
CHAPTER 7

The World Trade Organization (Revised)

Geneva is a beautiful city, and walking along Lake Geneva is an activity enjoyed by many of its residents and tourists. If you begin in downtown Geneva and proceed along the northwestern shore of Lake Geneva, you will have a grand view of the beautiful water jet in the middle of the lake. *Quai du Mont Blanc* turns into *Quai Wilson*, and you will then proceed by a number of statues and pleasant, open parks. Next, you will enter into the wooded *Parc Mon Repos* and proceed by the Graduate Institute of International and Development Studies. Finally, you will walk between a large, gray building and the lake. If you turn to face this building, you will be looking at the **World Trade Organization** (WTO), an organization both lauded and vilified with equal intensity by various groups with concerns about trade policy.

While many people and groups have strong opinions about the World Trade Organization, most know very little about it. This chapter is dedicated to making sure you understand the key aspects of this important institution of world trade. Later in the book, you will also be introduced to the International Monetary Fund and the World Bank, important institutions of international finance and international economic development, respectively. To develop your understanding of the WTO, we will first take up its precursor, the **General Agreement on Tariffs and Trade** (GATT). Here we will undertake a historical examination of the GATT and introduce the principles it established for the conduct of international trade in goods. Next, we will turn to the WTO itself, as established by the Marrakesh Agreement of 1994. Here we will cover the main provisions of the Marrakesh Agreement in the areas of goods, services, intellectual property, and dispute settlement. We will also consider the issue of trade and the environment within the WTO. Finally, we will take up the current round of **multilateral trade negotiations (add to glossary)** in the Doha Round.

Nobel Laureate Douglass North (1990) defined institutions as “humanly devised constraints that shape human interaction” (p. 3). A less formal definition is as “the rules of the game.” As an institution of international trade, the WTO sets out the rules of the global trading game. These rules have force as international economic law, and a careful study of the WTO takes place on the boundary of economics and law. This, in turn,

involves a subtle change in vocabulary that may appear odd or unnecessary at first. Trust that it is indeed necessary. The terms we introduce here are widely accepted and utilized in the field of international trade among economists, lawyers, and policy analysts.

The General Agreement on Tariffs and Trade

During World War II, the United States and Britain began developing the outlines of a set of post-war, economic institutions. The specifics of the plan were negotiated in July 1944 at the Bretton Woods Conference in Bretton Woods, New Hampshire. The conference set up the International Bank for Reconstruction and Development (World Bank) and the International Monetary Fund, discussed in Chapters 17 and 23, respectively. The conference also noted, however, that there should be a third international organization in the realm of international trade.

In 1945, the United States indeed attempted to launch the idea of an International Trade Organization (ITO), and this proposal was taken up by the United Nations Economic and Social Council in a 1946 meeting in London to begin work on an ITO charter. In early 1947, a GATT draft agreement based on the commercial language of the draft ITO charter was prepared at a meeting in the United States. This led to a later meeting that year in Geneva where 23 countries (13 developed and 10 developing) signed the Final Act of the GATT. The ITO charter itself was finalized at a 1948 meeting in Havana Cuba. However, in 1950, the US government announced that it would *not* seek US Congressional ratification of the Havana Charter, effectively terminating the ITO plan. Consequently, the vehicle for post-war trade negotiations became the GATT.¹

Between 1946 and 1994, the GATT provided a framework for a number of “rounds” of multilateral trade negotiations, the most recently-concluded being the Uruguay Round. These rounds, along with the WTO-sponsored Doha Round, are listed in Table 7.1. The GATT-sponsored rounds reduced tariffs among member countries in many (but not all) sectors. As a result, the average tariff on manufactured products imposed by industrial countries fell from 35 percent to 4 percent.² Despite these successes, the Geneva-based GATT Secretariat could not always effectively enforce negotiated agreements without the legal standing of the ITO. This and other “constitutional defects” (Jackson 1995) limited its effectiveness. These limitations were finally addressed in 1994 with the Uruguay Round negotiations ending in a signing ceremony that took place in Marrakesh. The **Marrakesh Agreement** provided for the creation of the World Trade Organization (WTO), which takes up the vision of the ITO for enforceable trade agreements among its members. This section of the chapter will focus on the GATT, while the following sections focus on the WTO.

¹ The decision to not seek ratification was in response to pressures from isolationist members of the US Congress. Formally, the GATT was able to exist without the ITO due to what was called the Protocol of Provisional Application which had standing under international law. The 23 Geneva signatories became “contracting parties” to the GATT rather than “members” of the ITO. Jackson (1990) noted that “Since the ITO did not come into being, a major gap was left in the fabric intended for post-World War II international economic institutions – the Bretton Woods system” (p. 15).

² See Hoekman and Kostecki (2001), p. 105.

What does the GATT entail? Its most important principle is that of **nondiscrimination**. As illustrated in Figure 7.1, nondiscrimination has two important sub-principles, namely **most-favored-nation** (MFN in GATT Article I) and **national treatment** (NT in GATT Article III). Under MFN, each member must grant treatment to all other members as favorable as it extends to any individual member country. If Japan lowers a tariff on Indonesia's exports of a certain product, it must also lower its tariff on the exports of that product from all other member countries for "like products." The MFN treatment has special importance for developing countries, since they will benefit from tariff reductions negotiated among developed countries. Exceptions to MFN treatment are allowed in the case of certain preferential trade agreements and preferences granted to developing countries.

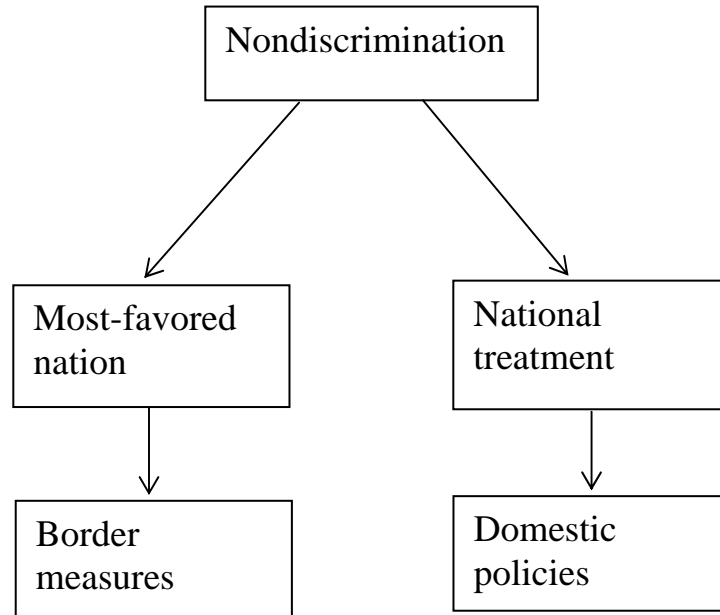
Table 7.1. GATT/WTO Rounds of Multilateral Trade Negotiations

Name of Round	Years	Number of Countries	Auspices
Geneva	1947	23	GATT
Annecy	1949	29	GATT
Torquay	1950-1951	32	GATT
Geneva	1955-1956	33	GATT
Dillon	1960-1961	39	GATT
Kennedy	1963-1967	74	GATT
Tokyo	1973-1979	99	GATT
Uruguay	1986-1994	117	GATT
Doha Round	2001-	Over 150	WTO

Whereas MFN addresses border measures, NT addresses internal, domestic policies such as taxes. NT specifies that foreign goods within a country should be treated no less favorably than domestic goods with regard to tax policies and other regulations (e.g., technical standards), again for "like products." Together, MFN and NT compose the nondiscrimination principle.

