PROTECTION, INCENTIVES AND THE GROWTH
OF CARIBBEAN MANUFACTURING

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PROTECTION, INCENTIVES AND THE GROWTH OF CARIBBEAN MANUFACTURING

In the 1950s the largest countries of the English-speaking Caribbean embarked on deliberate policies of industrialisation, following heated debates about the possibilities for manufacturing in the immediate post-war period. The early measures centred on fiscal incentives, supported by the establishment of official institutions to promote and finance industry. They were followed in the 1970s by deliberate tariff protection, uniformly imposed by larger Caribbean Community (CARICOM) members, and by quantitative restrictions, interest rate subsidies, credit insurance and other promotion and support. Most initiatives were aimed specifically at the manufacturing sector. The sector did grow significantly in the post-war period, in almost every country. Typically, its contribution to national output rose from about 5% to something in the region of 12%. Whether the official policies for industrial development made a useful contribution to this growth remains an open issue. The present essay sets out to glean evidence on this point from recent studies of the manufacturing sector in the English Caribbean.

We will draw evidence from studies by Ranis et al (1982), Whitehall (1984), Ayub (1981) and Cox (1982). The study by Ranis and associates is the only one which covers all of CARICOM. It offers a snapshot of CARICOM trade patterns in 1978, and draws comparisons with 1967; it also gives a detailed analysis of protection in a range of economic activities in 1978, for every

country in the regional grouping. Whitehall's paper gives measures of protection for the entire manufacturing sector in Barbados, distinguished according to type of activity. Ayub analyses the growth of manufacturing in Jamaica, providing detailed information on incentive schemes and measures of industrial protection. Cox provides information on the growth of manufacturing in Barbados which may be compared with information provided by Ranis and associates and by Whitehall so as to yield inferences about incentives; Cox also documents the fiscal incentive provisions available in Barbados.

After briefly describing the evolution of protection and fiscal incentives in the English Caribbean in the next section, we examine the correlations between the extent of protection and the growth of manufacturing in section three. The fourth section explores the logic of the incentive and protection systems to determine whether they are consistent with the overall strategy of growth. In the fifth section we attempt a summary of our findings.

Protection and Incentives

The first measures to encourage the growth of manufacturing came with the enactment of laws offering tax privileges to new manufacturers in the late 1940s and early 1950s. Initially, the laws varied somewhat from country to country but by the mid-1950s they had all been revised to incorporate similar features. The main provision was a period of total exemption from income taxes, typically of 7-10 years' duration. It was usually accompanied by allowances for duty-free imports and tax-free dividends, together with a provision that losses made during the tax-exempt years could be offset against profits earned after the exempt period had expired. These provisions were standardised across CARICOM countries in 1974, with the implementation of a Regional Agreement for the Harmonisation of Fiscal Incentives. It provided somewhat more generous tax holidays for the countries with smaller populations than for the so-called CARICOM MDCs. It also incorporated a depreciation allowance.

Tariff protection in the 1950s and 1960s was based on the notion of the British Commonwealth as a single market. A two-part tariff offered preferential access to imports to the English Caribbean from other Commonwealth members, with reciprocal treatment for Caribbean exports. Overall levels of protection appear to have been moderate. A deliberate scheme for tariff protection for manufacturers within CARICOM was put in place with the Agreement in 1973 on a Common External Tariff (CET) for all members. (The smaller economies were allowed to retain some tariffs against the products of their larger and wealthier neighbours.) The tariff barriers under the CET were a little higher than they had been for Third Countries in the Commonwealth scheme.

Quantitative restrictions became increasingly common in the late 1960s and early 1970s, but there were marked differences among countries in the extent of their use. In Jamaica, the number of

items banned or on quota rose from 50 in 1961 to 158 in 1968 and 334 in 1979 (Ayub, p. 33). By 1980, all imports were under quota in Guyana. Trinidad and Tobago retained quotas on a more limited range of goods, mainly consumer durables, which were produced in the country. The remaining CARICOM countries had relatively few quantitative restrictions.

