ECONOMIC DEVELOPMENT OF MALAYSIA: PATTERN AND PERSPECTIVE

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I. INTRODUCTION

THE ECONOMIC HISTORY OF Malaysia¹ is essentially a story of success without serious shortfalls. The Malaysian economy is in an enviable position on many counts vis-à-vis other developing counterparts. The Malaysian standard of living is one of the highest in Asia. The rate of economic growth in Malaysia is one of the fastest in the Third World. The unemployment rate in Malaysia is comparatively moderate. Balance of payments difficulties for Malaysia are unheard of. Malaysia's external reserves are not only huge but also steadily growing. The Malaysian currency is strong and stable by any standard. In short, few countries in the world can rival Malaysia's economic performance.

All these notwithstanding, the Malaysian economy is not devoid of serious problems. Problems common to most developing countries such as unemployment, inequitable income distribution, and inflation are all present, beside the special pressing problems of racial and regional economic imbalances. These problems are by no means formidable, but the solutions to these problems are not always mutually consistent. In this regard, the major strength of the Malaysian economy appears to lie in its remarkable resilience: its enormous capacity to adapt itself rapidly and smoothly to changing circumstances and shifting emphases.

The primary objective of the present paper is to analyze and account for the pattern of economic development in Malaysia and to focus attention on the major issues in Malaysian economic development with a view to assess the economic implications of the policy measures.

II. THE CHANGING PATTERN

Dynamism necessitates changes and adjustments, affecting both attitudes and aspirations. It is the character of the development process itself, and not the speed as such, which really matters in a world of growing political awareness. Major changes in the political arena have left lasting imprints upon the economic development pattern of the nation. An attempt is made in this section to trace the changes in the pattern of economic development in the Malaysian context.

Malaysia, formed in 1963, consists of West and East wings. The West Malaysia which was previously known as the Federation of Malaya, is now referred to as Peninsular Malaysia, while Sabah and Sarawak make up the "East Malaysia."

A. Colonial Development

Although the political entity of Malaysia was established only a decade ago, the evolution of the development process of the Malaysian economy dates back to the nineteenth century with the inception of active trade with the West. Dramatic changes came with complete British colonization. Economic transformation which accompanied brisk external trade at the end of the last century had been spectacular. The rising demand for Malaysian primary products in the West under the impact of the industrial revolution was the main impetus for the initiation of the development process. Trade was the vehicle which transmitted economic development from the industrial countries to the Malaysian economy. Foreign trade had thus apparently acted as an "engine of growth" to use Sir Dennis Robertson's phraseology [16, p. 214]. But there was no machinery to guide the economy onto a path of sustained development. Nevertheless there was economic development, as there were no serious impediments to development and as the essential ingredients were all present: rich natural resources, stable government, efficient administration, and Schumpeterian entrepreneurs.

The haphazard nature of the development process under the colonial rule gave rise to what might be called "lopsided economic development." Lopsided development might well be considered better than no development at all, although Levin would brand it as "frustrated economic development" [8, pp. 165–202]. It was unfortunate that export-induced development, especially the creation of infrastructure, was largely confined to the export sector. While development begot further development in the export sector, the rest of the economy remained at about the subsistence level: a situation which is sometimes epitomized as "economic dualism."

The Malaysian economy then was comprised of a dynamic export sector and a static domestic sector with very little spillover effects from the former to the latter, due to the absence of forward and backward linkages, and since exports consisted entirely of semi-processed primary products. The presence of income-remitting and import-consuming foreign factors also tended to thwart the growth of a domestic market. In this sense, the Malaysian export sector then could not be regarded as Rostow's leading sector which would transmit its growth to the rest of the economy. The net upshot was the emergence of a dualistic, dependent economy.

The laissez faire philosophy of the colonial government was also partly responsible for this. It is scarcely surprising that development planning in its proper perspective was alien to the colonial structure which apparently abhored any form of intervention with the market mechanism. This is amply reflected in the nature and scope of the various development plans which were introduced after the Second World War, viz., the 1950–55 Development Plan for Peninsular Malaysia, the 1947–56 Development and Welfare Plan for Sarawak, and the 1959–64 Development Plan for Sabah. These so-called development plans were largely aggregations of various departmental expansion programs amounting to little more than projections of annual budgets. The development objectives and targets were not only ambiguous but also unambitious and there was no evidence of adoption of any

development strategy. To say the least, the development plans prior to Independence served no more than to perpetuate the lopsided pattern and the dependent nature of the Malaysian economy.

B. Post-Independence Developments

Political independence came to Peninsular Malaysia in 1957 and to Sabah and Sarawak in 1963. Growing awareness, rising aspirations and mounting expectations being the necessary accompaniments of political freedom, the pattern of development began to assume a different form. Rural poverty, susceptibility to international economic fluctuations, excessive concentration of production in a narrow range of commodities, and dearth of manufacturing activities were some of the urgent problems to which attention was increasingly focused.

An irresistible desire to be economically independent could be seen in the efforts to reduce the degree of dependence of the economy on external trade, involving a somewhat sudden departure from the traditional outward-looking approach. The manufacturing sector, geared mainly to replace imports, was rapidly developed under a system of mild protection and generous incentives. As a result, the manufacturing sector in Peninsular Malaysia registered an annual growth rate of 9.9 per cent between 1965 and 1970 while its contribution to GDP increased from 10.4 per cent to 12.8 per cent in the same period. This is significant, in comparison with the 5.5 per cent annual growth rate of GDP (Table I).

To insulate the economy from the vagaries of externally induced fluctuations, it

TABLE I
GROSS DOMESTIC PRODUCT BY INDUSTRY OF ORIGIN, PENINSULAR MALAYSIA, 1965-70

Sector	1965		1970		Average
	M\$ Million in 1965 Prices	Percentage of GDP	M\$ Million in 1965 Prices	Percentage of GDP	Annual Growth Rate (%)
Agriculture, forestry, and fishing	2,066	31.5	2,877	33.6	6.8
Mining and quarrying	587	9.0	619	7.2	1.1
Manufacturing	682	10.4	1,094	12.8	9.9
Construction	269	4.1	329	3.8	4.1
Electricity, water, and sanitary services	150	2.3	221	2.6	8.1
Transport, storage, and communication	284	4.3	329	3.8	3.0
Wholesale and retail trade	1,004	15.3	1,173	13.7	3.2
Banking, insurance, and real estate	104	1.6	169	2.0	10.2
Ownership of dwellings	292	4.5	345	4.0	3.4
Public administration and defense	404	6,2	520	6.1	5.2
Services	710	10.8	893	10.4	4.7
Gross domestic product at factor cost	6,552	100.0	8,569	100.0	5.5

