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GROWTH, POLICYMAKING, TRADE AND ECONOMIC DEVELOPMENT IN MALAYSIA

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Abstract: *For the period between 1957 and 1997, Malaysia's development is analysed to determine the roles of inputs, planning, trade and government intervention in economic activity. Foreign investment is also analysed. During this period, by international standards, growth that Malaysia experienced was impressive. This growth was achieved through a policy framework that used government planning and investment in conjunction with incentives for the private sector. A unique feature of Malaysia's planning was its call for social justice to advance the economic interest of its less economically privileged population. By adopting amalgam of development strategies and policies, policymakers were successful in improving the socio-economic status of the majority of the Malaysian population.*

Key Word: Economic Development, Export, Growth, Investment, Planning, Sustainability, Country Studies: Malaysia.

PRELUDE

Malaysia is a federation of thirteen states, eleven on the Malay Peninsula and two on the Island of Borneo. Peninsular Malaysia obtained its independence from the United Kingdom in 1957 with the formation of Malaya, a federation of eleven states. In 1963, Malaysia was formed with the addition of Singapore and two northern Borneo states, Sabah and Sarawak. Incompatibilities led to the separation of Singapore from the federation in 1965. As discussed below, Malaysia through time progressed socially, politically and economically. In what follows different aspects of the Malaysian development is undertaken.

Malaysia, one of the rapidly industrializing economies of Southeast Asia, has had a remarkably high and sustainable rate of economic growth for nearly all of its years of existence as an independent nation. Consequently, it is now one of the high middle-income countries as listed in the World Bank's data (World Bank, WDR various issues). While Malaysia's economic growth and development have received considerable attention, these have not been as thoroughly analysed as several of the other East Asian economies (see, for example, Krugman, 1994; Ranis, 1995; Stiglitz, 1996; World Bank, 1993). The analyses below deal with aspects of the Malaysian development that took place since its inception as an independent state, 1957, through 1997, which can be considered as the foundation for its current status as a middle income nation.

Table 1 gives a comparison of some economic indicators for Malaysia and selected other Asian

Table 1. Economic Development Indicators for Selected East Asian Countries

Indicator	Malaysia	Indonesia	South Korea
Area/thousand square kilometres	329,750	1,919,440	98,480
Population 1960	12	170a	23a
Population 1997	21	200	46
Per Capita GNP 1960 in \$	466	141	217
Per Capita GNP 1997 in \$	4,680	1,110	10,550
PPP GNP 1997 in \$	10,920	3,450	13,500
Annual rate of inflation 1960-70	-.2	180	-6.7
Annual rate of inflation 1990-97	4.4b	8.5b	5.3b
Life expectancy at Birth/years 1997	70m(75f)	63m(67f)	69m(76f)
Agricultural GDP 1960 (% of total)	.40	.45	.40
Agricultural GDP 1997 (% of total)	.13	.16	.06
Industrial GDP 1960 (% of total)	.18	.17	.19
Industrial GDP 1997 (% of total)	.46	.42	.45
Services GDP 1960 (% of total)	.42	.38	.41
Services GDP 1997 (% of total)	.41	.41	.51

Source: World Bank, World Development Report, various issues. a stands for 1959. b stands for GDP deflator.

Table 2. Incidence of Poverty in Malaysia, Selected Years 1970-97

Year/Area	1970	1990	1997
Rural Incidence	58.7	21.8	11.8
Urban Incidence	27.8	7.5	2.4
Total Incidence	49.3	17.1	6.8

Source: Malaysia, Mid-term Review: The Third Malaysia Plan; Sixth and Eight Malaysia Plans.

Table 3. Overall and Sectoral Contribution to Growth in Malaysia, Selected Years 1960-1995

Years	Overall GDP Growth Rate	Agricultural Sector	Manufacturing Sub-Sector	Services Sector
1960-95	7.07	.95 (13.4)	2.23 (31.5)	2.64 (37.3)
1960-90	6.08	1.1 (16.2)	1.9 (27.9)	2.3 (33.8)
1970-90	6.9	1.0 (14.5)	2.1 (34.4)	2.8 (40.6)
1991-95	8.7	0.3 (3.4)	3.9 (44.8)	3.9 (44.8)

Source: Calculated from World Bank, World Tables and Malaysia Ministry of Finance, Economic Report, various issues, Malaysia, Sixth and Seventh Malaysia Plans. Sectoral percentage contribution to growth is enclosed in parentheses.

Table 4. Malaysia's Structure of the Economy

Sector % of GDP/Year	1960 ^a	1970	1990	1997 ^b
Agricultural	38	29.5	17.8	10.8
Industrial	15	34.7	44.4	46.5
manufacturing	9	14.6	28.1	30.9
Services	47	35.8	37.8	42.7

Source: Bruton, 1992; the World Bank, WDR, various issues; the World Bank, world Tables, 1992. a stands for 1962. b stands for 1999, a world-wide recessionary year.

Table 5. Shares of Total Exports by Sector of Origin in Malaysia, Selected Years 1960-1997

Year/Sector	1970	1990	1997
Agricultural	50.5	22.3	3.5
Mining and Quarrying	6.1	18.3	7.0
Manufacturing	43.3	58.8	89.5

Source: The United Nations, International Trade Statistics Yearbook, various issues.

Table 6. Malaysia's Income Distribution, Percentage Share of Household Income by Percentile Groups.