All countries set up development banks and industrial development agencies to provide finance, information, factory accommodation and technical support for manufacturers. However, they all remained rather limited in size and scope, compared with the volume of manufacturing. Some countries - notably Jamaica and Barbados - set up special agencies to support exporters and to provide export credit. They, too, remained quite puny. Jamaica and Barbados provided finance for manufacturers' working capital at preferential rates of interest, but this facility saw limited use. The development banks and corporations date from the 1950s and 1960s, but the export schemes and the preferential interest rates were phenomena of the late 1970s.

The regime of incentives and protection in the Caribbean may be divided into two phases, pre- and post- 1973. The introduction of the CET made the most substantial change in the level of protection in the post-war period. However, 1973 is an approximate marker only. The provisions of the CET were not implemented immediately everywhere; they required enabling national legislation, passed in 1973 only by Barbados. Moreover, for one or two individual countries, measures other than the CET served to alter the complexion of the production/incentive scheme. It happens that these other instruments - mainly quantitative restrictions - became widespread during the CET era, although they did not depend in any way on the CET.

Protection and the Growth of Manufacturing Output and Exports

Ranis and associates report that trade among CARICOM countries grew in relative importance between 1967 and 1978, the two years they chose for comparison. The principal items in intra-CARICOM trade were processed foods and other non-durable consumer goods; in these items the region's internal trade supplied the equivalent of 40-45 per cent of the overall net import requirements, a considerable improvement on 1967 (Table 1). Although we may suspect that regional protection measures contributed to the improvement, we have no way of estimating what might have happened in the absence of protection.

Ayub's data for Jamaica (Ayub, Tables 3.6 and 5.2) reveal a very slight tendency for activities with higher levels of protection to perform above the average during the late 1970s (Chart 1). Four of the more highly protected activities grew more quickly than the average, while two of the less protected grew more slowly. There were four other lines of production which did not conform to this pattern. This evidence, though it points to a

perceptible impact of protection, is ephemeral; the tendencies are not sharply delineated, and the period over which growth is measured is very short indeed. Furthermore, it was a time when manufacturing output was slipping.

Whitehall's data do not suggest that protection has spurred manufacturing output in Barbados. Growth was slower in the second phase (7.6 per cent per annum, 1974-80) of more intensive protection than it was during the first phase (13.4 per cent per annum, 1960-74), when there was no CET. Once again, we do not know how the growth rate might have compared in the absence of additional protection in the 1970s. Codrington and associates note that "a significant minority of foreign firms . . . have set up plants to cater for the CARICOM market . . ." (p. 160). The CET may have been helpful, even if its effects were not large enough to be revealed in the overall growth of manufacturing output or exports.

The evidence on the relationship of protection, exports and output at the national and regional levels is fragile. We turn to an analysis disaggregated by activity in search of firmer bases for inference about the relationship. We shall use indirect inferences, assuming that activities with high local value added will accelerate the growth of manufacturing and that a vigorous export performance indicates a healthy manufacturing sector.

Consistency in Protection and Incentive Schemes

A tenet of the industrialisation strategy has been that activities with high local value added are to be preferred, all other things being equal. We may infer that industrial protection is consistent with that strategy if there is a bias in favour of sectors where the value added is high. It has come to be accepted that a vigorous export sector must be in the vanguard of the growth process, so the incentive and protection system must also be consistent with export-led expansion. This does not mean that exports should be more highly protected than domestic sales; so long as there are import tariffs domestic sales will invariably be more heavily protected. Such a situation cannot be regarded as 'anti-export bias' in a world where tariffs are common. Anti-export bias may be identified by the diversion of scarce resources from promising export activities to domestic production in areas where the country has no basis for comparative advantage. This might be reflected in a slowdown in exports, coupled with vigorous growth in production for the home market, where the home market is heavily protected. If protection under the CET were excessive, we might observe a slowdown in extraregional exports, compared with the expansion of regional trade. These are the warning signals that we shall be searching for.

Instances where the system of protection and incentives reduces returns - so-called 'negative protection' - provide another test of the consistency of these policies. Negative protection may be a desirable feature of a system designed to provoke changes in the composition of production. We will examine those activities where protection is negative to determine whether output has contracted absolutely or relative to other sectors, and whether this seems consonant with long-term growth strategy.

