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Donald B. Keesing and Martin Wolf

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DOES TRADE in textiles and clothing matter and for whom? Who are the major actors? In what products do developing countries have most success? How significant is market penetration by developing countries in developed-country markets? What have been the overall trends in the trade of the developed countries? What has been the effect of protection on the exports of developing countries?

Those are questions of particular importance for the negotiations this year on the extension of the Arrangement Regarding International Trade in Textiles which is more familiarly known as the Multi-fibre Arrangement (MFA). In this article they will be addressed in turn.[1]

Put in perspective, trade in textile products hardly seems to justify the emphasis placed on it, at least in developed countries. As Table 1 shows, textile products are a rather small part of trade for developed countries, taken as a group. Moreover, their negative trade balance of less than $7 billion in these products in 1978 equalled only about three quarters of 1 per cent of their merchandise exports or imports and was more than compensated by a favourable overall trade balance with developing countries in manufactured products, exports being $169 billion as against imports of just $38 billion. From Table 2 it can be seen that the overall net trade deficit in textile products equalled a mere 3 per cent of United States' gross output in 1976 and 2 per cent of that of the European Community. The stake of the developing countries is somewhat larger, however, since, as Table 1 shows, exports of textile products in 1978 were 31 per cent of their manufactured exports and 13 per cent of their non-fuel exports.[2] According to Table 2, net

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DONALD B. KEESING and MARTIN WOLF, both Senior Economists on the Development Policy Staff, World Bank, Washington, are the authors of *Textile Quotas against Developing Countries* (1980). The former was previously Professor of Economics, University of North Carolina at Chapel Hill, and Visiting Professor at Williams College, Williamstown, Massachusetts, when he joined the Bank in 1975. The latter was a Research Associate, Nuffield College, University of Oxford, in 1978-79.

exports were as much as half of the gross output of textile products of Hong Kong, South Korea and Taiwan, 17 per cent of that of India and 10 per cent of that of Brazil.

TABLE 1

Trade in Textiles and Clothing as a Share of World Trade, 1978
(billion US dollars)

	World exports	Developed-country exports	Developed-country imports	Developing-country exports	Developed to developing	Developing to developed
Total Merchandise	1,290	874	863	291	208	210
Fuel	211	40	162	148	3	116
Non-fuel	1,079	834	701	143	205	94
Manufactures	782	653	499	61	169	38
Textiles and clothing	69	43	50	19	7	14
Textiles and clothing as percentage of:						
Total merchandise	5.4	5.0	5.8	6.5	3.5	6.5
Non-fuel	6.4	5.2	7.1	13.2	3.6	14.4
Manufactures	8.9	6.6	10.0	31.4	4.3	35.5

Source: *Monthly Bulletin of Statistics*, United Nations, New York, May 1980, Special Table D.
Note: Manufactures are defined as Standard International Trade Classification (SITC) 5-8 less 68.

Trade in textile products is generally quite modest in comparison with output. Even if trade within the European Community is counted, the share of gross output of the world's market economies entering international trade appears higher in the developing countries than the developed, but for both together it is less than one fifth.[3] The share is perhaps only 8 per cent of gross output in the centrally-planned economies.[4] Table 2 shows also that other things being equal, large countries have less trade relative to output than small ones, but a country's trade policies are also a factor.

WHO ARE THE MAJOR ACTORS?

The ability of developing countries to swamp the output of the developed countries is put into context when one realises that the Federal Republic of Germany's output of textile products alone exceeds that of Hong Kong, South Korea and Taiwan combined (see Table 2). The United States is the world's largest producer by far, its gross output in 1976 of $72 billion exceeding that of the whole of the European Community, while Japan's output was half that of the United States and that of Brazil, the largest

TABLE 2

Trade Compared with Output of Textiles and Clothing Combined, 1976

	Value added (billion US dollars)	Gross output[a] (billion US dollars)	Exports as % of gross output	Imports as % of gross output[b]
Developed countries				
United States	31.69	72.30	4	7
European Community (Nine)	29.47	(68.10)	30[c]	32[c]
West Germany	8.92	(18.78)	23	41
France	6.52	15.59	20	21
United Kingdom	5.54	13.39	18	21
Italy	5.34	11.94	35	13
Belgium-Luxembourg	1.61	(4.03)	70	58
Netherlands (1975)	0.89	2.96	66	88
Japan	13.52	33.90	11	5
Canada	2.95	6.69	4	26
Australia	1.52	3.37	1	30
Sweden	0.79	1.75	26	86
Austria	0.68	1.93	47	54
Finland	0.61	1.32	33	32
Intermediate countries				
Spain	2.00	4.68	10	6
Yugoslavia	1.24	3.62	13	6
South Africa	0.84	2.09	3	14
Greece (1975)	0.71	1.95	23	7
Portugal	0.58	1.48	33	9
Developing countries				
Brazil (1974)	(2.83)	(7.58)	13	3
Hong Kong	1.83	5.03	74	30
South Korea	1.77	5.12	55	7
India	1.42	6.16	17	—[d]
Taiwan	n.a.	4.28	59	4
Turkey	1.13	3.03	11	2

Sources: Value added and gross output are from *Yearbook of Industrial Production Statistics*, United Nations, New York, October 1979, pp. 83-4; exports and imports are from *Yearbook of Industrial Trade Statistics 1976*, United Nations, New York, Vol. I and *Monthly Statistics of Trade*, Republic of China, December 1976; exchange rates are from *International Financial Statistics*, International Monetary Fund, Washington, January 1980. Numbers in parenthesis are estimates based on incomplete data.

Note: No output data are available for Switzerland.

[a] Concepts vary significantly from one country to another.

[b] In most countries imports are c.i.f. (including insurance and freight) while exports are f.o.b. The United States and Canada are the principal exceptions reporting imports f.o.b.

[c] Including intra-trade.

