Institute of Economic Development and Research
SCHOOL OF ECONOMICS
University of the Philippines

Discussion Paper No. 69-11 July 9, 1969

THE STRUCTURE OF PROTECTION IN WEST MALAYSIA

by

JOHN H. POWER

NOTE: IEDR Discussion Papers are preliminary versions circulated private to elicit critical comment. References in publications to Discussion Papers should be cleared with the author.

THE STRUCTURE OF PROTECTION IN WEST MALAYSIA*

John H. Power
with the
assistance of
Cristina Crisostomo
and
Eloisa Litonjua

A system of protection of manufacturing industry, such as is found in many newly industrializing countries today, is only in its beginning stage of development in Malaysia. Just recently emerged from colonial status, the economy has been, and still is, relatively very "open". Moreover, until recently, strong export performance in a few primary commodities had precluded a balance of payments rationale for protection. A limited amount of manufacturing had developed in response to market growth in the context of generally outward-looking economic policies.

This picture began to change in the 1960's, however, and by the middle of the decade tariffs for protection of new

---

* West Malaysia refers to the so-called States of Malaya -- i.e., all of Malaysia except Sabah and Sarawak. Subsequently, in this paper "Malaysia" will be used as short-hand for West Malaysia.

manufactures had become an important issue of economic policy. And an embryonic system of protection had already emerged. This system is the focus of attention in this study. Before turning to the main task, however, it might prove helpful to put it in its historical context with a brief review of some aspects of Malaysia's recent economic history.

1. Growth and Change in the Malaysian Economy

The Malaysian economy was both young and small in 1965. It was young in the sense that political independence was achieved only in 1957, and the ability to implement an independent economic development policy awaited the return of internal security at the end of the 1950's following the successful struggle against the communist guerillas. It was small in the sense that the population of West Malaysia was about 8 million in 1965, growing at about three per cent a year, while per capita gross national product was only slightly more than M $900 (about US $300).

The economy was heavily dependent on exports, especially rubber and tin, as can be seen from Tables I and II. Traditionally, the pace of economic activity had been determined by the world markets for these two commodities, not only through the generation of income, but also via the inflow of foreign capital for investment. Following World War II there were three main cycles of economic activity, peaking in 1951, 1956 and 1960, each deriving from a boom in Malaysia's principal exports.[1/]

1/ G.B. Hainsworth, "Background notes on Malaysian Economic Growth," unpublished.

Since 1955, however, exports have tended to lag behind the growth of income, the share of exports in gross domestic product declining from 49 per cent to 40 per cent in 1966, as Table I demonstrates. The interruption of the downtrend in the share of exports in 1959-1960 by a sharp temporary rise in rubber prices, together with a subsequent continuing decline in rubber prices, has made the problem of export lag in the 1960's appear even more sudden and dramatic than it may in fact be. The balance of exports over imports as a percentage of imports (shown in Table I) dropped from an average of 36 per cent in 1955-60 to 12 per cent in 1961-1966.

Nevertheless, the rate of growth of the economy was sustained at a higher level after 1960. The impetus was an investment boom encouraged by a bold public infrastructure spending program and by tax, tariff and other incentives to private investment in manufacturing industries. The more rapid growth in the 1960's as compared to the late 1950's, and the leading roles played by manufacturing and construction are clearly brought out in Table III. Moreover, foreign capital, as well as domestic, shifted toward import substitution in manufacturing, away from the traditional export sector. The 1960's appeared, then, to mark the transition away from an export-led economy.

While export growth lagged, imports grew more nearly in line with income. The result was a sharp decline in the share of net exports (exports minus imports) in Gross Domestic Product, as Table IV indicates. The same Table shows that the rise in the combined shares of Government consumption and gross investment roughly matched this decline, so that the share of private consumption was unchanged.

TABLE I

MALAYSIAN FOREIGN TRADE*
1955-1966

Year	Imports ($ million)	Exports ($ million)	Balance ($ million)	Balance as per cent of Imports	Exports as per cent of GDP
1955	1,580	2,488	908	57	49
1956	1,801	2,422	621	34	48
1957	1,870	2,351	481	26	46
1958	1,704	2,040	336	20	42
1959	1,790	2,638	848	47	48
1960	2,278	3,094	816	36	50
1961	2,371	2,794	423	18	46
1962	2,592	2,790	198	8	44
1963	2,690	2,880	190	7	43
1964	2,754	2,986	232	8	41
1965	2,844	3,334	490	17	42
1966	2,904	3,346	442	15	40

* Includes non-factor services

Source: Department of Statistics.

TABLE II

PRINCIPAL EXPORTS OF MALAYSIA
AS A PERCENTAGE OF TOTAL EXPORTS
(VALUE IN MILLION $ MALAYAN)

Year	Total Exports	Rubber		Tin and Tin Ore		Coconut Oil		Iron Ore		Palm Oil		Timber		Canned Pineapple and Juice	
		Value	%	Value	%	Value	%	Value	%	Value	%	Value	%	Value	%
1948	1,117	680	60.9	221	19.8	25	2.2	1	0.1	32	2.9	8	0.7	2	0.2
1950	2,610	1,810	69.3	442	16.9	56	2.1	9	0.3	32	1.2	18	0.7	7	0.3
1955	2,372	1,584	66.8	434	18.3	51	2.2	33	1.4	36	1.5	266	1.1	17	0.7
1959	2,476	1,722	69.5	299	12.1	30	1.2	100	4.0	52	2.1	33	1.3	22	0.9
1960	2,927	1,829	62.5	507	17.3	24	0.8	140	4.8	61	2.1	55	1.9	26	0.9
1961	2,626	1,442	54.9	553	21.1	28	1.1	164	6.2	61	2.3	42	1.6	26	1.0
1962	2,626	1,368	52.1	620	23.5	22	0.8	166	6.3	65	2.5	48	1.9	28	1.1
1963	2,705	1,374	50.8	643	23.7	22	0.8	176	6.5	69	2.6	65	2.4	29	1.1
1964	2,781	1,303	46.9	728	26.2	12	0.4	162	5.8	81	2.9	86	311	33	1.2
1965	3,103	1,368	44.1	872	28.1	16	0.5	161	5.2	106	3.4	92	3.0	403	1.3
1966	3,120	1,396	44.7	792	25.4	20	0.6	136	4.4	118	3.8	99	3.2	44	1.4

Sources: Malaysia Official Year Book 1963, Volume III, 1964, p. 522.
Department of Statistics, Federation of Malaya Annual Statistics of External Trade 1962, p. 15.
_____, States of Malaya Annual Statistics of External Trade 1965, Vol. I, p. 3.
_____, _____ 1966, Vol. I, p. 3.

