The Uruguay Round of Trade Negotiations: An Overview

Norman S. Fieleke

Vice President and Economist, Federal Reserve Bank of Boston. Rachel Cononi provided valuable research assistance.

It took more than seven years of haggling, but on December 15, 1993, in Geneva, Switzerland, negotiators representing 117 countries reached consensus on the contents of the Final Act of the Uruguay Round, the most comprehensive international trade agreement in history. Launched in Punta del Este, Uruguay, in 1986, the Uruguay Round of multilateral trade negotiations covered more issues and involved more countries than any previous round. Its Final Act prescribes, among other things, that tariffs on industrial products be reduced by an average of more than one-third, that trade in agricultural goods be progressively liberalized, and that a new body, the World Trade Organization, be established both to facilitate the implementation of multilateral trade agreements such as the Final Act and to serve as a forum for future negotiations.

The Final Act is a formidable document, entailing more than 26,000 pages of technical language and detail. The chief purpose of this article is to summarize and assess in nontechnical language the main results of the Uruguay Round as recorded in that Act, in the belief that comprehension of such a major trade agreement is too important to be left to the trade negotiators alone.[1] Some estimates of the consequences of the agreement for world trade and income are also presented. A subsequent article will offer an evaluation of sectoral and geographic economic impacts within the United States.

I. Liberalization of Trade in Industrial Products

Agreements to liberalize trade in industrial products include reductions in tariffs and removal of quantitative restrictions.

Tariff Reductions

The breadth of the commitments made to reduce tariffs differs among the advanced countries, the developing countries, and the four "transition" countries that participated in the Uruguay Round (the Czech Republic, Poland, Romania, and the Slovak Republic, all transiting from centrally planned to market economies). The advanced countries agreed to reduce tariffs on industrial imports amounting to 64 percent of the total value of their imports of such products; 18 percent of their industrial imports were already duty-free under commitments made prior to the Round. By comparison, the developing countries agreed to lower their tariffs on about one-third of their industrial imports, and the participating transition countries on three-quarters of theirs. Tariff reductions are to be completed by the year 2000 except for certain sensitive sectors such as textiles, for which the reductions must be completed by 2005.

The depth of the proffered tariff reductions matters as much as the breadth. Overall, the advanced countries pledged to lower their tariffs on industrial goods from an average of 6.3 percent to 3.8 percent, a reduction of 40 percent. Moreover, as reported in Table 1, the proportion of industrial imports they admit duty-free is to rise sharply, from 20 to 44 percent, while the proportion facing tariffs above 15 percent should decline somewhat, from 7 to 5 percent.

For the developing countries, the share of their industrial imports admitted free of duty is scheduled to rise slightly, from 39 to 42 percent, while the proportion encumbered by tariffs above 15 percent will diminish from 43 to 38 percent. The high share of duty-free imports is attributable primarily to the large amount of duty-free imports entering Hong Kong and Singapore.

In evaluating the tariff reductions outlined in Table 1, one should bear in mind that moderate percentage declines in high tariffs may well precipitate greater price reductions on imports, and thus greater increases in imports, than do large percentage declines in low tariffs. For instance, a 20 percent reduction in a 35 percent tariff could bring about a 5 percent drop in price (inclusive of the tariff), while a 50 percent reduction in a 4 percent tariff would be expected to cause a price decline of no more than 2 percent.[2] Thus, the decrease in the share of developing country imports facing tariffs exceeding 35 percent is worthy of note.

By the same token, the 22 percent reduction promised by the advanced countries on their imports

Table 1
Pre- and Post-Uruguay Round Tariff Profiles for Imports of Industrial Products,[a] by Country Group

Tariffs by Country Group	Imports: Billions of U.S. Dollars[b]	Percentage Distribution: Pre-UR	Percentage Distribution: Post-UR
Advanced Economies			
Total	736.9	100	100
Duty-free[c]	149.5	20	44
0.1—5.0%	304.3	41	32
5.1—10.0%	176.8	24	15
10.1—15.0%	51.5	7	5
15.1—35.0%	45.1	6	4
Over 35%	9.8	1	1
Developing Economies			
Total	350.5	100	100
Duty-free[c]	137.3	39	42
0.1—5.0%	20.5	6	5
5.1—10.0%	28.1	8	10
10.1—15.0%	14.4	4	5
15.1—35.0%	96.6	28	30
Over 35%	53.6	15	8
Transition Economies			
Total	34.7	100	100
Duty-free[c]	4.6	13	16
0.1—5.0%	9.5	27	37
5.1—10.0%	9.5	27	35
10.1—15.0%	7.5	22	7
15.1—35.0%	3.4	10	4
Over 35%	0.2	0	0

[a]Excludes items for which duties are not available in *ad valorem* terms, since these items cannot be distributed by duty ranges, and also petroleum.
[b]Data are primarily for 1989 or 1989 and are for imports from sources receiving MFN or generalized system of preferences treatment, excluding imports from free trade area partners and imports under contractual preferential arrangements.
[c]Figures refer to tariff lines which were duty-free prior to the Uruguay Round, including those that were fully bound, partially bound or unbound.
Note: Detail may not add to totals shown because of rounding.
Source: General Agreement on Tariffs and Trade, "The Results of the Uruguay Round of Multilateral Trade Negotiations" (Geneva: November 1994).