Income Group/Year	1970	1987	1989	1995	1997
Lowest 20 %	3.3	4.6	4.6	4.5	n.a.
Second Quintile	7.3	9.3	8.3	8.3	n.a.
Third Quintile	12.2	13.9	13.0	13.0	n.a.
Fourth Quintile	20.7	21.2	20.4	20.4	n.a.
Highest 20 %	56.6	51.2	53.7	53.8	54.3
Highest 10 %	39.6	34.8	37.9	37.9	38.4
Gini Coefficient	.479	.418	.484	.485	.490

Source: The World Bank, World Development Report, various issues

countries. A unique feature of Malaysia's record has been its stability to achieve a high growth rates in spite of its ethnicity and high income inequality (Tables 2-3 and 6, also see: Bruton, 1992; Demery and Demery, 1991; Hoer, 1975; Horii, 1991; Rudner, 1975). To help overcome problems caused by inter-ethnic problems and conflicts, a political alliance was forged between the Malays, Chinese, and Indian groups to assure political order and continuity. To achieve this end, in 1971 and in 1991, Malaysia implemented long run economic policies, i.e., the New Economic Policy (NEP) and the New Development Policy (NDP), respectively, which were specifically designed to help the disadvantaged, Malay and indigenous, groups without causing economic harm to the prosperous, Chinese and Indians, groups.

In the sixties and seventies, much of the poverty and economic inequality was associated with the rural and small-holder agricultural sectors where a large share of the indigenous populations lived and worked. The transformation of the rural sector together with rapid industrialization and increased exports became integral parts of Malaysia's effort to reduce poverty and promote growth with greater equity (Tables 2-5). Rapid economic growth, rather than income distribution, was the means by which this transformation was to be accomplished (Malaysia, 1971 and 1991). Accordingly, the primary focus of this paper is on policy and planning framework, a means to lift the economy from its low level of activity, particularly of investment and export factors that help explain the successful efforts to induce rapid economic growth while simultaneously eradicating most of the poverty that had affected the economy at the time of independence, 1957, and throughout the seventies, eighties and up to the second half of the nineties. After a description of the history, problems, issues and policies developed to address the problems, a regression analysis is used to aid in determining which factors contributed to the high and sustained growth rates achieved in Malaysia for the period of the analysis. Specifically, this paper is organized into five sections. Section one addresses economic planning, within which industrial, social, and infrastructural policies are undertaken. Private and public investments and foreign direct investment are discussed in the second investment section. International trade is presented in section three. Section four is dealing with the empirical analysis. Section five is devoted to conclusions and final remarks. Data from the Malaysian Central Bank, the Malaysian Ministry of Finance, the Office of the Malaysian Prime Minister, the United Nations, and the World Bank are used for the analyses presented in this paper.

ECONOMIC PLANNING

The years after independence, especially the 1960s, were a time of economic growth for Malaysia. The first five-year economic plan for Malaya was formulated—when a British expatriate developed the First Malaya plan—in 1956, the year before independence; at the end of that period a second plan was developed to cover the early 1960s. Subsequently, the planning function was absorbed into the Prime Minister Office where it has remained. During the sixties, these plans were indicative and were intended to help guide the economy and assist the government in setting priorities in, for example, its investments in infrastructure, public sector investments and especially rural development and activities. However, during the first several years after independence, the public sector played more of a secondary role to that of the private sector in moving the economy. The government confined its activities to more orthodox, supportive roles that promoted economic growth; these included additions to infrastructure, education, and health measures and a first stage import-substitution industrialization. Government policy also included the protective measures needed for the import-substitution industrial strategy. It was assumed, however, that growth would automatically—trickle down—benefiting all Malaysians and that the government, therefore, did not have to concern itself with distributive policies. Despite the healthy growth that the Malaysian economy enjoyed in this period, poverty continued to be widespread, particularly among Malays and other indigenous groups. Wealth was relatively concentrated within specific groups, together with foreign-owned corporations, being the principal wealth holders and higher income earners. The 1960s ended with greater total wealth but also greater socio-economic imbalances, which contributed to the socioeconomic conflicts that characterized the end of the decade.

The unrest produced by the socio-economic conditions of the 1960s induced Malaysian policy makers to develop and adopt a set of long-term objectives and goals enunciated in the First Outline Perspective Plan for 1971-1990 and denoted as the NEP and later on, in 1991 adopted the NDP, a continuum of the NEP, which was enunciated in the Sixth Malaysian Plan. So, five-year economic plans continued to be developed, but under the umbrella of the NEP and NDP, which were to be a 20-year set of activities designed to promote economic development, greater income equality and national unity. The primary objectives of the NEP and NDP were to decrease economic inequality and reduce poverty while simultaneously maintaining high rates of

economic growth; this was to be accomplished through economic and social restructuring to include providing greater access to land, improved training (education), physical capital, and public services. It also would involve a reduction in the Malays dependence on agriculture and their incorporation into commercial agriculture or nonfarm employment. Differently put, as a consequence, with the development of the NEP, the plans became more proactive and the government substantially increased its economic development activities, interventions and investments. (However, this was in line with what the other newly industrialized countries of Southeast Asia were advocating, e.g., Japan, Singapore, South Korea, and Taiwan.) The five-year plans continued to emphasize rural development activities with land settlement, irrigation and drainage, roads, schools, rural industries and other activities to raise rural incomes, reduce poverty, and, hence, improve the economic wellbeing of rural population. On the industrial front, planning turned from import substitution to export promotion with a strong emphasis on developing the manufacturing subsector. Typically, this was accompanied by policies and credit, among other programs indicated below, to promote the inclusion of the economically underprivileged population in nonfarm activities. The government invested heavily in parastatals and purchased, with the increased oil revenues in the second half of the seventies, many foreign owned businesses as a way to increase share ownership by Malaysians. The Malaysian government also held stock shares in trust until they could be sold to Malaysians.