TABLE III

ANNUAL GROWTH RATES OF GROSS DOMESTIC PRODUCT AND SECTORS OF ORIGIN, 1955-1966
(per cent)

	Average 1955-1959	1959-1960	1960-1961	1961-1962	1962-1963	1963-1964	1964-1965	1965-1966
1. Agriculture, Forestry, Hunting and Fishing	2.19	5.67	5.01	2.70	5.16	3.17	19.55	4.74
2. Mining and quarrying	-2.74	40.37	10.13	1.78	6.12	-4.00	6.88	3.48
3. Manufacturing	3.19	12.32	7.95	9.00	14.26	13.46	13.02	10.88
4. Construction			20.89	25.65	14.17	16.79	12.50	11.11
5. Electricity gas & water	0.49	29.63	12.86	10.13	9.20	14.74	12.84	14.63
6. Transport, storage and communication	7.13	12.50	3.17	3.59	2.48	5.80	8.22	9.28
7. Wholesale and retail trade	3.34	18.75	5.14	4.77	8.78	5.62	5.42	5.04
8. Banking, Insurance & real estate	1.57	14.52	11.27	10.13	10.34	10.42	9.43	10.34
9. Ownership of dwellings	3.18	2.94	4.08	3.53	4.92	4.69	5.17	4.26
10. Public administration and defense	2.32	2.11	0.89	2.08	9.33	6.67	6.25	5.88
11. Services	5.83	7.00	8.39	7.43	7.78	6.82	8.14	6.48
GROSS DOMESTIC PRODUCT AT FACTOR COST	2.64	10.34	6.15	5.11	7.57	5.83	6.80	6.40

Sources: United Nations, Yearbook of National Accounts Statistics, New York, 1966, pp. 233-5.
Department of Statistics, National Accounts of West Malaysia 1955-1964, p. 28.
IBRD International Development Association, Malaysia - Review of the Economic Situation, Vol. I.

The orientation toward domestic manufacturing is seen in the latter's rising share in the origin of the national product, at the expense of agriculture (Table V). While the changing pattern of imports shows a rise in the category, Manufactured Goods, in the standard international trade classification of Table VI, we can see from the breakdown of manufacturing imports in Table VII that the share of consumption goods declined while that of intermediate goods rose. This is, of course, characteristic of the early stage of import-substituting industrialization.

An important question is the extent to which the beginnings of industrialization in Malaysia depended on tariff protection and other government policies such as tax exemptions, as opposed to natural encouragement arising from the rapid growth of the domestic market. In the opionion of this writer, the latter was at least of equal importance. Contrary to the experience of some less developed counties, the initial impetus to industrialization did not come from a sudden and drastic attempt to control imports in the face of a severe balance of payments crisis. Correspondingly, as will be seen in the next section, the average level of protection in 1965 was modest and many manufacturing industries had by then developed with no protection at all. Moreover, as can be seen in Table VI, the export of manufactures (e.g., rubber products), while small, grew rapidly between 1960 and 1966. This suggests that natural comparative advantage factors plus growth of the market played a larger role in initiating industrial growth in Malaysia than in many other countries more dependent on protection.

TABLE V

INDUSTRIAL ORIGIN OF GROSS DOMESTIC PRODUCT
1960 PRICES
($ million)
(percentage in parentheses)

	1955	1960	1964	1965	1966
1. Agriculture, Forestry, Hunting and Fishing	1,715 (40)	1,976 (38)	2,312 (35)	2,407 (34)	2,521 (34)
2. Mining and quarrying	270 (7)	306 (6)	349 (5)	373 (5)	386 (5)
3. Manufacturing	480 (11)	453 (9)	691 (10)	781 (11)	866 (12)
4. Construction		158 (3)	320 (5)	360 (5)	400 (5)
5. Electricity, gas & water	56 (1)	70 (1)	109 (2)	123 (2)	141 (2)
6. Transport, storage and communication	128 (3)	189 (4)	219 (3)	237 (3)	259 (3)
7. Wholesale and retail trade	605 (14)	817 (16)	1,034 (16)	1,090 (16)	1,145 (15)
8. Banking, insurance and real estate	59 (1)	71 (1)	106 (2)	116 (2)	128 (2)
9. Ownership of dwellings	210 (5)	245 (5)	290 (4)	305 (4)	318 (4)
10. Public administration and defense	303 (7)	339 (6)	400 (6)	425 (6)	450 (6)
11. Services	444 (11)	596 (11)	799 (12)	864 (12)	920 (12)
GROSS DOMESTIC PRODUCT AT FACTOR COST	4,270	5,220	6,630	7,081	7,534

Sources: United Nations, Yearbook of National Accounts Statistics, New York, 1966, pp. 233-5. Department of Statistics, National Accounts of West Malaysia, 1955-1964, p. 28. IBRD International Development Association, Malaysia - Review of the Economic Situation, Vol. I.

TABLE VI

MERCHANDISE TRADE OF MALAYSIA
(value in $ million Malaysian)

	Total Value	Foods, Beverages and tobacco Value	%	Crude Materials Value	%	Fuels Value	%	Manufactured Goods Value	%
IMPORTS									
1955	1,511.0	557.4	37	227.1	15	125.8	8	600.7	40
1960	2,105.0	640.5	31	429.7	20	149.3	7	885.5	42
1961	2,180.0	650.2	30	386.0	18	142.9	6	1,000.9	46
1962	2,387.0	634.8	27	476.7	20	151.2	6	1,124.3	47
1963	2,463.2	718.2	29	424.3	17	152.7	6	1,168.9	48
1964	2,470.7	753.3	30	365.7	15	167.3	7	1,184.4	48
1965	2,557.0	674.6	26	389.9	15	174.2	7	1,318.9	52
1966	2,575.1	667.3	26	332.6	13	195.0	8	1,380.2	53
EXPORTS									
1955	2,362.4	94.0	4	2,197.3	93	13.9	1	57.2	2
1960	2,905.1	103.0	4	2,694.5	93	8.2	..	99.4	3
1961	2,601.1	108.8	4	2,346.6	90	9.2	..	136.5	5
1962	2,600.6	118.6	5	2,335.8	90	10.9	..	135.3	5
1963	2,673.8	113.5	4	2,401.6	90	13.0	1	145.7	5
1964	2,754.0	123.1	4	2,422.2	88	43.0	2	165.7	6
1965	3,072.4	151.3	5	2,679.1	87	50.2	2	191.8	6
1966	3,084.7	177.5	6	2,639.0	85	55.6	2	212.6	7

Source: Department of Statistics.

TABLE VII

MANUFACTURED IMPORTS
1962 - 1966

YEAR	Total Manufactured Goods Value ($'000)	Intermediate Inputs Value ($'000)	%	Inputs Into Construction Value ($'000)	%	Capital Goods Value ($'000)	%	Consumption Goods Value ($'000)	%
1962	1,124.3	218.5	19	149.5	13	333.3	30	423.0	38
1963 a	1,158.9	194.5	17	149.6	13	386.2	33	438.6	37
b	1,088.4	180.5	17	146.1	13	353.3	32	408.5	38
1964 a	1,184.4	303.4	26	140.7	12	314.3	26	425.9	36
b	1,105.8	291.2	26	136.7	12	279.6	25	398.3	36
1965 a	1,318.3	361.6	27	141.4	11	366.7	28	448.6	34
b	1,236.8	351.9	29	136.4	11	324.7	26	423.8	34
1966 a	1,380.2	336.3	25	142.8	10	472.5	34	428.6	31
b	1,299.2	327.9	25	138.1	11	428.1	33	405.1	31

a/ Includes re-exports.

b/ Excludes re-exports.

Source: States of Malaya Annual Statistics of External Trade of 1962-1966.

TABLE VIII

MALAYSIAN TERMS OF TRADE, 1952-1966

Year	Export Prices	Import Prices	Terms of Trade
1952	123	122	101
1953	91	119	76
1954	88	107	82
1955	125	98	128
1956	116	101	115
1957	110	105	105
1958	100	100	100
1959	120	98	122
1960	127	101	126
1961	105	100	105
1962	102	101	101
1963	99	101	98
1964	100	102	98
1965	104	93	112
1966	98	108	91

SOURCE: International Monetary Fund, International Financial Statistics, Supplement to 1966/67 Issues, pp. 160-61. _____, Vol. XX (November 1967), p. 206.

