Trade Effects of the Generalized System of Preferences

ZUBAIR IQBAL*

I. Introduction

All the developed countries that agreed to be donors under the proposal for Generalized System of Preferences (GSP) adopted at the first UNCTAD session in 1964, have introduced their individual (GSP) schemes.[1] Under these schemes, imports of a large number of manufactures and semimanufactures from less developed countries are permitted at zero or reduced tariff rates up to a certain maximum amount. The full tariff rates continue to apply to imports from other countries.

Attention has focused on the institutional arrangements underlying the schemes, the nature and possible effects of quantitative limitations such as import ceilings and tariff quotas, and the estimation of probable demand responses to preferential tariff cuts in developed countries under specific schemes [3, 4, 8, 11, 12, 13 and 14].

An underlying assumption of the GSP has been that a preferential treatment of imports from less developed countries would promote the exports of manufactured and semimanufactured products from these countries. The purpose of this study is not to test or otherwise quantify this hypothesis as such. Rather, this study seeks to provide a comprehensive assessment of the global trade effects of all the schemes, taken individually as well as collectively, by estimating the trade creation, (i.e., increase in world trade) and trade diversion, (i.e., decline in the exports of non-preferred countries) effects. These estimates are drawn upon

*The author, who is an Economist in the Exchange and Trade Relations Department of the International Monetary Fund, wishes to acknowledge the many helpful comments and suggestions he received from a number of colleagues, especially Mark Allen, Jack Barnouin, Carlos Emaneul, Bahram Nowzad, and Duncan Ripley. The views expressed in this paper are those of the author alone and may not be interpreted as those of the Fund.

[1]These countries were: the EEC (July 1971); Japan (August 1971); Norway (October 1971); the United Kingdom, Denmark, Finland, Ireland, New Zealand, and Sweden (January 1972); Switzerland (March 1972); Austria (April 1972); Canada (January 1, 1974); and the United States (1975). The United Kingdom, Denmark, and Ireland upon joining the EEC replaced their schemes with the EEC scheme on January 1, 1971.

to determine the basic weaknesses of the schemes as currently in operation and to suggest possible ways of enhancing their effectiveness.

Section II discusses some of the conceptual problems in assessing the economic effects of the GSP schemes, reviews previous attempts to measure the benefits of national GSP schemes for developing countries and then provides a simple partial equilibrium model of trade discriminations that permits the estimation of trade creation and trade diversion effects. Section III applies this model. This is done by applying estimated values of elasticities of import demand and export supply to the data for 1971 on trade in manufactures and semimanufactures along with tariff cuts as implied in the schemes. The calculated effects are then adjusted for quantitative limitations included in the schemes such as exclusions, import ceilings, and tariff quota limitations on preferred imports to derive the likely net trade effects of the schemes.

II. The Effects of the Generalized System of Preference

The effects of the GSP schemes may be assessed either on a general equilibrium basis or according to the partial equilibrium criteria. While the former approach evaluates the effects on the structure of the economy i.e., changes in the consumption pattern and resource allocation in both the preference-receiving as well as the preference-granting countries, the latter approach concentrates on the changes in trade flows, i.e, trade creation and trade diversion effects.

General Equilibrium Approach

Under the general equilibrium approach, the production and consumption effects of preferences are determined simultaneously in both the preference-granting as well as the preference-receiving countries. On the consumption side, the changes in nominal tariff rates and the consequent changes in the nominal relative prices of the commodities determine the effects of preferences. The change in nominal relative prices results in a shift in the consumption pattern giving rise to increased demand for preferred commodities in the preference-granting country and for the nonpreferred commodities in the preference-receiving country. On the production side, the effects are determined by the reduction in effective protection to certain production activities in the preference-granting countries and the consequent increase in effective (as against nominal) preference granted to the same activities in the preference-receiving countries. The decline in effective protection in the former country would give rise to reallocation of resources away from the preferred activity, while encouraging a flow of resources to such an activity in the preference-receiving country. There are, however, important limitations in such an approach that merit attention [6, 7, 15 and 21]. Even when one abstracts from the weaknesses of the effective protection as a useful economic indicator due to limiting assumptions that underly its theoretical formulation, the estimation of effective protection rates, and changes in them occasioned by preferences, is not an easy task. For most of the beneficiary countries,the data are not available in sufficient detail so as to permit any meaningful calculations. Furthermore, it must not be lost sight of that even when changes in the structure of effective protection in preference-granting countries are measurable, their reverse need to necessarily reflect the gains to the beneficiary countries. This is so because of differences in supply and demand elasticities, production functions, and elasticities of substitution

between developed and less developed countries. Moreover, given the nature of most of the GSP schemes that allow for an active use of arbitrary quantitative restrictions, such as escape clauses, exclusions and tariff quotas, limiting the extent of gains to the developing countries, estimated changes in effective protection rates would provide grossly exaggerated results of benefits accruing from the schemes. It would be necessary to introduce tariff equivalents of the quantitative limitations embedded in the schemes and then obtain their effects on effective protection. Such adjustments would involve more approximations and hence further dilute the usefulness of effective protection as an explanatory estimator.

Partial Equilibrium Approach

Assume a three-country world of which one is a less developed country and the other two developed. Further, assume that both the developed countries grant preferences to imports of manufactures and semimanufactures of the less developed country without removing tariff barriers on trade with each other. Introduction of preferences will, on the one hand, give rise to increase in imports of preferred commodities in the two developed countries from the preference-receiving country (overall trade effect), and on the other hand, reduce imports of these countries from each other of commodities that compete with preferred imports from the less developed country (trade diversion). The net trade creation, due to the institution of preferences, will be equal to the increase in overall trade between the less developed country and the developed countries less the decline in trade between developed countries in preferred goods.[2]

Partial equilibrium approach emphasizing the direct trade effects, on the other hand, lends itself favourably to estimation. In concentrating on trade effects of tariff changes and consequent price changes, it abstracts from the adjustment of economic structure of countries involved in the preference schemes, both preference-granting and preference-receiving. It is, however, safe to assume that trade effects to some degree reflect corresponding changes in the structure of economies. The partial equilibrium approach can, therefore, be drawn upon to obtain some indications of the eventual structural effects that general equilibrium approach tries to do.

Kojima [11], while estimating the potential effects of generalized tariff preferences of the Japanese scheme, used a simple model estimating the trade creation and trade diversion effects for Japan. His attempt was a modest one that of evaluating effects on domestic economy and the displacement of certain

[2]Trade creation and diversion effects of preferences as discussed above are not entirely consistent with the Vinerian concept of trade effects which implies a substitution of a cheaper source of supply for a more expensive one and vice versa. The lowering of the market price of the commodity in the importing country (country 1), lowers the price received by domestic suppliers and foreign suppliers (country 2) outside the preference area. Their costs of production per unit of output and their supplies to the market of the preference-granting country (country 1) therefore also decline. Conversely, the price received by the preference-receiving country (country 3) is raised, its cost of production increases as supplies to the preference-granting country increase. Thus the result is to increase supplies from the source whose costs increase compared with the no preference situation and to reduce the supplies from the sources whose unit costs of production have fallen. However, the cost of the increased supplies from preference-receiving country will be less than the reduced home supplies previously protected by an m.f.n. tariff, but greater than the average cost of the displaced supplies from outside the preference area. These results are due to the assumption that the supplies from each source are an increasing function of the price received by the supplier because of rising cost of production, whereas Viner assumed constant costs in each source of supply.

Japanese exports to the United States by less developed countries. This was done by drawing upon the estimated import demand and supply elasticities that were applied to trade data for 1967 to obtain estimates of trade creation and diversion. Blackhurst [2] developed a theoretical model for evaluating the relative welfare effects of preferences that utilizes excess demand and supply functions. The welfare effects of alternative preference approaches on a preference-granting country are then evaluated on the basis of changes in consumer's and producers' surplus. Clague [3] formulates a tariff discrimination model with product differentiation—a departure from the homogenous products assumption—similar to the "Dutch" models of Verdoorn [20], Johnson [10] and Janssen [9] in order to assess possible trade effects of a preference scheme of developed countries. The model consists of demand equations relating the changes in the quantities consumed of each good to changes in the prices of all goods, and supply equations, relating changes in quantities supplied to changes in market prices and tariffs. Based on the restrictive assumption of infinite supply elasticity of exports from less developed countries and assumed critical values for parameters like supply, demand, and substitution elasticities in the preference-granting and third countries, the model then estimates trade creation and diversion effects. It found the trade diversion effect to be fairly sensitive to the changes in supply elasticities, while trade creation and overall imports from less developed countries were found to be quite insensitive to changes in these parameters. Clague concluded, therefore, that if substitution elasticities are assumed to be equal to 6.16 and perfectly elastic export supply responses in less developed countries, "then a fifty percent tariff preference extended by major industrial countries would expand LDC exports of finished manufactures by 22 percent. (The percentage expansion should be approximately doubled for a one hundred percent preference). If the LDC export supply elasticity is 5 the percentage expansion should be cut by approximately one third [3, p. 387]. Similar conclusions were derived for alternative U.S. proposals by the U.S. Tariff Commission and Dunford using models similar to the one used by Clague [5].

Cooper [4] and Murray [14] have investigated the scheme of the EEC with special emphasis on the restrictiveness of the tariff quotas, exclusions and the mode whereby quota ceilings are determined [4, p. 35]. Murray examines the relationship between the products chosen for preferential treatment and the products currently being exported by less developed countries and finds that only 4 percent of imports from preference-receiving countries into the EEC are provided the preferential treatment due to exclusions and quota restrictions. In another paper, Murray [13] has expanded her analysis to include all other preference-granting countries. She shows that the experience with the EEC scheme holds true for other donors as well and that "when the institutional constraints are accounted for, the program (or preferences) is transformed from a 'trade' program to an 'aid' program with quite limited benefits [4, pp. 379-394 and 14] Cooper's critique based on data for 1969 and 1970 estimates what the effects of restrictive tariff quota would have been had the scheme been in operation in those two years. It concludes that the areas in which less developed countries had any scope for trade expansion in response to preferences were chemicals, machinery, and transport equipment—categories in which these countries have little or no comparative advantage. The scheme was found to be most "generous for those products in which the developing countries are least competitive, and the most generous quotas of all are for those products, such as jet aircraft and advanced computers, which the developing countries have little hope of exporting for many years, duties or not" [4, p. 381].