Ranis and associates and Whitehall both provide evidence on the relationship between levels of protection and local value added. The Ranis study covers all CARICOM member countries and documents protection for 31 specific items, listed under traditional cash crops, other cash crops and manufactured goods (food, other non-durables, consumer durables and producer goods). Ranis' measure of protection takes account of trade taxes, quantitative restrictions, duty exemptions, tax holidays and interest subsidies. Whitehall reports on Barbados, grouping all manufacturing into 24 groups of related activities. Because there were few quantitative restrictions in force in Barbados, and few interest subsidies of any consequence, Whitehall can confine his measure to the effects of trade taxes, duty exemptions and corporation tax relief.

Ranis' results do not suggest that the system of protection was consistent with the value-added criterion. There is no tendency for an association between high value added and a high level of protection. Activities where value added is more than 50 per cent of the sale price and where protection is offered at 50 per cent or more of the value added account for only 8 out of 54 items. The number of low value added items which get protecction above the 50 per cent level is almost twice as large, at 15. The poor correlation of protection and value added is a feature of all categories of manufacturing, for the larger CARICOM economies as well as for the less developed (see Exhibit 1 on page 19).

The data reported by Ranis and associates indicates that levels of protection vary across a wide spectrum. For 19 of the 54 items, the shelter lies between nothing and 50 per cent of value added. Another nine enjoy protection at levels between 50 and 100 per cent, while 14 are protected at rates above 100 per cent. (The remaining 12 items, which were discriminated against, will be discussed later.) The mean value of the index for each of the six categories used to classify items is not significantly different from zero. Even where the mean is high, the deviations from it are so large that one may not be confident about its value (Table 2). Within each category variation in the incidence of protection was considerable.

Whitehall finds that activities which have high local value added enjoy the greatest protection in Barbados, but unfortunately, these items are very few. Firms where local value added is more modest, which are more typical of the manufacturing sector, are

offered the lowest protection, much less than the other large bloc of firms which add very little in local processing (Table 3). Evidence supplied by Whitehall (Table 4) gives no reason to believe that the system of protection in Barbados inhibited the growth of exports. Although the most heavily export-oriented sectors received little protection, they enjoyed the fastest rate of growth between 1974 and 1980. The products that are most highly protected export in moderate amounts, but there are relatively few of them. Firms which sell nearly all their output on the domestic market are by no means the most highly protected, and their growth was much less rapid than for the exporting firms. Cox confined his attention to fiscal incentives; he found a strong correlation between the use of fiscal incentives and export orientation (Cox, p. 50).

Cox demonstrates that exports to destinations outside the CARICOM region were the fastest growing segment of manufacturing in Barbados between 1972 and 1979 (Cox, p. 76, Table 18). Combining his results with data from Whitehall and from Ranis and associates confirms the impression that the system of protection was not a central factor in the growth of manufacturing, though it may have supported the growth of firms supplying local and regional markets. Of the products aimed at the local market, food processing was among the most robust, and some areas of food processing were heavily protected. (The protection in this case was largely an offshoot of tax revenue policy; the items included alcoholic beverages, a favourite target when revenues are in need of a boost. See Whitehall, p. 19.) Wood products accounted for the best performance on CARICOM markets, and Whitehall finds that they were protected to a moderate degree. The best extraregional performers received little protection, as expected (see Table 5).

Ayub (p. 83) reports that in Jamaica domestic sales in the manufacturing sector are very highly protected, but there are few incentives for exports. When firms are forced to export domestic sales provide a subsidy for exports. However, Ayub's data may be read as indicating a very slight tendency for the activities which receive greater protection under the CET to expand more rapidly in regional trade in the late 1970s. Between 1976 and 1978, firms which exported mainly to the CARICOM market, accounting for 47% of all Jamaica's exports to CARICOM, outperformed other firms in their penetration of the regional market. These firms enjoyed levels of protection under the CARICOM umbrella which tended to be higher than for the weaker performers (Chart 2). Not surprisingly, there is no correspondence between protection and exports destined outside the Region.

There is no indication that protection and incentive policies have retarded Jamaica's export growth; there are very weak signals that protection may have been helpful, by providing an indirect subsidy to exports via protected domestic sales, and by encouraging exports to other CARICOM countries.

