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THE IMPORTANCE OF TRADE FOR DEVELOPING COUNTRIES

by

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# THE IMPORTANCE OF TRADE FOR DEVELOPING COUNTRIES

## ABSTRACT

This paper indicates the benefits developing countries may derive through international trade. It reviews recent trends in world trade in major product groups; analyzes the economic performance of developing countries applying outward-oriented and inward-oriented policies; and examines the relationship between exports and economic growth. It is further shown that external constraints do not stand in the way of an increasing number of developing countries adopting outward-oriented policies. Recommendations are made for the adoption of such policies and for developing country participation in multilateral trade negotiations.

# The Importance of Trade for Developing Countries

Bela Balassa

## Introduction

Participation in international trade provides a variety of benefits to developing countries. They may obtain gains through resource allocation according to comparative advantage; the exploitation of economies of scale and increased capacity utilization; improvements in technology; increases in domestic savings and foreign direct investment; and increased employment.

At early stages of development, countries will generally benefit from specializing in natural resource products. In the process of industrialization, it will be advantageous to concentrate first on products utilizing mainly unskilled labor, with subsequent upgrading in the product composition of exports as the country accumulates physical and human capital. International specialization according to the changing pattern of comparative advantage will bring important gains to developing countries; conversely limiting participation in the international division of labor through high import protection can entail considerable losses.

The domestic markets of even the largest developing countries are relatively small. In regard to manufactured goods, where economies of scale can be obtained, India's market is smaller than that of Belgium, a country extensively engaged in international trade, and Brazil's is only one-sixth of that of Germany, for which trade has been of considerable importance.

International trade makes it possible for developing countries to overcome the limitations of their domestic markets in exploiting economies of scale and ensuring full capacity utilization, thereby avoiding the dilemma of

building ahead of demand and operating with a low degree of capacity utilization or constructing less than optimal size plants.

But, even in cases when a developing country's market can provide for the exploitation of economies of scale and full capacity utilization, it may not permit domestic competition, thus leading to the establishment of monopolies and oligopolies. It has often been observed that such firms prefer "quiet life" to innovative activity, which entails risk and uncertainty. In turn, the carrot and the stick of competition provides inducements for technological change. Exporting firms, in particular, try to keep up with modern technology in order to maintain or improve their market position.

In generating higher incomes, participation in international trade will also lead to higher domestic savings, which will increase further to the extent that a higher than average share of incomes generated by exports is saved. Also, as export expansion improves the balance of payments, a country may become more attractive to foreign investments.

As long as labor is not fully employed, increases in output resulting from participation in international trade will benefit employment, when additional gains are obtained to the extent that exports are more labor intensive than import substitution. Higher employment, in turn, will contribute to increases in wages that tend to improve the distribution of incomes.

Having briefly indicated the benefits developing countries may obtain through international trade, this paper will provide an empirical and policy analysis of the principal issues involved. It will review past trends in developing country exports; present evidence on exports and on economic growth in developing economies following alternative development strategies, evaluate

the effects of trade orientation on economic performance; and analyze future prospects for developing country exports.

Section I of the paper will provide information on trends in international trade in major product groups in the 1963-84 period; analyze the relationship between trade and economic growth during this period; and examine the export performance of groups of developing economies. Section II will report on the growth of exports and GDP in developing economies applying outward-oriented and inward-oriented policies, with separate consideration given to the pre-1973 and the post-1973 periods. In Section III, the relationship of exports and economic performance will be analyzed, using GDP growth, employment, and income distribution as performance indicators. Section IV will address the question as to whether external constraints would limit the application of outward-oriented policies in the future. Finally, in the conclusion, the implications of the findings for economic policy making in developing countries and for their participation in the new round of multilateral trade negotiations will be discussed.

#### I. Changes in Trade Flows during the Postwar Period

##### A. The Expansion of Trade in Major Commodity Groups

Table 1 provides information on the geographical and commodity composition of the exports of developed and developing countries in the years 1963, 1973 and 1984, expressed in 1975 prices. <sup>1/</sup> In the entire 1963-84 period, the total exports of the developed countries increased nearly fourfold

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<sup>1/</sup> 1963 has been chosen as the initial year because the United Nations statistics do not provide trade data in the necessary commodity and geographical breakdown for earlier years. On data sources, the classification scheme utilized, and the method used in expressing data in 1975 prices see the notes to Table 1.

Table 1

The Geographical and Commodity Composition of Exports, 1963, 1973 and 1984  
(S billion, 1975 prices)

Origin/Destination	Fuels			Nonfuel Primary Products			Manufactured Goods			Nonfuel Products			Total		
	DC	LDC	World	DC	LDC	World	DC	LDC	World	DC	LDC	World	DC	LDC	World
<u>Absolute Values</u>															
<u>1963</u>															
Developed Countries	16.5	2.1	19.6	52.5	10.2	66.2	99.7	36.1	144.5	152.2	46.3	210.7	168.7	48.4	230.3
Developing Countries	44.7	16.0	62.7	30.1	6.1	39.6	4.1	3.0	7.4	34.2	9.1	47.1	79.0	25.1	109.8
Market Economies	61.2	18.1	82.4	82.6	16.3	105.8	103.8	39.2	151.9	186.4	55.5	257.8	247.6	73.5	340.2
<u>1973</u>															
Developed Countries	28.8	1.9	32.7	82.8	14.7	104.9	299.9	78.5	397.9	382.7	93.1	502.9	411.5	95.0	535.5
Developing Countries	108.9	28.6	142.4	34.3	8.3	47.7	19.2	8.5	28.9	53.5	16.8	76.6	162.4	45.4	219.0
Market Economies	137.8	30.4	175.1	117.0	23.0	152.6	319.2	86.9	426.8	436.2	109.9	579.4	574.0	140.4	754.5
<u>1984</u>															
Developed Countries	44.6	3.7	50.5	126.2	37.7	178.2	476.3	154.0	661.8	602.5	191.7	840.0	647.1	195.4	890.5
Developing Countries	55.2	23.0	80.8	44.7	18.6	73.5	66.5	31.1	103.8	111.2	49.7	177.3	166.4	72.8	258.0
Market Economies	99.7	26.7	131.2	171.0	56.3	251.7	542.8	185.2	765.6	713.7	241.5	1017.3	813.5	268.2	1148.5
<u>Percentage Change</u>															
<u>1963-73</u>															
Developed Countries	75	-10	67	58	44	58	201	117	175	151	101	139	144	96	132
Developing Countries	143	79	127	14	37	20	367	179	288	56	84	63	106	81	99
Market Economies	125	69	113	42	41	44	208	122	181	134	98	125	132	91	122
<u>1973-84</u>															
Developed Countries	55	95	54	53	157	70	59	96	66	57	106	67	57	106	66
Developing Countries	-49	-19	-43	31	123	54	245	268	259	108	196	131	2	60	18
Market Economies	-28	-12	-25	46	145	65	70	113	79	64	120	76	42	91	52
<u>1963-84</u>															
Developed Countries	171	75	157	140	270	169	378	326	358	296	314	299	284	303	287
Developing Countries	23	44	29	48	205	86	1514	925	1294	225	445	277	111	190	135
Market Economies	63	48	59	107	246	158	423	373	404	283	335	295	228	265	238

Source: United Nations, Monthly Bulletin of Statistics, various issues.

Notes: The data have been expressed in constant prices by the use of deflators derived from price indices published in the United Nations, Monthly Bulletin of Statistics which is also the source of the current price trade data. For primary products, the price indices for individual commodities and commodity groups have been weighted by the commodity composition of exports for developing and for developed countries, respectively; for manufactured goods, use has been made of import price indices for the two groups of countries published in the above source.

The data pertain to the exports of fuels (SITC class 3); nonfuel primary products, including foods and beverages (SITC classes 0 and 1); industrial materials (SITC classes 2 and 4) and nonferrous metals (SITC category 6A); manufactured goods (SITC categories 5 to 8 less nonferrous metals); nonfuel products (SITC classes 0 to 2 and 4 to 8), and total exports (SITC classes 0 to 8). They do not include SITC Class 9, commodities and transactions not classified according to kind, which rarely exceeds 2 percent of the total.

Under the UN classification scheme used in the table, developed countries are identified with the member countries of the OECD. Developing countries comprise the countries of Latin America, Africa (other than South Africa), and nonsocialist Asia (other than Israel and Japan); the rest of the world includes the socialist countries, Israel, and South Africa.

whereas the developing countries experienced a less than two-and-a-half fold rise. Closer inspection reveals, however, that these differences are in large part explained by differences in the commodity composition of exports.

Rapidly growing manufactured exports accounted for only one-fifteenth of the total exports of the developing countries in the base year, 1963, while manufactured products had a nearly two-thirds share in the exports of the developed countries. From this low base, developing country manufactured exports rose fourteen-fold between 1963 and 1984, reaching four-tenths of their total exports; in the same period, the developed countries increased these exports four-and-a-half times, approaching three-fourths of the total.

The growth of the developing countries' manufactured exports and the increase in their share in the exports of these commodities by the developed and the developing countries combined from one-twentieth in 1963 to nearly one-seventh in 1984 was the most important change in trade flows during the postwar period. It shows the extent of transformation in the export structure of the developing countries and the availability of markets in the developed countries for their manufactured exports.