[d] Negligible.

developing country, was only a tenth of the American level. The developing countries with the biggest exports, Hong Kong and South Korea, are even smaller.[5]

Looking at gross exports in Table 3, those of the developed economies exceeded those of the developing countries by 245 per cent in textiles and 35

TABLE 3

Trade and Trade Balances in Textiles and Clothing, 1978
(billion US dollars in exporters' prices)[a]

	Textiles		Clothing		Net
	Exports	Imports	Exports	Imports	balance
Developed market economies	29.0	27.2	14.4	22.9	−6.7
of which EC inter-trade (Nine)	11.3	11.3	6.9	6.9	0
Developing market economies	8.4	10.6	10.6	3.1	5.3
of which OPEC	0.5	3.3	—[d]	1.2	−4.0
Centrally-planned economies	3.4	2.8	3.5	2.5	1.6
World total	40.7	40.7	28.5	28.5	0
	Positive trade balances				
Italy (incl. EC inter-trade)[b]	3.3	1.4	3.3	0.3	4.9
EC trade with non-members	7.2	4.4	3.4	5.4	0.8
Greece, Portugal, Spain and Yugoslavia[b]	1.1	0.7	1.0	0.1	1.3
Japan	3.8	1.5	0.5	1.2	1.6
Developing East and South Asia	6.1	4.2	9.3	0.5	10.7
Centrally-planned Asia (mainly China)	1.7	0.3	1.1	0.02	2.5
	Negative trade balances				
EC except Italy (incl. inter-trade)[b]	15.1	15.3	7.0	10.0	−3.2
Other developed, except southern Europe and Japan	5.5	8.3	2.6	9.3	−9.5
Developing Middle East (West Asia)	0.8	2.8	—[d]	0.9	−2.9[e]
Developing Africa	0.6	2.3	—[d]	0.7	−2.4[e]
Developing America	0.9	1.3	0.8	0.9	−0.5
Eastern Europe and the Soviet Union[c]	1.7	2.5	2.4	2.5	−0.9

Sources: *Monthly Bulletin of Statistics*, United Nations, New York, February 1980, Special Table D, and May 1980, Special Table D; country data from Table 5 below.

[a] Based mainly on United Nations matrices.

[b] Based on individual country data with 5 per cent subtracted from imports as an allowance for insurance and freight; for Yugoslavia 1977 data were used.

[c] Within this group the Soviet Union appears to have a combined deficit of over $2 billion while the other countries have a surplus of over $1 billion.

[d] Small and not shown in the matrix.

[e] Without taking into account exports not shown in the matrix.

per cent in clothing in 1978. Indeed, in that year developing countries were responsible for only 21 per cent of world exports of textiles, 37 per cent of clothing and 27 per cent of textile products combined. The picture in net trade is somewhat different, however, since developed countries had a surplus of $1.8 billion in textiles more than offset by a deficit of $8.5 billion in clothing, while developing countries had a deficit of $2.2 billion in textiles offset by a surplus of $7.5 billion in clothing. In general, clothing is exported on balance by poorer countries and is imported mainly by rich ones, including members of the Organisation of Petroleum Exporting Countries (OPEC). Textiles, by contrast, are exported mainly from the more industrialised countries, including though the new ones of developing Asia, and are imported in substantial amounts by both poor as well as rich countries.

A closer view of net trade reveals that trade surpluses in textiles and clothing combined come mainly from two parts of the world. The net export surplus of the southern part of Western Europe was a little over $6 billion in 1978, while that of East and South Asia approached $15 billion, over two thirds of which came from the developing market economies of the region (which had a $9 billion export surplus in clothing alone). The other regions of the world were net importers.

The net exports of developing Asia come almost entirely from four economies (see Table 4) namely South Korea, Taiwan, Hong Kong and India in that order; in clothing, the exports come mainly from the first three. The next largest net exporters of all textile products among developing countries — Brazil, Pakistan, Turkey and Egypt — are miniscule in world trade. Brazil's surplus, for example, was about 12 per cent of that of South Korea in 1978.

After taking account of Mexico's border assembly operations, it is striking that most developing countries appear to have a net surplus in clothing and their imports are usually negligible. Comparative advantage is no doubt one part of the explanation. But another explanation is protection. Only exceptionally, as in Hong Kong, Singapore or Malaysia, is there little protection or even none and it is noteworthy that Hong Kong is not only the largest exporter but also the largest importer of clothing among the developing countries. In some developing countries, protection is coupled with artificial assistance to exports, such as export taxes on raw cotton or wool or (exceptionally) direct export subsidies, but it is no accident that almost all exports of clothing come from economies where exporters receive essentially free-trade treatment for their imported inputs. In many developing countries, trade policy has a negative net effect on exports of textiles and clothing, since export incentives fail to offset the negative effects of protection — for example, over-valued exchange rates and high prices — and exports are tightly constrained by the unavailability of inputs.

Turning to the position of developed and intermediate countries shown in Table 5, Italy is an important source of difficulties for the other countries of Western Europe in both clothing and textiles, with an overall surplus of $5 billion in 1978. She is now the world's biggest net exporter of textile products. Helped greatly by her proximity to the East Asian clothing exporters, Japan is the other major net exporter of textiles, followed by

TABLE 4

Trade Balances in Textiles and Clothing of Leading Developing-country Exporters (million US dollars, latest year available)

	Textiles		Clothing		Net
	Exports	Imports	Exports	Imports	balance
South Korea (1978)	1,533	403	2,575	—[a]	3,705[bd]
Taiwan (1978)	1,162	196	1,746	7	2,705
Hong Kong (1978)	998	1,839	3,421	276	2,304
India (1977)	882	—[a]	340	—[a]	1,222[b]
Pakistan (1977)	457	106	54	—[a]	405[b]
Thailand (1977)	171	89	93	—[a]	175[b]
Macau (1976)	12	69	178	2	121
Philippines (1977)	34	84	114	—[a]	64
Malaysia (1978)	32	181	90	26	−85
Singapore (1978)	267[c]	618	296[c]	113	−168[c]
Turkey (1978)	263	50	86	—[a]	299[b]
Egypt (1978)	324	82	40	19	263
Morocco (1977)	80	92	58	—[a]	46[b]
Tunisia (1978)	12	117	176	61	10
Brazil (1978)	420	84	127	—[a]	453[b]
Uruguay (1978)	25	9[d]	109	—[a]	123[bd]
Argentina (1977)	51	21	84	—[a]	114[b]
Colombia (1977)	84	21	50	7	106
Mexico (1976)	126	33	33[e]	40	86[e]

Sources: *Yearbook of International Trade Statistics 1978*, United Nations, New York, Vol. I; *Monthly Statistics of Trade*, Republic of China, December 1978; and *Commodity Trade Statistics 1976*, United Nations, New York, for the United States.

[a] Too minor to be shown as a separate category in United Nations trade statistics.
[b] Excluding any trade in categories too minor to be shown.
[c] Statistics for Singapore include re-exports but not those to Indonesia, hence figures may be misleading.
[d] Import statistics are for 1976.
[e] Exclude border assembly which included assembly of garments precut in the United States. American imports of clothing from Mexico, mostly on this basis, were valued at $166 million.

