

## MANUFACTURED EXPORT PERFORMANCE OF THE HIGHLY INDEBTED COUNTRIES

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### I. INTRODUCTION

THIS paper looks at the shifts in trade in manufactures in the context of the debt problem. In particular, we are concerned in looking at the behavior of manufactured exports from the highly indebted countries (HICs) to the industrial countries.<sup>1</sup>

Section II starts with a brief overview of the economics of outward-oriented economies and from here, it goes on to analyze the recent trade policy liberalization measures introduced by the HICs. Section III takes a look at the export performance of the HICs paying particular attention to manufactures. This discussion is accompanied with an assessment of the protectionist trends of industrial countries during the 1980s. Finally, Section IV provides a simulation of the potential increase in export earnings contingent upon a removal of the early 1980s industrial countries' import barriers against manufactures coming from the HICs.

### II. CHANGES IN TRADE AND EXCHANGE RATE REGIMES OF THE HICs

#### A. *A Note on Outward-Oriented Development Strategies*

A stylized fact of modern economic growth is that successful economic experiences have been systematically associated with outward-oriented development policies. These policies have at least three major components:

- a realistic exchange rate;
- trade policies that do not protect nor discriminate to any significant extent among economic sectors; and
- factor market policies that allow a high degree of mobility.

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An earlier version of this paper was presented at an international symposium on "North-South Manufactures Trade: Factors for Recent Development," held at the Institute of Developing Economies, Tokyo, March 23–24, 1988. The views expressed in this paper are those of the authors and should not be attributed to the World Bank.

<sup>1</sup> The country list of highly indebted countries follows the World Bank. It includes Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Côte d'Ivoire, Ecuador, Jamaica, Mexico, Morocco, Nigeria, Peru, Philippines, Uruguay, Venezuela, and Yugoslavia.

Theory suggests that these sets of policies improve the allocation of resources, and empirical research has shown that under competitive pressures, these policies have improved the employment and growth performance of developing countries [4].

In contrast, in general, inward-oriented economies have shown a poor economic performance. There are several reasons why this might be the case. Protectionist policies:

- reduce competition and worsen resource allocation;
- put a barrier on the extent to which economies of scale can be internalized by the country;
- are an incentive for rent-seeking and other directly unproductive activities; and
- when implemented with nontariff barriers reduce the efficacy of macropolicy.

The way by which outward-oriented economies actually improve economic performance can be measured in many ways, one of them being a higher export performance [1]. Thus, the degree of economic success of outward-oriented policies will be determined by the degree of access allowed by other economies to the exports of these countries adopting these policies, and by the way open trade policies and higher import competition promote productivity growth.

Thus, in evaluating the recent export performance of the HICs, we are interested in knowing the extent to which they are outward-oriented.

#### B. *Changes in the Trade and Exchange Rate Regimes of the HICs*

One of the most spectacular policy changes of the 1980s which has gone quite unnoticed is the dramatic shifts in the trade and exchange rate regimes of the HICs. Table I shows average tariff rates and incidence of NTBs during and after the debt crisis erupted and spread between 1982 and 1984.

It is seen that during these years, nine out of seventeen countries introduced import licensing regimes covering 100 per cent of imports and domestic production. While this was done with the purpose of saving foreign exchange for debt service, the new import regimes had a severe and negative impact on resource allocation. An idea of the importance of this is given by the extent of import compression suffered by the HICs. Between 1980 and 1982, the average annual value (in current dollars) of imports of the HICs was U.S.\$132.9 billion. In contrast, during 1983–85 this figure was U.S.\$89.0 billion, i.e., a reduction of 33 per cent.

This historically high import compression was accompanied by declining exports. Paradoxically, the ability of the HICs to generate foreign exchange resources to meet debt-service payments was severely hampered by the short-run policies introduced to deal with the debt crisis.

Since the crisis erupted, the HICs have been facing continuing balance of payments difficulties. In spite of this, they have introduced important trade liberalization measures. Table I shows that a majority of HICs have reduced quite drastically the extent of import licensing procedures. The exceptions here are Brazil, Peru, and Yugoslavia which still control all of their imports with licenses.

TABLE I  
SUMMARY OF TRADE POLICY INDICATORS OF HICs  
DURING AND AFTER THE PAYMENTS CRISIS

	Average Tariff Rates (%)		Incidence of NTBs <sup>a</sup> (%)		Ratio of 1986 Real Exchange Rate to Highest Rate in 1980s
	During	After	During	After	
Argentina <sup>b</sup>	D	28(W)	100(tl)	63(tl)	0.44
Bolivia	H	20	100(M)	L	0.32
Brazil	H	51(U)	100(M)	100(M)	0.73
Chile <sup>c</sup>	35	15	L	L	0.49
Colombia	61(U)	61(U)	66(M)	50(M)	0.59
Costa Rica	54(U)	24(U)	L	2(M)	0.72
Côte d'Ivoire	n.a.	n.a. <sup>d</sup>	47(M)	D	0.87
Ecuador	51(U)	42(U)	29(tl)	16(tl)	0.64
Jamaica	n.a.	D	100(P)	9(P)	0.62
Mexico	25(W)	<25(W)	100(M)	39(M)	0.53
Morocco	36(U)	23(U)	100(tl)	67(tl)	0.71
Nigeria	19(R)	n.a.	100(tl)	D	0.48
Peru	57(U)	>57(U)	100(M)	100(M)	0.87
Philippines <sup>e</sup>	D	29(U)	100(tl)	<100(tl)	0.71
Uruguay	46(U)	D	D	L	0.56
Venezuela	n.a.	34(U)	50(tl)	<50(tl)	0.64
Yugoslavia <sup>f</sup>	n.a.	12(U)	n.a.	50(M)	0.72

Sources: World Bank internal documents.

Note: D: declining, H: high, L: low, (U): unweighted, (W): import weighted, (M): import coverage, (P) product coverage, (tl): tariff-line coverage, <: lower than, >: higher than, (R): tariff revenues as a proportion of imports.