We have identified in Table 6 fifteen items listed in the Ranis Report for which the protection to value added is negative. The major item of concern is rum; exports from the Region have been slow to take off, and rum is considered a useful complement to the export of sugar. It turns out that there is no bias against rum in the system of tariffs, incentives, subsidies and quotas; the 'negative protection' reflects the fact the rum is usually sold on the domestic market at prices somewhat above those used for exports. If the markets for rum were perfectly free of restriction, this policy might be considered a disincentive to export. However, with only a tiny home market, the domestic price does not serve to divert export sales, which have been mainly affected by controls on access to export markets. (Although sugar did not record negative protection in 1978, a calculation made at the current - 1986 - low world prices would reveal strong 'negative protection' for sugar as well.)

The other products suffering negative protection will be of declining importance in regional development. The regional market for beverages and biscuits is near saturation, and CARICOM countries have no basis for comparative advantage in the production of beer, orange juice and biscuits for export. There is not a strong case for the production of cement or refrigerators in CARICOM countries. Economies of scale are against the development of quality production of refrigerators, while world over-capacity in the supply of cement argues a case for reliance on cheap imports. Overall, the incidence of 'negative protection' does not indicate that protection created incentives at variance with Caribbean development strategy.

The Most Effective Protection Policies

Ranis and associates and Whitehall agree that nominal tariffs on final output make the greatest contribution to the level of effective production. Ranis reports on the separate impact of each policy on the aggregate level of protection. In their calculation, tax holidays and interest rate subsidies have little effect on protection : for 16

manufactured products in 11 countries, there are only seven instances where the value added because of tax holidays is more than 10%. Interest subsidies add that much to value added only once. Protection arises mainly from final tariffs, with duty exemptions a distant second in importance for most items. Quantitative restrictions tended to be less important than final tariffs, but more important than duty rebates. However, their influence invariably reduced the level of effective protection (Appendix B).

Whitehall notes that 'nominal tariffs on final output make the most significant contribution to the effective rate of protection' (p. 21). Exemption from corporation tax made little difference because corporate profits were low, although there were important exceptions. Whitehall found a significant effect of import duty rebates, but the largest share of protection came from the effect of the tariff on final goods.

The importance of the tariff on final goods and the insignificance of interest subsidies seem to be robust conclusions. The apparent impact of quantitative restrictions and duty rebates is open to question. Ranis and associates ascribe to quantitative restriction all domestic/world price differentials which cannot be explained by some other protective device. Errors in measurement and violations of the underlying assumptions will show up under this heading, as we saw in the case of rum. It could be quite misleading to conclude that quantitative restrictions have had harmful effects unless detailed scrutiny is given in each case.

The apparent impact of duty rebates depends on the proportion of local value added to purchased inputs, which are mainly imported. Processes which provide less domestic added value receive more protection, for a given tariff rebate on inputs, than firms which add more local value. Because the low value added operation imports more, a rebate on import duties makes a greater difference to its costs. Tariff rebates may be quite modest in themselves, but they may generate a high level of effective protection if firms with very low value added are allowed to qualify for them.

Summary and Assessment

Levels of industrial protection in the English-speaking Caribbean varied widely from country to country and from item to item. However, the protection strategy may be much more innocuous than is usually suggested. None of the studies surveyed was able to demonstrate convincingly that protectionism had made an impact on the overall growth of manufacturing. Moreover, the system of protection does not

favour firms with high domestic value added, as might have been expected. Nevertheless, it does seem that the CARICOM Common External Tariff may have stimulated manufacturing output for export within the Region. There is no basis for the criticism that protectionist policies have biased the growth of manufacturing in undesirable directions. Restrictions do not appear to have inhibited exports, and where protectionism has acted as a disincentive, the activity affected was judged to have little growth potential in almost every case.

This assessment is no more than a tentative view, making the most of available research. Much of this research uses methodologies which have known deficiencies. Ayub points out that high effective protection coefficients may not result from official policies at all. A high reading will emerge (using the survey technique of Ayub and Ranis and associates), if firms operate with excess profits, if overheads are unduly high, if techniques of organisation are sub-standard, if firms suffer diseconomies of small scale and if there are 'x inefficiencies' - unidentified reasons for performance below the norm. Since no one has conducted sufficiently detailed micro-analysis to account for these factors and to neutralise their effects in computing effective protection, none of the previous paragraph's conclusions may be held with great confidence. They certainly will not be characteristic of every activity or sub-sector.

