

CHAPTER TWO

EXPORT DIVERSIFICATION IN THE MALAYSIAN ECONOMY (1968-91)

2.1 Introduction

Under British Colonial Rule, Malaysia was turned into a classic export economy, largely concentrating in the production of rubber and tin for exports¹. During the early 1950s, natural rubber and tin accounted more than 80 per cent of all domestic exports and contributed about 40 per cent to Gross Domestic Product (GDP). Of the two, rubber was of greater importance to the economy as it accounted for an average of 62.2 per cent of domestic export earnings and 30.2 per cent of GDP between 1951 and 1955². This high degree of export concentration coupled with the vagaries of the international commodity markets for natural rubber and tin meant that any sharp fall in the price of these commodities would greatly affect Malaysian export earnings and GDP.

Price slumps in the rubber industry which occurred during 1947-49, 1953-54 and 1958, and large fluctuations in tin export earnings, directly affected the revenue of the colonial government³. Government revenue from export duties on rubber and tin was substantial. Duties on natural rubber and tin alone accounted for almost all export duties collected during the 1947-51 period. Export duties in turn accounted for 18.1 per cent of

¹This was based mainly on the natural environment suited to rubber cultivation, rich and abundant deposits of tin and an advantageous close proximity to the entreport post of Singapore.

²See International Bank for Reconstruction and Development (1955,p.9), *The Economic Development of Malaya*, Singapore, Government Printer; and also Lee,1974,pp.40,42,46.

³Average year-to-year fluctuation in export earnings for tin was 35 per cent a year during the 1948-50 period, 13 per cent a year during 1951-55 and slightly more than 20 per cent during 1956-60. This was mainly due to: (i) large fluctuations in export volume as a result of recovery in production, (ii) the onset of the Korean War from 1948 to 1950, and (iii) the imposition of export quotas through international tin agreements during 1958-59 to maintain price within agreed ranges (see Lee,1978,p.53).

government revenue in 1947 and rose to 41.1 per cent in 1951⁴. During the 1960s, they accounted for well over 80 per cent. The assessed income from rubber and tin constituted about one third of total assessed tax revenue in 1957, although by 1969 it had fallen to 11.5 per cent (Lee, 1978, p.27).

The fear of a recurrence of adverse effects from export earnings instability on the economy provided the rationale for diversification. From the early 1950s, the government, in the main, pursued a policy of agricultural diversification⁵. However, until the early 1960s, the policy of agricultural diversification was more a declaration of intent than an objective to be implemented immediately. The massive replanting and new planting programmes in the rubber industry were considered sufficient to deal with fluctuating industrial demand for natural rubber. Although rubber prices started to fall from 1960, they were not considered alarming until the mid-1960s (Lee, 1978, p.323).

Further downturns in natural rubber and tin towards the end of 1960s⁶ coupled with consistent empirical findings of high export instability from the mid-1940s to the late 1960s lent strong support to the push for diversification⁷. In particular, there was a

⁴However, the share of export duties went on a decline from 27.0 per cent in 1956 down to 11.6 per cent in 1970 (Lee, 1974, p.43).

⁵See Federation of Malaya (1950), *Draft Development Plan of the Federation of Malaya*, Kuala Lumpur, Government Printer.

⁶Changes in rubber prices were mainly due to fluctuating industrial demand coupled with low elasticity of supply of rubber. As for tin, slow growth in world tin consumption limited the increase in output. Other factors included stiff competition from substitutes, a generally short supply situation in the 1960s and a gradual decline in known tin deposits (Lee, 1974, pp.59, 87-90).

⁷For the 1946-58 period, Erb and Schiavo-Campo (1969) reported an average export instability index of 38.9 for Peninsular Malaysia compared with 17.6 for the DCs and 23.0 for the LDCs. In a much later period (1954-66), the instability index for Peninsular Malaysia was still relatively higher. It was 16.5 compared with 6.2 for the DCs and 13.4 for the LDCs. Leith (1970) covering the 1948-68 period, reported an instability index of 19.6 compared with 7.9 for the DCs and 12.0 for the LDCs. Ariff (1972) in a case study for Peninsular Malaysia, reported 29.1 for the 1947-67 period. Lim (1974) attributed high export instability to high demand instability and price inelasticities of supply and demand for Malaysia's rubber

call not only for commodity diversification but, more importantly, diversification through industrialization. Limited success in reducing fluctuations in the prices of natural rubber and tin through international agreements provided further push towards diversification.

In an apparent effort to increase the resilience of the economy to the vagaries of external demand for its exports, significant changes in the export sector and in the implementation of government policies with regard to export diversification were introduced. This chapter provides an overview of export diversification within the primary sector and into the manufacturing sector.

Studies on economic diversification from the colonial era until the early 1970s are not lacking. For instance, Lim (1973) provides a succinct discussion on policies and effects of diversification for the West Malaysian economy over the period 1947-70 while Lee (1978), covered the 1957-70 period. This study will place greater emphasis on the more recent period. In particular, this study focuses on the period from 1968 to 1991. It will nevertheless, touch on past policies as they continue to have a bearing on the later strategies of economic diversification.

This chapter is organised as follows: The second section covers in broad terms the diversification process of exports within the primary sector. This includes both the agricultural and mining sectors. The third section reviews diversification from primary to manufacturing exports. The fourth section discusses the progress in diversification in terms of export markets and trade. The final section provides a summary highlight of the diversification in the agricultural, mining and manufacturing sectors during the period of study.

and tin during the 1949-69 period. It should be noted, however, that some of the indices may not be directly comparable as they did not use the same measure of instability.

2.2 Diversification of exports within the primary sector

2.2.1 The Agricultural Sector

In 1955, the IBRD Mission⁸ suggested that within the agricultural sector, the highest development priority should be given to maintaining the position of the rubber industry because they were *"convinced that increase in the production of a variety of other crops do not promise possibilities for expansion on a scale and at a rate which would compensate for a major decline in rubber production"* (IBRD,1955,p.33). Further, *"there were new varieties of rubber trees which could produce two to three times as much latex as ordinary rubber trees at greatly reduced cost. Cost data from a representative cross-section of rubber estates indicate that the production of high-yielding rubber on well-managed estates could continue to compete profitably with synthetic rubber..... and it seems clear that high-yielding rubber trees, once they reach bearing age, promise a return greater than that of any other crop for which the vast majority of smallholdings would be suitable"* (IBRD,1955,p.34). In light of this argument, rubber replanting was accorded top priority in the First Five-Year Plan (1956-60). Over sixty-seven percent of total development expenditure for agriculture was devoted to rubber replanting (Malaya,1956,p.22). As a consequence of this policy, rubber continued to play a major role in the Malaysian economy until the late 1960s. In 1969, for instance, rubber alone accounted for 47.8 per cent of total export earnings in Peninsular Malaysia.

⁸The Mission's task was to access the resources available for future development in the Federation of Malaya and Singapore with a general survey which addressed broad issues of development policy and priorities in investment.

However, prices for rubber had been quite volatile. Average year-to-year price fluctuations were between 12 to 29 per cent during 1950-60⁹. Price optimism for natural rubber further diminished just after two years into the Second Five-Year Plan (1961-65) with the rise of strong competition from synthetic rubber which had a lower cost of production and a wide range of uses. Serious steps to facilitate agricultural diversification were undertaken starting with the Ford Foundation survey aimed at promoting agricultural diversification¹⁰. However, despite the encouraging rate of growth of output of other commodities¹¹ which gradually reduced the relative importance of rubber in the sector, the rise in value-added of these other commodities was not sufficient to offset the decline in rubber. Inadequate incentives, it was argued, contributed to limited knowhow and small-scale production units which in turn limited the development of alternative agricultural products. High marketing costs for both inputs and outputs, lack of credit on reasonable terms and unfavourable tenure relationships proved to be major barriers. In Sabah and Sarawak, the problem was compounded by shifting cultivation which resulted in inefficient land use (Malaysia, 1966).

As it was felt that the economy would continue to depend on rubber, the government believed that rehabilitation of the rubber industry through vigorous replanting program would make a major contribution to the strengthening of the economy. Although there was a decline (about 17.9 per cent) in development expenditure

⁹The violent price fluctuations in the early fifties were due to substantial purchases for strategic stockpiling by the United States following the Korean War in 1951. Other subsequent large changes in price were mainly due to fluctuating industrial demand (in 1955-56, 1959-60 and 1969) coupled with low price elasticity of supply (see Lee, 1978, p.39).

¹⁰See Federation of Malaya (1963), *Policies and Measures Towards Greater Diversification of the Agricultural Economy of Malaya*, Ford Foundation Survey Team, Kuala Lumpur, Government Printer.