Source: [13, p. 31, Table 2-5].

was necessary not only to reduce the share of exports in GDP but also to broaden the export base itself. Excessive specialization in a few commodities, which are prone to frequent price oscillations, and excessive concentration of export markets in few countries, where demand for the primary commodities tends to be unstable, were frowned upon. The implementation of a large-scale diversification program distributed the eggs into several baskets, and thus introduced marked changes in the composition and the directions of export. The share of natural rubber in the export proceeds of Peninsular Malaysia fell from 62.6 per cent to 39.7 per cent and that of palm oil increased from 2.1 per cent to 5.9 per cent between 1960 and 1970, as a direct result of the dramatic expansion of oil palm production. The traditional markets for Malaysian export, especially the United Kingdom and the United States, grew to be relatively less important and new export markets grew to take dominant positions. Particularly, the emergence of Japan and the USSR as export markets for Malaysian products was phenomenal; the share of Japan in the exports of Peninsular Malaysia rose from 1.8 per cent in 1950 to 12.7 per cent in 1965 and that of the USSR increased from 2.9 per cent in 1950 to 17.6 per cent in 1965 [2, p. 99, Table 3-4].

Major changes also took place in the import pattern. The share of consumer goods in the imports of Peninsular Malaysia, for instance, decreased from 68.9 per cent in 1950 to 52.2 per cent in 1965, while the corresponding share of capital goods increased from 7.0 per cent to 23.4 per cent, largely due to the import substitution program [2, p. 270, Table 8–1]. There were noticeable changes in the relative importance of several countries as sources of import. The growth of Japan and China as sources of imports was spectacular: Japan's contribution to the imports of Peninsular Malaysia jumped from 2.4 per cent in 1950 to 11.5 per cent in 1965 and China's contribution from 3.0 per cent to 6.7 per cent in the same period [2, p. 96, Table 3–2].

The problem of rural poverty, often perceived as a ramification of the dualistic development, has serious racial, regional, and political implications in the Malaysian context. Rural poverty is found largely among Malays and other indigenous people, commonly referred to as the Bumiputras, and in regions with heavy Bumiputra concentrations. Rural development was therefore urgently undertaken and it assumed mainly the form of creation of infrastructures, improvements in agricultural techniques, introduction of chemical fertilizer applications, and expansion of health and education facilities. While rural development helped improve living standards in the rural areas, it apparently perpetuated racial specialization in economic activities in the sense that it tended to preserve, if not encourage, Bumiputra participation in the peasant sector, especially since no attempt was made to increase their participation in the more buoyant modern urban sector dominated by non-indigenous communities.

The pattern of development in the post-independence era was conspicuously different from that in the past. The development machinery was certainly more vigorous in the sense that it identified, within its capacity, the needs of the nation and established a set of priorities, as it were, for effective implementation. However, the approach to development was basically conservative and cautious. This is

amply exemplified by the accent on the traditional free market private enterprise system and the apparently insignificant role assigned to the public sector. The result was that racial economic imbalances in terms of income distribution, employment, and ownership and control of wealth were not disappearing fast enough.

C. Recent Trends

The violent outbreak of racial riots on May 13, 1969, marked an important turning point in the political and economic history of Malaysia. The message was loud and clear; progressive Malaysian plural society cannot be built upon a structure of economic imbalances along racial lines. It was a manifestation of frustration caused by explosive expectations and unimpressive achievements. It called for an immediate reappraisal of the situation and a thorough review of policy objectives.

The net upshot was launching of the New Economic Policy with the overriding objective of restructuring society and eradicating poverty among all races, as embodied in the Second Malaysia Plan 1971–75. The New Economic Policy has warranted a departure from the old conservative approach to a bold radical one, as illustrated by the new emphasis placed upon public enterprises. Activities of public enterprises which were in existence before 1969, such as the Federal Land Development Authority (FELDA), the Federal Industrial Development Authority (FIDA), Malaysian Industrial Development Fund (MIDF), and Majlis Amanah Ra'ayat (MARA) have been stepped up and several new public enterprises, notably Perbadanan Nasional (PERNAS), State Economic Development Corporations (SEDCs), and Urban Development Authority (UDA) have been established in order to increase and intensify Bumiputra participation in the modern urban sector, especially commerce and industry.

The Second Malaysia Plan envisages that (a) in twenty years hence 30 per cent of the total industrial and commercial activities in all categories and scales of operations will be owned and managed by Bumiputras [13, pp. 41–42], and (b) the employment pattern at all levels and in all sectors will reflect the composition of population presumably at the end of the plan period in 1975 [13, p. 42]. The strategy adopted is categorically clear: the targets are to be attained not through "disruptive redistribution" of the existing cake, but through active Bumiputra participation in enlarging the national cake.

The overwhelming emphasis upon racial economic balance apart, the New Economic Policy contains crucial implications with regard particularly to industrialization policy. There is an unmistakable shift of emphasis from import-substitution industries to export-oriented industries. This may be construed as a revival of the traditional outward-looking philosophy, but with the important difference of increasing accent placed upon the export of manufactured goods. This is extremely vital for the success of the New Economic Policy since the bulk of the contribution to the expanding national cake is expected to come from the manufacturing sector, but the scope of the latter to expand is heavily constrained by the size of the domestic market; hence, the need for export-oriented manufacturing industries.

While the New Economic Policy has imposed new responsibilities on the public sector, it is very clear that its successful implementation also requires continued expansion of the private sector which accounts for 65-75 per cent of total savings and 60-70 per cent of total investment [13, p. 82]. Malaysia's policy towards the private sector is therefore a liberal one: a mixture of minimum direct controls over private production, trade, and finance with a variety of inducements designed to encourage private investment, both domestic and foreign. It must, however, be added that the days of what de facto was indiscriminate absorption of foreign investment are definitely over. Foreign investment is under careful scrutiny and is being channelled into those activities consistent with the national goals. It is also pertinent to note that the policy of self-reliance has always been an important keynote in the Malaysian formula for economic development. Thus, foreign aid accordingly plays an insignificant role, unlike in most other developing countries.

III. MAJOR PROBLEMS

References have already been made to some of the economic problems in the preceding section. The chief sources of these problems are the colonial heritage, the ethnic mixture of the population, and the modern development process itself. Major problems are singled out here for special consideration, since these problems obviously have crucial policy implications which will bear importantly on the future development pattern.

