An Economist’s Overview of the World Trade Organization

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The paper provides a brief overview of the new World Trade Organization, successor to the GATT as the arbiter of cooperation in matters of international trade policy. The approach taken is to look only at its main features, asking how they contribute to the end of permitting countries to cooperate in the use of policies that they often have strong incentives to use against each other. Noting that many of the problems of trade policy can be understood in a framework loosely based on the prisoners’ dilemma in game theory, the paper examines four aspects of the WTO in terms of their contribution to resolving such prisoner’s dilemma problems. These are: first, the various ways that the WTO fosters communication among countries about what they are in fact doing with their trade policies; second, the many requirements that the WTO imposes on country policies in defining cooperative behavior; third, a number of exceptions to these rules that permit, but do not require, countries to deviate from some of these requirements; and fourth, the new dispute settlement mechanism that provides the incentive for countries to conform with all of the rules. In the end, the WTO is viewed as a remarkably well-conceived solution to the complex problems of international cooperation in international trade.

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I. Introduction

The arena of international trade has provided ample evidence over the years of the destructive chaos that can ensue when nations are left completely on their own in conducting trade policies. At the beginning of the Great Depression of the 1930s, the United States led the world in raising its trade barriers in order to stimulate its domestic economy at the expense of economies abroad. Since World War II, fortunately, the United States has also led in bringing down these and other barriers to trade. But powerful economic and political forces continue to exist throughout the world that push for whatever protection might be available in particular sectors, again at the expense of those sectors elsewhere. International trade theory tells us that increased barriers to trade reduce world welfare, and that the outcome of these “beggar-thy-neighbor” policies is likely to be that all countries are worse off. Still, each country individually may perceive correctly that it stands to gain in some way from its own protection, whether or not protection is used abroad. This means that the world is in something like the classic “prisoners’

*The author has benefitted from frequent discussions of trade policy and the WTO with John H. Jackson and Robert M. Stern. I am indebted as well to Joseph Francois and Bernard Hoekman for their insights into the WTO and their pointers to the literature dealing with it. I would also thank my discussants, Ernie Preeg and Chul-Su Kim, as well as other participants at the KEI conference, for corrections and suggestions that have improved the revised version of the paper.
In the classic prisoners' dilemma, two prisoners are suspected of jointly committing a crime, but neither has yet confessed. They are placed in separate rooms and told: (1) that if neither confesses both will go free; (2) that if both confess they will both be imprisoned; and (3) that if only one confesses, turning state’s evidence against the other, that one will be positively rewarded, while the other will serve a longer prison term. Since each prisoner is better off confessing, given the action of the other (the reward is better than just going free, and the short prison term is better than the long one), the normal outcome in the absence of cooperation between the prisoners (called a Nash equilibrium) is for both to confess. Both could be better off than that equilibrium however, if they could somehow agree to cooperate and neither confess. However, such cooperation is bound to be difficult, since both have an incentive to break any agreement by confessing.

The WTO and its predecessor, the General Agreement on Tariffs and Trade (GATT) have an interesting and somewhat peculiar history that I will review initially, in Section II below. This history contributed to the institutional structure of the WTO, as containing three components: the revised GATT, the General Agreement on Trade in Services (GATS), and the Agreement on trade-related intellectual property issues (TRIPs). It is customary, therefore, to organize a

1In the classic prisoners’ dilemma, two prisoners are suspected of jointly committing a crime, but neither has yet confessed. They are placed in separate rooms and told: (1) that if neither confesses both will go free; (2) that if both confess they will both be imprisoned; and (3) that if only one confesses, turning state’s evidence against the other, that one will be positively rewarded, while the other will serve a longer prison term. Since each prisoner is better off confessing, given the action of the other (the reward is better than just going free, and the short prison term is better than the long one), the normal outcome in the absence of cooperation between the prisoners (called a Nash equilibrium) is for both to confess. Both could be better off than that equilibrium however, if they could somehow agree to cooperate and neither confess. However, such cooperation is bound to be difficult, since both have an incentive to break any agreement by confessing.

2This paper will not attempt to cover every detail of the WTO agreements. For other somewhat more detailed summaries, see GATT (1993) and Martin and Winters (1995). Also, a very detailed presentation of the many components of the WTO is provided by both Hoekman (1995b) and Hoekman and Kostecki (1995). I have drawn heavily upon all three of these sources in preparing this paper.
discussion of the WTO in this same way, dealing first with the GATT, then the GATS, then
TRIPs. However, from a functional point of view these distinctions are not very helpful, and I
will instead organize my discussion of the WTO around the following four functions that, to a
greater or lesser extent, all three of these components collectively provide:

1. **Communication:** Constitutes a forum for exchange of information, consultation,
   and negotiation.

2. **Constraint:** Constrains the trade-policy actions of member governments.

3. **Exception:** Permits exceptions from these constraints for prescribed reasons and
   with prescribed means.

4. **Dispute Settlement:** Offers a mechanism for settlement of disputes among
   members.

These four functions are broken down into their various components in Table 1, which
also provides an outline of the discussion in this paper. Those who are already familiar with the
GATT and the WTO may find this organizational structure unfamiliar, because of its grouping by
function. In particular, many of the familiar provisions of the GATT and WTO -- such as tariff
bindings, quantitative restrictions, anti-dumping, and safeguards -- are split between the section
on constraints and the section on exceptions, reflecting my view that there is an important
difference between what countries are *required* to do and not do, the constraints, and what
countries are merely *permitted* optionally to do, the exceptions. Similarly, the single issue of
subsidies/countervailing duties is itself split here between the constraints on the use of subsidies,
on the one hand, and the exceptions that permit, but do not require, countervailing duties on the
other. Finally, the issues that prior to the WTO were handled outside the GATT in the Tokyo
Round codes -- such as customs valuation and product regulations (standards) -- are here listed
on an equal footing with both the more venerable GATT provisions and the new agreements on services and intellectual property. The purpose of this organizing framework, then, is to convey a picture of the WTO as it now is, not as it evolved in the past.