¹¹Agricultural crop subsidies were given beside rubber for the cultivation of padi, oil palm, fruit, coconut, citrus, banana, maize, groundnut, cashew-nut, pineapple and coffee to stimulate diversification of agricultural products.

allocation for rubber replanting under the First Malaysia Plan (1966-70) relative to the Second Five-Year Plan (1961-65), rubber replanting grants were still substantial, constituting 59.9 per cent of the allocation for agriculture (Malaya, 1961, p.22; Malaysia, 1966, p.121).

Towards the end of the 1960s, high prices of palm oil concurrent with declining price of rubber indicated that palm oil could yield higher net returns than rubber¹². This led to a new policy aimed at encouraging estates and smallholders to replace low-yielding rubber with oil palm rather than with high-yielding rubber. In this, the Federal Land Development Authority (FELDA) played a major part¹³. Subsequent expansion of oil palm acreage through the FELDA schemes contributed significantly towards enhancing agricultural diversification¹⁴. Table 2.1 shows that by 1970, the total acreage planted with oil palm in FELDA schemes exceeded the total rubber acreages on the schemes. Although cultivation of oil palm was mainly concentrated in Peninsular Malaysia, palm oil production increased by more than two and a half times between 1965 and 1970 and to almost three fold during 1970-75. Table 2.2 shows the rapid increase in palm oil production against a sluggish, if not declining, growth of rubber.

¹²The bulk of rubber exports during the period was still in unprocessed forms largely due to slow absorption into semi-processed or manufactured goods.

¹³Other factors that attributed to the viability of oil palm in Malaysia were soil and climate suitability, sufficient control of pests and diseases which afflicted the palms and, oil palm having a shorter maturity period (four years) relative to rubber (seven years). However, the most important factor was the high price for palm oil relative to rubber.

¹⁴It must be noted that the basic objective of FELDA was to increase rural income and achieve higher standard of living by planting crops that yield the highest value in the long term.

Table 2.1

Planted hectareage ('000 hectares) of rubber and oil palm smallholdings by FELDA in Peninsular Malaysia

	1966	1967	1968	1969	1970	1972	1974	1976	1978	1980
Rubber	47.1	50.8	51.8	52.6	59.8	76.2	94.3	114.7	145.2	168.9
Oil Palm	16.8	24.2	36.7	51.4	55.0	96.8	155.8	215.5	282.8	307.5

Source: Department of Statistics, 1974, *Rubber Statistics Handbook*, p.25; 1980, p.35;
1978, *Oil Palm, Coconut, Tea and Cocoa Statistics*, p.21; 1980, p.33.

Table 2.2

Production ('000 tonnes) of rubber, palm oil and cocoa beans

	1965	1970	1975	1980	1985	1991
Rubber	917	1269	1459	1530	1470	1256
Palm Oil						
- Crude Palm Oil	149	431	1258	2576	4133	6141
- Palm Kernel	35	92	256	557	1213	782
Cocoa Beans	n.a	2	13	37	103	230

Source: Department of Statistics, various issues, *Rubber Statistics Handbook*;
Handbook of Cocoa, Coconuts and Tea Statistics.
Ministry of Primary Industries, June 1993, *Statistics on Commodities*, p.14.

The second half of the seventies saw further significant changes in export crop diversification under planted hectareage. Besides oil palm, there were increasing planting and yields in cocoa (see Table 2.3). Cocoa was principally planted as an intercrop with coconuts. However, the relatively high price for cocoa which rose by more than three and a half times towards the end of the 1970s as compared with the price in 1965, led to further diversification in the agricultural export commodity sector. Chart 2.1 shows the actual price trend of palm oil and cocoa which contrasted a generally downward trend for rubber between 1960 and 1980. Within ten years from 1970 to 1980, the contributions of palm oil and cocoa to total agricultural export earnings rose by 14.2 percentage points from 9.0 per cent in 1970 to 23.2 per cent in 1980. This contrasted with the declining share of rubber, and saw logs and sawn timber¹⁵.

Table 2.3

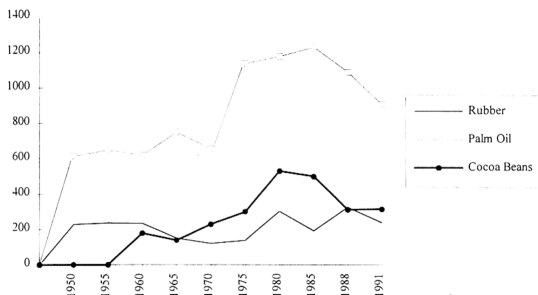
Malaysia: Selected agricultural commodities, planted area ('000 hectares)

	1965	1970	1975	1980	1985	1991
Rubber	2044	2019	1992	2005	1948	1819
Oil Palm	97	300	642	1024	1431	2094
Cocoa	0.8	7	27	124	304	430

Source: Department of Statistics, various issues, *Rubber Statistics Handbook*;
Handbook of Cocoa, Coconuts and Tea Statistics.
 Ministry of Primary Industries, June 1993, *Statistics on Commodities*, p.13.

Chart 2.1

Average prices of cocoa beans, palm oil and rubber



Source: Appendix 2.1

By the early eighties, further reinforcement of diversification schemes and incentives were undertaken to promote crop diversification under the Agricultural Inputs

¹⁵Rubber, saw log and sawn timber exports constituted 85.8 per cent of total agricultural exports in 1970. However, their share declined to 71.9 per cent in 1980. Total agricultural exports consist of rubber, saw logs and sawn timber, palm oil, cocoa beans, conunut oil, copra, palm kernel oil, pepper and, canned pineapple and juice (Bank Negara, Sept.1993, pp.86-88; Department of Statistics, 1988, *Agricultural Statistics - Time Series*, p.40).

and Diversification Programme of the Department of Agriculture¹⁶. In 1984, the National Agriculture Policy (NAP) was drawn up to ensure a diversified and balanced development with reliable and sufficient supply of agricultural inputs to the manufacturing and services sectors. The NAP contained the basic thrust for the revitalization of the agricultural sector with emphasis on a commercial approach to ensure efficient utilization of resources to generate sustained growth in the agriculture sector (Malaysia, 1989, *Mid-Term Review of Fifth Malaysia Plan*, p.139).

By the mid-eighties, oil palm dominated the agricultural sector in planted hectareage. This may be largely attributed to higher price and to lower labour requirement per hectare relative to rubber. Higher value-added meant that the output sector could afford higher wages than the rubber industry. Increase in wages and salaries was 50 per cent higher as compared to the years prior to 1970 (Moktar, 1991, p.34). This contributed towards difficulties in attracting workers to the rubber industry. This, coupled with declining natural prices led to a decline in investment in the rubber industry (Moktar, 1991). The growing importance and prospect of palm oil exports led to the push for vertical diversification of the industry. The Palm Oil Research Institute of Malaysia (PORIM) was established in 1979. Research and Development focussed on expanding the uses of palm oil, improving agronomic practices and minimizing cost of operations. By 1985, export earnings from palm oil surpassed that of rubber. Malaysia became the world's largest producer of palm oil, accounting for about 49.5 per cent of world's production in 1990 (Ministry of Finance, *Economic Report, 1991/92*, p.79).

Cocoa exports gained momentum and significance in the eighties. To augment the export crop diversification effort, emphasis was given to the quality of cocoa so that

¹⁶ The source of financing came mainly from the Centralized Agriculture Credit Scheme (SPKP) under Bank Pertanian Malaysia.

the Standard Malaysian Cocoa could establish a niche in the international market. Increase in cocoa production has been attributed to increased planted hectareage and planting density in intercropped areas, the development of higher yielding varieties as well as cocoa management and improved production systems over recent years (Ministry of Finance, *Economic Report, 1991/92*, p.81). The growing importance given to cocoa production is reflected by the establishment of the Malaysian Cocoa Board (MCB) in 1989. One of the MCB's principal objective is to improve Malaysia's share of the international cocoa market. By 1991/92, Malaysia became the fourth largest world producer of cocoa, accounting for 9.9 per cent of the world's output after Cote d'Ivoire, Brazil and Ghana; compared with only 0.8 per cent in 1975 (Ministry of Primary Industries, Jun.1993, p.102).

Despite the growing emphasis and importance of oil palm and cocoa in the agricultural sector, the rubber industry was not neglected. The emphasis instead, shifted to rubber industry upstream development. There were a few contributory factors. First, Malaysia was still a dominant world producer and exporter of natural rubber accounting for 28.4 per cent of world exports of natural rubber in 1991. Second, although world consumption of natural rubber (NR) was much smaller than synthetic rubber (SR), growth in consumption of natural rubber has been on an upward trend in recent years. The NR:SR consumption ratio was on a rise from 3:7 in 1980 to about 9:16 in 1991 (Ministry of Primary Industries, Jun.1993, p.81). In addition, rubber yield per hectare was on the increase from 1980 despite a decline in rubber production during the period (see Table 2.4). Fourth, the growth of Malaysian rubber products industry is largely attributable to the presence of foreign investors. Exports of rubber products were mainly for the EEC and the U.S. markets. For instance, rubber exports to the EEC countries and the United States constituted, on the average, well over 40 per cent of total rubber exports in 1960-85 (Department of Statistics, 1988, *Agricultural Statistics - Time Series*). Thus, the problem

in marketing Malaysian rubber products is *"not one of gaining access to international markets as it is one of creating sufficient products of consistent quality to meet the demand of the international market"* (Fadillah,1990,p.165).