A. Export Instability

The Malaysian economy is often sighted as "an extreme example of the instability of raw material exporting countries" [18, Chapter 14], and the instability is largely attributed to the specialization and concentration in primary products with inelastic supply and demand. Cycles in the industrial output of the advanced countries tend to p oduce fluctuations in the prices of export commodities. Export price swings cause export earnings instability which in turn produces bigger fluctuations in national output in the well-known multiplier fashion. It would therefore appear that the fortunes of Malaysia depend significantly upon external conditions which are beyond domestic control [9, p. 60]. However, these casual observations are not entirely plausible in the light of new empirical evidence which suggests that the deleterious effects of export instability in general [10], and in the Malaysian case in particular, have been grossly exaggerated in the prima facie arguments.

Contrary to popular expectations, the empirical study reveals that the effect of export instability on the Peninsular Malaysian economy have been rather weak and insignificant [3]. Insofar as the primary effects are concerned, the export sector appears to be fairly resilient. The secondary effects are extremely imperceptible, as national income, domestic prices, and government revenue and expenditure have all been fairly stable. The lack of sensitivity of the domestic economy to export fluctuations can be largely attributed to the presence of built-in stabilizers which allow only a feeble multiplier mechanism. It now appears that the impact

of export volatility is largely absorbed by variations in the external balance without much internal disturbance.

This does not, however, mean that export instability is of no consequence to the Malaysian economy. All that the available evidence indicates is that the adverse effects of export instability are not as serious as often portrayed. But the problem of export instability is real, and stable prices for exports would eliminate a major source of uncertainty.

B. Unemployment

Although unemployment in Malaysia appears to be moderate in comparison with many other developing countries, the problem nevertheless is apparently growing. The unemployment situation is presumably more serious in Peninsular Malaysia than in Sarawak, while the problem scarcely exists in Sabah. The unemployment rate for 1970 has been estimated to be about 8 per cent of the labor force for Peninsular Malaysia and 7.3 per cent for Malaysia as a whole [13, p. 96]. During the First Malaysia Plan period (1966-70) the annual rate of growth of the Malaysian labor force (3 per cent) outstripped that of employment (2.8 per cent). As a result, unemployment in Malaysia grew at 6.8 per cent per year [13, p. 102, Table 7-2]. This is essentially due to the postwar population explosion and the bottom-heavy age-structure of the population, as more than 30 per cent of the labor force consists of those between the ages of fifteen and twenty-five. The problem is especially acute since more than 75 per cent of the labor force are without any formal education.

During the Second Malaysia Plan period (1971–75) the labor force is expected to grow at 3.2 per cent, and this places additional burden upon the Malaysian capacity to create more jobs. The Malaysian economy apparently has to expand faster to maintain the status quo at the unemployment front. The Second Malaysia Plan thus aims at an unprecedented employment growth rate of 3.2 per cent per annum to keep pace with the rate of growth of labor force, so that the unemployment rate will remain at the 1970 level of 7.3 per cent. The modern urban sector, i.e., commerce and industry, is expected to make the largest contribution to employment creation, 43.9 per cent, compared with the share of the manufacturing industry alone, 21.8 per cent [13, p. 109, Table 7–6].

The New Economic Policy, by imposing constraints upon the employment pattern to reflect the racial composition of the population, has rendered the unemployment problem much more complex. Given the strategy, it is readily obvious that the bulk of the new jobs will have to go to the Bumiputras, if the goal is to be accomplished in a fairly short period. The unemployment specter is therefore likely to be a more serious threat to the non-indigenous labor force in the immediate future.

C. Economic Imbalances

The thorniest of all problems in Malaysia at the moment stems from the economic disparities along racial lines in terms of employment, income distribution, and ownership and control of wealth. The indigenous people, especially the Malays,

are poorly represented in the employment pattern, particularly in the modern urban sector, and are largely associated with the traditional rural sector with a relatively low per capita income and with very little share in the ownership and control of economic activity.

In 1967 the traditional rural sector accounted for 61.8 per cent of the economically active Malay population compared to 9.5 per cent in the modern urban sector [20, p. 6, Table 1–4]. Malays' share of employment in the fields of commerce and manufacturing in Peninsular Malaysia in 1967 was only slightly over 18 per cent [20, p. 8, Table 1–5]. Except for the government sector, the average income of Malay workers are very low compared to that of the non-Malays. Even in the traditional rural sector, where the Malays dominate, income per head of the Malays is roughly 21 per cent less than that of the non-Malays; in the modern urban sector the average Malay worker earns only four-fifths of what an average non-Malay earns [20, p. 5, Table 1–3].

The situation is much more unfavorable for the Malays with respect to ownership and control of wealth. The ownership pattern of the share capital of limited companies in Peninsular Malaysia amply reflects the racial lopsidedness of wealth distribution. In 1969, only about 1.5 per cent of the share capital of these companies was accounted for by Malays, compared with 62.1 per cent by foreign interests, 22.8 per cent by Chinese, and 0.9 per cent by Indians (Table II). The Malays

TABLE II
OWNERSHIP OF SHARE CAPITAL OF LIMITED COMPANIES
IN PENINSULAR MALAYSIA, 1969

	M\$ Million	Percentage of Total
Foreign interests	2,909.8	62.1
Chinese	1,064.8	22.8
Malay and Malay interests	70.6	1.5
Indians	41.0	0.9
Federal and state governments	21.4	0.5
Others	569.9	12.2
Total	4,677.5	100.0

Source: [13, p. 40, Table 3-1].

apparently have a very low savings potential, as shown by the figure for 1966 when the Malay savings accounted for 0.9 per cent of GDP [20, p. 3, Table 1-1].

All these imbalances may be explained in terms of the well-known vicious circle of poverty and are largely ascribed to the colonial policies and development pattern. The gravity of the problem cannot be exaggerated, for the situation is simply explosive with serious political overtones.

Yet another variant of economic imbalance concerns with the regional inequalities in terms of income, living standard, infrastructure, etc. The disparate pattern, which can be easily explained in terms of the spread and backwash effects, is a heritage of centuries of colonial policies and the result of the lopsided development process during the colonial era. Using per capita income as the yardstick, Selangor

is the most, and Kelantan the least, developed of all the thirteen states. Per capita income of Kelantan is less than one-fourth of that of Selangor.² Peninsular Malaysia is much better off than "East Malaysia," i.e., Sabah and Sarawak, in the sense that per capita income of the former is 24 per cent higher than that of the latter.³ Sarawak's per capita income is less than one-half of that of Selangor, while Sabah's per capita income barely exceeds one-half of that of Selangor. It is readily obvious that such striking regional imbalance is extremely unhealthy for a political federation such as Malaysia.