Belgium and Switzerland, but all of the last three are net importers of clothing. Most of the other big industrial countries come close to breaking even in textiles, although Canada, Australia, Sweden and Norway are large net importers of both clothing and textiles. In clothing, there is a wide range of performance from France, which remains a modest net exporter, to big net importers such as the Netherlands, the Federal Republic of Germany and the United States. Meanwhile, most of the poorer countries near the periphery of Western Europe are net exporters of clothing and a few are net exporters of textiles as well, in part because of their protection. Net clothing exports also come from some of the Eastern European countries headed by Romania.[6]

TABLE 5

Trade Balances in Textiles and Clothing of Developed and Intermediate Countries, 1978
(million dollars, exports f.o.b. and imports c.i.f. except where noted)

	Textiles		Clothing		Net
	Exports	Imports	Exports	Imports	balance
European Community[a]	18,481	16,865	10,307	13,581	−1,658
Italy	3,347	1,495	3,349	353	4,848
Belgium-Luxembourg	2,724	1,754	802	1,345	427
Ireland	345	374	162	121	12
France	2,646	2,909	1,720	1,474	− 17
Denmark	302	582	253	381	− 408
United Kingdom	2,318	2,768	1,285	1,765	− 930
Netherlands	1,859	1,836	618	2,214	−1,573
West Germany	4,940	5,147	2,118	5,928	−4,017
Finland	119	372	428	[illegible]01	74
Austria	794	830	402	628	− 262
Switzerland	1,205	807	290	1,038	− 350
Norway	85	363	44	495	− 729
Sweden	300	722	216	869	−1,075
Japan	3,832	1,499	486	1,235	1,584
United States[b]	2,104	2,239	(683)[c]	5,418	(−4,735)[c]
Canada[b]	177	1,057	134	588	−1,334
Australia	33	733	—[d]	288	− 988[e]
New Zealand (1977)	64	234	29	—[d]	− 141[e]
Portugal	401	129	304	10	566
Greece	328	165	256	28	391
Yugoslavia (1977)	199	242	210	24	143
Spain	177	221	241	68	129
Israel	81	129	157	19	90
Malta (1977)	11	85	119	11	34
South Africa (1977)	33	228	23	57	− 229

Source: *Yearbook of International Trade Statistics 1978*, United Nations, New York, Vol. I.
[a] Including inter-trade.
[b] Imports f.o.b.
[c] 1977; this is also used in the net balance for lack of a figure for 1978.
[d] Too minor to be shown separately in United Nations trade statistics.
[e] Excluding trade in categories too minor to be shown.

IN WHAT PRODUCTS DO DEVELOPING COUNTRIES MOST SUCCEED?

The category 'textiles' (SITC 65), also known as 'textile yarn and fabrics', includes a wide range of items made in very different ways. Within textiles, in which products does each group of countries do best? Which products are most affected by developing-country competition?

To help answer these questions, Table 6 shows for each product the value

TABLE 6

Comparative Advantage by Products as Revealed by Exports of Developed and Developing Countries, Export Shares of Developing Countries and Net Trade Balances of Developed Countries, 1976

Product (SITC number)	Value of exports (million US dollars)		% of market-economy exports coming from developing countries	Developed-country exports minus imports (million US dollars)
	Developing countries	Developed countries		
Clothing (84)	7,908.0	10,224.4	43.6	−7,540
Clothing not of fur (841)	7,841.5	9,926.0	44.1	−7,303
Textiles (65)	6,178.0	22,137.2	21.8	1,675
Made-up textiles (656)	670.8	1,827.9	36.7	−204
Knotted carpets (6575)	297.7	112.1	72.6	−568
Woven jute fabrics (6534)	245.3	37.6	86.7	−194[a]
Grey cotton yarn in bulk (6513)	749.6	558.3	57.3	−273
Grey woven cotton fabrics (6521)	680.4	391.0	63.5	−625
Other woven cotton fabrics (6522)	912.7	2,426.7	27.3	33
Knit fabric, non-elastic (6537)	248.3	1,431.9	14.8	407
Wool yarn (6512)	98.8	882.2	10.1	341
Woven wool fabrics (65321)	44.1	890.1	4.7	150
Man-made fibre yarn (6516/7)	519.3	4,014.9	11.5	1,062
Woven man-made fibre fabrics (6535/6)	671.4	4,464.2	13.1	1,491
Carpets, except knotted (6576)	109.6	1,489.3	6.9	92
Coated textiles (6554)	29.9	1,227.8	2.4	258
Related industries				
Textile and sewing machinery (7171, 7173)	208.4	5,723.6	3.5	2,504
Man-made fibre (26621, 2663)	51.0	1,479.5	3.3	409

Sources: *Yearbook of International Trade Statistics 1978*, United Nations, New York, Vol. II; *Monthly Statistics of Trade*, Republic of China, December 1976.
[a] Major discrepancies exist between statistics of importers and of exporters.

of exports from developed and developing countries in 1976, the share of their combined exports coming from developing countries, and the net exports (exports minus imports) of the developed countries. The developing countries' export success was largely in clothing, but it also extended to cotton yarn and fabrics (especially in a grey or unfinished state), made-up textiles (a category ranging from jute sacks to bed linens), hand-knotted carpets and woven jute fabrics. By contrast, developing countries supplied only a small share of world exports of man-made fibre yarn and fabric, and even smaller shares in wool yarn and fabric and machine-made carpets. The smallest shares of all came in specialised (for example, coated) industrial textiles and in the two categories related to trade in textiles, namely man-made fibres and textile machinery. Even in products such as yarn and fabric of man-made fibre, however, significant competition against developed countries came only from the more industrially advanced developing countries such as Taiwan and South Korea.

MARKET PENETRATION OF DEVELOPED COUNTRIES BY DEVELOPING ONES

It is common to assess market penetration by referring to imports alone. This is a defective approach since the size of an industry (although not the structure of its output) is determined essentially by the sum of domestic demand and the balance of trade. Nevertheless, import penetration alone does at least provide an upper bound to the impact of trade on the industry and identifies those products for which imports are particularly important. Sometimes attention is paid only to the particular product lines where penetration is highest, as though not merely the industry as a whole but every product it has ever produced must be retained. It is also common to rely solely on aggregate measures by weight, ignoring the fact that income is derived from the value of output, not from its physical bulk. Aggregation of cotton grey cloth with high fashion garments by weight can only give misleading, indeed ludicrous, results — unless the measurement applies only to narrowly defined product categories.[7] With these comments in mind, it is possible to make tentative observations on aspects of important penetration in developed countries.

Table 7 shows 1976 market penetration (defined as shares of gross imports in apparent consumption) by developing and other low-wage countries in the European Community in 'Group I' products, which are those considered most 'sensitive' and given the most restrictive quotas. As might be expected from Table 6, the most penetrated textile items were woven cotton fabrics in which 31 per cent of the market had been taken over by 'low cost' suppliers, and cotton yarn in which this ratio was 23 per cent. In all but two clothing categories, the share of the 'low cost' countries was 26 per cent or less, and that of developing countries was below 20 per cent, but the two exceptions had high penetration ratios indeed. In men's woven shirts, 59 per cent of the European Community's market had been taken by 'low cost' suppliers by 1976 and in women's blouses 48 per cent.