A second important GATT principle is the general prohibition of quotas or quantitative restrictions on trade. This reflects a longstanding view that price distortions (tariffs) are preferred to quantity distortions in international markets. It also reflects the history of GATT. During its birth, quantitative restrictions were one of the most significant impediments to trade. As always, there are exceptions allowed. Temporary quantitative restrictions on trade can be used in the case of balance of payments difficulties, but these must be implemented with the nondiscrimination principle of Figure 7.1 in mind.

Figure 7.1. The Nondiscrimination Principle



For many years, there were additional, sector-specific exceptions to the general prohibition of quotas in the GATT. The first was the case of agricultural products and applied when certain domestic programs were in place. This exception was granted to address US agricultural programs.³ This exception was used for decades to reduce US imports of sugar, dairy products, and peanuts. In addition, the United States insisted that export subsidies, prohibited in general by the GATT, be allowed for agriculture. Despite the early role of the United States in these violations of GATT principles in agriculture, it was the European Union that became the most vociferous supporter of these exemptions in the 1980s and 1990s under its Common Agricultural Policy (CAP).⁴ The second important exemption to quota prohibition was for textiles and clothing. These began in the early 1960s and were in place through the end of 2004, the 1995 to 2004 period being under the auspices of the World Trade Organization.⁵

³ See Hathaway (1987), p. 109.

⁴ On the EU Common Agricultural Policy, see Hathaway (1987), Hathaway and Ingo (1996), and Chapter 12 of Dinan (2005).

⁵ The 1961 quotas were in the form of what was called the Short Term Arrangement Regarding International Trade in Cotton Textiles. The 1962 to 1973 period was under the Long Term Arrangement Regarding International Trade in Cotton Textiles. The 1974 to 1994 period was

Exceptions to the quota prohibitions of the GATT in the areas of agriculture, textiles and clothing generated negative feelings on the part of developing countries with regard to the world trading system. Why? Agriculture, textiles, and clothing are three groups of products that countries first turn to in their trade and development process. The fact that these three groups of products were taken out of the GATT framework at the insistence developed countries (led by the United States and the European Union) left the developing countries wondering how they could have a fair chance to participate in the trade and development process. These sentiments have not entirely disappeared.

A third important GATT principle is that of **binding**. GATT- and WTO-sponsored reductions in tariff levels have been based on the practice of binding tariffs at agreed-upon levels, often *above* applied levels. Once set, tariff bindings may not in general be increased in the future. Applied rates that are below bound rates, however, may be increased. Although there are provisions made for some re-negotiation of bound tariffs, such re-negotiations must be accompanied by compensation. The general purpose of the binding principle is to introduce a degree of predictability into the world trading system.⁶

A final important GATT principle is that of “fair trade.” In the interest of promoting “fair” competition in the world trading system, the GATT introduced a number of stipulations with regard to subsidies, countervailing duties, and antidumping duties. The use of subsidies is not supposed to harm the trading interests of other members. When subsidies are shown to cause “material injury” or “threat thereof” to a domestic industry of another country, that other country is authorized to apply countervailing duties or tariffs on its imports of the product from the subsidizing country. The GATT leaves room for different interpretations, especially in the case of production as opposed to export subsidies. This, combined with differing national laws, leaves a great deal of room for controversy. “Dumped” goods are defined as exports sold at a price below those charged by the exporter in its domestic market. As in the case of countervailing duties, a county can impose anti-dumping duties when the dumping is shown to cause “material injury” or “threat thereof” to a domestic industry. The determination of dumping and injury is not straightforward in practice, but these forms of protection have been, at times, widely used among GATT and WTO members.⁷

The World Trade Organization

As discussed above, the initial Bretton Woods vision of an ITO failed to materialize. However, when the Uruguay Round was launched in 1986, there was recognition that the GATT had inherent institutional flaws. Consequently, the Uruguay Round included a negotiating group on the “function of the GATT system” or FOGS. Then John Jackson (1990), a preeminent trade lawyer, suggested that the Uruguay Round consider establishing

under a series of Multifiber Arrangements (MFAs) that expanded quota coverage across countries and fibers.

⁶ It is important to note that the MFN principle applies to *both* applied *and* bound tariff rates. Gaps between bound and applied rates are known as “water in the tariff.”

⁷ A succinct legal review of anti-dumping can be found in Chapter 11 of Matsushita, Schoenbaum and Mavroidis (2006).

a World Trade Organization or WTO. In 1991, the Director General of GATT, Arthur Dunkel released a draft agreement for the Uruguay Round that became known as “the Dunkel text.” The Dunkel text included a draft charter for the WTO. By the end of 1993, the text of the Uruguay Round contained a final charter for a World Trade Organization (WTO).

The Marrakesh Agreement is actually the “Marrakesh Agreement Establishing the World Trade Organization.” Therefore, the stipulations of this agreement are formally an element of the WTO, and the new GATT (known as GATT 1994) has been folded into the institutional structure of the WTO. The Marrakesh Agreement and the WTO is sometimes referred to as a “tripod” in that it primarily addressed the following three areas:

Trade in Goods, governed by GATT 1994, including an Agreement on Agriculture and an Agreement on Textiles and Clothing

Trade in Services as specified in the General Agreement on Trade in Services (GATS)

Intellectual Property as specified in the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS)

The Marrakesh Agreement also included a WTO charter. It established the WTO as a legal international organization and stipulated that “The WTO shall provide the common institutional framework for the conduct of trade relations among its members.”⁸ The charter also defined the functions of the WTO, including: to facilitate the implementation, administration, and operation of the multilateral trade agreements; to provide a forum for negotiations among members concerning multilateral trade relations; to administer disputes among members; and to cooperate with the International Monetary Fund and World Bank.

The administrative aspects of the WTO are summarized in Table 7.2. Members of the WTO send representatives to a Ministerial Conference that meets at least once every two years and carries out the functions of WTO. The Ministerial Conference appoints a Director General of the WTO Secretariat who, in turn, appoints the staff of the Secretariat. The Ministerial Conference adopts “regulations setting out the powers, duties, conditions of service and term of office of the Director General.” Between meetings of the Ministerial Conference, the General Council meets to conduct the affairs of the WTO. The General Council establishes rules and procedures, discharges responsibilities of the Dispute Settlement Body, and discharges the responsibilities of the Trade Policy Review Body.

When possible, the Ministerial Conference and the General Council make decisions by *consensus*. Consensus is defined to be a situation in which “no member, present at the meeting when the decision is taken, formally objects to the proposed decision.” Therefore, consensus does not necessarily imply unanimity. This definition of consensus proves to be important in the dispute settlement process of the WTO to be discussed below. When consensus cannot be reached, the WTO makes decisions through a process of majority voting (one vote per member).

⁸All quotations without citations are taken from GATT Secretariat (1994).