The worldwide recession of the early 1980s, the increasing costs of the government owned enterprises, and the decline in oil prices in the mid 1980s produced serious economic problems including large government deficits and the threat of inflation. As a consequence, in the second half of the 1980s, the Malaysian government revised, once again, its basic approach to development by liberalizing its economy and partially or fully privatized many of its public enterprises. The public sector, however, continued to play important roles in the economy including a continued effort to redress the problems of poverty and economic inequality. Planning became more advanced, science based technology and R & D were emphasized to guide and influence the level of economic activity, thus growth and development.

In sum, as analysed in the following sections, the development and implementation of a series of economic plans, as well as new legislation, regulations, investments, and interventions in the economy was assumed to be needed and were used to help accomplish the objectives of the NEP

and later on those of the NDP. Was Malaysia successful in this regard? In what follows economic development planning and records since independence up to 1997 will be undertaken.

Rural and Agricultural Development Policies

Early Malaysian rural development policies were affected by the belief that little could be achieved unless the peasant farmers could be changed into more ambitious and productive workers and managers. In addition, policy makers were inclined to take a *laissez faire* approach to most aspects of economic development in the belief that this would promote overall levels of economic growth, which, in turn, would benefit all segments of the economy. Thus, rural development activities tended to be limited to infrastructure (largely roads and irrigation projects), social programs including education, training, youth, health services, and amenities such as electricity, water and sewage. However, the era before 1970 also included the beginnings of the land settlement schemes and the continuation of the rice price stabilization programs that began shortly after World War II. Community development activities were initiated in the 1950s, but were not adequately funded and faded after only a short time. Attempts to improve agricultural marketing activities through co-operatives suffered a fate similar to community development after the Minister of Agriculture, who promoted the activity, was forced to leave the government due to his support for measures termed to be too socialistic (Rudner, 1975a: 82-3; 1975b).

In the 1970s, among the many activities undertaken or expanded were the Malaysian Agricultural Bank (*Bank Pertanian Malaysia*) to provide loans for farming activities, the National Padi and Rice Authority (LPN) to support rice prices, a reorganization of the Federal Agricultural Marketing Authority (FAMA), originally established in 1965, to provide market information, the Farmers Organization Act for other crops, a National Livestock Development Authority, expansion of the Federal Land Development Authority (FELDA) to settle new lands, and the Federal Land Consolidation and Rehabilitation Authority (FELCRA) to help consolidate the fractionalized land holdings in, primarily, rice production. The Rubber Industry Smallholders Development Authority (RISDA) and a similar association for oil palm producers was also established in 1970s (Mehmet, 1986: 46-8).

The programs to implement the rural development policies included the continued construction of infrastructure as well as port facilities for exports and fishing. Irrigation schemes were especially important for rice since this permitted double cropping as well as increased yields. Rice prices were also subsidized as were inputs, especially fertilizer. Rice programs consisted of 1) a continuation of irrigation and drainage projects, but at reduced levels from earlier periods and to a relatively low level in the fifth plan (1986-90) since most of the available areas had been provided with these services; 2) price supports at guaranteed minimum prices which is carried out by government rice purchases; 3) cash subsidies per unit of rice marketed through government channels; and 4) input subsidies where the farmer could buy limited amounts of fertilizer at below-market prices. The effects of these have been to increase rice production, but also kept domestic rice prices higher than international prices.

The land settlement program involved the opening of new land through the clearing of jungle and replanting with export crops such as rubber or oil palm. To improve rubber production, a subsidized replanting program was undertaken to replace old varieties with new, higher-producing varieties. Research, extension and training activities also were financed to help improve productivity in the agricultural sector; for export crops (rubber and oil palm) these were financed, at least in part, by special taxes on exports.

Fisheries development was undertaken and schemes to subsidize provision of credit for the purchase of boats, refrigerators, nets and other supplies, and related activities were undertaken (Mehmet, 1986; Shand and Kalirajan, 1991). Harbour construction also was undertaken as well as training and technical assistance.

Forestry, through the exploitation of the country's vast native forests, was another aspect of rural development activities that contributed to Malaysia's economic growth, especially in Sabah and Sarawak. Much of the production is exported either as logs, sawn lumber, or veneers and plywood. With the initiation of the NEP, the forestry sector received relatively more attention; in the *Second Malaysia Plan*, for example, mentions plans to improve forests for future exploitation and to ensure that they would be used in ways to contribute to conservation of soil and water resources (pp. 141-42). Reforestation plans were to be developed and implemented, i.e., FELDA, the land resettlement agency, has been devoting more of its efforts to reforestation

rather than settling new lands (Sixth Malaysia Plan, 1991: 76, 95). Further, a forestry college established within the Agricultural University, the Forest Products Research Laboratory expanded, and UNDP forestry projects would be continued. In Sabah and Sarawak, research and establishment of experimental plantations was to be continued along with forest industries development planning.