D. Inflation

Inflation is very new to the Malaysian economy. The rate of general price increase in the sixties was negligible, about 1 per cent per annum. This is in direct contrast with the rate of more than 6 per cent for the year 1972. It is readily obvious that phenomenal price increases have taken place since the beginning of 1973, although comprehensive data on the recent price increases are not readily available. It appears from casual observation that although nearly all goods have been affected with varying degrees of intensity, foodstuffs and building materials experienced the most rapid prices increases.⁴ Various estimates suggest that the present rate of inflation is no less than 10 per cent.

Although it is too early to ascertain precisely the causes of inflation, it is possible to indicate the likely sources. The Second Malaysia Plan is partly responsible. The twin objectives of economic growth and economic balance as outlined in the Second Malaysia Plan have warranted an easy monetary policy and a loose budgetary deficit with built-in inflationary tendencies. The act of "redistribution" to reduce the economic imbalance itself has an inflationary bias, contributing to the demand-pull inflation. There is evidence of rising costs, but most of this appears to be passive adjustments to general price increases, although huge firms with monopolistic powers and the powerful trade unions are capable of raising costs in active or aggressive manner. There is also an external source of inflation, namely imported inflation. The import content of the Malaysian manufactures being substantial, inflation overseas is transmitted to the Malaysian economy via increased costs of imported raw material, intermediate and capital inputs.

It might be argued that the Malaysians should learn to live with the inflationary pressure which must be accepted as a small price for economic progress. It might also be pointed out that the rate of inflation is relatively mild compared with many developed and developing countries, let alone the Latin American countries whose inflationary spirals are far beyond Malaysian credibility. But the problem cannot be resolved in this manner. Galloping inflation is perhaps too high a price to pay for economic progress of any kind and the situation certainly calls for immediate measures. However, it is important to realize that strong anti-inflationary measures

³ Calculated from figures in [11, p. 4, Table 1-2].

² Calculated on the basis of 1965 figures. See [3, p. 2, Table 1-1].

⁴ Weighted food price index increased by as much as 15 per cent between October 1972 and March 1973 due largely to shortage and profiteering. The prices of building materials rose by more than 30 per cent mainly as a result of a building boom.

such as tight monetary and fiscal policies may check the growth of the economy and jeopardize the efforts to achieve the various development objectives. Nevertheless, there are a number of possible alternative solutions such as the establishment of a prices and incomes board, relaxation of import controls, government supervision over supplies of essential commodities, and changes in the composition of the tax structure so as to reduce the proportion of indirect taxes such as the sales tax. These measures, mild as they are, could effectively reduce the inflationary pressures without the deleterious effects of deflationary monetary and budgetary measures.

IV. POLICY ISSUES

In many respects Malaysia is at the crossroads where it has to make important policy decisions or revisions which will affect the future course of development. Some crucial policy issues are highlighted in this section. Obviously, the policy issues discussed here are highly controversial and accordingly opinions are likely to differ considerably.

A. Diversification of the Primary Sector

A large-scale diversification of the economy was launched upon the recommendations of the World Bank Mission [7] and the Ford Foundation Team [6] which advocated oil palm as one of the key crops for agricultural expansion. The main reasons for this major policy switch were the vulnerability of the economy to export fluctuations due to excessive concentration in primary production and the loss of faith in the future viability of the main pillar, namely natural rubber. Massive efforts to increase palm oil production led to a spectacular expansion of the oil palm industry. Oil palm acreage quadrupled between 1963 and 1970. The expansion of the oil palm smallholdings was particularly phenomenal under the FELDA schemes. This was also accompanied by a sizable reduction in the rubber acreage, largely due to the conversion of several rubber plantations into oil palm holdings. 6

The diversification policy may be criticized on a number of premises. First, it is not clear whether the objective of the policy was stabilization of export earnings or producers' incomes. Of course, measures to achieve the former need not be consistent with the latter. Second, the cost implications of large-scale diversification needs to be carefully examined. Massive diversification will obviously entail an enormous reallocation of scarce resources, perhaps away from the optimum. Third, it appears that the authorities have been over-pessimistic about natural rubber and over-optimistic about oil palm. The first two considerations, important as they are, fall beyond the scope of the present paper [3, pp. 155–56], while the third deserves at least a brief treatment here.

Pessimism surrounding the future of natural rubber is ascribable to the so-called threat from synthetic rubber. Upon close scrutiny, it is fairly clear that the synthetic

F Area under oil palm increased from 176,000 acres in 1963 to 691,000 acres in 1970.

⁶ Rubber acreage declined from 4.5 million acres in 1969 to 4.3 million in 1970.

threat to natural rubber is more apparent than real. It is important to note that the special-purpose synthetic rubbers do not compete directly with natural rubber on the basis of relative prices. While the general-purpose styrene-butadiene (SBR) rubbers are in direct competition with natural rubber, they are nevertheless technically inferior to natural rubber in resilience. Stereo-regular rubbers, polybutadiene and polyisoprene, which are often referred to as "synthetic natural rubber" pose a more serious threat to the SBR rubbers than to natural rubber [15, p. 82].

It is evident that competition between synthetic and natural rubbers is not always on the basis of relative prices. The "zone" within which price competition is intense accounts for about one-third of the entire rubber market. It is interesting to observe that synthetic rubbers compete not only with natural rubber but also among themselves [19]. While it is true that natural rubber faces potential competition from stereo-regulars and actual competition from the SBR rubbers, the threat to natural rubber has been grossly exaggerated. The synthetic rubbers in general and stereo-regulars in particular are unlikely to displace natural rubber on the basis of relative prices, since the cost of raw materials in synthetic production, especially of butadiene and isoprene, are rapidly rising, while remarkable reductions in the cost of production of natural rubber have been achieved due to astounding technological breakthroughs. The situation, therefore, does not warrant policy switches to encourage diversion of resources away from natural rubber.

The wisdom of continued expansion of oil palm also needs to be examined. Admittedly, palm oil prices are relatively stable, and the expansion of an export-oriented oil palm industry tends to stabilize export earnings. A recent study has shown that oil palm was more profitable than natural rubber in 1967 in the sense that the return to investment for the former was 6 per cent higher than that for the latter. However, this comparison is probably an exaggeration, as 1967 was not a good year for rubber. The apparent advantage of oil palm over natural rubber notwithstanding, it is time for a second look at the policy of continued expansion of oil palm in Malaysia. Palm-oil-using industries appear to be growing too sluggishly to provide rapid expansion of demand. Many palm oil products, especially margarine, soap and compound fat face highly income-inelastic demand [3, pp. 63–66].