Nevertheless, the trend in Malaysia is toward more protection. And the pressures in this direction may be expected to increase in the future if recent trends in terms of trade and export earnings continue. For, as Table VIII shows, export prices have generally declined over the past decade. Moreover, the decline in rubber prices was much sharper than for all exports, the drop in the latter having been dampened by rising tin prices. And high tin prices are less encouraging than they might be because of limitations on exports under the international tin agreement and, more important, because of the foreseeable exhaustion of known reserves. So low rubber prices and dwindling tin reserves have given rise to a certain amount of pessimism about continued dependence on Malaysia's traditional exports. Nor is this pessimism surmounted by the growing importance of new exports like palm oil and timber. (See Table II.)

Finally, the more modest trade surplus of recent years has its counterpart in a more precarious balance of payments situation as indicated in Table IX. Overall deficits occurred in 1963, 1964, 1966 and 1967. Moreover, it has been suggested that the pessimistic investment climate, stemming both from the decline in rubber earnings and the more recent tendency of the Government to respond to the balance of payments problem with fiscal restraint, has contributed to the deficit by discouraging private capital from abroad and encouraging outflow of Malaysian capital.[2/] The sharp rise in "errors and omissions," evidenced in Table IX, may be indicative of the latter, while the growing gap between "service imports" and private long-term capital inflow is

---

2/ I am indebted to Professor Emile Despres for enlightment on this point.

TABLE IX

Malaysian Balance of Payments
(Includes Sabah and Sarawak)

	1961	1962	1963	1964	1965	1966	1967*
Merchandise							
Exports	3,212	3,232	3,296	3,346	3,752	3,808	3,685
Imports	-2,641	-2,892	-3,010	-3,071	-3,226	-3,254	-3,163
Balance	571	340	286	275	526	554	522
Services (net)	-353	-294	-324	-360	-395	-453	-438
Transfers (net)	-195	-204	-181	-74	-71	-92	-130
Private Long-Term Capital (net)	180	235	270	205	190	160	135
Official Long-Term Capital (net)	21	48	87	19	94	7	118
Official Short-Term Liabilities (net)	--	--	-5	71	116	-11	-183
Errors and Omissions	131	-93	-210	-274	-326	-336	-271
Overall Surplus (+) or Deficit (-)	+93	+32	-77	-138	+134	-171	-247

* Preliminary.

Source: Bank Negara Malaysia, Annual Reports and Department of Statistics, West Malaysia Annual Statistics of External Trade.

evidence of the former/

These developments seem to have posed a dilemma for economic policy. The boom in demand has kept imports growing while export growth has slowed. In addition, there is evidence of a decline in capital inflow and increase in capital outflow. To protect the balance of payments by restrictive monetary and fiscal policies would further artifically discourage foreign and domestic investors in what might otherwise be an attractive investment climate. On the other hand, to unleash domestic demand would mean a worsening of the trade balance, and there is no assurance that the capital account improvement from greater investment profitability would offset this.

One way to resolve the dilemma, given an unfavorable world market situation for growth of traditional exports (if that is the case), would be to step up the pace of import substitution, especially in manufacturing. While devaluation accompanied by higher taxes on major exports (to prevent adverse terms of trade effects) might be the ideal means of achieving this goal, tariff protection is an alternative that has considerable appeal to non-economists. So it seems likely that in this setting the pressures for raising tariff rates will be much stronger than in the past.

2. The System of Protection

Until the 1960's, tariffs in Malaysia tended to serve revenue purposes and protection of the industries of other British Commonwealth countries, rather than Malaysian industry. While this began to change after 1959 with the trend toward elimination of Commonwealth preferences and the rise in the proportion of imports from non-Commonwealth countries, the level of tariff protection was still quite low in the early 1960's.

Moreover, there may have been (and perhaps still are) some important interests opposing deliberate industrialization behind protection.[3/] One is the fear of the effect of a rise in the cost of living on wages of rubber workers. The large import houses also have tended to defend their vested interests in distribution, though apparently some have begun the transformation to a role in industrial capitalism. The Treasury has apparently preferred tariffs for revenue rather than for protection. And, finally, the numerically and politically dominant Malays may have felt some reluctance about favoring urban (predominantly Chinese) interests at the expense of rural (predominantly Malay).

The first important step toward protection, occurring in 1959, was essentially a reclassification that had the effect of eliminating Commonwealth preferences in a number of categories. In the meantime, a Tariff Advisory Committee had been established as a part of the new industrial

---

3/ E.L. Wheelwright, "Industrialization in Malaya," in T.H. Silcock and E.K. Fisk, eds., The Political Economy of Independent Malaya (Singapore: Eastern Universities Press, 1963), pp. 231-233.

development policy. The cautious approach of the Government to tariff protection in the early 1960's can be appreciated from the following excerpt from its "Notes for the Guidance of Applicants Tariff Concessions (October 1961):*

> ... The margin of protection granted will in no case be greater than that which will obtain for the local manufacturer the market for goods which can be economically produced in the Federation within a reasonable period .... The Government will not grant exemption or protection to an extent which would permit the marketing of goods of inferior quality or at excessive prices in comparison with imported goods. It will not grant tariff concessions to industry to an extent which would materially affect public revenue.

The Tariff Advisory Board which succeeded the Committee, was instrumental in establishing modest protective duties on more than 200 items by 1963. And it has been moderately active since then in considering and in some cases granting tariff protection to applicant industries. Meanwhile, Commonwealth preferences finally disappeared altogether in 1967.

Still, as the evidence of the next section demonstrates, tariffs generally were at modest levels in 1963 and even in 1965. The few very high rates were generally for revenue purposes, on goods like tobacco and liquor. And, while the Government by 1965 had made a much more definite commitment to protective tariffs as a device for stimulating industrialization, this commitment was tampered by a concern

---

*/ Quoted by Wheelwright, op. cit., p. 220.

to avoid the excesses of a protection system, as is evident from the following statement of policy contained in the First Malaysia Plan (1965)*:

> .... In recognition of the problems of infant industries and those which arise from the limited industrial experience of the country, major attention will be given to the imposition of protective tariffs....The government, however, is intent on ensuring that no more protection than is necessary will be accorded, for the cost of industrialization to the domestic consumer must be minimised. The government is also intent that tariff protection will not be afforded for periods longer than are absolutely necessary. The growth of the industrial sector in the long run will demand that eventually production be extended to supply not only the domestic market but also markets overseas. This makes it essential that domestic enterprise be constantly prodded to increase efficiency so that there will be progressive reductions in production costs.

The Tariff Advisory Board also grants duty exemptions on imported inputs to certain firms as a part of the Government's industrial promotion program. Unfortunately, it proved impossible to take these into account in the analysis of the next section because they are granted on an ad hoc firm to firm basis, with no uniformity even within industries. The data is kept confidential. Because these exemptions pertain usually to inputs of equipment and materials not produced in Malaysia, the duties exempted are generally very low. This, together with the fact that their input coefficients are also generally low, means that the estimates of rates of protection are not likely to be very different as a result of this omission.

---

*/ pp. 132-133.

Another omission in the analysis of the protection system is consideration of Commonwealth preferences. By 1963, they were relatively unimportant and imports from non-Commonwealth countries generally predominated. Hence it is likely that the remaining preferences simply enabled higher-priced Commonwealth products to compete with, say, Japanese goods, so that they did not significantly reduce protection.