While the agricultural sector was an important part of the NEP and of the five-year plans for implementing it, the gap between agriculture and industry remained and agriculture was particularly affected by the recession of the early 1980s due to the decline in the prices of its export products. This situation induced Malaysia's policy makers to re-evaluate its agricultural development activities and in 1984 a National Agricultural Policy (NAP) was developed and implemented. Its basic objective was to maximize income from agriculture through efficient utilization of the country's resources and revitalization of the sector's contribution to the overall economic development of the country (Malaysia, 1992: 1). This was to be accomplished through a set of programs and activities that included new land development, establishment of economically viable farm units, promotion of efficient agricultural practices, growing new, higher-valued crops, and additions to support services such as research, extension, marketing, financial incentives, and social and institutional development. It also involved the promotion of agro-industrial enterprises to augment the productivity and income of the sector through value added activities. The agricultural sector and rural areas continue to be an important aspect of development planning in Malaysia, not only because of the realization of the importance of the sector in economic development but also, and perhaps more importantly for Malaysia, because the sector is a stronghold and the largest source of poverty and inequality (see Tables 2-3).

Industrial Policies

During the first 14 years after independence most industrial policies were based on import-substitution concepts that promoted and protected industries that produced products the country normally imported, although they also contained the beginnings of programs to promote industrial exports. Specifically, under the Pioneer Act of 1958, the Tariff Advisory Board of 1959 and the Action Committee on Tariff and Industrial Development of 1966, domestic as well

as foreign companies were encouraged through tax incentives to assemble and produce finished goods that the domestic market needed.

Concurrent with the First Malaysia Plan, the Federal Industrial Development Act of 1965 was amended extensively in 1968 and became the Malaysia Industrial Development Act. The Investment Incentive Act, passed in 1968, emphasized and encouraged the manufacturing of export products, indicating the start of a shift in industrial policy because, in part, by the late 1960s much of the domestic market for former imports was being supplied by local producers. Policy makers chose to limit their intervention to creating a favourable climate for investment and to building up infrastructure and support services that culminated in the development of the foundation for the first-stage of an export-led industrialization.

In the early 1970s, a series of National Equity Corporations were established, under the Second Malaysia Plan to help overcome a pervasive low standard of living and achieve the objectives of the NEP, which included improving employment and a restructuring of industrial ownership. Buying-out and restructuring foreign companies' equities took place and policy makers selectively helped to establish new industrial activities. Licenses, quotas, and price controls were adopted under the Industrial Coordination Act of 1975. To promote trade, the Free Trade Zones Act of 1971 was implemented and Licensed Manufacturing Warehouses that produced mainly for the foreign sector were permitted to operate in Malaysia. Textile, garment, footwear, and semi-conductor industries, among others, were developed.

For the periods between 1976 and 1980 and 1981 and 1985, the government's actual industrial and commercial development expenditures were about 15 and 27 per cent, respectively, of total development expenditures. In the latter period they were higher than original planned expenditures because of government efforts to offset the effects of the recession of 1985. Export promotion became an especially important goal and to help achieve this goal, effective protection rates were brought down throughout the seventies and eighties, forcing manufacturing enterprises to become more efficient or face bankruptcy.

During the first half of the eighties, however, a global recession, together with industrial countries' protectionism and appreciation of the Malaysian exchange rate combined to

unfavourably affect exports and economic growth. Thus, to ameliorate the effects of weaker performances by exports and the private sector in increasing national income, Malaysia opted for a large effort at industrialization. Although this period was characterized by an export-oriented strategy, policies to proceed to a more advanced stage of industrialization, plus some additional import-substitution policies were also implemented. To improve the linkages, investment in heavy industries, such as petrochemicals, fertilizers, steel, automobiles, and industrial machinery, took place. However, structural weaknesses began to surface and large public sector deficits that resulted from increased public sector investments, threatened to erode the effectiveness of the government. Consequently, financial reforms, consolidation and privatization of public enterprises and parastatals, and further liberalization of trade policies (all emulating the experience of the East Asian NICs) were promulgated. Thus, the country was able to resume its high rate of economic growth after a short hiatus, one during which there was actually a decrease of about 1 per cent in GDP during 1985. Simultaneously, labour shortages and negative performances by some public enterprises necessitated new directions. Thus, to overcome internal structural weaknesses, minimize the effects of adverse international economic conditions on the economy, and improve Malaysia's international competitive position, in 1986 policy makers reversed some of the policies that had been adopted in the 1970s and early 1980s. Licensing requirements enacted under the Industrial Coordination Act and the guidelines governing the Foreign Investment Committee were eased, new investment incentives were introduced under the Investment Act of 1986, and increased trade with other Asian and developing countries was encouraged. These, in turn, prompted the private sector to invest in larger, often joint, ventures and encouraged the presence of multinationals on a greater scale (FRBSF, 1995).

In sum, steps to promote productivity and efficiency and, thus, growth have been taken more vigorously as, for example, the relaxation of some of the controls on the private sector. These policy changes were induced, in part, by the depreciation of the ringgit.¹ All this activity to liberalize the economy culminated in higher private sector (domestic and international)

¹In 1985 and 1986, the exchange rates were 2.48 and 2.58 ringgits per dollar, respectively (The World Bank, WT, 1992).

investments and increased exports. Evidence suggests that Malaysia embarked on a new era of industrial growth led by the private sector. Since 1986, economic activities have continued to grow fairly steadily. As discussed previously, investments in industries that have linkages to the natural resource base as well as various non-resource-based industries that are strategically outward-oriented have been given high priority in the country's development planning.