The Model

All the studies summarized above have concentrated on one or the other aspects of one or more GSP schemes in order to highlight the spuriousness of benefits that could be expected from their operation. There is, however, a need for in-depth assessment of trade effects of all the schemes on a global basis that will take into account the quantitative and other limitations contained in them. This will help in bringing out the basic weaknesses of the schemes and devise ways of overcoming them. For this purpose, a tariff discrimination model can be formulated based on the analysis underlying the partial equilibrium approach discussed in Section II above. Such a model assumes that, within a given commodity category, preference-granting, preference-receiving, and "third" countries produce and trade in perfect substitutes. Trade effects then depend on the elasticity of import demand in the preference-granting country and elasticity of supply from the three competing sources—preference granting, preference-receiving, and third countries. All less developed countries (Group of 77) are attributed the status of preference receivers, while developed market economy countries[3] are considered preference grantors as well as "third" countries by virtue of the fact that their preferences extend to less developed countries and not to each other. With the introduction of preferences, changes in the values of exports of less developed and developed (third) countries will depend upon the rates of change in export prices in their countries and the rate of change in the import price in preference-granting country.[4]

If u represents preference recipients, i preference grantors, and w-u the third countries and given the following definitions:

P	=	Prepreference price
$\left(\frac{\Delta P}{P}\right)_i$	=	Rate of change (decline) in domestic price of the preference-granting country, i
$\left(\frac{\Delta P}{P}\right)_u$	=	Rate of change (increase) in the export price of the recipient countries, u
$\hat{P}$	=	Postpreference price
t	=	M.F.N. tariff rate
β	=	Preference margin ($o < \beta \leq 1$)
η_i	=	The price elasticity of import demand in the preference-granting country, i
ε_{w-u}	=	The price elasticity of export supply in the third countries.
ε_u	=	The price elasticity of export supply in the beneficiary countries
α_i	=	Share of beneficiary countries in the import of preference-granting country, i, of a preferred commodity.
$1-\alpha_i$	=	Share of third countries in the import of preference-granting country, i

[3]These include: Australia, Austria, Canada, EEC, Japan, New Zealand, Nordic countries, Switzerland, and the United States.

[4]This model is similar to the one used by Kojima (11).

Then, $\hat{P}_u$ that is determined by the preference margin granted and the prepreference price P_u, will be:

$$\hat{P}_u = \left\{ 1 + (1-\beta)t \right\} P_u \left\{ 1 + \left(\frac{\Delta P}{P} \right)_u \right\} \qquad \text{I}$$

If $\beta = 1$, i.e., preferences eliminate the tariff rate, then:

$$\hat{P}_u = P_u \left\{ 1 + \left(\frac{\Delta P}{P} \right)_u \right\} \qquad \text{I}'$$

The introduction of preferences that shifts the import supply function upward and to the right, reduces the export price, inclusive of tariffs for the third countries to be equal to the export price, net of tariffs, of the recipient country. Notationally,

$$\hat{P}_{(w-u)} = P_{(w-u)} \ (1+t) \left\{ 1 - \left(\frac{\Delta P}{P} \right)_i \right\} \qquad \text{II}$$

$$= \left\{ 1 + (1-\beta)t \right\} P_u \left\{ 1 + \left(\frac{\Delta P}{P} \right)_u \right\}$$

or if $\beta = 1$, then:

$$\hat{P}_{(w-u)} = P_u \left\{ 1 + \left(\frac{\Delta P}{P} \right)_u \right\} \qquad \text{II}'$$

The rate of change in P_i, the domestic price in the preference-granting country, depends on the domestic import demand, export supply elasticities in recipient and third countries, and their respective shares in the market of country i. Given the relevant elasticities, the decrease in P_i due to preferences can be calculated as such:

$$\left(\frac{\Delta P}{P} \right)_i = \frac{\alpha_i \varepsilon_u}{\eta_i + \alpha_i \varepsilon_u + (1-\alpha_i) \varepsilon_{(w-u)}} \left(\frac{t}{1+t} \right) \beta \qquad \text{III}$$

Similarly, the rate of increase in export price for the recipient country, u, may be calculated as such:

$$\left(\frac{\Delta P}{P} \right)_u = \frac{\eta_i + (1-\alpha_i) \beta_{(w-u)}}{\eta_i + \alpha_i \varepsilon_u + (1-\alpha_i) \varepsilon_{(w-u)}} \left(\frac{t}{1+t} \right) \beta \qquad \text{IV}$$

With the estimated values of $\left(\frac{\Delta P}{P}\right)_i$ and $\left(\frac{\Delta P}{P}\right)_u$ one can calculate the changes in the value of exports from beneficiary countries and third countries to the preference-granting country. Therefore, decline in third country exports to country i would be:

$$\Delta M_{i(w-u)} = \left(\frac{\Delta P}{P}\right)_i M_{i(w-u)} \left(1+\varepsilon_{(w-u)}\right) \quad \text{V}$$

or

$$\Delta M_{i(w-u)} = \frac{\alpha_i \varepsilon_u}{\eta_i+\alpha_i \varepsilon_u+(1-\alpha_i)\varepsilon_{(w-u)}} \left(\frac{t}{1+t}\right)_i \beta \left\{1+\varepsilon_{(w-u)} M_{i(w-u)}\right\} \quad \text{VI}$$

Similarly, increase in exports of beneficiary countries to country i would be:

$$\Delta M_{iu} = \left(\frac{\Delta P}{P}\right)_u M_{iu} \left(1+\varepsilon_u\right) \quad \text{VII}$$

or

$$\Delta M_{iu} = \frac{\eta_i+(1-\alpha_i)\varepsilon_{(w-u)}}{\eta_i+\alpha_i \varepsilon_u+(1-\alpha_i)\varepsilon_{(w-u)}} \left(\frac{t}{1+t}\right)_i \beta \left[(1+\varepsilon_u) M_{iu}\right] \quad \text{VIII}$$

Therefore,

$$\Delta M_i = \Delta M_{iu} + \left(\Delta M_{i(w-u)}\right)$$

Where:

ΔM_i = Trade creation

$\Delta M_{i(w-u)}$ = Trade diversion, or reduction in imports from third countries.

and

M_{iu} = Overall trade effect, or increase in exports of less developed countries to country

III. Estimation

For the application of this model, 24 manufactured commodities were selected that in 1971 accounted for over 70 percent of total manufactured exports from less developed countries to the developed market economy countries. Less developed countries are expected to have comparative advantage in these commodity categories [8]. Moreover, the selected commodity groups are basically nonresource-based activities in which exports from less

Table 1

Trade Effects of Tariff Cuts Under the GSP Schemes on the Recipients and Donors (Based on Data for 1971)

Recipient Donor Countries	M (In 1000 dollars)	$M_{(w-u)}$ (In 1000 dollars)	$-\Delta M_{(w-u)}$ (In 1000 dollars)	$\left(\frac{-\Delta M}{M}\right)_{(w-u)}$ (percent)	M_u (In 1000 dollars)	ΔM_u (In 1000 dollars)
	(1)	(2)	(3)	(4)	(5)	(6)
Australia	737,893	598,548	4,033	0.67	139,345	9,821
Austria	727,619	706,387	2,150	0.30	21,232	4,084
Canada	1,928,098	1,723,738	12,785	0.74	204,360	29,262
European Economic Community	7,242,332	6,011,419	111,805	1.86	1,230,913	331,685
Japan	979,571	731,784	17,528	2.40	247,787	69,387
New Zealand	198,072	141,190	3,075	2.18	56,882	8,685
Nordic Countries	2,203,975	2,100,572	24,094	1.15	103,403	45,557
Switzerland	1,309,845	1,263,046	4,469	0.35	46,799	9,194
United States	8,546,335	6,062,846	200,296	3.30	2,483,489	878,928
Total	23,873,740	19,339,530	380,235	1.97	4,534,210	1,386,603

Recipient Donor Countries	$\left(\frac{\Delta M}{M}\right)_u$ (percent)	$\frac{M_{w-u}}{M}$ (percent)	$\frac{M_u}{M}$ (percent)	Net trade creation (In 1000 dollars)	Two measures of Trade Effects	
					(10)/(1) percent	(10)/(5) percent
	(7)	(8)	(9)	(10)	(11)	(12)
Australia	7.05	81.12	18.88	5,788	0.78	4.12
Austria	19.24	97.08	2.92	1,934	0.27	9.11
Canada	14.32	89.40	10.60	16,477	0.85	8.06
European Economic Community	26.95	83.00	17.00	219,880	3.04	17.86
Japan	28.00	74.70	25.30	51,859	5.29	20.93
New Zealand	15.27	71.28	28.72	5,610	2.83	9.86
Nordic Countries	44.06	95.31	4.69	21,463	0.97	20.76
Switzerland	19.65	96.43	3.57	4,725	0.36	10.10
United States	35.39	70.94	29.06	678,632	7.94	27.33
Total	30.58	81.01	18.99	1,006,368	4.22	22.20

Sources: Tables 1-9, Appendix.

developed countries have been growing at a fast rate for a decade or so. Therefore, for a preference scheme to be of any meaningful benefit to less developed countries, it should incorporate all these categories. In the absence of any information on the price elasticities of supply and demand at a sufficiently disaggregated level to correspond to the three digit SITC commodity classification that is adopted for this study, estimated values for broad categories were applied. The Balassa-Kreinin [1] estimates of import demand elasticities that were explicitly calculated for assessing the effects of tariff cuts under the Kennedy Round have been drawn upon for this purpose. As far as the export supply elasticities are concerned, very little information exists. It is for the lack of informaton in this field that most of the studies dealing with discriminatory tariff cuts in favour of less developed countries have assumed infinitely elastic supply functions in these countries. Nothing could be farthar from the truth than this assumption. Therefore, this study draws upon Kojima's estimates of supply elasticity for Japan [11]. In order to avoid making too restrictive an assumption about supply elasticities, it is assumed that estimates for Japan would be applicable to less developed countries and that, due to differences in efficiency and the existence of other factors such as R and D, supply elasticities in developed countries could be expected to be at least 10 percent higher than in less developed countries. Trade data for 1971 were drawn upon to conduct the study because that is the latest year for which detailed statistics on trade between developed countries are available. The calculated effects, therefore, indicate results that would have been realized had the schemes been introduced in 1971.