<sup>a</sup> A value of 100 for the NTB coverage is valid for all three indicators (tl), (M), and (P).

<sup>b</sup> The recent estimate of incidence of NTBs does not include the liberalization of the steel and petrochemical industries implemented in early 1988.

<sup>c</sup> Only a few variable levies protecting cereals, sugar, and dairy products remain in place.

<sup>d</sup> Because the dismantling of NTBs will be accompanied by the introduction of tariff surcharges, it is expected that the maximum and average tariff rates will be increasing.

<sup>e</sup> Direct foreign exchange allocation was the main NTB introduced at the time of the debt crises.

<sup>f</sup> There is also a generalized tariff surcharge that up to 1987 was 7 per cent; since then it has been raised to 10 per cent.

In some of the HICs the extent of trade liberalization measures has been significant. For example, in Bolivia, Chile, Costa Rica, Ecuador, Jamaica, Mexico, and Uruguay, there has been an important dismantling of NTBs. Moreover, Bolivia and Chile have introduced uniform tariffs while Jamaica and Mexico have rationalized their tariff structures.

These countries have also devalued and liberalized their exchange rate regime. For example, Bolivia has gone from a regime of tight controls in which the black

market exchange rate was more than fifteen times higher than the official rate, to one where foreign exchange is auctioned. Jamaica also auctions its foreign exchange. Finally, Chile has a unified exchange rate regime and Table I shows that Mexico has devalued significantly during the 1980s.

Vis-à-vis other HICs, these four countries have adopted quite liberal trade and exchange rate regimes. Nevertheless, except for Brazil, Peru, and Yugoslavia, Table I shows that other HICs have also devalued and dismantled part of their import licensing regimes. Thus on average, we would expect the export performance of the HICs to show a tendency to improve. This is more so given the fact that other microeconomic policies adopted (but not analyzed in this paper) by the HICs in recent years—such as drawbacks and temporary admission programs—have also helped to improve the international competitiveness of the HICs exports.

### III. ASSESSING THE RECENT EXPORT PERFORMANCE OF THE HICs

#### A. *The Global Picture*

Ideally, we would like to provide a convincing test of the question posed in the previous section, namely, that countries following outward-oriented trade regimes have had a better export performance than those that have remained inward-oriented. For several reasons this cannot be done. First, none of the HICs has followed outward-oriented strategies for a long period of time. It is true that Chile has been under a uniform tariff regime for several years. Nevertheless, it is also true that its real exchange rate has been very unstable and this has affected this country's export performance (Table I). On the other hand, Bolivia rationalized its macro and trade policies only in 1986. A very short period of time has elapsed since then. The same is true of the trade policy changes of the other HICs.

Second, as mentioned earlier, we have focused attention only on trade and exchange rate policies. Other policies such as factor market distortions which could have an impact on export performance are not discussed in this paper. Finally, in assessing the export performance of the HICs, we must recall that the great majority of them are primarily exporters of commodities. It is well known that the prices of these products have fluctuated importantly during the 1980s.

Having this in mind, we will provide a perspective on the trade and export performance of the HICs. Table II shows the HICs balance of trade figures from 1970 through 1987. It is seen how these countries went from a deficit situation during 1980–82 to a surplus since then.

During the early years of the debt crisis, the trade surplus was engineered with import-contraction policies which included a real devaluation and the introduction of stringent import barriers (Table I).

It is well known that under free trade and a tariff-protection regime, a real devaluation will increase exports. Nevertheless, if as in the case of the HICs, the real devaluation is accompanied with the introduction of higher import barriers, the net change in the anti-export bias of the economy and therefore on international competitiveness remains unknown.

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TABLE II  
HICs BALANCE OF TRADE, 1970-87

Exporter	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987
Total	-1,008	-12,666	-7,187	-16,689	-4,673	19,513	35,799	32,677	11,668	17,797
Argentina	85	-984	-2,518	-287	2,288	3,332	3,522	4,582	2,129	492
Bolivia	31	-130	277	-5	250	166	233	72	-146	-264
Brazil	-106	-4,909	-4,817	-780	-888	5,114	11,768	11,265	6,841	11,003
Chile	254	-84	-1,480	-2,495	-407	650	-120	523	751	599
Columbia	-115	-30	-718	-2,041	-2,350	-1,886	-1,015	-413	1,128	941
Costa Rica	-86	-200	-565	-264	-68	-126	-124	-122	-29	-234
Côte d'Ivoire	82	55	127	142	104	278	1,210	1,223	1,210	716
Ecuador	-83	-11	265	261	554	738	865	1,298	368	-575
Jamaica	-190	-339	-213	-502	-634	-818	-416	-575	-368	-561
Morocco	-196	-1,004	-1,779	-2,032	-2,257	-1,535	-1,735	-1,684	-1,376	-1,032
Mexico	-1,255	-3,579	-4,210	-4,120	6,189	14,289	12,408	8,114	4,034	7,923
Nigeria	169	1,951	9,326	-3,031	-3,906	-1,884	2,527	3,676	-697	1,341
Peru	423	-1,089	836	-554	-428	293	935	943	-320	-475
Philippines	-151	-1,558	-2,507	-2,756	-3,242	-2,977	-1,041	-853	-624	-1,468
Uruguay	-0	-135	-593	-416	-86	258	149	147	268	59
Venezuela	1,328	3,006	7,466	7,019	3,555	5,861	8,373	5,944	-838	372
Yugoslavia	-1,195	-3,627	-6,087	-4,828	-3,348	-2,241	-1,741	-1,463	-665	-1,041

Source: World Bank BES Data Base (BESD).

The experience of the HICs shows that comparing 1983–85 with 1980–82, all seventeen HICs went through a period of import contraction. Most significantly, in thirteen of the seventeen HICs the import contraction was accompanied with export contraction. Nevertheless, as we shall discuss, the decline in export performance should not necessarily be attributed to the increase in NTBs.