Social Policies

The major social policies were intended to promote education and training, improve health, and provide amenities in the cities, villages and, to some extent, rural areas (Meerman, 1980). One policy in the 1960s was a drive to promote adult education and eliminate rural illiteracy. In addition, free primary and secondary education were provided, and both State and Federal governments assisted poor families to some extent by providing for books and other costs and giving scholarships for secondary boarding schools in rural areas without such facilities. Scholarships also were provided for university training. But, while the educational programs helped rural areas, there was still a considerable gap between rural and urban educational achievements (Hoer, 1975: 292-93). This situation, attracted policy makers attention and to a great extent was corrected in the eighties, nineties and beyond (Lucas and Verry, 1999).

Policies to improve health services included hospitals (mostly in urban areas), rural health clinics, government-employed midwives, and educational activities (Meerman, 1980). Rural health clinics and midwives were especially important for improving the health situation of the rural poor. As a result, life expectancies increased, infant mortality decreased, and there were other improvements in the health of Malaysians.

The public sector, both the federal and state governments, also was responsible for the provision of amenities such as electricity, water and sewage facilities. These facilities, of course, contributed to improving health. By the mid-seventies, such facilities were widely, but not universally, available. Nevertheless, many rural families did not take advantage of the facilities because they could not afford the connection fees and other costs of the services (Meerman, 1980; Thillainathan, 1975).

In the area of education, 50 per cent of the higher education posts were reserved for the disadvantaged, Malays and other indigenous, groups. More importantly, however, the Malaysian educational system was to be restructured to help integrate the diverse ethnic groups, so all would consider themselves to be Malaysians. The school system that Malaysia inherited from the colonial era consisted of four streams, one for each of the three main language groups (Malay, Chinese, Indian) plus an English language program, which had been the primary route to governmental and commercial employment. Under the NEP, all were to be integrated into a single system using the Malay language. Policy makers increased investments in education and training as well as health, to improve the capabilities and productivity of the country's labour force. To assist in this process, the number of training institutions was expanded and a training certification board was established to coordinate activities and help assure quality in the programs. Furthermore, a new primary school curriculum (KBSR) was introduced in 1983, a new secondary school curriculum (KBSM) and a National Policy for Women (NPW) was established in 1989 (Sixth Malaysia Plan, 1991: 413). A Cabinet Committee on Training was established in 1990 to seek ways to improve training programs. The numbers of schools, classrooms and teachers were expanded rapidly and training programs were used to upgrade the skills of workers in both the public and private sectors (Mohamad, 1991: 167-69; World Bank, WDR 1983: 108). Investments in education at all levels were used as a way to raise the skills of all Malaysians including scholarships to Western Societies helped assure that graduates become better prepared for professional and managerial levels of employment. The achievement of the increased employment of Malays in industry and commerce necessarily meant that many Malays would need to migrate to urban areas, where such jobs are located, so urbanization was also a mechanism used to meet the employment objective, as was expansion of job opportunities in rural areas; however, rural industrialization and infrastructure construction provided substantial amounts of employment opportunities in rural areas. Among the programs for accomplishing greater participation by Malays and other indigenous groups in commercial and industrial activities was the formation of the Malay Commercial and Industrial Community, later to be redesignated as the Bumiputera Commercial and Industrial Community (BCIC). Furthermore, Malaysian policy makers realized that it would take time to fully incorporate the Malays and other disadvantaged groups into the economy, a move they believed essential to the overall goal of eliminating the identification of race with specific economic activities.

Infrastructure

Although not included as a separate part of the five-year economic development plans, the creation of an adequate infrastructure was a vital part of the sectoral development activities under each of the plans and its creation was a major contributor to the country's economic growth record. About one-fifth, if not more, of total development expenditures were devoted to creating and improving the nation's infrastructure (Salleh and Meyanathan, 1993: 27, Eight Malaysia Plan, 2001). During the first few plans, the development of the rural infrastructure was a high priority. In the 1970s, the development goals and, consequently, the focus of infrastructure creation shifted to industrialization and the export of manufactured products, although the country also continued to develop substantial amounts of infrastructure for both rural and social development activities. The construction of factories and other related facilities in the free trade zones and other industrial centres became a major activity in addition to building roads and utilities to service those facilities. Infrastructure development also included ports and port facilities, airports, and telecommunications facilities. The quality of the infrastructure was particularly useful in attracting foreign investors who indicated in surveys that the good infrastructure was a plus in their decisions to locate in Malaysia (Ali and Kam, 1993). Thus, the anticipation of needs and timely provision of an adequate infrastructure by Malaysia's policy makers prevented the lack of adequate facilities from becoming a bottleneck or constraint to the country's industrialization.

INVESTMENT

Malaysia undertook far-reaching structural reforms to spur investment, economic efficiency and, thus, growth (Tables 3-4). These reforms culminated in placing the Malaysian economy on a higher growth path. To elaborate on this, in 1960 there was a large gap between savings and investment. However, since the 1970s, the gap between savings and investment as a proportion of GDP has been eliminated as savings have been channelled to finance more viable and productive investments. Shortages in domestic savings combined with the desire to promote faster growth led Malaysia to borrow internationally as well as to encourage foreign direct investment. Factors that led to the growth in investment demand were: 1) policy reforms, which took place after 1970 and again after 1985; 2) a big-push for industrialization that was adopted during the *Fourth Malaysia Plan*, 1981-85; 3) open trade policies and changes in trade structure,

especially following the reforms after 1985; 4) changes in the levels and composition of domestic and international demand; and 5) an increased openness to foreign direct investment.