At the same time, the developing countries lost market shares in the exports of nonfuel primary products. Thus, the near doubling of these exports between 1963 and 1984 compares with a more than two-and-a-half fold increase for the developed countries. The results reflect the unfavorable commodity composition of developing country exports: they have had a much larger share in industrial materials, which experienced slow increases in world exports, than in foods and beverages, for which increases exceeded the average for nonfuel primary products.

Finally, whereas the fuel exports of the developing countries rose by less than one-third between 1963 and 1984, the developed countries increased these exports two-and-a-half times. Within this period, 1973 represents a turning point. While world fuel exports more than doubled between 1963 and 1973, they decreased by one-fourth between 1973 and 1984, due largely to the energy saving measures taken in response to the rapid increases in petroleum prices. The decline was even greater in the developing countries whose 1984 fuel exports did not reach three-fifths of the 1973 level, compared with an increase by one-half in the developed countries. Petroleum and gas discoveries in the United Kingdom, Norway, and the Netherlands and the substitution of coal for oil importantly contributed to these results.

Excluding fuels, differences in the growth of exports in developed and in developing countries are much reduced and, in the 1973-84 period, reversed. For the 1963-84 period, taken as a whole, nonfuel exports quadrupled in the developed countries and increased three-and-a-half times in the developing countries. But, while these exports rose two-and-a-half times in the developed countries and by only four-tenths in the developing countries between 1963 and 1973, a two-thirds increase in the former group of countries was accompanied by a two-and-a-half fold rise in the latter between 1973 and 1984.

As increases in primary non-fuel exports were somewhat larger in the developed than in the developing countries during the second period, even though considerably reduced compared to the first, the observed results reflect differential rates of export expansion in manufactured goods. The developing countries increased these exports three-and-a-half times between

1973 and 1984 while the developed countries experienced only a two-thirds rise.

With the bulk of the developing country exports of manufactured goods destined to developed country markets, access to these markets was the major factor in the observed result. In fact, the share of the developed countries as markets for the exports of the developing countries rose during the 1963-84 period, and it exceeded two-thirds by 1984. However, developing country exports of fuels and of nonfuel primary products increased more rapidly to developing country, than to developed country, markets. All in all, the total exports of the developing countries to other developing countries nearly tripled between 1963 and 1984 while their exports to the developed countries slightly more than doubled, indicating the growing importance of inter-developing country trade.

#### B. The Relationship Between Trade and Economic Growth

The acceleration in the growth of the developing countries' nonfuel exports after 1973 is even more remarkable if account is taken of the slowdown of economic growth in the developed countries, where an average rate of GDP growth of 4.7 percent between 1963 and 1973 gave place to a growth rate of 2.5 percent between 1973 and 1984. The nonfuel exports of developing countries to the developed countries grew at average annual rates of 5.3 and 8.3 percent in the two periods, respectively. The corresponding growth rates are 2.5 and 4.6

percent for nonfuel primary products <sup>1/</sup> and 14.2 and 12.4 percent for manufactured goods (In the case of manufactured goods, the very low base year figure raised the growth rate in the first period).

The relationship between economic growth in the developed countries and their imports from the developing countries has been analyzed by the use of regression analysis, with the addition of price variables. <sup>2/</sup> The estimates are reported in Table 2 for the entire 1963-84 period; the shortness of the time series limited the statistical significance of the estimates for the two subperiods.

The results show that a one percent increase in the gross domestic product of the developed countries was associated with a 1.5 percent rise in their total imports from the developing countries in the 1963-84 period. The corresponding estimates are 0.5 percent for nonfuel primary products, 1.9 percent for fuels, and 3.8 percent for manufactured goods. Disaggregating nonfuel primary exports, the results are 0.6 percent for foods and beverages, 0.3 percent for industrial materials, and 0.7 percent for nonferrous metals. All the estimates are statistically significant at the one percent level.

The empirical results further indicate the effects of changes in relative prices on the imports of the developed countries from the developing

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<sup>1/</sup> The estimates are 2.1 and 5.9 percent for foods and beverages, 2.9 and 2.8 percent for industrial materials, and 3.5 and 3.9 percent for nonferrous metals for the 1963-73 and the 1973-84 periods, respectively. They have been calculated by regressing exports on time.

<sup>2/</sup> The statistical formulation assumes that the causation goes from economic growth in the developed countries to their imports from the developing countries. In view of the small share of trade with the developing countries in developed country GDP (2 percent in 1984), we may neglect the possibility of a reverse causation.

Table 2

The Effects of Developed Country GDP and Relative Prices  
on their Imports from Developing Countries, 1963-84  
(t-values in parenthesis)

<u>Exports</u>	<u>Constant</u>	<u>Gross Domestic Product</u>	<u>Relative Prices</u>	<u>R<sup>2</sup></u>	<u>D.W.</u>
Total exports	5.35 (8.06) **	1.47 (9.88) **	-0.29 (-3.52) **	0.897	0.49
Nonfuel primary exports	8.42 (56.61) **	0.48 (14.02) **	-0.43 (-6.80) **	0.909	1.27
Foods and beverages	7.17 (26.83) **	0.61 (10.07) **	-0.53 (-6.02) **	0.834	0.96
Industrial materials	8.33 (39.73) **	0.27 (5.66) **	-0.29 (-2.97) **	0.626	1.60
Nonferrous metals	5.06 (10.01) **	0.71 (6.38) **	-0.17 (-1.49)	0.767	1.23
Fuels	2.84 (1.42)	1.88 (4.21) **	-0.41 (-3.36) **	0.437	0.36
Manufactured exports	-7.10 (-14.95) **	3.84 (35.40) **	-0.63 (-0.98)	0.984	0.54

Notes: All variables have been expressed in logarithmic terms. Relative prices have been defined as the ratio of the export prices of the particular product groups in the developing countries to the export prices of manufactured goods in the developed countries (For explanation, see text.)

The symbol \*\* indicates that the results are statistically significant at the 1 percent level.

Sources: Export values and prices -- United Nations, Monthly Bulletin of Statistics and Yearbook of International Trade Statistics, various issues.  
Gross domestic product -- International Monetary Fund, International Financial Statistics, 1985 yearbook.

countries. This has been done by relating price indices for developing country exports of various product groups to the price index of the developed countries' manufactured exports. <sup>1/</sup>

The estimates reported in Table 2 show that a one percent increase in developing country export prices, relative to the manufactured export prices of the developed countries, leads to a 0.3 percent decline in these imports. The corresponding estimates are 0.4 percent for nonfuel primary products, 0.5 for foods and beverages, 0.3 for industrial materials, and 0.4 for fuels. They are all statistically significant at the one percent level; however, the relative price variables are not significant for the imports of nonferrous metals and manufactured goods. <sup>2/</sup>

It is apparent, then, that economic growth in the developed countries is associated with more than proportionate increases in their imports from the developing countries, with manufactured goods being much above and nonfuel primary products below the average. For reasons noted below, the rise in their exports, in turn, contributes to economic growth in the latter group of countries.

The latter relationship has been estimated for the 1973-84 period, with the addition of a relative price variable. The results show that a one percent increase in the exports of the developing countries to the developed countries raises the former's GDP growth rate by 0.73 percentage points. A

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<sup>1/</sup> The derivation of these indices is discussed above.

<sup>2/</sup> In the former case fixed input coefficients in the short run, in the latter case the intercorrelation between the prices of developed and developing country manufactured exports may account for the observed results.

one percent improvement in the terms of trade of the developing countries, measured as the ratio of their export prices to the manufactured export prices of the developed countries, adds another 0.47 percentage points to their GDP growth rate. <sup>1/</sup>

C. Export Performance for Groups of Developing Economies

Further interest attaches to the export performance of different groups of developing economies. For this purpose, distinction has been made among newly-industrializing economies (NICs), newly-exporting countries (NECs), and less developed countries (LDCs), with a further breakdown based on geographical location. Table 3 provides the list of countries in the first two groups and reports the results obtained for the years 1963, 1973, and 1980. <sup>2/</sup>

In an earlier study by the author, newly-industrializing countries were defined as countries having a share of manufactured value added of 20 percent or higher in the gross domestic product in 1977 and per capita incomes of at least \$1100 in 1978 (Balassa, 1981). The same list of countries is obtained by applying the 20 percent benchmark to 1984 and using a per capita income figure of \$1700 for the year. <sup>3/</sup>

The newly-exporting countries have been defined by the joint requirement that the share of manufacturing value added in GDP was at least 15

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<sup>1/</sup> Both regression coefficients are statistically significant at the 1 percent level; the adjusted R<sup>2</sup> is 0.95.

<sup>2/</sup> Data for most recent years are not available for several developing countries included in these groups.

<sup>3/</sup> This is the lower limit for upper middle-income countries in World Bank, World Development Report 1986 (Table 1).