The main weakness and perhaps also the main strength of palm oil is that it is easily substitutable. A large variety of vegetable, animal, and marine oils compete with palm oil in many end uses. The market for palm oil is centered in the Commonwealth and the British entry into the European Economic Community may have adverse implications for the Malaysian oil palm industry. Against this risk are ranged strong possibilities of substantial reductions in the production cost and

Discovery of high-yielding rubber clones with shorter gestation period, improvement in tapping techniques, and the development of superior quality rubbers, such as Standard Malaysia Rubber (SMR), Superior Processing Rubber (SPR), and Technically Classified Rubber (TCR), represent some of the breakthroughs in natural rubber technology.

⁸ For elaborations on the price stability of palm oil, see [3, pp. 16-20, 157].

The return on investment from six thousand acres of rubber and oil palm have been calculated to be 16.9 per cent and 10.9 per cent respectively. See [4].

improvements in the qualities of palm oil. Malaysia could therefore preserve its competitive position. Nevertheless, the analysis cautions against ambitious expansion of oil palm production in order to avoid an awkward situation of depressed prices as a result of supply expanding faster than demand, unless of course new uses of palm oil are rapidly developed.

B. Industrialization

The chief reasons for industrialization in Malaysia are as follows: to correct the lopsided economic structure, to increase employment and to preserve the balance of payments position. The rationale for industrialization is too well known to be dwelt with here. The World Bank Report (1955), the Industrial Development Working Party Report (1957), and the Rueff Commission Report (1963) have stressed the need for industrialization and proposed specific policy recommendations. The main result was the Investment Act of 1968, which contained various investment incentives including tax holidays for pioneer firms, tariff protection, and exemption from import duties and surtax. Large sums were spent for the provision of infrastructures, the development of industrial estates, and the establishment of institutions such as FIDA and MIDF. Apparently, the emphasis has always been on manufacturing industries and the results of the various endeavors are fairly impressive. The contribution of the manufacturing industry to the GDP of Peninsular Malaysia rose from 8.5 per cent in 1960 to 13.1 per cent in 1970; and 19.6 per cent of the increment of GDP originated in the manufacturing sector, the annual growth rate of which was 10.4 per cent between 1960 and 1970 [13, p. 147].

There has been an unmistakable shift in the industrialization policy away from import-replacing towards export-oriented production. The wisdom of this policy shift is readily apparent, for (a) industrialization based upon import substitution has limited scope owing to the smallness of the domestic market, and (b) exportoriented industrialization, apart from the fact it can enjoy extended market frontiers, is in line with the outward-looking approach to development which had paid handsome dividends in the past. Export-based industries are encouraged through various incentives which include investment tax credit, accelerated depreciation, and double deductions for promotion and research expenditures from taxable income. There has been a significant increase in the Peninsular Malaysian exports of manufactured goods which have grown at the rate of 14.2 per cent per annum between 1960 and 1970. The share of manufactured goods in the total exports of Peninsular Malaysia rose from less than 5 per cent in 1960 to more than 10 per cent in 1970 [13, p. 147]. It is envisaged that the manufactured exports will continue to grow at the rate of 15 per cent per annum between 1970 and 1975 [13, p. 153, Table 10-21.

The New Economic Policy as embodied in the Second Malaysia Plan assigns a more vigorous role to industries, especially the manufacturing industries in restructuring society so as to correct the economic imbalances. At this juncture it is not certain if the present pace of industrialization can meet this challenge. In the first place, the employment generating capacity of industries appear to be rather limited. The manufacturing sector's share of employment in the total labor force dropped

from 6.7 per cent in 1962 to 6.5 per cent in 1970 [12, p. 68], despite thousands of new jobs created in the sector. Output tends to increase twice as fast as employment in the manufacturing sector. This is not surprising in view of the fact that (a) the production techniques in most cases are capital-intensive and (b) the growth of output is largely due to increases in productivity, requiring no significant additions to labor inputs. It is in this light that the planned target of 7 per cent annual growth rate for employment in the manufacturing sector might appear to be rather optimistic. Thus, there is clearly a need to promote labor-intensive industries; the danger however is that labor-intensive techniques might lead to a less rapid expansion of output. This seems to pose a conflict between growth and employment objectives.

The Malaysian manufacturing sector is dominated by foreign capital which represents no less than 60 per cent of the total investment. As at December 31, 1972, foreign investment in the pioneer companies of Peninsular Malaysia alone amounted to M\$402.7 million or 51.5 per cent of the total. Singapore accounts for 28.6 per cent, United Kingdom for 21.1 per cent, United States for 15.4 per cent, Japan for 11.6 per cent, and Hong Kong for 9.5 per cent of the foreign investment in these pioneer companies (Table III). Malaysia provides a conducive

TABLE III

FOREIGN AND LOCAL INVESTMENT IN PIONEER COMPANIES OF
PENINSULAR MALAYSIA AS AT DECEMBER 1972

Country of Origin	M\$ Million	Percentage of Total Foreign Investment	Percentage of Total Investment Foreign & Local	
Singapore	115.0	28.6	14.7	
United Kingdom	85.1	21.1	10.9	
United States	61.9	15.4	7.9	
Japan	46.7	11.6	6.0	
Hong Kong	38.3	9.5	4.9	
Bahamas	14.0	3.5	1.8	
Puerto Rico	13.0	3.2	1.7	
Australia	7.7	1.9	1.0	
Canada	6.1	1.5	0.8	
Holland	4.1	1.0	0.5	
Formosa	1.9	0.5	0.2	
India	1.9	0.5	0.2	
Pakistan	1.4	0.3	0.2	
Others	5.6	1.4	0.7	
Total Foreign	402.7	100.0	51.5	
Total Local	379.7		48.5	
Grand Total	782.4		100.0	

Source: Calculated from unpublished figures provided by the Federal Industrial Development Authority, Kuala Lumpur.

Annual growth rate of manufacturing sector was 10.4 per cent while that of employment in the sector was 4.5 per cent in Peninsular Malaysia during 1960-70. See [13, p. 148, Table 10-1].

investment climate for foreign investment. Besides extending attractive investment incentives, Malaysia offers guarantees against expropriation, currency inconvertibility, and discrimination against foreign firms.