Public Sector Investments

Public-sector investments often served as countervailing influences to investments from the private sector. Thus, one of its roles was to spur and/or to ameliorate the effects of a lack of private investment. More specifically, public-sector investment was used to prompt growth during 1971 through 1975, during 1980 through 1983, and during 1997 through 1999.

However, the growth rate of public-sector investment generally declined during periods of more lucrative economic performance and optimistic economic outlooks, e.g., 1976 through 1979, 1983 through 1984, and 1987 through 1988.

Foreign Direct Investment

Foreign investment also was encouraged and has contributed to Malaysia's economic growth although this component of investment has varied considerably. Despite volatility, policy makers encouraged foreign entities to invest in its manufacturing sector as a way to enhance capital formation, technological innovations, managerial skills, employment, and training opportunities.² Among the factors that contributed to high foreign direct investment rates were political stability, economic growth, and a favourable economic environment, which created an attractive climate for foreign capital, particularly during the economic liberalization, which was started in 1986. This, in turn, assisted in the diversification of the economy. Nonetheless foreign investors thought that the small size of Malaysia's domestic market and a lack of adequate reinvestment opportunities were some of the problems in Malaysia.

All in all, policy makers in Malaysia strove to create and maintain investment growth and to ameliorate investment fluctuations and to maintaining a climate that was conducive to stable macroeconomic conditions. To elaborate on the macroeconomic situation, low rates of inflation are in line with stable macroeconomic conditions. Conversely, high rates of inflation create uncertainty, which, in turn, weakens investment and capital formation incentives and also affects

²For example, the government included internships and other training in multinational corporations as a way to enhance the administrative skills of its employees (Sixth Malaysia Plan, 1991).

productivity adversely. Since the 1960s, by international standards, Malaysia has maintained a relatively low rate of inflation (The World Bank, WDR, 1980, 1992, 1994, and 2001). Malaysian policy makers adopted responsible and prudent monetary and fiscal policies, and in turn inflation has not been a serious problem during recent decades. Furthermore, the absence of high rates of inflation restored the credibility of prices as signals that encouraged investors (both domestic and foreign) to invest and allocate resources efficiently. That is why, among the other factors indicated above, high rates of investment prevailed and why this was an important factor in explaining the country's remarkable growth record (see Table 3).

INTERNATIONAL TRADE

International trade has been an important factor in the Malaysian economy since long before either the colonial or independence eras. In recent years, however, it has become more important and has increased relative to GDP growth rates. The composition of trade also has been transformed, with exports changing from nearly all being primary products or their processed counterparts to a large share being manufactured goods (Table 5), with imports shifting from manufactured consumer goods to capital equipment and intermediate goods. Thus, trade balances were positive for most of the period, being negative only during 1981-83 when the international prices of many primary product exports declined drastically due to a worldwide recession. The absolute values and shares of exports have risen almost constantly since independence. In 1960, the ratio of exports to GDP was 56 per cent and became 94 per cent in 1997. The structure of merchandise exports changed over the period of the 1960-97, with manufactured exports increasing very significantly relative to primary, mainly agricultural, product. The high rates of export growth and of their share in GDP can be attributed, in part, to: 1) historical circumstances, a strategic location, abundant natural resources, and favourable human resource characteristics; 2) an ability to compete in the world's markets; 3) development policies which supported the export-led growth strategy; 4) flexibility which includes the ability to adjust to changing domestic and global social and economic conditions (Salih, 2002).

EMPIRICAL ANALYSIS

This section examines the empirical relationships between economic growth, inputs, and economic policies in the light of thirty years of export performance in Malaysia. In this model,

economic growth is measured by the annual growth rate of real GDP. A simple production function, which accounts for growth, is used. To confirm policy making's effectiveness, exports as a proxy for policy making is included in the production function. Thus, as a matter of accounting, GDP growth is attributed to the growth in factor inputs and to export performance. The impact of the composition of exports and investments on growth will also be investigated. Thus, the following general production function is postulated:

$$Q_t = f(l_t, k_t, x_t)$$

where Q = real output, l = labour input, k = capital stock input, x = exports, and t = time in years. Exports are included in the production function to reflect scale effect, better capacity utilization, positive externalities resulting from exports expansion, and improvement in the production of none portables. With higher levels of exports, new and more productive techniques and new ideas with respect to management and efficiency may be developed and adopted. In turn, these factors help overcome constraints imposed on the economy by various internal and external forces. It is, for instance, plausible that exports will ease constraints imposed by foreign currency and help improve the productivity of various inputs through realization of economies of size or scale. Given these considerations, a model can be specified that is expected to reasonably explain Malaysia's national output growth and its relation to export performance. Differentiating the above equation with respect to time and rearranging terms, gives

$$G_Q = B_0 + B_1 L + B_2 K + B_3 X + e$$

where G is the real growth rates of GDP. B_i ($i = 1, 2, 3$) stands for the variables' growth elasticity. Furthermore, assume that the growth of the labour force proxies the growth of labour input (L), that investment growth proxy's capital stock growth (K), that exports are representable by the growth of exports of goods and nonfactor services (X), and e is the error term. It is assumed that the error term has a normal distribution, with a zero mean and a constant variance. Real annual data for gross domestic product, for investment, and for exports are used as given by the World Bank's World Tables, among others. The labour force statistics were obtained from the World 1994 Resources Institute's Data Base (on diskette). To estimate the above equation, the least squares method is applied. If serial correlation exists, the Cochrane-Orcut iteration technique is applied to correct for serial correlation in the error term. Models were estimated for

neoclassical (labour and capital) and export (labour, capital and exports) models for each of two analytical periods (1960-90, and 1971-90).³