Table 3

Exports by Groups of Developing Economies, 1963, 1973, and 1980  
(\$ billion, 1975 prices, percent)

	<u>Fuels</u>		<u>Nonfuel Primary Products</u>		<u>Manufactured Goods</u>		<u>Nonfuel Products</u>		<u>Total</u>	
	\$billion	percent	\$billion	percent	\$billion	percent	\$billion	percent	\$billion	percent
<u>1963</u>										
(1) NIC Latin America	0.39	0.6	8.63	21.8	0.64	8.6	9.27	19.7	9.66	8.8
(2) Far East	1.30	2.1	1.91	4.8	2.38	32.2	4.29	9.1	5.59	5.1
(3) NEC Latin America	16.72	26.7	3.11	7.9	0.21	2.8	3.33	7.1	20.04	18.3
(4) North Africa-Middle East	0.33	0.5	1.83	4.6	0.27	3.6	2.10	4.5	2.43	2.2
(5) South Asia	0.11	0.2	3.35	8.5	1.70	23.0	5.05	10.7	5.16	4.7
(6) Far East	2.08	3.3	5.19	13.1	0.21	2.8	5.40	11.5	5.48	5.0
(7) Less Developed Countries	<u>41.77</u>	<u>66.6</u>	<u>15.58</u>	<u>39.3</u>	<u>1.99</u>	<u>26.9</u>	<u>17.57</u>	<u>37.4</u>	<u>61.44</u>	<u>55.9</u>
	62.70	100.0	99.60	100.0	7.40	100.0	47.00	100.0	109.80	100.0
<u>1973</u>										
(1) NIC Latin America	0.39	0.3	11.66	24.4	3.96	13.7	15.62	20.4	16.01	7.3
(2) Far East	2.53	1.8	2.90	6.0	14.61	50.5	17.51	22.9	20.04	9.2
(3) NEC Latin America	14.91	10.5	3.21	6.7	0.98	3.4	4.19	5.4	21.10	9.6
(4) North Africa-Middle East	0.80	0.6	1.92	4.0	0.64	2.2	2.56	3.3	3.36	1.5
(5) South Asia	0.19	0.1	2.40	5.0	2.76	9.5	5.16	6.7	5.35	2.4
(6) Far East	5.97	4.2	7.47	15.7	1.10	3.9	8.57	11.2	14.54	6.6
(7) Less Developed Countries	<u>117.61</u>	<u>82.6</u>	<u>18.14</u>	<u>38.0</u>	<u>4.85</u>	<u>16.8</u>	<u>22.99</u>	<u>30.0</u>	<u>138.60</u>	<u>63.3</u>
	142.40	100.0	47.70	100.0	28.90	100.0	76.60	100.0	219.00	100.0
<u>1980</u>										
(1) NIC Latin America	3.75	3.2	14.62	23.7	7.70	12.0	22.32	17.7	26.07	10.7
(2) Far East	1.78	1.5	4.85	7.8	35.44	55.8	40.59	32.3	42.37	17.3
(3) NEC Latin America	6.46	5.4	4.58	7.4	1.88	2.9	6.46	5.1	12.92	5.3
(4) North Africa-Middle East	1.11	0.9	1.77	2.9	1.19	1.9	2.96	2.4	4.07	1.7
(5) South Asia	0.13	0.1	2.98	4.8	4.11	6.4	7.09	5.6	7.22	3.0
(6) Far East	6.47	5.4	5.41	8.8	3.72	5.8	9.13	7.3	10.60	6.4
(7) Less Developed Countries	<u>98.90</u>	<u>83.4</u>	<u>27.59</u>	<u>44.6</u>	<u>9.68</u>	<u>15.1</u>	<u>37.25</u>	<u>29.6</u>	<u>1326.15</u>	<u>55.7</u>
	118.60	100.0	61.80	100.0	64.00	100.0	125.80	100.0	244.40	100.0

Note: (1) Argentina, Brazil, Chile, Mexico, Uruguay; (2) Hong Kong, Korea, Singapore, Taiwan, China; (3) Colombia, Costa Rica, Guatemala, Jamaica, Peru, Venezuela; (4) Egypt, Jordan, Morocco, Tunisia; (5) Bangladesh, India, Pakistan, Sri Lanka; (6) Indonesia, Malaysia, Philippines, Thailand.

(7) The difference between the total exports of the developing countries shown in Table 1, and the sum of exports of country groupings (1) to (6).

Sources: Table 1 and World Bank data base.

percent or manufactured goods accounted for at least 30 percent of total exports in 1984 and manufactured export reached \$250 million, i.e. 0.03 percent of world manufactured exports, and 0.2 percent of manufactured exports by the developing countries, in 1984. 1/

Limiting attention to nonfuel products, the results show that the market share of the Far Eastern NICs (Hong Kong, Korea, Singapore and Taiwan, China) in the combined exports of the developing countries rose from 9.1 percent in 1963 to 22.9 percent in 1973, and, again, to 32.3 percent in 1980. All other groups lost export market shares during this period. The losses were particularly pronounced in the South Asian NECs (Bangladesh, India, Pakistan, and Sri Lanka), the market share of which decreased from 10.7 percent in 1963 to 5.6 percent in 1980, followed by the North African and Middle Eastern NECs (Egypt, Jordan, Morocco, and Tunisia) where the decline was from 4.5 to 2.4 percent.

Among major product groups, changes in export market shares were the largest for manufactured goods. Although the Far Eastern NICs had a relatively high export share of 32.2 percent in these products already in 1963, they increased this share to 55.8 percent by 1980. In the same period, the market share of the South Asian NECs fell from 23.0 to 6.4 percent, with a

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1/ Alternative definitions of the newly-exporting countries are provided by Havrylyshyn and Alikhani (1982) and Hughes and Newbery (1986). The former include countries with manufactured export growth rates in excess of average growth rates by the NICs during the 1970s; the latter include countries with populations in excess of 10 million and per capita incomes of at least \$750 in 1983. Both of these definitions have the disadvantage of excluding India, whose manufactured exports exceed that of any newly-exporting country, and Pakistan that also surpassed the majority of the NECs.

decline from 3.6 to 1.9 percent observed in the North Africa-Middle East group.

In turn, the Latin American NICs (Argentina, Brazil, Chile, Mexico, and Uruguay) and, in particular, the Far Eastern NECs (Indonesia, Malaysia, Philippines, and Thailand) were gainers, with increases in manufactured export market shares from 8.6 percent in 1963 to 12.0 percent in 1980 in the first case and from 2.8 to 5.8 percent in the second. But while in the Latin American NICs the 1980 result represented a deterioration following the progress made between 1963 and 1973, the growth of the exports of the Far Eastern NECs accelerated after 1973. Finally, increases between 1963 and 1973 were undone afterwards in the Latin American NECs (Colombia, Costa Rica, Guatemala, Peru, and Venezuela).

The Far Eastern NICs also made the largest gains in nonfuel primary products, with their export market share rising from 4.8 percent in 1963 to 7.8 percent in 1984. The South Asian NECs again experienced the largest losses in market shares, from 8.5 to 4.8 percent, followed by the North African and Middle Eastern NECs, where the decline was from 4.6 to 2.9 percent. Smaller changes occurred in the other country groups.

These developments are closely linked to the policies applied by the various countries. The Far Eastern NICs began a policy of outward orientation <sup>1/</sup> in the early 1960s and continued with this policy afterwards. The South Asian NICs, however, persisted with highly protectionist inward-oriented policies. In the North Africa-Middle East area, the unfavorable results were dominated by Egypt that failed to productively utilize the bonanza provided by increased

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<sup>1/</sup> For definitions, see the next section.

oil earnings, toll receipts from the Suez Canal, and workers' remittances from the Middle East.

During the period under consideration, the increased outward orientation of the Far Eastern NICs accounts for the acceleration of the growth of their manufactured exports while changes in the policies applied explain the reversal in manufactured export market shares in Latin America. These countries reformed their economic policies after the mid-1960s, involving a (partial) shift from inward to outward orientation but again turned inward after 1973, with Brazil providing a partial exception.

The preceding discussion concerned six developing country groups, defined according to their level of economic development and geographical location. While the remaining group of less developed countries is too heterogeneous to derive any firm conclusions, it may be observed that increases in their market shares in nonfuel primary products were more than offset by declines in manufactured export shares.

The next section will consider individual country experiences with economic policies and the effects of these policies on exports and economic growth during the postwar period. As an introduction to the discussion, the concepts of outward and inward orientation will be defined.

## II. Trade Orientation and Economic Growth

### A. Defining Inward and Outward Orientation

In examining the postwar experience of developing economies with alternative policies, distinction may be made between inward-oriented and outward-oriented development strategies. Inward-oriented developing economies have protected their domestic industries by the use of tariffs and quantitative import restrictions without providing commensurate export

subsidies. The application of these measures has biased the system of incentives in favor of import substitution and against exports. In contrast, under outward orientation, similar incentives have been granted to import substitution and exports, with export subsidies offsetting, on the average, the effects of import protection.

Outward-oriented developing economies have also maintained realistic exchange rates, and avoided variations in real exchange rates (nominal exchange rates, adjusted for changes in relative prices at home and abroad) over time, so as to encourage exports. Conversely, exchange rates have often been overvalued in developing economies pursuing inward oriented policies, with the degree of overvaluation varying over time, as intermittent devaluations periodically caught up with domestic inflation, thereby creating uncertainty for exporters.

In addition to fluctuations in the extent of overvaluation leading to changes in incentives over time, there has been considerable variation in incentives among manufacturing industries in inward-oriented developing economies that has not generally been the case under outward orientation. Also, inward-oriented, but not outward-oriented, developing economies have generally discriminated against agriculture.