The estimation is carried out in two stages: in the first stage, tariff cuts effected under each scheme are applied to the 24 commodity categories selected. Trade creation, trade diversion, and overall trade effects are calculated for each scheme and for all the schemes put together. In the second stage, quantitative limitations, such as tariff quotas and exclusion, are introduced and more realistic estimates of static effects are obtained.

1. Effects of Tariff Cuts

As mentioned earlier, only GSP schemes of the EEC, Japan, Nordic countries, Switzerland, and the United States provide for duty free treatment to imports from beneficiary countries. Japan and Switzerland, however, permit only partial tariff reduction for ome of the commodities. other preference-granting countries have effected only partial preferential reduction. The tariff cuts under the schemes and elasticity estimates were applied to 1971 data for trade between preference-granting and preference-receiving countries on the one hand, and trade among preference-granting countries on the other. The results for each scheme are summarized in Appendix Tables 1-9, and aggregated in Table 1. The estimates show that the tariff cuts under the schemes if there were no quantitative limitation, would give rise to an overall trade xepansion, i.e. increase in exports of less developed countries, of about $1.4 billion if the schemes had been implemented in 1971 or equal to about 6 percent of total imports of developed countries i.e. equivalent to about 31 percent of exports of less developed countries to developed countries of commodities covered by this study in the same year. Trade diversion was estimated to be $380 million, or less than 2 percent of imports from third (nonpreferred) countries. Net trade creation effect was found to be over $1 billion or 4 percent of total developed countries' imports and 22 percent of less developed countries' exports of products

incorporated in this study. For individual schemes, the net trade creation as a percentage of developed countries' imports and of less developed countries' exports range between 27 percent and 7.94 percent and between 4.12 percent and 27.33 percent, respectively.

The most effective schemes were found to be those of the United States, the EEC, and Japan, and in the same order of importance. Under the U.S. scheme in the absence of quantitative limitations on preferred imports, exports from less developed countries would increase by over 35 percent[5] and those from third countries would decline by over 3 percent, giving rise to $679 million in net trade creation, or over 67 percent of total net trade creation effect generated by all the schemes taken together. This is primarily because of the dominant share of the United States in imports of manufactures by developed countries from less developed countries. The EEC and Japan follow the United States with their schemes accounting for 22 percent and 5 percent of overall net trade creation, respectively.

2. Quantitative Limitations

The schemes impose two kinds of quantitative limitations: exclusion of imports that are highly competitive with domestic import substitutes such as textiles, footwear, clothing, and many other simple manufactures; and imposition of tariff quotas limiting preferred imports of certain "sensitive" products to a fixed amount over a period based on arbitrary formulas. While the EEC, Japan, and the United States[6] practice both kinds of restrictions, other donors apply only exclusions to varying degrees of restrictiveness. Adjustments for these quantitative limitations were carried out in two stages: firstly, imports subject to the exclusion principle in developed countries were substracted from the trade flows ($\triangle M_u$ and $-\triangle M_{w-u}$) generated by the schemes for both the beneficiary as well as the donor countries. Secondly, for schemes of countries which impose tariff quota limitations, i.e. the EEC and Japan, further adjustments were made by excluding exports from beneficiary countries over and above quota ceilings from both $\triangle M_u$ and $-\triangle M_{w-u}$.[7]

The inclusion of quantitative limitations totally dilutes the beneficial effects of tariff cuts under the schemes. By excluding or limiting the preferential imports of commodities in which less developed countries are likely to have comparative advantage, the schemes limit the increase in exports from less developed countries to only 27 percent of what it would have been if only tariff cuts were in operation (see Table 2). The reduction in export flows due to quantitative limitations ranges between a low of 3 percent for New Zealand and a high of

[5]These estimates are consistent with other studies carried out on the possible effects of U.S. proposals. See, for example, [3], [5] and [19].

[6]The U.S. scheme contains a "competitive need" formula which limits imports from important beneficiary countries to 50 per cent of the total imports of a preferred commodity or $25 million per year. For details see Appendix IA.

[7]These estimated deductions for quantitative limitations are essentially underestimates because this study makes use of three digit SITC classification while the GSP schemes follow highly disaggregated BNT classification. Therefore, only those items were excluded for which exact correspondendce between BNT and SITC classifications was possible. For the EEC, the quota limitations were obtained from [4]. For Japan, data for 1972 ceilings were applied and were obtained from UNCTAD, [16].

Table 2

Trade Effects of Tariff Cuts and Quantitative Limitations in Recipient Countries Under the GSP Schemes

(Based on data for 1971)

	M_u (In 1000 dollers)	ΔM_u (In 1000 dollers)	$\Delta M'_u$[1] (In 1000 dollers)	$\left(\frac{M}{M}\right)_u$ %	$\left(\frac{\Delta M'}{M}\right)$ %	$\frac{\Delta M'_u}{\Delta M_u}$ %
	(1)	(2)	(3)	(4)	(5)	(6)
Australia	139,345	9,821	4,910	7.05	3.52	49.99
Austria	21,232	4,084	1,645	19.24	7.75	40.28
Canada	204,360	29,262	6,396	14.32	3.13	21.86
European Economic Community	1,230,913	331,685	59,177[2]	26.95	4.81	17.85
Japan	247,787	69,387	11,341[3]	28.00	4.58	16.34
New Zealand	56,882	8,685	8,388	15.27	14.75	96.58
Nordic Countries	103,403	35,557	25,879	44.06	25.03	56.81
Switzerland	46,799	9,194	8,430	19.65	18.01	91.69
United States	2,483,489	878,928	254,366	35.39	10.24	28.94
Total	4,534,210	1,386,603	380,532	30.58	8.39	27.44

$\frac{\Delta M_u}{M}$ %	$\frac{\Delta M'_u}{M}$ %	$\frac{\Delta M'_u}{GNP}$ %	External Assistance (% of GNP)	$\Delta M'_u$ in the First Year of Operation (Projected) (1000 dollars)[4]	$\Delta M'_u$ (1980 (Projected)[4] (1000 dollars)
(7)	(8)	(9)	(10)	(11)	(12)
1.33	0.67	0.012	1.10	6,583 (1974)	8,893
0.56	0.23	0.010	0.48	2,084 (1972)	4,444
1.52	0.33	0.001	0.71	8,787 (1974)	13,809
4.58	0.82	0.011	0.96	70,522 (1972)	137,686
7.08	1.16	0.001	0.91	12,951 (1972)	27,040
4.38	4.23	0.112	0.86	9,317 (1972)	15,559
2.07	1.17	0.041	0.61	28,875 (1972)	55,674
0.70	0.64	0.033	0.54	9,926 (1972)	20,398
10.28	2.98	0.024	0.52	412,743 (1975)	561,433
5.81	1.59	0.020	0.68	—	844,936

Sources: Table 1, and UNCTAD documents on GSP schemes of donor countries.

[1] $\Delta M'_u$ is the change in imports due to preferences adjusted for exclusions and quantitative ceilings. For details of adjustment see the text.

[2] Adjusted for limitations under the Long-Term Textile Arrangement. Estimates of quota limitations obtained from Cooper [4].

[3] Projections calculated on the basis of linear trend approximation.

[4] Quota ceilings for 1972 applied to data for 1971. Ceilings obtained from UNCTAD [16].

Table 3

Trade Effects of Tariff Cuts and Quantitative Limitations in Donor Countries Under the GSP Schemes

(Based on data for 1971)

	M_{w-u} (1000 dollers)	$-\Delta M'_{w-u}$ (1000 dollers)	$-\Delta M'_{w-u}$[1] (1000 dollers)	$-\left(\frac{\Delta M}{M}\right)_{w-u}$ %	$\left(\frac{\Delta M'}{M}\right)_{w-u}$ %	$\left(\frac{\Delta M'}{M}\right)_{w-u}$ %	$\frac{\Delta M_{w-u}}{M}$ %	$\frac{\Delta M'_{w-u}}{M}$ %	$\Delta M'_{w-u}$ In the First Year of Operation (Projected)[2]	$\Delta M'_{w-u}$[2] (Projected) (1000 dollers)
Australia	598,548	4,033	2,070	0.67	0.35	51.33	0.55	0.28	3,439 (1974)	4,646
Austria	706,387	2,150	1,068	0.30	0.15	49.67	0.30	0.15	1,359 (1972)	2,898
Canada	1,723,738	12,785	3,421	0.74	0.20	26.76	0.66	0.18	5,159 (1974)	8,369
European Economic Community	6,011,419	111,805	38,446	1.86	0.64	34.39	1.54	0.53	55,042 (1972)	107,462
Japan	731,784	17,528	9,690	2.40	1.32	55.28	1.79	0.99	14,738 (1972)	30,769
New Zealand	141,190	3,075	2,949	2.18	2.09	95.90	1.55	1.49	4,603 (1972)	7,687
Nordic Countries	2,100,572	24,094	14,607	1.15	0.70	60.63	1.09	0.66	17,275 (1972)	33,309
Switzerland	1,263,046	4,469	4,084	0.35	0.32	91.39	0.34	0.31	4,963 (1972)	10,199
United States	6,062,846	200,296	71,329	3.30	1.18	35.61	2.34	0.83	114,949 (1975)	223,815
Total	19,339,530	380,235	147,664	1.97	0.76	38.83	1.59	0.62	—	429,154

Source: Table 1, and UNCTAD documents on GSP schemes of donor countries.

[1] $-\Delta M'_{w-u}$ shows the trade diversion effect (ΔM_{w-u}) adjusted for quantitative limitations in the schemes. See the text for details.