Table 7 summarizes the regression results. As presented in columns two and three, for the whole period 1960-1990, regressing output growth on the conventional inputs, labour and capital, and on all three variables, presented in column three, confirms that investments help explain the growth rate of national output while, at an 8 per cent level of significance, the growth rate of exports is also an important factor in explaining the variation in national product. The coefficient for the labour variable is not statistically significant and the explanatory powers of these two equations are weak; the R-squares are only about 0.38 and 0.39, respectively, for the neoclassical and export models. Regression results for the NEP, 1971-90, period are depicted in columns four and five of the table. The results for this regression are better than those of the whole period. As shown in column five, the capital and exports variables are statistically significant but labour is not. Adding the growth rate of exports to the regression of column four improves the coefficient of determination; it increases from 0.52 to 0.69. Thus during the NEP era, adopting policies that encouraged exports, Malaysia's economic performance was improved. This conclusion is supported by a comparison of the changes in shares of investment in GDP relative to those of exports (calculation are not shown). Thus, it appears that higher levels of exports relative to GDP and higher rates of export growth are conducive to increased rates of economic growth.⁴

Given the fact that export growth did not have as good explanatory power for the growth of the Malaysian national domestic product in 1960-90 as it was between 1971 and 1990, it can be surmised that exports were not very strong as a policy proxy during the sixties; primary product exports had a more important role in the earlier time period (see Table 5) and these are affected

³The rationale for restricting the econometric analysis to 1990 is to shade some light on the NEP effectiveness, without affecting the general results. Furthermore, we found that as the time period of the regression analysis starts in 1975 and beyond, regression results improved.

⁴A regression was run for the period between 1976 and 1990. The statistical significance of the coefficient of determination and those of the labour, capital, and export coefficients were higher than they were in the NEP period. It seems that as the time period is moved towards the second half of the 70s, the results improved. The implication of this could be that Malaysia became more efficient in utilizing its resources.

Table 7. Regression Estimates for Factors Affecting GDP Growth (t-statistics are in parentheses)

Period/ Model	1960-1990		1971-1990	
	Neoclassical	Export	Neoclassical	Export
Constant	.04 (9.44)	.05 (5.47)	.05 (1.42)	.01 (.29)
Labour	.53 (.59)	.02 (.19)	.03 (.03)	.73 (.79)
Capital	.10 (3.75)*	.11 (3.04)*	.19 (4.16)*	.16 (4.07)*
Exports		.11 (1.82)**		.21 (3.01)*
R ²	.38	.39	.52	.69
DW	2.06	1.81	2.4	2.1

* statistically significant at least at a 1 per cent level of significance.

** statistically significant at least at a 5 per cent level of significance.

as much by world economic conditions as by Malaysian policies.

As indicated previously, the labour coefficients were not that significant in explaining output growth. What is a plausible rationale behind the weakness of the labour input in explaining RGDP growth? A plausible explanation to the weak labour input coefficients could be: 1) the high population growth rate, which Malaysia had experienced during the sixties and seventies; 2) Malaysia's policy makers adopted an employment led development, which, in turn, could have made labour a superfluous input in many industries particularly those in rural areas; 3) at the early stages of the Malaysian development, Malaysia may have experienced a weak managerial and skilled labour base; and, 4) a disguised unemployment. All in all, it appears that the growth rate of Malaysian output has been robustly explained by the growth rates of investment and exports.

Effects of Investment and Export Components on GDP Growth

In the above analysis, for the period 1971-90, adding exports to the neoclassical production function improved the explanatory power of the fit. To further explore the relationships between growth and investments, and between growth and exports, a variant of investment, exports, and development analyses is conducted. In this analysis, investments and exports are broken down into their separate components, private, public, and foreign investments and agricultural, manufacturing and mineral exports. Three equations are estimated first, the basic neoclassical model (labour and investment), then one with exports but without foreign direct investment (FDI), and finally an export model with FDI. In addition, a similar model with the decomposition of exports into agriculture, manufactured, and mineral exports is estimated. Finally, a model is run that excludes mining from exports composition.

Table 8 portrays the results of the model with the composition of investments on economic growth. Breaking the investment variable into its component parts improved the model vis-à-vis those without such a breakdown (Table 7). As presented in columns four, five, and six, the growth of national output is significantly related to the growth rates of public and private sector investments, but not to the rate for foreign investment. As in the original models, i.e., those with

Table 8. Regression Estimates for Factors Affecting Malaysia's GDP Product Growth by Type of Investment, 1971-1990 (t-statistics in parentheses)

Equation	Constant	Labour	Investment			Exports	R ²	DW
			Pvt.	Gov.	FDI ^a			
Neoclassical	.04 (1.48)	.32 (.43)	.12 (5.31)*	.11 (4.42)*	.01 (.79)		.7838	2.23
Export w/o FDI	-.003 (-.17)	1.03 (1.71)***	.07 (3.29)*	.12 (6.62)*		.22 (3.51)*	.8762	2.04
Export with FDI	-.003 (-.14)	1.02 (1.63)	.07 (3.16)*	.12 (6.31)*	.002 (.27)	.21 (3.25)*	.8769	2.03

^a Foreign Direct Investment.