Excise taxes are levied on only a very few commodities, mainly liquors, cigarettes, petroleum products and matches, so that they played a very minor role in the analysis of protection.

Finally, export duties were responsible for negative protection in a number of industries, as the results of the next section show. The major ones were Copra (5 per cent), Palm Oil (5 per cent in 1963, 7.5 per cent in 1965), Iron and Iron Ore (10 per cent), Logs (10 per cent), and Rubber. The latter was taxed on a sliding scale in relation to price. The ad valorem rate was calculated from the ratio of duties paid to export value. The rates were in the range of five to seven per cent for 1963 and 1965. Tin exports were also taxed, at an even higher rate, but tin smelting was not included in the estimates of rates of protection for lack of input-output data.

3. The Structure of Protection

With this background, we may direct our attention to the structure of protection in West Malaysia as it appeared in 1963 and 1965. The year 1963 is the latest in which there was a Census of Manufacturing, while 1965 is the latest year for which the less comprehensive Survey of Manufacturing Industries was available. A detailed breakdown of outputs and inputs for 44 manufacturing industries was obtained for 1963 as compared to 28 for 1965. Industries common to both years numbered 27.

Nevertheless, rates of protection were estimated for a total of 45 industries for each year. This was done by assuming that physical input-output relationships were unchanged between the two years and adjusting the value coefficients for changes in levels of protection of outputs and inputs. The industries for which this procedure was followed are noted with an asterisk in Table X. In all cases except soaps and cleaning compounds, it was the 1965 coefficients that were deduced in this manner.

While there is no officially published input-output table for Malaysia, it was possible to obtain nearly complete inter-industry data for 1965 interrelating 18 manufacturing sectors, agriculture, rubber, planting, forestry, fishing and mining to permit estimates for the latter five non-manufacturing sectors, as well.

The rates of protection shown in Table X and XII are rates of protection of value added -- i.e., $Z = \frac{w - v}{v}$, where w is actual recorded value added and v is value added in free trade prices. Rates of protection of the whole value of the product (t) are also shown for comparison. Since Malaysia is a very open economy it was impossible to

deduce value added in free trade prices from the system of tariffs and excise taxes, on the assumption that where imports are competing in significant volume with domestic production the level of nominal tariff protection is effective in permitting a corresponding price or quality differential. In four cases, however, in which imports were less than ten per cent of total supply direct price comparisons were used to estimate the level of effective protection of the product. These are Joineries and Soft Drinks for 1965 and Tobacco Products and Refined Coconut Oil for both years. Motor Vehicle (i.e., Truck) Bodies also had less than ten per cent competing imports, but since the industry had no protection anyway, price comparisons were not used.

Both so-called "Balassa estimates" and "Corden estimates" were calculated, the latter including in the value added base an estimate of direct and indirect value added from non-traded inputs.

The rates for all 45 manufacturing industries covered, grouped by end-use categories, can be seen in Table X. Except for a number of consumption goods industries, the rates appear generally to be low. In particular, the high proportion of those with negative rates stands out in contrast to what we find in many other newly industrializing countries. The export industries, of course, could be expected to fall in this category since they receive no protection from world competition, but may use protected inputs (and may pay export duties). However, a substantial number of other manufacturing industries had zero nominal tariffs in 1963 and 1965 and, accordingly, had negative rates of protection.

TABLE X

RATES OF PROTECTION IN MALAYSIAN MANUFACTURING
1963 and 1965
(per cent)

Industry	1963 Balassa Z	1963 Corden Z	1963 t	1965 Balassa Z	1965 Corden Z	1965 t
EXPORTS						
Rubber Remilling	-52	-50	-06	-41	-40	-05
Latex Processing	-38	-36	-07	-49	-47	-07
Crude Coconut Oil	-14	-13	-05	-11	-10	-05
*Sago and Tapioca	-02	-02	00	-02	-02	00
*Soaps and Cleaning Compounds	-02	-02	00	-02	-02	00
Lumber and Plywood	-02	-02	00	-02	-02	00
RUBBER PRODUCTS	48	40	16	-09	-09	01
CAPITAL GOODS						
Industrial Machinery	-07	-06	00	-07	-06	00
*Hardware, Tools, Cutlery	11	10	06	10	10	06
INPUTS INTO CONSTRUCTION						
Structural Clay Products	-07	-07	-01	-05	-05	03
Structural Cement	-07	-06	03	00	00	05
Joineries	-03	-03	00	39	37	14 (20)
Architectural Metal	-01	-01	00	09	08	03
INTERMEDIATE GOODS						
Motor Vehicle Bodies	-11	-10	00	-09	-09	00
Iron Foundries	-06	-05	00	-04	-03	00
Motor Vehicle Parts	-05	-05	00	-05	-04	00
Prepared Animal Feeds	-04	-03	00	-06	-06	00
Tin Cans & Metal Boxes	-02	-02	00	-03	-03	00
Wire & Wire Products	29	27	06	25	23	05
Wooden Boxes	30	29	15	58	55	19
*Leather & Products	54	52	19	54	52	19
CONSUMPTION GOODS						
Tobacco Products	-37	-36	86 (177)	10	10	107 (180)
*Coffee	-22	-21	05	-28	-27	05
Biscuit Factories	-09	-09	06	01	01	07
*Soyabean Products	-08	-08	00	-10	-09	00
Dairy Products	-04	-04	05	-02	-02	05
Large Rice Mills	-02	-02	00	-02	-02	00
Refined Coconut Oil	-01	-01	00	-01	-01	00
Pottery and Chinaware	14	14	12	19	18	13
Soft Drinks & Carbonated Beverages	16	16	22	42	40	31 (73)
Bicycle and Trishaw	17	16	09	12	11	08

TABLE X (cont.)

Industry	1963 Balassa Z	1963 Corden Z	1963 t	1965 Balassa Z	1965 Corden Z	1965 t
CONSUMPTION GOODS (cont.)						
*Paper and Paper Products	19	18	15	19	18	15
*Carpentry Shops	20	19	15	20	19	15
*Pickles & Sauces	22	21	15	35	34	20
Brass, Pewter Products	46	44	15	60	57	19
Paints, Varnishes, Lacquers	59	58	14	51	49	15
*Glass and Products	64	57	25	64	57	25
*Clothing Factories	65	61	25	65	61	25
*Footwear	67	63	25	70	66	25
*Furniture & Fixtures	69	65	20	72	67	21
*Spice & Curry Mills	81	55	09	92	63	10
*Plastic Products	93	83	22	93	83	22
*Chocolate & Confectionery	133	120	21	141	128	24
*Mechon & Noodles	146	132	19	146	132	19
*Textiles	337	212	24	337	212	24

1965 Values estimated from 1963 inter-industry coefficients. Values in parentheses indicate potential rates differing from effective rates.

Nevertheless, despite the generally low level of protection, the range of rates is rather wide -- in 1965 from minus 40 per cent for Rubber Remilling to 212 per cent for textiles (Corden estimates). Moreover, in 1965, there were 20 industries with Corden rates of zero or less, while 14 industries had rates of 40 per cent or higher -- four of them above 100 per cent. This indicates the possibility of considerable distortion of the price system and bias in resource allocation despite the generally low average level of protection. Happily, there were no industries for which value added at free trade prices appeared to be negative, however, so that cases of possible absolute waste of resources were apparently absent.