[2] Projections calculated on the basis of linear trend approximation.

83 percent for Japan. The major donor countries like Japan, the EEC, Canada, and the United States, are found to be the most restrictive with respect to quantitative limitations. So much so that the additional exports from beneficiaries as percentage of total developed countries' imports in products covered by this study declines from about 6 percent to barely 2 per cent. On the other hand, adverse effects on "third" countries are considerably lessened as trade diversion declines from $380 million to $148 million, or by about 61 percent (see Table 3). The net trade creation declines to a paltry $233 million as compared with $1,006 million in the absence of quantitative limitations—a decline of 77 percent.

If the structure of GSP schemes remains unchanged with regard to tariff cuts and quantitative restrictions, then, based on the least squares method of estimating a linear trend,[8] the net trade creation is projected to be about $416 million in 1980, i.e., almost 80 percent higher than in 1971 (Tables 2 and 3). This projection, however, involves a margin of error because it is based on trade data for the period 1961-71 which may not accurately reflect the trade pattern of the period 1971-80. Any change in the structure of the scheme, however, would cause this projection to be revised. One such change could be the global reduction in tariffs, including tariffs on products covered by these schemes that may be negotiated under the Multilateral Trade Negotiations (MTN) currently under way. A 50 percent cut in tariffs under the MTN on products covered by the schemes would result in about a 30 percent reduction in the rate of increase in GSP-related exports of beneficiaries as the preference margin for their exports declines.

The UNCTAD secretariat has sought to obtain information on the actual operation of the schemes from both preference-receiving and preference-granting countries with special emphasis on the effects on trade flows, use of safeguard mechanism in donor countries, and the attempts at providing information to less developed exporters on the rules and regulations governning the schemes [17]. Some information on the trade flows of eligible commodities has been collected for Austria, New Zealand, Nordic countries, and Switzerland, for 1972 and 1973. It shows that the introduction of preference schemes has had an effect, though limited, on trade flows as the imports of eligible commodities grew at a faster rate, than that of the ineligible commodities, raising the share of the former in total imports from the beneficiaries. This is quite consistent with the findings of the present study. In the case of Finland, for example, the share of imports eligible for preferential treatment in total imports from beneficiaries grew by 1.2 percent. For Norway, this share increased by 5.1 percent and by a somewhat higher rate for Sweden. In the case of Switzerland, the share remained more or less unchanged for the first year scheme. Austria showed a significant increase in the share of preferred imports but that was primarily due to a sharp rise in the value of fuel imports for which the preference status has since been ended.

No information is available on the operation of the schemes of the major donors like the EEC and Japan that have been in effect for more than three

[8]These estimates were obtained in two stages: First, total imports of donor countries were projected for 1980 on the basis of 1960-70 data by using the least squares method. Secondly, the ratios, $\frac{\Delta M'_u}{M}$ and $\frac{\Delta M'_{(w-u)}}{M}$ for 1971 were applied to estimate for 1980 to obtain figures for the increase in exports of beneficiaries and decline in exports of third countries.

years. However, one can hazard a guess that their schemes faired less favourably than those summarized above because, unlike other donors, the EEC and Japan practice very restrictive quantitative limitations. The Canadian and the U.S. schemes have not been in operation long enough to permit any meaningful analysis.

As far as the beneficiary countries are concerned, their supply response to preferences is not known. David Wall undertook an attempt to determine the likely reaction of producers in the leading beneficiaries to lowered tariffs under the GSP schemes.[9] His interview with producers in India and importers in the developed (donor) countries revealed that, firstly, the producers in India were largely unaware of the existence of the GSP and secondly, importers in the donor countries were also often unaware and where they were aware of preferences, the impact of preferences was lessened in the short run by the inability of the Indian producers to meet the increased demand for preferred goods. He was unable to find even one increased or newtrade flow that could be identified by importers or producers as having resulted from the GSP. The same may hold true for other beneficiaries. This apparently contradicts the evidence on preferential imports in the donor countries as collected by the UNCTAD secretariat. It, however, must be emphasized that both of these findings may be correct and consistent with each other if one notes that many (though not all) of the commodities accorded preferential treatment by the minor donors as summarized above, have been growing at a fast rate independent of preferences and have been becoming increasingly important in total imports from the beneficiaries. Much work needs to be done, however, before any meaningful conclusions with regard to the actual operation of GSP schemes can be arrived at.

IV. Conclusion

The analysis presented in this study, though essentially partial in terms of coverage, indicates that the anticipated benefits of the GSP have been only partially realized. The estimated increase in beneficiary exports adjusted for quantitative limitations is barely equal to 2 percent of total imports of preference-granting countries in products covered by the schemes. Without these limitations, the calculated increase in beneficiary exports would be about 6 percent of preference-granting countries' imports in preferred commodities. The basic shortcoming of the GSP as implemented has been the quantitative limitations built into the various schemes. These limitations, motivated by domestic considerations in donor countries have tended, in effects, to restrict the import of products in which less developed countries may have comparative advantage and have reduced the beneficial effects of the preferential tariff cuts. Thus, their relaxation, by increasing the size of quotas as well as by expanding the list of eligible items, would enhance the beneficial effects of the schemes for the recipient countries.

At the same time, if the Multilateral Trade Negotiations (MTN) now under way result in a global reduction in tariffs, then the beneficial effects

[9]This information was supplied by Prof. Wall during an informal discussion on the U.S. System of Tariff Preferences sponsored by the Overseas Development Council on August 1, 1973.

of existing preferential tariff cuts under the GSP schemes would be further diluted. In the absence of any tariff cuts resulting from MTN, the increase in exports of less developed countries to donor countries by than 5 percent of their projected total manufactured exports in that year (Table 2). An assumed 50 percent tariff cut on products covered by this study would, however, lead to about a 30 percent reduction in the rate of increase in GSP-related exports during the same period, if all other aspects of the GSP schemes remained unchanged.

In the light of the above, a relaxation of the quantitative limitations would become all the more important in order to compensate beneficiary countries for possible reductions in preferences due to global tariff cuts that may result from the Multilateral Trade Negotiations. However, despite their restrictiveness, the schemes may indirectly stimulate exports from less developed countries by drawing attention to the possibility of exporting to developed countries, and thereby promoting exports that could take place profitably even over the tariff walls, but may not have done so because of market ignorance. Secondly, importers in donor countries may be induced to establish subsidiary production outlets and marketing channels in the beneficiary countries to take advantage of cheaper sources of supply. However, these indirect economic stimuli are unlikely to make up for the basic structural limitations of the schemes implicit in quantitative restrictions and exclusions.

Table 1 **Appendix**

Trade Effects of Tariff Cuts Under the GSP Scheme of Australia (Based on data for 1971)

Commodity Groups	(SITC)	M_T (In thousand dollars)	t_T percent	$M_{T(w-u)}$ (In thousand dollars)	$-\Delta M_{T(w-u)}$ (In thousand dollars)
	(1)	(2)	(3)	(4)	(5)
Leather	(611)	5,554	10.2	4,952	4
Leather, manufactures	(612)	1,542	10.2	1,443	1
Rubber and its products	(629)	62,582	28.3	61,081	229
Veneers, plywood	(631)	11,840	37.5	7,322	81
Wood manufactures	(632)	6,228	35.0	2,899	188
Paper and paper board	(641)	38,532	18.2	38,160	7
Articles of paper	(642)	12,351	11.6	11,759	9
Textile yarn and thread	(651)	59,093	0.0	53,120	—
Cotton fabrics	(652)	103,224	49.0	54,332	1,671
Woven textiles, wool	(653.2)	5,249	11.6	5,249	—
Jute fabrics	(653.4)	16,327	45.0	472	29
Woven synthetic fabrics	(653.5)	32,062	10.0	31,381	8
Floor coverings	(657)	36,468	37.5	33,074	186
Cement, etc.	(661)	3,784	12.9	3,336	4
Glass	(664)	24,445	15.2	22,972	17
Glassware	(665)	18,731	15.2	17,058	38
Pottery	(666)	13,369	27.1	12,444	37
Telecommunication equipment	(724)	60,173	18.1	59,682	15
Electrical machinery	(729)	103,148	13.3	102,246	38
Furniture	(821)	7,412	42.5	6,044	79
Travel goods, handbags	(831)	8,279	45.0	3,853	84
Clothing	(841)	50,293	23.4	23,247	514
Footwear	(851)	25,305	40.0	17,397	372
Toys	(894)	31,902	46.5	25,025	422
Total		737,893		598,548	4,033

$\left(\frac{-\Delta M_T}{M_T}\right)_{w-u}$ percent	$\left(\frac{-\Delta P}{P}\right)_T$ percent	M_u (In thousand dollars)	ΔM_u (In thousand dollars)	$\frac{\Delta M_u}{M_u}$ percent	$\left(\frac{\Delta P}{P}\right)_u$ percent	η_T	ε_{w-u}	ε
(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
0.08	0.04	602	10	1.67	0.98	0.90	0.97	0.70
0.00	0.03	99	2	2.18	0.99	0.90	1.50	1.20
0.38	0.15	1,501	92	6.12	2.78	0.90	1.50	1.20
1.10	0.59	4,518	243	5.37	3.16	0.90	0.87	0.70
6.50	2.60	3,329	176	5.28	2.40	0.90	1.50	1.20
0.08	0.01	372	8	2.02	1.19	0.90	0.87	0.70
0.02	0.03	592	15	2.49	1.13	0.90	1.50	1.20
—	—	5,973	—	—	—	0.90	0.87	0.70
3.08	1.23	48,892	3,948	8.07	3.67	0.90	1.50	1.20
—	—	—	—	—	—	0.90	1.50	1.20
6.23	2.49	15,855	705	4.44	2.02	0.90	1.50	1.20
0.03	0.01	681	15	2.18	0.99	0.90	1.50	1.20
0.56	0.15	3,394	391	11.52	3.60	2.27	2.75	2.20
0.11	0.06	448	9	2.09	1.23	0.90	0.87	0.70
0.07	0.04	1,473	37	2.52	1.48	0.90	0.87	2.20
0.23	0.06	1,673	78	4.67	1.46	2.27	2.75	2.20
0.03	0.08	925	78	8.42	2.63	2.27	2.75	2.20
0.03	0.01	491	19	3.87	1.80	0.90	1.50	1.20
0.04	0.01	902	38	4.22	1.32	2.27	2.75	2.75
1.31	0.35	1,368	171	12.48	3.90	2.27	2.75	2.20
2.18	0.58	4,426	479	10.82	3.38	2.27	2.75	2.20
2.21	0.59	27,046	1,515	5.60	1.75	2.27	2.75	2.20
2.14	0.57	7,908	868	10.98	3.43	2.27	2.75	2.20
1.69	0.45	6,877	924	13.44	4.20	2.27	2.75	2.20
0.67		139,345	9,821	7.05				

Sources: [18] and UNCTAD documents.