* statistically significant at least at a 1 per cent level of significance.

*** statistically significant at least at a 10 per cent level of significance.

Table 9. Regression Estimates for Factors Affecting Gross Domestic Growth by Type of Export, 1971-1990 (t-statistics in parentheses)

Equation	Constan	Labour	Capital	Export Component			R ²	DW
				Mfg	Agr.	Mining ^a		
Exports by Type	.03 (.76)	.19 (.14)	.22 (4.72)*	.27 (2.39)**	.11 (2.26)**	-.003 (-.14)	.7738	2.13
Without Mining	.04 (1.24)	.05 (.05)	.22 (5.33)*	.27 (2.48)**	.11 (3.01)*		.7734	2.15

^a Mining stands for Mining and Quarrying.

* statistically significant at least at a 1 per cent level of significance.

** statistically significant at least at a 5 per cent level of significance.

aggregate investment data, adding the growth rate of exports (see second row) resulted in a better fit, but the inclusion of FDI (see third row) had no significant effect in either model.⁵ The labour coefficient is significant at the 10 per cent level in the model with exports (see second row) but without FDI, but not in the other two models. As indicated in row three, public-sector investment, private sector investment, exports, and the other independent variables explain about 88 per cent of the variation in national output growth.

The effects of the composition of exports on economic growth are depicted in Table 9. This model also resulted in an improvement from the comparable model shown in Table 7, but not by as much as the capital components model (Table 8). The agricultural and manufactured goods export coefficients are statistically significant explanatory variables of national output growth, as is capital. But, as indicated in column seven, the regression coefficient for the export of mining and quarrying products has an unexpected sign and it is not statistically significant. The results also indicate that Malaysia's growth still benefited from the export of renewable natural resource products, as represented by the exports of agriculture, forestry and fishing products. The coefficient for capital also was statistically significant but that for labour was not. However, the results for this equation indicate that mining and quarrying exports are weak explanatory variables of growth; as indicated in row two of Table 9, the statistical results of the second equation suggest that dropping mining and quarrying exports from the regression results in better statistical significance for capital, as well as for manufactured and agricultural product exports.⁶ For the period 1971-1990, it seems that agricultural and manufactured exports are robust explanatory variables of Malaysia's growth. The product composition still reflects Malaysia's comparative advantage in natural resources, especially for agriculture. Since 1971, manufactured

⁵Although the regression results for the foreign direct investment variable are weak, they do not preclude FDI as being important, since it tends to be quite volatile and, thus, its effects may not be captured in the model.

⁶Since 1976, regression and statistical results suggest that the importance of the agricultural contribution to growth and to export growth has declined (see Tables 3-5) whereas that of mining and quarrying has improved. A plausible rationale is agricultural became increasingly smaller part of total exports, the increased importance of oil exports, and the exports of manufactured goods began to increase very rapidly.

exports have enhanced national output growth. Given these results, it appears that export promotion policies adopted after 1970 resulted in a positive and significant relationship between economic performance and exports growth. Trade was not detrimental; rather, it was a handmaiden to the Malaysian economy.

CONCLUSION AND FINAL REMARKS

Some of the salient features of the Malaysian economic planning and policies can be summed up as follows: (1) policy makers strived to develop and maintain an appropriate basic environment for development; (2) to accelerate the rate of development, industrialization that is based only on natural endowments may not be adequate. Diversification and use of manufacturing-based industrialization to improve trade performance was made the cornerstone of Malaysia's development planning; (3) the Malaysian policy makers had successfully identified those resource and nonresource-based industries in which Malaysia can be internationally competitive, and they capitalized on them. The structure of the economy has changed from exporting primary products to an economy that has vigorously pursued a multiple policy objectives; (4) since industry and agriculture supplied each other with inputs and final products, industrialization and rural development proceeded simultaneously; (5) the development of the industrial sector with increased employment and higher incomes stimulated demand for agricultural goods and, in turn, that sector's productivity and output were increased; (6) the deliberate and integrated development of agriculture and industry was a conduit to decrease poverty (Table 2), to increase exports, to provide employment, and, thus, to enhance the Malay's and other indigenous—an economically underprivileged—groups' wellbeing; (7) unless it is accompanied by other redistributive policies, the redistribution of wealth through policies of land reforms, subsidies, employment and welfare may not guarantee a more equitable distribution of income and may not assure a narrower gap between income groups. More specifically, looking at the income distribution reported in Table 6, even though the lowest quintile groups of household income recipients became better off than they were in the 1970s, the shares of the highest income recipient groups had increased relative to those of the 1970s and were biased upwards in 1995 and 1997. After liberalization of the economy in 1986 and beyond, as measured by the Gini coefficient, there was a reversal in the income equality towards the richest income recipients; (8)

the experience of the 1960s, 1970s and 1980s and beyond indicates that ideas count and are important to the development process.

Given the above, planning in Malaysia has been a serious endeavour that was implemented to improve the economy, rather than being ideological processes. These policies, in spite of the adverse external economic condition of 1997-98 and those of 2007-2009 on the economy, were the foundation that sustained Malaysia's growth and development to the present.

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