Table 2.4
Rubber: Yield and Production

Year	Production (^{000 tonnes})	Yield (kg/hectares)	
		Estates	Smallholdings
1965	917	937	326
1970	1269	1174	475
1975	1459	1268	616
1980	1530	1423	628
1985	1470	1414	635
1991	1256	1279	915

Source: Department of Statistics, 1988, *Agricultural Statistics - Time Series*;
1991, *Rubber Statistics Handbook*.

Saw logs and sawn timber accounted for about 17.2 per cent of total gross export earnings in 1968. They were the second largest export earners after rubber. However, the expansion of the timber production in the 1960s was not a direct outcome of policies to promote economic diversification. It was due more to growing world demand for tropical woods. Malaysia, for instance, became a substantial source of supply of logs and sawn timber to Singapore's wood-based industries¹⁷.

However, in contrast to an average annual growth rate of 16.0 per cent for saw logs and 10.5 per cent for sawn timber during the 1960s, saw logs and sawn timber production saw a decline to an average of 3.7 per cent and 4.0 per cent, respectively, in the mid-1970s (Bank Negara, Sept.1993;Dec.1977). This was largely due to restrictions on the exports of logs which came into effect in 1973 when the Sabah State introduced

¹⁷There were then strong industrialisation programmes pursued by the Singapore government in the 1960s (Lee,1978,p.364).

controls over logging¹⁸. This was further accompanied by more stringent National Forestry Policy introduced in 1981 to curb depletion of easily accessible forest areas and to promote conservation of tropical forests.

Due to industrialization policies, severe restrictions were placed on the exports of logs. With better milling efficiency and improved quality of processed wood products such as plywood and veneer in recent years, the shift is now towards higher value-added wood products. This has intensified following the anti-tropical hardwood campaign largely in the industrialised countries which were also the markets for Malaysian furniture and other processed items (Baharuddin,1990,p.170). However, contributions of wood products to total exports have not been impressive. They constitute less than 2 per cent of total exports between 1970 and 1991 (Bank Negara, Dec.1993,p.90).

To shed some insight on the change in direction and emphasis of government development in the agricultural sector, a general review of the Malaysia Plans over the past thirty years is essential. A salient feature of public sector involvement after the 1980s is the reorientation towards *in-situ* farm area developments rather than new land development. Government expenditure on *in-situ* developments through the Integrated Agricultural Development Projects (IADPs) in the agricultural sector rose by more than two and a half times in the Sixth Malaysia Plan period compared with the Fourth Malaysia Plan period. This was partially due to scarcity of suitable land and the high cost of developing new land in marginal areas of Peninsular Malaysia, Sabah and Sarawak (Malaysia,1991,p.114).

¹⁸Contribution of saw logs from Sabah to total log exports¹ was about 81.7 per cent in 1973 . However, exports of saw logs from Sabah fell to account for only 23.7 per cent of Malaysia's total exports of saw logs and 42.7 per cent of total exports of sawn timber in 1991 (Department of Statistics,1991, *External Trade Summary*, p.74; 1973, *Statistics of External Trade, Sabah*, p.2; 1973, *Annual Statistics of External Trade*, p.6).

The Fifth and Sixth Malaysia Plans have seen a shift in government policy. The private sector has been accorded the principal task of revitalizing the agricultural sector. This change in policy stance came mainly after the country's worst recession in 1985-86. Under the Fifth Malaysia Plan (1985-90), for instance, the government's role focused on the provision of adequate support services as one of the key factors in contributing to the expansion of the agricultural sector. The allocation for support services rose almost three fold under the Fifth Malaysia Plan as compared with the Third Malaysia Plan (1975-80). They increased further by another 5.1 per cent under the Sixth Malaysia Plan (see Table 2.5).

2.2.2 The mining sector

In the mining sector, during the years prior to 1970s, the principal mining activities were in tin, iron, bauxite and crude oil. In terms of value-added and foreign exchange earned, tin was the most important of the minerals. For instance, it accounted for over 80 per cent of total mineral exports, 20.4 per cent of total exports and 7.5 per cent of GDP in 1968 (Bank Negara, Dec. 1977).

Unlike the rubber industry, developments in the tin industry until mid-1970s did not exert much pressure on the economy to hasten the programme of economic diversification in the mining sector. Growth in consumption demand for tin was low. However, for most times, the general shortage of supply in the 1960s obscured the situation and accorded the industry with the attributes of prosperity in the form of rising prices and export receipts (Lee, 1978, p. 61). Shortage of supply in Malaysia was partly attributed to gradual decline in known tin deposits, limited prospecting of new tin bearing areas caused by the controls placed under the pre-war international tin agreements, the Japanese occupation, the state of Emergency following the communist insurrection in

1948 and the fact that land became useless for agricultural purposes after mining (IBRD,1955,p.69).

Table 2.5

Malaysia: Development allocation for agricultural development (RM million)*

	1MP (1966-70)	2MP (1971-75)	3MP (1976-80)	4MP (1981-85)	5MP (1986-90)	6MP (1991-95)
<i>In-situ Development</i>	600.20	674.78	1800.71	2859.46	2739.30	4117.30
Integrated Agricultural Development Project	267.50	149.21	496.74	505.60	1030.60	1439.40
Drainage & Irrigation	332.70	256.49	629.03	1451.30	202.30	463.30
Flood Mitigation & Coastal Protection	--	--	--	--	82.60	347.30
Replanting	--	269.08	674.94	398.61	595.80	905.00
Consolidation & Rehabilitation	--	--	--	503.95	828.00	962.30
<i>Land & Regional Development</i>	375.90	908.65	2009.69	3148.81	2801.40	2380.00
New Land Development	--	--	--	2218.61	2129.70	1315.50
Regional Development	--	--	--	930.20	671.70	1064.50
<i>Forestry</i>	12.40	18.23	55.47	20.96	125.20	198.60
<i>Fisheries</i>	22.30	45.84	275.73	301.50	270.10	375.80
<i>Livestock</i>	33.80	44.10	179.01	135.50	136.80	271.10
<i>Support Services</i>	37.00	205.31	355.40	1111.70	1028.70	1081.00
Input Subsidies for Paddy	--	--	--	430.20	396.80	398.00
Agricultural Credit, Reseach, Processing & Marketing	37.00	205.31	355.40	606.30	597.50	540.90
Extension & Other Servicexes	--	--	--	75.20	34.40	142.10
<i>Other Programmes</i>	5.00	23.95	67.53	310.40	325.50	591.90
TOTAL	1086.60	1920.86	4743.54	7888.33	7427.00	9015.70

Source: Malaysia, various issues, *Malaysia Plan*.

Note: *Malaysian Ringgit per US dollar: 3.060 (1966); 3.050 (1971); 2.540 (1976); 2.300 (1981); 2.580 (1986); 2.750 (1991) [World Tables, 1987;1993]

1MP refers to First Malaysia Plan; 2MP - Second Malaysia Plan; 3MP - Third Malaysia Plan; 4MP - Fourth Malaysia Plan; 5MP - Fifth Malaysia Plan; 6MP - Sixth Malaysia Plan.

The sharp rise in the price of tin between 1960 and 1965 relative to the 1950s caused new tin mining projects particularly dredge mining to emerge in a number of large areas in Selangor and Perak. Between 1972 and 1974, large fluctuations in tin prices coupled with the imposition of export control by the International Tin Council to contain price decline, affected the marginal mines in Malaysia's tin industry. By 1980, production of tin-in-concentrates declined by a fifth compared with its peak in 1972, from 76,831 tonnes down to 61,404 tonnes (Bank Negara, Dec. 1977, p.65; Sept. 1993, p.74). This was largely attributed to stagnant prices and gradual depletion of known reserves. Tin's importance as a major export earner declined. Its share in total merchandize exports fell from 13.3 per cent in 1975 to 8.9 per cent in 1980 (Bank Negara, Sept. 1993, p.86).

The share of tin as a proportion of major mineral exports fell further from 27.1 per cent in 1980 to 4.5 per cent in 1991. The factors contributing to the fall were: (i) the tin surplus which prevailed in the international market; (ii) further export controls imposed by the International Tin Council (ITC) in 1982 and 1983 and; (iii) the depletion of financial resources of the ITC which led to subsequent tin trading in secondary markets at prices much lower than the floor price and this resulted in a substantial reduction in output. The collapse of the international tin market in October 1985 led to the closure of a large number of tin mines. The total number of mines in operation prior to the collapse was 448. However, this number fell to 195 during the crisis (Malaysia, 1989, *Mid-Term Review of the Fifth Malaysia Plan*, p.167).