The described characteristics of outward-oriented and inward-oriented development strategies are exemplified by the experience of the last quarter of a century. In the 1960-73 period of rapid growth in the world economy, a contrast may be drawn among three groups of developing economies: those pursuing outward-oriented policies, inward-oriented developing economies undertaking policy reforms, and developing economies characterized by continued inward orientation. The choice between outward and inward

orientation has further relevance in the period of external shocks, owing to increases in oil prices and recessionary conditions in the world economy after 1973. The following discussion concentrates on nine developing economies that established basic industries and may be considered representative of alternative policy regimes.

B. The Period of Rapid World Economic Growth (1960-73) <sup>1/</sup>

Among the nine developing economies under consideration, Korea, Singapore and Taiwan, China adopted outward-oriented policies in the early 1960s. In turn, India, Chile, and Uruguay continued with inward-oriented policies throughout the 1960-73 period. An intermediate position was taken by Brazil, and to a lesser extent, by Argentina and Mexico, which had followed inward-oriented policies but undertook policy reforms in the mid-1960s, reducing the extent of discrimination against agriculture and, in particular, against manufactured exports.

At the same time, there were several important differences between the policies applied by the three Far Eastern and the three Latin American developing economies. These differences largely reflected the fact that the latter group of countries endeavored to maintain the high-cost industries, which had earlier been established, following the policy reforms.

In the three Far Eastern developing economies, exporters were free to choose between domestic and imported inputs; they were exempted from indirect taxes on their output and inputs; and they paid no duty on imported inputs. The same privileges were extended to the producers of domestic inputs used in export production, thus providing essentially free trade treatment to the

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<sup>1/</sup> This section draws on Balassa and Associates, 1982.

export sectors. With additional subsidies and low import protection, exports in the manufacturing sector received, on the average, similar incentives as import substitution in these countries. At the same time, there was little discrimination against primary exports, and against primary activities in general, and the system of incentives was quite uniform.

In reforming their system of incentives, the three large Latin American developing economies reduced the extent of import protection. They did not provide, however, exporters with a free choice between domestic and imported inputs. Rather, in order to safeguard existing industries, exporters were required to use domestic inputs produced under protection. To compensate exporters for the resulting excess cost, the three Latin American economies granted export subsidies, but these did not suffice to provide producers with export incentives comparable to the protection of domestic markets. Thus, there continued to be a bias in favor of import substitution and against exports, in particular traditional primary exports, albeit to a lesser extent than had been previously the case.

Among developing economies that continued with a policy of inward-orientation, Chile traditionally had the highest level of import protection in Latin America and, after brief experimentation with import liberalization, reimposed quantitative restrictions in the early 1970s. Protection levels also remained high in Uruguay and little effort was made to promote exports. Finally, the introduction of selected export subsidies in the mid-sixties was far overshadowed by the continued use of import prohibitions and investment controls in India.

The system of incentives applied importantly affected export performance in the three groups of developing economies. The share of exports

Table 4

Exports by Selected Developing Economies  
(\$ million, 1975 prices)

	<u>Fuels</u>		<u>Nonfuel Primary Products</u>		<u>Manufactured Goods</u>		<u>Nonfuel Products</u>		<u>Total</u>	
		%		%		%		%		%
<u>1963</u>										
Korea	17	1.0	97	0.9	84	3.3	181	1.4	198	1.3
Singapore	1207	69.2	78	0.7	73	2.9	151	1.1	1358	9.1
Taiwan, China	21	1.2	584	5.5	272	10.8	856	6.5	877	5.9
Argentina	74	4.2	2641	24.9	169	6.7	2810	21.4	2884	19.4
Brazil	62	3.6	2941	27.7	90	3.6	3031	23.1	3094	20.8
Mexico	256	14.7	1461	13.7	316	12.6	1777	13.5	2033	13.7
India	107	6.1	1562	14.7	1445	57.5	3007	22.9	3114	20.9
Chile	0	0.0	998	9.4	45	1.8	1044	8.0	1044	7.0
Uruguay	1	0.1	264	2.5	17	0.7	275	2.1	277	1.9
Total	1745	100.0	10626	100.0	2511	100.0	13132	100.0	14879	100.0
<u>1973</u>										
Korea	117	4.0	541	3.8	3180	22.4	3721	13.2	3838	12.3
Singapore	2269	76.9	121	0.9	1176	8.3	1297	4.6	3567	11.4
Taiwan, China	46	1.6	899	6.4	4321	30.4	5220	18.4	5266	16.9
Argentina	19	0.6	2587	18.4	860	6.0	3447	12.2	3465	11.1
Brazil	276	9.3	5499	39.1	1433	10.1	6932	24.5	7208	23.1
Mexico	82	2.8	1653	11.7	1299	9.1	2952	10.4	3035	9.7
India	131	4.4	1586	11.3	1838	12.9	3424	12.1	3555	11.4
Chile	9	0.3	970	6.9	54	0.4	1025	3.6	1033	3.3
Uruguay	3	0.1	217	1.5	61	0.4	278	1.0	281	0.9
Total	2952	100.0	14073	100.0	14222	100.0	28296	100.0	31248	100.0
<u>1980</u>										
Korea	11	0.2	1036	5.3	9844	28.8	10879	20.3	10891	18.4
Singapore	1596	29.2	338	1.7	3045	8.9	3383	6.3	4979	8.4
Taiwan, China	97	1.8	1280	6.5	10982	32.2	12262	22.8	12359	20.9
Argentina	95	1.7	3722	19.0	1170	3.4	4892	9.1	4987	8.4
Brazil	122	2.2	6691	34.2	4721	13.8	11412	21.2	11534	19.5
Mexico	3510	64.3	1865	9.5	1084	3.2	2949	5.5	6459	10.9
India	11	0.2	1845	9.4	2775	8.1	4621	8.6	4632	7.8
Chile	20	0.4	2389	12.2	263	0.8	2652	4.9	2672	4.5
Uruguay	0	0.0	404	2.1	253	0.7	657	1.2	657	1.1
Total	5462	100.0	19570	100.0	34137	100.0	53707	100.0	59170	100.0

Source: See Table 1.

in manufactured output rose from 1 percent in 1960 to 14 percent in 1966 and to 41 percent in 1973 in Korea, from 11 percent to 20 percent and to 43 percent in Singapore, and from 9 percent to 19 percent and to 50 percent in Taiwan, China.

After slow increases in the 1960-66 period, the growth of manufactured exports accelerated between 1966 and 1973 in the three Latin American economies that reformed their system of incentives during this period. In particular, the share of exports in manufactured output rose from 1 percent in 1966 to 4 percent in 1973 in both Argentina and Brazil, with smaller increases occurring from a higher initial level -- explained by its common border with the United States -- in Mexico.

Chile, Uruguay, and India, which continued with an inward-oriented development strategy, experienced a decline in the share of exports in manufacturing output. India lost ground in textiles, its traditional exports, and was slow in developing new manufactured exports. As a result, its share in the combined exports of manufactured goods of the nine countries under consideration declined from 57 percent in 1963 to 13 percent in 1973. In the same period, Chile's share fell from 2 percent to below one-half of one percent, while Uruguay's share declined to the same level from one percent in 1963.

In turn, the three Far Eastern developing economies increased their combined market share in the manufactured exports of the nine developing countries under consideration, from 17 to 60 percent, and the combined share of the three Latin American countries rose slightly, from 23 to 24 percent between 1963 and 1973. The Far Eastern developing economies also gained market shares in nonfuel primary exports; gains in Brazil were approximately

offset by losses in Argentina and Mexico; and India, Chile, and Uruguay all experienced losses in nonfuel primary exports (Table 4). <sup>1/</sup>

The experience of the nine developing economies further provides evidence of the favorable effects of outward orientation on economic growth during the period preceding the 1973 oil crisis. The three Far Eastern economies had by far the highest GNP growth rates throughout the period; the three Latin American developing economies that undertook policy reforms improved their growth performance to a considerable extent after the reforms were instituted; and Chile, Uruguay, and India remained at the bottom on the growth league. For the 1960-73 period, taken as a whole, per capita incomes rose at rates ranging between 6 and 8 percent in the first group, between 3 and 4 percent in the second, and between 1 and 2 percent in the third.

C. The Period of External Shocks (1973-85) <sup>2/</sup>

Developing economies experienced substantial external shocks between 1973 and 1983. In the first half of the period, the quadrupling of oil prices was accompanied by a world recession and followed by a slow recovery; in the second half, oil prices increased three times, the industrial countries again experienced a recession, and interest rates increased considerably. At the same time, policy responses to these shocks in the individual countries varied greatly.

The three Far Eastern developing economies continued with their outward-oriented development strategy and were joined by Chile and Uruguay which, however, again introduced price distortions after mid-1979 when their

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<sup>1/</sup> As in Table 3, the data refer to 1963, 1973, and 1980.

<sup>2/</sup> This section utilizes the results reported in part in Balassa, 1986.

exchange rates became seriously overvalued. In turn, after earlier efforts made to reduce the bias of the incentive system against exports, Argentina and Mexico, and to a lesser extent Brazil, increased the degree of inward orientation while India continued with its inward-oriented stance.