In the United States, the picture seems to be rather different, although in this case we do not have separate data for developing or 'low cost' countries alone. The closest approximation is imports (in physical units) from all sources as a share of imports plus production. We do know, however, that in recent years about 80 per cent of American imports of clothing and nearly half of American imports of textiles have come from the developing countries,[8] while very little is imported from other low-wage countries. It is

TABLE 7

Market Shares of Apparent Consumption in the European Community of Imports from Developing Countries and Low Wage-cost Suppliers in the Eight Highly-penetrated and Sensitive Group I Products, 1976
(per cent, based on data in physical units)

	Developing countries	Other low-cost suppliers[a]	Total	All extra-EC suppliers
Cotton yarns	14.0	8.7	22.7	24.5
Woven cotton fabrics	22.9	8.2	31.1	43.4
Woven fabrics of discontinuous synthetic fibre	13.4	4.6	18.0	28.4
Knit shirts, T-shirts *et cetera*	13.6	12.3	25.9	26.5
Sweaters, pullovers, cardigans *et cetera*	15.3	7.1	22.4	26.1
Woven trousers, slacks and shorts	19.7	5.3	25.0	30.1
Women's blouses, knit or woven	42.3	5.5	47.8	49.3
Men's woven shirts	48.7	10.2	58.9	60.1

Source: Unpublished tables from the Commission of the European Community.
[a] Greece, Portugal, Spain, Yugoslavia and centrally-planned economies.

clear that the market penetration ratios are much lower in the United States than in Western Europe in textiles, while in clothing they are higher in some products but lower in others. Thus in 1977 imports from all sources equalled 32 per cent of imports plus production of men's woven shirts, 39 per cent in the case of women's blouses and less than 11 per cent in woven cotton fabrics (the three most penetrated items in the European Community), but the ratio reached 49 per cent in sweaters, 36 per cent in women's coats, 33 per cent in body-supporting garments and 32 per cent in gloves and mittens.[9]

Penetration rates in the items discussed are exceptions. Indeed, in a wide variety of products (for example yarn, underwear and hosiery) penetration ratios in the United States in 1977, for imports from all sources were in the order of 2 per cent or less. What, then, is the average market penetration (if one may speak of averages) in textiles and clothing? According to Table 8, the developing-country share of the American market was under 2 per cent in textiles and slightly over 7 per cent in apparel, based on unadjusted import statistics. When allowance is made for the cost of shipping and tariffs, however, the penetration rate appears to have been slightly over 2 per cent in textiles and close to 10 per cent in apparel. This last figure is consistent with data on American clothing imports by weight.[10]

Market penetration by developing countries in the other developed

TABLE 8

Imports as a Share of Apparent Consumption of Textiles and Apparel in the United States, 1976

	Textiles	Apparel
Producers' shipments (million $)	38,633	32,255
Imports, f.o.b. (million $)	1,626	3,256
Imports, adjusted for shipping costs and tariffs (million $)	1,951	4,396
Exports (million $)	1,855	434
Apparent consumption based on imports, f.o.b. (million $)	38,404	35,077
Apparent consumption based on imports adjusted (million $)	38,729	36,217
Imports f.o.b. as % of consumption ($)	4.2	9.3
Imports as % of consumption ($)	5.0	12.1
Imports as % of consumption by weight	n.a	12.4
Share of imports coming from developing countries (%, in $)	43.9	79.9
Imports from developing countries as % of consumption:		
based on value of imports f.o.b.	1.9	7.4
based on value of adjusted imports	2.2	9.7
based on import weight[b]	n.a	9.9

Sources: Based on unpublished tables and documents from the United States International Trade Commission (weight data are originally from the United States Department of Agriculture) except that the share of imports coming from developing countries is from *Commodity Trade Statistics 1976*, United Nations, New York. Apparel here is practically synonymous with clothing as defined in trade statistics.

[a] These are assumed to raise the cost of imports by 20 per cent in textiles and 35 per cent in apparel.

[b] Assuming that the developing-country share of imports by weight is the same as by value; but it may be higher.

countries is explored for 1976 in Table 9. Penetration in textiles and clothing combined seems to have been higher than in the United States — judging by imports relative to gross national product (GNP) — in a number of countries, especially in Britain, West Germany and Sweden, which were followed closely by Denmark, Australia and the Benelux countries (the latter being treated here as one market). In clothing, the ratio of imports to GNP was over 60 per cent higher in the first three countries than it was in the United States; it was also higher in Denmark, Canada, Benelux, Switzerland and Norway. The penetration rate was lowest in Italy followed by France and Japan. Since tariffs are lower in the European Community, market penetration in clothing must have been roughly the same in the European Community overall as in the United States. If other low-wage exporters are included in the comparison, however, penetration would have been clearly higher in the Community.[11]

In most of the other developed countries, as in the United States, market penetration by developing countries appears to have been higher in clothing

TABLE 9

Imports of Clothing and all Textile Products from Developing Countries Per Capita and Relative to GNP, 1976

	Imports from developing countries[a]					
	Value (million dollars)		Per capita (dollars)		Per $1,000 GNP (dollars)	
	Clothing	All textile products	Clothing	All textile products	Clothing	All textile products
United States	2,888	3,609	13.43	16.78	1.70	2.13
European Community	2,692	4,339	10.37	16.71	1.87	3.01
West Germany	1,268	1,899	20.62	30.87	2.75	4.11
United Kingdom	648	972	11.39	17.08	2.77	4.16
Benelux	376	576	15.67	24.00	2.31	3.54
France	252	433	4.76	8.19	0.71	2.16
Italy	51	293	0.91	5.22	0.28	1.62
Denmark	94	148	18.43	29.02	2.42	3.79
Japan	583	1,072	5.17	9.50	1.02	1.87
Canada	424	547	18.46	23.78	2.32	3.00
Australia	165	354	13.20	25.46	1.70	3.64
Sweden	222	304	27.27	37.07	2.99	4.10
Switzerland	120	173	19.33	27.24	2.07	2.98
Austria	70	114	9.33	15.20	1.66	2.70
Norway	65	78	16.34	19.60	2.07	2.48
Total (above)	7,229	10,590	11.11	16.28	1.72	2.52

Sources: Imports from *Trade by Commodities, Series C*, OECD Secretariat, Paris, January-December 1976; population and GNP from *World Bank Atlas 1978*, World Bank, Washington.
[a] SITC 65 and 84; includes non-MFA products.

than in textiles. Indeed, over two thirds of the developed countries' combined imports of textile products from developing countries in 1976 consisted of clothing. Nevertheless, in practically all the other developed countries, textile imports were larger relative to GNP than they were in the United States — in most countries two to three times as large.[12] The highest ratio of textile imports to GNP appears to have occurred in Australia, followed by all the main economies of the European Community, closely bunched together.