Towards the end of the 1980s, despite better tin prices brought about by the implementation of the Tin Supply Rationalization Scheme (SRS) by the Association of Tin Producing Countries (ATPC) in March 1987, and the launching of the Kuala Lumpur Commodity Exchange (KLCE) Tin Futures in October 1987 to boost the flagging tin mining industry, tin production remained sluggish. This was largely due to the small

number of active mines and diversification away from tin-mining (Malaysia,1989, *Mid-Term Review of the Fifth Malaysia Plan*,p.168). World production of tin fell by about 14.6 per cent between 1970 and 1991, as an overall decline in world consumption of tin metal from 185,600 tonnes to 183,900 tonnes was experienced during the same period (Ministry of Primary Industries,Jun.1993,p.193). This was in part due to general developments within the tin-plate industry since 1970s which used smaller amounts of tin such as reduction in average thickness of tin coating, substitution by aluminium, plastics and other materials (see Lee,1978,p.58). From the early 1980s, demand for tin has been poor due to the recession of the industrialised economies. By 1991, production was confined to the most economic mines only with production reduced to below 21,000 tonnes. This contrasted with a production of over 60,000 tonnes during the heydays between the mid-1960s and early 1970s (Bank Negara, Dec.1977,p.74;Sept.1993,p.65).

In contrast to the less favourable events in the tin industry, the price of crude oil rose substantially from RM43.1 per ton in 1970 to RM226.9 per ton in 1975 following the first oil price increase in 1973 by OPEC (Bank Negara, Sept.1993,p.87). The rise in oil price led to an increase in total investment in exploration, production, terminal facilities in the oil industry, and related new projects such as in liquefied natural gas (LNG). This contrasts sharply with the period prior to 1970. Export of crude oil for instance, accounted for only 4.3 per cent of total exports in 1968 (Bank Negara, Dec.1977,p.78). Following further discovery of new oil fields during the later part of 1970s and the construction of two supply bases in Kemaman, Trengganu and in Labuan, Sabah, production jumped by almost two fold in 1975-76. Thereafter, the oil industry began to assume greater importance. Petroleum and liquified natural gas exports became the prime mineral exports towards the second half of 1970s while tin exports diminished in importance (see Table 2.6).

Table 2.6

Contribution of major mineral exports to total gross exports (percentage)

Year	Tin	Petroleum	LNG
1970	19.63	3.92	0.05
1975	13.07	9.33	0.09
1980	8.89	23.81	0.13
1985	4.33	22.88	6.05
1988	1.65	11.07	3.32
1991	0.72	11.87	3.47

Source: Appendix 2.2

While production of tin-in-concentrates declined by more than 60 per cent over the 1982-1991 period, production of crude oil, on the other hand, doubled and gas production increased four-fold (Department of Statistics, 1991, *Industrial Surveys: Construction, Manufacturing, Mining and Stone Quarrying*, pp.158-159). The relatively high growth of crude oil exports and the commencement of LNG exports to Singapore, Japan and South Korea during the 1980-85 period caused a rise in the share of mineral exports in 1985 despite declining exports of tin.

The discovery of vast gas resource in Malaysia led to the formulation of policies and projects designed to intensify the use of gas, as a fuel substitute for oil, in electricity generation and in the transport sector. As a result, under the Fifth and Sixth Malaysia Plans, large development expenditures were allocated to the oil and gas sector given the capital intensive and technologically sophisticated nature of petroleum exploration and exploitation (see Table 2.7). For instance, PETRONAS¹⁹ constructed a second refinery to enable the country to produce value-added petroleum products instead of merely exporting crude oil. This contrasts with a lack of government involvement in the mining industry under the previous Plans. From the mid-1980s, development in the mining

¹⁹PETRONAS, the National Oil Corporation, was first established in 1974 as a public sector agency participating in petroleum related activities such as exploring and exploiting oil and natural gas resources.

sector focussed on strengthening the position of oil and gas, in line with the National Depletion Policy (Malaysia,1986,p.413).

Table 2.7
Malaysia: Development allocation for the mining sector (RM million)

	1MP (1966-70)	2MP (1971-75)	3MP (1976-80)	4MP (1981-85)	5MP (1986-90)	6MP (1991-95)
Geological & Mines Department	1.3	0.7	5.04	--	--	--
Geological Department	--	--	--	30	37.89	--
Mines Department	--	--	--	18	1.66	--
PETRONAS	--	--	--	--	1008.66	10814.8*
Total	1.3	0.7	5.04	48	1048.21	10814.8

Source: Malaysia, various issues, *Malaysia Plan*.

*Refers to the oil and gas sector comprising of upstream, downstream, manufacturing and others

The displacement of tin by crude petroleum did not spare the economy from exposure to high risks and fluctuations in foreign exchange earnings. The October, 1985 collapse of the international tin market²⁰ and the sharp plunge in the price of crude oil in March, 1986 in the case of the petroleum industry²¹ are cases that illustrate the point. Recognizing the limited and depleting reserves of the country's major minerals, activities of the tin industry were consolidated. The Mineral Development Policy Study proposed further diversification towards non-traditional mineral development. Stress was also placed on upstream activities in efforts to encourage the development of resource-based

²⁰The international tin market collapsed in October 1985 following depletion of financial resources of the International Tin Council. The market price went below the floor price and this caused a substantial fall in output.

²¹The decision of the Organization of Petroleum Exporting Countries (OPEC) to defend its "fair share" of the world crude petroleum market in December 1985, amidst increased production from countries which were not members of OPEC, led to a substantial increase in OPEC crude petroleum production by about 10 per cent between 1985 and the first half of 1986. Coupled with the weak world demand following sluggish performance of the major industrialised countries and greater efficiency in energy consumption, the prices of crude petroleum plunged for most of 1986 (Ministry of Finance, *Economic Report, 1986/87*, p.94).

industries as an added catalyst to industrial development (Malaysia, 1989, *Mid-Term Review of the Fifth Malaysia Plan*, p.173).

Overall, within the agricultural and mining sectors, some success appears to have been achieved in terms of diversification into a wider range of commodities for exports in addition to rubber and tin. The decade of the seventies saw an increasing trend of export diversification in favour of the non-agricultural commodities, particularly following the emergence of crude oil and manufactured goods as important export commodities. Tables 2.8 and 2.9 summarise the change in Malaysia's principal primary commodity exports over the 1970-91 period.

Table 2.8
Malaysia: Contribution of major natural resources (percentage)

Major Mineral		1970	1975	1980	1985	1986	1987	1988	1989	1990	1991
Tin	(a)	83.17	58.11	27.08	13.03	8.22	9.37	10.27	10.44	6.36	4.51
	(b)	19.63	13.07	8.89	4.33	1.84	1.85	1.65	1.71	1.13	0.72
	(c)	8.57	5.40	4.70	2.13	0.91	1.05	1.00	1.13	0.78	0.53
Crude Petroleum & Partly Refined	(a)	16.63	41.48	72.52	68.78	68.38	70.23	69.01	70.99	75.05	73.89
	(b)	3.92	9.33	23.81	22.88	15.29	13.91	11.07	11.64	13.36	11.87
	(c)	1.71	3.86	12.59	11.22	7.54	7.90	6.73	7.70	9.21	8.66
Liquefied Natural Gas	(a)	0.21	0.41	0.40	18.19	23.40	20.41	20.72	18.57	18.59	21.60
	(b)	0.05	0.09	0.13	6.05	5.23	4.04	3.32	3.04	3.31	3.47
	(c)	0.02	0.04	0.07	2.97	2.58	2.30	2.02	2.01	2.28	2.53
Percentage of Total Major Mineral Exports to Total Gross Exports		23.60	22.49	32.84	33.26	22.36	19.80	16.04	16.39	17.80	16.07
Percentage of Total Major Mineral Exports to GDP		10.30	9.29	17.35	16.31	11.03	11.25	9.75	10.84	12.27	11.72

Source: Computations from Appendix:2.2
Contribution of a Mineral Commodity Exports to
a) Total Mineral Exports
b) Total Gross Exports
c) GDP at Market Prices

Note: Tin accounted for about 5 per cent of total exports in Peninsular Malaysia in 1960. It rose to about 23 per cent in 1969 (Department of Statistics, Malaya, 1960, *Federation of Malaya, Statistics of External Trade*; Malaysia, 1969, *West Malaysia Annual Statistics of External Trade*).