Table 2 **Appendix**

Trade Effects of Tariff Cuts Under the GSP Scheme of Austria (Based on data for 1971)

Commodity Group	(SITC)	M_R (In thousand dollars)	t_R percent	$M_{R(w-u)}$ (In thousand dollars)	$-\Delta M_{R(w-u)}$ (In thousand dollars)
	(1)	(2)	(3)	(4)	(5)
Leather	(611)	19,465	9.2	18,784	14
Leather, manufactures	(612)	6,326	9.2	6,225	3
Rubber and its products	(629)	29,124	14.0	29,010	58
Veneers, plywood	(631)	8,765	7.1	8,587	3
Wood manufactures	(632)	6,667	7.9	6,600	3
Paper and paperboard	(641)	38,248	14.8	38,248	—
Articles of paper	(642)	14,651	19.1	14,651	—
Textile yarn and thread	(651)	117,943	11.2	116,847	22
Cotton fabrics	(652)	29,306	22.8	127,103	11
Woven textiles, wool	(653.2)	16,974	13.1	16,974	—
Jute fabrics	(653.4)	609	28.0	479	11
Woven synthetic fabrics	(653.5)	22,817	15.0	22,490	17
Floor coverings	(657)	24,305	21.5	20,053	526
Cement, etc.	(661)	3,991	12.5	3,991	—
Glass	(664)	19,063	14.9	19,063	—
Glassware	(665)	7,719	14.9	7,686	26
Pottery	(666)	7,302	18.0	7,188	11
Telecommunication equipment	(724)	61,576	24.1	60,463	106
Electrical machinery	(729)	102,010	13.3	101,895	38
Furniture	(821)	41,604	14.8	41,578	16
Travel goods, handbags	(831)	7,779	19.5	7,528	4
Clothing	(841)	91,846	30.2	83,991	1,071
Footwear	(851)	23,039	17.9	21,732	106
Toys	(894)	26,490	17.3	25,221	104
Total		727,619		706,387	2,150

$\left(\frac{\Delta M_R}{M_R}\right)_{(w-u)}$ percent	$\left(\frac{-\Delta P}{P}\right)_R$ percent	M_u (In thousand dollars)	ΔM_u (In thousand dollars)	$\frac{\Delta M_u}{M_u}$ percent	$\frac{\Delta P}{P_u}$ percent	η_R	ε_{w-u}	ε
(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
0.07	0.04	681	32	4.62	2.72	0.90	0.87	0.70
0.05	0.02	101	6	6.03	2.74	0.90	1.50	1.20
0.20	0.08	114	11	9.22	4.19	0.90	1.50	1.20
0.04	0.02	178	6	3.59	2.11	0.90	0.87	0.70
0.05	0.02	67	3	4.48	2.36	0.90	1.50	1.20
—	—	—	—	—	—	0.90	0.87	0.70
—	—	—	—	—	—	0.90	1.50	1.20
0.02	0.01	1,096	62	5.66	3.35	0.90	0.87	0.70
0.04	0.22	2,203	319	14.48	6.58	0.90	1.50	1.20
—	—	—	—	—	—	0.90	1.50	1.20
2.30	0.92	130	21	16.15	7.48	0.90	1.50	1.20
0.08	0.03	327	32	9.83	4.47	0.90	1.50	2.20
2.63	0.70	4,252	782	18.39	5.75	2.27	2.75	0.70
—	—	—	—	—	—	0.90	0.87	0.70
—	—	—	—	—	—	0.90	0.87	2.20
0.34	0.09	33	5	15.15	4.47	2.27	2.75	2.20
0.15	0.04	114	20	17.12	5.35	2.27	2.75	1.20
0.18	0.07	1,113	175	15.75	7.16	0.90	1.50	2.20
0.04	0.01	115	15	13.04	3.99	2.27	2.75	2.20
0.04	0.01	26	4	15.38	4.40	2.27	2.75	2.20
0.30	0.08	251	46	18.46	5.77	2.27	2.75	2.20
1.28	0.34	7,855	2,120	27.90	8.72	2.27	2.75	2.20
0.49	0.13	1,307	219	16.77	5.24	2.27	2.75	2.20
0.41	0.11	1,269	206	16.26	5.08	2.27	2.75	2.20
0.30		21,232	4,084	19.24				

Sources: [18] and UNCTAD documents.

Table 3 **Appendix**

Trade Effects of Tariff Cuts Under the GSP Scheme of Canada (Based on data for 1971)

Commodity Group	(SITC) (1)	M_c (In thousand dollars) (2)	t_c percent (3)	$M_{c(w-u)}$ (In thousand dollars) (4)	$-\Delta M_{c(w-u)}$ (In thousand dollars) (5)
Leather	(611)	32,375	16.4	31,822	24
Leather manufactures	(612)	3,131	16.4	2,768	23
Rubber, and its products	(629)	116,781	13.0	116,585	117
Veneers, plywood	(631)	53,422	13.8	34,053	458
Wood manufactures	(632)	13,355	13.2	10,596	97
Paper and paperboard	(641)	91,147	13.5	90,784	136
Articles of paper	(642)	38,860	16.0	38,735	70
Textile yarn and thread	(651)	105,270	14.2	100,521	150
Cotton fabrics	(652)	72,188	17.7	56,744	383
Woven textiles, wool	(753.2)	21,639	14.9	19,675	118
Jute fabrics	(653.4)	19,946	0.0	757	—
Woven synthetic fabrics	(653.5)	55,985	14.2	55,409	42
Floor coverings	(657)	24,828	12.0	22,894	120
Cement, etc.	(661)	13,926	10.5	13,792	36
Glass	(664)	63,513	14.1	62,423	35
Glass ware	(665)	49,907	14.1	49,506	37
Pottery	(666)	34,724	15.0	33,414	113
Telecommunication equipment	(724)	290,672	11.9	280,106	490
Electrical machinery	(729)	394,129	15.2	392,175	147
Furniture	(821)	33,521	18.5	32,206	133
Travel goods, handbags	(831)	18,656	18.9	14,783	338
Clothing	(841)	201,583	22.9	117,736	6,711
Footwear	(851)	84,524	21.5	64,479	1,934
Toys	(894)	94,016	17.5	81,770	1,073
Total		1,928,098		1,723,738	12,785

$\left(\frac{-\Delta M_c}{M_c}\right)_{(w-u)}$ percent (6)	$\left(\frac{\Delta P}{P}\right)_c$ percent (7)	M_u (In thousand dollars) (8)	ΔM_u (In thousand dollars) (9)	$\frac{\Delta M_u}{M_u}$ percent (10)	$\left(\frac{\Delta}{P}\right)_u$ percent (11)	η_c (12)	$\varepsilon_{(w-u)}$ (13)	ε_u (14)
0.08	0.04	553	51	9.23	5.43	0.82	0.87	0.70
0.83	0.33	363	41	11.29	5.13	0.82	1.50	1.20
0.10	0.04	196	19	9.69	4.33	0.82	1.50	1.20
1.35	0.72	19,369	1,278	6.60	3.88	0.82	0.87	0.70
0.92	0.49	2,759	237	8.60	3.91	0.82	1.50	1.20
0.15	0.08	363	28	7.63	4.49	0.82	0.87	0.70
0.18	0.09	125	15	11.70	5.32	0.82	1.90	1.20
0.15	0.08	4,749	376	7.92	4.66	0.82	1.87	0.70
0.67	0.67	15,444	1,776	11.51	5.23	0.82	1.50	1.20
0.60	0.24	1,964	204	10.36	4.71	0.82	1.50	1.20
—	—	19,189	—	—	—	0.82	1.50	1.20
0.08	0.03	576	60	10.38	4.71	0.82	1.50	1.20
0.53	0.14	1,934	239	12.35	3.86	2.06	2.75	2.20
0.26	0.14	134	8	5.93	3.49	0.82	0.87	0.70
0.06	0.03	1,085	86	7.94	4.67	0.82	0.87	0.70
0.08	0.02	401	60	14.98	4.68	2.06	2.75	2.20
0.34	0.09	1,310	206	15.71	4.91	2.06	2.75	2.20
0.18	0.07	10,566	707	6.69	3.04	0.82	1.50	1.20
0.04	0.01	1,954	285	14.56	4.55	2.06	2.75	2.20
0.41	0.11	1,315	255	19.39	6.06	2.06	2.75	2.20
2.29	0.61	3,873	704	18.18	5.68	2.06	2.75	2.20
5.70	1.52	83,847	16,394	19.55	6.11	2.06	2.75	2.20
3.00	0.80	20,045	4,086	20.38	6.37	2.06	2.75	2.20
1.31	0.35	12,246	2,147	17.54	5.48	2.06	2.75	2.20
0.74		204,360	29,262	14.32				

Sources: [18] and UNCTAD documents.