Table II also shows that the trade surplus of the HICs has declined during 1986 and 1987. There is evidence, particularly for 1987, that both imports and exports of the HICs are increasing. Nevertheless, unlike the immediate years following the debt crisis the trade behavior among the HICs is still very varied. Comparing 1986–87 with 1983–85, the data show that in only five countries—Brazil, Chile, Costa Rica, Jamaica, and the Philippines—have imports and exports expanded simultaneously. Thus, although there has been a move towards outward orientation, many HICs continue with low imports and exports.

As already stated, in addition to the HICs' own policies, there are other external forces that during this period affected their trade performance. Most importantly have been the international price movements of commodities; industrial countries' protectionism during the 1980s and the import growth of industrial countries. In order to focus the analysis, in what follows, we will concentrate attention on the performance of manufactured exports of the HICs to industrial countries. Before doing this, we will provide a brief comment of industrial countries protectionism during the 1980s.

#### *B. Industrial Countries' Protection Policies in the Manufactures Sector during the 1980s*

It is difficult to assess the overall net movement of protection in the developed countries in the 1980s. On the whole the tariff changes appear to have been positive, but the situation with respect to NTBs has deteriorated.

The basic tariff situation of the industrial countries has improved in the 1980s with the progressive implementation of the Tokyo Round rates. The MFN tariff reductions following the Tokyo Round brought industrial countries' tariffs on manufactures down from 7.0 to 4.7 per cent [3]. There was some advance implementation of those rates and some countries, especially Japan, have made unilateral—although not binding—cuts in their rates beyond what was agreed in the Tokyo Round. However, there remains a pattern of high rates against the key exports of the developing countries. In the manufactures sector we have calculated that the applied rates against developing countries were 4.5 per cent in the EEC (compared with 3.3 per cent against other industrial countries), and 7.6 per cent in the United States (compared with 3.9 per cent against other industrial countries). Japan is almost unique among the industrial countries in that its rates against developing countries—2.9 per cent—are lower than those against other industrial countries (3.9 per cent). The further processing of the developing countries primary products remains handicapped by tariff escalation [14].

This bias in tariff protection against the developing countries manufactured exports occurs despite the generalized system of tariff preferences (GSP) which was intended to facilitate the diversification and expansion of developing countries'

TABLE III  
 PERCENTAGE OF TRADE AFFECTED BY HARD-CORE NTBS IN EEC, JAPAN, AND  
 U.S.A. AGAINST MANUFACTURED EXPORTS OF HICs, 1986

(%)

SITC	Product Description	EEC		Japan		U.S.A.	
		HICs	Industrial Countries	HICs	Industrial Countries	HICs	Industrial Countries
	All manufactures	31.9	11.9	13.2	16.3	22.6	19.3
512	Organic chemicals	0.0	0.6	24.3	32.8	0.0	0.0
541	Medicinal, pharm. prod.	0.0	0.0	56.1	45.0	0.0	0.0
561	Fertilizers manufactured	0.5	1.8	100.0	100.0	0.0	0.0
581	Plastic materials, etc.	22.7	7.1	0.0	0.0	0.0	0.0
599	Chemicals, n.e.s.	1.5	4.5	17.0	7.9	0.0	0.0
611	Leather	20.0	18.8	50.7	74.5	0.0	0.0
613	Furskins tanned or dressed	0.0	0.0	100.0	100.0	0.0	0.0
629	Rubber articles, n.e.s.	29.7	7.3	0.0	14.5	0.0	0.0
632	Wood manufactures, n.e.s.	7.5	0.5	0.0	0.0	0.0	0.0
641	Paper and paperboard	29.9	7.5	0.0	0.0	0.0	0.0
651	Textile yarn and thread	84.1	3.0	13.5	8.3	73.3	12.3
652	Cotton fabrics, woven	84.5	0.8	100.0	66.0	99.6	61.1
653	Woven textiles noncotton	73.8	1.4	73.7	86.3	30.2	4.3
655	Special textile, etc. prod.	24.8	0.0	24.8	64.5	1.3	33.4
656	Textile etc. products, n.e.s.	96.2	11.9	0.0	0.0	86.8	16.2
657	Floor covr., tapestry, etc.	4.6	5.8	0.0	0.0	87.7	16.6
662	Clay, refr. const. mtrl.	3.2	10.1	99.9	95.2	0.0	0.0
666	Pottery	36.9	17.5	0.0	0.0	0.0	0.0
671	Pig iron, etc.	35.6	17.8	0.0	0.0	0.0	0.0
672	Iron and steel primary forms	30.6	86.8	0.0	0.0	100.0	83.2
673	Iron and steel shapes	39.1	67.5	0.0	0.0	89.9	79.9
674	Iron and steel univ. plate, sheet	62.8	79.8	0.0	0.0	90.7	66.8
675	Iron and steel hoop, strip	1.8	26.4	0.0	0.0	99.0	86.0
677	Iron and steel wire, excl. wire rod	87.1	14.2	0.0	0.0	97.4	71.7
678	Iron and steel pipes, tubes, etc.	33.6	9.2	0.0	0.0	98.5	81.6

TABLE III (Continued)

SITC	Product Description	(% )					
		EEC		Japan		U.S.A.	
		HICs	Industrial Countries	HICs	Industrial Countries	HICs	Industrial Countries
693	Wire products nonelec.	0.0	0.0	0.0	0.0	60.7	55.9
694	Steel, copper nails, nuts, etc.	0.0	0.1	0.0	0.0	55.9	7.9
711	Power gen. machy. nonelec.	49.1	2.4	0.6	38.2	0.0	0.0
714	Office machines	14.9	0.2	0.0	0.0	0.0	0.0
718	Machs. for spcl. industry	15.0	5.4	0.0	0.0	0.0	0.0
723	Electr. distributing eqpt.	8.4	4.1	0.0	0.0	0.1	0.1
729	Electrical machinery, n.e.s.	22.9	6.7	0.0	0.3	0.0	0.0
734	Aircraft	6.2	1.5	100.0	71.6	0.0	0.0
735	Ships and boats	29.4	8.7	0.0	0.0	0.0	0.0
841	Clothing not of fur	84.7	9.7	0.0	0.0	14.8	2.6
842	Fur, etc. clothes, prod.	0.0	0.0	100.0	99.8	0.7	0.3
851	Footwear	5.8	5.1	12.0	19.3	0.0	0.0
864	Watches and clocks	3.6	29.5	0.0	0.0	0.0	0.0

Source: UNCTAD Data Base on Trade Measures.