Outward-oriented developing economies maintained realistic exchange rates, with little variation over time whereas exchange rates were generally overvalued in inward-oriented economies, with the degree of overvaluation varying during the period. This explains that outward-oriented economies continued to gain export market shares in nonfuel exports while inward-oriented economies experienced losses in foreign markets (As shown in Table 4, in the case of Brazil losses in nonfuel primary exports offset gains in manufactured goods).

We also find that more import substitution occurred in outward-oriented, than in inward-oriented developing economies during the 1973-83 period. Various considerations may explain this, prima facie surprising, result. To begin with, the former but not the latter group of developing economies maintained realistic exchange rates that contribute to export expansion as well as to import substitution. Also, the exploitation of economies of scale in the export industries of outward-oriented developing economies permits replacing imports by domestic production in these industries while import replacement becomes increasingly costly, and net import savings decline, under continued inward orientation. Finally, virtual lack of discrimination in the system of incentives against agriculture in outward-oriented economies allows import substitution to occur in this sector that is not the case under inward orientation.

Outward-oriented developing economies thus undertook domestic adjustment through output-increasing policies of export expansion and efficient import substitution that was not the case under inward orientation. At the same time, the former group generally eschewed highly capital-intensive projects that were undertaken by the public sector and by the greatly protected private sector in inward-oriented developing economies.

While, owing to their greater exposure to foreign markets, external shocks were considerably larger in outward-oriented than in inward-oriented developing economies, these differences were offset several times by differences in economic growth rates. Notwithstanding the external shocks they suffered, average per capita GDP growth rates remained at 5 percent a year between 1963-73 and 1973-79 in outward-oriented developing economies while declining from 5 to 3 percent in inward-oriented economies (Apart from the developing economies referred to above, the latter group includes Israel, Portugal, Turkey, and Yugoslavia).

These results obtained despite the fact that inward-oriented developing economies borrowed heavily abroad, since the borrowed funds were generally not utilized efficiently. In particular, slow increases in exports led to a substantial rise in the debt-export ratios of inward-oriented economies while this ratio remained approximately unchanged in outward-oriented economies.

Correspondingly, increases in world interest rates bore greatly on inward-oriented developing economies, necessitating the application of deflationary policies that led to stagnation in their per capita incomes in the 1979-82 period. And while outward-oriented developing economies also applied deflationary measures on a temporary basis, with their per capita GDP

growth rates declining to 2 percent in 1979-82, they rebounded again in subsequent years. Between 1982 and 1985, per capita GDP growth rates averaged 4 percent in outward-oriented economies as compared to a slight decrease in inward-oriented economies that had to pay the price for their excessive indebtedness.

The overall conclusions reached in regard to the two groups of developing economies neglect the variety found within each. Among Latin American economies, particular interest attaches to Chile, where two important policy shifts were undertaken within a short period. Note may further be taken of the experience of Turkey where the adjustment policies applied permitted moving from virtual bankruptcy to creditworthiness for bank lending within a few years.

The September 1973 military takeover found Chile with a 500 percent rate of inflation and economic stagnation in a highly regimented economy. The situation was further aggravated as the quadrupling of oil prices was accompanied by a substantial fall in the price of copper. The Pinochet government applied strong deflationary measures to cope with the situation, which led to a large decline in national income. It subsequently undertook a far-reaching policy reform, representing a shift from inward to outward orientation. <sup>1/</sup>

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<sup>1/</sup> Quantitative import restrictions were abolished and tariffs reduced to 10 percent over a five-year period, the only exception being the automobile industry. These measures were part of a package of economic reforms that included a large devaluation in real terms, the abolition of price control, the establishment of realistic prices for public utilities, the elimination of budget deficits, the establishment of positive interest rates, and the liberalization of financial markets.

Following the turn towards outward orientation, Chile reached one of the highest per capita GNP growth rates, 7 percent, among developing economies in the 1976-79 period, although this result represented in part a reversal after the earlier decline. Rapid economic growth was supported by export expansion as the policies applied led to considerable increases in nontraditional exports.

A policy change occurred in mid-1979, however, when Chile fixed its exchange rate in terms of the U.S. dollar, supposedly forever, and simultaneously reinforced the indexation of wages. Between June 1979 and October 1981, average wages doubled as a result while the exchange rate remained unchanged, compromising the competitive position of Chilean export and import-substituting activities in agriculture as well as in manufacturing. At the same time, under the virtual exchange rate guarantee, a large inflow of foreign capital ensued as domestic inflation rates exceeded foreign interest rates by a considerable margin, and the resulting negative real interest rates provided inducements for borrowing abroad. Since the production of goods entering into international trade became increasingly unprofitable, the borrowed funds were used to increase consumption as well as to invest in luxury housing and the stock market.

The resulting artificial boom came to an end in early 1982 as it became apparent that Chile could no longer continue financing its growing balance-of-payments deficit. Several devaluations were undertaken in succession, but the large burden of the foreign debt and the greatly weakened condition of domestic financial institutions will make it difficult for Chile to return to the growth path of the years 1976-79 for some time to come.

The moral of the story is summarized in a recent article on "Policy Experiments in Chile, 1973-83" by the author. The article concludes that "liberalization in Chile was perverted by increasing price distortions after 1979," adding that "it will be inappropriate, however, to declare the experience of the entire decade a failure, when it is a policy reversal that led to the predicament in which Chile now finds itself" (Balassa, 1985b, p. 234).

Turkey was practically bankrupt in 1979 and, with increasing foreign exchange stringency, it experienced considerable shortages of energy, raw materials, and spare parts. Industrial output declined and inflation accelerated as a result. This was the consequence of excessive borrowing and the use of borrowed funds in inefficient investment projects in the public sector as well as in the highly-protected private sector.

The January 1980 policy reforms aimed at redressing the situation and changing the inward-oriented development strategy Turkey had followed in the previous decades. <sup>1/</sup> While the reform measures had to be carried out in a deflationary environment, exports rose rapidly, leading to the resumption of

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<sup>1/</sup> The policy changes comprised stabilization measures, with the twin objectives of reducing the rate of inflation and improving the balance of payments, as well as reform measures, with a view to turning the Turkish economy in an outward direction and giving an increased role to market forces. Stabilization objectives were pursued by lowering the rate of money creation and reducing the public sector deficit. Both stabilization and reform objectives were served by a large devaluation. Furthermore, the bias against exports was substantially reduced through export subsidization and import liberalization. Finally, industrial prices and interest rates were freed.

economic growth. <sup>1/</sup> Rapid export expansion, in turn, provided a boost to economic growth in Turkey, with per capita GNP rising at an average annual rate of 2 percent between 1980 and 1985. In addition, inflation rates declined from 140 to 40 percent, although further decreases are desirable.

Turkey provides an example of successful adjustment through export expansion. Apart from the resumption of economic growth, Turkey again became creditworthy for borrowing from private banks. This is the more remarkable since Turkey was one of the most inward-oriented countries in the developing world, with an export-GNP share of only 3 percent in 1979. The turn towards outward orientation meant that this share reached 15 percent in 1985.

### III. Export Expansion and Economic Performance <sup>2/</sup>

#### A. Exports and Economic Growth

The experiences of developing economies discussed in the previous section of the paper indicate the favorable effects of exports on economic growth. This conclusion has been confirmed by a statistical analysis of the results obtained for these economies. The estimates, made in an intercountry framework, show a high correlation between the growth of exports and that of production in agriculture, in manufacturing, as well as in the national

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<sup>1/</sup> Between 1980 and 1985, the dollar value of exports increased threefold. Increases were the largest for exports to the Middle East, but Turkey also gained export market shares in the OECD countries. Thus, the dollar value of Turkish exports to these countries more than doubled between 1980 and 1985, although total OECD imports hardly changed during this period.

<sup>2/</sup> The results reported in the section of the paper derive largely from reports on the findings of major research projects on policy-making in developing countries including Little, Scitovsky, Scott (1970), Balassa and Associates, (1971), Bhagwati (1978), Krueger (1978), Donges and Müller-Ohlsen (1978), Balassa and Associates (1982), and Krueger (1983).

economy taken as a whole. <sup>1/</sup> In the latter case, it has also been shown that the growth of exports is highly correlated with the growth of GNP less exports, indicating the indirect effects of exports on the rest of the economy. <sup>2/</sup>

Estimates made by Anne Krueger (1978, p. 282) for a partially overlapping group of developing economies <sup>3/</sup> confirm these results. She has found that, in the 1954-71 period, Brazil's 25 percent rate of growth of exports increased its GNP growth rate by 2.75 percentage points while Korea's 40 percent rate of growth of exports raised its GNP growth rate by 4.4 percentage points. In turn, for a group of 31 semi-industrial economies Feder (1983) has estimated that shifting resources from nonexport to export industries was responsible for a 1.8 percentage point difference in GNP growth rates in the 1964-73 period.

Explaining GNP growth in terms of export growth omits the effects of other economic variables. Michalopoulos and Jay have endeavored to remedy this deficiency by introducing data on labor and capital, in addition to exports, to explain intercountry differences in GNP growth rates. Using data for 39 developing economies, these authors have found that intercountry differences in the growth of labor and in domestic and foreign investment

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<sup>1/</sup> In the investigation, use has been made of data for the 1960-66 and 1966-73 periods for the countries in question, with the addition of Israel and Yugoslavia; however, the calculations omit Uruguay (Balassa and Associates, 1982, ch. 3).