In this context, two fundamental issues crop up. First, is Malaysia overdoing in her bid to attract foreign capital? Second, is such a policy consistent with the New Economic Policy which aims to distribute 30 per cent of the capital to Malays and other indigenous people by 1990?

Is Malaysia being overgenerous to the foreign investors in the sense that the investment incentive schemes are extravagant? No definitive answers are possible unless optimality regarding the degree of incentives can be clearly defined and determined. It must of course be noted that what is optimum for one industry may not be the optimum for another. One important variable influencing the optimum level of incentives is the degree of risks faced by the new firms. Thus, for instance, the degree of risk in import substitution industries is relatively low since the domestic market for the product of the firm is readily available and tariff protection is perhaps sufficient to enable the firm to gain a viable foothold. By the same token, exportoriented industries face greater risks and therefore require stronger incentives. The optimum level of incentives for export-oriented industries is certainly higher than that for import-replacing ones. In this light it appears that many firms in the field of import substitution would have entered even in the absence of some of the strong incentives. One might therefore question the need to offer highly attractive incentives for many firms which have entered, for example, the food and beverages industry which accounts for more than 20 per cent of the foreign investment in the pioneer category.

It is the lack of technical know-how and not of capital which is the main obstacle to rapid industrialization in Malaysia. The emphasis, therefore, ought to be placed not so much upon the transfer of foreign capital per se as upon the transfer of technology which foreign investment entails. It is not certain how much technology is really transferred via foreign investment. Nor is it certain whether the kind of technology which is transferred through foreign investment is the most suitable for the economy.

The policy toward foreign capital needs to be reviewed in the light of the New Economic Policy. It appears that continued expansion of foreign capital involvement is inconsistent with the target of 30 per cent Bumiputra participation in the ownership and control of capital in all sectors, including the manufacturing sector. Even if the shares of non-Bumiputras were not to fall as the strategy outlines, the 30 per cent target for Bumiputras still would remain unattainable if the foreign capital were to continue to account for more than 60 per cent.

There is, thus, a need for a program to phase out the role of foreign capital by stipulating a limit to the period of stay. The implementation of such a program should present no serious problems, since raising local capital to replace foreign capital is not difficult for the Malaysian economy, and since the necessary expertise and technical know-how would have already been transferred by the end of the period. Care must however be exercised in determining the length of the stay period, for too short a period might act as a disincentive, although this may be

neutralized by additional incentives to ensure that foreign investors find their ventures adequately profitable.

C. Restructuring of Society

The overriding objective of national unity has an important bearing upon the restructuring of society, by which is meant the rectification of racial imbalances in terms of ownership, employment, and income. That there is an urgent need to restructure the Malaysian multi-racial society is readily obvious. Not so obvious are the feasibility and the implications of the balanced distribution targets.

Will the Malays and other indigenous people own and control 30 per cent of all economic activities in all sectors by 1990? The target appears to be a formidable one in view of the present negligible proportion of national wealth in the hands of the Malays and the presumably low propensity of the Malays to accumulate capital due to low average incomes. It is precisely for this reason that public enterprises such as PERNAS and the SEDCs have been assigned crucial roles. The capital stock of the public enterprises are meant to be held in trust for Bumiputras until they are ready to take over. Institutions such as MARA, UDA, and Bank Bumiputra have been set up to stimulate private direct participation of Bumiputras in commerce and industry. Whether or not the target will be attained depends largely upon (a) the rate of growth of capital formation in the Malaysian economy and (b) the extent of Bumiputra participation in capital accumulation. For any given Bumiputra participation rate, the higher the rate of growth of capital stock, the better the chances of the realization of target; and conversely, for any given growth rate of capital stock, the higher the Bumiputra participation rate the more likely the realization of the target. Thus, it has been shown, for example, that given 1.8 per cent annual growth rate of capital stock, the Bumiputra participation rate must be 100 per cent (all additions to the stock must be owned by Bumiputras) if the 30 per cent target is to be attained in twenty years; a lower Bumiputra participation rate would require a faster rate of growth of capital stock [17, p. 61]. Assuming a 6 per cent capital stock growth rate, 44 per cent of all additions to the stock must be owned by Bumiputras in order to achieve the wealth distribution target [17, p. 62]. It therefore follows that the success of the program depends crucially upon whether the 44 per cent Bumiputra participation rate can be elicited.

Although the New Economic Policy outlines that the employment pattern in all sectors and in all occupations must reflect the racial composition of the population, the Second Malaysia Plan has not set specific targets or deadlines. Nevertheless, it is clear that the faster the employment growth rate in each sector and the higher the Bumiputra participation rate in new employment, the sooner the distribution pattern will be achieved. Thus it has been worked out that, assuming that all new employment is taken by Bumiputras (100 per cent Bumiputra participation rate), to obtain 50 per cent Bumiputra employment in the manufacturing sector, employment must grow at the rate of (a) 6.4 per cent if the target is to be achieved in five years, (b) 3.1 per cent if it is to be achieved in ten years, and (c) 1.6 per cent if it is to be achieved in twenty years [17, p. 69, Appendix Table II]. It is to be noted

that the Second Malaysia Plan envisages that employment in the manufacturing sector will grow at the rate of 7 per cent per annum.

It is not certain, however, if a high Bumiputra participation rate, let alone a 100 per cent participation rate, is possible, given the lack of skill and expertise which are necessary for employment in the commercial and industrial sectors. Even with a well-designed program of manpower planning, the supply of high-level and middle-level manpower is likely to lag behind demand, thus imposing constraints upon the growth potentials of the economy. It also implies that the program will, at least in the short run, benefit those individuals with scarce skills and expertise who would command premium prices in the employment market.

A more serious implication associated with the wealth distribution target merits special attention. There is a real danger of the benefits of such a distribution being confined to a small group of individuals in the Bumiputra community. The program tends to create a capitalist class within the Bumiputra community and the probable outcome may well be a heavy concentration of the Bumiputra share of the national wealth in the hands of a few dominant individuals or groups of individuals. This could be a source of great frustration for the Bumiputra masses. There is also the danger that the program might nurse industrial and commercial monopolies which may be used for exploitation when these public enterprises eventually revert to the private hands.