There are a number of interesting cases that warrant special comment. The joineries industry, producing wooden flooring and frames for doors and windows, had more than ten per cent competing imports in 1963 with a zero tariff. By 1965, however, the tariff was up to 20 per cent and imports were virtually nil. This gave a potential rate of protection (Balassa) of more than 64 per cent, as compared to minus three per cent in 1963. Because of the absence of competing imports, price comparisons were made the basis for estimating effective protection in 1965. These yielded an effective rate of 39 per cent, significantly below the potential rate.

A similar situation existed for soft drinks. Competition with imports at a relatively low duty prevailed in 1963, indicating that the potential rate was an effective one. By 1965 a prohibitive duty had virtually eliminated imports, the calculated potential rate of

protection being above 200 per cent. Again, however, price comparisons yielded a much lower rate -- 42 per cent -- through significantly above 1963.

Tobacco products is an unusual case in that a very high t -- rate of protection of the whole value of the product -- is offset by very high protection of the principal input, raw tobacco. Accordingly the effective rate of protection of value added was negative in 1963 and relatively low in 1965. Both for the final product and for the raw tobacco input, price comparisons were used to get "effective" rates.

In the case of coffee, a low t was swamped by higher rates of protection on raw coffee (and other inputs) to yield effective protection of less than minus 20 per cent.

Refined coconut oil presented the puzzling case of zero tariff and, yet, the highest potential rate of protection of any industry. This stemmed from the five per cent export tax on the principal input, crude coconut oil, plus the very low margin of value added in refining. Since Malaysia is not a very large supplier of coconut oil to the world market, it is reasonable to assume that the export tax was absorbed by the domestic industry. It seemed reasonable also to assume that this would result in a lower price to domestic refiners to equalize the gain at the margin from export and domestic sales. Yet price comparisons for 1963, 1964, and 1965 showed no evidence that the price to domestic refiners was lower than the export price. Hence, the effective rate turned out to be minus one per cent, in contrast with the calculated potential rate of 328 per cent.

Finally, some consumption goods industries like Spice and Curry Mills, Chocolate and Confectionery, Meehon and Noodles, and especially Textiles had estimates for Z far above estimates for t because of low margins of value added. For textiles, which had the highest effective rate of protection of any industry, the value added ratio in free trade prices was less than four per cent.

Table XI shows average rates of protection for each end-use category, weighted by value added in free trade prices. The tobacco products industry has been excluded from the averaging, however, since its very high implied free trade value added would permit its unusual and perhaps dubious protection estimates (extremely high t's and very low Z's, especially for 1963) to render misleading results so far as all of the other industries are concerned. The rubber products industry is treated separately (but included in the overall average) because it made the transition from consumption good to export between 1963 and 1965.

While the system of protection is still young and tariffs are generally low, there is already evident the familiar pattern of bias against exports and escalation of protection from beginning to finishing stages of production. The export category stands out as being most strongly penalized with average Corden rates of minus 23 and minus 19 per cent, respectively, for 1963 and 1965. At the other extreme, consumption goods were most favored with rates of 19 and 21 per cent for the two years. Eliminating rice milling, which may not fully qualify as a manufacturing activity, raises the average to 22 and 25 per cent, which is perhaps a better indication of the level of protection for

TABLE XI

AVERAGE* RATES OF PROTECTION IN MANUFACTURING
BY END-USE CATEGORY
1963 and 1965

Industry	1963 Balassa Z	1963 Corden Z	1963 t	1965 Balassa Z	1965 Corden Z	1965 t
Exports	-24	-23	-03	-20	-19	-03
Capital Goods	-04	-03	01	-05	-04	01
Inputs into Construction	-06	-05	01	03	03	05
Intermediate Goods	03	03	02	03	00	01
Consumption Goods	21	19	11	23	21	11
Rubber Products	48	40	16	-09	-09	01
All Manufacturing	-06	-06	02	-05	-06	02
Except Exports	12	11	08	14	12	08

* Weights are free trade value added. Tobacco Products Industry is not included in the averages.

manufactured consumption goods. It also should be noted that the very high rate for textiles has little influence on the result, since free trade value added for that industry was insignificant despite its great importance in total supply.*

Capital goods industries, like exports, are penalized by having to purchase protected inputs while enjoying little or no protection for their products. However, the average of minus four per cent represents only two industries: Industrial Machinery and Hardware, Tools and Cutlery. Moreover, neither is a pure capital goods industry. The former produces a high proportion of parts and spares, as well as machinery units. The latter produces a variety of hardware products in addition to its principal output of hand tools. Nevertheless, I think that inclusion of these as representative of capital goods industries is not misleading. In fact, in studies of this kind it might be better to include all industries for which there is any total supply, even if it is entirely imports, rather than restricting the analysis to industries in being. For we are as interested in the effects of the system on potential as on actual production. And the absence of duties, in general, on capital goods in Malaysia indicates negative protection for potential capital goods industries.

Inputs into construction had a modest average rate of about three per cent in 1965, indicating another very minor penalty on the production

---

* It should be evident to the reader that in the formula $\frac{w - v}{v}$ a low v means, other things equal, both a high rate and a low weight in the average.

of capital goods -- in this case, structures. While the penalty no doubt would be largely passed on it would still mean a lower volume of construction, assuming that the price elasticity of demand for the latter is greater than zero.

The average rate for intermediate goods was only slightly above zero in both years, though this masks a wide range of rates within the group -- from minus nine per cent for Truck Bodies to 52 per cent for Leather and Leather Products. Wooden Boxes had an even higher rate -- 55 per cent -- in 1965, but this may be somewhat suspect. Imports were 30 per cent of total supply in 1963, but had dropped to 14 per cent by 1965. Price comparisons are impossible because of the great variety of types and qualities. Following the rule that imports of more than ten per cent indicate competition at the margin yields the 55 per cent rate. But, given the abundance and cheapness of wood, one suspects that domestic competition might have driven the rate below the potential one, and that imports were not fully competing with domestic supply.

Average rates for all of manufacturing are also given in Table XI. Average Z (Corden) for both years was minus six per cent, while the average for t was two per cent. The low level for Z and, in particular, the fact that average t was above average Z is explained by the great number of industries with zero t rates and negative Z's, especially exports. When exports are eliminated, however, average Z for manufacturing becomes 11 and 12 per cent for the two years.

Average rates of protection in 1965 for non-manufacturing sectors can be compared with that for manufacturing in Table XII. Since inter-industry data were not adequate for the calculation of Corden rates, only Balassa rates are shown. Forestry and Mining are predominantly

export industries with substantial export taxes which accounts for their negative rates. Rubber planting is separated from other agriculture because of its special importance in the Malaysian economy. It was assumed that the incidence of the export tax was on the processing of rubber or on the world buyers, rather than on the growers, because of potential alternative uses of land. Admittedly, this is a long-run view and if in the short run a portion of the incidence is on the growers the rate protection would be negative.

Agriculture and Livestock had a modest rate of two per cent protection when tobacco growing was excluded. The latter, however, was protected by a duty of more than 400 per cent. Price comparisons, however, indicated that effective t for raw tobacco was only about 280 per cent in 1963 and 236 per cent in 1965. The latter, together with a weight of one per cent for tobacco growing raised the estimation of Z for agriculture to four per cent. Finally, fishing had a modest t of two per cent, but protected inputs reduced the estimation of Z to one per cent.

In summary it appears that in 1965, the Forestry and Mining sectors suffered from the system of protection, while Manufacturing -- except exports -- was relatively favored. Agriculture and Fishing fell in between. But the average level of protection even in the favored (non-export) manufacturing sector was modest, and not much above that of agriculture. Nevertheless, as was indicated above, within manufacturing there was a wide range of rates, with capital goods least favored and some consumptions very highly favored.