[1] This article draws upon a number of sources, but relies most heavily on the following two: General Agreement on Tariffs and Trade, "The Results of the Uruguay Round of Multilateral Trade Negotiations" (Geneva: November 1994); and U.S. International Trade Commission, *The Year in Trade: Operation of the Trade Agreements Program*, 45th report (Washington, D.C.: USITC publication 2769, June 1994).

[2] In the first case, for example, a 20 percent reduction would lower the tariff from 35 percent to 28 percent. If the price without any tariff were, say, $1.00, then the price including the tariff could well fall from $1.35 to $1.28 as the tariff dropped, a price reduction of 5 percent.

of textiles and clothing—as reported in Table 2—could be expected to precipitate a somewhat larger price decline than the more prepossessing 69 percent reduction promised for wood, pulp, paper, and furniture. But most price declines caused by the advanced country industrial tariff reductions will be modest, since their pre-Uruguay Round tariffs were generally low. And once the Uruguay Round reductions have been completed, those tariffs will be negligible for several major industrial product categories, and will exceed 5 percent only for textiles and clothing, for leather, rubber, and footwear, and for transport equipment.

Table 2
Advanced Country Tariff Reductions by Major Industrial Product Group[a]

Product Category	Imports[b] (Billions of U.S. Dollars)	Tariff Averages[c]		
		Pre-UR	Post-UR	Percent Reduction
All industrial products	736.9	6.3	3.8	40
Fish and fish products	18.5	6.1	4.5	26
Wood, pulp, paper and furniture	40.6	3.5	1.1	69
Textiles and clothing	66.4	15.5	12.1	22
Leather, rubber, footwear	31.7	8.9	7.3	18
Metals	69.4	3.7	1.4	62
Chemicals and photographic supplies	61.0	6.7	3.7	45
Transport equipment	96.3	7.5	5.8	23
Non-electric machinery	118.1	4.8	1.9	60
Electric machinery	86.0	6.6	3.5	47
Mineral products and precious stones	73.0	2.3	1.1	52
Manufactured articles n.e.s.	76.1	5.5	2.4	56

[a]Excludes petroleum products.
[b]Data are primarily for 1988 or 1989 and are for imports from sources receiving MFN or generalized system of preferences treatment, excluding imports from free trade area partners and imports under contractual preferential arrangements.
[c]Weighted by import values.
Source: General Agreement on Tariffs and Trade, "The Results of the Uruguay Round of Multilateral Trade Negotiations" (Geneva: November 1994).

Some advanced countries agreed to much larger tariff reductions than others on these industrial products. As can be seen in Table 3, Japan and New Zealand ranked first and second, with average tariff reductions far greater than the smallest that were tendered. But the resulting price declines on imports should be much smaller for Japan than for New Zealand or for a number of other countries, such as Australia, Iceland, and South Africa, whose tariffs have been much higher than Japan's. Indeed, it is remarkable that so many countries with relatively high tariffs agreed to reductions nearly as great as, or more than, the average reduction of 40 percent; Australia, Canada, Iceland, and New Zealand all fall into this category. The governments of these countries may have had to overcome concerns that significantly cheaper imports would pose difficult adjustment problems for some competing domestic industries.

While the summary statistics presented here are suggestive, they provide only rough indications of the true levels of tariff protection. To illustrate this important point, suppose that an industry buys a raw material for $1.00 and transforms it into a finished product that sells for $2.00, the same price as an identical competing import. The industry then has "added value" of $1.00 to the raw material. If a tariff of 10 percent (amounting in this case to $0.20) is then imposed on competing imports and the price rises to $2.20, the true, or "effective," tariff protection on the value added in the industry is not 10 but 20 percent ($0.20 as a percentage of $1.00).

If tariffs are also levied on items used as inputs by the industry, the computation becomes more complex. But under certain fairly general assumptions, the effective rate of protection for an industry is equal to the tariff on imports that compete with the industry's output only if that tariff is the same as the weighted average duty on the inputs. The greater the excess of that tariff over the average duty on inputs, the greater is the excess of effective protection over that tariff. One can, therefore, get some idea of the effective protection provided for manufacturing industries by comparing the tariffs on the kinds of goods they produce with the tariffs on the inputs, or unfinished components, that go into those goods.

This matter has been a major concern of developing countries striving to generate manufacturing industries capable of exporting finished products to the advanced countries. Their concern should probably be eased by the pattern of tariff reductions negotiated in the Uruguay Round. As reported in Table 4, the percentage point decrease in the average tariff levied by the advanced countries on finished product imports from developing countries will exceed the

Table 3

Advanced Country Tariff Reductions on Industrial Products,[a] by Country

Country	Imports[b] (Millions of U.S. Dollars)	Trade-Weighted Tariff Averages Pre-UR	Post-UR	Percentage Reduction
	736,947	6.3	3.8	40
Australia	25,152	20.1	12.2	39
Austria	5,768	10.5	7.1	32
Canada	28,429	9.0	4.8	47
European Union	196,801	5.7	3.6	37
Finland	4,237	5.5	3.8	31
Iceland	334	18.2	11.5	37
Japan	132,907	3.9	1.7	56
New Zealand	4,997	23.9	11.3	53
Norway	6,192	3.6	2.0	44
South Africa	14,286	24.5	17.2	30
Sweden	10,324	4.6	3.1	33
Switzerland	10,227	2.2	1.5	32
United States	297,291	5.4	3.5	35

[a]Excluding petroleum.