Table 2.9

Malaysia: Contribution of major agricultural commodity exports (percentage)

Commodity		1970	1975	1980	1985	1985	1987	1988	1989	1990	1991
Rubber	(a)	60.56	54.66	44.88	31.11	37.33	34.01	40.06	29.98	25.61	23.67
	(b)	33.39	31.27	16.39	7.56	9.01	8.66	9.51	5.82	3.80	2.85
	(c)	14.57	12.93	8.66	3.70	4.45	4.92	5.78	3.85	2.62	2.08
Palm Kernel Oil	(a)	0.37	2.06	2.95	5.82	3.82	3.89	4.83	5.73	4.43	4.37
	(b)	0.20	1.18	1.08	1.41	0.92	0.99	1.15	1.11	0.66	0.53
	(c)	0.09	0.49	0.57	0.69	0.45	0.56	0.70	0.74	0.45	0.38
Crude Palm Oil	(a)	9.24	22.50	8.98	9.75	0.76	1.09	0.21	0.12	0.62	0.86
	(b)	5.10	12.88	3.28	2.37	0.18	0.28	0.05	0.02	0.09	0.10
	(c)	2.22	5.32	1.73	1.16	0.09	0.16	0.03	0.02	0.06	0.08
Palm Stearin	(a)	--	--	4.75	8.33	4.89	3.60	4.91	5.07	5.40	4.94
	(b)	--	--	1.74	2.02	1.18	0.92	1.17	0.99	0.80	0.59
	(c)	--	--	0.92	0.99	0.58	0.52	0.71	0.65	0.55	0.43
Saw Logs	(a)	22.58	12.67	25.42	30.02	33.40	37.13	30.54	33.07	34.20	36.08
	(b)	12.45	7.25	9.29	7.29	8.06	9.45	7.25	6.42	5.07	4.34
	(c)	5.43	3.00	4.91	3.57	3.98	5.37	4.41	4.25	3.50	3.16
Sawn Timber	(a)	7.06	7.42	11.45	10.54	13.98	14.35	14.05	22.07	25.94	26.48
	(b)	3.89	4.24	4.18	2.56	3.37	3.65	3.34	4.29	3.85	3.18
	(c)	1.70	1.75	2.21	1.25	1.66	2.07	2.03	2.83	2.65	2.32
Cocoa Beans	(a)	0.19	0.69	1.57	4.44	5.82	5.94	5.40	3.95	3.80	3.59
	(b)	0.10	0.40	0.57	1.08	1.40	1.51	1.28	0.77	0.56	0.43
	(c)	0.05	0.16	0.30	0.53	0.69	0.86	0.78	0.51	0.39	0.31
Percentage of Major Agricultural Commodity Exports to Total Gross Exports		55.13	57.22	36.53	24.28	24.14	25.45	23.74	19.42	14.84	12.02
Percentage of Major Agricultural Commodity Exports to GDP		24.06	23.65	19.30	11.90	11.91	14.46	14.44	12.84	10.22	8.77

Source: Computations from Appendix:2.3

Contribution of Agricultural Commodity to:

a) Total Exports of Agricultural Commodities

b) Total Gross Exports

c) GDP at Market Prices

Note: In 1960, crude rubber alone accounted for about 62.5 per cent of total exports in Peninsular Malaysia but declined to 47.8 per cent in 1969 (Department of Statistics, Malaya, 1960, *Federation of Malaya, Statistics of External Trade*; Malaysia, 1969, *West Malaysia Annual Statistics of External Trade*).

In an apparent move to meet the challenges posed by global changes which have affected the nation's earnings from primary commodities, new initiatives were introduced to diversify more extensively into manufactured goods particularly after the mid-80s.

2.3 Diversification from primary to manufacturing exports

Prior to the 1960s, the expansion of the agricultural and primary sector gave impetus to the simultaneous growth of the transport, banking, communication and other tertiary activities. For instance, the First Five-Year Plan (1956-60) shows that transport, utilities and social services constituted 56.6 per cent of planned total public investment. Together with agriculture, they accounted for about 79.7 per cent (Malaya, 1961, pp. 7-8). The bulk of the planned public development expenditure then was directed at development of economic and social infrastructure. However, the government's financial commitment to industrial development was negligible - only 1.25 per cent of total development expenditure under the First Five Year Plan

Manufactured products comprised less than 5 per cent of total exports in 1960 with very little development of new lines of production. The lack of industrial development during 1950-55 had much to do with the colonial relationship between Britain and Peninsular Malaysia (see Lee, 1974, p. 24). Hoffman and Tan (1980, pp. 13-14) argued that the economic worth of colonial Malaya to the British were two-fold: (i) to serve as a captive market for manufactured exports from Britain and, (ii) more importantly, to be a reliable and cheap source of primary raw materials for British industries. The British encouraged greater investment in the primary-based sectors mainly, rubber and tin, and not in local industries. Discrimination against the industrial sector was reinforced by the "open system" introduced by the British which permitted the

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liberal inflow of manufactured commodities from abroad, in particular from the old Commonwealth countries. On the other hand, (potential) Malaysian exports faced severe import restrictions in the industrialised countries. This effectively discouraged the growth and expansion of local industrial investment (Hoffmann and Tan, 1980, p.14).

Government policy toward industry only began to take shape with the *Report of the Industrial Development Working Party*²² which was delivered to the government in 1957. This followed from a World Bank mission in 1955²³ which made some general recommendations for industrialization. While the World Bank mission emphasized tariff protection and depreciation allowances as effective incentives, the Working Party, on the other hand, came out in favour of tax concessions for pioneer companies. The reasons given were that the cost of tax exemption was small compared to the gains from increased investment, and that tax concessions were more attractive to profit-oriented investors than capital allowances²⁴.

As a result, the Pioneer Industries Ordinance was implemented in 1958 to encourage private investment in the manufacturing sector. This contributed in part to a five-fold increase in the number of pioneer firms between 1959 and 1963. The value of

²²Federation of Malaya, 1957, *Report of the Industrial Development Working Party*, Kuala Lumpur, Government Printer.

²³International Bank for Reconstruction and Development (IBRD), 1955, *The Economic Development of Malaya*, Singapore, Government Printer.

²⁴There were several reasons for the weak reaction towards the World Bank's proposal on the use of import duties. First, until 1957, Malaysia was firmly tied to the Commonwealth system and could not pursue an independent trade policy. Second, it was feared that an increase in existing tariffs might in the medium term lead to reduced imports and thus affect government revenue. Third, it was argued that tariff protection and income distribution appeared to favour the urban Chinese at the expense of the rural Malays, thereby intensifying racial tensions. Fourth, there was opposition from foreign import agencies and foreign plantation owners who feared that rising costs-of-living for the plantation workers might lead to wage hikes. Finally, the Working Party's report came out in favour of tax incentives instead of tariffs (Hoffmann and Tan, 1980, p.52).

net output rose by 18 times during the same period (Malaysia,1966,p.126). Following the recommendations of the World Bank in 1955, the government embarked on an import-substitution strategy²⁵. The industries which emerged were food products, metal and non-metallic products, electrical and non-electrical machinery and transport equipment.

The Second Five Year Plan (1961-65) had as one of its objectives, *"To widen the variety of Malayan production, emphasizing the development of other suitable agricultural products in addition to rubber, and giving every reasonable encouragement to industrial expansion which in the long term offers perhaps the greatest promise for sustained development and diversification of the Federation's economy"* (Malaya,1961,p.16)²⁶. This lackadaisical stance in relation to industrialization saw the allocation for industrial development rise to 2.52 per cent only of total development expenditure.

Coupled with a worsening terms-of-trade averaging 9.2 per cent between 1956 and 1958 (IMF,1963,pp.182-183), a more vigorous approach to industrialise came following the formation of Malaysia, (comprising the former Federation of Malaya, the British colonies of Sabah and Sarawak and the self-governing state of Singapore). It was the intention of the new federation to establish a common market based on a study by a mission of the World Bank²⁷. There were four different incentives acts which existed then

²⁵For a time during the 1950s, the conclusion drawn seemed to be towards isolationism and self-sufficiency via import substitution. However, since the early 1960s, this direction turned to enhancement of export earnings both through price-boosting control efforts and generalised trading preference for the LDCs.

²⁶It was believed that in the short and medium run, falling rubber prices could only be dealt with by an all-out effort to increase productivity in the rubber sector and by effective programmes for agricultural diversification. In fact, agriculture acted as a stimulus for manufacturing, especially the manufacturing of processed agricultural products. As Malaysia's agricultural export commodities have a strong stand in the world market, there was no urgent need for domestic manufacturing as an outlet (Hoffmann and Tan,1980,p.33).

²⁷See International Bank for Reconstruction and Development, 1963, *Report on the Economic Aspects of Malaysia*, Kuala Lumpur, Government Printer.

in the four regions. The attempts to harmonize these separate acts resulted in the introduction of the Pioneer Industries Act, 1965 which stipulated higher investment amounts in order to qualify for an extended exemption period. The departure of Singapore from Malaysia in 1965 provided greater push for industrialization.

The Investment Incentives Act of 1968, instead provided greater incentives in the form of exemptions from company tax, reliefs from payroll tax for a period ranging from two to five years, investment tax credit, accelerated depreciation allowances and export incentives to approved companies. In addition to tariff protection with advice from the Malaysian Tariff Advisory Board (which was established in 1963), exemption from import duty and surtax were also granted to facilitate the establishment of new activities²⁸. The Investment Incentives Act also extended the coverage to non-manufacturing establishments²⁹.