Much work remains to be done, but the results so far raise questions about the urgency of the analysis. If the whole system of protection does not have profound effects countries might well content themselves with a moderate tariff on final products, together with duty rebates for firms whose operations involve sufficient local value added. Beyond this, the expansion of manufacturing may depend on non-price factors such as skills, politics, technology and marketing strategies.

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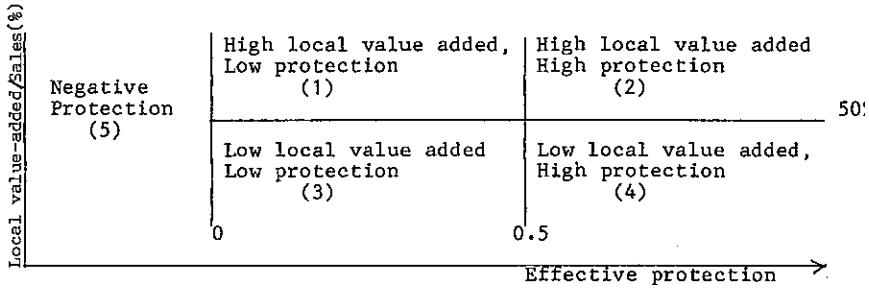
EXHIBIT 1

Evaluation of Protection and Value Added, All CARICOM

If the degree of protection is plotted against the proportion of local value added for each product the resulting points may be divided into five regions:



In the order of desirability, the outcomes may be ranked (1) and (2), (3), (4). Whether (1) or (2) is preferable depends on the rate of growth of output for the items concerned. A slow-growing item in (1) may deserve higher protection. Items in (5) are evaluated separately.

The distribution of outcomes reported by Ranis is, as follows:

Item	Number Reported in each Region (1)	(2)	(3)	(4)	(5)
MDCs					
Food processing	3	4	2	3	5
Non-durables	2	1	4	5	1
Durables	1	1	-	2	1
Producers' Goods	2	1	-	1	2
LDCs					
All manufacturing	3	1	2	4	3

Source: Ranis et al, Diagrams 9-12, 14

TABLE 1

RATIO OF CARICOM TRADE TO NET IMPORTS FROM THE REST OF THE WORLD

	1967	1978
Producers' Goods	18	20
Consumer Goods	18	42
Food Processing	33	45
Other Manufacturing	10	40

Source: Ranis et al, Tables 4, 5 and 6

TABLE 2

AGGREGATE EFFECTIVE PROTECTION OF VALUE ADDED BY COMMODITY GROUP

	MDCs		ECCM	
	Mean	St. Dev	Mean	St. Dev
Traditional Cash Crops	.054	1.440	-.086*	.349
Non-Traditional Cash Crops	-.048	.504	.438	1.509
Non-Durables: Processed Food	.733	1.383	.118	.666
Non-Durables: Other	1.193	1.519	.201	.846
Durables	4.653	7.705	-	-
Producer Goods	.052	.493	.792	-

* Excludes wood in Grenada, which received a large Government transfer, apparently at least in part directed towards timber resource development

Source: Ranis et al, Table 21a

TABLE 3

PROTECTION AND VALUE ADDED IN BARBADOS

VALUE ADDED (% of Sales)	EFFECTIVE PROTECTION INDEX		SHARE OF TOTAL SALES
	1974	1980	%
Less than 30%	120	258	42
30% but less than 50%	116	176	49
50% and over	278	311	9

Source: Whitehall, Tables 1 and 5

TABLE 4

PROTECTION AND EXPORTS IN BARBADOS

EXPORTS AS % OF SALES	EFFECTIVE PROTECTION		GROWTH RATE 1974-80 (% p.a.)	SHARE OF TOTAL SALES (%)
	1974	1980		
Less than 10%	122	141	13.9	46
10%, less than 30%	201	630	14.4	19
30% and over	98	75	17.7	35

Source: Whitehall, Tables 1 and 5

TABLE 5

PROTECTION, EXPORTS AND DOMESTIC SALES IN BARBADOS

SECTORS WITH MOST VIGOROUS GROWTH IN	EFFECTIVE PROTECTION INDICES	
	WHITEHALL	RANIS ET AL
Extraregional Exports (Clothing, Assembly)	34, 10	0.03(1)
CARICOM Exports (Wood Products)	80	
Local Sales (Food Processing, Printing)	35-140, 25	-0.21(2) 0.989(3)