D. Regional Cooperation

Regional cooperation is increasingly looked upon as a possible solution to many national economic problems, especially in the field of industrialization. While the smallness of the domestic market necessarily limits the scope of industrialization, and the development of the export market is hindered by tariffs and other impediments, regional cooperation promises an extended regional market and freer intra-regional trade which will facilitate rapid industrialization with enormous economies of scale. Although the Malaysian involvement in intra-regional trade has been only minimal in the past, it is only logical that outward-looking Malaysia seek a more active participation in intra-regional trade in the near future. The attitudes of other Southeast Asian members also appear to be favorable to regional cooperation. The formation of the Association of Southeast Asian Nations (ASEAN) represents a major breakthrough in this direction.

While there is no dispute about the need for regional cooperation in Southeast Asia, the fundamental issue centers around the form regional cooperation must assume. There is certainly a need to devise a system which will accommodate the inevitable divergence between common regional objectives and individual national objectives, and which will strike a workable balance between efficiency and equity aspects so as to ensure that the gains are distributed fairly among member nations. Above all, the creation of a narrowly self-contained regional entity is not in the best interest of Malaysia and other Southeast Asian nations in view of the various limitations.

First of all, even substantial tariff reductions may not stimulate intra-regional trade owing to the diverse tariff structures. High-tariff countries like the Philippines

and Indonesia will have much to offer, while low-tariff countries like Malaysia and Singapore will have very little to offer by way of tariff reductions. Therefore, freer intra-regional trade may simply lead to one-way flow of goods, for instance, from Singapore to the Philippines. In a situation where the member countries produce similar, if not identical, manufactured products, the process of elimination of inefficient producers through competitive forces may not be politically acceptable. Second, measuring the market size, not in terms of geographical area or population size but in terms of purchasing power, the regional market is too small to cope fully with the industrial expansion in the region. It is therefore clear that Malaysia must continue to look for extra-regional markets for her growing manufactured products. Third, primary production being the backbone of the Southeast Asian nations, even rapid industrialization in the region cannot provide an adequately growing market for the primary products. Malaysia must continue to focus her attention upon advanced industrial countries as the major outlets for the primary products.

The analysis therefore warns against uncritical extension of textbook models to the Southeast Asian venture and unimaginative emulation of regional groupings in other parts of the world. Regional cooperation must be tailored to suit the social, political, and economic facets of the region. Regional cooperation which partakes of the character of a regional autarky is not in the best interest of Southeast Asia. This is of utmost importance in particular to the Malaysian economy which is the most open of all in terms of the ratio of exports to GDP. Malaysia, therefore, may well be advised to join a regional association that is economically aggressive, and not an association which is economically passive or defensive.

E. Economic Cooperation with Japan

The economic might of Japan is amply manifested by her ever expanding involvement in international trade and investment. The dramatic economic success of Japan itself has placed her in the center of world attention and it is no wonder that Japan has become a source of inspiration as well as a target for criticism. Japan is being watched carefully by many countries especially by the developing nations not only with admiration but also with apprehension.

The imprint of the Japanese influence upon the Malaysian economy is readily noticeable. As a trading partner, Japan is in a dominant position, accounting for nearly one-fifth of the total Malaysian exports and imports. It is of interest to note that Malaysia's trade balance with Japan has always been favorable. Japanese capital involvement in Malaysia is also substantial: at the end of 1970 the number of ventures with Japanese capital rose to 103 and the Japanese investment in the pioneer industries currently represents almost 12 per cent of the foreign investment.

The need for economic cooperation with other countries is felt strongly in Japan for the following main reasons: (a) to secure sources of raw materials for the expanding Japanese industries, (b) to preserve and expand the international market for Japanese exports, (c) to beat the labor shortage and wage spirals in Japan, (d) to share the benefits of payment surpluses with the less fortunate countries, (e) to correct the adverse foreign attitudes toward Japan, and (f) to fill the vacuum left

by the declining role of the United States especially in Southeast Asia. International economic cooperation in general, and with Japan in particular, is in the interest of Malaysia. Although there is unmistakable evidence of growing economic cooperation between Malaysia and Japan, especially in the fields of commerce and industry, the possibilities have not been fully exploited. Japan is technologically advanced with ingenious international marketing networks and superb expertise. Malaysia could therefore gain immensely through increased economic cooperation with Japan. Malaysia in turn has much to offer, abundant supply of labor with relatively low wage levels, raw materials, and conducive investment climate and facilities.

Japan could contribute significantly toward the implementation of the Malaysian development plans in general and the New Economic Policy in particular. Joint ventures with Bumiputra firms or public enterprises could help increase Bumiputra participation in the commercial and industrial activities. Japan has already forty-eight joint ventures in Malaysia ranging from electronics manufacturing to automobile assembly. The New Economic Policy broadens the scope for such joint ventures. Malaysia needs the Japanese technical know-how more than the Japanese capital, and Japan must ensure technology and skill are effectively transferred. Such transfers, however, need not necessarily be tied to Japanese equity capital, since the necessary knowledge can be supplied by Japan at relatively low costs through, for example, licensing arrangements.

It is clear that Japan is gradually losing the traditional comparative advantage in labor-intensive production due to rapidly rising labor costs in Japan. Accordingly, Japanese attention is increasingly focused upon more capital-intensive industries. These changing trends tend to open up new avenues for Malaysia-Japan economic cooperation, as Malaysia would provide an excellent base for the relocation of the Japanese labor-intensive industries. Besides preserving the competitive advantage enjoyed by the Japanese brands in the international markets and solving the Malaysian unemployment problem, this would also help develop export-oriented industries in Malaysia. Japan could make significant contribution in this direction by establishing export-oriented joint ventures, by making available her intricate international marketing network and by liberalizing imports. Japan could also directly assist Malaysia to correct regional imbalances by setting up industries in the less developed areas by taking advantage of the various incentives.

In the past Japan had confined her activities largely to trade and investments and had shown little interest in giving direct aid to Malaysia. Japanese aid to Malaysia amount to less than 2 per cent of the Malaysian aid receipts [1, p. 47] and little more than 1 per cent of Japan's foreign aid to Asia [5, p. 69, Table 4–5]. Japan's technical assistance has been the least satisfactory of all. Japanese aids are invariably tied and the terms are comparatively hard. An outstanding example of Japanese assistance is the yen credit under the 1966 Agreement totalling U.S.\$50 million, two-thirds of which was supplied by the Export-Import Bank of Japan and commercial banks at the interest rate of 5.75 per cent and the remaining one-third by the Overseas Economic Cooperation Fund (OECF) carrying an interest rate of 4.5 per cent, for a period of twenty years with a five year grace period. The

yen credit was essentially a project loan which was used to finance various projects including port extensions, electrification and telecommunication, and radio and television networks. By international standards, the above project loan was not a soft one, and it is perhaps this realization which led Japan to soften subsequent assistance. The second yen credit totalling \forall 36 billion or approximately U.S.\\$100 million signed in 1972 was relatively soft. One-half of the loan, given by the Export-Import Bank, bore an interest rate of 5.5 per cent and the other half, given by the OECF, carried an interest rate of 3.25 per cent over a thirteen year period including a grace period of five to seven years. This amply demonstrates the intension of Japan to offer aid on comparable terms.