TABLE XII

AVERAGE RATES OF PROTECTION
BY MAJOR SECTORS, 1965
(per cent)

	Z	t
Forestry	-17	-14
Mining	-17	-14
Rubber Planting	00	00
Fishing	01	02
Agriculture & Livestock	02	06
without Tobacco	-01	04
Manufacturing	-05	02
Except Exports	14	08

Rates of protection were also calculated on the basis of inter-industry coefficients from the standard input-output table employed in this project. Results for 57 sectors in 1963 and 1965 were shown in Table XIII. Averages based on international trade weights for eleven product groups are shown in Table XIV. The differences resulting from using these weights rather than Malaysian total supply weights are interesting. Tobacco growing, for example, has a six times greater weight, yielding an average rate of protection for agriculture far above that based on Malaysian weights. Again, the very high rate and weight for sugar dominates the result in Processed Foods which would be negative if sugar were eliminated. The group with the highest rate -- Intermediate Products II -- is dominated by the high rate for textile fabrics. In the classification based on the Malaysian coefficients and weights, this industry was included in consumption goods. Machinery appears to have modest protection but this is the result mainly of the inclusion of television, radio, phonograph, and tape recorder sets in this category. Automobiles represent more than 92 per cent of the weight in the Consumer Durables group, and this accounts for the appearance of negative protection there. The international trade weight of soft drinks in the category, Beverages, is almost nil, which accounts for the higher note in Table XIII.

Finally, while the rate for textile fabrics is high, it comes nowhere near the record rate for textiles based on Malaysian input-output relations. The principal difference is the much lower value for free

TABLE XIII

RATES OF PROTECTION FROM STANDARDIZED INPUT-OUTPUT TABLE
1963 and 1965
(per cent)

Code	Description	1963			1965		
		Balassa	Corden	t	Balassa	Corden	t
		%	%		%	%	
01	Agriculture	22	21	16	25	23	18
02	Fishing	-10	-09	02	-11	-10	02
03	Solid Fuels	-04	-03	00	-04	-03	00
04	Gas	19	16	06	18	16	06
05	Iron Mining	-26	-22	-15	-26	-22	-15
06	Non-Ferrous Metals	-23	-21	-08	-23	-22	-08
07	Petroleum & Natural Gas	-07	-07	00	-07	-07	00
08	Construction Material	-09	-07	00	-03	-02	03
09	Other Minerals	08	07	07	08	07	07
10	Meat Preserves	-06	-04	00	-06	-04	00
11	Prepared Food (other than Meat)	40	32	17	21	16	18
12	Sugar	124	106	34	232	199	63
13	Chocolate Confectionery	05	05	11	-05	-04	13
14	Dairy	0	0	05	-10	-08	04
15	Cereal-Based Industries	0	0	01	01	01	02
16	Other Food Industries	-13	-10	07	-24	-19	06
17	Beverages	154	124	64	245	198	100
18	Fats and Oils	04	03	05	-03	-02	05
19	Tobacco	-93	-83	86	18	16	10
21	Thread and Yarn	0	0	01	04	03	03
22	Textile Fabrics	78	65	25	78	65	25
23	Hosiery	70	6[illegible]	25	77	68	27
24	Clothing	35	31	25	35	31	25
25	Sacks, Bags and Linen Goods	25	22	20	25	22	20
26	Shoes	01	0	05	04	03	03
28	Sawn Wood	-01	-01	00	-01	-01	00
29	Wood Products, including Furniture	19	15	09	24	20	11
31	Wood Pulp	61	36	14	61	36	14
32	Paper & Paper Product	17	13	12	17	13	11
33	Printed Matter	-03	-02	03	-03	-02	03
35	Leather	44	36	14	48	39	14
36	Leather Goods Other than Shoes	40	36	23	39	35	23
37	Rubber Goods	997	81	34	06	05	06
38	Plastic Articles	27	23	14	33	29	14
39	Synthetic Materials	27	22	14	29	24	14
40	Chemical Materials Other than Synthetics	06	04	05	14	10	06
41	Chemical Products	50	43	22	48	42	23
44	Petroleum Products	-05	-04	00	-05	-04	00
45	Non-Metallic Mineral Products	11	09	07	13	11	07

TABLE XIII (cont.)

Code	Description	1963 Balassa	1963 Corden	1963 t	1965 Balassa	1965 Corden	1965 t
		Z	Z		Z	Z	
46	Glass & Glass Products	34	29	23	33	28	23
48	Pig Iron & Ferromanganese	16	08	00	16	08	00
49	Ingots & Other Primary Forms of Steel	-11	-08	00	-11	-08	00
50	Rolling Mill Products	-06	-05	00	-06	-05	00
51	Other Steel Products	-05	-04	00	-05	-04	00
54	Non-Ferrous Metals	12	08	01	12	08	01
55	Metal Castings	-02	-02	00	-02	-02	00
56	Metal Manufacturers	20	17	08	18	16	08
57	Agricultural Machinery	-06	-05	00	-06	-05	00
58	Non-Electrical Machinery	09	07	06	09	07	06
59	Electrical Machinery	18	16	11	19	17	11
60	Ships	-08	-07	00	-07	-07	00
61	Railway Vehicles	-06	-05	00	-06	-05	00
62	Automobiles	-15	-13	00	-09	-08	00
64	Bicycles & Motorcycles	22	19	12	29	25	13
65	Airplanes	-05	-04	00	-05	-04	00
66	Precision Instruments	10	09	08	09	08	07
67	Other Industries	22	19	14	21	18	14

TABLE XIV

AVERAGE* RATES OF PROTECTION FROM STANDARDIZED COEFFICIENTS BY PRODUCT GROUPS, 1963 & 1965
(per cent)

PRODUCT GROUP	Balassa	Corden	Balassa	Corden
Agriculture and Fishing	21	20	24	22
Processed Food	12	10	16	14
Tobacco Manufactures	-93	-83	18	16
Mining and Energy	-09	-08	-09	-08
Intermediate Products I	09	08	14	09
Intermediate Products II	33	27	30	25
Non-durable Consumer Goods	22	19	22	20
Consumer Durables	-12	-10	-06	-05
Machinery	11	09	11	10
Transport Equipment	.06	-04	-05	-04
Services	00	00	00	00

*Averages based on international trade weights.

trade value added in the latter case -- less than four per cent, in contrast with 28 per cent of direct value added in the standard table. Building up the same protection from the much larger base yields, of course, a much lower rate of protection of value added.

4. EVALUATION OF THE PROTECTION SYSTEM

There are, perhaps, two basic aspects of the system of protection about which some judgements might be made. First, is the general level of protection, with the related question of overvaluation of the Malaysian dollar. And there is the question of the structure -- the differences in rates -- and their implications for bias in resource allocation, especially investment.

Since there were no restrictions on convertibility and the foreign exchange reserve of Malaysia in 1965 was adequate, overvaluation of the dollar could have meaning mainly in relation to an alternative set of policies that would have implied a lower equilibrium value. The degree of overvaluation in this sense will be estimated both for a policy of free trade and for a policy combining free imports with an optimal tax on imports. In each case, the technique will be to estimate the devaluation required to maintain the original trade balance when the alternative policy is adopted. Following this, the additional question of a possible disequilibrium in the balance of payments can be considered.

The key elements in the calculation are the average level of import and export duties to be eliminated and the four trade elasticities. Average import duties, weighted by estimated total supply of importables was about ten per cent in 1965. Export tax rates, weighted by exports, averaged about five per cent.