Note: Trade above U.S.\$10 million and share affected by NTBs above 5 per cent in one market.

manufactured exports.<sup>2</sup> The last decade has seen the extension of the scope of the schemes, mainly into agriculture, but there has also been some erosion of preferences as MFN rates decline. GSP has been eliminated for some products under the competitive needs provisions. We are seeing a number of countries being graduated out.<sup>3</sup>

Table III shows the pattern in the use of hard-core NTBs against the HICs and other industrial countries by the EEC, Japan, and the United States in 1986.<sup>4</sup> As may be observed, the situation with respect to NTBs is similar to that for tariffs in the EEC and the United States, with a greater share of manufactured imports from the HICs being subject to restraint than imports from other industrial countries. In Japan the situation appears reversed. In the EEC the sectors with the greatest share of trade affected by NTBs are: various textile products, iron

<sup>2</sup> See [8].

<sup>3</sup> For a discussion of GSP, see [6] and references therein.

<sup>4</sup> The measure used is the percentage of trade affected by NTBs. Tariff-line data on NTBs from the UNCTAD Data Base on Trade Measures is linked to trade data collected by the World Bank directly from calculation. The measure has a downward bias in that the more restrictive the NTB the lower the weight. "Hard-core" NTBs include variable levies, quantitative restrictions, including quantitative voluntary export restraints, and the MFA.



TABLE IV  
INCIDENCE OF ANTI-DUMPING ACTIONS AGAINST THE HICs,  
1980-81 AND 1982-86

A-D Actions Taken by	A-D Actions against the HICs as a % of			
	Total A-D Actions		A-D against LDCs	
	1980-81	1982-86	1980-81	1982-86
Australia	2.8	4.5	7.7	14.9
Canada	4.2	6.6	20.0	27.3
EEC	5.6	16.3	26.7	49.3
U.S.A.	5.6	18.1	25.0	42.1
Total	4.1	11.4	15.2	34.1

Source: Constructed from GATT files.

and steel wire, and clothing other than of fur. In Japan the sectors most affected are fertilizers, rubber articles, various textile items, pottery, aircraft, and fur clothing. In the United States the most affected sectors are: various textile items and various iron and steel items.

With respect to changes in the 1980s, UNCTAD [13, Part I] estimates that the share of manufactures trade affected by hard-core NTBs has expanded by some 9 per cent. The situation has also tightened somewhat in the basic iron and steel sector against the developing countries, more than even against other developed countries. Voluntary export restraints became the most important NTB in the 1980s and are particularly important in the textiles and iron and steel sectors [5]. In terms of changes, the spread in the use of NTBs against the HICs (and developing countries generally) occurred in the United States and the EEC, with no significant movement either way in Japan. The products most affected by increased application of hard-core NTBs were: in the EEC, clothing, leather, and electrical machinery; and in the United States, iron and steel products.

The changes in the use of "hard-core" NTBs have been significant but the 1980s has seen dramatic growth in the use of administered protection, such as countervailing [2] [10] anti-dumping, against the developing countries, particularly against the HICs by Australia, Canada, the EEC, and the United States. There has been a substantial growth in the use of these procedures during the 1980s, but what stands out is that the number of cases against the HICs has grown much more than the average—growing by more than three times in the cases of the EEC and the United States.

Table IV shows numbers of the incidence of industrial countries' anti-dumping actions against the HICs for two periods 1980-81 (before the debt crisis) and 1982-86. The figures show that the proportion of total anti-dumping actions<sup>5</sup> taken against the HICs almost tripled during the recent years of continuing

<sup>5</sup> An action might involve many countries and many firms. Nogués [10] shows that the incidence of U.S. countervailing actions against the highly indebted Latin American countries is even higher than in anti-dumping investigations.

balance-of-payments problems. Regrettably, this behavior of the creditor countries has occurred during a period when the majority of HICs have been making efforts to adjust and service their debts.

What is the significance of these cases? Some results from Patrick Messerlin's recent study of the EEC are foreboding. Messerlin [9] shows that in the five years following the initiation of an action in the EEC, the *quantity* of imports declined by 50 per cent. This is important evidence on the chilling effect of this type of legal administrative action against imports.

### C. *Industrial Countries' Imports of Manufactures from the HICs*

A significant factor in compounding the crisis in the 1980s is the high concentration of the HICs in exporting primary commodities. Some 73.9 per cent of the HICs exports in 1987 were commodities, and the HICs include a number of major petroleum exporters. They are also major exporters of nonferrous metals and a range of food products. We have estimated that if 1979–81 prices for the main commodity exports had prevailed through to 1986 then the HICs' export revenues would have been a net U.S.\$4.7 billion higher than they were in 1986 (some U.S.\$10 billion higher on the basis of 1980 prices). For a number of these commodities, e.g., beef and sugar, the reasons for the price declines were policy-related, encompassing both domestic protection in all major industrial country markets as well as subsidy war between the United States and the EEC. On average the prices of metals products and petroleum were higher in 1986 than the average 1979–81 level (the positive impact of these changes was taken into account in arriving at the net figure).