The four main functions listed above and in Table 1 can be easily understood in terms of the prisoners'-dilemma nature of the problems that the WTO seeks to resolve. First, the prisoners’ dilemma arises most clearly from the assumed inability of the prisoners to communicate with each other, and thus to agree to remain silent. Therefore the first and most important role for an international mechanism to escape the prisoners’ dilemma in trade policy is to get the players into the same room to facilitate communication. The WTO is that room. I will discuss the various means that the WTO provides for communication in Section III.

The strategies available to trade policy makers are of course far more complicated than the simple prisoners’ choices of whether or not to confess. Therefore it is necessary to define what will constitute cooperation, that is, what constraints should be placed on behavior in order for it to be viewed as cooperative. This is important, first because such cooperation should lead in fact to a desirable outcome, and it is not always obvious whether particular policies affecting trade are

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3I am using game theory here, and the prisoners’ dilemma game in particular, in only an informal and very loose way. As colleagues have pointed out, the strict framework of the simple prisoners’ dilemma game does not imply the usefulness of at least some of the functions provided by the WTO. For example, if the prisoners’ dilemma is a one-shot game, then getting the players together to discuss their actions will not help, since any agreement they make will be broken when they are separated. On the other hand, if the game is repeated indefinitely, then cooperation can arise after all spontaneously without anything like the WTO, out of fear of the consequences if a player defects. I am, however, less interested in the formal solutions to such abstract games than in using the game as a motivator for my exposition. Those who wish to relate the discussion to formal results in game theory should interpret my prisoners’ dilemma game as one that occurs in real time, with multiple and continuous variables under the players’ control, with uncertainty, and with whatever other realistic complications will suffice to make the game too difficult for my learned colleagues to solve.
good or bad. But it is also important because observed departures from such agreed behavior
will be taken by the players to indicate that cooperation has broken down, and the constraints
should not be so onerous or ambiguous that cooperation is not sustainable. The constraints that
the WTO places on trade policy will be discussed in Section IV.

These constraints define what countries must do and must not do. However, any set of
constraints is likely to be too strict, either because special circumstances may arise in which the
constraints are inappropriate, or because events may make adhering to the constraints too
difficult. There is therefore also a need to permit exceptions to these rules, defining what
countries may do. That is, the exceptions permit, but do not require, certain forms of behavior
that would otherwise have been viewed as non-cooperative. These exceptions will be the topic
of Section V.

Finally, there needs to be some mechanism for enforcing any agreement. This requires a
way of determining whether a country has departed from it, as well as some form of penalty that
will be imposed if it does. This is the dispute settlement mechanism that will be the subject of
Section VI. Section VII concludes with a brief evaluation of how well the WTO structure
succeeds in the objective of fostering international cooperation in trade policy.

Underlying the entire WTO and its GATT predecessor is the single principle of
nondiscrimination: that economic welfare is greatest if policies do not discriminate among
suppliers and among demanders of economic goods and services. This principle may have been
motivated originally by some notion of fairness, but the basis for it may today be found among
the theorems of welfare economics. These argue that consumer welfare will be maximized if
both consumers and producers bear the full marginal costs and marginal benefits of their own
actions. In particular, consumers should face prices from alternative suppliers that reflect their true marginal costs, undistorted relative to one another by policy. In the WTO, the principle of nondiscrimination takes two forms: Most Favored Nation (MFN) treatment and National Treatment (NT). MFN assures that there is nondiscrimination among foreign suppliers, while NT assures that there is nondiscrimination between foreign suppliers and domestic suppliers. Most of the constraints of the WTO can be understood as attempts to maintain or move towards MFN and NT.

II. A Very Brief History of the WTO

The WTO came into existence on January 1, 1995, as one result of the agreement reached in the seven-year-long Uruguay Round of multilateral trade negotiations that was completed the previous year. Its history, however, extends much further back, at least to the proposed International Trade Organization (ITO) that was designed in the mid-1940s alongside the other Bretton Woods institutions, the IMF and the World Bank. The ITO was never approved, and part of its intended purpose was served instead by the GATT, which had been agreed upon originally as only a temporary measure pending approval of the ITO. Although it was formally only a treaty and therefore not an organization per se, the GATT served much the same functions that were listed above for the WTO. The scope of the GATT, however, was limited to trade in goods.

As a vehicle for communication, the GATT sponsored a series of “rounds” of trade negotiations, the Uruguay Round being the most recent. Early rounds were primarily intended to

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4For a more detailed history of the international trading system prior to the Uruguay Round, see Jackson (1989), which also includes detailed explanation of the structure of the GATT system. For a history of the Uruguay Round itself see Preeg (1995).
reduce tariffs, the most successful of these being the Kennedy Round that was completed in 1967. It was followed by the Tokyo Round, begun in 1974 and completed in 1979. In addition to negotiating further tariff reductions, the Tokyo Round also succeeded in extending the negotiations to several nontariff barriers (NTBs), which were covered in several “codes” that countries who were signatories of the GATT had the option of signing and that bound only the signatories of the respective code.

The original GATT included many of the same constraints and exceptions that remain part of the WTO and that will be discussed below. Successive rounds of negotiation expanded the lists of both, while the Tokyo Round codes extended some of these optionally to certain NTBs.

All of these rules were minimally enforced by means of several distinct dispute settlement mechanisms, one for the GATT itself and additional ones for separate codes. These mechanisms were also similar to the single mechanism that will be described below for the WTO. However, the earlier dispute mechanisms provided only minimal discipline, because of a feature that each country could in effect veto any decision that went against it. This, as we shall see, has been changed fundamentally in the WTO.