By late 1960s and beginning of the seventies, a few factors emerged which led to intensified effort to diversify and develop the industrial sector. First, the growth of import-substituting industries for industrial expansion did not look encouraging. Recognizing the relatively small domestic market, the Government switched its development strategy to promoting export-oriented industries³⁰. Second, the substantial downturns of Malaysia's traditional exports of natural rubber and tin in the second half of

²⁸See Lee (1986) for more details on Malaysian manufacturing sector protection.

²⁹For instance, professional services, hospitality and related businesses, and trading.

³⁰The hypothesis is that export-oriented policies lead to better growth performance than policies favouring import substitution because export-oriented policies provide similar incentives to sales in domestic and in foreign markets. This would lead to resource allocation according to comparative advantage, allow for greater capacity utilization, permit the exploitation of economies of scale, generate technological improvements in response to competition abroad and in labour-surplus countries, contribute to increased employment. Also, emphasis on export markets is well justified given a limited availability of domestic markets and opportunities available in international markets (Balassa, 1978).

the 1960s coupled with high export instability³¹, could no longer provide the momentum for rapid development. As a result, the Second Malaysia Plan (1971-75) highlighted that *"development will be directed towards increased production for exports, including new industrial and agricultural items, greater local processing of domestic raw materials and further substitution of domestic production for imports"* (Malaysia,1971,p.6)³².

The establishment of Free Trade Zone, under the FTZ Act in 1971, saw a large inflow of export-oriented industries, mainly in electronics and textiles. The policies then encouraged the establishment of labour-intensive industries in line with the Second Malaysia Plan's (1971-75) objective of achieving high employment growth rate due to the country's abundant labour resources and scarce capital. Tariff protection was provided to infant industries with protection based on labour intensity of a firm, use of domestic raw materials, location and the expected increase in efficiency³³. This was accompanied by the abolition of the payroll tax in the 1971 Budget which provided additional incentive to use more labour.

Although aggressive promotion of export-oriented industries in the manufacturing sector was stepped up in the 1970s with trade commissions in major world trading centres, import substitution industries continued to expand though of a lower pace. By the end of 1970s, the shift was towards consumer durables such as household appliances, furniture and clothing. Expansion of the domestic market for these goods coupled with rising

³¹This have been mentioned in the earlier section (see p.28, footnote no.7).

³²Prebisch (1950) and others had argued that the declining terms of trade thesis for producers of primary commodities appears to indicate that bargaining strength was more widespread in industrialised countries (which are largely exporters of manufactured goods) than in primary producers where the former may be inclined towards collusion and price fixing. The degree of downward pressure on price was compounded by the inelastic demand for many primary commodities as the supply increased (Law,1975,p.21).

³³See Lee (1986) for further more details on the Malaysian manufacturing sector protection.

standards of living and increasing rate of urbanization were the main factors (Malaysia,1981,p.293).

The push towards the development of export-oriented industries gained momentum in the early 1980s. In particular, the Fourth Malaysia Plan (1981-85) stressed that *"high priority will be accorded to the establishment of export-oriented industries and the promotion of intermediate and capital goods industries"* (Malaysia,1981,p.293). Moving from the traditional and principal activities of manufacturing tyres, tubes and rubber footwear, these export-oriented industries, for instance, entered into wood products, new rubber products such as household and surgical gloves, heavy duty tyres and medical equipment.

However, the rapid expansion of manufacturing industries was mainly confined to the electronics and electrical machinery industries, and the textile industry. In 1980, exports of these industries³⁴ rose to about 60.5 per cent of total manufacturing exports; up from 35.9 per cent in 1975 (Bank Negara, Dec.1993,pp.90-91). The high growth in the electronic and electrical machinery industries, as noted in the Third Malaysia Plan (p.311), is mainly attributed to the special fiscal incentives provided, the boom in the electronic industry and the increasing investments of multi-national electronic firms largely situated in the Free Trade Zones. On the other hand, production of textile and clothing expanded as a result of the imposition of a ban on certain imported fabrics and the granting of duty exemption on raw material imports. The increase in textile mills was also attributed to export promotion efforts of the government and increase in export consciousness among textile producers as they benefitted from textile quotas under the Multifibre Arrangements (MFAs).

³⁴They comprised of electronic components, electrical appliances, other electrical machinery, textiles, clothing and footwear.

There were fiscal incentives for export such as the double deduction of export credit insurance premiums to encourage exporters to go into non-traditional markets, double deduction for expenses incurred under promotion of exports, and more liberalised equity guidelines formulated in the government's attempt to attract foreign equity into export-oriented industries. For instance, foreign investors were allowed to hold a greater proportion of investment which depends on the proportion of output to be exported and factors such as the level of technology, potential for linkages, value of the investment, location of the factory, local resources utilised and value-added (Malaysia,1981,p.352). There were reductions in electricity rates and rates to assist manufacturers to lower their costs of production (Malaysia,1981,p.354). By 1985, the proportion of manufacturing exports to total gross exports was almost thrice that in 1970, up from 11.9 per cent in 1970 to 32.8 per cent in 1985. Its contribution to GDP rose from 5.2 per cent to 16.1 per cent during the same period.

Additional incentives included the Export Credit Refinancing (ECR) facilities which were made more accessible to exporters and indirect exporters at preferential rates of interest. Provision of export refinancing and export credit insurance facilities³⁵ by the government had in part contributed to the growth of the export of manufactured goods. The value of ECR as a proportion of the total manufactured export earnings rose from 3 per cent in 1977 to 14.6 per cent in 1982 and to a further 26 per cent in 1991 (Ministry of International Trade and Industry,1994, *International Trade and Industry Report*, p.149). Annual utilisation of ECR facility rose from RM139 million in 1977 to RM9.6 billion in 1989 (see Jaffar,1990,p.35). The Malaysia Export Credit Insurance Bhd (MECIB) (a

³⁵The Export Credit Refinancing (ECR) scheme was for exporters of manufactured goods in Malaysia. It comprised of a post-shipment refinancing facility (introduced in January 1977) and a pre-shipment refinancing facility (in March 1979). The objective of the ECR facilities was to promote the export of manufactured goods and approved agricultural products which have significant value added (a minimum value-added of 20 per cent) and local content (a minimum local content of 30 per cent of raw materials).

joint-venture between the government and the private sector) was incorporated in the same year to complement export credit insurance for commercial, economic and political risks. Since its operation in September 1988, MECIB has recorded a steady expansion of insurance policies to exporters with the number of policies valued at RM91.8 million in 1977 rising to RM1,118 million at the end of 1989 (Jaffar,1990,p.35). Subsequently, other utilisation of trade financing instruments were introduced such as the Bankers' Export Finance Insurance Policy (BEFIP) scheme to protect commercial banks and financial institutions against non-payment of loans and advances made to exporters and suppliers.

From the mid-1980s, there was an about-turn in government policies brought about by the global recession in 1980-81 which led to a substantial rise in the financial burden faced by the federal government³⁶. The slowdown in manufacturing growth in 1985 was in part caused by slower growth in industrial countries, and a loss in Malaysia's competitiveness relative to international levels (World Bank,1989,p.17). Performance of the heavy industries, launched at the beginning of the eighties, were weak due to sluggish domestic market and the inability of the industries to compete at the international level. High production and operational costs and low capacity utilization of the plants were the main contributing factors (Malaysia,1989, *Mid-Term Review of the Fifth Malaysia Plan*,p.196).

³⁶The substantial rise in federal debt was a result of a counter-cyclical stance adopted against a terms of trade loss of an average of 7.3 per cent between 1980 and 1982 (World Bank, *World Tables*,1988/89,pp.374-375). Beside the steep fall in the prices and demand for Malaysia's major export commodities, mainly petroleum, palm oil and tin, other contributory factors included the weak financial position of the public sector, and the increased level of development expenditure. The large government deficit necessitated a high level of net borrowing (Ministry of Finance, *Economic Report*,1986/87,p.63). While external debt service rose by 67.4 per cent between 1982 and 1986, domestic borrowing was doubled from 3150 million in 1980 to 7071 million in 1982 (Bank Negara, Jun.1993,p.102).

Reappraisal of past strategies and recommendations of the Industrial Master Plan (IMP) (1986-95) and the Malaysian Industrial Policies Study (MIPS) suggested lower protection rates³⁷. This was to enable resources to be allocated more efficiently to weather the effects of the recession. Through the introduction of the Promotion of Investments Act (PIA), 1986 and amendments made to the Income Tax Act, 1967, potential investors were provided with more liberal investment incentives. For instance, the exemption order under the Industrial Coordination Act (ICA), 1975 was liberalised to exempt manufacturing companies with shareholders' funds of less than RM2.5 millions or 75 workers from being licensed (Malaysia, 1991, p.127)³⁸.