Where improvements occurred in the underlying trade data they were largely due not so much to any reversal in commodity price trends<sup>6</sup> as to the very fast growth of manufactured exports, especially to the industrial countries, their major markets. While fuel and nonfuel exports have stagnated throughout the 1980s (in volume and value terms), the manufactures sector has grown apace. Industrial countries' imports of manufactures from the HICs almost doubled, from US\$15.3 billion in 1980 to U.S.\$30.3 billion in 1986 (Table V). This table also demonstrates the diversity of performance of the individual HICs and it is clearer here than in Table II that some countries achieved their improved trade balances by export expansion, such as the impressive trade performances, in value terms, of Brazil and Mexico. However, the percentage increments from 1980 to 1986 are also important for Bolivia, Costa Rica, Jamaica, Morocco, and the Philippines, all of which undertook significant trade reform in the period (Table I). In only three countries, Argentina, Ecuador, and Nigeria, did industrial countries' imports of manufactures declined.

Table VI shows that on average and in relative terms, the HICs performed as well as the Asian tigers (Hong Kong, the Republic of Korea, Singapore, and Taiwan); between 1980 and 1986 industrial countries' imports of manufactures from the HICs as well as from the Asian tigers doubled. Nevertheless, the performance in different industrial country markets has not been similar. On the one hand, we

<sup>6</sup> The effect of the U.S. drought on international prices is very recent and therefore has not been incorporated in the paper.

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TABLE V  
INDUSTRIAL COUNTRIES' MANUFACTURED IMPORTS FROM INDIVIDUAL HICs, 1980-86  
(U.S.\$ million)

Exporter	1980	1981	1982	1983	1984	1985	1986	Change 1980-86	
								Value	%
All HICs	15,288.5	16,554.2	17,256.0	19,596.8	25,399.9	26,733.4	30,309.3	15,020.8	98.2
Argentina	842.0	878.1	958.6	762.6	767.1	841.2	810.7	-31.3	-3.7
Bolivia	25.9	28.8	30.3	40.4	56.9	65.2	82.7	56.8	219.3
Brazil	3,493.8	4,001.5	4,353.2	4,836.2	7,158.2	7,307.2	7,417.9	3,924.2	112.3
Chile	149.8	139.1	152.7	203.5	196.8	207.2	257.0	107.2	71.6
Colombia	357.6	321.5	285.5	354.5	402.8	399.6	514.9	157.3	44.0
Costa Rica	82.0	81.9	95.7	143.0	149.7	181.7	244.1	162.1	197.6
Côte d'Ivoire	95.0	76.6	77.0	82.8	78.9	86.3	137.5	42.5	44.8
Ecuador	44.0	24.6	30.6	30.7	32.2	34.3	39.3	-4.7	-10.6
Jamaica	26.5	41.2	31.0	33.8	48.6	99.9	155.1	128.6	485.9
Morocco	409.9	362.8	480.1	506.6	548.6	604.3	820.3	410.3	100.1
Mexico	4,466.7	5,289.3	5,409.6	6,491.1	8,772.3	9,694.0	11,322.7	6,855.9	153.5
Nigeria	89.4	67.0	66.1	77.9	61.1	54.3	73.2	-16.2	-18.2
Peru	218.2	242.0	284.0	276.3	306.3	276.3	264.5	46.3	21.2
Philippines	1,859.7	2,127.9	2,075.4	2,159.6	2,659.7	2,431.7	2,472.5	612.8	32.9
Uruguay	290.5	312.4	389.6	493.6	669.4	646.3	599.9	309.4	106.5
Venezuela	249.1	263.1	207.4	456.0	500.9	400.6	484.9	235.8	94.7
Yugoslavia	2,588.4	2,296.4	2,329.1	2,647.9	2,990.2	3,403.3	4,612.2	2,023.8	78.2

Source: U.N. COMTRADE Data Base.

TABLE VI  
INDUSTRIAL COUNTRIES' IMPORTS OF MANUFACTURES  
FROM HICs AND ASIAN COUNTRIES, 1980-86

	(U.S.\$ billion)						
Importers and Exporters	1980	1981	1982	1983	1984	1985	1986
EEC							
HICs	5.6	4.8	5.3	5.3	5.8	6.3	6.1
Asian tigers	12.8	10.9	9.8	10.7	10.9	10.6	16.0
Japan							
HICs	0.7	0.8	0.8	0.8	1.1	0.9	1.0
Asian tigers	4.2	4.8	4.5	4.4	5.5	5.6	7.6
U.S.A.							
HICs	7.8	9.7	9.9	12.0	16.4	17.5	19.0
Asian tigers	18.1	21.2	22.9	28.9	38.0	40.4	47.8
Total industrial markets							
HICs	15.3	16.6	17.3	19.6	25.4	26.7	30.3
Asian tigers	39.6	42.1	42.8	49.3	61.2	63.0	79.5

Source: U.N. Trade Data System.

Note: Asian tigers refer to Hong Kong, Korea, Singapore, and Taiwan.

have the EEC and Japan whose imports of manufactures from the HICs remained quite stagnant during the 1980s. This contrasts with the positive import growth from the Asian tigers. On the other hand, it has been mainly in the United States where the HICs were able to more than double their manufactured exports.

Clearly then, the huge increase in U.S. imports during the 1980s, attributed mainly to expansionary fiscal policies, has been a key factor in providing some element of dynamism to the economies of the HICs. A majority of HICs are from Latin America, for which the United States has been the most important trading partner. A big question for the near future is whether the HICs will be able to maintain this dynamic element while the United States reduces its trade deficit. The initial signs are not encouraging. During 1985 and 1986 manufactured imports of the EEC and Japan from the HICs have stagnated, while those coming from the Asian tigers have increased significantly.

A final comment regarding the product composition of manufactured exports by the HICs. Table VII gives a breakdown of manufactures exports, illustrating that strong growth, while not a phenomenon confined to one or two sectors, was not uniform across sectors. Sectors with substantial additional exports in value terms and where the growth seemed to be shared by an important subgroup of HICs include: nonmetallic mineral manufactures, iron and steel, power generating equipment, electrical machinery, and clothing.