III. Communication in the WTO

As the example of the prisoners’ dilemma suggests, effective communication is a fundamental prerequisite for cooperation. In the sphere of trade policy, countries need ways to know what others are doing as well as what commitments others are making. The WTO provides several of these.
At the highest level, the trade ministers or their equivalents from the member countries meet every two years to discuss trade policies. These “Ministerials” also occurred under the GATT, although not always with such regularity. They are preceded by a great deal of communication among lower level trade diplomats, who seek to lay the foundation for agreement among the ministers. Frequently in past ministerials, agreement has been reached to initiate another in the series of rounds of trade negotiations, which constitute another critical mechanism of communication among countries. At this time, however, it is not clear whether future ministerials under the new WTO will again initiate such rounds of negotiation, since the WTO includes more mechanisms for the gradual evolution of the trade institutions than were part of the GATT, and such major initiatives as the recent trade rounds may therefore be unnecessary in the future. The next ministerial is scheduled for this December 1996, in Singapore. As the first ministerial under the new WTO, it may lay out the parameters that future ministerials will follow. If a new round of negotiations is not initiated, as seems likely, then the purpose of the Singapore Ministerial will be more one of plotting the course for future smaller negotiations within the WTO framework.

Trade rounds, when they have occurred in the past under the GATT and if they occur in the future under the WTO, do serve a purpose for cooperation among the diverse players in the world trading system that cannot be understood within the simple framework of the prisoners' dilemma. This is the fostering of trade-offs. While there are many issues in international trade policy in which, like the prisoners, all countries can be made better off if they can only agree, there are also many other issues for which agreement necessarily implies both winners and losers. Thus, for example, negotiations in the Uruguay Round dealing with the Multi-Fiber Arrangement
(MFA) were well understood to be leading, if they were successful, toward losses for firms within the developed world and toward gains for potential producers of textiles and apparel in the developing world that were being denied access to developed country markets by the MFA. At the same time, negotiations on intellectual property were widely regarded as likely to benefit developed countries and harm developing countries. Had negotiations on either of these issues been attempted independently, it is therefore unlikely that agreement could have been reached, since in each case the losing group of countries would have nothing to gain. However, by combining a variety of such issues within the framework of a negotiating round, the GATT has successfully permitted countries to trade off losses on some issues in exchange for gains on others. It is not clear that anything but such a round, therefore, will permit the WTO to make progress on many of the issues that remain before it.

Currently, the way that members of the WTO are communicating on many of these issues is through “working groups.” In addition to direct changes in the international trade policy environment that have been negotiated in recent rounds, the Uruguay Round also included agreement to form several of these working groups. This has been a typical response to issues where the discussions are not yet far enough along for agreement to be foreseeable, and instead

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\(^5\) Other firms and developing countries that had quotas, however, might well lose from textile liberalization, as these quotas would lose their value.

\(^6\) The importance of such tradeoffs has been stressed by Hoekman (1989).

\(^7\) Communication also takes place outside the WTO, most importantly through the OECD. For example, it will be noted that the WTO says very little about foreign direct investment (FDI). The OECD is currently in the process of trying to design a multilateral code for FDI, which then might become a model for future agreement within the WTO. On this and other issues, the OECD Trade Committee plays an important role of helping to define the future negotiating agenda of the WTO.
those who advocate consideration of such issues have had to content themselves with more formal discussion. By forming a working group on an issue, the WTO gives it a legitimacy that may lead in the longer run to formal negotiation and agreement. In addition, it alerts those parties who might oppose an initiative to voice their objections. Working groups are currently in place on several issues, including one on trade and the environment and another on trade and competition policy. That these working groups do have some substantive significance is indicated by those issues where even the formation of a working group has been opposed, in spite of a strong constituency in favor. The United States pushed in the Uruguay Round for the formation of a working group on labor standards, but the developing countries successfully prevented that.

Ministerials, rounds of negotiation, and working groups are all designed as means of communication over primarily large issues. The WTO also includes several facilities for communication on a more regular basis. One is the Trade Policy Review Mechanism (TPRM). First established in 1988, the TPRM has been made a formal part of the WTO, which includes a Trade Policy Review Body (TPRB) to oversee it. Under the TPRM, countries are required to undergo periodic reviews of their trade policies, based on information that both they themselves and the TPRB assemble. Done as frequently as every two years for the largest WTO members, these reviews are intended to identify all of the policies affecting the international trade of the focus countries, including both goods and services. Therefore, to the extent that membership in the WTO has committed any country to policies that it would be in its unilateral interest to abandon, these regular reviews should facilitate cooperation. However, the scope of the TPRM is limited to trade. It does not currently deal with investment regulations, and it is now being
debated whether to expand its scope to other "new" issues, such as environment and labor standards.

Channels for even more frequent communication on a day-to-day basis also exist in the form of the Councils and Committees of the WTO. The former are three Councils for Trade and Goods, Trade in Services, and Trade-Related Aspects of Intellectual Property. The first of these oversees the many agreements covering trade in goods, while the other two are responsible for the respective agreements on services and intellectual property. There are also three special purpose Committees -- on Trade and Development, on Balance of Payments, and on Budget -- that deal with the areas indicated. All of these Councils and Committees report to the General Council, composed of all WTO member countries, which conducts the day-to-day work of the WTO.

In addition, membership in the WTO obligates countries to notify the WTO whenever they engage in policies in a variety of areas that might be trade restricting. Technical regulations, for example, must be notified to the WTO Secretariat with sufficient lead time for exporters to adapt to the new rules. Similar notification requirements apply, for example, to sanitary and phytosanitary measures and state-trading enterprises.

Ultimately, however, for many trade policy actions, the most effective means of communication will be formal filing of a WTO case against a country by another country that perceives itself to be aggrieved by that action. Thus the most important and effective means of communication is probably the WTO dispute settlement process, to be discussed below. In some cases, the mere filing of such a case (or even the threat of filing) may be enough to persuade the
offending party to change its behavior, especially in situations where its violation of WTO cooperation was inadvertent.