[b]From most-favored-nation origins. Data are primarily for 1988 or 1989 and are for imports from sources receiving MFN or generalized system of preferences treatment, excluding imports from free trade area partners and imports under contractual preferential arrangements.

Source: General Agreement on Tariffs and Trade, "The Results of the Uruguay Round of Multilateral Trade Negotiations" (Geneva: November 1994).

decreases for both semi-manufactures and raw materials, and the decrease on semi-manufactures will exceed that on raw materials. The resulting post-Uruguay Round average tariff structure of the advanced countries for these goods will therefore exhibit less "escalation" from the lower to the higher stages of processing, and may well provide a smaller degree of effective protection to those higher stages. More detailed product category data generally support this conclusion.

Removal of Quantitative Restrictions

Well before the Uruguay Round, a series of multilateral trade negotiations had succeeded in reducing tariffs to relatively low levels, especially in the advanced countries. By contrast, nontariff barriers to trade had proliferated, with the result that trade was far less free than the tariff schedules suggested. Prominent among these nontariff barriers are quantitative restrictions that place limits on the volume of goods flowing from one country to another. The Uruguay Round Final Act prescribes a major relaxation of these restrictions.

For industrial products, the most important quantitative restraints scheduled for removal are those on textiles and clothing applied under the MFA (Multifibre Arrangement). In recent years, approximately 11 percent of world trade in textiles and 35 percent of world trade in clothing have been subjected to these restrictions, which have limited the exports of 31 countries to 8 others. These MFA restraints are to be phased out in four steps, starting January 1, 1995, and ending January 1, 2005.

Other quantitative restrictions have been imposed under Article XIX of the GATT (General Agreement on Tariffs and Trade), which authorizes countries to establish such restrictions to shield their industries from serious injury from import competition. In addition, numerous similar "grey-area" restrictions have been imposed that violate certain important conditions set by Article XIX, in particular the condition that countries whose exports become restricted are entitled to receive, or take, some form of compensatory trade measure. More than 75 grey-area measures were being employed as recently as 1993, covering travel goods, electrical equipment and appliances, footwear, television sets or television tubes, machine tools, and other products.

Table 4

Change in Tariff Structure on Advanced Country Imports of Industrial Products from Developing Countries

	Raw Materials	Semi-Manufactures	Finished Products
Imports[a]			
Billions of U.S. Dollars[b]	36.7	36.5	96.5
Percent of Total	22	21	57
Tariff (Percentage)			
Pre-Uruguay Round	2.1	5.4	9.1
Post-Uruguay Round	.8	2.8	6.2
Percentage Point Reduction	1.3	2.6	2.9

[a]Excluding petroleum

[b]Data are primarily for 1988 or 1989 and are for imports from sources receiving MFN or generalized system of preferences treatment, excluding imports from free trade area partners and imports under contractual preferential arrangements.

Source: General Agreement on Tariffs and Trade, "The Results of the Uruguay Round of Multilateral Trade Negotiations" (Geneva: November 1994).

The Final Act provides for the termination of restrictions taken under Article XIX not later than eight years after the date on which they were instituted or January 1, 2000, whichever comes later; comparable restrictions introduced in the future are to be maintained no longer than eight years. In addition, grey-area restraints must be either conformed to standards of the Final Act or eliminated by January 1, 1999—except that one such restraint may be maintained by each country until December 31, 1999, provided the country whose exports are restricted agrees.

II. Liberalization of Trade in Agricultural Products

Trade in agricultural products has been subjected to more varied and extensive government intervention than trade in industrial products, and the agreements incorporated in the Final Act reflect that difference.

Tariff Reductions

While tariffs on agricultural products are not uncommon, a substantial share of agricultural products have been protected from international competition by nontariff barriers such as quantitative restrictions and bans, variable import levies, minimum import prices, and discretionary import licensing. The Final Act requires that these nontariff barriers generally be converted into tariffs estimated to afford an equivalent degree of protection—a procedure known as "tariffication." Thereafter, all advanced country tariffs on agricultural goods are to be reduced by an average of 36 percent by the year 2000, with each individual tariff declining by at least 15 percent. For developing country tariffs, the comparable average reduction is 24 percent by 2004, with each tariff declining by at least 10 percent. No agricultural tariff reductions are required on the part of developing countries considered to be "least developed."

The advanced countries account for about two-thirds of world imports of agricultural products. As indicated in Table 5, their simple (or unweighted) average tariff reductions by product group range from a low of 26 percent for dairy products to a high of 48 percent for flowers, plants, and vegetable materials as well as for the miscellaneous category, "other agricultural products." For all products collectively, the 37 percent decrease slightly exceeds the 36 percent target.