On the assumption that in the other developed countries the ratio of apparent consumption to GNP was not much different from that in the United States,[13] we can infer from Tables 8 and 9 together that in most developed countries — other than Italy, France and Japan where the ratio was lower — the developing countries' share of the market in clothing must have ranged from about 8 to about 18 per cent. In textiles, the shares outside the United States must have been typically at least 4 per cent; and in the high cases, as much as 8 per cent. The ratios are probably much the same now as in 1976 because imports relative to GNP have hardly risen since then to most developed countries.[14]

Since they are based on total imports, the penetration ratios discussed above cannot be used to judge the impact of trade with developing countries on the domestic industry. Ratios would be required, based instead on net imports (imports less exports) or, for that matter, net exports. Based on net imports the list of the most highly penetrated countries would also change; for example, the European Community's penetration rates in clothing and textiles would be lower than those for the United States.

OVERALL TRENDS IN THE TRADE OF DEVELOPED COUNTRIES

Analysis of trade trends is difficult for lack of a suitable deflator or unit price index for trade in textiles and clothing. Our very imperfect solution in Table 10 is to deflate the net trade balances with the United Nations unit value index for all manufactured exports from developed countries. This index may not parallel the movement of textile and clothing prices, but it does at least provide an indication of what the trade balances were worth in terms of ability to purchase manufactured goods in general. The totals for all leading industrial countries together in Table 10 reveal the net effects of trade with low-wage countries, itself influenced by such factors as underlying competitiveness, protection, and the stage of the business cycle. (Measurement in Table 10 is also affected, of course, by relative price trends in textile products and other manufactures.) Outside competition has made few inroads on textiles, for there has been little change in the trade surplus for all the industrial countries taken together, which has remained around $3 billion in 1975 prices. By contrast, in clothing the industrial countries have witnessed a rising tide of net imports; from 1971 to 1976, the negative balance increased (in 1975 prices) from less than $3 billion to more than $8 billion.

Even though there has been practically no overall change in the position of the industrial countries in textiles, there have been losses in individual industrial countries offset by gains in others. The principal net gains have been made by the United States, which climbed from a large net deficit in 1971 when the dollar was still over-valued to a small net surplus in most years since 1974, being helped by declining relative wages and also, it is alleged, by cost advantages to the American industry created by controlled energy prices. A further chapter was added to this story in 1979 when the United States increased its exports of textile manufactures of cotton, wool and man-made fibres by over $1 billion from $2,302 million in 1978 to $3,324 million

TABLE 10

Changing Trade Balances in Textiles and Clothing in Leading Developed Countries, 1971-78
(million 1975 US dollars)[a]

TEXTILES	1971	1972	1973	1974	1975	1976	1977	1978
Japan	3,175	2,899	1,792	2,332	2,150	2,365	2,610	1,866
Italy	1,100	1,235	850	817	1,077	788	1,131	1,482
Belgium-Luxembourg	750	891	922	788	745	773	814	776
Switzerland	186	207	187	191	217	308	304	270
Netherlands	247	210	261	224	183	136	105	18
Austria	–40	–14	–44	–7	–42	–56	–52	–29
United States	–1,321	–1,185	–456	215	412	336	173	–108
West Germany	62	–186	398	762	59	297	–62	–166
France	574	367	392	160	–46	–267	–117	–211
Sweden	–416	–457	–436	–466	–419	–457	–390	–338
United Kingdom	434	305	250	152	35	42	48	–360
Australia	–589	–590	–793	–903	–522	–698	–642	n.a
Canada	–788	–910	–854	–919	–744	–881	–781	–704
TOTAL ABOVE	3,374	2,772	2,469	3,346	3,105	2,686	3,141	n.a
CLOTHING								
Italy	1,518	1,767	1,508	1,432	1,623	1,826	2,062	2,397
France	435	548	606	540	441	132	175	197
Austria	26	–1	47	–71	–105	–163	–216	–181
Australia	–89	–94	–154	–290	–211	–270	–260	n.a
Canada	–207	–294	–288	–313	–361	–605	–441	–364
United Kingdom	–208	–300	–513	–453	–531	–481	–269	–384
Belgium-Luxembourg	108	86	20	–29	–153	–273	–366	–435
Sweden	–303	–376	–359	–370	–452	–580	–608	–523
Switzerland	–355	–450	–513	–491	–431	–480	–533	–598
Japan	609	438	–278	–560	–207	–339	–372	–599
Netherlands	–632	–762	–609	–727	–806	–1,074	–1,154	–1,277
West Germany	–1,487	–2,053	–2,248	–2,363	–2,522	–2,696	–2,744	–3,048
United States	–2,291	–2,627	–2,551	–2,133	–2,122	–3,012	–3,156	n.a
TOTAL ABOVE	–2,876	–4,118	–5,332	–5,828	–5,837	–8,015	–7,882	n.a
Deflator (1975 = 100)	56.8	62	73.5	89	100	101	109	125

Sources: *Yearbook of International Trade Statistics*, United Nations, New York, for 1974, 1976 and 1978 (with imports f.o.b. in the United States and Canada, but c.i.f. elsewhere); deflator (based on *Monthly Bulletin of Statistics*, United Nations, New York, various issues through to December 1979) is from the World Bank International Trade and Capital Flows Division.

[a] Deflated with a unit price index for all developed-country manufactured exports.

in 1979 in current prices and reduced its trade deficit in these products (including clothing) by a similar amount.[15] (In 1975 prices this would be equivalent to an improvement of over $700 million.) On a much smaller scale, Italy and Switzerland also gained. Both Britain and France, however, lost about $800 million in 1975 dollars between 1971 and 1978, each of them going from a net export surplus to a net deficit, while Japan, West Germany and the Netherlands also had smaller net balances by the end of the period.

In clothing, the only industrial country that improved its trade balance over this period was Italy, which made most of its gains in 1977 and 1978, perhaps in part as a result of increasing protection in the European Community; of the other members, France and Britain gained only slight relief in 1977 and 1978, while the deficits of West Germany, the Netherlands and Belgium continued to grow. Japan moved quickly from surplus to deficit between 1971 and 1974 before halting the process in the ensuing recession; Belgium and Austria also swung into deficit in that earlier period. Elsewhere, real deficits grew although this growth was slowed by import restrictions — quickly in the United States and more slowly elsewhere.