Table 4 **Appendix**

Trade Effects of Tariff Cuts Under the GSP Scheme of the European Economic Community[1]
(Based on data for 1971)

Commodity Group	(SITC)	M_{Ew}[2] (In thousand dollars)	t_E percent	$M_{E(w-u)}$[2] (In thousand dollars)	$-\Delta M_{E(w-u)}$ (In thousand dollars)
	(1)	(2)	(3)	(4)	(5)
Leather	(611)	202,545	6.8	59,455	929
Leather manufactures	(612)	24,301	6.8	18,644	312
Rubber and its products	(629)	177,796	7.3	173,837	217
Veneers, plywood	(631)	331,375	12.7	255,810	4,305
Wood manufactures	(632)	97,041	6.1	84,317	696
Paper and paperboard	(641)	1,486,169	10.6	1,477,597	553
Articles of paper	(642)	97,279	12.4	96,704	71
Textile yarn and thread	(651)	818,155	7.4	752,126	2,531
Cotton fabrics	(652)	261,409	13.0	229,806	3,734
Woven textiles, wool	(653.2)	18,631	11.5	17,257	151
Jute fabrics	(653.4)	28,752	19.0	4,689	838
Woven synthetic fabrics	(653.5)	118,325	13.0	101,939	1,911
Floor coverings	(657)	251,554	11.5	149,336	21,336
Cement, etc.	(661)	39,700	10.1	38,550	65
Glass	(664)	51,898	13.4	50,572	104
Glassware	(665)	65,879	13.4	65,253	122
Pottery	(666)	32,330	12.0	29,208	504
Telecommunication equipment	(724)	512,598	10.6	459,629	5,286
Electrical machinery	(729)	932,354	8.4	886,418	5,983
Furniture	(821)	144,049	8.2	137,782	724
Travel goods, handbags	(831)	36,344	11.3	20,731	1,703
Clothing	(841)	1,082,777	11.6	605,205	45,617
Footwear	(851)	211,175	11.1	143,151	7,462
Toys	(894)	219,895	11.3	153,403	7,651
Total		7,242,332		6,011,419	111,805

$\left(\frac{-\Delta M_E}{M_E}\right)_{(w-u)}$ percent	$\left(\frac{\Delta P}{P}\right)_E$ percent	M_u (In thousand dollars)	ΔM_u (In thousand dollars)	$\frac{\Delta M_u}{M_u}$ percent	$\left(\frac{\Delta P}{P}\right)_u$ percent	η_E	ε_{w-u}	ε_u
(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1.57	1.56	143,090	12,819	8.96	5.27	1.42	0.87	0.70
1.68	0.67	5,657	763	13.49	6.13	1.42	1.50	1.20
0.13	0.05	3,959	472	91.92	5.42	1.42	1.50	1.20
1.68	0.90	75,565	15,158	20.06	11.80	1.42	0.87	0.70
0.83	0.33	12,724	1,615	12.69	5.77	1.42	1.50	1.20
0.04	0.02	8,572	1,543	18.00	10.58	1.42	0.87	0.70
0.07	0.03	575	156	27.21	12.37	1.42	1.50	1.20
0.34	0.18	66,029	8,104	12.27	7.22	1.42	0.87	0.70
1.63	0.65	31,603	8,587	27.17	12.35	1.42	1.50	1.20
0.88	0.35	1,374	337	24.53	11.15	1.42	1.50	1.20
17.88	7.15	24,063	6,273	26.07	11.85	1.42	1.50	1.20
1.88	0.75	16,386	4,416	26.95	12.25	1.42	1.50	1.20
14.29	3.81	204,158	50,239	24.61	7.69	3.09	2.75	2.20
0.17	0.09	1,150	196	17.02	10.01	1.42	0.87	0.70
0.21	0.11	1,326	300	22.61	13.30	1.42	0.87	0.70
0.19	0.05	626	267	42.72	13.35	3.09	2.75	2.20
1.73	0.46	3,122	1,196	38.30	11.97	3.09	2.75	2.20
1.15	0.46	52,969	11,945	22.55	10.25	1.42	1.50	1.20
0.68	0.18	45,936	12,083	26.30	8.22	3.09	2.75	2.20
0.53	0.14	6,267	1,618	25.82	8.07	3.09	2.75	2.20
8.21	2.19	15,613	4,691	30.05	9.39	3.09	2.75	2.20
7.54	2.01	477,572	146,557	30.69	9.59	3.09	2.75	2.20
5.21	1.39	68,024	21,136	31.07	9.71	3.09	2.75	2.20
4.99	1.33	66,492	21,214	31.90	9.97	3.09	2.75	2.20
1.86		1,230,913	331,685	26.95				

Sources: [18] and UNCTAD documents.
[1]EEC includes Belgium-Luxembourg, Denmark, France, Germany, Italy, Ireland, Netherlands, and the United Kingdom.
[2]Net of intra-community trade.

Table 5 — Appendix

Trade Effects of Tariff Cuts Under the GSP Scheme of Japan (Based on data for 1971)

Commodity Group	(SITC)	M_j (In thousand dollars)	t_j percent	$M_{j(w-u)}$ (In thousand dollars)	$-\Delta M_{j(w-u)}$ (In thousand dollars)
	(1)	(2)	(3)	(4)	(5)
Leather	(611)	18,280	15.0	5,775	356
Leather manufactures	(612)	2,990	15.0	1,978	107
Rubber and its products	(629)	8,571	9.1	8,380	17
Veneers, Plywood	(631)	108,822	18.0	88,074	1,746
Wood manufactures	(632)	7,010	10.2	1,408	128
Paper and paperboard	(641)	27,052	9.2	26,335	34
Articles of paper	(642)	7,068	7.9	6,798	20
Textile yarn and thread	(651)	50,176	7.0	6,749	250
Cotton fabrics	(652)	40,833	11.2	23,902	1,189
Woven textiles, wool	(653.2)	41,289	7.0	41,190	10
Jute fabrics	(653.4)	4,247	20.0	4	0
Woven synthetic fabrics	(653.5)	6,907	7.0	5,234	93
Floor coverings	(657)	12,063	18.7	8,038	732
Cement, etc.	(661)	4,920	12.1	2,840	86
Glass	(664)	8,056	10.0	7,926	0
Glassware	(665)	7,338	10.0	7,055	40
Pottery	(666)	3,609	11.3	2,823	101
Telecommunication equipment	(724)	40,888	8.3	36,567	338
Electrical machinery	(729)	269,550	10.5	245,494	3,314
Furniture	(821)	7,803	12.5	5,164	318
Travel goods, handbags	(831)	10,096	13.3	5,468	492
Clothing	(841)	120,839	17.3	36,046	6,623
Footwear	(851)	13,437	17.4	8,427	401
Toys	(894)	157,727	10.8	150,109	1,126
Total		979,571		731,784	17,528

$\left(\frac{-\Delta M_j}{M_j}\right)_{(w-u)}$ percent	$-\left(\frac{\Delta P}{P}\right)_j$ percent	M_u (In thousand dollars)	ΔM_u (In thousand dollars)	$\frac{\Delta M_u}{M_u}$ percent	$\left(\frac{\Delta P}{P}\right)_u$ percent	η_j	ε_{w-u}	ε_u
(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
6.17	3.30	12,505	2,785	22.27	13.10	1.42	0.87	0.70
5.4	2.16	1,012	286	28.25	12.84	1.42	1.50	1.20
0.20	0.08	191	38	19.84	9.02	1.42	1.50	1.20
1.98	1.06	20,748	5,975	28.80	16.94	1.42	0.87	0.70
9.09	3.65	5,602	807	14.41	6.55	1.42	1.50	1.20
0.13	0.07	717	111	15.52	9.13	1.42	0.87	0.70
0.30	0.12	270	46	17.09	7.77	1.42	1.50	1.20
3.70	1.98	43,427	3,808	8.77	5.22	1.42	0.87	0.70
4.98	1.99	16,931	3,431	20.26	9.21	1.42	1.50	1.20
0.00[1]	0.01	99	11	11.22	5.10	1.42	1.50	1.20
—	4.58	4,243	506	11.92	5.42	1.42	1.50	1.20
1.78	0.71	1,673	232	13.84	6.29	1.42	1.50	1.20
9.11	2.43	4,025	2,096	52.06	16.27	3.09	2.75	2.20
3.01	1.61	2,080	371	17.83	10.49	1.42	0.87	0.70
0.01	0.05	130	22	16.92	9.95	1.42	0.87	0.70
0.56	0.15	283	89	31.52	9.85	3.09	2.75	2.20
3.36	0.95	786	259	32.95	10.35	3.09	2.75	2.20
0.93	0.37	4,321	757	17.51	7.96	1.42	1.50	1.20
1.35	0.36	24,056	7,806	32.45	10.14	3.09	2.75	2.20
6.14	1.64	2,639	917	34.75	10.86	3.09	2.75	2.20
9.00	2.40	4,624	1,613	34.88	10.90	3.09	2.75	2.20
18.38	4.90	84,793	33,646	39.68	12.40	3.09	2.75	2.20
4.76	1.27	5,010	1,191	23.78	7.43	3.09	2.75	2.20
0.75	0.20	7,618	2,584	33.92	10.60	3.09	2.75	2.20
2.40		247,787	69,387	28.00				

Sources: [18] and UNCTAD documents.

[1]Equals 0.003.