Table 5
Advanced Country Imports and Tariff Reductions on Agricultural Products

Product Category	Imports[a] (Millions of U.S. Dollars)	Percentage Reduction in Tariffs
All agricultural products	84,240	37
Coffee, tea, cocoa, mate	9,136	35
Fruits and vegetables	14,575	36
Oilseeds, fats and oils	12,584	40
Other agricultural products	15,585	48
Animals and products	9,596	32
Beverages and spirits	6,608	38
Flowers, plants, vegetable materials	1,945	48
Tobacco	3,086	36
Spices and cereal preparations	2,767	35
Sugar	1,730	30
Grains	5,310	39
Dairy products	1,317	26

[a]Data are primarily for 1988 or 1989 and are for imports from sources receiving MFN or generalized system of preferences treatment, excluding imports from free trade area partners and imports under contractual preferential arrangements.

Source: General Agreement on Tariffs and Trade, "The Results of the Uruguay Round of Multilateral Trade Negotiations" (Geneva: November 1994).

Other Liberalization Measures

In addition to the foregoing tariff reductions, the Final Act prescribes measures to ensure that agricultural products will have access to import markets up to certain minimal levels. Furthermore, negotiators agreed to make substantial reductions in both domestic and export subsidies.

The agreements on subsidies will enhance world competition in agricultural products. In the advanced countries, domestic subsidies to agricultural producers are to be lowered, with certain exceptions, by 20 percent by the year 2000 from the levels prevailing during the period 1986–88. For developing countries, the corresponding reduction is 13 percent by 2004 (although no reduction is required by the least developed). Among the subsidies exempted from these reductions are direct payments to limit production.

With respect to export subsidies, in the advanced countries budgetary outlays for such subsidies are to be decreased by 36 percent, and the quantities of subsidized exports by 21 percent, for specified products by the year 2000 from the levels prevailing between 1986 and 1990. For developing countries,

the corresponding reductions are 24 percent for outlays and 14 percent for quantities by the year 2004 (with, again, no reductions required of the least developed).

These reductions are significant, but fall far short of eliminating all agricultural subsidies that impede free competition. More specifically, domestic subsidies are to decrease from $197 billion to $162 billion. Export subsidies, largely for wheat, beef, coarse grains, dairy products, and sugar, are to decrease from $22.5 billion to $14.5 billion, with one-half of the reduction attributable to the European Union.

III. Liberalization of Trade in Services

The Uruguay Round is the first multilateral trade negotiation to reach a comprehensive agreement on international trade in services, ranging over such varied activities as accounting to tourism. The agreement covers not only cross-border trade in services (such as U.S. television broadcasts to Canada), but also every other means by which services can be internationally traded, including: (1) services supplied from one territory to a consumer from another territory (such as New York hospital services to a citizen of Saudi Arabia); (2) services supplied by a person of one territory within the territory of another (such as consulting services provided by a U.S. citizen in Moscow); and (3) services supplied from an organization based in one territory to another territory through a subordinate organization abroad (such as financial services supplied by Citicorp USA through a Citicorp branch in another country).

Because service transactions have become a substantial component of world trade, their inclusion in the negotiations and the Final Act is a noteworthy feat. Cross-border trade alone in services accounts for roughly 20 percent of world trade in goods and services, and trade in services has been growing more rapidly than that in goods. The agreements on services include commitments on both general principles and specific service sectors.

The general principles, or goals, agreed for trade in services are similar to those long accepted in agreements relating to trade in goods. They include national treatment, most-favored-nation treatment, transparency, and progressive liberalization.

National treatment means that a country treats foreign services and service suppliers no less favorably than its national services and suppliers, while most-favored-nation (MFN) treatment means that a country treats services and service suppliers of a foreign country no less favorably than it treats those of any other foreign country. Transparency requires that relevant government policies on services be published. Progressive liberalization involves binding commitments on agreed liberalization measures, rendering the process of liberalization irreversible and laying the basis for future rounds of negotiation.

In addition to endorsing the foregoing general principles, each Uruguay Round participant country presented a schedule detailing its specific commitments for the various service sectors and indicating the extent to which it will apply the general principles to each sector. Among other things, the schedules limit particular barriers to trade in services—barriers such as restrictions on the number of service suppliers, on people employed, and on the total value or quantity of service transactions. All such schedules were included in the Final Act.

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Measuring reductions in barriers to services trade is much more difficult than measuring reductions in tariffs. Typically, services barriers take the form of rather imponderable discriminatory regulations or obstacles limiting the provision of services by foreigners. Moreover, detailed, internationally comparable data on services imports are not available.

In the absence of better measures, a few statistics on the number of countries making commitments in some important sectors may convey the flavor of what was accomplished. Most such commitments "bind," or guarantee, the current degree of access for foreign suppliers, while the others enlarge that access. Thus, commitments were scheduled by 67 countries in the business services sector (embracing legal, accounting, medical, computer, management consulting, and many related business services), by 52 countries in "value-added" (as distinguished from "basic") telecommunications, and by more than 40 countries in the air transport sector. By contrast, only 13 countries—

including just 2 advanced countries—made commitments in audiovisual services, and the numerous commitments made in financial services (in banking and insurance) may be withdrawn unless further negotiations resolve disagreements in that sector by July 1, 1995.