The drawback of the dispute settlement process, however, is that it gives voice to objections to a country’s policies only if they are explicitly constrained under one or more WTO rules, and even then only if the aggrieved country or countries want the practices to stop. In some cases, these conditions are not satisfied. Voluntary export restraints (VERs) for example were not mentioned in the old GATT, and therefore could not generate GATT disputes. And even in the WTO, where the rules do prohibit VERs as we shall see, there is the question of whether the countries whose exports have been constrained by the VERs will complain about them. In such cases, it may well be in the political interests of producers in both exporting and importing countries to maintain the VERs because of the rents that they generate, even though consumer welfare in at least the importing country is being reduced. Therefore it is to be hoped that the TPRM and others means of communication under the WTO will be sufficient to alert the world to policies that undermine the broader public interest.

IV. Constraints Imposed by the WTO

Had the players in the prisoners’ dilemma been able to talk to each other, their agreement could have been very simple: don’t confess. Trading nations have a much more complicated form of cooperation to achieve. The general principle, that their trade policies should be nondiscriminatory, conforming to the principles of MFN and NT, is far too imprecise to be operational, although for some categories of trade, such as state trading, the WTO includes explicit requirements that such trade be MFN. Therefore the WTO spells out in some detail a
long list of constraints on member country behavior -- things that they either must do or must not do in order to be viewed as cooperating. Many of these constraints appeared as provisions of the original GATT agreement of 1947, which took the form of a treaty and consisted of XXXV Articles of Agreement. These articles have been revised, extended, and supplemented with additional agreements in the rounds of negotiation that have occurred since then. The major provisions constraining member behavior are listed in Table 1 and discussed below. Note again that other important provisions such as those dealing with anti-dumping and safeguards are left to the next section of the paper dealing with exceptions.

Some of the more noteworthy constraints, then, are as follows.

**Tariff Bindings:** Basic to the GATT and the WTO is the commitment of the member countries to constrain their use of tariffs on imports. Tariffs were, of course, the most obvious and common form of trade policy that existed when the GATT was first negotiated, and their adverse effects are well understood. However, the GATT did not, and the WTO still does not, prohibit the use of tariffs completely. On the contrary, it only requires countries to commit not to raise tariffs above certain levels that they negotiate on entry or in multilateral negotiating rounds. These levels are called the tariff “bindings,” and it is on these that the early rounds of negotiation focused. Even after many such rounds, however, it remained true before the Uruguay Round that not all traded goods were covered by tariff bindings, especially in developing countries. One achievement of the Uruguay Round, therefore, was the commitment of most member countries to

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8GATT articles are numbered with Roman numerals.

9The number of articles was increased to XXXVIII in the Kennedy Round that went into force in 1966, while additional agreements were negotiated as separate codes during the Tokyo Round.
bind almost all of their tariffs. These tariff bindings, however, are often well above the actual tariffs that developing countries especially are currently levying, so that there remains a substantial risk that such countries may raise their actual tariffs and still be in accord with their WTO commitments.

Notice too that by permitting members to continue to levy positive tariffs in all sectors where they have not explicitly bound themselves voluntarily at zero, the WTO is necessarily departing from its own NT principle for a large portion of trade in goods. That is, imports are not being accorded NT whenever they are subject to a tariff, since domestically produced goods clearly are not subject to the tariff. NT in goods remains, therefore, only a long-run goal towards which the international trading system attempts to move over time, rather than an immediate requirement. As will be discussed below, this is in marked contrast to what has been attempted with regard to services. Because services do not physically cross borders, they are not subject to tariffs, and the use of tariff bindings in services would therefore be meaningless. Negotiations have therefore centered on achieving NT immediately in these sectors, wherever countries can be persuaded to do so.

*Customs Valuation:* Because of the prisoners’-dilemma nature of trade policy cooperation, there will always be an incentive to cheat on any agreement. Therefore, having bound their tariffs, countries will sometimes seek ways to increase the restrictiveness of these tariffs without violating the tariff bindings. There are many ways of administering tariffs that can have this effect, and the WTO seeks to prevent such behavior. For example, *ad valorem* tariffs are levied on the value of the imported good, and unless the method of valuation is precisely circumscribed, customs officers may seek to exaggerate the value of a good in order to increase
the tariff collected on it. Of course, the importers have an even stronger incentive to understate the value of an imported good, so that one cannot simply rely on an importer’s declaration of value as definitive. These declarations are especially problematic when trade is between subsidiaries of a single multinational firm, and the transfer prices that they report have no counterpart on the open market. The WTO therefore includes explicit rules on customs valuation that are intended to reduce the discretion that countries and their customs officers, as well as the traders themselves, have in valuing goods at the border.

Note that these constraints on customs valuation serve another important purpose, in addition to making it harder for governments to undermine their WTO agreements. By reducing uncertainty over the amount of tariff that an exporter will pay at the border, potential traders become more confident of the profits they will make from trade, and they may therefore be expected to trade more. That is, uncertainty over customs valuation itself acts as a barrier to trade, and by committing themselves to predictable and transparent valuation procedures, countries reduce this barrier.

Product Regulations: Governments engage in a wide variety of regulatory actions, many of which are not targeted at international trade but which nonetheless may affect the costs or feasibility of trade. Most obvious are the many regulations, standards, and other measures that restrict the form that a good may take or the manner in which it may be produced for sale in the domestic market. Such rules may be intended to protect the public safety or health, or they may only seek to insure compatibility of products that must be used in combination. But in either case it is possible for such a rule to be biased against imported products, perhaps in the form that a product must take, or perhaps in the procedures that are laid out for certifying that a rule has
been obeyed. The WTO therefore includes its own constraints on how such rules should be established and enforced so as not to be biased against imports. Two sets of constraints appear, one on Technical Regulations and Standards and another on Sanitary and Phytosanitary Measures, but both have essentially the same purpose. They do not prescribe what such regulations should be, only that they should be designed and enforced in ways that do not discriminate against imports. Like the agreement on customs valuation, these too provide the additional benefit of reducing uncertainty in international trade.