Let's now turn to a few important aspects of the WTO.

Trade in Goods

The section of the Marrakesh Agreement related to trade in goods contains GATT 1994, an update of the original GATT, as well as an Agreement on Agriculture and an Agreement on Textiles and Clothing. The Agreement on Agriculture addresses three outstanding issues concerning international trade in agricultural goods: market access, domestic support, and export subsidies. In the case of *market access*, the Agreement on Agriculture replaced a quota-based system with a system of bound tariffs and tariff-reduction commitments. The conversion of quotas into tariffs is a process known as **tariffication**. In this aspect, the Agreement on Agriculture represents a significant change of regime. Non-tariff measures (quotas) are now prohibited. Further, developed country members must have reduced average agricultural tariffs by 36 percent by 2001, and developing country members must reduce average agricultural tariffs by 24 percent by 2005. Least-developed country members are not required to reduce their tariffs.⁹ In practice, the current tariff regime includes **tariff rate quotas** discussed in the Appendix to Chapter 6.

In the case of *domestic support*, a distinction is made between non-trade-distorting policies known as “green box” measures and trade-distorting policies known as “amber box” measures. Green box measures are exempt from any reduction commitments. Amber box measures are not exempt, and these commitments are specified in terms of what are known as “total aggregate measures of support” (total AMS). Developed country members must have reduced total AMS by 20 percent by 2001, and developing country members must reduce total AMS by 13 percent by 2005. Least-developed country members are not required to reduce their total AMS.

Finally, in the case of *export subsidies*, use has *not* been eliminated. Rather, it has been limited to specified situations. Developed country members must have reduced export subsidies by 36 percent by 2001, and developing country members must reduce export subsidies by 24 percent by 2005. Least-developed country members are not required to reduce their export subsidies. The persistence of developed-country export subsidies represents a major distortion in global agricultural trade.

Despite the above-specified reduction commitments, the Agreement on Agriculture is best viewed as a *change in rules* rather than as a significant program for the liberalization of trade in agricultural products.¹⁰ The hope is that further liberalization of the new tariffed quotas will take place in the current (as of this writing) Doha Round of trade negotiations discussed below.

⁹ The 50 least developed countries are recognized by the United Nations based on criteria of low income, low human resource development and economic vulnerability.

¹⁰ Hathaway and Ingco (1996) supported this view.

The Agreement on Textiles and Clothing (ATC) required that, in four stages of a ten-year transition period beginning in 1995, countries reintegrate their textile and clothing sectors back into the GATT framework (GATT 1994). At the end of the ten-year period, all quotas on textile and clothing trade were removed. This represented a reintegration of the textile and clothing sector into the GATT-WTO principles from which it had been removed for a half-century.

Trade in Services

As we discussed in Chapter 1, trade in services composes more than 20 percent of total world trade and has at times grown faster than trade in goods. The General Agreement on Trade in Services (GATS) represents the first time that services have been brought into a multilateral trade agreement. For these reasons, the GATS was a significant outcome of the Uruguay Round. The negotiations on GATS, however, were difficult. Contributing to this difficulty was the fact that trade in services is less tangible than trade in goods. To provide a structure to trade in services, GATS defined trade in services as occurring in one of four modes:

Mode 1: cross-border trade

Mode 2: movement of consumers

Mode 3: foreign direct investment or FDI

Mode 4: movement of natural persons

Let's consider each of these in turn. Cross-border trade is a mode of supply that does not require the physical movement of producers or consumers. For example, Indian firms provide medical transcription services to US hospitals via satellite technology. Movement of consumers involves the consumer travelling to the country of the producer and is typical of the consumption of tourism services. Foreign direct investment is involved for services that require a commercial presence by producers in the country of the consumers and is typical of financial services. Finally, the movement of natural persons involves a non-commercial presence by producers to supply consulting, construction, and instructional services.¹¹

¹¹ GATT Mode 4 is often referred to as the *temporary* movement of natural persons, but as Matsushita, Schoenbaum and Mavroidis (2006) note: "nowhere does... GATS state that the movement of natural persons under Mode 4 is intended to be temporary."

Table 7.2. Administrative Structure of the WTO

Body	Composition	Function
Ministerial Conference	Representatives of all members.	Meets at least once every two years. Carries out functions of WTO. Makes decisions and takes actions.
General Council	Representatives of all members.	Meets between the meetings of the Ministerial Conference. Establishes rules and procedures. Discharges responsibilities of the Dispute Settlement Body. Discharges responsibilities of the Trade Policy Review Body.
Council for Trade in Goods	Representative of all members.	Oversees the functioning of the multilateral agreements of Annex 1A.
Council for Trade in Services	Representative of all members.	Oversees the functioning of the multilateral agreements of Annex 1B.
Council for Trade Related Aspect of Intellectual Property Rights	Representative of all members.	Oversees the functioning of the multilateral agreements of Annex 1C.
Dispute Settlement Body	Representative of all members.	Establishes panels, adopts panel and Appellate Body reports, maintains surveillance of implementation of rulings and recommendations.
Dispute Settlement Panels	Three or five well-qualified governmental and/or non-governmental individuals.	Assist the dispute settlement body by making findings and recommendations in dispute settlement cases.
Appellate Body	Seven persons, three of whom serve on any one case.	Hears appeals from panel cases.
Secretariat	Director General and staff.	Provides support for the activities of the member countries.

Another difficulty in negotiating the GATS was that there was resistance to it on the part of a number of developing countries. The United States and the European Union were in favor of it, however, and prevailed upon developing countries to allow negotiations to move forward. The GATS includes the principle of nondiscrimination discussed above. Each member was allowed to specify nondiscrimination exemptions on a “negative list” of sectors upon entry into the agreement that lasted for 10 years.

For those sectors a member country specifies on a “positive list,” the GATS prohibits certain market access restrictions. Six types of limitations were prohibited: the number of service suppliers; the total value of service transactions; the total number of operations or quantity of output; number of personnel employed; the type of legal entity in the case of FDI; and the share of foreign ownership in the case of FDI.

The GATS contains an understanding that periodic negotiations would be required to incrementally liberalize trade in services. These negotiations have resulted in the following protocols to the GATS:

Second GATS Protocol: Revised Schedules of Commitments on Financial Services, 1995.

Third GATS Protocol: Schedules of Specific Commitments Relating to Movement of Natural Persons, 1995.

Fourth GATS Protocol: Schedules of Specific Commitments Concerning Basic Telecommunications, 1997.

Fifth GATS Protocol: Schedules of Specific Commitments and Lists of Exemptions from Article II Concerning Financial Services, 1998.

The Second and Fifth Protocols on financial services were a significant outcome of the post-Marrakesh negotiations, although the negotiation process was contentious. As a result, beginning in 1999, a total of 102 WTO Members entered into multilateral commitments in the areas of insurance, banking, and other financial services. The Fourth Protocol on telecommunications is discussed in the accompanying box. The Third Protocol on the movement of natural persons (Mode 4 defined above) was not significant, involving only a few countries. This is a disappointment to developing countries because, as stressed by Mattoo (2000) and others, Mode 4 services trade is where developing countries possess an important comparative advantage.¹²

¹² As Winters et al. (2003) have shown, the gains for developing countries from an increase of only 3 percent in their temporary labor quotas would exceed the value of total aid flows and be similar to the expected benefits from the Doha Round of trade negotiations, with most of the benefits to developing countries coming from increased access of unskilled workers to jobs in developed countries.