IV. Strengthening the International Rules, Procedures, and Institutions Governing World Trade

The worth of all the foregoing commitments depends not only on those commitments and their observance, but also on rules limiting alternative forms of protection. For example, a lower tariff may be of little value to a foreign supplier if the importing country rejects many of the foreign supplier's goods for allegedly failing to meet health or safety or environmental standards. Therefore, the Final Act incorporates provisions to strengthen the rules, procedures, and institutions that have been used both (1) to limit such alternative protective devices and (2) to resolve disputes over the interpretation of the Final Act itself. Some of the matters these provisions address have already been outlined in passages discussing the MFA, grey-area restrictions, agriculture, MFN, and national treatment. This section briefly summarizes the remaining matters treated by these provisions.

Trade in Goods

With respect to trade in goods, the Final Act includes provisions strengthening the regulation of the following potential non-tariff barriers: customs valuation, preshipment inspection, rules of origin, import licensing procedures, subsidies and countervailing duty measures, antidumping procedures, technical barriers, safeguards, and sanitary and phytosanitary measures (dealing with matters such as pest and disease control and food safety). For all of these, the Final Act prescribes guidelines that subscribing governments must follow to make their policies and procedures clear (or "transparent") and predictable, with due process for affected exporters.

A noteworthy example is afforded by the provisions dealing with antidumping duties. "Dumping" of merchandise into a market by an exporter has long been considered an "unfair" trade practice, and countries have commonly reacted to it with antidumping duties if they judged their domestic industries to be seriously injured, or threatened with serious injury, by competition from the dumped goods. But antidumping measures, as employed, have often been criticized as being unfair trade practices themselves, capricious and overly zealous in nature.

Although the Final Act will not—and should not—allay all such criticism, it does make clearer the rules and procedures to be followed by governments in conducting investigations of alleged dumping and in determining whether injurious dumping has occurred. Thus, among other things, investigating governments now must provide interested trade partners with full notice of an investigation and the right to present evidence, must apply certain specified standards in determining injury, and must remove within five years any antidumping duty that is imposed unless a determination is made that, without the duty, dumping and injury would probably continue or recur.

The worth of tariff reductions and removal of quantitative restrictions depends not only on those commitments and their observance, but also on rules limiting alternative forms of protection.

Other provisions deal with certain trade-distorting requirements that countries sometimes impose on enterprises, such as requirements that an enterprise use or purchase products of domestic origin or that it limit its use or purchase of imports according to the amount of its output that is exported. Such requirements must now be eliminated by advanced countries by January 1, 1997, by developing countries by January 1, 2000, and by least developed countries by January 1, 2002.

Intellectual Property

Through such devices as patents and copyrights, governments have long endeavored to protect the ownership rights of inventors, writers, and other producers of intellectual property. However, the nature of those endeavors has varied widely from country to country, and no multilateral system of principles and rules has existed to discipline international trade in

counterfeit items. Concern with this state of affairs has intensified with the growing role of intellectual property and the increasing ease with which it can be transmitted across national boundaries.

The Final Act addresses this concern. With limited exceptions, subscribers to the Act are required to treat nationals of trading partners on the same basis (the MFN principle), and also to provide for national treatment, with regard to the protection of intellectual property. Encompassed in the concept of intellectual property rights are patents, copyright and related rights (including rights for computer programs, data bases, sound recordings and films), trademarks and service marks, industrial designs, layout-design of integrated circuits, and geographical indications (including appellations of origin). Patent protection is to extend for 20 years for all inventions, whether of products or processes, in nearly all branches of technology.

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Moreover, governments must offer procedures and remedies under their domestic law by which foreign holders of intellectual property rights can effectively enforce their rights. These provisions on intellectual property are to be put into effect within transition periods of varying length—generally by January 1, 1996, by advanced economies; by January 1, 2000, by developing and transition economies; and by January 1, 2006, by the least developed economies.

Monitoring and Enforcement

In 1989 a Trade Policy Review Body (TPRB) was established on a provisional basis under the General Agreement on Tariffs and Trade and charged with monitoring, and publishing reviews of, the current trading policies of countries belonging to the GATT. Such reviews help to insure that multilateral trade agreements are observed. Under the Final Act, this review procedure, which covers all subscribing countries, acquires a permanent status.

Adherence to trade agreements cannot be ensured merely by such a review procedure. Thus, a multilateral enforcement process known as dispute settlement has long been available, and this process has been considerably strengthened under the Final Act. First, in place of the separate dispute settlement procedures used under different trade agreements in the past, the Act establishes a single system under a Dispute Settlement Body. Second, a negative consensus of that Body (a unanimous consensus *against* proceeding) is now required to halt the dispute settlement process from adjudicating a claim alleging that a trade agreement has been violated. Third, to assure the legal quality of rulings issued by the panels that adjudicate disputes, the Act provides for an Appellate Body to hear appeals of those rulings.