Next in importance to the estimation of the average import and export taxes calculation are the estimates of the trade elasticities. While we can safety assume the elasticity of world supply to be infinitely

great, there seem, unfortunately, to be no available estimates of e_{hd}, the elasticity of home demand, e_{wd}, the elasticity of world demand, and e_{hs}, the elasticity of home supply. So, as in the Philippines study, plansible ranges of estimates were used. Because of the low average level of protection, wide variations in assumptions about the elasticities make little difference in the result. Nevertheless, available evidence about elasticities for individual commodities, Malaysia's share in the world trade of her principal exports and the share of imports in total supply was employed in setting the ranges of estimates. The ranges assumed were from 3 to 5 for e_{hd}, from 5 to 10 for e_{wd}, and from 1 to 4 for e_{hs}.

These were then substituted in the expression

$$k = \frac{X/M\,(F) + e_{hd}}{\frac{X/M\,(F)}{1+s} + \frac{e_{hd}}{1+t}} - 1$$

where k is the required devaluation, X/M is the ratio of exports to imports, s is the average rate of export subsidy (negative in this case), t is the average duty on imports, and F is the expression

$$\frac{e_{hs}\ (e_{wd} - 1)}{e_{hs} + e_{wd}}$$

The results are shown in Table XV. The highest estimate of over-valuation is less than eight per cent and the lowest is slightly more than two per cent. The estimate corresponding to the highest elasticities (perhaps the best long-run guess) is about four per cent. The reasons for the low estimates are, of course, that average import duties are low, while the removal of export duties, under the assumed values for e_{wd}, would improve the trade balance.

The elasticities for exports on both the supply and demand side may seem high for a country so heavily dependent on a few agricultural and mineral export products. The viewpoint here is a very long-run one, however, the key question being the difference resulting from having adopted more than a decade ago a higher price for foreign exchange in lieu of tariff protection. The implication is a different economic structure, with a greater diversification of exports.

In particular, it is not suggested that a devaluation of the magnitude of the k estimates would successfully accomodate the balance of payments to free trade. Owing to the limitations of available reserves a devaluation must prove its effectiveness in a shorter time period. Moreover, there will inevitably occur some erosion of the devaluation from increases in the price of non-traded goods. In any case, however, the results for k are not very sensitive to changes in the assumed value for e_{wd}. If the latter is set at a value of two, for example, the resulting estimate for k is no more than eight or nine per cent even with the lower value of unity for e_{hs}.

TABLE XV

ESTIMATES OF OVERVALUATION

VIS A VIS

FREE TRADE

(Assumed values for e_{hd} given in parentheses)

	$e_{hs} = 1.0$	$e_{hs} = 4.0$
$e_{wd} = 5$	.064 (3)	.032 (3)
	.076 (5)	.050 (5)
$e_{wd} = 10$	.059 (3)	.024 (3)
	.072 (5)	.042 (5)

The other case considered assumes free imports plus a tax on exports designed to bring the marginal terms of trade into line with domestic price ratios. To do this the export tax should be equal to $1 / e_{wd}$. This means raising the average export tax from 5 per cent to 10 or 20 per cent, depending on whether e_{wd} is assumed to be 10 or 5. The results in this case are a range of estimates for k between seven and eleven per cent, again indicating very little overvaluation. Ideally, of course, the export tax should be applied to only a few exports with low demand elasticities.

Finally, we should note the possibility that the balance of payments was not in equilibrium in 1965. Referring back to Table IX, we can see that, while there was an overall surplus that year, it was more than accounted for by official borrowing (above the line). Moreover, there were overall deficits in four of the past five years. This suggests that overvaluation may have been greater than our estimates have indicated.

A related question is the "real" value of foreign exchange -- i.e., the nominal exchange rate corrected for price changes. Since the importance of changes in the exchange rate lie in affecting the relative prices of (internationally) traded and non-traded goods, it is of interest to note independent changes in the terms of trade between these two categories of goods as an additional influence. Since we have two categories of traded goods -- importables and exportables -- we require two corresponding real exchange rates.

A rise in the domestic prices of non-traded goods reduces the real exchange rate, while a rise in world prices of traded goods -- export or import -- raises the real exchange rate. We have, then, as an "inflator" of the nominal exchange rate, a world trade price index divided by an index of prices of domestic non-tradables.

For the denominator, I have used the Retail Price Index, and for the numerator, the export and import unit value indexes. The former, in particular, is not ideal, but it is the best available proxy. The indexes of prices, inflators and real export and import exchange rates are shown in Tables XVII and XVIII. There has been a remarkable degree of price stability in Malaysia over the years 1954-1966 and the nominal exchange rate remained constant. Hence changes in the real exchange rates depended mainly on changes in the export and import unit values. The latter changed little over the period, though it was low in 1965, indicating a penalty on import substitution similar to that from an overvalued currency. Import prices rebounded sharply in 1966, however, so that the 1965 result has little significance.

Movements in the export unit value index produced significant changes in the real export exchange rate, the most important of which was the decline in the 1960's from the high levels of the late 1950's. The average for 1961-66 was about five per cent below that for 1955-59. The rate of 2.86 for 1965 indicates a penalty on exports in comparison with earlier years, similar to that from a lower nominal exchange rate.

TABLE XVII

EXCHANGE RATE INFLATORS, 1960-1966
AVERAGE 1954-1959 = 100

Year	Retail Price Index (1)	Export Unit Value Index (2)	Import Unit Value Index (3)	Export Inflator (2) / (1)	Import Inflator (3) / (1)
1954-1959	100.0	100.0	100.0	100.0	100.0
1960	98.8	115.6	99.5	117.0	100.7
1961	98.6	95.6	98.5	97.0	99.9
1962	98.7	92.9	99.5	94.1	100.8
1963	101.8	90.1	99.5	88.5	97.7
1964	101.4	91.0	100.5	89.7	99.1
1965	101.3	94.7	91.6	93.5	90.4
1966	102.2	89.3	106.5	87.4	104.2

Sources: Department of Statistics, Monthly Statistical Bulletin of West Malaysia.
International Monery Fund, International Financial Statistics.

TABLE XVIII

MALAYSIAN EXCHANGE RATES 1960-1966
(Malaysian dollars per U.S. dollars)

Year	Export Rate		Import Rate	
	Nominal	Real	Nominal	Real
Average 1954-1959	3.06	3.06	3.06	3.06
1960	3.06	3.58	3.06	3.08
1961	3.05	2.96	3.05	3.05
1962	3.06	2.88	3.06	3.08
1963	3.06	2.71	3.06	2.99
1964	3.07	2.75	3.07	3.04
1965	3.06	2.86	3.06	2.77
1966	3.08	2.69	3.08	3.21

Source: International Monetary Fund, International Financial Statistics.

Turning to some of the other effects of the system of protection we might note first that protection of manufacturing may lead to an overstatement of the rate of overall growth when the manufacturing sector is growing more rapidly than the penalized export sector. For the weight of the former will be artificially high and that of the latter, artificially low. In the case of Malaysia, however, a correction for this has produced no significant change in the growth rate. The reasons are that net protection of the manufacturing sector was slight, while the penalty on the export sector was probably not greater than that required to prevent losses from terms of trade.

Again, for these same reason, a calculation of the "deadweight" welfare loss from static resource misallocation yielded insignificant values. The calculation was based on averages for the various sectors, however, and these hide considerable variation in levels of protection within the sectors, with implied additional welfare loss. To estimate this would require knowledge of demand and supply elasticities for each industry.