Telecommunication Services in the GATS

As we discussed in Chapter 1, information and communication technology (ICT) has been an important driver of globalization processes. Nevertheless, the Marrakesh Agreement of 1994 contained no agreement on trade in telecommunication services. Negotiations on telecommunication services had begun in 1989 at the instigation of the United States. These negotiations broke down, however, because the United States was unsatisfied with the size of the market access concessions made by other countries of the world. The Marrakesh Agreement did contain a commitment to convene a Negotiating Group on Basic Telecommunications (NGBT) with a deadline of concluding an agreement in 1996.

Despite this commitment, telecommunications negotiations broke down in the spring of 1996, again with the United States being dissatisfied with market access commitments. Further negotiations proved to be successful, and in early 1997 they resulted in an Agreement on Basic Telecommunications among 69 countries that composed the Fourth Protocol of the GATS, involving commitments by 69 countries. The agreement contains general provisions on nondiscrimination. It also contains specific commitments in the areas of market access and domestic regulation. The latter regulatory principles are contained in an associated Reference Paper.

The Agreement on Basic Telecommunications addresses telecommunications trade in 14 telecom sectors and came into effect in 1998. By that time, it included three additional signatories for a total of 72 WTO members. In principle, the Fourth Protocol applies to all forms of basic telecommunications services, all modes of transmission, and all modes of supply. As WTO members that have committed themselves to the GATS, the 72 signatories have already committed themselves to MFN treatment and transparency. But as Fourth Protocol signatories, they have also committed themselves to market access and national treatment commitments and the regulatory principles of the Reference Paper. Subsequent accession agreements and unilateral actions have led to commitments of one type or another by 77 WTO members at the time of this writing.

Sources: World Trade Organization, Bronckers and Larouche (1997), Fredebeul-Krein and Freytag (1999) and Cowhey and Klimenko (2000).

The GATS committed signatories to begin a new round of GATS negotiations beginning in the year 2000, now known as GATS 2000. The WTO Services Council launched these negotiations in February of that year. On the agenda of GATS 2000 are subsidies, safeguard measures, government procurement, and additional market access. Progress in these negotiations was slow throughout the year, and it took the launch of the Doha Round in 2001 to revive the service negotiations. In 2006, plurilateral requests and offers were tabled as part of the Doha Round, but overall progress in the round has been help up at the time of this writing (see below).¹³

¹³ The 2006 requests and offers fell under four categories: the addition of sectors that are not included in current schedules; the removal of existing limitations or reducing levels of

Intellectual Property

The most contentious aspect of the Marrakesh Agreement is to be found in the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). Intellectual property or IP is an asset in the form of rights conferred upon a product of invention or creation by a country's legal system.¹⁴ The TRIPS agreement defined intellectual property as belonging to one of six categories: copyrights; trademarks; geographical indications; industrial designs; patents; and layout designs of integrated circuits.¹⁵ It is thus quite comprehensive.

The trade-relatedness of IP refers to the fact that “theft” of intellectual property suppresses trade of the goods in question. For example, if India takes a new drug, invented in the United States, analyzes its chemical constitution and produces its own version of that drug, ignoring the US patent, it will import substantially less of the patented drug. If it agrees to honor the US patent, it would import the drug from the United States or have its domestic market supplied via FDI by the US-based company holding the patent. Or, if a jeweler in Dubai sells counterfeit Cartier watches in place of authentic Cartier watches, this trademark violation will suppress the imports of authentic Cartier watches from France or Switzerland. No one takes this possibility more seriously than Cartier itself, which has crushed counterfeit watches with steamrollers and maintains its Middle East headquarters in Dubai.

The United States and the European Union pushed for the inclusion of IP in the Uruguay Round. Developing countries, led by India and Brazil, opposed it. The United States and the European Union prevailed, and the TRIPS became a part of the WTO. The ensuing disagreements, which have continued to this day, were well-summarized by Barton et al. (2006):

Conclusion of the TRIPS agreement has had important legal and political implications. As a legal matter, it has taken the GATT/WTO system into uncharted territory, covering not merely border measures, but also mandating threshold national regulatory standards and means of enforcing those standards. Politically, it has placed WTO rules and negotiations into the center of domestic political battles over the appropriate scope of IP protection, and has been responsible more than any other issue area for exacerbating North-South acrimony in Geneva (pp. 140-141).

The TRIPS agreement applied the principle of nondiscrimination to IP. Any advantage a WTO member grants to any country with regard to IP must now be granted to

restrictiveness; requests for additional commitments that relate to matters not falling within the scope of market access and national treatment; and the removal of MFN exemptions.

¹⁴ See Maskus (2000).

¹⁵ Geographical indications are defined as: “indications which identify a good as originating in the territory of a Member, or a region or locality in that territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographic origin.” We saw an example of this in Chapter 4 in the form of *blue d’Auvergne* cheese.

all other members. If India agrees to honor UK pharmaceutical patents, it must honor US pharmaceutical patents as well. This aspect of the TRIPS agreement must have been implemented by 1996.

The TRIPS agreement also sets out obligations for members structured around the six IP categories listed above:

1. *Copyrights*. Members must comply with the 1971 Berne Convention on copyrights. Computer programs are protected as literary works under the Berne convention, and the unauthorized recording of live broadcasts and performances is prohibited. The term of this protection is to be 50 years.
2. *Trademarks*. Trademarks of goods and services are to be protected for a term of no less than seven years. Provisions for the registration of trademarks must be made and are renewable indefinitely.
3. *Geographical indications*. Members must provide legal means to prevent the false use of geographical indications.
4. *Industrial designs*. Members must protect “independently created industrial designs that are new or original.” This protection does not apply to “designs dictated essentially by technical or functional considerations.” The protection of industrial designs must last at least 10 years.
5. *Patents*. The Agreement states, “patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application.” Exceptions to this do exist and include the protection of public order, and human, animal and plant life. Patents are to be extended for at least 20 years, representing a harmonization to the high-income country standard.
6. *Layout designs of integrated circuits*. The distribution of protected layout designs, as well as integrated circuits embodying protected layout designs, is forbidden. This protection is to extend for at least 10 years.

Currently, citizens and firms in developed countries own most of the world’s IP. It is also the case that developing countries currently often have less IP protection than developed countries, especially in the case of patents. Therefore, the TRIPS agreement raises the cost of many goods and services to developing countries. India will have to pay more for drugs as a result of the TRIPS agreement, and this will have an adverse effect on welfare in this country, especially the welfare of the poor. The same goes for the poor in many other developing countries. In the short term, then, the TRIPS agreement represents a transfer from developing country consumers to developed country producers.