The difficulties arising from the commodity concentration of the HICs and, conversely, the gains made across a range of manufactures should not be taken as a prescription for planned "diversification" or "targeting" in the manufactures sector. With some exceptions, the sectors where export growth was most marked were either based on the processing of domestic resources or in low labor cost

TABLE VII  
INDUSTRIAL COUNTRIES' IMPORTS FROM HICs 1980-86, BY SECTOR  
(U.S.\$ million)

SITC	Industry	1980	1981	1982	1983	1984	1985	1986	Change 1980-86		No. of Countries for Which This Item in Top Five
		15,288.5	16,554.2	17,256.0	19,596.8	25,399.9	26,733.4	30,309.3	15,020.8	98.2	
	Total manufactures										
51	Organic chemicals	482.2	524.3	496.3	823.5	1,109.2	1,132.7	816.2	334.0	69.3	4
52	Inorganic chemicals	375.9	404.9	428.6	403.7	469.7	439.3	409.3	33.4	8.9	2
53	Dyes, tanning, colour mtrl.	38.6	48.7	42.5	45.8	56.4	58.6	64.2	25.6	66.2	1
54	Medicinal, pharm. prod.	100.8	108.7	95.5	98.0	108.6	121.2	142.5	41.8	41.4	0
55	Perfume, cleansing, etc. prod.	102.1	82.1	70.4	83.3	110.2	124.1	136.8	34.7	34.0	0
56	Fertilizers, manufactured	32.3	38.6	59.0	125.9	84.5	81.0	99.7	67.4	208.9	1
57	Explosives, pyro. prod.	6.9	5.4	3.7	2.7	3.2	4.4	4.6	-2.3	-33.2	0
58	Plastic materials, etc.	56.5	60.7	76.1	161.4	273.0	309.3	373.3	316.8	561.0	2
59	Chemical materials, n.e.s.	85.8	128.7	146.6	123.0	206.4	220.2	169.9	84.0	97.9	2
61	Leather, dressed fur, etc.	594.9	544.5	524.2	512.5	575.5	602.4	719.3	124.5	20.9	1
62	Rubber manufacturers, n.e.s.	101.6	90.1	107.8	152.3	233.9	247.0	290.5	188.9	185.9	1
63	Wood, cork manufacts., n.e.s.	444.9	436.1	348.1	421.5	429.8	439.3	494.2	49.4	11.1	4
64	Paper, paperboard mfrd.	185.5	239.1	253.7	314.5	510.6	454.8	636.2	450.7	242.9	2
65	Textile yarn, fabrics, etc.	1,154.5	1,046.6	1,035.3	1,062.8	1,276.5	1,295.0	1,438.0	283.5	24.6	5
66	Nonmetal mineral manufacts., n.e.s.	483.8	450.9	433.5	547.8	734.3	793.9	924.6	440.8	91.1	6
67	Iron and steel	809.7	923.5	1,171.8	1,382.0	2,072.0	1,754.9	1,943.5	1,133.8	140.0	5
69	Metal manufacts., n.e.s.	267.4	250.1	277.6	286.3	409.4	440.6	530.2	262.7	98.2	2
71	Power generating machy.	566.2	637.3	860.3	1,217.2	1,788.8	2,171.3	2,182.1	1,615.9	285.4	7
72	Machs. for spl. industrys	160.1	214.8	200.7	206.8	243.6	264.0	271.2	111.1	69.4	0

TABLE VII (Continued)

SITC	Industry	(U.S.\$ million)										No. of Countries for Which This Item in Top Five
		1980	1981	1982	1983	1984	1985	1986	Change 1980-86			
		Value	Value	Value	Value	Value	Value	Value	Value	%		
73	Metalworking machinery	41.6	51.0	42.5	46.6	30.5	54.6	72.7	31.2	75.0	0	
74	Genrl. industri. machy., n.e.s.	212.1	242.9	261.1	259.7	338.4	451.4	612.2	400.1	188.6	1	
75	Office machines, ADP eqpt.	379.3	442.8	465.4	446.1	598.6	663.3	648.7	269.4	71.0	2	
76	Telecomm., sound equipment	893.4	973.6	1,016.6	1,352.1	1,584.4	1,704.4	2,019.8	1,126.4	126.1	2	
77	Electrical machy., n.e.s.	1,710.4	2,039.2	2,160.9	2,526.3	3,356.7	3,183.7	3,675.0	1,964.5	114.9	6	
78	Road vehicles	797.2	885.8	978.7	1,075.9	1,446.0	1,898.2	2,465.6	1,668.4	209.3	4	
79	Other transport equip.	227.6	207.6	181.8	166.9	116.4	101.8	277.2	49.6	21.8	2	
81	Plumbg., heating, lighting eqpt.	41.5	42.9	37.2	49.2	70.0	88.3	117.2	75.7	182.2	2	
82	Furniture, parts thereof	360.9	385.2	369.6	438.8	546.9	622.2	731.9	371.0	102.8	2	
83	Travel goods, handbags	110.0	112.0	83.8	84.1	88.0	93.4	109.7	-0.2	-0.2	0	
84	Clothing and accessories	1,769.4	1,693.8	1,629.8	1,793.5	2,225.3	2,467.5	3,183.2	1,413.8	79.9	9	
85	Footwear	689.7	800.0	778.4	966.1	1,376.3	1,380.5	1,424.6	734.9	106.6	2	
87	Precision instruments, n.e.s.	151.1	172.2	146.6	191.1	246.1	257.8	323.0	171.9	113.7	1	
88	Photo. eq., optical gds., etc.	108.7	117.7	129.8	96.3	126.1	184.4	187.1	78.4	72.1	0	
89	Misc. manufctd. gds., n.e.s.	736.2	950.7	887.7	619.3	766.3	924.1	973.4	237.2	32.2	7	

Source: U.N. COMTRADE Data Base.

sectors, i.e., the areas of natural comparative advantage. In other sectors there was clearly a reliance on imported components and we do not know the value added or retained value in these sectors. Moreover, there is an important argument against forced diversification, namely, that it is simply not clear where the future comparative advantage of these countries lies and we have little faith in the record of our profession in promoting industrial targeting. In fact, in the HICs the improvements are coming largely as a result of broad based reforms rather than targeting.

