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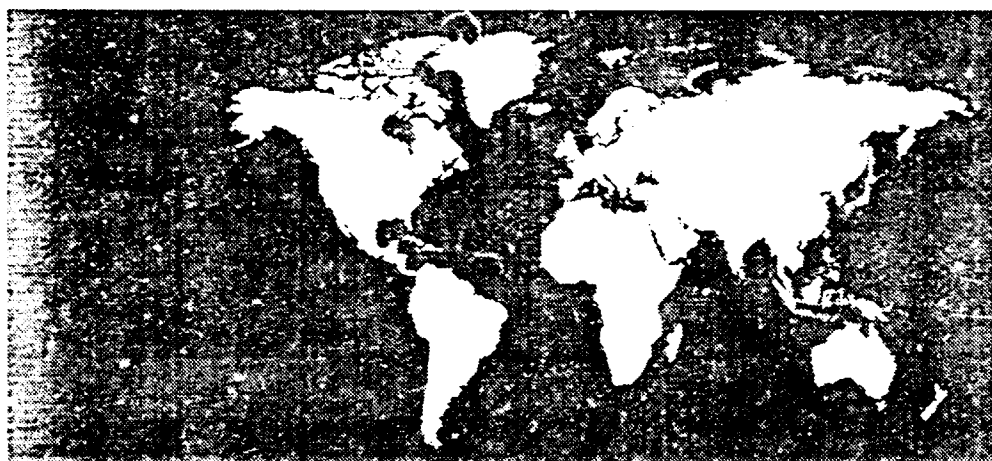
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Panel IV Global trade liberalization: Implications for industrial restructuring



Background Paper

Sectoral impact of the Uruguay Round Agreements on developing countries: Engineering goods

Prepared by

C. NIRANJAN RAO



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

This study was prepared by C. Niranjan Rao of the Indian Council for Research on International Economic Relations, New Delhi, India, as consultant.

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1. Introduction *

The developing countries have been keen to develop an indigenous engineering goods industry for the basic purpose of industrialization. As engineering goods industry has strong backward and forward linkages these countries thought that it is essential to have capabilities in the production of engineering goods. Engineering goods also have an important role to play in fostering technological capabilities in the long run. Engineering goods is a heterogeneous grouping which can be classified in various ways, for example, light and heavy engineering; electrical and non-electrical; capital goods; and machine tools etc.

One form of encouragement to engineering goods in developing countries has been to give tariff protection, on the basis of infant industry arguments. The short term costs (in various forms) is supposed to have been offset by long term gains (building technological capability etc.). Very few countries have actually achieved this favorable result, most notably Japan and South Korea. In many other developing countries it had the negative impact of fostering an inefficient and internationally non-competitive engineering goods sector. Even then many developing countries have moved on to diversify their export basket to include many 'non-traditional' items like engineering goods (for example, India).

* Discussions with Swapan Bhattacharya and Nisha Taneja were very useful.

The Uruguay Round of Multilateral Trade Negotiations which were started in 1986 finally ended in 1994, when all the Contracting Parties agreed to the Final Act. The Final Act commits all the member countries to reduction of tariff levels in the engineering goods sector. The agreement to make transparent the use of anti-dumping duty will also have a positive impact on the export of engineering goods from developing countries. The other important area which has some impact on engineering goods in the agreement relating to the Trade Related Aspects of Intellectual Property Rights. In this study we will seek to study the impact of the Uruguay Round agreements on the export and import of engineering goods for developing countries; the impact on foreign investment in this sector for developing countries and technology transfer in this sector.

2. Market Access

One of the achievements of the Uruguay Round in respect of market access was the significant reduction of the levels of tariffs. There was an average reduction of tariffs on industrial products by one third on a trade-weighted basis. For developing countries, the average tariff reduction was set at 24 per cent, with minimum reductions by line of 10 per cent. The finally agreed tariff reductions will result in an overall reduction in developed countries of their MFN tariffs on industrial products (excluding fuel) by an average of 38 per cent on a trade weighted basis, from 6.3 per cent to 3.9 per cent. Developing countries will benefit from these tariff reduction, which should improve their market access.