The intellectual case in favor of multilateral *trade* liberalization of the kind embodied in the Marrakesh Agreement is the improvement of welfare that generally,

although not always, accompanies the liberalization. In the case of the TRIPS agreement, however, such welfare gains can be absent, especially in short to medium time frames. Indeed, some prominent trade economists from developing countries (e.g. Jagdish Bhagwati and Arvind Panagariya) consider the TRIPS to be a welfare-worsening, “non-trade” agenda item that has no place in the WTO. These economists view TRIPS as lacking in the efficiency gains that characterize trade (see Chapters 2 and 3) and as inappropriately restricting the freedom of countries to choose the intellectual property regime that is best for them.¹⁶

Can developing countries expect any benefits from the TRIPS Agreement? Prominent trade economist Keith Maskus (2000) argues that they can. These come in the form of increased inward FDI and technology transfer, as well as in the form of increased domestic innovation. Thus, the TRIPS Agreement imposes short-term costs in the hopes of generating long-term benefits. Whether this tradeoff has been made in an appropriate manner by TRIPS is an issue on which there is still much disagreement.

Access to Medicines

If there is one area in which the TRIPS agreement has been most contentious, it is in the area of *access to medicines*. With the advent of the new TRIPS regime in 1995, the United States government put a great deal of pressure on the governments of Brazil, India, and South Africa to honor US patents on HIV/AIDS drugs, thus raising the costs of these drugs to AIDS patients in these countries. In November 2001, WTO members gathered in Doha Qatar for the fourth Ministerial Conference of the WTO. At this meeting, developing countries pushed back. As a result, the members issued a special Declaration on the TRIPS Agreement and Public Health. This declaration included the statement that “the TRIPS Agreement does not and should not prevent Members from taking measures to protect public health.” More specifically, the declaration reaffirmed four “flexibilities” with regard to TRIPS and public health. For example: “Each member has the right to determine what constitutes a national emergency or other circumstances of extreme urgency, it being understood that public health crises, including those related to HIV/AIDS, tuberculosis, malaria and other epidemics, can represent a national emergency or other circumstances of extreme urgency.”

These flexibilities also included the production of generic drugs under **compulsory licensing** arrangements under Article 31 of TRIPS. However, Article 31(f) limits the use of these generic drugs to the domestic markets of the producing countries. Matthews (2004) noted that this had “the practical effect of preventing exports of generic drugs to countries that do not have significant pharmaceutical industries themselves... For countries with insufficient manufacturing capacity, the only realistic sourcing mechanism is importation” (p. 78).

¹⁶ See, for example, Panagariya (2004).

Unfortunately, such importation of this kind was restricted under TRIPS Article 31(f). A WTO “decision” on this issue was adopted in August 2003 that allowed least-developed WTO members to import off-patent, generic drugs. However, it was not yet clear that these provisions ensured that existing knowledge would be effectively deployed to confront some of the most serious health crises of modern times. First, the August 2003 decision was procedurally demanding. Second, deliberations at the TRIPS Council regarding the application of the decision could be lengthy. Third, there was a concern that developed countries with pharmaceutical industries will take unilateral action against developing countries making use of the decision. Fourth, there was evidence of bilateral, TRIPS-plus activity that might be extended to rights under the decision.

The 2003 WTO decision also directed the WTO TRIPS Council to prepare an *amendment* based “where appropriate” on the decision. An agreement regarding this amendment was reached in 2005 and is in the process of being ratified by member countries. It remains, however, both for supporting legislation in WTO member countries to be fully enacted and for the provisions of the amendment to be tested in practice. Indeed, Matthews (2006) noted that “it is perhaps surprising that no developing country has yet used the new mechanism to allow the importation of generic medicines following the issuance of a compulsory license in a developed country prior to patent expiry” (p. 130). Rwanda became the first country to do this in 2007 in order to import HIV/AIDS antiretroviral drugs from Canada.

It has become clear that capacity building is necessary to support use of the system, and the World Bank has been active in this regard. Hopefully, the compulsory licensing option will be helpful in harnessing knowledge in the form of pharmaceuticals to alleviate health crises and promote human development. Another avenue, however, is to improve productive capacities for key pharmaceuticals in developing countries, and the German government has been active in this area. Whatever the mechanism, a sustained commitment by all parties will be necessary.

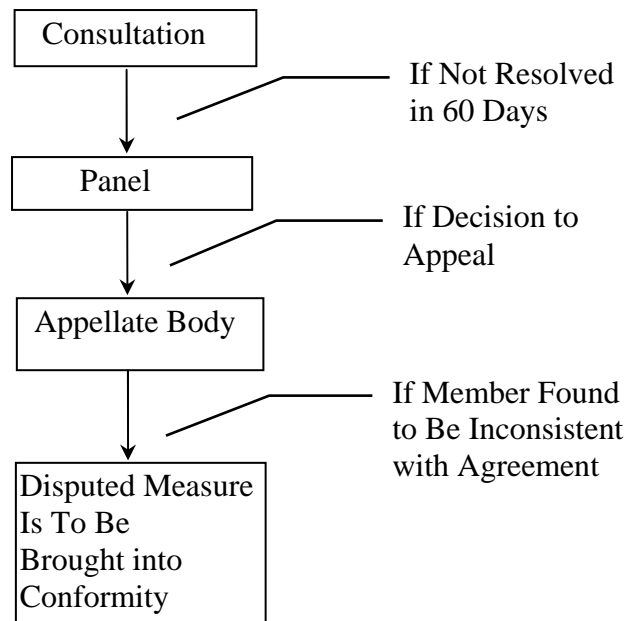
Sources: Abbott and Reichman (2007) and Matthews (2004, 2006)

Dispute Settlement

The Marrakesh Agreement included an Understanding on Rules and Procedures Governing the Settlement of Disputes. The original GATT had been somewhat unclear about the resolution of disputes, and in establishing the WTO, the Marrakesh Agreement attempted to clarify dispute settlement procedures. As shown in Table 7.2, the WTO includes councils on trade in goods and services as well as a council on TRIPS. These councils should help to minimize the occurrence of disputes, but they certainly have not eliminated them. In the event of disputes, the WTO turns to a Dispute Settlement Body or DSB whose function is to administer the dispute settlement rules and procedures (see Table 7.2). The DSB makes decisions by “consensus.” As with the WTO in general, consensus for the DSB exists “if no Member, present at the meeting of the DSB when the decision is taken, formally objects to the proposed decision.”

The dispute settlement procedure is summarized in Figure 7.2. If a member of the WTO has a complaint against another member, the first step in settling this dispute is a *consultation* between the members involved. If the consultation process fails to settle a dispute within 60 days, the complaining member may request the establishment of a *panel*. This request also must be submitted in writing. Panels are composed of three or five “well-qualified governmental or non-governmental individuals.” The function of the panel is to assist the DSB in the dispute settlement process. It consults the parties involved and provides the DSB with a written report of its findings. The DSB then has 60 days to adopt the report by consensus unless a party to the dispute decides to appeal.

Figure 7.2. Dispute Settlement in the WTO



The appeal of a panel report is referred to an *appellate body*, composed of seven persons “of recognized authority, with demonstrated expertise in law, international trade and the subject matter of the covered agreements generally.” The appellate body reviews the appeal and submits its report to the DSB. At this point, it is stipulated that the appellate body report “shall be adopted by the DSB and unconditionally accepted by the parties to the dispute unless the DSB decides by consensus *not* to adopt the appellate body report within 30 days following its circulation to the members.” Therefore, given the definition of consensus for the DSB, *any DSB member can effectively insist on the adoption of the appellate body report*. Renowned international trade lawyer John Jackson (1994) referred to this appellate body procedure as “ingenious” and noted that “the result of the procedure is

that appellate report will in virtually every case come into force as a matter of international law” (p. 70). The way in which this dispute settlement process evolved in the famous Bananas Dispute is presented in the box.