Notes:

(1) Brassieres

(2) Orange Juice

(3) Rum

Sources: Ranis et al, pp. 104, 105; Whitehall, Appendix II

TABLE 6

NEGATIVE PROTECTION AND GROWTH

	PROTECTION	GROWTH
FOOD PROCESSING		
Orange Juice		
Barbados	-0.21	
St. Vincent and the Grenadines	-0.911	
Rum (Exports)		
Barbados	-0.416	
Jamaica	-1.025	
Trinidad and Tobago	-0.73	
Guyana	-0.657	
Antigua and Barbuda	-0.161	
Beer		
Barbados	-0.113	
Grenada	-0.087	
Biscuits		
Barbados	-0.143	
Guyana	-0.60	
Antibiotics		
Barbados	-0.22	
Refrigerators		
Guyana	-0.105	
Cement		
Jamaica	-0.203	
Trinidad and Tobago	-0.693	

Sources: Ranis et al, pp. 104, 105

APPENDIX A

TABLE A1

PROTECTION AND EXPORT GROWTH (JAMAICA)

	EFFECTIVE PROTECTION (1978)	REAL EXPORT GROWTH RATE (1975-78)	
Food	1.30	-3.2	
Beverages	2.95	(-0.5 (-3.0	Alcoholic Non-Alcoholic
Tobacco	0.65	-0.6	
Garments	1.08	-6.5	Textiles, Garments
Footwear	1.74	-0.1	
Leather goods	1.42	8.0	
Furniture	1.00	-14.3	
Building materials	1.84	6.5	Wood and Wood products
Paper and products	1.84	-8.0	
Rubber and Plastics	1.49	-1.1	Chemicals, rubber and plastics
Metal products	1.54	-5.9	Machinery and metal products
Average	1.50	-4.3	

Source: Ayub, Tables 3-6 and 5-2

TABLE A2

PROTECTION, CARICOM AND INTRAREGIONAL EXPORTS

	EXPORTS TO CARICOM (% OF TOTAL EXPORTS)	CARICOM EXPORTS		EXTRAREGIONAL EXPORTS		% OF EXPORTS TO CARICOM	% OF TOTAL EXPORTS
		X78/X76 (US$)	Protection 1978	X78/X76 (US$)	Protection 1978		
I	<25%	0.87	0.64 - 1.27	0.85	0.65 - 0.85	7	65
II	25 - 65%	1.03	0.98 - 1.38	1.14	0.90 - 1.00	16	15
III	65 - 75%	0.98	1.13 - 1.40	0.81	1.15 - 1.49	30	13
IV	75 - 85%	1.29	0.99 - 1.96	1.25	1.00 - 2.04	13	5
V	>85%	1.19	1.14 - 1.96	0.53	1.54 - 2.04	34	2
	TOTAL	1.08	0.64 - 1.96	0.88	0.65 - 2.04		

Key:

I Beverages, tobacco, clothing
II Leather, rubber, wood, food, textiles
III Plastics, chemicals, perfumes, misc
IV Pharmaceuticals, equipment, minerals, furniture
V Metal products, paper products, apparel, shoes, electrical equipment

Source: Ayub, Tables 3-8 and 5-2

Appendix B

Sources of Effective Protection

	Protection due to					
	Tariffs	QRs	Duty Exemption	Tax Holiday	Interest Subsidy	All Measures
Barbados						
Processed Food						
Orange Juice	0.482	-0.977	0.285	-	-	-0.210
Rum (domestic)	3.364	-4.353	-	-	-	0.989
(export)						
Beer	1.340	-1.453	-	-	-	-0.113
Biscuits	0.551	-0.697	0.030	-	-	-0.143
Other Non-durables						
Shirts	2.061	1.035	0.849	-	-	3.945
Brassieres	-1.392	-	1.392	0.030	-	0.030
Toilet Paper	0.224	0.447	0.089	-	-	0.134
Antibotics (domestic)	-0.153	-0.220	0.153	-	-	-0.220
(export	-0.153	-0.491	0.153	-	-	-0.491
Jamaica						
Processed Foods						
Orange Juice	-0.450	0.450	-	-	-	-
Tomato Ketchup	0.661	2.159	0.288	-	-	3.108
Rum (domestic)	3.634	-3.160	-	-	-	0.474
(export)	-0.008	-1.017	-	-	-	-1.025
Beer	2.377	-1.560	0.026	-	-	0.843
Biscuits	0.512	-0.240	0.222	-	-	0.494
Other Non-durables						
Shirts	-0.874	-13.229	-4.167	-	-	-18.270
Shoes	0.713	2.328	0.536	-	-	3.577
Toilet Paper	0.530	-0.575	0.099	0.120	0.017	0.191
Antibotics	-0.043	2.771	0.043	-	-	2.771
Durables						
Refrigerators	0.250	0.095	0.088	-	-	0.433
TV/Radio (domestic)	1.600	1.683	0.800	-	0.202	4.285
(export)	-0.800	1.554	0.800	-	0.202	1.756