Quantitative Restrictions: Quantitative restrictions (QRs) are usually regarded as more onerous than tariffs because of the more limited flexibility that they permit in trade and because they place greater limits on the extent to which foreign and domestic sellers can compete. In addition, it is very difficult to measure the restrictiveness of a QR, and this makes it hard to negotiate only their partial liberalization. It is therefore only recently that QRs have come under the effective discipline of the GATT. The WTO, with some exceptions, largely simply prohibits their use. This includes both explicit quotas that are imposed on particular products, and also import licensing schemes that allocate scarce foreign exchange in a manner that is discriminatory across goods or countries. VERs, which typically have taken quantitative form, are also prohibited as part of the safeguards rules discussed in the next section. QRs are still permitted for a few specific purposes to be discussed below, but for the most part they are

10Phytosanitary measures refer to the health of plants, while sanitary measures evidently refer to health of animals and people.


12QRs were banned under the GATT, but the ban was not effective especially in sensitive sectors.
forbidden. Since until the Uruguay Round QRs were quite commonly used in some sensitive sectors -- especially agriculture and textiles/apparel -- implementation of this prohibition has required some major changes in policy. In agriculture, existing QRs have been replaced by “tariff equivalents” -- additional tariffs that are intended to restrict imports to the level of the QR. These tariff equivalents will then be subject to future liberalization through the same process of negotiated tariff bindings that has long been used for other goods. In the case of textiles and apparel, on the other hand, the complex web of quotas that has spread over recent decades under the MFA is allowed to continue to exist temporarily, with WTO members committed to a schedule of removing them over the next ten years.13

Subsidies: Subsidies that are provided by governments directly for exports have always been prohibited in the GATT, although until the Uruguay Round and the formation of the WTO there have been very large exceptions to this prohibition. Now, all export subsidies are forbidden. Subsidies to production, on the other hand, are a much trickier problem. On the one hand it is clear that some production subsidies can adversely affect producers in other countries. On the other hand, there exist a multitude of solid economic reasons why some production subsidies are at least second-best, and sometimes even first-best, means of achieving various legitimate objectives.14 This ambiguity has been dealt with in the WTO by first identifying three

13The schedule for eliminating these quotas leaves the bulk of the trade to be liberalized only at the end of this ten-year period, and it leaves to the discretion of importing countries which product lines they liberalize before that. How successful this effort at liberalization will turn out to be therefore remains to be seen.

14The simplest example in economic terms is the use of a subsidy to the production of a good that yields an external economic benefit for other parts of the economy. A more common and familiar example, however, is the use of a subsidy to promote growth of an infant industry.
classes of subsidy, classes that are sometimes conveniently identified by the colors of a traffic light. “Red light subsidies” are those for which no redeeming value can be identified, and these are simply prohibited. They include export subsidies, as already mentioned, plus subsidies that are contingent upon the use of domestic over imported goods, as well as an illustrative list of very explicit subsidies that fall into this category. “Yellow light subsidies,” on the other hand, are not prohibited at all, but their possible adverse effects on other countries’ producers are nonetheless recognized by permitting importers to levy countervailing duties against them in specified circumstances. They are there called “actionable subsidies,” and we will discuss them further in the next section. Finally, “green light subsidies” are “non-actionable” and include both subsidies that are not specific to particular firms or industries, plus certain subsidies for research and development, regional development, and adaptation to environmental regulations.

Foreign Direct Investment: So much of international commerce is today conducted by multinational corporations, with substantial investments in many countries, that there has long been call for international constraints not only on trade policies, but also on policies affecting foreign direct investment. As a result, the Uruguay Round included negotiations on Trade Related Investment Measures (TRIMs), and the WTO too includes a TRIMs agreement. In fact, however, the TRIMs agreement only prohibits investment measures that directly affect trade flows in a manner that violates NT or that violates the prohibition of QRs. Prohibited most clearly are local content and trade balancing requirements, both of which would restrict the trade of an international direct investor.

Services: Services were not included under the GATT, largely because they were not viewed as being tradable when the GATT was created. Most services require the simultaneous
Modern technologies have created other modes of delivery of some services, but it remains true that it is often difficult to observe traded services moving across national borders. See Hoekman and Stern (1991).

presence of both the producer and consumer, so that if a service provider from one country wishes to sell to a buyer from another, either the seller must establish a presence in the buyer’s country, which typically requires foreign direct investment and/or movement of labor, or the buyer must travel to the seller’s country, as in the case of tourism. However, the increasing volume of international transactions in services industries, such as finance, transportation, and telecommunications, led to powerful political forces in the developed world, pushing to provide for services industries the same sorts of protections against capricious government policies that were provided for goods producers under the GATT. The result is the General Agreement on Trade in Services, GATS, which is a part of the WTO.

The aim of the GATS is to require that services providers from all countries, when they compete in other countries, be subject to the same principles of MFN and NT that are the objectives of the GATT. In fact, because traded services do not themselves cross national borders and are therefore not subject to the same kinds of tariffs and other border measures as are goods, the approach followed in the GATT of gradually bringing down those barriers through negotiation is not available for services. Instead, members of the WTO have committed themselves to go all the way to national treatment in those service industries in which they have promised to do anything at all. In the Uruguay Round negotiations leading to the WTO, countries negotiated not on services barriers, but rather on lists of service sectors, identifying those sectors that they were willing to make subject to liberalization. Unfortunately, the number of such sectors turned out to be quite small, and the extent of actual liberalization of trade in

15Modern technologies have created other modes of delivery of some services, but it remains true that it is often difficult to observe traded services moving across national borders. See Hoekman and Stern (1991).
services that was achieved by the Uruguay Round was essentially zero.\textsuperscript{16} Continued negotiation of liberalization for the excluded service sectors has been underway in the WTO since it began, although with limited success.