Technical assistance from Japan to Malaysia has been largely in the field of agriculture [5, p. 21] and there is certainly a need to increase such assistance and to extend substantially to other fields especially commerce and industry. Technical assistance can make positive contributions toward the fulfillment of the New Economic Policy by training Bumiputras in order to increase their participation in commercial and industrial activities. It is in this sphere that the Overseas Technical Cooperation Agency (OTCA) has a significant role to play.

Malaysia is extremely concerned over Japan's policy toward synthetic rubber expansion and as a result the attitude toward Japan has somewhat hardened. What is disturbing to natural rubber producing countries in general and Malaysia in particular is not so much the observation that Japan produces more than 15 per cent of the world synthetic rubber output but the fact that the Japanese synthetic rubber capacity is designed to export a substantial proportion of the output: Japan exports almost one-third of her output and the proportion is expected to grow. Even more alarming is the Japanese thrust in the form of joint ventures in synthetic rubber production in South Korea, Puerto Rico, Iran, and Saudi Arabia. As a first step toward closer cooperation with Malaysia, Japan must review her synthetic rubber policy. It is pertinent that Japan should realize that tremendous quality improvements and incredible productivity increases and cost reductions have been achieved in natural rubber production and that the natural rubber capacity can easily keep pace with the expanding world demand for rubber.

Local feelings in Malaysia against the Japanese are certainly not as severe as those in Thailand. Indeed, the Malaysians appear to be favorably disposed toward Japan [14]. But the admiration for the Japanese seems to be gradually giving way to suspicion and apprehension stemming from the fear of Japanese economic domination. It is up to Japan to prove otherwise through actions. Closer economic cooperation with Malaysia will provide Japan with many opportunities for such actions.

V. CONCLUSION

The Malaysian experiment with economic development has been fairly successful on numerous counts and the Malaysian achievements in many respects are still far beyond the reach of many developing countries. The Malaysian success recipe has always been a careful blending of realistic plans with a positively outward-looking approach to economic development, self-reliance being her main development

strategy. The economy has displayed a remarkable degree of flexibility in adjusting itself to changing circumstances, and the development pattern accordingly reflects the political and social aspirations and constraints.

Important changes are taking place with emphasis being shifted from primary production toward manufacturing, from import-substitution industries toward export-oriented industries, from hasty industrialization toward a harmonious expansion of industrial and agricultural sectors, from liberal absorption of foreign investment and aid toward a more sophisticated selective system, and from laissez faire philosophy toward a mechanism of intervention and control. These policy trends are the harbingers of the beginning of a new pattern of development and progress. But the road to economic progress is not an easy one and there is certainly a need to keep the policies under constant review and scrutiny in order to check upon their suitability, compatibility, and feasibility.

REFERENCES

- 1. Anandarajah Ananthan. "Foreign Economic Assistance: Its Role in Economic Development with Special Reference to Malaysia" (Graduation Exercise, Faculty of Economics and Administration, University of Malaya, Kuala Lumpur, 1972).
- ARIFF, K.A.M. "Post-War Imports of West Malaysia" (M.Ec. Thesis, University of Malaya, Kuala Lumpur, 1968).
- Export Trade and the West Malaysian Economy (Kuala Lumpur: University of Malaya, 1972).
- 4. BEVAN, J.W.L., and GOERING, T. J. "The Oil Palm in Malaysia: An Estimate of Product Prices and Return to Investment," in *Oil Palm Development in Malaysia* (Proceedings of the First Malaysian Oil Palm Conference), ed. P. P. Turner (Kuala Lumpur, 1968).
- 5. CHIN VEE LIN. "Japanese Capital Investments and Foreign Aid to Malaysia" (Graduation Exercise, Faculty of Economics and Administration, University of Malaya, Kuala Lumpur, 1970).
- 6. Ford Foundation Survey Team. Policies and Measures Leading towards Greater Diversification of the Agricultural Economy of the Federation of Malaya (Kuala Lumpur, 1963).
- 7. International Bank for Reconstruction and Development. The Economic Development of Malaya (Washington, 1955).
- 8. LEVIN, J. V. The Export Economies: Their Pattern of Development in Historical Perspective (Cambridge, Mass.: Harvard University Press, 1960).
- 9. Lim Chong Yah. "Malaysia," in Asian Economic Development, ed. C. Onslow (London: Weidenfeld and Nicolson, 1965).
- 10. MacBean, A. I. Export of Instability and Economic Development (London: George Allen & Unwin, 1966).
- 11. Malaysia. First Malaysia Plan 1966-1970 (Kuala Lumpur, 1965).
- 12. ———. Mid-Term Review of First Malaysia Plan 1966-1970 (Kuala Lumpur, 1968).
- 13. ———. Second Malaysia Plan 1971–1975 (Kuala Lumpur, 1971).
- 14. Md. Tajudin B. Md. Ali. "Malaysian Attitudes towards Japan: An Attitude Study Conducted in the University of Malaya Campus" (Graduation Exercise, Faculty of Economics and Administration, University of Malaya, Kuala Lumpur, 1970).
- 15. PHILLIPS, C. F., Jr. Competition in the Synthetic Rubber Industry (Chapel Hill, N. C.: University of North Carolina Press, 1963).
- 16. ROBERTSON, D. H. Essays in Monetary Theory (London: P. S. King & Son, 1940).

- 17. THILLAINATHAN, R. "The Second Malaysia Plan: Notes on the Objectives of Balanced Distribution of Wealth and Employment," Kajian Ekonomi Malaysia, Vol. 7, No. 2 (December 1970).
- 18. United Nations, ECAFE. Economic Survey of Asia and the Far East, 1953 (Bangkok, 1954).
- 19. U.S., Department of Justice. Ninth Report of the Attorney General on Competition in Synthetic Rubber Industry (Washington, 1962).
- Wong Hiong Chin. "Evaluation of Malay Participation in Commerce and Industry" (Graduation Exercise, Faculty of Economics and Administration, University of Malaya, 1972).