Cont'd

Appendix B Cont'd

Sources of Effective Protection

	Protection due to					
	Tariffs	QRs	Duty Exemption	Tax Holiday	Interest Subsidy	All Measures
Jamaica						
Producer Goods						
Paint	0.795	-0.780	0.007	-	-	0.022
Wire Nails	0.550	-0.069	-	-	-	0.481
Cement	-0.207	-0.410	-	-	-	-0.203
Trinidad-Tobago						
Processed Foods						
Orange Juice (domestic)	1.067	-1.173	1.372	-	-	1.302
(export	-1.364	1.586	1.364	-	-	0.158
Tomato Ketchup	1.148	-0.986	-	-	-	0.162
Rum (domestic)	6.530	-1.598	-	-	-	4.932
(export)	-	-0.730	-	-	-	-0.730
Beer	1.010	-0.430	0.014	-	-	0.621
Biscuits	0.971	-0.093	-	-	-	0.878
Other Non-durables						
Laundry Soap	0.735	-0.662	0.080	-	-	0.153
Shirts	-0.279	-1.853	-0.985	-	-	-3.117
Brassieres (domestic)	0.567	-0.854	0.406	-	-	0.119
(export)	-0.406	-	0.406	-	-	-
Durables						
TV/Radio	6.356	10.838	0.884	-	-	18.078
Producer Goods						
Paint	0.710	-0.017	-	-	-	0.693
Wire Nails	0.209	-0.203	0.006	-	-	0.012
Cement	0.041	-0.737	0.002	-	-	-0.694

Cont'd

Appendix B Cont'd

Sources of Effective Protection

	Protection due to					
	Tariffs	QRs	Duty Exemption	Tax Holiday	Interest Subsidy	All Measures
Guyana						
Processed Foods						
Tomato Ketchup	0.314	-0.107	-	-	-	0.207
Rum (domestic)	-3.207	-3.698	-	-	-	-0.491
(export)	-0.054	-0.603	-	-	-	-0.657
Biscuits	-0.363	-0.963	-	-	-	-0.600
Other Non-durables						
Shirts (domestic)	2.440	-0.050	-	-	-	2.390
(export)	-	0.388	-	-	-	0.388
Shoes	0.267	-0.184	-	-	-	0.083
Toilet Paper	1.110	-0.828	-	-	-	0.282
Antibotics	-0.012	2.051	0.012	-	-	2.051
Durables						
Regrigerators (domestic)	-0.370	-0.553	0.078	-	-	-0.105
(export)	-0.078	-0.344	0.078	-	-	-0.344
TV/Radio	0.450	0.057	0.066	-	-	0.573
LDCs						
Processed Foods						
Orange Juice (domestic)	0.201	1.186	0.364	-	-	1.751
(export)	-0.362	2.245	0.362	-	-	2.245
Rum St. Vincent	0.435	-1.580	0.234	-	-	-0.911
Antigua	-0.564	-0.725	-	-	-	-0.161
Grenada	0.774	-0.237	-	-	-	0.537
St. Lucia	0.935	-0.391	-	-	-	0.544
St. Vincent[1]	-0.134	0.034	-0.004	-	-	-0.104
Beer Grenada	1.278	-1.365	-	-	-	-0.087
St. Lucia	1.075	-1.477	0.017	0.120	-	-0.265