\textit{Intellectual Property:} Much as developed-country service providers sought to benefit from a GATT-like structure, owners of many forms of intellectual property (IP) -- copyrights, patents, trademarks, etc. -- in the developed countries also began seeking during the 1980s to include intellectual property issues in GATT negotiations. In order to justify their inclusion in a trade negotiation, discussion was nominally restricted to Trade Related Intellectual Property Rights, or TRIPs, although in fact the negotiations covered almost all aspects of IP protection. The major issue, for all forms of IP protection, was that many countries, especially in the developing world, either did not have IP laws that were comparable to those in the developed world, or they had such laws but were lax in enforcing them. As a result, owners of copyrights, patents, and trademarks were finding their products copied and counterfeited in the developing world with impunity.

The result of these negotiations was that the WTO now includes, alongside the GATT and GATS agreements, a TRIPs agreement on intellectual property. This agreement goes considerably beyond the MFN and NT principles of the two trade agreements, however, in that it seeks to harmonize the actual policies of the member countries. In particular, all but the very poorest WTO members are now required to adhere to certain minimum standards regarding intellectual property, and these standards are comparable to those prevailing in the developed countries (who also agree to remove various differences among their own IP laws).

Missing Constraints on Unilateral Action

Noticeably absent from the list of constraints just considered is any constraint on the sorts of unilateral action that the United States and other large trading blocs have used in the past to pressure other countries in their trade policies and even in their domestic policies. Indeed, movement toward some of the objectives of the WTO, especially the TRIPs agreement, already occurred before the Uruguay Round was completed, as the United States negotiated bilaterally with countries where it felt that its intellectual property rights were being abused. In addition, the United States has made frequent use of Section 301 of its trade law, which triggers unilateral retaliation against countries with perceived barriers to market access, and it has a long history of negotiating bilaterally with Japan, especially, seeking quantitative targets on Japanese market penetration by foreign firms.

Nowhere in the constraints discussed above are countries prevented from further use of such unilateral action. Nor, however, do the exceptions discussed below explicitly permit such action either. Use of Section 301 and similar bilateral initiatives are therefore left in an ambiguous state in the WTO, and there is disagreement among trade policy authorities as to whether particular ones of these initiative do or do not violate the GATT. The one such initiative on which the WTO does take a position is VERs, which are explicitly prohibited as mentioned above. Otherwise there seems to be no reason within the legal framework of the WTO that countries will not be able to continue acting unilaterally and bilaterally for their own purposes. On the other hand, the more that countries find themselves able to deal with perceived trade conflicts within the context of the WTO, the less they may feel the need to go outside it. There is
some reason for hope on this score, since countries do seem to be taking their disputes increasingly to the WTO.

V. **Exceptions Permitted by the WTO**

Simple agreements, like that between our prisoners not to confess, can be essentially absolute (“I will not confess.”) because the actions being agreed to and the circumstances of the agreement are both well understood.\[^{17}\] But complex agreements among national governments must permit a fair amount of flexibility. Any rules that are adopted will inevitably be subject to interpretation, and the effects of these rules on the economy can never be known with certainty. Therefore, international trade agreements typically include some sort of “escape clause” that allows the parties to back partially out of the agreement in the event that it proves to be more injurious than expected. Furthermore, governments always have well-established policies that they are reluctant to relinquish as well as powerful constituents who benefit from those policies. The latter may interfere with adoption of any agreement, and therefore may need to be bought off by permitting some form of these policies to continue, hopefully in weakened form. The WTO, like the GATT before it, includes a number of such policy options that either protect members partially from adverse outcomes or, more commonly, that are needed to make membership in the organization acceptable to powerful domestic political interests.

\[^{17}\text{Although even here I suppose there could be some ambiguity. Does “not confess” mean not talk at all? Or does it permit talking, and if so, about what? Can the prisoner admit to being on the scene? And so forth. A skillful interrogator can no doubt exploit both ambiguities in any agreement, getting one to say more than intended while still not confessing, or using silence on some issues as itself incriminating.}\]
I discuss these exceptions in this section, separate from the restrictions on member country behavior considered above, in part because these exceptions are all optional. That is, while countries are required to keep their tariffs at or below their bound levels under normal circumstances, they are only permitted, not required, to make exceptions to this binding in the case of, say, dumped imports. There is nothing in the WTO that says a country must have and use an anti-dumping law. Indeed, most of the exceptions to be discussed below are, in their nature, rather antithetical to the larger objectives of the WTO.

*Anti-Dumping:* The WTO follows long established practice in permitting the use of anti-dumping (AD) duties under certain circumstances. Dumping is defined as the export of a good for an unfairly low price, defined either as below the price on the exporter’s home market or as below some definition of cost. In spite of this designation of unfairness, however, nothing in the WTO prohibits dumping itself, or asks member governments to try to restrain their firms from doing it. Rather, the WTO only addresses how importing countries may respond to dumping. When dumping is shown to cause injury, WTO rules permit importing countries to levy AD import duties equal to the “dumping margin” -- the difference between the actual and the fair market price. And note, of course, that the WTO does not *require* the use of AD duties, it only permits them and says how they may be used.

There are numerous details of the AD rules in the WTO, which are far too complex to cover here. Some would say that the AD rules that preceded the WTO were so lax that an affirmative finding of dumping in the United States and Europe was almost assured, as long as a company seeking such protection asked for it enough times.\footnote{See Finger (1993).} These rules were tightened in

\footnote{See Finger (1993).}
some respects in the Uruguay Round, but they were loosened in other respects. The result is that AD continues to be a tool of protection that is readily available to those who want to use it. For all its accomplishments, therefore, the WTO leaves open the question of whether AD will be used to undermine the liberalization efforts in goods and services.

*Countervailing Duties*: Countervailing duties (CVDs) were already mentioned above as being permitted in response to “actionable” subsidies. When an importer establishes that domestic producers have been injured by imports that have benefitted from a government subsidy abroad, and when the nature of that subsidy satisfies certain requirements -- most importantly, perhaps, being that it not be generally available to other industries -- then the importing country is permitted to levy a CVD equal in size to the subsidy. The purpose is to offset the harm that the subsidized imports do to domestic industry, not to punish the foreign exporters. For again the WTO does not take a position on whether such subsidies are good or bad. It says only that other countries should be permitted to protect their competing domestic producers from any adverse effects that the foreign subsidies may cause them. Of course, the WTO also identifies another group of “prohibited” subsidies -- primarily export subsidies and their equivalents -- that are also subject to CVDs and that are designated as undesirable.