A detailed study of net balances in trade among pairs of countries is beyond the scope of this article, but in textiles and clothing combined, in years through to the end of 1978, the European Community has regularly maintained a positive net balance in its trade with both Japan and the United States, while Japan has kept a positive balance in its trade with the United States.[16]

EFFECT OF PROTECTION ON THE EXPORTS OF DEVELOPING COUNTRIES

Table 11 gives deflated growth rates of clothing and textiles into the industrial countries of Western Europe and North America (which are the industrial regions with quota protection) in 1963-73, 1973-76 and 1976-78. The table uses as a deflator the unit price index of manufactured exports from developed to developing countries, so that the numbers help to show the real growth of low-wage countries' earnings from textile and clothing exports in terms of the industrial goods that could be bought in return. The choice of years is based in part on changes in the quota system. The first of these periods, 1963-73, was an era of rapid growth of world trade, but it was also the period of the Long Term Arrangement Regarding International Trade in Cotton Textiles (LTA), under which many quotas were imposed against developing and other low-wage countries in textiles and clothing made wholly or mainly of cotton. To add to their difficulties, technological advances occurred in textiles and associated synthetic fibre industries, which

TABLE 11

'Real Growth Rates of Imports of Clothing and Textiles from Four Groups of Countries into Industrialised Countries of Western Europe and North America, 1963-73, 1973-76 and 1976-78[a]

(per cent per annum)

	Clothing			Textiles		
Source	1963-73	1973-76	1976-78	1963-73	1973-76	1976-78
Developing countries	21.1	14.4	4.6	6.9	−0.4	2.5
Southern Europe	28.8	6.4	4.8	13.8	−0.8	5.8
Centrally-planned countries	30.5	7.9	7.1	12.5	0.1	1.6
Developed countries	11.7	−0.4	7.3	7.8	−4.5	4.4
World	15.3	5.6	6.0	8.0	−3.6	4.1

Sources: Computed from *International Trade 1978/79* (Geneva: GATT Secretariat, 1979) Tables A7 and A8, and a deflator series in 1977 prices from the World Bank International Trade and Capital Flows Division.

[a] Based on import statistics of the European Community, the European Free Trade Association, except Portugal, the United States and Canada, using as a deflator the United Nations unit value for developed-country manufactured exports to developing countries.

left most developing countries' textile industries behind. In this period, however, the low-wage countries emerged for the first time as clothing exporters on a large scale in part as a result of improved transportation and communications. Quotas under the LTA were, of course, meant to limit their exports in clothing as well as textiles, but by making garments out of the latest man-made fibre fabrics the East Asian developing countries were able to circumvent this obstacle — at least until the United States imposed its first multi-fibre quotas in October 1971. The two subsequent periods, 1973-76 and 1976-78, witnessed first a spread of multi-fibre quotas under the initial Multi-fibre Arrangement; and then a tightening in 1977-78, when quota systems in the European Community and elsewhere were made comprehensive and much stricter. Trade growth was also hurt by generally slower growth of markets, starting with the 1974-75 recession.

Table 11 reveals that in 1963-73 the growth rates of imports of clothing from developing countries were very high (above 20 per cent per annum) and higher still in clothing from centrally-planned countries and Southern Europe. Overall, the industrial countries' imports of clothing grew at about 15 per cent a year, starting from a low base, since most clothing had previously been made near the final consumer. The overall growth rate of clothing imports fell sharply in 1973-76, due no doubt to the loss of economic momentum in the industrial countries, but developing countries achieved quite a high rate of growth of export earnings, nonetheless, and outpaced rival suppliers. (Indeed, in volume the growth rates in 1973-76 were probably higher than those shown in the table, for prices of clothing and textiles traded internationally probably rose less than prices of industrial goods sold to developing countries.) In the 1976-78 period, the growth rate for imports of clothing from developing countries suddenly fell below 5 per cent, and for the first time it was less than the rate of import growth from all sources. While the period covered is too short for any certain conclusions, this setback may have been caused by increased protection.

In textiles, meanwhile, world trade expanded at 8 per cent a year between 1963 and 1973, but developing-country exports lagged behind, in part because of quotas on cotton textiles and perhaps the pace of technical change. In the second period, real earnings of all suppliers (including the developed countries) from textile exports to these industrial countries fell, while the earnings by all three groups of low-wage countries stayed the same or declined slightly. In the third period, in textiles as in clothing, developing countries suffered a lower growth rate than unrestricted rival suppliers in developed countries, again perhaps as a result of strict quotas.

Table 12 shows competing suppliers' shares in the imports of the industrial countries of Western Europe and North America in 1963, 1973, 1976 and 1978. This table confirms that the long-term down-trend in the imports of clothing of these industrial countries from each other was reversed between 1976 and 1978, when the developing countries suffered a loss in their market shares. It also confirms the stable (and low) shares of developing countries in imports of textiles.

Both Table 11 and Table 12 suggest tentatively that the recent tightening of import restrictions against developing countries has had an effect, at least initially, in slowing their exports to the protected markets. Further evidence is given in Table 13, which shows year-by-year fluctuations in total exports

TABLE 12

Competing Suppliers' Changing Shares in the Imports of the Industrialised Countries of Western Europe and North America, 1963-78
(per cent)

	Clothing				Textiles			
	1963	1973	1976	1978	1963	1973	1976	1978
Developing countries	19	31	40	38	15	13	15	14
Southern Europe	3	8	8	8	3	5	5	5
Centrally-planned countries	1	5	5	5	2	3	4	3
Japan	9	3	2	1	7	3	3	3
Other developed countries	68	53	45	48	73	76	73	75
World	100	100	100	100	100	100	100	100

Source: Computed from *International Trade 1978/79* (Geneva: GATT Secretariat, 1979) Tables A7 and A8.

TABLE 13

Exports from Developing and Developed Countries, 1970-78[a]

Year	Value in million US dollars at 1977 prices			
	Textiles		Clothing	
	Developed	Developing	Developed	Developing
1970	21,231	4,225	8,998	2,934
1971	22,877	4,515	9,593	3,796
1972	23,965	5,286	10,768	4,730
1973	26,650	6,598	10,899	5,859
1974	26,144	6,571	10,227	5,951
1975	21,506	5,102	9,946	5,832
1976	23,708	6,642	10,984	8,472
1977	24,575	6,683	12,072	8,560
1978	25,121	7,258	12,516	9,225
	Percentage changes over previous years			
1971	7.8	6.9	6.6	29.4
1972	4.8	17.1	12.2	24.6
1973	11.2	24.8	1.2	23.9
1974	−1.9	−0.4	−6.2	1.6
1975	−17.7	−22.4	−2.4	−2.0
1976	10.2	30.2	10.4	45.3
1977	3.7	0.6	9.9	1.0
1978	2.2	8.4	3.7	7.8
	Percentage changes by periods			
1970-73	7.9	11.8	6.6	25.9
1973-76	−4.0	0.2	0.3	9.6
1976-78	2.9	4.5	4.4	4.3

Sources: *Yearbook of International Trade Statistics 1978*, United Nations, New York, Special Table B; *Yearbook of International Trade Statistics 1975* (UN), Special Table B; *Monthly Bulletin of Statistics*, United Nations, New York, May 1980, Special Table D; and a deflator series in 1977 prices from the World Bank International Trade and Capital Flows Division.