Table 6 **Appendix**

Trade Effects of Tariff Cuts Under the GSP Scheme of New Zealand
(Based on data for 1971)

Commodity Group	(SITC)	M_z (In thousand dollars)	t_z percent	$M_{z(w-u)}$ (In thousand dollars)	$-\Delta M_{z(w-u)}$ (In thousand dollars)
	(1)	(2)	(3)	(4)	(5)
Leather	(611)	1,337	13.5	727	10
Leather manufactures	(612)	337	13.5	337	—
Rubber and its products	(629)	5,946	29.3	5,946	—
Veneers, plywood	(631)	1,630	37.3	1,652	2
Wood manufactures	(632)	1,021	47.5	978	4
Paper and paperboard	(641)	12,761	26.4	12,734	0
Articles of paper	(642)	2,333	38.6	2,333	—
Textile yarn and thread	(651)	18,233	15.9	13,063	37
Cotton fabrics	(652)	35,159	19.5	16,066	2,289
Woven textiles, wool	(653.2)	4,288	30.9	4,288	—
Jute fabrics	(653.4)	4,228	23.0	230	71
Woven synthetic fabrics	(653.5)	21,647	15.9	20,309	25
Floor coverings	(657)	1,550	25.6	1,297	90
Cement, etc.	(661)	374	13.9	374	—
Glass	(664)	5,059	21.5	5,059	—
Glassware	(665)	3,567	21.5	3,353	11
Pottery	(666)	2,446	23.0	2,376	3
Telecommunication equipment	(724)	39,704	19.4	15,648	372
Electrical machinery	(729)	25,212	27.1	25,095	9
Furniture	(821)	407	41.9	374	3
Travel goods, handbags	(831)	227	50.0	172	4
Clothing	(841)	3,572	44.6	2,797	68
Footwear	(851)	2,071	38.2	1,866	12
Toys	(894)	4,963	39.4	4,206	65
Total		198,072		141,190	3,075

$\left(\frac{\Delta M_z}{M_z}\right)_{(w-u)}$ percent	$-\left(\frac{\Delta P}{P}\right)_z$ percent	M_u (In thousand dollars)	ΔM_u (In thousand dollars)	$\frac{\Delta M_u}{M_u}$ percent	$\left(\frac{\Delta P}{P}\right)_u$ percent	η_z	ε_{w-u}	ε_u
(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1.37	0.73	610	12	1.87	1.10	0.90	0.87	0.70
—	—	—	—	—	—	0.90	1.50	1.20
—	—	—	—	—	—	0.90	1.50	1.20
0.15	0.08	68	6	9.40	5.53	0.90	0.87	0.70
0.38	0.15	43	7	16.28	6.97	0.90	1.50	1.20
0.00	0.00	27	1	3.70	2.64	0.90	0.87	0.70
—	—	—	—	—	—	0.90	1.50	1.20
0.28	0.28	5,170	228	4.40	2.59	0.90	0.87	0.70
14.25	5.70	19,093	5,850	30.40	13.82	0.90	1.50	1.20
—	—	—	—	—	—	0.90	1.50	1.20
30.83	12.33	3,998	938	23.27	10.67	0.90	1.50	1.20
0.13	0.05	1,338	45	3.39	1.54	0.90	1.50	1.20
6.98	1.86	253	192	75.97	23.74	2.27	2.75	2.20
—	—	—	—	—	—	0.90	0.87	0.70
—	—	—	—	—	—	0.90	0.87	0.70
0.34	0.09	214	22	10.05	3.14	2.27	2.75	2.20
0.12	0.03	70	5	7.25	2.27	2.27	2.75	2.20
2.38	0.95	24,056	1,037	4.31	1.96	0.90	1.50	1.20
0.04	0.01	117	20	17.31	5.41	2.27	2.75	2.20
0.86	0.23	33	6	18.18	6.06	2.27	2.75	2.20
2.30	0.55	55	8	14.24	4.45	2.27	2.75	2.20
2.44	0.65	775	150	19.33	6.04	2.27	2.75	2.20
0.64	0.17	205	24	11.68	3.65	2.27	2.75	2.20
1.54	0.41	757	134	17.70	5.51	2.27	2.75	2.20
2.18		56,882	8,685	15.27				

Sources: [18] and UNCTAD documents.

Table 7 **Appendix**

Trade Effects of Tariff Cuts Under the GSP Schemes of Nordic Countries[1] *(Based on data for 1971)*

Commodity Group	(SITC)	M_{NW} (In thousand dollars)	t_N percent	$M_{N(w-u)}$ (In thousand dollars)	$-\Delta M_{N(w-u)}$ (In thousand dollars)
	(1)	(2)	(3)	(4)	(5)
Leather	(611)	28,756	6.8—13.0	25,111	263
Leather manufactures	(612)	7,553	6.8—13.0	7,515	6
Rubber and its products	(629)	126,008	8.7—13.2	125,367	94
Veneers, plywood	(631)	56,412	2.5—11.0	54,830	81
Wood manufactures	(632)	25,961	3.9— 6.1	25,585	26
Paper and paperboard	(641)	80,952	2.5— 6.0	80,952	—
Articles of paper	(642)	54,800	3.8—10.8	54,800	—
Textile yarn and thread	(651)	184,090	5.0—11.9	179,026	301
Cotton fabrics	(652)	64,775	13.8—24.4	58,113	1,409
Woven textiles, wool	(653.2)	30,081	6.1—10.3	30,081	—
Jute fabrics	(653.4)	4,420	0.0—23.0	3,291	119
Woven synthetic fabrics	(653.2)	77,245	8.1—13.5	76,584	77
Floor coverings	(657)	82,712	5.7—14.1	77,112	1,186
Cement, etc.	(661)	11,243	3.9— 7.5	11,243	—
Glass	(664)	57,737	9.1—28.3	57,737	—
Glassware	(665)	24,632	8.8—24.5	24,554	28
Pottery	(666)	17,282	7.3—16.4	16,776	82
Telecommunication equipment	(724)	224,427	11.1—23.0	223,626	168
Electrical machinery	(729)	350,370	6.2— 9.7	348,967	131
Furniture	(821)	79,349	8.0— 9.6	78,914	59
Travel goods, handbags	(831)	19,350	9.7—21.1	17,685	418
Clothing	(841)	422,079	14.6—36.7	358,888	17,900
Footwear	(851)	103,924	12.1—17.1	98,844	1,186
Toys	(894)	69,816	5.4—10.2	64,971	560
Total		2,203,975		2,100,572	24,094

$\left(\frac{-\Delta M_N}{M_N}\right)_{(w-u)}$ percent	$\left(\frac{-\Delta P}{P}\right)^2_N$ percent	M_u (In thousand dollars)	ΔM_u (In thousand dollars)	$\frac{\Delta M_u}{M_u}$ percent	$\left(\frac{P\Delta}{P}\right)_u$ percent	η_N	ε_{w-u}	ε_u
(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1.05	0.56	3,645	647	17.75	10.44	0.90	0.87	0.70
0.08	0.03	38	10	26.32	11.47	0.90	1.50	1.20
0.08	0.03	641	148	23.09	10.47	0.90	1.50	1.20
0.15	0.08	1,582	200	12.61	7.42	0.90	0.87	0.70
0.10	0.04	376	42	11.13	5.06	0.90	1.50	1.20
—	—	—	—	—	—	0.90	0.87	0.70
—	—	—	—	—	—	0.90	1.50	1.20
0.17	0.09	5,064	724	14.30	8.41	0.90	0.87	0.70
2.43	0.97	6,662	2,599	39.01	17.73	0.90	1.50	1.20
—	—	—	—	—	—	0.90	1.50	1.20
3.63	1.45	1,129	237	21.01	9.55	0.90	1.50	1.20
0.10	0.04	661	145	21.91	9.96	0.90	1.50	1.20
1.54	0.41	5,600	1,808	32.29	10.09	2.27	2.75	2.20
—	—	—	—	—	—	0.90	0.87	0.70
—	—	—	—	—	—	0.90	0.87	0.70
0.11	0.03	78	45	57.50	17.97	2.27	2.75	2.20
0.49	0.13	506	160	31.58	9.87	2.27	2.75	2.20
0.08	0.03	801	299	37.33	16.97	0.90	1.50	1.20
0.04	0.01	1,403	314	22.37	6.99	2.27	2.75	2.20
0.08	0.02	435	11	25.54	7.98	2.27	2.75	2.20
2.36	0.63	1,665	846	50.78	15.87	2.27	2.75	2.20
4.99	1.33	63,191	33,700	53.34	16.67	2.27	2.75	2.20
1.20	0.32	5,080	2,386	46.98	14.68	2.27	2.75	2.20
0.86	0.23	4,845	1,127	23.26	7.27	2.27	2.75	2.20
1.15		103,403	45,557	44.06				

Sources: [18] and UNCTAD documents.

[1]Nordic countries are Finland, Norway, and Sweden. Since their schemes are similar with respect to tariff cuts, they are considered jointly.

[2]Average of changes in prices of all the three countries calculated individually.

Table 8 Appendix

Trade Effects of Tariff Cuts Under the GSP Scheme of Switzerland (Based on data for 1971)

Commodity Group	(SITC)	M_s (In thousand dollars)	t_s percent	$M_{s(w-u)}$ (In thousand dollars)	$-\Delta M_{s(w-u)}$ (In thousand dollars)
	(1)	(2)	(3)	(4)	(5)
Leather	(611)	24,609	4.2	23,551	31
Leather manufactures	(612)	11,135	4.2	10,952	11
Rubber and its products	(629)	64,204	2.8	64,052	16
Veneers, plywood	(631)	28,596	18.7	28,274	42
Wood manufactures	(632)	16,101	6.0	15,404	15
Paper and paperboard	(641)	82,099	12.9	82,069	0
Articles of paper	(642)	32,044	11.1	32,044	—
Textile yarn and thread	(651)	67,499	5.6	66,447	435
Cotton fabrics	(652)	27,910	11.2	25,760	258
Woven textiles, wool	(653.2)	12,284	4.6	12,180	6
Jute fabrics	(653.4)	4,029	9.1	1,149	103
Woven synthetic fabrics	(653.5)	28,738	5.6	28,530	14
Floor coverings	(657)	53,452	11.5	37,650	2,183
Cement, etc.	(661)	10,792	8.7	10,766	2
Glass	(664)	27,683	6.1	27,683	—
Glassware	(665)	21,095	6.1	21,095	—
Pottery	(666)	11,926	7.5	11,797	18
Telecommunication equipment	(724)	127,301	7.9	126,285	95
Electrical machinery	(729)	157,204	3.2	156,639	0
Furniture	(821)	94,288	8.6	93,898	70
Travel goods, handbags	(831)	19,770	8.4	19,343	51
Clothing	(841)	269,872	10.3	254,252	763
Footwear	(851)	66,728	8.7	64,378	338
Toys	(894)	50,486	6.5	48,938	18
Total		1,309,845		1,263,046	4,469