The agreed concessions on tariffs will lead to a general reduction of the share of imports facing tariffs of 10 per cent or more. Nevertheless, while developing countries benefit from liberalization in all sectors, the proportion of imports attracting duties of 10 per cent or more

Table 1

REDUCTION IN TRADE-WEIGHTED TARIFF AVERAGES FOR IMPORTS BY QUAD COUNTRIES IN 1988
(Percentage)

Importing market	Total imports				Imports from developing countries						
	Value (\$million)	MFN tariff average		Reduction	Value (\$million)	MFN tariff average		Reduction (%)	MFN/GSP tariff average		Reduction (%)
		A	B			A	B		A	B	
Manufactures of metal											
Canada	2917	9.9	6.1	38.7	315	10.4	6.2	40.5	6.4	5.5	14.3
European Union	6544	5.7	3.1	45.2	1359	6.1	3.2	47.5	-	-	-
Japan	1346	4.9	0.9	80.6	480	5.0	0.9	82.7	0.2	-	-
United States	8873	4.7	2.7	41.9	3344	4.9	3.1	36.8	1.1	0.8	30.4
Office machines and telecommunications											
Canada	9260	4.1	0.7	82.2	1547	4.4	0.6	81.8	1.9	0.6	69.6
European Union	41865	7.6	4.0	46.7	9155	8.8	5.3	40.4	-	-	-
Japan	7546	4.0	-	100.0	2435	3.8	-	100.0	3.3	-	100.0
United States	61009	4.3	1.0	76.7	26513	4.3	1.0	77.1	2.5	0.5	80.7
Other non-electrical machinery											
Canada	11616	6.8	3.4	49.6	367	8.6	5.1	37.0	2.9	2.7	4.8
European Union	23050	4.5	1.9	56.5	1264	4.9	2.6	48.1	-	-	-
Japan	4905	2.6	-	100.0	700	3.7	-	100.0	0.6	-	-
United States	32012	3.3	1.5	55.0	4161	3.5	1.9	47.0	0.3	0.7	-

Importing market	Total imports				Imports from developing countries						
	Value (\$million)	MFN tariff average		Reduction	Value (\$million)	MFN tariff average		Reduction (%)	MFN/GSP tariff		Reduction (%)
		A	B			A	B		average	B	
Electrical Machinery											
Canada	4281	9.3	4.6	51.1	424	8.7	3.9	55.2	5.1	3.4	33.9
European Union	12750	5.5	2.9	46.2	2197	5.5	3.3	40.2	-	-	-
Japan	2877	2.6	0.3	88.9	821	3.3	0.4	87.7	2.2	-	-
United States	17316	4.5	2.6	41.9	7636	4.7	3.1	34.0	0.5	0.4	-
Automotive products											
Canada	26351	9.2	6.0	34.6	676	9.2	6.1	33.8	6.0	6.0	-
European Union	19521	9.5	8.4	11.7	1570	8.5	7.2	15.5	-	-	-
Japan	3651	0.4	-	-	93	2.6	-	100.0	2.6	-	100.0
United States	76452	5.0	4.8	3.8	6719	3.1	2.9	7.8	2.0	2.0	-
All imports (excluding fuels)											
Canada	104607	8.0	4.4	45.3	10162	12.4	7.4	40.5	7.5	5.3	29.3
European Union	379671	7.5	4.6	38.2	106626	9.8	6.9	29.8	5.1	3.5	30.3
Japan	159400	9.3	6.2	33.3	53675	7.4	4.7	36.5	4.3	3.4	22.6
United States	413065	5.1	3.4	32.7	132937	7.6	5.5	28.3	4.7	3.8	18.8

Source: UNCTAD [1994].

A= Pre-Uruguay Round; B=Post-Uruguay Round.

Imports include duty free imports.

MFN/GSP tariff rates were calculated, by applying GSP tariffs, to the entire imports of the item from the preference receiving countries.

remains relatively high, in particular for exports from developing countries in product sectors of export interest to them.

High MFN tariffs have been a matter of traditional concern to developing countries, an important factor restricting their access to industrial markets. As far as manufactures are concerned, the Uruguay Round achieved greater reduction in tariffs than other sectors. Even then, some particular products which are of export interest to developing countries face high tariffs, for example, automotive products in the EU.