The Banana Dispute

Perhaps the most controversial of all dispute settlement proceedings of the WTO is the famous “bananas dispute” between five Latin American countries and the European Union. Its roots actually go back to the GATT era when, in 1993, Costa Rica, Colombia, Nicaragua, Guatemala and Venezuela invoked GATT dispute resolution proceedings against the newly-created EU (then EC) harmonized banana regime. This was put into place to support the banana exports of formal colonies in the African, Caribbean and Pacific (ACP) group recognized by the EU and consisted of a discriminatory tariff rate quota system (see appendix to Chapter 6). The ensuing GATT panel found against the EU, citing the regime’s violation of MFN and quantitative restriction principles. However, the EU and the ACP blocked the adoption of the panel under GATT’s positive consensus rule on panel reports. A similar result followed a second GATT panel requested by the five Latin American countries that addressed the specific rules of the EU banana regime, but it was again blocked.

Under the new WTO regime, which came into effect in 1995, the United States joined the Latin American claimants in support of US-based banana multinationals. Having acceded to the WTO in early 1996, Ecuador also joined in asking for a panel that year. The panel issued its report in 1997, again finding against the EU. The EU appealed, and an Appellate Body was also set up, but it did not significantly change the panel’s findings. The WTO’s negative consensus rule ensured that the Appellate Body’s findings were adopted in September 2007. The EU subsequently obtained an arbitration finding allowing it 15 months to bring its banana regime into conformity.

As a result of this, a *new* EU banana regime replacing country-specific measures began in 1999. Not satisfied, the United States, the original five Latin American countries, Ecuador and Panama initiated further consultations with the EU. The United States was planning to retaliate against the EU under its own domestic trade legislation, and a WTO arbitration decisions set the value of this retaliation in April 1999. This complicated consultative process, and further subsidiary disputes, finally resulted in a *revised*, new EU banana regime in May 2001. Initially, this appeared to satisfy all parties by phasing in a tariff-only regime by 2006.

What the EU put in place in 2006, however, maintained duty-free access for ACP countries, while imposing a €176 per ton of bananas from non-ACP sources. In 2007, both Ecuador and the United States initiated new dispute settlement proceedings against the EU. In 2007, a panel found against the EU, but at the time of this writing, we are still waiting for the Appellate Body report, and what has sometimes been called the “Bananarama” dispute has yet to come to an end.

Sources: Salas and Jackson (2000) and Herrmann, Kramb and Monnich (2003)

The dispute settlement procedure outlined above and in Figure 7.2 applies to all aspects of the Marrakesh Agreement. It improves significantly the procedures of the old GATT and therefore makes a significant contribution to the conduct of international trade.¹⁷ However, the effectiveness of the procedures depends on members' commitment to it. A country has the option of ignoring the outcome of the dispute settlement process. In this case, the complaining member has the right to impose retaliatory tariffs on a volume of imports from the other country determined by the DSB as in the Banana Dispute.

The Environment

In 1991, the GATT reactivated a long-dormant Working Group on Environmental Measures and International Trade (EMIT). Not coincidentally, this was the year that a GATT dispute resolution panel issued its controversial opinion in the now-famous tuna-dolphin case. The panel ruled against a US law banning imports of Mexican tuna that involved dolphin-unsafe fishing practices, issued in response to the US Marine Mammal Protection Act. The panel argued that the import ban violated the general prohibition against quotas and that the United States had not attempted to negotiate cooperative agreements on dolphin-safe tuna fishing. The US environmental community reacted strongly against the GATT panel ruling, casting the GATT as anti-environment, and the trade-environment issue has loomed large over the WTO ever since.¹⁸

With the advent of the WTO in 1995, EMIT was replaced by the Committee on Trade and the Environment (CTE). Most developing country members of the WTO have taken a dim view of the work of the CTE, fearing the possibility of further protection against their exports on environmental grounds, what they term "green protection." These members often view environmental matters as non-trade issues that have no place in the trade policy agenda of the WTO. The subsequent polarization of views has inhibited the effectiveness of the CTE.¹⁹

Many trade economists (e.g. Anderson, 1996 and Hoekman and Kostecki, 2001, Chapter 13) are broadly supportive of the developing-country view that environmental issues represent an "intrusion" into the WTO trade agenda. These trade economists suggest, perhaps correctly, that the environmental agenda could result in an inappropriate

¹⁷ For more on the WTO dispute settlement procedures, see Kuruvila (1997), Davey (2000), and Hoekman and Mavroidis (2000).

¹⁸ For a review of the tuna-dolphin case, see Chapter 4 of Runge (1994). Posters at the time, issued by US-based environmental groups, depicted GATT as "GATTzilla," a monster destroying national environmental sovereignty. In actuality, as pointed out by Matsushita, Schoenbaum and Mavroidis (2006), the realities of the dispute settlement procedure under the GATT made the tuna-dolphin finding nonbinding.

¹⁹ See Shaffer (2001). This author notes that "In light of the immense challenge developing countries face in meeting the basic needs of the majority of their human populations, southern constituencies typically place less weight on the social value of environmental preservation than on economic and social development and poverty eradication" (p. 87).

“one size fits all” approach to environmental policies across WTO members. As Hoekman and Kostecki (2001) note, “Countries may have very different preferences regarding environmental protectionism, reflecting differences in the absorptive capacity of their ecosystems, differences in income levels (wealth), and differences in culture” (p. 442). The limitation of this argument is that it could just as easily (and sometimes is) applied to the TRIPS agreement discussed above. Consequently, many trade economists appear to be inconsistent on these matters.

In 1999, the WTO took up the trade and environment issue formally with the publication of a “special studies” report on this subject (Nordström and Vaughan, 1999). As with Runge (1994) and others, this report argued that increased trade can have both positive and negative impacts on the environment. The report emphasizes, however, that trade-driven growth cannot always be counted upon to deliver improvements in environmental quality through increased incomes, as many economists claim. Consequently, these higher incomes must be “translated into higher environmental quality” through the mechanism of international cooperation. As emphasized by Barrett (1999), designing environmental treaties to include the appropriate combination of incentives and threats to achieve international cooperation on environmental matters is not always easy. This has been shown in the case of the Kyoto Protocol on greenhouse (global warming) gasses. The WTO report also emphasized that government subsidies to polluting and resource-depleting sectors such as agriculture, fishing, and energy can exacerbate the environmental consequences of trade.

The role of the WTO in trade and environment matters will continue to be both important and controversial. The decade of the 1990s ended with another difficult case regarding the impact of shrimp fishing on sea turtles.²⁰ The appellate body report on this case stressed the importance of international environmental agreements in reconciling trade and the environment. Further, as noted by Esty (2001), the WTO has reached such a position of prominence that it will find it very difficult to avoid scrutiny on environmental issues. To some degree, then, the success of the WTO depends on the willingness and ability of its members to enter into **multilateral environmental agreements** (MEAs).²¹ Some observers (e.g. Runge, 1994) have gone further to suggest that the CTE be replaced by a World Environmental Organization (WEO) to stand alongside the WTO. Runge (2009) has suggested that the WEO be modeled on the North American Commission on Environmental Cooperation (CEC). The WEO could bring a sense of rationality to the large set of existing MEAs and could potentially provide a dispute settlement mechanism for environmental disagreements. While currently not a global, political reality, the WEO proposal is one that will not go away.