<sup>2/</sup> The latter procedure also avoids the statistical problem of intercorrelation due to the inclusion of exports in production.

<sup>3/</sup> Brazil, Chile, Colombia, Egypt, Ghana, India, Israel, Korea, Philippines, and Turkey.

explain 53 percent of intercountry variations in GNP growth rate, while adding export growth increases this ratio to 71 percent (Michalopoulos and Jay, 1973). Similar results have been reached by applying this procedure to the combined 1960-66 and 1966-73 data for the developing economies referred to above (Balassa and Associates, 1982, ch. 3).

The cited estimates refer to the period of rapid growth in the world economy. Further interest attaches to the question as to how these results hold up in the subsequent period of external shocks. Applying the same procedure to the 1973-78 period, the earlier findings on the importance of exports for economic growth have again been reconfirmed (Balassa, 1985a).

Data available for 43 developing economies have further permitted analyzing the implications for economic growth of trade orientation at the beginning of the period of external shocks and of policy responses to external shocks in the 1973-78 period. The extent of trade orientation in the initial year has been defined in terms of deviations of actual from hypothetical per capita exports, the latter having been estimated by reference to per capita incomes, population, and the ratio of mineral exports to GNP. In turn, alternative policy responses have been defined as export promotion, import substitution, and additional net external financing. <sup>1/</sup>

The impact of trade orientation on economic growth is indicated by the existence of a difference of 1 percentage point in GNP growth rates

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<sup>1/</sup> External shocks refer to the effects of the slowdown in the growth of world exports and changes in the terms of trade. Among policy responses to these shocks, export promotion is represented by changes in export market shares; import substitution refers to decreases in the income elasticity of import demand; and additional net external financing has been derived by extrapolating past trends in such financing.

between developing economies in the upper quartile and the lower quartile of the distribution in terms of trade orientation, corresponding to the median among outward-oriented and inward-oriented countries, respectively.

Furthermore, a difference of 1.2 percentage points in GNP growth is obtained in comparing the upper and the lower quartiles of the distribution as regards reliance on export promotion, as against import substitution and additional external financing.

The results are cumulative, indicating that both initial export orientation and reliance on exports in response to external shocks importantly contributed to economic growth in developing economies during the period under consideration. These factors explain a large proportion of intercountry differences in GNP growth rates in the 1973-78 period, with a difference of 3.2 percentage points between the upper quartile and the lower quartile of the distribution in the 43 developing economies.

#### B. Factors Affecting Economic Growth

The results show that export expansion favorably affects economic growth in developing economies. As noted in the introduction, this may be explained by reference to gains from resource allocation according to comparative advantage; the exploitation of economies of scale and increased capacity utilization; improvements in technology; and increases in domestic savings and foreign direct investment under an outward-oriented development strategy. There may be further gains through increased employment if labor is not fully employed.

The obverse of gains from specialization is the cost of protection incurred under inward orientation. For the first half of the 1960s, this cost, including monopoly profits, has been estimated at 9.5 percent of GNP in

Brazil, 6.2 percent in Chile, 6.2 percent in Pakistan, and 3.7 percent for the Philippines; the estimated cost was 2.5 percent of GNP for Mexico, which had relatively low levels of protection in 1960, the year of the estimate (Balassa, 1971, p. 82). Furthermore, Krueger (1966) has concluded that the reallocation of resources from import-substitution to export industries under free trade would lead to the doubling of the world market value of manufacturing production in Turkey; with manufacturing industries accounting for one-seventh of GNP, this is equivalent to a cost of protection of 7 percent of Turkey's GNP.

These estimates do not take account of the effects of protection on the prices of the factors of production, capital and labor. To do so, general equilibrium estimates are needed. Such estimates have first been made for Colombia, which had protection levels comparable to Mexico, for the year 1970. The cost of protection has been estimated at 3.8 percent of GNP under full employment assumptions and 5.8 percent if labor is available at a constant real wage (de Melo, 1978, p. 217). <sup>1/</sup>

There are several more recent estimates derived in a general equilibrium framework. Grais, de Melo, and Urata (1986, p. 77) have estimated the cost of protection for Turkey in 1978 (i.e. prior to the 1980 reforms) at 5.5 percent of GDP, by taking account of the implications of quantitative import restrictions. And while, according to Keyzer (1986, p. 273), tariff reductions would hardly affect GDP in Bangladesh, his results are vitiated by neglecting quantitative import restrictions that are pervasive in Bangladesh

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<sup>1/</sup> The results are 11.0 percent and 15.8 percent, respectively, postulating an optimal export tax for coffee, which is subject to an international agreement.

and by excluding changes in production structure in response to tariff reductions -- truly, Hamlet without the Prince.

None of these estimates consider the gains obtainable through the exploitation of economies of scale under outward orientation that permits overcoming the limitations of small national markets. These have been incorporated in a general equilibrium model estimated by Harris. The results show a 3.6 percent increase in GNP associated with the unilateral elimination of Canada's relatively low tariffs, with the bulk of the gain attributed to economies of scale (Harris, 1984, p. 94 and 1986, pp. 242-44).

Gains from economies of scale under increased outward orientation can be expected to be greater in developing economies. With the exception of Brazil, these economies have smaller domestic markets for manufactured goods, where economies of scale are important, than does Canada and their protection levels are considerably higher.

Exporting also permits increased capacity utilization. In fact, in the small domestic markets of the developing countries, the choice often is between building ahead of demand and operating with involving a low degree of capacity utilization or constructing less than optimal size plants. This dilemma arises under traditional economies of scale, which entail reductions in production costs with increases in plant size in industries producing standardized products, such as steel, copper and newsprint.

Other forms of economies of scale include cost reductions obtainable through horizontal specialization (involving reductions in product variety as in the case of machine tools) and vertical specialization (involving the manufacture of parts, components, and accessories in separate establishments as in the case of automobiles) in differentiated products.

At the same time, according to the time-honored infant industry argument, incurring the cost of protection will be warranted as long as subsequent improvements in productivity offset this cost. But high protection may have the opposite effect by limiting competition in the small domestic markets of the developing countries as the resulting monopolies and oligopolies will often prefer 'quiet life' to innovative activity, which entails risk and uncertainty. In turn, the carrot and the stick of competition will provide inducements for technological change under outward orientation. Exporting firms, in particular, try to keep up with modern technology in order to maintain or improve their market position.

These conclusions are supported by empirical evidence. Thus, export expansion has been shown to be positively, and import substitution negatively, correlated with changes in total factor productivity (i.e. the productivity of the factors of production combined) in 13 Korean, Turkish, and Yugoslav industries during the period preceding the quadrupling of oil prices in 1973 (Nishimizu and Robinson, 1984, Table 5).

The results obtained for Turkey confirm the conclusions reached earlier by Krueger and Tuncer (1982) for this country. Also, India, which had a particularly pronounced inward-orientation during the postwar period, experienced a decline in total factor productivity between 1959-60 and 1979-80 (Ahluwalia, 1985). The same result has been obtained in an unpublished World Bank study for Mexico for the 1970-82 period, when the economy became increasingly outward-oriented.

The advantages of outward-orientation are also apparent from comparisons of estimates of total factor productivity for 20 developing economies covering the postwar period. Thus, Chenery (1986, Table 2-2)

reports that total factor productivity increased at annual rates of over 3 percent in outward-oriented economies <sup>1/</sup> while increases were 1 percent or less in countries with especially pronounced inward orientation. <sup>2/</sup>

In generating higher incomes, outward orientation would raise domestic savings. Assume, for example, that the incremental capital-output ratio (the relationship between an increment in the capital stock to that of output) is 4, the average domestic savings ratio is 16 percent, and the marginal savings ratio is 33 percent. Eliminating protection, taking to represent a loss of 6 percent of GNP, would now raise the rate of economic growth from 4.0 to 4.5 percent by increasing the amount saved.

This conclusion is supported by estimates of Mercenier and Waelbroeck who also include the rise in investment owing to the increased imports of capital goods in the event of trade liberalization. According to their results, a unilateral tariff cut by 50 percent would increase GNP by 0.9 percent in the low-income, and by 1.9 percent in the middle-income, oil-importing developing economies excluding, and by 2.1 and 4.3 percent including, savings and investment effects (Mercenier and Waelbroeck, 1986, pp. 301, 303). <sup>3/</sup>

Domestic savings would increase further if a higher than average share of incomes generated by exports were saved. This proposition has received support from a cross-section study of 14 developing economies by

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<sup>1/</sup> Hong Kong, Korea, Taiwan, China and, in earlier periods, Israel and Spain. An exception is provided, however, by Singapore.

<sup>2/</sup> Argentina, Chile (prior to 1974), India, and Venezuela.

<sup>3/</sup> These estimates do not include the gains obtainable through the elimination of quantitative restrictions.

Weisskopf (1972), who has found a positive correlation between exports and domestic savings. Weisskopf's results have been confirmed by Papanek (1973) in a cross-sectional analysis of 34 developing economies for the 1950s, and fifty-one developing countries for the 1960s (1973).