The acceleration in net corporate investments towards the end of 1980s was in part a response to the highly competitive and favourable private investment environment such as favourable credit terms provided by the government, and favourable developments on foreign equity ownership for manufacturing and agricultural projects³⁹. The Yen appreciation⁴⁰ which necessitated movement to greater cost competitive manufacturing bases spurred Japanese foreign direct investment (FDI) inflows into ASEAN (Ministry of International Trade and Industry, 1994, *International Trade and Industry Report*, pp.31-32). With the trend towards relocation of industries away from

³⁷The IMP and MIPS were two major studies initiated by the government in 1983.

³⁸Prior to that, the exemption was for manufacturing activities with shareholders' funds of less than RM250,000 and with less than 25 full-time employees.

³⁹For instance, foreign investors were allowed to hold up to 100 per cent equity for a period of 5 years from the date of production based on conditions such as, local participation cannot be found, products exported by a company must be at least 20 per cent, and State Government approval with regard to landownership (Ministry of Finance, *Economic Report, 1988/89*, p.182).

⁴⁰The US dollar appreciation between late 1981 and early 1985 was reversed in March 1985 when it began to decline due to changing perceptions of the sustainability of the US external deficits. In September 1985, the five leading industrial countries (the G-5) set in motion concerted intervention in currency markets to maintain an orderly decline of the dollar. The Louvre Accord of February 1987 marked a further commitment by industrial countries with external surpluses to cooperate closely to foster stability of exchange rates (World Bank, *World Development Report, 1988*, p.19).

Japan, Taiwan, Hong Kong, South Korea and also Singapore, a major portion of the total flow of foreign investments flowed into Malaysia, primarily into the manufacturing and oil sectors (Ministry of Finance, *Economic Report, 1990/91*, p.171).

Consequently, the Fifth Malaysia Plan (1986-90) prepared the groundwork for an integrated export-oriented manufacturing sector. Under further diversification strategy, twelve subsectors were identified as priority subsectors. They comprised of seven resource-based industries and five non-resource based industries. The resource-based industries were food processing, rubber, palm oil, wood-based, chemical and petrochemical, non-ferrous metal products and non-metallic mineral products industries. These resource-based manufacturing projects approved by the Malaysian Industrial Development Authority (MIDA) were stepped up and promoted under the Industrial Master Plan to provide more capacity to increase the share of export of manufactures. The non-resource based industries were the electrical and electronic, transport equipment, machinery and engineering products, ferrous metal and textiles and apparel industries.

Under the Sixth Plan (1991-95), the industrial policy shifted towards capital-intensive and technologically sophisticated industries to produce better quality and more competitive products. The key areas designated for industrial technology development were automated manufacturing, advanced materials, electronic technology, biotechnology and information technology leading to development of energy-saving technology and energy-efficient industries. Funding for research and development (R&D) through direct matching grants, soft loans and preferential credit allocations was based on the priorities of the technology development programmes.

In addition, the Sixth Plan placed more emphasis on improving the capability of small- and medium-scale industries (SMIs)⁴¹ to supply the required production inputs of the larger enterprises⁴², to expedite the diversification of the industrial base. To extend the end-uses of raw materials, research activities of agencies such as the Malaysian Agricultural Research and Development Institute (MARDI), the Standards and Industrial Research Institute of Malaysia (SIRIM), the Forest Research Institute (FRI) and the Rubber Research Institute of Malaysia (RRIM) were strengthened. The abatement of adjusted income (AAI) for exports, for instance, is now provided at 50 per cent of export sales, 5 per cent of the value of "indigenous Malaysian materials" which are inputs to manufacturing exports, for gazetted locations, SMIs compliance with government on capital participation and employment for a period of five consecutive years (see Yeoh,1991), and penetration into export markets. The Product Development Scheme (PDS) provided financial assistance to SMIs which upgrade or diversify their product lines. SIRIM also provides assistance to the SMIs through a technology transfer programme with a data base on the latest information in meeting quality standards set by importing countries. This was done by establishing links with several foreign standards institutions through mutual recognition agreements and technical cooperation (Ministry of International Trade and Industry, Oct.1994, *Bulletin Dagang*, p.2). As a result, the salient feature under the Sixth Malaysia Plan was the substantial allocation given for the development of industrial infrastructure which included general infrastructure, SMI

⁴¹Small-scale industries are engaged primarily in the production of foodstuff, furniture, handicraft, fabricated metal products, wood-based products, textiles and clothing. Medium-scale industries on the other hand, concentrate more on the processing of beverages and tobacco, electrical and electronic products, chemical products, non-metallic mineral products and automotive parts and components.

⁴² SMIs are generally dominated by domestic investors. Initially, their size are small. Inadequate capital, managerial, marketing and production capability as well as low utilization of modern technology, have resulted in the lack of inter-industry linkage, poor quality products and delays in delivery. This inevitably caused large firms either to expand their own production capacity without relying on subcontracts or to continue sourcing from abroad.

development and high technology infrastructure support. This allocation did not appear in the previous Malaysia Plans (see Table 2.10).

Table 2.10

Malaysia: Development allocation for the manufacturing sector (RM million)

	1MP (1966-70)	2MP (1971-75)	3MP (1976-80)	4MP (1981-85)
<i>Heavy Industries Corporation</i>	--	--	--	330.61
<i>Economic Enterprises</i>	109.2	568.1	1682.19	1066.34
PERNAS	--	100	200	22.6
MARA	70	73	515	18.8
SEDCs	--	45.6	423.8	351.74
Ministry of Trade & Industry				
Industrial Estates	14	23.5	--	--
FIDA/MIDA	5	--	--	--
Other Investment in economic enterprises	20.2	326	543.39	673.2
<i>Energy and Industrial Research</i>	5.3	5.5	52.27	91.5
<i>Agro-based Industries</i>	--	--	--	76.68
<i>Other Programmes</i>	--	--	--	237
TOTAL	114.5	573.6	1734.46	1802.13

	5MP (1986-90)	6MP (1991-95)
<i>Industrial Estate Development</i>	127.7	291.4
General Industrial Estates		
Development in Slower Growing States/Regions (loans)	127.7	188.4
Special Industrial Estates		
Development/High Technology (loans)	--	103
<i>Development of Industrial Infrastructure</i>		493.1
General Infrastructure	--	222.8
SMI Development		140.6
High Technology Infrastructure Support	--	129.7
<i>Rural Industries</i>	77.4	162.3
<i>Training & Consulting Series</i>	28.1	341.7
<i>Investment in Heavy Industries</i>	2553.6	1497.3
<i>Programmes for Commercial & Industrial Development</i>	25	235
<i>Implementation of Action Plan for Industrial Technology Development</i>	--	166
TOTAL	2811.8	3186.8

Source: Malaysia, various issues, *Malaysia Plan*.

In summary, rapid industrial expansion which arose towards the end of 1980s was a result of: (i) the implementations of more liberal policies by the government with respect to fiscal and monetary incentives, and other special incentive schemes⁴³; (ii) improved export competitiveness⁴⁴; (iii) the increase in foreign direct investment as a result of relocation of industries from industrialised countries, notably Japan, South Korea and Taiwan; (iv) the expansion of infrastructure and; (v) the expansion of the domestic market. Table 2.11 gives an overview of the export structure of manufactured goods over the past twenty years. In contrast to wider export diversification in both the agricultural and mining sector (see pp.45-46), manufactured exports are still traditionally dominated by electronic, electrical machinery and appliances, and textile, clothing and footwear. For instance, they accounted for 60.6 per cent of total manufactured exports in 1980 and rose further to 65.7 per cent in 1991 (Bank Negara, Sept.1993).

⁴³Beside specific fiscal and monetary export incentives schemes (see pp.53-54 in this chapter), other special incentives included exemptions from various import duties and surtax of eligible exporters, establishment of Free Trade Zones (FTZs) and Licensed Manufacturing Warehouse (LMWs).

⁴⁴After the mid-eighties, the Ringgit depreciated against most of the major currencies as a result of capital outflows and sizeable external debts and this improved competitiveness in the Malaysian exports. There had also been some external competitive edge gained since the Plaza Accord of September, 1985. At the same time, improvement in the external environment after the short recession in the industrialized countries during 1981-83 resulted in rising external demand. Upturn in prices of Malaysia's major primary commodities brought about a revival in the private sector activities in the later part of 1980s. By 1987, the manufacturing sector overtook the agricultural sector to become the largest sector in the economy.

