industrial decentralization. Hence, there is a need to review the present system of invest-

ment incentives to bring it in line with the present development strategy of the country.

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