A positive correlation between exports and domestic savings has also been found in a time-series analysis of four developed and eight developing economies by Maizels (1968, ch. 4) for the early post-World War II period extending to 1962. Maizels' sample includes India; for the same country Bhagwati and Srinivasan (1975, ch. 16) have obtained inconclusive results in a comparative study of ten industries for the 1950s and 1960s. Given India's orientation toward import substitution during the entire period, however, the lack of clear-cut results in an interindustry framework may not modify the cross-sectional and time-series results obtained for the developing economies cited above. <sup>1/</sup>

As export expansion improves the balance of payments, a country may become more attractive to foreign investors. While Weisskopf and Papanek have found a negative correlation between domestic and foreign savings, Grinols and Bhagwati have brought into question the validity of these results (1976). Furthermore, on the basis of the experience of the developing economies included in the NBER project, Bhagwati (1978) has concluded in regard to the application of an export promotion (EP) strategy that a "substantial inflow of foreign capital seems to attend such a strategy [and that] this inflow is not

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<sup>1/</sup> At the same time, one may agree with Bhagwati (1978) that "while there is much empirical evidence in support of a statistical association between exports and saving, there is little evidence so far for some of the hypotheses that could provide a rationale for such an association implying a causal relationship running from exports to savings" (p. 147).

exogenous to the EP strategy, as is sometimes assumed, but can be seriously argued to be a result in large part of the EP strategy itself." (p. 211). <sup>1/</sup>

C. Trade Orientation, Employment, Wages, and Income Distribution

As long as labor is not fully employed, the rapid growth of output under an outward-oriented strategy benefits employment, and additional gains are obtained to the extent that exports are more labor intensive than import substitution. However, these gains are reduced in the event that outward orientation leads to more rapid increases in labor productivity than would otherwise be the case.

Banerji and Riedel (1980) have analyzed the effects of these factors on industrial employment in Taiwan, China and in India. Their results indicate that the favorable effects of rapid output growth on employment were enhanced by the shift towards labor-intensive export activities in the first case while output rose at a slower rate and a shift occurred towards relatively capital-intensive import-substituting activities in the second. With higher productivity growth, industrial employment grew at an average annual rate of 8 percent between 1954 and 1971 in the former, and 2 percent a year between 1950 and 1969 in the latter, case.

Furthermore, in a comparative study of eight inward-oriented developing economies, Anne Krueger (1983, Table 6.2) has found that considerable employment gains may be obtained through a shift from import-substitution to export orientation. These gains, calculated by the use of

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<sup>1/</sup> Bhagwati's definition of an export-promoting strategy (1978, p. 207) is practically equivalent to the above definition of outward orientation.

labor input coefficients for individual sectors, varied between 21 and 107 percent, with results for Indonesia and Thailand exceeding 100 percent. <sup>1/</sup>

Fields (1984) has examined the employment effects of outward orientation in the Far East. He found that, between the early 1960s and the early 1970s, unemployment rates declined from 8 to 4 percent in Korea, and from 6 to 2 percent in Taiwan, China; little change occurred in these rates in subsequent years of outward orientation. Also, Carvalho and Haddad (1981, Table 2.15) have shown that greater outward-orientation in Brazil after the mid-1960 led to a 27 percent increase in the labor-intensity of exports relative to import substitution in Brazil.

Apart from its impact on economic growth and on the interindustry allocation of the factors of production, trade orientation will affect employment through changes in factor prices. Under inward orientation capital goods are underpriced, both because the exchange rate is overvalued and because tariffs on capital goods tend to be low or nonexistent.

Among countries for which estimates have been made, the elimination of protection would involve reducing capital costs by 30 to 40 percent in Chile, Pakistan, and Turkey and by 8 percent in Argentina (Krueger, 1983, Table 7.1). As a one percent change in the relative prices of capital and labor has been shown to be associated with a one percent change in the use of labor relative to capital (Behrman, 1982, p. 186), eliminating this distortion

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<sup>1/</sup> An apparent exception is Chile but this was due to the capital-intensity of its intra-Latin American exports under the policies applied; the labor-intensity of exports in trade with developed countries much exceeded that for import substitution (Krueger, 1983, Table 6.2).

would lead to increases in employment commensurate with the rise in the relative cost of capital.

With the growth of employment, real wages increased considerably in outward-oriented economies where exports expanded rapidly. This increase reflects the fact that the rate of growth of the demand for labor on the part of the manufacturing sector exceeded the rate of growth of the supply of labor to this sector. As a result, between 1966 and 1973, real wages in manufacturing doubled in Korea and increased by nearly three-fifths in Taiwan. Also, real wages in manufacturing rose by three-tenths in Brazil after its shift towards increased outward orientation. In turn, real wages decline by one-tenth in India between 1966 and 1973, which continued with inward-oriented policies during this period. <sup>1/</sup>

The described tendencies continued during the period of external shocks. Between 1973 and 1983, real wages more than doubled in Korea and nearly doubled in Taiwan, China while Argentina and Mexico experienced a decline and in no major Latin American developing economies did real wages increase by as much as one-half. <sup>2/</sup>

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<sup>1/</sup> Fields (1984) further made comparisons with three small developing economies (Barbados, Jamaica, and Trinidad and Tobago) he considered as open economies albeit, given their high level of protection, they may better be classified as inward-oriented. And, while he attributed the high level of unemployment in these countries to the application of a 'lenient' wage policy, compared to the 'strict' wage policies allegedly followed by the Far Eastern countries, this assertion conflicts with the fact that real wages rose more rapidly in the Far East than in the Caribbean countries, with an absolute decline observed in Jamaica.

<sup>2/</sup> Balassa, Bueno, Kuczynski, and Simonsen, 1986, Table 1.6 -- Data for India are not available.

Rapid increases in wages, together with the growth of agricultural incomes contributed to the rise of incomes of the poor. In fact, in the two cases where export promotion began earliest and was the most far-reaching, income inequalities were reduced. Thus, the Gini coefficient, measuring the extent of income inequality, declined from 0.37 in 1964 to 0.35 in 1970 in Korea, and from 0.33 in 1964 to 0.31 in 1973 in Taiwan, China. Also, in Korea, between 1964 and 1972, the incomes of the poorest 60 percent of the population grew 40 percent faster than the national average (Balassa and Associates, 1982, p. 58).

Myint (1985) has further compared the experiences of Korea and Sri Lanka that may be considered as archetypes of outward- and inward-oriented countries. Based on work carried out by Surjit Bhalla, Myint reports that the decline of exports was associated with a one-fifth percent fall in per capita incomes in terms of purchasing power parities between 1960 and 1977 in Sri Lanka, where the number of people living below the poverty line actually increased. In the same period, per capita incomes more than tripled in Korea, leading to a substantial fall in the number of people living below the poverty line.

Improvements have occurred in Sri Lanka following the policy reforms undertaken in 1977, which have involved a move towards outward orientation. Between 1977 and 1984, per capita incomes rose by more than one-fourth, employment increased to a considerable extent, and food and other expenditures by the poor surpassed the levels reached in 1973 (Bhalla and Glewwe, 1986, p. 61).

### III. Prospective Policy Changes and Market Access

#### A. Availability of Foreign Markets

The evidence presented in the preceding two sections of the paper indicates the advantages of outward orientation. Developing economies following such a strategy have reached higher economic growth rates and have had a superior record in increasing employment, raising wages, and improving the lot of the poor than inward-oriented economies.

The question has repeatedly been raised, however, if market constraints would permit other developing economies to adopt outward-oriented strategies. This question has usually been formulated by reference to the limitations the availability of export markets in the developed countries is said to impose on economic growth in developing economies.

In his Nobel Prize lecture, Arthur Lewis (1980) adopted a rather pessimistic view concerning the future. He suggested that while a 6 percent rate of economic growth in the developing countries would require a 6 percent rate of export growth, the exports of these countries to the developed countries would rise only 4 percent a year. Apart from the slowdown of economic growth in the developed countries, Lewis attributed this result to a historical relationship between the growth of industrial production in the developed countries and the world exports of primary products, with an elasticity of 0.87 of the latter in regard to the former.

While the results reported in Table 2 for primary exports seem to support Lewis' thesis, one needs further to consider the prospects for manufactured exports. Manufactured products have assumed increasing importance in the exports of the developing countries to the developed countries, with their share reaching two-fifths of the total in 1984 (Table

1). Correspondingly, in the 1963-84 period, the estimated income elasticity of demand for these products in the developed countries was 3.8, raising the overall elasticity to 1.5 (Table 2).

Following Lewis' logic, then, economic growth rates in the developing countries could exceed those in the developed countries by one-half if past relationships were to continue. This conclusion is strengthened if we consider that export expansion in the developing countries accelerated *pari passu* with the deceleration of economic growth in the developed countries. Thus, the decline in GDP growth rates in the developed countries from 4.7 percent in 1963-73 to 2.5 percent in 1973-84 was accompanied by an increase in the rate of growth of their nonfuel imports originating in the developing countries from 5.3 percent in 1963-73 to 8.3 percent in 1973-84. At the same time, increases in petroleum prices were only partly offset by declining petroleum imports.