In any case, it is evident that what is significant about Malaysian protection is not the average level, which is low, but rather the wide range of rates -- from minus 40 per cent in rubber processing to more than 200 per cent for textiles. And probably more important than the static misallocation loss is the effect the system will have on future investment and growth. For there is evident already the same bias in favor of consumption goods and against exports, capital goods and intermediate goods that has plagued other less developed countries that began their industrialization earlier.

In the case of Malaysia, however, the bias poses no immediate problem, since import substitution has not yet begun to approach the limits of the domestic market in consumption goods. Eventually, however, as these limits are approached, the pace of industrialization must retard to the rate governed by the growth of domestic demand unless investment can be encouraged into the areas penalized by the system -- backward linkage and exports. Moreover, since a protection system tends to generate self-perpetuating forces by the activities and institutions that it spawns, the biases may prove more difficult to remove later on. Thus it might be fruitful to consider now alternatives to the continuation of these kinds of biases in the protection of manufacturing.

5. POLICY ALTERNATIVES

Hirschman has distinguished four types of import-substituting industrialization.[6/] One that was prominent in the 19th Century was led by exports (often primary), which encouraged a natural import substitution in its wake as incomes and markets grew. There is a strong tendency in this case for comparative advantage to determine investment allocation. Wars, in contrast, created unnatural scarcities that have led to the domestic production of substitutes for imports. Since they tend to affect all imports equally, however, wars are genrally neutral in their impact on investment choice among alternative import substitutes.

6/ A. O. Hirschman, "Hirschman, "The Political Economy of Import Substituting-Industrialization in Latin America" The Quarterly Journal of Economics, February 1968, pp. 1-32.

A third, and perhaps most common, type of industrial import substitution is that whose impetus comes from a balance of payments crisis. Here the tendency is to restrict imports on criteria of essentiality of the use of foreign exchange, while neglecting the protective effect. The result is often a system of protection strongly biased against backward linkage and exports,[7/] both of which are crucial to sustaining rapid industrial growth beyond the first easy stage. While the structure of Malaysian protection exhibits some tendencies in this direction, as noted above, the extent of the bias is not yet great.

A key question facing Malaysia is whether its primary exports are in a temporary slump or a long-run decline. If it is the former, Malaysia can elect to continue to enjoy export-led growth with import-substitution following the growth of demand. A policy of protection, beyond a very modest level, would be a mistake in this case, since it would unnecessarily penalize exports and encourage a less efficient pattern of industrialization. The growth of primary exports, incidentally need not be in rubber and tin. New exports like logs and palm oil might replace the traditional ones as the "engines of growth."

If, on the other hand, the long-run prospects for these primary exports appear less hopeful than is required for the export-led growth process, more emphasis on deliberate industrialization will be

---

7/ Ibid., pp. 18, 27. See also the present writer's Import Substitution as an Industrialization Strategy, "Philippine Economic Journal, Second Semester 1966, pp. 173-174.

necessary. This is Hirschman's fourth type -- rational planned import substitution. It would be difficult to point to an actual example of this type but if Malaysia were to become one, she would at least have the benefit of lessons from the frustrating experiences of other countries, in Latin America and Asia, that allowed themselves to be deluded by quick and easy successes in the first stage of import-substituting industrialization.

Before turning briefly to these lessons, let me note, however, that on neither prediction -- i.e., temporary slump or long-run decline -- for primary exports does a policy of financial susterity make sense. If it is temporary, then reserves and borrowing from abroad should provide the cushion to enable investment and growth to continue. It might even turn out, as suggested above, that a boom investment climate would protect the balance of payments via a greater net capital inflow. And, if the downtrend in primary export earnings is permanent, there is again no reason for promoting temporary slump conditions in the Malaysian economy. The alternative of stimulating industrial import substitution with eventual development of new diversified exports would be the obvious remedy. If this produced so much exuberance in the economy that inflation threatened, then financial restraint would be called for. But there is a great difference between using financial restraint to avoid "overheating" and using it to counteract the balance of payments effects of a slump in exports (or in capital inflow).

One difficulty, of course, is that import substitution may not save enough foreign exchange quickly enough. Fortunately, however,

Malaysia's reserve position is strong. Moreover, this is precisely the kind of situation for which IMF credits were designed -- to tide an economy over an adjustment to a fundamental disequilibrium.

But the adjustment must be a successful one. And this underlines the importance of applying the lessons learned from import-substituting industrialization elsewhere. In particular Malaysia should avoid the excessive protection that encourages both allocative inefficiency and production inefficiency, as well as a complacent attitude toward innovation and growth. In addition, the biases against new exports and backward linkage import substitution should be avoided.

This means aiming at roughly uniform rates of protection at all stages of the production process and for exports as well. This could be achieved either though free trade combined with a higher price of foreign exchange, or through uniform tariff rates and matching subsidies to exports, since the two are equivalent. In either case, exceptions should be made for those few exports (rubber, tin) for which terms of trade effects might be significant. Depending on estimates of world demand elasticities, they should be taxed or receive lower subsidies. This, incidentally, would remove the principal argument against devaluation as a means of encouraging domestic industry. And encouragement would be given equally for sale in the domestic market and for export. Thus, the usual inhibition in the form of a penalty exchange rate against development of new exports would be missing.

While this evidently avoids the usual biases, the question arises, where is the special inducement to industrialization that tariff protection

accords? The answer is that a favorable enough exchange rate can give whatever level of protection is desired. Unfortunately, however, this is a kind of answer that never satisfies. For the commitment to protection of "infant industries" via tariffs or other import restrictions is pervasive.

As is well known, a second-best case can be made for this kind of protection to certain industries that are judged to be more responsive than are others to scale economics and time-consuming learning processes. It is second-best because a straight subsidy would avoid the disadvantage of penalizing the users of the product protected, and there is a welfare loss from misallocation associated with this whether the users are businesses or consumers (since they face a price that does not reflect opportunity cost.) Moreover, a subsidy would avoid the bias against exports. On the other hand, a direct subsidy must be financed by taxation and the tax system may not be capable of raising the necessary revenue without equal or greater distortion than that which results from tariff protection. So the choice in the end is likely to be a practical one.*

However, since the gains from infant industry protection depend on concentrated, not dispersed, growth, the temptation to extend infant industry protection too broadly must be avoided. Just as protecting everything equally means protecting nothing, bringing too many industries into the infant category simply dilutes the inducement to concentrated growth in the most responsive industries. Moreover, the

---

* Note, however, that exchange rate adjustment avoids all of these fiscal difficulties.

logic of the infant industry argument calls for protection of a limited duration.

The logic of the infant industry argument calls also, however, for protection against foreign competition in the world market, as well as at home -- i.e., for matching subsidies to exports. And in the case of a country the size of Malaysia the eventual development of mature, efficient manufacturing industries can hardly be expected if the export market is neglected. This again emphasizes the first-best character of exchange rate policy as a weapon to achieve industrialization goals, for it protects industries simultaneously in domestic and foreign markets.

Finally, we should admit that commercial policy is in part an international problem. We must face the possibility of a reactive protectionism of the advanced countries in the face of competition from new manufacturing industries in the less developed countries. This, together with the obvious difficulties of basing an industrialization on limited demand in the home market, leads directly to the case for preferential trade among less developed countries. The point is to achieve import substitution in a wider market, so as to take mutual advantage of the gains from concentration and scale. A country the size of Malaysia cannot afford to neglect this option.