Table 2.11
Malaysia: Composition of exports of manufactured goods (percentage)

		1970	1975	1980	1985	1988	1991
Electronic Components	(a)	-	-	8.14	11.68	15.77	13.81
	(b)	-	-	4.30	5.72	9.59	10.08
Electrical Appliances	(a)	-	-	0.98	1.21	2.23	3.84
	(b)	-	-	0.52	0.59	1.36	2.80
Other Electrical Machinery	(a)	-	-	1.59	4.20	9.43	20.01
	(b)	-	-	0.84	2.06	5.74	14.60
Total	(a)	1.01	5.49	10.70	17.08	27.44	37.66
	(b)	0.44	2.28	5.66	8.37	16.69	27.47
	(c)	8.45	25.08	47.72	52.06	56.47	58.03
Transport Equipment	(a)	0.63	0.72	0.79	1.49	0.91	3.47
	(b)	0.27	0.30	0.42	0.73	0.56	2.53
Food	(a)	1.79	2.96	1.75	1.99	2.37	2.22
	(b)	0.78	1.23	0.92	0.97	1.44	1.62
Beverages and Tobacco	(a)	0.40	0.29	0.10	0.07	0.15	0.18
	(b)	0.17	0.12	0.05	0.03	0.09	0.13
Textiles, Clothing & Footwear	(a)	0.61	2.36	2.86	3.39	4.28	4.98
	(b)	0.27	0.98	1.51	1.66	2.60	3.63
Wood Products	(a)	1.74	2.23	1.67	0.96	1.65	1.82
	(b)	0.76	0.92	0.88	0.47	1.00	1.33
Rubber Products	(a)	0.32	0.47	0.30	0.30	1.65	1.86
	(b)	0.14	0.19	0.16	0.15	1.01	1.36
Paper and Paper Products	(a)	0.11	0.10	0.14	0.19	0.45	0.47
	(b)	0.05	0.04	0.07	0.09	0.28	0.34
Petroleum Products	(a)	3.11	1.14	0.67	2.74	1.38	1.22
	(b)	1.36	0.47	0.35	1.34	0.84	0.89
Chemical and Chemical Products	(a)	0.68	0.94	0.67	1.61	2.49	1.91
	(b)	0.30	0.39	0.35	0.79	1.51	1.39
Non-metallic Mineral Products	(a)	0.39	0.25	0.22	0.40	0.81	0.94
	(b)	0.39	0.25	0.22	0.40	0.81	0.94
Manufactures of Metals	(a)	0.67	0.67	0.89	0.94	2.10	1.91
	(b)	0.29	0.28	0.47	0.46	1.28	1.40
Optical and Scientific Equipment	(a)	0.07	3.63	0.49	0.60	0.89	1.72
	(b)	0.03	1.51	0.26	0.29	0.54	1.25
Toys and Sporting Goods	(a)	0.04	0.15	0.20	0.44	0.75	1.40
	(b)	0.02	0.06	0.11	0.22	0.46	1.02
Other Manufactures	(a)	0.34	0.49	1.00	0.63	1.25	3.14
	(b)	0.15	0.20	0.53	0.31	0.76	2.29
Percentage of Total Manufactured Exports to Total Gross Exports		11.90	21.89	22.43	32.80	48.59	64.89
Percentage of Total Manufactured Exports to GDP		5.19	9.09	11.85	16.08	29.55	47.34

Source: Computations from Appendix:2.4
Contribution of Manufactured Good to
(a) Total Gross Exports
(b) GDP at Market Prices
(c) Contribution of electronic components, electrical appliances and other electrical machinery to total manufactures

2.4 **Diversification of Export Markets**

A notable feature of Malaysian export trade is that the bulk of exports is directed to the industrialised economies. They are directed mainly through Singapore and to the United States, Japan and the EEC. Besides being the traditional markets for Malaysian exports, they absorbed over 70.7 per cent of Malaysian's total exports in 1991 (see Table 2.12). Such concentration could be a factor for export instability because there appears to be a large exposure of the export sector to the economic fortunes of a few countries.

Table 2.12
Malaysia: External trade by major countries:
Contribution of a country's trade to total gross exports (percentage)

	1970	1975	1980	1985	1990	1991
United States	12.99	16.13	16.36	12.87	16.94	16.92
European Economic Community	20.28	24.23	17.61	14.48	14.90	14.79
Japan	18.29	14.49	22.82	24.39	15.81	15.70
ASEAN	25.39	24.97	22.53	25.79	29.07	29.27
NICs Total	26.67	24.49	24.79	28.87	32.73	33.80
Singapore	21.56	20.30	19.12	19.35	22.78	23.31
Taiwan	1.26	1.37	1.77	2.26	2.17	2.72
Rep. of Korea	2.60	1.67	2.02	5.91	4.62	4.41
Hong Kong	1.24	1.15	1.88	1.35	3.17	3.36

Souce: Computations from Appendix: 2.5

Efforts to find alternative markets in view of increased protection, particularly, non-tarrieff barriers in developed country markets has hastened the government's effort to promote export market diversification. This may be seen in terms of the steps taken to penetrate other non-traditional markets.

First, information is disseminated to Malaysian businessmen by government institutions such as MIDA, Malaysian Export Trade Centre (MEXPO)⁴⁵ and the network

⁴⁵MEXPO was subsequently replaced by Malaysia External Trade Development Corporation (MATRADE) in 1993 where the latter focusses more on the promotion and marketing aspects of Malaysia's exports.

of Malaysian trade commissions overseas. Exporters were kept informed of the changes to the Generalised System of Preferences (GSP) as well as other changes affecting market access through trade liberalisation measures. These activities intensified as a result of the slowing down in the economies of major industrialised countries, the recent development in Eastern Europe, the move towards regional blocs such as the Single European Market 1992 and the North American Free Trade Area.

Second, to strengthen the ability to finance trade among developing countries, Bilateral Payments Agreements (BPAs) between the Central Bank of Malaysia and Central Banks of other non-traditional trading partners have been established⁴⁶. The BPAs aim at guaranteeing payments for exports and imports, thus eliminating credit risk. Trade among developing countries (South-South trade) are promoted through the trade financing mechanism, and the South Investment and Trade Data Exchange Centre (SITDEC)⁴⁷.

However, market diversification to reduce market concentration by moving away from traditional major export partners has not been particularly rapid. The move has been stifled by schemes such as the GSP accorded by the nation's major trading partners (see Table 2.13), and the textile quota under the Multifibre Arrangements (MFAs) accorded by the EEC, the United States, Canada, Norway and Finland. The total value of Malaysia's exports under the GSP in 1991 amounted to almost sixty times the 1986 value, that is, rising from RM187.6 million to RM11,210.0 million. This figure constituted 14.8 per

⁴⁶Contacts were made and established in the context of accelerating South-South cooperation and increasing the volume of trade with newly emerging nations such as the Pacific Island states, nations on the African continent, the Caribbean, Eastern Europe and South America.

⁴⁷However, due to different political, cultural and socio-economic background of the South countries, bilateral economic cooperation was more on a country-by-country basis.

cent of Malaysia's global exports, an increase by 6 per cent since 1986 (Ministry of International Trade and Industry).

Table 2.13
Malaysia: GSP Exports (1991)

Country/Region	GSP Exports (\$ million)	% of GSP Exports to Total Exports to Country/Region
EEC ⁴⁸	5,545.91	39.7
EFTA ⁴⁹	280.76	42.1
U.S.A.	3207.16	20.1
Japan	1645.16	11.0
Canada	304.15	41.3

Source: Ministry of International Trade and Industry

It can be seen that benefits obtained under the GSP schemes⁵⁰ have attracted considerable exports to export regions which offer the scheme. Malaysia's major exports such as palm oil products, rubber products and electrical goods have been the major beneficiaries of the GSP preferential treatment. For instance, palm oil products constituted 11.5 per cent of total GSP exports, rubber products and electrical goods constituting 7.6 per cent and 30.7 per cent, respectively, of total GSP exports in 1991 (Ministry of International Trade and Industry).

Nonetheless, Table 2.12 shows a slight change in trade direction. Share of exports to the Asian NICs has been on the rise; an increase of 5.39 percentage points of total Malaysian exports between 1970 and 1991. On the other hand, share of exports to the European Community has fallen by 5.49 percentage points over the same period.

⁴⁸The EEC consists of Netherlands, Belgium, Denmark, Greece, Ireland, Italy, Germany, Luxembourg, Spain, Portugal, France and the United Kingdom.

⁴⁹The EFTA consists of Austria, Finland, Norway, Sweden and Switzerland.

⁵⁰It should be noted that preferential treatment through GSP by the donor countries is only an interim measure to enable developing countries to break into their market.

2.5 Summary

An overview of the diversification progress in the Malaysian economy between 1968 and 1991 shows that: (i) there had been a wider range of commodity diversification both in the agricultural and mining sector, particularly from the late 1970s and early 1980s. For instance, oil palm overtook rubber as the leading agricultural export crop while petroleum and liquefied natural gas exports replaced tin; (ii) although there had been rapid growth in the manufacturing sector, the export structure of manufactured goods had remained relatively unchanged. It is still dominated by the electronics, electrical machinery and appliances, and textile and clothing industries as it was in the early 1970s and; (iii) diversification among the export markets has been small. Malaysia's exports to her traditional trading countries remain substantial.