Once a violation has been found, the custom has been first to direct the offending country to cease and desist. However, rather than cease and desist, the country has the alternative of providing a mutually agreed concession (such as a reduction of its tariffs) to compensate for its continuing violation. If no agreement can be reached on compensation, the country bringing the complaint may be authorized to retaliate (for example, by raising its tariffs a specified amount on imports from the offending country).

The World Trade Organization

One of the chief results of the Uruguay Round is the establishment of the World Trade Organization (WTO), which replaced the legal system of the GATT. Its assigned tasks are as follows: to provide a forum for multilateral trade negotiations and a framework for implementing their results, including, first and foremost, the results of the Uruguay Round; to administer the trade policy review and dispute settlement mechanisms; and to cooperate with the International Monetary Fund and the World Bank group of agencies.

The WTO commenced operations on January 1, 1995, with 81 member countries and territories and nearly 50 more in a position to join in the near future. The initial membership accounted for more than 90 percent of international trade in goods and services. The organization is headed by a Ministerial Conference that meets at least once every two years, while a

General Council oversees its day-to-day operations. All members of the WTO are members of the Ministerial Conference and the General Council.

Each member country has one vote, and the majority required to approve a proposal depends on the issue under consideration. Thus, as already noted, a (unanimous) consensus is required to halt a dispute settlement proceeding. A three-quarters majority of WTO members is required to adopt an interpretation of the agreements on goods, services, and intellectual property. A two-thirds majority of the members may approve amendments to the agreements, except that unanimity is required for amendments that change the rights and obligations of members. Other proposals may be adopted either by consensus of those present or by simple majority of votes cast.

Plurilateral Agreements

In addition to the foregoing multilateral agreements, to which all Final Act subscribers accede, the Act includes several "plurilateral" agreements adopted by only some of the subscribers. Adherents to a plurilateral agreement are obliged to offer the benefits of the agreement to each other, but have no such obligation to non-adherents. Such agreements cover government procurement, civil aircraft, bovine meat, and certain dairy products.

Trade liberalization is undertaken not for its own sake but to improve living standards.

Most important for trade liberalization is the agreement on government procurement, which extends the scope of international competition for government contracts into the procurement of services (including construction services), procurement by public utilities, and procurement by government bodies below the central level, such as states, provinces, departments, and prefectures. Contracts below certain specified values are not covered. The basic principle is national treatment: Foreign suppliers, goods, and services must be treated no less favorably in government procurement than national suppliers, goods, and services. Thus, foreign suppliers must be given the same commercial opportunity to bid for and secure a government contract as domestic suppliers. At this writing, participants in the agreement will include Canada, the European Union, Hong Kong, Israel, Japan, (South) Korea, Norway, Switzerland, and the United States.

V. Effects on Trade and Income of Liberalizing Trade in Goods

What do all these agreements add up to? After all, trade liberalization is undertaken not for its own sake but to improve living standards. As trade barriers come down, countries will be stimulated to channel more of their resources into those activities they carry on relatively most efficiently in the world economy, thereby enlarging total exports, income, and investment. Evaluating the quantitative impact of the agreements is very difficult, however, given their breadth and the number of countries involved. The difficulty is greatest for the agreements dealing with matters other than trade in goods, partly because of the nature of the agreements (including the nature of the barriers to be relaxed) and partly because of the paucity of relevant data.

For the trade in goods, some fairly sophisticated estimates have been published, in spite of the difficulties—estimates of the effects of the agreements on both trade and income. Among the most recent and comprehensive are estimates issued by the GATT Secretariat in November, 1994, summarized here in Tables 6 to 9.[3] As all the agreed trade liberalizations should have been instituted by 2005, the estimates indicate how much greater (or, in some cases, lower) trade and income are expected to be by 2005 than they would have been if no Uruguay Round had occurred. In each table the estimated effect varies with the version of the estimating model employed or, more precisely, with the underlying assumptions about the nature of competition and returns to scale of production or about the investment of income gains. (These assumptions are spelled out in the notes to the tables.)

As reported in Table 6, by 2005 the volume of world merchandise trade is expected to be about 9 percent to 24 percent above the level it would have attained in the absence of the Uruguay Round. By far the greatest percentage gains are predicted for cloth-

[3] The estimates were derived from a computable general equilibrium model linking together: (1) industries (within economies) from lower to higher stages of processing, subject to constraints on the supply of land, labor, and capital; and (2) the economies themselves.