[a] Measured in constant purchasing power to buy developed countries' manufactured exports to developing countries.

from developed and developing countries, deflated with the same deflator as was used in Table 11. On a world scale, developing countries were generally outpacing developed ones from 1970 up to 1976, but this was not true in every single year. The changes since 1976 do not add up to a clear trend as yet.

Trends in the deflated value of trade are not a wholly satisfactory way of judging the effects of quotas. Rather than pursue this approach further, we turn to direct evidence of import volume in physical units in the European Community and the United States.[17] Information for the European Community is given in Table 14. The Community's comprehensive system of strict quotas went into effect only in 1978, but the year 1977 was marked by

TABLE 14

European Community (Nine) Imports of MFA Products, 1976-78
(thousand tons)

	1976	1977	1978	Average growth rate 1976-78 (% per annum)
All extra-Community sources	1,449	1,333	1,430	−0.7
Five south European countries	308.4	267.3	328.6	3.2
Greece, Portugal and Spain	181.1	175.8	218.0	9.7
Turkey and Yugoslavia	127.3	91.5	110.6	−7.3
Seven leading developing countries of Asia and Latin America	437.1	417.2	419.7	−2.0
East Asian 'big three'[a]	267.8	252.6	267.3	−0.1
Four others[b]	169.3	164.6	152.4	−5.4
Four East European countries[c]	101.9	94.5	101.8	−0.1
Other 'low cost' suppliers[d]	245.6	222.0	224.9	−4.5
All 'low cost' suppliers	1,093	1,001	1,075	−0.8
of which apparel	350[e]	343	361	

Sources: Unpublished data from the Commission of the European Community, and *Trade by Commodities, Series C, Market Summaries: Imports*, OECD Secretariat, Paris, January-December 1976 and 1977.

[a] Hong Kong, South Korea and Taiwan.
[b] India, Brazil, Pakistan and Thailand.
[c] Romania, Czechoslovakia, Hungary and Poland.
[d] Computed by subtraction; includes notably East Germany, which has special access to the West German market, and People's Republic of China, which had growing exports equal to 37.1 thousand tons in 1978.
[e] Estimated on the basis of OECD import data for all clothing not of fur in 1976 compared with 1977.

discussions, threats and negotiations of impending quotas based on 1976 (if not earlier) levels of imports. Furthermore, various temporary import restrictions were imposed on an 'emergency' basis. As the table shows, measured in tons, Community imports from all outside sources dipped in 1977 and recovered only partially in 1978, remaining a little below 1976 levels. The developing countries and most other low-wage countries suffered a negative rate of export growth in the two-year period, while Greece, Portugal and Spain managed to increase their market shares by delaying agreement and taking advantage of the less effective controls against them. Preliminary reports suggest that Community imports from developing countries did increase significantly in volume in 1979 although not as much as imports from other extra-Community suppliers. By comparison, according to Community estimates, the tonnage of imports of MFA textile products from all extra-Community sources increased from 1973 through to the end of 1976 at a compound growth rate over 20 per cent a year.[18]

Table 15 shows United States imports of textiles and clothing by origin from 1971, the year in which American multi-fibre quotas were introduced, through to the end of 1979. Due to the improving competitiveness of the

TABLE 15

Imports into the United States of Textile Products by Sources, 1971-79
(million equivalent square yards)[a]

Year	Apparel	Other textiles	Total	Origin of total imports: Hong Kong, Taiwan, South Korea	Latin America	Other developing countries[b]	Japan	China	Europe and other
1971	2,098	3,853	5,951	1,762	293	383	1,691	0.2	1,822
1972	2,226	4,010	6,236	1,810	369	559	1,249	11	2,238
1973	2,090	3,035	5,125	1,523	453	635	813	33	1,668
1974	1,937	2,473	4,410	1,475	422	571	861	84	998
1975	2,077	1,751	3,828	1,599	362	432	536	141	758
1976[a]	2,578	2,560	5,138	2,134	463	708	832	153	848
1977[a]	2,466	2,511	4,977	1,970	418	552	943	91	995
1978	2,905	2,835	5,740	2,247	605	776	853	201	1,058
1979	2,671	1,977	4,648	1,930	512	812	492	231	681
Annual growth rate									
1971-78	4.8	−4.3	−0.5	3.5	10.9	10.5	−9.3	100+	−7.5
1971-79	2.7	−8.0	−3.0	1.1	7.2	9.8	14.3	100+	−11.6
Share (% per annum)									
1971	35.2	64.8	100.0	29.6	4.9	6.4	28.4	0.003	30.6
1979	57.5	42.5	100.0	41.5	11.0	17.5	10.5	5.0	14.7

Sources: *The History and Current Status of the Multifiber Arrangement* (Washington: International Trade Commission, 1978); *US General Imports*, United States Department of Commerce, for data on textile products as of December 1979 Tables 7-9; and 'Textile Trade for January-December 1979', United States Department of Commerce news release of 14 February 1980.

[a] Minor changes in conversion factors for converting garments, yarns *et cetera* into equivalent square yards took place between 1976 and 1977 when the system of product categories was changed.

[b] Defined here as Asia and Africa (except Israel and South Africa).

American industry against other industrial countries, imports from Japan and Western Europe fell in eight years to less than one third of their initial level, while imports from developing countries increased from about 40 to 70 per cent of the total, with the People's Republic of China going from zero to 5 per cent. After 1972, however, combined United States imports of textile products fell and remained below their initial 1971 level. An increase of apparel (clothing) imports at 2.7 per cent a year from 1971 to 1979 was more than offset by a fall in textile imports at 8 per cent a year.

Throughout this period, the strictest American quotas were those maintained against Hong Kong, Taiwan and South Korea; their combined exports to the United States grew in equivalent square yards at only slightly over 1 per cent per annum. By contrast, other developing countries were able to expand their exports at well over 8 per cent per annum, but for all developing countries the average growth rate was only 3.7 per cent per annum. Thus American quotas seem to have been quite effective in limiting the growth of imports from developing countries. Recent United States' desire to restrict further the quotas of Hong Kong, Taiwan and South Korea can hardly be explained by the ineffectiveness of previous quotas against them, although they have, of course, taken advantage of the scope for export increases left to them under the United States' quota system, notably by increasing the unit value of their exports to the United States.[19]

In sum, strict quotas seem to have had an effect in limiting the growth of developing-country exports. Meanwhile, however, competition goes on among the industrial countries themselves under very different rules from those of the MFA. Thus, as cost advantages shift, industrial countries continue to make inroads in each other's markets, not only in the products and processes they would have kept without protection but also in the low-skilled, low-paying processes that are maintained in the industrial countries by quotas against poorer ones.

SIX CONCLUSIONS

We would like to emphasise the following points, some of them are perhaps surprising:

1. The developed countries continue to generate the bulk of the world's exports of textiles, all textile products, and even of clothing.

2. The developing countries' industries are simply too small to threaten the extinction of textiles and clothing industries in developed countries, as is sometimes suggested.