#### IV. POTENTIAL TRADE GAINS FOR THE HICs FROM INDUSTRIAL COUNTRIES' TRADE LIBERALIZATION IN THE MANUFACTURES SECTOR

We have estimated the potential gains for the HICs if the major industrial countries were to eliminate trade barriers on manufactured imports. While these gains are substantial, particularly in certain sectors, they are small by comparison with the gains to be made from developing countries reducing their own anti-export biases. This is not surprising; in general, tariff and NTBs still provide more protection to the HICs than to industrial countries.<sup>7</sup>

We use a standard partial equilibrium trade model together with data on tariffs and the ad valorem incidence of trade barriers in the industrial countries and simulate the complete MFN liberalization of tariffs and NTBs in the major industrial country markets.<sup>8</sup> In the model data on the ad valorem equivalents of NTBs are treated in the same way as tariffs. The information on the ad valorem equivalents of NTBs was based on a search through studies published in the late 1970s and early 1980s. These studies typically identify the price disadvantages of domestically produced goods relative to the prices of similar internationally traded goods. The ad valorem equivalent is then assumed to equal this price disadvantage less the ad valorem tariff rate. While there are some problems with this technique it does give a rough order of magnitude for the kind of analysis we have carried out in this paper. The study was carried out at the most detailed tariff-in-line level, with the results being aggregated to the three-digit SITC level only for presentational purposes.

The effects computed for this study are the increased imports from the HICs

<sup>7</sup> This confirms the detailed work on Argentina by Sturzenegger [11] where the gains from Argentina's own liberalization are more than ten times the gains which we estimate from developed countries cutting back on their protection against HICs exports.

<sup>8</sup> For a brief description of the model and sources of data and import-demand elasticities, see [7]. The methodology is similar to that used by the Brookings Institution for its evaluation of the Tokyo Round. In the present study, supply elasticities were assumed to be infinite—not unreasonable in the light of the magnitude of the estimated changes, the underutilization of capacity in the HICs, and the fact that this is comparative static analysis with no short-run expectations of changes. Moreover, under imperfect supply conditions there is a price effect which means that there are revenue gains as well as (smaller) volume gains. The elasticity of substitution among suppliers was arbitrarily assumed to be 2.5.

Additional details on the tariff and NTB data, including sources, will be included in Samuel Laird and Alexander Yeats, *Quantitative Methods for Trade Barrier Analysis* (forthcoming).

TABLE VIII  
INCREASED IMPORTS FROM HICs BY EEC, JAPAN, AND U.S.A. UNDER FULL TRADE LIBERALIZATION

Country	Imports by EEC, Japan, U.S.A. 1983		Increase in Imports from Full MFN Liberalization							
	All Trade (A)	Manufs. (B)	Tariffs (Manufs.)		NTBs (Manufs.)		Tariffs and NTBs (Manufs.)		Tariffs and NTBs (All Trade)	
			(A)	(C)/(B)	(A)	(D)/(B)	(E)	(E)/(B)	(F)	(F)/(A)
All HICs	71,703.6	14,674.0	1,792.4	12.2	1,977.4	13.5	3,764.6	25.7	6,491.5	9.1
Argentina	2,775.6	572.7	56.2	9.8	39.4	6.9	95.6	16.7	439.2	15.8
Bolivia	345.1	19.2	1.0	5.5	2.6	13.4	3.5	18.4	16.4	4.8
Brazil	11,604.2	3,800.7	467.3	12.3	510.4	13.4	976.6	25.7	1,924.5	16.6
Chile	2,555.5	86.7	3.4	4.0	1.5	1.7	4.9	5.7	112.6	4.4
Colombia	2,022.8	263.7	32.3	12.3	74.8	28.3	107.0	40.6	179.4	8.9
Costa Rica	591.1	101.2	31.3	30.9	57.8	57.1	89.8	88.7	121.2	20.5
Côte d'Ivoire	1,646.7	72.5	4.4	6.0	10.9	15.0	15.1	20.9	93.6	5.7
Ecuador	1,554.9	11.6	0.9	7.7	0.5	4.5	1.4	12.2	103.7	6.7
Jamaica	372.8	200.8	8.0	4.0	13.3	6.6	21.5	10.7	29.9	8.0
Morocco	1,311.3	425.9	63.7	15.0	143.1	33.6	206.1	48.4	276.8	21.1
Mexico	19,581.6	5,707.4	569.5	10.0	313.8	5.5	881.9	15.5	1,233.8	6.3
Nigeria	10,196.0	30.0	1.5	5.1	0.1	0.3	1.6	5.4	35.0	0.3
Peru	2,188.1	115.1	10.1	8.8	34.0	29.6	44.0	38.3	105.6	4.8
Philippines	3,366.2	1,022.0	268.0	26.2	328.7	32.2	595.2	58.2	895.8	26.6
Uruguay	575.3	141.6	26.4	18.6	35.5	25.0	61.8	43.7	85.9	14.9
Venezuela	8,237.1	217.1	9.9	4.6	29.3	13.5	39.2	18.1	144.7	1.8
Yugoslavia	2,779.2	1,885.8	238.9	12.7	381.8	20.2	619.1	32.8	693.4	24.9

Note: See text for data sources and methodology.



by the EEC, Japan, and the United States. We do not take account of the gains the HICs may make, if any, in world markets as a result of such trade liberalization.<sup>9</sup>

We calculate that the removal of tariffs and NTBs in the EEC, Japan, and the United States would increase the manufactured exports of the HICs by some U.S.\$3.7 billion dollars a year, based on 1983 trade data. The HICs which would gain most from such a liberalization are, in order, Brazil, Mexico, Yugoslavia, and the Philippines (Table VIII). The percentage increments range from as little as 5.4 per cent in the case of Nigeria to 88.7 per cent for Costa Rica. Comparator data for all merchandise imports by the EEC, Japan, and the United States from the HICs are given in the table, showing that in those markets the estimated increment for manufactures exceeds 50 per cent of the total increment.