²⁰ These finding overturned a number of the findings of the tuna-dolphin case.

²¹ Some existing MEAs include the Convention on International Trade in Endangered Species (CITES), the Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol), and the Convention of Biological Diversity (CBD). There are many others.

Doha Round

As mentioned in Chapter 1, the Seattle Ministerial Conference of the WTO that took place in December 1999 was not successful. This was, in part, due to the protests of young people against the WTO as an agent of globalization. It was also due to a lack of agreement between developed and developing WTO member countries on a number of issues discussed in this chapter. For both these reasons, WTO members were not able to launch the hoped-for new round of multilateral trade talks.

A second attempt to launch a new round took place in Doha, Qatar in November 2001 at the next Ministerial Conference. This attempt was successful, although disputes between developing and developed countries still simmered beneath the surface. While, as mentioned above, progress was made on the TRIPS/AIDS issue, the European Union maintained its intransigent position with regard to agricultural trade liberalization, and the developing countries were displeased with the introduction of new agenda items such as investment and competition policy.

The progress in what has come to be called the Doha Round of multilateral trade negotiations has been very uneven. A focus point was the Cancún Ministerial Meeting of September 2003. The European Union had insisted that the so-called Singapore issues (competition policy, transparency in government procurement, trade facilitation, and investment) be included in the negotiations. Further, the EU and the United States had just issued a draft text on the agricultural negotiations. Coalitions of developing countries emerged to oppose both of these. In the case of agriculture, a representative of the Brazilian government stated:

The real dilemma that many of us had to face was whether it was sensible to accept an agreement that would essentially consolidate the policies of the two subsidizing superpowers... and then have to wait for another 15 to 18 years to launch a new round, after having spent precious bargaining chips.²²

A new bargaining group of developing countries emerged at Cancún. Known as the G20 and led by Argentina, Brazil, China, India, and South Africa, these countries accounted for over two-thirds of the world population, over 60 percent of its farmers. It adamantly opposed the EU/US agricultural text, proposing more strenuous liberalization in agricultural markets. Despite predictions to the contrary, the group held firm during the negotiations. The ministerial statement coming out of Cancún was only one-half page long. It noted that “more work needs to be done in some key areas to enable us to proceed towards the conclusion of the negotiations in fulfillment of the commitments we took at Doha.” In the polite language of trade diplomacy, this was an admission of failure.

Some progress appeared in July 2004 with the “July 2004 Package” that reaffirmed the Doha Ministerial commitments in agriculture and acknowledged in some

²² See Narlikar and Tussie (2004), p. 951.

specific ways the concerns of the developing countries (e.g., cotton subsidies). Most important was the adoption of a “tiered approach” to reductions in domestic support and tariffs and the commitment to eliminate exports subsidies by an unspecified date. Despite this progress, the next deadline for progress in agricultural negotiations, July 2005, was missed. The next small breakthrough occurred in October 2005 with proposals for domestic support being tabled using the tiered framework. In July 2006, negotiations among the United States, the EU, Japan, Brazil, India, and Australia regarding the Doha Round broke down, and the WTO Director General Pascal Lamy suspended further discussions noting that “We have missed a very important opportunity to show that multilateralism works.” Further failed talks were held in the summer of 2008 and resulted in what became known as the “July 2008 Package.” Sufficient progress to conclude the round, however, has not yet been made at the time of this writing.

The Doha Ministerial statement of 2001 stated that: “International trade can play a major role in the promotion of economic development and the alleviation of poverty. We recognize the need for all our peoples to benefit from the increased opportunities and welfare gains that the multilateral trading system generates. The majority of WTO members are developing countries. We seek to place their needs and interests at the heart of the Work Program adopted in this Declaration.” This vision has largely been lost due to the politics of trade in the United States and the European Union.²³

Conclusion

The WTO came into being in 1995, completing the Bretton Woods vision of a global trade institution. Since its birth, it has both demonstrated the importance of a multilateral approach to managing trade issues and stirred up controversies in a number of areas. All evidence suggests that the WTO will continue, as stated in the introduction to this chapter, to be “both lauded and vilified with equal intensity by various groups with concerns about trade policy.” In general, a common fault line exists across many issues within the WTO between developed and developing countries.

With regard to the old GATT agenda of trade in goods, developing countries are still at a market access disadvantage in textiles, clothing, and agriculture. Their exports must contend with higher than normal tariff levels in the developed world and, in the case of agriculture, with the massive domestic and export subsidies of the United States and the European Union. The ongoing controversies over TRIPS also have a similar fault line. In the short term, developing countries will generally lose from intellectual property protection through the higher prices they will have to pay for goods and services. This short-term cost will have to be accepted by the developing world, waiting for the hoped-for, long-term benefits of increased inward FDI and domestic innovation. Finally, ongoing disputes concerning environmental issues often pit developed and developing countries against one another. Developing countries fear a surge of “green protection,” exacerbating their disadvantages in other areas.

²³ The appendix to this chapter puts the Doha Round negotiation process in some context.

These fissures within the WTO deserve attention. Unfortunately, years of negotiating energy have been put into the Doha Round with (at the time of this writing) little to show for it. The WTO faces a crisis of legitimacy that can only be overcome through greater commitment to it by its leading members. Whether this commitment will be forthcoming remains to be seen.

Review Exercises

1. What is meant by *nondiscrimination* in international trade agreements?
2. One criticism of the Agreement on Agriculture is that it involves something known as *dirty tariffication*. Dirty tariffication involves quotas being converted into tariffs that are larger than the actual tariff equivalent of the original tariff. Draw a diagram like that of Figure 6.4, illustrating dirty tariffication.
3. The chapter mentioned the four modes by which trade in services can occur: cross-border trade; movement of consumers; foreign direct investment; and personnel movement. Try to give an example of each of these modes. The more specific the better.
4. The chapter also gave an example of the way that the “theft” of intellectual property by India in the case of pharmaceuticals suppresses trade in this product. Try to give another example of such trade suppression.

Further Reading and Web Resources

Concise introductions to the GATT and the WTO can be found in Blackhurst (2009a,b). The reader interested further pursuing an understanding of the GATT/WTO system can start with the works by Hoekman and Kostecki (2001) and Barton, Goldstein, Josling and Steinberg (2006). A more legal approach can be found in Jackson (1997) and Matsushita, Schoenbaum and Mavroidis (2006). Journals covering the subjects of this chapter include the *Journal of World Trade*, *World Trade Review*, and the *Journal of International Economic Law*. The controversy over TRIPS is analyzed by Maskus (2000), and case studies of developing countries in trade negotiations can be found in Odell (2006).