The results point to the inappropriateness of considering export expansion in the developing countries as being exclusively, and even primarily, dependent on economic growth in the developed countries. Such demand-oriented explanations disregard the supply side, i.e. the effects developing country policies have on the growth of their exports.

These effects are indicated by the relationship between outward orientation and export growth that has been shown to exist in individual developing economies applying different policies (Section II). The results of time series analysis and available evidence on individual commodities further indicate the importance of policy choices for export growth.

Time series analysis of data for 27 developing countries has led to the conclusion that supply-side, rather than demand-side, variables dominated

export growth in the developing countries during the postwar period. In particular, "the results are consistent with [the] hypothesis that export success is related to favorable internal factors influencing countries' abilities to compete and diversify" (Love, 1984, p. 289).

Apart from tropical beverages, which constitute a small and declining share in their exports, developing countries compete with the developed countries for markets in primary commodities. It follows that the policies applied by the developing countries will importantly affect their success in exporting.

These considerations apply to foodstuffs, to raw materials, as well as to manufactured goods. They apply even to petroleum, where OPEC was long assumed to have a quasi-monopoly position. Thus, under the pressure of competition, the price of oil fell from its peak of \$34 a barrel in 1980 to below \$10 in early 1986 and was re-established only to \$15-16 following across-the-board production cuts. Also, the share of OPEC in world petroleum production declined from 68 percent in 1973 to 40 percent in 1985.

#### B. Prospects for Manufactured Exports

It may be concluded that the developing countries could augment their primary exports by following outward-oriented policies. The adoption of such policies would permit these countries to increase their share in world markets while benefiting from increases in the dollar prices of nonfuel primary products.

This conclusion applies a fortiori to manufactured goods, where the developing countries have a relatively small share in developed country markets and the possibilities for future increases are especially great. In this connection, reference may be made to the fact that the rapid growth of

the developing countries' manufactured exports occurred in an environment of slow world economic growth and protectionist pressures in the developed countries after 1973. In fact, after having increased from 0.2 percent in 1963 to 0.9 percent in 1973, the ratio of imports from the developing countries to the domestic consumption of manufactured goods in the developed countries (production plus imports less exports) reached 2.3 percent in 1983.

Among individual commodity groups, a slowdown is shown only for semi-manufactures, which are heavily weighted by semi-processed natural-resource products, such as aluminum, and for textiles and clothing, for which protectionist measures were taken by the developed countries (Table 5). Nevertheless, in 1984, the imports of textiles and clothing from the developing countries increased again, reflecting the emergence of new suppliers and the introduction of new products by traditional suppliers in the face of limitations imposed on increases in volume. At the same time, developing country exporters increasingly shifted to the exportation of products that do not encounter barriers, in particular, engineering products, which came to account for nearly two-fifths of the manufactured exports of the developing countries.

In considering future possibilities for the expansion of the manufactured exports of the developing countries, the starting point is the fact that these countries supplied only 2.3 percent of the manufactured goods consumed by the developed countries in 1983, notwithstanding the rapid growth they experienced during the preceding two decades. Assuming that manufacturing consumption in the developed countries would grow at an average annual rate of 3 percent and that their imports from the developing countries would rise 12 percent a year, the share of the developing countries in the

Table 5

The Relative Importance of Imports from Developing Countries in  
the Consumption of Manufactured Goods in Developed Countries

	Import-Consumption Ratio (in current prices)		
	<u>1973</u>	<u>1978</u>	<u>1983</u>
Iron and Steel	0.4	0.5	1.5
Chemicals	0.4	0.6	0.9
Other Semi Manufactures	1.0	1.6	1.8
Engineering Products	0.5	1.0	1.8
Textiles	1.3	2.7	2.9
Clothing	6.0	10.9	14.6
Other Consumer Goods	1.4	2.4	4.0
Total Manufacturing	0.9	1.5	2.3

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Sources: GATT, International Trade various issues; United Nations, Yearbook of Industrial Statistics various issues; and OECD, Indicators of Industrial Activity, various issues.

developed countries' consumption of manufactured goods would hardly reach 5 percent by 1993.

At the same time, the developing countries can be expected to use increments in their export earnings to buy manufactured goods from the developed countries. With the balance of trade in manufactured goods remaining unchanged, then, industrial activity in the developed countries would not be affected in toto while resources would be reallocated toward high technology industries.

Such reallocation would not occur instantaneously. Policy changes in the developing countries, which are a precondition for the acceleration of their export expansion, would have an impact only over time. Also, a growing part of trade in engineering products between developed and developing countries involves intra-industry rather than inter-industry specialization, so that changes occur in the product composition of the firm rather than in the industrial structure of the economy.

It follows that a 12 percent growth rate of manufactured exports from the developing to the industrial countries could be attained without major dislocations in developed country markets. At the same time, this rate of expansion would permit an increasing number of developing countries to adopt

outward-oriented policies, thereby attaining GDP growth rates higher than those considered by Lewis. <sup>1/</sup>

The conclusions are strengthened if we consider the employment effects of the prospective expansion of trade in manufactured goods between the developed and the developing countries. Estimates made by the author for the 1983-93 period show that the net loss of employment in the developed countries, associated with a balanced expansion of trade in manufactured goods, would not reach 0.1 percent of their labor force.

Among individual industries, the developed countries would obtain gains in employment in the technologically more advanced industries, using to a large extent skilled and technical labor, while losses would occur in the highly labor-intensive industries, employing mostly unskilled and semi-skilled labor. But, losses in employment would amount to less than 5 percent of the labor force in the latter group of industries. And, the changes would occur over a ten-year period, thereby limiting the cost of adjustment.

The problem of adjustment in the developed countries would be further reduced if the more advanced developing countries upgraded and diversified their exports. At the same time, as these countries move ahead on the comparative cost scale, their exports may be supplanted by countries at a lower level of development. Now, to the extent that one developing country

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<sup>1/</sup> If primary exports, accounting for three-fifths of developing country exports in 1983, grew by 4 percent a year as Lewis postulates, and manufactured exports increased at an average annual rate of 12 percent, the total exports of the developing countries would rise 8 percent a year between 1983 and 1993. This is much in excess of the 6 percent export growth rate that would be required, according to Lewis, for these countries to attain a GDP growth of 6 percent a year.

merely replaces another in exporting particular commodities to developed country markets, the problem of adjustment in these markets is mitigated.

C. Economic Growth and Trade among Developing Countries

There are further possibilities for increased trade among the developing countries. Such trade may take place among countries at similar levels of industrial development as well as among countries at different levels of industrialization. In the former case, gains would result largely through intra-industry specialization and the exploitation of economies of scale; in the latter case, benefits would be derived from specialization according to comparative advantage.

The historical tendency, interrupted by the debt crisis, has in fact been for trade among the developing countries to increase more rapidly than their exports to the developed countries. The resumption of this trend may be expected in the future. For one thing, higher economic growth rates in the developing countries would lead to more rapid increases in their markets. For another thing, with their greater degree of economic sophistication, the newly-industrializing developing countries could increasingly supply the needs of countries at lower levels of development in a wider array of commodities.

At the same time, as Lewis notes in the article referred to above, the expansion of trade among the developing countries may not be sought through preferential arrangements. Such arrangements increase the cost of

imports, thereby reducing the competitiveness of production in the developing countries. <sup>1/</sup>

Rather, the developing countries can and should produce goods competitively with the developed countries. They have done this in regard to textiles, clothing, and shoes, with automobile and steel representing the next stage. At the same time, with their increased economic sophistication, the developing countries would need increased amounts of high technology products from the developed countries.

#### Concluding Remarks

This paper has shown the importance of international trade for the developing countries and the benefits they can derive from outward orientation. It has also been noted that market limitations in the developed countries would not stand in the way of an increasing number of developing countries adopting outward-oriented policies.

Nevertheless, a liberal trading environment would enhance the gains developing countries could derive from outward orientation. For one thing, the limitations imposed by the developed countries on the importation of temperate zone agricultural products, textiles and clothing, and steel would need to be undone. For another thing, one would need to ensure that new restrictions are not imposed in the future.

These objectives can be pursued in the framework of the new round of multinational trade negotiations agreed to in Punta del Este last month. For

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<sup>1/</sup> These considerations, in fact, largely explain the lack of success of integration efforts in developing countries.

the negotiations to succeed, however, the more advanced developing countries would have to agree to reduce their own trade barriers.

To begin with, import controls by developing countries create problems for particular export interests in the developed countries. Also, with rising imports of manufactured goods from the more advanced developing countries, as a matter of practical politics it is difficult to make a case for unilateral concessions to them. Finally, historical experience indicates that developing countries have obtained better results in multilateral trade negotiations when they offered reductions in their own trade barriers.

The more advanced developing countries would thus benefit from liberalizing their imports in exchange for reductions in the trade barriers of the developed countries in the framework of the new round of multilateral trade negotiations. They would, in fact, doubly benefit because a policy of increased outward orientation is in their own interest and because the effectiveness of such a policy will increase if the developed countries lowered their barriers to developing-country exports.

This should not mean, however, that developing countries be asked to reduce their trade barriers to the same extent as the developed countries. Still less may be asked of the less industrialized developing countries, which are weaker economically. At the same time, the less developed countries would benefit through reductions in the trade barriers of the more advanced developing countries that provide potential markets for them.

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