Table 6

Estimated Increase in Merchandise Exports by 2005 from the Liberalization of Trade in Goods, by Major Product Group

Percentage Change in Volume

Product Group or Sector	Version of the Estimating Model[a] Version 1	Version 2	Version 3	Actual Value of Exports in 1992 (Billions of U.S. Dollars)
All Merchandise[b]	8.6	9.6	23.5	2,843
Grains	4.1	4.4	4.6	24.2
Other Agricultural Products[c]	21.1	21.0	22.1	73.8
Fishery Products[c]	13.0	12.9	13.5	26.5
Forestry Products	3.7	4.1	5.6	7.7
Mining	1.6	1.8	3.1	328.4
Primary Steel	8.3	8.4	25.5	76.7
Primary Non-ferrous Metals	3.6	3.9	14.2	52.4
Fabricated Metal Products	5.3	5.4	16.0	57.2
Chemicals and Rubber	5.2	5.4	21.4	251.3
Transport Equipment	11.7	13.6	30.1	320.2
Textiles	17.5	18.6	72.5	93.9
Clothing	69.4	87.1	191.6	105.6
Other Manufactures	4.7	4.7	12.7	1,425.1

[a]Version 1 assumes perfect competition and constant returns to scale (no economies of scale). Version 2 assumes perfect competition and increasing returns to scale in industrial sectors ("external" economies of scale). Version 3 assumes monopolistic competition in industrial sectors and increasing returns to scale within firms ("internal" economies of scale). In the second and third versions of the model, all sectors but grains, other agriculture, forestry, and fishery are assumed to experience economies of scale.

[b]Excluding intra-European Union trade, and including trade in petroleum.

[c]The marginally smaller gains under the second version of the model than under the first result from the shift of resources into sectors whose production was stimulated by the introduction of increasing returns to scale.

Source: General Agreement on Tariffs and Trade, "The Results of the Uruguay Round of Multilateral Trade Negotiations" (Geneva: November 1994).

ing. In our judgment, the assumptions underlying the higher estimates (version 3) may be somewhat more realistic than the assumptions underlying the lower estimates—provided, of course, that the agreements are carried out.

In Table 7, the estimated increases in trade are allocated by major countries or country groups. China and Taiwan are listed separately from the other developing economies because Taiwan did not participate in the Uruguay Round and China's liberalization commitments were not definitive when the estimates were prepared. While the increases in trade from the liberalization are expected to be widely distributed, by far the largest percentage gains are projected for the developing and transition economies. The explanation, with reference to Table 6, is that these economies have a comparative advantage in the production of clothing, textiles, and other agricultural products, all of which should experience remarkable trade stimulation from the substantial liberalizations planned for them.

More informative than the trade gains are the income gains expected from the liberalization, outlined in Tables 8 and 9. As with Tables 6 and 7, readers can select the version of the estimating model that they think employs the most realistic assumptions. Again, our judgment inclines toward the set of assumptions that yields the highest estimate: that world income (gross product) will be perhaps $510 billion greater in 2005 than it would have been without the liberalization. By comparison, world income was estimated to be $22.3 trillion in 1990 (in 1990 dollars) by the World Bank.[4] This $510 billion gain, it should be noted, is not a one-time windfall, but an enduring increase in yearly income.

If nothing else mattered, the countries or country groups with the largest exports would experience the largest absolute gains in annual income. But other things do matter—in particular, the manner in which the various trade liberalizations interact with a country's economy. More specifically, relaxation of a country's barriers to imports and of foreign barriers to the country's exports encourage shifting of the country's resources into greater production of goods that the country turns out relatively more efficiently, in exchange for which the country can import more of the goods that it cannot produce so efficiently, the net result being an increase for the country in the total supply of goods that it desires.

Some idea of this interaction is conveyed in Table 9, which reports how much each of the three main categories of goods trade liberalization may add to annual income in the major countries or country groups by 2005. The major source of estimated income gains is the relaxation of industrial nontariff barriers—chiefly, MFA quantitative restrictions. Reduction of

[4] World Bank, *World Development Report 1992* (New York: Oxford University Press, 1992), p. 223.

Table 7

Estimated Increase in Merchandise Exports by 2005 from the Liberalization of Trade in Goods, by Major Countries or Country Groups[a]

Percentage Change in Volume

Country or Country Group	Version of the Estimating Model[b]: Version 1	Version 2	Version 3	Actual Value of Exports in 1992 (Billions of U.S. Dollars)
World	8.6	9.6	23.5	2,843
Developing and Transition Economies	13.7	15.3	36.7	906.4
European Union	7.3	7.8	19.4	568.7
European Free Trade Association	3.2	3.3	6.3	226.9
United States	7.5	8.2	21.7	448.2
Japan	7.5	8.0	18.3	339.9
Canada	5.3	6.1	16.6	134.1
China	6.1	8.4	26.5	85.0
Taiwan	4.5	5.7	14.4	81.5
Australia and New Zealand	8.4	9.0	24.0	52.3

[a]Excluding intra-European Union trade, and including trade in petroleum.

[b]Version 1 assumes perfect competition and constant returns to scale (no economies of scale). Version 2 assumes perfect competition and increasing returns to scale in industrial sectors ("external" economies of scale). Version 3 assumes monopolistic competition in industrial sectors and increasing returns to scale within firms ("internal" economies of scale).

Source: General Agreement on Tariffs and Trade, "The Results of the Uruguay Round of Multilateral Trade Negotiations" (Geneva: November 1994).

industrial tariffs becomes the second largest source of income gains if economies of scale are realized in selected nonagricultural sectors, as assumed in version 3.