In the Uruguay Round, as a result of tariffs concessions, overall MFN tariffs will be reduced on a trade weighted basis, by 45 per cent in Canada, by 38 per cent in the EU and by 33 per cent in Japan and the US. If we take trade from developing countries this will come down to 40.5 per cent by Canada, 36.5 per cent by Japan, 29.8 per cent by EU and 28.3 per cent by US. Only Japan's reduction of tariffs is higher with imports from developing countries.

Table 1 shows that in the case of engineering goods the trade weighted average tariff reduction in Quad countries is in some cases smaller when we take the imports from developing countries. This is because most of the developing country exports face high tariffs in developed country markets. Because the share of developing countries in total imports is very low the gains from tariffs reduction will also be low.

The reductions vary among various products, ranging from 3.8 per cent for automotive products in United States to 100 per cent for office machines and other non-electrical machinery in Japan. Even if allowance is made for preferential imports from developing countries under GSP, (which considerably reduces the tariff reduction averages for developing countries), tariffs remain higher than overall tariffs in the post-Uruguay Round period. It is interesting to note that

many engineering products did not have GSP preferences, for example, EU did not give GSP preferences for all the products mentioned in the table. For many products MFN/GSP tariff reductions are negligible.

Table 2
Developed Country tariff profiles
(percentages)

Product Category	Total import value	Percentage of imports					
		Duty free		0.1-5%		5.1-10.0%	
		Pre	Post	Pre	Post	Pre	Post
Metals							
All sources	69392	36	70	36	21	23	7
Developing economies	24359	46	77	35	18	17	4
Transport equipment							
All sources	96312	16	21	52	51	21	19
Developing economies	7562	32	36	49	48	12	12
Non-electric machinery							
All sources	118126	11	52	74	38	10	7
Developing economies	9786	9	55	74	34	13	10
Electric machinery							
All sources	86014	5	30	54	55	26	6
Developing economies	19216	6	37	58	47	21	6

Source: GATT [1994].

Looking at the tariff reductions from a different angle, once the Uruguay Round tariff reductions are fully implemented, the proportion of industrial products which enter the developed country market under MFN zero duties from developing countries will double, from 22 to 44 per cent. In the case of metal products it has gone up from 46 to 77 per cent, non-electrical machinery from 9 to 55 per cent and electrical machinery from 6 to 37 per cent. In the case of metals and electric machinery the reduction in the percentage of imports in the 5.1 to 10 per cent tariff range has come down considerably but not in other product groups.

3. Non-tariff Barriers: Anti-dumping

Anti-dumping duties were used indiscriminately by the developed countries to keep the labour intensive, low value added engineering goods from developing countries, (for example, India used to face this in its exports to the USA). The Uruguay Round agreement made the use of anti-dumping duty transparent and rule bound. A WTO member applying a non-tariff measure is required to follow precise guidelines to make the system transparent and predictable, as well as provide procedural guarantees for exporters. Depending upon how much of their engineering goods exports were subject of anti-dumping duty, developing countries are expected to gain from this new agreement.

4. Intellectual Property Rights

The Agreement on Trade Related Aspects of Intellectual Property Rights, commits the members to a set of standardized rules with respect to patents. As far as engineering goods is concerned these will mostly in the area of mechanical engineering. Some important provisions in this respect relate to the term of patent protection (which has been made a uniform twenty years from the date of grant); removal of license of right and comprehensive narrowing of the compulsory licensing provisions; and treatment of imports as working of the patent. All these provisions may effect foreign direct investment, location of international R&D, domestic R&D, and also technology transfer.

As far as patents are concerned it has been shown that in mechanical engineering patent protection has marginal significance (Taylor and Silberston [1973]). But a sudden and drastic change in the patent system especially the increase in the patent term may have some impact on this industry in developing countries. The link between intellectual property protection and

foreign direct investment is not well established (Correa [1993]; for a different view point see Mansfield [1994]). It is very difficult to predict the impact of changes in IPR regimes on foreign direct investment.

On the whole the developing countries will marginally benefit from the Uruguay Round tariff reductions. In the case of Engineering goods this is especially so. The tariff reductions have been more in sophisticated upper end products, where the competitive advantage of developing countries is low. Those countries which have these capabilities (such as the East Asian countries) will gain. The other developing countries have to gain these capabilities if they have to benefit from the liberalized trade in the Post-Uruguay Round period.

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