To keep up with the work of the WTO, the reader will want to visit its web-site: www.wto.org. Perhaps the most useful link here is the one to “trade topics.” However, the document dissemination facility at this web-site is a particularly useful resource. The reader will want to monitor the Centre for Trade and Sustainable Development at www.ctsd.org, a very important resource on issues of trade and the environment.

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Appendix: WTO Membership and Multilateral Trade Negotiations

Multilateral trade negotiations or MTNs are trade negotiations that occur under the auspices of the previous GATT and current WTO in the form of negotiation “rounds” as documented above in Table 7.1. In MTNs, there is much reference to what are termed “modalities” or the rules of the negotiations. In the first five rounds through the Dillon Round, the central modality was a “principal supplier” or “request-and-offer” method. Here, requests for market access were made by the principal supplier of a product to other members’ markets in what was really a bilateral negotiation over “concessions.”

Concessions were generalized across the membership through the MFN principle. The exchange of concessions is known as “reciprocity.”

The Kennedy Round introduced a new modality in the form of linear or proportional, across-the-board tariff reductions. This modality can be represented as:

$$t_1 = at_0 \quad 0 \leq a \leq 1$$

where t_1 is the final tariff, and t_0 is the initial or base tariff. If, for example, $a = 0.8$, then all tariffs would be reduced by 20 percent.

The Tokyo Round introduced a new modality innovation in the form of the “Swiss formula,” which can be represented as:

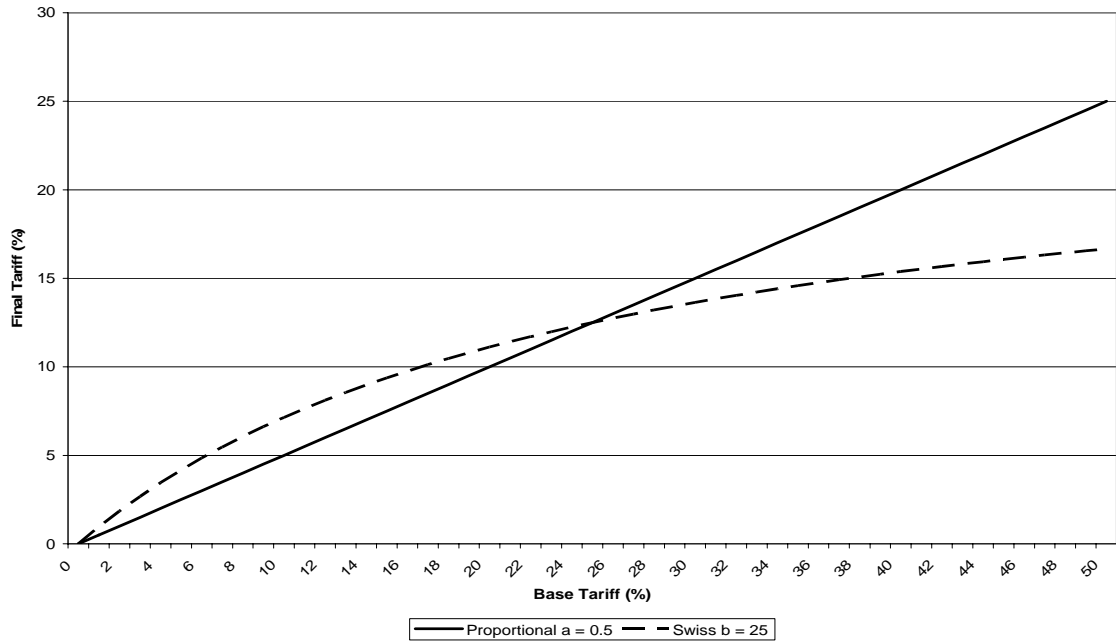
$$t_1 = \frac{bt_0}{b+t_0} \quad 0 \leq b \leq 100$$

where b is the ceiling tariff.

The purpose of the Swiss formula is to reduce higher base tariffs by a greater proportion than lower base tariffs. This can be seen in Figure 7.3, which translates base tariffs along the horizontal axis into final tariffs along the vertical axis. The linear formula is presented as the solid line for a proportional reduction of 50 percent ($a = 0.50$). So, you can see in the figure that a base tariff of 50 percent is reduced to a final tariff of 25 percent. The Swiss formula is presented as the dashed line with a ceiling of 25 percent ($b = 25$). Here, for each base tariff of over 25 percent, the reduction of the base tariff is greater than in the linear case. Further, as you can see, the gap between the proportional and Swiss reductions over the 25 percent base tariff increases as the base tariff increases.

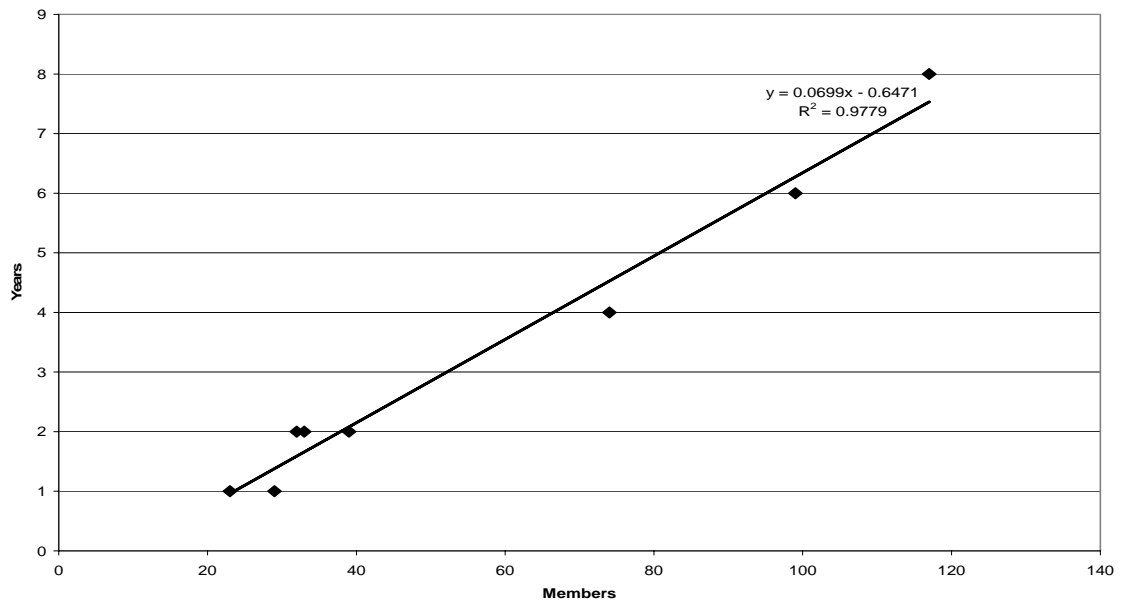
How long do MTNs last? Figure 7.4 plots the eight rounds of multilateral trade negotiations previous to the Doha Round. The surprisingly linear relationship between number of members and years of negotiations (explaining 98 percent of the variance in the latter) indicates that, given the current WTO membership, the Doha Round should last approximately a decade. If we put our faith in such statistical relationships (and there are reasons not to do so), the Doha Round should not end before 2011.

Figure 7.3. Proportional-Swiss Formula Comparison



Source: author's calculations

Figure 7.4 .Members and Years to Conclude GATT/WTO Rounds



Source: World Trade Organization and author's calculations