3. Developed countries collectively enjoy a large and sustained surplus in textile trade offset by a larger and growing deficit in clothing.

4. Significant trade surpluses in textile products are enjoyed by Southern Europe and East and South-east Asia, especially in clothing. Italy is the world's largest combined net exporter of textiles and clothing and her surplus has been growing rapidly. Only Hong Kong, South Korea, Taiwan and India have large trade surpluses among developing countries.

5. Outside a relatively narrow range of products, import penetration by developing countries is modest. Developing countries' exports of clothing seem to have taken between 8 and 18 per cent of the overall market for clothing in developed countries and much less (directly) for textiles. Moreover, the impact of trade on the size of the industries overall is much less than these figures suggest because of exports, especially of textiles.

6. Because of protection, developing countries' exports of textiles and clothing have no longer outstripped the growth of all trade in textiles and clothing since 1976. This effective control dates back to 1972 in the United States and to 1977 in the European Community.

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1. This article is based on a paper given at a conference on 'International Trade in Textiles and Clothing under the Multi-fibre Arrangement', sponsored by the International Chamber of Commerce and the Trade Policy Research Centre, held in Brussels on 27-29 May 1980.

The views and interpretations in this article are those of the authors and should not be attributed to the World Bank, to its affiliated organisations or to any individual acting in their behalf.

For a discussion of a number of other issues, see Donald B. Keesing and Martin Wolf, *Textile Quotas against Developing Countries*, Thames Essay No. 23 (London: Trade Policy Research Centre, 1980). The underlying research was done in part under a World Bank research project (RPO 671-68) on 'Key Institutions and Expansion of Manufactured Exports'.

2. Here and throughout the article the trade statistics for developing countries are based on the United Nations definition, which includes the member countries of the Organisation of Petroleum Exporting Countries (OPEC), but excludes Israel, South Africa, all of southern Europe except Turkey and centrally-planned economies such as the People's Republic of China.

3. In the market economies as a group, exports of textiles and clothing totalled $46.5 billion in 1976 according to United Nations trade matrices, while gross output from the countries shown in Table 2 alone was $233 billion. Here and in the following tables, the latest year for which reasonably complete data are available is taken, even though this is a different year from one table to another.

4. The share of the centrally-planned economies in world fibre consumption in 1976 was 28 per cent, according to Vincent Cable, *World Textile Trade and Production*, EIU Special Report No. 63 (London: Economist Intelligence Unit, 1979) Table 2. Taking into account quality and the mix of fibres and products, the centrally-planned economies' share of world output in recent years was probably around one fifth, but their share of world trade based on United Nations matrices has been less than one tenth.

5. Value added and gross output are both inflated in some countries compared with others as a result of protection. Thus Hong Kong's value added might well be larger than that of Brazil or Canada if all products were valued in these countries at world trade prices. Among centrally-planned economies, the People's Republic of China, East Germany and Poland appear to be next in output after the Soviet Union, but not necessarily in that order.

6. According to United Nations trade matrices, in 1977 centrally-planned economies of Eastern Europe and the Soviet Union together exported to the market economies clothing valued at $740 million and achieved a net export surplus in this trade of $243 million, but in

textiles they had a net deficit in this trade of $891 million. See *Yearbook of International Trade Statistics 1978*, United Nations, New York, Vol. 1, Special Table B.

7. For further discussion of the measurement of import penetration, see Keesing and Wolf, *op. cit.*, Appendix, pp. 205-11.

8. As shown in Table 8 of this article.

9. These figures are computed from data in *US Production Imports and Import/Production Ratios for Cotton, Wool and Man-made Fiber Textiles and Apparel* (Washington: United States Department of Commerce, 1979).

10. More recent data suggest a rise in this ratio through to the end of 1978, although it must have fallen again in 1979. See Table 15 and Keesing and Wolf, *op. cit.*, Table A.1.

11. In 1976 imports of the European Community from Greece, Portugal, Spain, Yugoslavia, Israel, Romania and Malta totalled $1,269 billion in clothing and $1,897 million in all textile products compared with $105 million and $144 million respectively imported from these countries by the United States. See *Trade by Commodities*, OECD, Paris. Inclusion of these countries would thus raise the Community penetration ratio by 47 per cent in clothing, 38 per cent in textiles and 44 per cent in all textile products.

12. Figures for textiles alone can be computed throughout Table 9 by subtracting the figures for 'clothing' from those for 'all textile products'.

13. It is our impression, based in part on data in *Yearbook of Industrial Statistics* (UN) for various years, that, in cross-country comparisons, as GNP per person gets lower, gross output and thus consumption of textile mill products relative to GNP generally either stays much the same or rises slightly, while the share of income spent on factory-made clothing declines until, at very low income levels, the industry nearly disappears. This implies that the shares of developing-country exports in consumption of clothing may be somewhat higher in many other developed countries — notably those like Japan and Italy with relatively modest living standards — than one would calculate in the United States. OECD data, however, indicate that the percentage of disposable income spent on clothing (including shoes and, presumably, fabrics made into clothing at home) was 8 per cent in the United States and West Germany, only a fraction of a point lower in Sweden, France, Belgium and Finland and about one percentage point higher in Britain, Italy, Japan, Canada and Norway; thus the ratio was nearly the same in all the major industrialised countries. See *Textile Industry in OECD Countries, 1977* (Paris: OECD, 1978) p. 22. The only OECD countries with lower ratios in 1977 were Switzerland (5.1 per cent) and Denmark (6.5 per cent) while Greece had the highest ratio (12.4 per cent). These data suggest, however, that differences in ratios of consumption to GNP are not sufficiently large to invalidate our procedure.

14. The main exceptions have been Japan, where total textile and clothing imports rose in current value from $1,702 million in 1976 to $2,734 million in 1978 bringing the penetration ratio more into line with most other developed countries and the United States, where clothing imports rose considerably above 1976 levels in 1978 and then fell again in 1979, as shown in Table 15.

15. Imports of these products rose in current prices from only $6,302 million to $6,307 million, according to the United States Department of Commerce, Washington, news release of 14 February 1980.

16. See, for example, *Yearbook of International Trade Statistics 1978* (UN) Vol.I, Special Table B.

17. As discussed further in Keesing and Wolf, *op. cit.*, developing-country exports also suffered setbacks from stricter protection starting in the 1976-78 period in Canada, Australia, Sweden, Austria, Norway and Finland. Some indication of the effects in the first four countries can be gleaned from their 'real' trade balances in Table 10.

18. This figure is based on an internal document of the Commission of the European Community. The reliability of this series is doubtful since some member countries did not report exports in tons as early as 1973.

19. For evidence that the unit value of American imports of apparel per 'equivalent square yard' increased in six years by 89 per cent relative to the American wholesale price index for apparel.