The products for which trade is expected to increase most under this liberalization scenario are dominated by clothing and footwear which show the greatest percentage and value increases. Together they account for more than 50 per cent of the estimated expansion (Table IX). Beyond these products the estimated gains are substantial and widespread throughout the manufactures sector.

We also find that the estimated expansion is divided almost equally between that associated with tariff and NTB liberalization. This helps to dramatize the importance of high tariffs on many of the products exported by the HICs (and other developing countries), contrary to the often expressed view that, after forty years of GATT negotiations, tariffs have now become of minor importance.

It is emphasized that these estimates relate more to the stock of protection mainly in place in the late 1970s and early 1980s, and do not take account of some of the more recent changes in administered protection and the more recent increase in the use of hard-core NTBs, such as voluntary export restraints.

## V. CONCLUSION

This paper has taken a look at the behavior of manufactured exports of the HICs to industrial countries. Three major factors have played a role in this trade, namely, the degree of trade openness of the HICs; the degree of trade openness of industrial countries; and the growth of import demand in industrial countries. We conclude that in general and in recent years, the HICs have introduced important trade liberalization cum real devaluation measures. For the HICs as a group these policy changes have improved their export performance in spite of increasing protectionist measures of industrial countries. This performance, which differs quite significantly among the HICs, is also linked to the high growth of U.S. imports. The crucial question for the near future is whether the HICs will be able to maintain this momentum while the U.S. balances its trade.

<sup>9</sup> The gains in world markets from trade liberalization in industrial country markets are particularly important for commodity trade where the HICs' major markets are other developing countries or the socialist countries. An example is the sale of Argentine wheat to the Soviet Union. The gains result from the reduction of surpluses following the elimination of domestic price supports and the subsidized export of these surpluses. For details see [15] [12].

TABLE IX  
 INCREASED MANUFACTURED IMPORTS FROM HICs BY EEC, JAPAN, AND U.S.A. UNDER FULL LIBERALIZATION:  
 TWENTY-FIVE ITEMS TO GAIN MOST

SITC	Product Description	Imports 1983 (U.S. \$1,000)	Increases Resulting from Full MFN Liberalization					
			Tariffs		NTBs		Tariffs and NTBs	
			U.S. \$1,000	%	U.S. \$1,000	%	U.S. \$1,000	%
	Total manufactures	14,674,043	1,792,442	12.2	1,977,423	13.5	3,764,580	25.7
841	Clothing not of fur	1,274,377	503,276	39.5	876,677	68.8	1,377,146	108.1
851	Footwear	808,884	265,516	32.8	289,347	35.8	554,699	68.6
821	Furniture	319,370	52,792	16.5	88,249	27.6	140,912	44.1
724	Telecommunications eqpt.	1,033,454	138,915	13.4	4	0.0	138,919	13.4
651	Textile yarn and thread	265,644	12,641	4.8	96,658	36.4	108,779	40.9
671	Pig iron, etc.	382,516	25,731	6.7	67,149	17.6	92,624	24.2
891	Sound recorders, reprod.	224,716	21,296	9.5	64,612	28.8	85,882	38.2
674	Iron and steel univ., plate, sheet	231,992	23,455	10.1	54,066	23.3	77,514	33.4
652	Cotton fabrics, woven	172,111	10,261	6.0	67,097	39.0	76,755	44.6
732	Road motor vehicles	599,689	71,531	11.9	0	0.0	71,531	11.9
729	Electrical machinery, n.e.s.	572,141	61,739	10.8	0	0.0	61,739	10.8
711	Power machinery nonelec.	831,684	60,034	7.2	59	0.0	60,104	7.2
678	Iron and steel pipes, tubes, etc.	159,406	9,407	5.9	41,806	26.2	51,155	32.1
655	Special textile, etc. prod.	88,002	1,894	2.2	49,229	55.9	50,999	58.0
512	Organic chemicals	524,017	37,027	7.1	10,599	2.0	47,625	9.1
672	Iron and steel primary forms	132,244	11,962	9.0	27,637	20.9	39,620	30.0
656	Textile, etc. products, n.e.s.	85,635	6,651	7.8	32,236	37.6	38,484	44.9
842	Fur, etc. clothes, prod.	58,396	7,235	12.4	29,890	51.2	37,182	63.7
611	Leather	275,128	34,101	12.4	2,065	0.8	36,169	13.1
612	Leather, etc. manufactures	69,788	9,012	12.9	26,735	38.3	35,680	51.1
673	Iron and steel shapes	87,479	4,404	5.0	28,918	33.1	33,333	38.1
861	Instruments, apparatus	337,132	28,912	8.6	0	0.0	28,912	8.6
675	Iron and steel hoop, strip	81,311	9,278	11.4	18,632	22.9	27,888	34.3
733	Road vehicles non-motor	357,643	27,396	7.7	0	0.0	27,396	7.7
894	Toys, sporting goods, etc.	140,627	20,865	14.8	5,827	4.1	26,669	19.0

Note: See text for data sources and methodology.

The paper concludes with an estimate of the higher exports of manufactures that the HICs would undertake if industrial countries were to eliminate their protective barriers. These estimates show that the potential trade gains from the HICs from both tariff and NTB liberalization in industrial countries are substantial and widespread in the manufactures sector, but are especially important for clothing and footwear.

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