Removal of the MFA restraints is estimated to reduce rather than enhance the incomes of developing and transition economies, including China and Taiwan, under version 1. Having been obliged to restrict their textile and clothing exports under the MFA, these countries have received scarcity prices, which will fall as their exports of these goods expand with the termination of the MFA. Under assumptions about demand made in version 3, but not version 1, their exports of these goods will expand by more than enough to compensate for the adverse income effect of the decline in price, thus generating a net income gain.

VI. Conclusion

These few pages should have conveyed some idea of the scope, complexity, and achievements of the Uruguay Round. As with many things in life, trade negotiations are not so simple as they once were. Several decades ago, almost all trade was in goods, transported by rail, truck, or

Table 8

Estimated Increase in Annual Income in 2005 from the Liberalization of Trade in Goods, by Major Countries or Country Groups

Billions of 1990 US Dollars

Country or Country Group	Version of the Estimating Model with Static Specifications[a]: Version 1	Version 2	Version 3	Version of the Estimating Model with Dynamic Specifications[a]: Version 1	Version 2	Version 3
World	109	146	315	184	218	510
Developing and Transition Economies	−1.9	4.1	70.2	−.7	2.7	116.1
European Union	47.7	58.6	103.3	78.5	87.2	163.5
European Free Trade Association	10.1	13.4	23.1	17.5	18.0	33.5
United States	30.4	35.9	75.6	49.2	59.5	122.4
Japan	11.9	15.2	17.0	21.2	19.3	26.7
Canada	2.3	3.0	8.0	3.8	5.0	12.4
China	4.1	8.9	10.1	6.9	14.3	18.7
Taiwan	2.6	4.7	4.5	5.1	8.4	10.2
Australia and New Zealand	1.5	1.9	3.1	2.4	3.6	5.8

[a]Version 1 assumes perfect competition and constant returns to scale (no economies of scale). Version 2 assumes perfect competition and increasing returns to scale in industrial sectors ("external" economies of scale). Version 3 assumes monopolistic competition in industrial sectors and increasing returns to scale within firms ("internal" economies of scale). The dynamic specification assumes that a share of the income gain is saved and invested in new capital.

Note: Detail may not add to totals shown because of rounding.

Source: General Agreement on Tariffs and Trade, "The Results of the Uruguay Round of Multilateral Trade Negotiations" (Geneva: November 1994).

Table 9

Decomposition of Estimated Increases in Annual Income in 2005 from the Liberalization of Trade in Goods, by Major Countries or Country Groups

Billions of 1990 US Dollars

	Versions of the Estimating Model with the Dynamic Specification[a]							
	Version 1				Version 3			
Country or Country Group	Industrial Tariffs	Industrial Nontariff Barriers	Agri-culture	Total	Industrial Tariffs	Industrial Nontariff Barriers	Agri-culture	Total
Developing and Transition Economies	.3	−12.2	11.2	−.7	33.4	68.4	14.3	116.1
European Union	16.8	42.9	18.7	78.5	33.8	115.1	14.6	163.5
European Free Trade Association	5.5	4.2	7.7	17.5	9.8	17.7	6.0	33.5
United States	7.0	38.4	3.8	49.2	13.7	102.3	6.3	122.4
Japan	10.1	−.4	11.5	21.2	18.1	2.1	6.5	26.7
Canada	−.5	2.7	1.6	3.8	.7	10.2	1.5	12.4
China	9.5	−3.5	.8	6.9	11.6	5.4	1.7	18.7
Taiwan	5.9	−1.3	.5	5.1	7.7	2.1	.4	10.2
Australia and New Zealand	.4	.3	1.7	2.4	3.1	.6	2.1	5.8
Total	55	71	58	184	132	324	53	510
(Percent of total gain)	(30.0)	(38.7)	(31.3)		(25.9)	(63.6)	(10.5)	

[a]Version 1 assumes perfect competition and constant returns to scale. Version 3 assumes monopolistic competition and increasing returns to firm scale in selected sectors. The dynamic specification assumes that a share of the income gain is saved and invested in new capital.

Note: Detail may not add to totals shown because of rounding.

Source: General Agreement on Tariffs and Trade, "The Results of the Uruguay Round of Multilateral Trade Negotiations" (Geneva: November 1994).

ship; and government barriers impeding this trade mainly took the form of tariffs and quotas. Levels of protection were both high and relatively easy to measure, and negotiating reductions was straightforward.

Trade negotiations today are much more complex. Services and intellectual property comprise a much larger share of international commerce, and nontariff barriers, difficult to measure and sometimes even difficult to identify, account for much more of the protection provided to domestic industries. And more countries are involved in the negotiations.

In the face of these complexities, Uruguay Round negotiators made commendable progress. Not only did they agree to lower tariffs substantially, as in previous rounds of negotiations, but they also pledged major reductions in other trade-distorting measures such as quantitative restrictions and subsidies. In addition, they extended basic rules of trade conduct into areas that had escaped such discipline, such as services, as well as reducing barriers in these areas, and they materially strengthened the rules, procedures, and institutions that govern world trade. This was more than a good day's work, and the net benefit to the world could even exceed the $510 billion gain in annual income expected by 2005 from the liberalization of trade in goods alone.

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