Cont'd

Appendix B Cont'd

Sources of Effective Protection

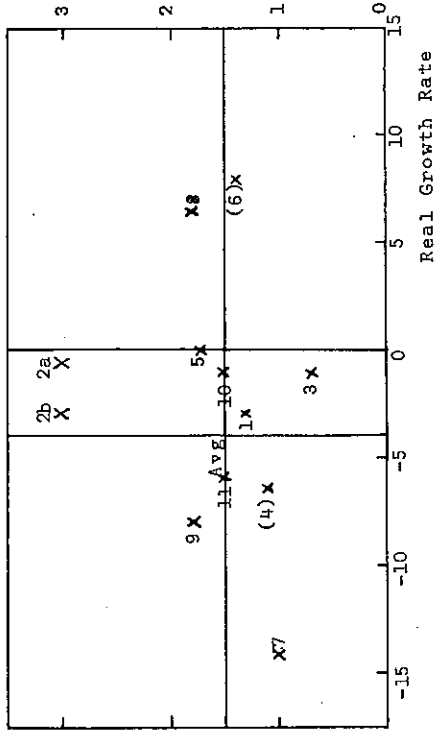
	Protection due to					
	Tariffs	QRs	Duty Exemption	Tax Holiday	Interest Subsidy	All Measures
Guyana						
Other Non-durables						
Soap Dominica	1.278	-0.802	0.120	-	0.810	
Shirts Dominica	0.277	1.276	-	-	-	1.553
St. Kitts	-0.630	-0.750	1.380	-	-	-
St. Lucia[1]	0.021	-1.008	-0.021	0.060	-	-0.948
Shoes St. Kitts	0.076	-0.316	0.040	0.200	-	-
Brassieres St. Lucia	-	-	-	0.200	-	0.200
Toilet Paper Belize	1.408	-0.344	1.342	0.090	-	2.496

Source: Ranis et al, Tables 15, 16, 18, 19 & 20.

Note: 1. Value added is negative at world prices.

Chart 1

Protection and Export Growth

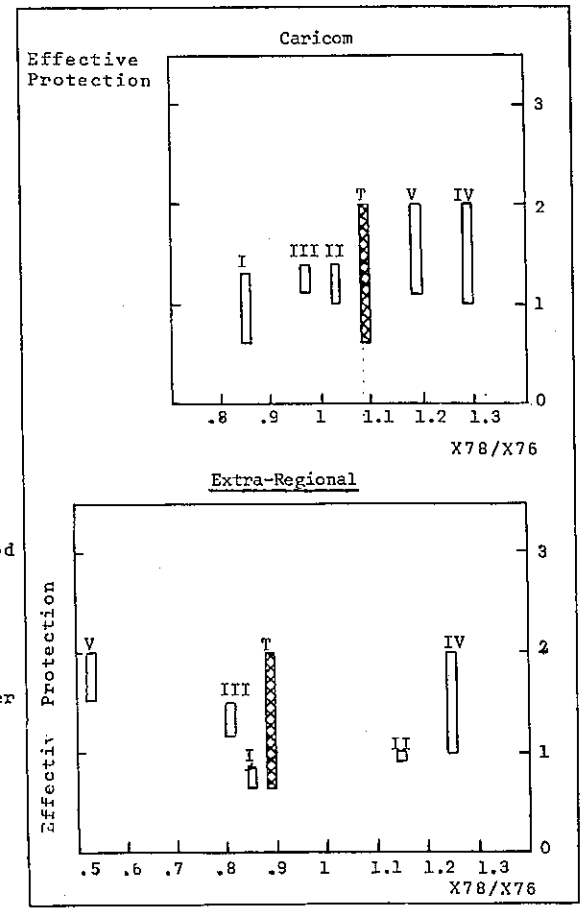


Key:

1	Food
2(a)	Beverages
2(b)	"
3	Tobacco
4	Garments
5	Footwear
6	Leather goods
7	Furniture
8	Building materials
9	Paper and products
10	Rubber and plastics
11	Metal Products

Chart 2

Protection and Export Growth



Key:

I	Beverages, tobacco, clothing
II	Leather, rubber, wood food, textiles
III	Plastics, chemicals, perfumes, misc
IV	Pharmaceuticals, equipment, minerals, furniture
V	Metal products, paper products, apparel, shoes, electrical equipment
T	All items