$\left(\frac{-\Delta M_s}{M_s}\right)_{(w-u)}$ percent	$-\left(\frac{\Delta P}{P}\right)_s$ percent	M_u (In thousand dollars)	ΔM_u (In thousand dollars)	$\frac{\Delta M_u}{M_u}$ percent	$\left(\frac{\Delta P}{P}\right)_u$ percent	η_s	ε_{w-u}	ε_u
(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
0.13	0.07	1,058	74	7.02	4.13	0.90	0.87	0.70
0.10	0.04	83	17	9.17	4.17	0.90	1.50	1.20
0.03	0.01	152	9	5.92	2.80	0.90	1.50	1.20
0.15	0.08	322	102	31.65	18.62	0.90	0.87	0.70
0.10	0.04	697	27	3.87	1.76	0.90	1.50	1.20
0.00	0.00	30	7	23.33	12.90	0.90	0.87	0.70
—	—	—	—	—	—	0.90	1.50	1.20
0.65	0.35	1,052	100	9.47	5.57	0.90	0.87	0.70
1.00	0.44	2,150	509	23.69	10.77	0.90	1.50	1.20
0.05	0.02	104	11	10.58	4.58	0.90	1.50	1.20
8.95	3.58	2,880	350	12.14	5.52	0.90	1.50	1.20
0.05	0.02	208	26	12.28	5.58	0.90	1.50	1.20
5.81	1.55	15,892	5,060	31.84	9.95	2.27	2.75	2.20
0.02	0.01	26	4	15.38	8.69	0.90	0.87	0.70
—	—	—	—	—	—	0.90	0.87	0.70
—	—	—	—	—	—	2.27	2.75	2.20
0.15	0.04	129	31	23.87	7.46	2.27	2.75	2.20
0.08	0.03	1,016	176	17.31	7.87	0.90	1.50	1.20
0.00	0.00	565	18	3.23	1.01	2.27	2.75	2.20
0.08	0.02	390	107	27.44	8.58	2.27	2.75	2.20
0.26	0.07	427	114	26.62	8.32	2.27	2.75	2.20
0.30	0.08	15,620	1,505	9.63	3.01	2.27	2.75	2.20
0.53	0.14	2,350	629	26.78	8.57	2.27	2.75	2.20
0.04	0.01	1,548	318	20.51	6.41	2.27	2.75	2.20
0.35		46,799	9,194	19.65				

Sources: [18] and UNCTAD documents.

Table 9 Appendix

Trade Effects of Tariff Cuts Under the GSP Scheme of the United States (Based on data for 1971)

Commodity Group	(SITC)	M_A (In thousand dollars)	t_A percent	$M_{A(w-u)}$ (In thousand dollars)	$-\Delta M_{A(w-u)}$ (In thousand dollars)
	(1)	(2)	(3)	(4)	(5)
Leather	(611)	84,718	16.4	57,087	1,633
Leather manufactures	(612)	21,674	16.4	15,015	747
Rubber and its products	(629)	262,824	9.3	257,865	64
Veneers, plywood	(631)	349,234	12.6	125,297	5,553
Wood manufactures	(632)	141,858	8.5	106,507	2,210
Paper and paperboard	(641)	1,105,690	6.2	1,099,948	205
Articles of paper	(642)	51,640	6.7	44,959	382
Textile yarn and thread	(651)	350,613	11.6	317,067	1,838
Cotton fabrics	(652)	174,240	18.4	84,598	8,079
Woven textiles, wool	(653.2)	37,882	22.3	34,764	617
Jute fabrics	(653.4)	191,391	8.5	7,278	628
Woven synthetic fabrics	(653.5)	207,301	11.6	204,906	256
Floor coverings	(657)	68,798	22.5	46,143	4,222
Cement, etc.	(661)	78,218	13.1	62,442	876
Glass	(664)	122,925	13.4	116,607	414
Glassware	(665)	73,989	18.5	64,397	1,859
Pottery	(666)	135,636	12.5	132,994	398
Telecommunication equipment	(724)	1,318,815	6.9	1,041,477	14,841
Electrical machinery, n.e.s.	... (729)	664,168	8.4	423,312	15,874
Furniture	(821)	261,020	10.9	234,777	3,081
Travel goods, handbags	(831)	119,411	12.8	73,847	4,459
Clothing	(841)	1,514,515	22.6	603,786	102,568
Footwear	(851)	757,914	10.6	614,626	14,981
Toys	(894)	451,971	11.4	293,147	14,511
Total		8,546,335		6,062,846	200,296

$\frac{-\Delta M_{A(w-u)}}{M_{A(w-u)}}$ percent	$-\left(\frac{\Delta P}{P}\right)_A$ percent	M_u (In thousand dollars)	ΔM_u (In thousand dollars)	$\frac{\Delta M_u}{M_u}$ percent	$\left(\frac{\Delta P}{P}\right)_u$ percent	η_A	ε_{w-u}	ε_u
(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
2.86	1.53	27,632	6,985	25.28	14.87	1.63	0.87	0.70
4.98	1.99	6,659	2,111	31.70	14.41	1.63	1.50	1.20
0.02	0.01	4,959	1,007	20.31	9.23	1.63	1.50	1.20
4.43	2.37	223,937	38,982	17.41	10.24	1.63	0.87	0.70
2.08	0.83	35,351	5,965	16.87	7.67	1.63	1.50	1.20
0.02	0.01	5,742	604	10.52	6.19	1.63	0.87	0.70
0.85	0.34	6,681	935	13.99	6.36	1.63	1.50	1.20
0.58	0.31	33,546	6,438	19.19	11.29	1.63	0.87	0.70
9.55	3.82	89,642	28,754	32.08	14.58	1.63	1.50	1.20
1.78	0.71	3,118	1,480	47.50	21.59	1.63	1.50	1.20
8.63	3.45	184,113	20,576	11.18	5.08	1.63	1.50	1.20
0.13	0.05	2,395	608	25.41	11.55	1.63	1.50	1.20
9.15	2.44	22,655	14,543	64.19	20.06	4.12	2.75	2.20
1.40	0.75	15,776	3,312	21.00	12.35	1.63	0.87	0.70
0.36	0.19	6,318	1,419	22.46	13.21	1.63	0.87	0.70
2.89	0.77	9,501	5,390	56.74	17.73	4.12	2.75	2.20
0.30	0.08	2,642	1,050	39.74	12.42	4.12	2.75	2.20
1.43	0.57	277,338	38,622	13.93	6.33	1.63	1.50	1.20
3.75	1.00	240,856	57,035	23.68	7.40	4.12	2.75	2.20
1.31	0.35	26,243	8,860	33.76	10.55	4.12	2.75	2.20
6.04	1.61	45,564	16,316	35.81	11.19	4.12	2.75	2.20
16.99	4.53	910,729	521,083	57.22	17.88	4.12	2.75	2.20
2.44	0.65	143,288	45,623	31.84	9.95	4.12	2.75	2.20
4.95	1.32	158,824	51,230	32.26	10.08	4.12	2.75	2.20
3.30		2,483,489	878,928	35.39				

Sources: [18] and UNCTAD documents.

REFERENCES

1. Balassa, Bela and Mordechai E. Kreinin. "Trade Liberalization under the Kennedy Round: The Static Effects." *Review of Economics and Statistics.* May 1967. pp. 125-137.
2. Blackhurst, Richard. "General Versus Preferential Tariff Reduction for LDC Exports: An Analysis of the Welfare Effects." *Southern Economic Journal.* January 1972. pp. 350-362.
3. Clague, Christopher. "The Trade Effects of Tariff Preferences." *Southern Economic Journal.* January 1972. pp. 379-389.
4. Cooper, Richard N. "The European Community's System of Generalized Tariff Preferences: A Critique." *Journal of Development Studies.* July 1972.
5. Dunford, David. "Trade Effects of Alternative U.S. Systems of Generalized Preferences." Washington, D.C.: Department of State. February 1973. (Unpublished).
6. Ethier, Wilfred. "General Equilibrium Theory and the Concept of Effective Protection." In H.G. Grubel and H.G. Johnson (eds.) *Effective Tariff Protection.* Geneva: GATT and Graduate Institute of International Studies. 1971.
7. Grubel, H.G. and P.J. Lloyd. "Factor Substitution and Effective Tariff Rates". *Review of Economic Studies.* January 1971.
8. Iqbal, Zubair. "The Generalized System of Preferences and the Comparative Advantage of Less Developed Countries in Manufactures." *Pakistan Development Review.* Vol. XIII, No. 2. Summer 1974.
9. Janssen, L. *Free Trade, Protection, and Customs Union.* Leiden: H.E. Stenfert Kroese. 1961.
10. Johnson, Harry. "The International Competitive Position of the United States and the Balance of Payments Prospects for 1968." *Review of Economic and Statistics.* February 1964. pp. 14-32.
11. Kojima, Kiyoshi. "Trade Preferences for Developing Countries: A Japanese Assessment." *Hitotsubashi Journal of Economics.* February. 1969. pp. 1-12.
12. Murray, Tracy. "How Helpful is the Generalized System of Preferences to developing Countries." *Economic Journal.* June 1973. pp. 449-455.
13. ———. "Preferential Tariffs for LDCs." *Southern Economic Journal.* July 1973. pp.35-46.
14. ———"EEC Enlargement and Preference for the Developing Countries". *Economic Journal.* September 1973. pp. 853-857.
15. Ruffin, Roy J. "Tariffs, Intermediate Goods, and Domestic Production." *American Economic Review.* June 1969.
16. UNCTAD. Document No. TD/B-5/17/Add. 8.

17. UNCTAD. *Generalized System of Preferences, Replies Received From Preference-Giving Countries.* TD/B/C.5/30. October 28, 1974.

18. U.N. Statistical Office. *World Trade Annual and Suppliment.* 1971.

19. U.S. Tariff Commission. *Probable Effects of Tariff Preferences for Developing Countries.* Washington, D.C. 1972.

20. Verdoorn, P. "The Intra-Block Trade of Benelux." In E. Robinson (ed.) The Economic Consequences of the Size of Nations. New York: St. Martin's. 1960. pp. 291-329.

21. Wilkinson, W. "Effective Protection: Some Empirical Issues." In H.G. Grubel and H.G. Johnson (eds.) *Effective Tariff Protection.* Geneva: GATT and Graduate Institute of International Studies. 1971.