Once again, the use of CVDs is only permitted, not required, and this is interesting from an economist’s perspective for two reasons. First, it can be argued that the use of some subsidies -- those that are not responding to some other distortion in the economy -- does lower world welfare, and therefore that they should be prohibited. That is in fact what the designation of red light subsidies seeks to do, although there are undoubtedly also many yellow light subsidies that
are unjustified and should be prohibited as well. However, merely prohibiting a subsidy may not have much effect, and it is here that CVDs could be useful.

To see how, consider the use of competitive export subsidies, such as have emerged in agriculture in recent years. These, once again, put countries in the position of a prisoners’ dilemma, since each country’s subsidy undermines the gains that others’ subsidies were seeking, and makes all worse off. An effective deterrent to the use of such subsidies would be CVDs, but only if they were expected with certainty by governments that were contemplating use of subsidies. Thus one could argue that the use of CVDs should not just be permitted, but rather should be required, even in (or especially in) countries that have no domestic competing producer interests to ask for them. Of course, this presupposes that one can adequately make the necessary distinction between economically justified and unjustified subsidies, and while the traffic light approach of the WTO does attempt this, few would argue that it gets it exactly right.

Safeguards: The Safeguards Clause of the WTO serves the purpose identified above of permitting members to partially and temporarily back out of their agreements if they prove too costly. Thus, if the concessions made in joining the WTO are causing serious injury\(^{19}\) to domestic producers, then countries are permitted to protect those producers temporarily with a trade barrier. Such a facility has been available throughout the history of the GATT, but it was used less and less over time. The reasons for this were several, including the requirement that users of safeguards compensate the foreign countries who were adversely affected by them, the prohibition under the old rules against discriminatory safeguards tariffs, and the greater difficulty of getting safeguards protection, in comparison to an AD duty, due to the more stringent injury

\(^{19}\)The injury test for safeguards is stronger than those for AD duties and CVDs.
requirement. Instead, industries routinely sought AD protection rather than safeguard protection, even when the reason for their petition had more to do with injury than with the low foreign price. Alternatively, for major industries, governments negotiated VERs with the relevant foreign exporters, thus achieving both discrimination and compensation without needing to formally contravene the GATT. Under the new rules of the WTO, VERs are formally prohibited, as mentioned above. Rules for safeguards have been modified to permit some discrimination, and the requirement of compensation has been weakened. The hope is that the new safeguards rules will attract greater use, diverting governments from excessive use of AD duties and other measures for safeguards purposes. It remains to be seen whether this will in fact happen.

**Balance of Payments Protection:** From the beginning, the GATT has permitted exceptional use of protection for balance of payments purposes, and this continues to be the case in the WTO. That is, if a country is experiencing severe excess demand for foreign exchange that is making it difficult to retain foreign reserves, it is permitted to use quotas to restrict trade, even on a discriminatory basis. From an economist’s perspective this is an odd exception, since trade restrictions, especially at the sectoral level, make little sense as means to solve the macroeconomic problem that a balance of payments deficit represents. Furthermore, since almost by definition something like half of all countries are likely to be in deficit positions, this exception opens a huge hole in the WTO restrictions against trade barriers. The surprise to me is that the balance of payments exception has not be more used.

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20See Deardorff (1987) for more discussion of the need for both discrimination and compensation in safeguards policies.


*Preferential Trade Agreements (PTAs):* Despite its underlying principle of nondiscrimination embodied in the MFN requirement, the WTO permits preferential trade agreements so long as they reduce to zero essentially all of the tariffs among the participants. Thus it is permitted to form free trade areas, where this is done without changing each country’s tariffs against nonmembers, as well as customs unions that also include a common external tariff. In the latter case the WTO requires that the external tariff not increase the average protection against nonmember exports. That restriction does not, unfortunately, assure that PTAs are beneficial from the perspective of world welfare, since they will still inevitably cause welfare reducing trade diversion as well as trade creation.\(^{21}\) Since the proliferation of PTAs that began in the 1980s and 90s with the expansion of the European Union, the North American Free Trade Agreement, and arrangements such as ASEAN, APEC, and Mercosur, there has been controversy among economists as to their desirability. However, they are certainly a reality, and it was inevitable that the WTO, like the GATT, would permit them. Unfortunately the WTO has done little to increase the likelihood that the movement toward PTAs will be beneficial, as it could have done, for example, if it had done more to insist that PTAs stand ready to admit new members on the same terms as existing members.

**VI. Dispute Settlement in the WTO**

\(^{21}\)Trade creation occurs when members of a PTA import from each other what they previously produced themselves, presumably at higher cost. Trade diversion occurs when members import from each other what they previously imported from nonmembers, presumably at lower cost.
Agreements are worthless without enforcement. If the prisoners in the prisoners’ dilemma were allowed to communicate, but were then separated again, they would surely agree to cooperate by not confessing. But if that is all they agree to, then once they are separated, they still have an incentive to break their agreement by confessing, regardless of whether each believes that the other will confess or not. On the other hand, if their agreement includes not only a commitment not to confess, but also a threat by each that if the other confesses they will manage, even though incarcerated, to do them harm, then cooperation may be sustained. What matters then is the seriousness of the threat and its credibility.

Similarly, the WTO involves a long list of commitments by the member countries, as we have seen above. But without some mechanism to enforce these agreements, countries will depart from them whenever they perceive it in their interest to do so, which it often will be. The first line of defense against violation of the WTO agreements is provided by the regular WTO bodies -- the Councils and Committees mentioned above -- where many disagreements can be resolved. As a last resort, however, the WTO includes a formal dispute settlement mechanism provides more explicit procedures for enforcing the agreements.

To be effective, an enforcement mechanism would ideally provide some sort of punishment to a defector from an agreement if and only if they do defect, and this punishment should be viewed as worse than any advantage they might otherwise get from defecting. It is critical that the punishment be highly correlated with defection, since the possibilities of defecting without being punished, and of being punished without defecting, both make defections more likely. In the complex world of trade policy, the hardest part of this may be the
determination of whether or not a country has violated the agreement, and this is the main purpose of the WTO dispute settlement mechanism.

Once the mechanism has identified a violation of the WTO agreement, then the punishment that is supposed to follow, if the violation is not corrected, is the withdrawal of certain concessions that the offended country had previously made to the offending party. In practice this means that selected trade barriers will be raised against (and only against) the offending country.

The dispute settlement mechanism of the WTO works as follows. First, when one country believes that another is violating any aspect of the agreement (including GATS and TRIPs, as well as GATT), the complaining country first requests consultation with the offending country, and the two seek to resolve the dispute on their own. If consultation fails, then the complaining country requests establishment of a panel, consisting of three persons with appropriate expertise from countries not party to the dispute. This panel assesses the evidence in the context of its interpretation of the WTO rules and issues a report. This report is automatically accepted unless all WTO members, acting through their Dispute Settlement Body (DSB), decide by consensus against its adoption, or if one of the parties to the dispute voices its intention to appeal. Therefore, the process requires unanimity among WTO members not to accept a panel report, in marked contrast to the procedures of the old GATT, where a panel report could be blocked by any one country, including the country that was complained against.

To hear appeals, the WTO has established an Appellate Body, composed of seven members, of which three will serve on any given case. This Appellate Body is to consider only
issues of law and legal interpretations by the panel, and it too issues a report which must be accepted except by a unanimous decision of the DSB.

Once this process is completed, countries are expected to implement any recommendations of the panel report. If they do not, then complaining countries are entitled to compensation from them, or to use suspension of concessions (usually increased trade barriers) against them. If suspension of concessions occurs, it is to be done preferably in the same sector as the dispute, or failing that under the terms of the same agreement (GATT, GATS, or TRIPs). But if this too is impractical, suspension can come under another agreement. Thus, in particular, violations of the TRIPs agreement can lead to increased barriers to trade in goods, if the violations are not corrected in accordance with the recommendations of a panel report. This ability to extend dispute settlement across agreements is one of the strengths of the WTO, and no doubt is one of the things that motivated advocates of extended intellectual property protection to incorporate it into the Uruguay Round negotiations.

One might think that this mechanism, with its ultimate reliance on suspension of concessions, would be defeating the purpose of the WTO. After all, the presumption is that the “concessions” made by WTO members have been for the general good, so that to respond to one violation by creating a second violation is just making matters worse. Two wrongs, we were taught as children, do not make a right.

But of course the hope is that suspension of concessions will rarely be needed -- that countries will sometimes reach an understanding in the initial consultations, and that when they do not, the cases will be settled either by implementing the panel’s recommendation or by
compensation. Suspension of concessions is always the last resort. But it is the possibility of suspension that makes the rest of the process work. It is critical to achieving cooperation.

One might also think that this whole procedure should be unnecessary. Why not just threaten every member with expulsion from the WTO if they violate its rules? Surely the gains from membership are large enough that no member would risk expulsion from it. The difficulty here is that this threat is not credible. Membership in the WTO is indeed valuable, so valuable in fact that the other members will be reluctant to set a precedent by expelling another, lest the same thing later happen to them.

Indeed, I would argue that the WTO dispute settlement mechanism comes reasonably close to the “tit for tat” strategy that Axelrod (1983) has shown to be most successful in achieving cooperation in prisoner-dilemma games. It also comes as close as is probably possible to incorporating the four characteristics that Axelrod argues are needed to foster cooperation: (1) clarity; (2) niceness; (3) provocability; and (4) forgiveness. The WTO rules are as clear as it has been possible to make them, and the panel and appellate body decisions as they begin to appear should make them clearer. Niceness is implicit in WTO membership, which presumes that countries initially do not set out to break the rules. But it is both quite possible to act in such a way that will lead to an adverse panel report (provocability), while at the same time a country can avoid retribution by ceasing its behavior (forgiveness).

VII. Conclusion

The WTO has brought a remarkable degree of order to the world economy. While its precise structure to some extent still reflects the odd circumstances of its history, the institution
as it is designed makes very good sense. Viewed as a facility for fostering cooperation in trade policy, set in a world where underlying incentives are to use trade policies in beggar-thy-neighbor ways, the WTO appears to succeed admirably in providing the necessary tools for cooperation. It constructs a variety of channels through which countries can communicate. It lays out a detailed set of rules defining cooperative behavior, rules that are well-grounded in either economic theory or history so as to be acceptable to the member countries. It permits an assortment of exceptions to these rules, some of which are regrettable but all of which were probably necessary to make it possible for many countries to participate. And finally it creates a streamlined dispute settlement mechanism that seems well-tailored to encouraging cooperation and adaptation by the participating countries.

It is too early to know for sure how successful all of this will be. But the biggest danger for any international agreement is not that it will fail to be achieved (witness the success, in a sense, of the still-born International Trade Organization), but that it will be ignored. There are signs already that countries are turning increasingly to the WTO to settle disputes that earlier they would have handled bilaterally. And the list of countries seeking membership in the WTO continues to grow. The world of international trade policy will probably never be truly peaceful, but the WTO offers our best hope that future competition in international trade will be productive, not destructive.

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22As of November 5, 1996, there were 124 members of the WTO, according to WTO (1996). An additional 31 have requested to join, and their applications are being considered. The latter include several cases that are bound to be difficult, such as the People’s Republic of China, Chinese Taipei, and the Russian Federation. One of the challenges for the future of the WTO is how to deal with such major political and economic decisions as the admission of these countries.


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