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Market Access Bargaining in the Uruguay Round

Rigid or Relaxed Reciprocity?

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The Uruguay Round tariff negotiations did not achieve a country-by-country balancing of concessions given and concessions received. How governments bargained was determined *less by their national interests* than by the interests of their politically important industrial constituencies.

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Summary findings

How tightly are trade negotiators held to winning a dollar of concession for each dollar of concession granted? The outcome of the Uruguay Round tariff negotiations suggests that such constraints were not tight.

None of the delegations interviewed by Finger, Reincke, and Castro had tried to calculate for themselves the extent of concessions *received*. And the surplus or deficit of concessions received (over concessions given) varied widely among countries.

Measuring the "percentage point dollar" of concessions given and received (a "percentage point dollar" being a reduction of the tariff by one percentage point on $1 of imports, or by trading partners on exports), they found that the outcome of negotiations varied enormously from one country to another.

For 13 of 27 countries, *net concessions* (positive or negative) were at least 75 percent of the size of concessions received.

Negotiations were widely perceived to involve "equal sacrifice for the common good," with all countries expected to cut tariffs on the same percentage of imports.

Ability to pay was also a consideration: a smaller fraction of imports was liberalized for developing countries.

The authors found a tendency toward equality (in percentage of imports affected) across participating countries' concessions, particularly when developing countries' *unilateral liberalization* was considered — including the part of it that was not bound at the Uruguay Round.

Delegations emphasized how important it was for them to look after the interests of politically important sectors (including rice for Japan and the Republic of Korea and textiles for the United States and the European Union).

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Economists widely agree that unilateral free trade augments the national economic interest. Economists perhaps even more widely accept that bargaining at the GATT rounds has been motivated and controlled by reciprocity -- each government treats its trade restrictions as assets and will reduce them only in exchange for equivalent reductions by trading partners. This presumption, that trade liberalization through the GATT is built on reciprocity, seems to be an even more solid part of economists' folklore than is a preference for free trade.

This study will explore market access bargaining -- particularly tariff bargaining -- at the Uruguay Round. There are two general objectives:

1. <u>To measure the extent of country participation in market access bargaining</u> -- the degree to which countries agreed to reciprocal liberalization or to bind under the GATT/WTO otherwise unilateral liberalization.

2. <u>To analyze the basis of the success in market access bargaining that was achieved at the round</u>. Was the successful outcome attributable to a rigid adherence to reciprocity in bargaining -- a dollar of concessions received by each party for each dollar of concession given? Or is this success the result of a more relaxed view of reciprocity; one that recognizes other reasons to agree to reduce tariffs, such as the contribution of individual liberalizations to constructing an international system within which all may prosper -- or even the domestic gains that liberalization brings?

The following section explores several hypotheses or models that might explain the motives and disciplines that propel and control tariff bargaining at GATT negotiations. The next sections explain how we have measured tariff concessions given and received at the Uruguay Round, then use these findings to evaluate the relevance of the various models that we have advanced to explain tariff negotiations. The final section provides our conclusions.

HYPOTHESES ABOUT THE NATURE OF BARGAINING

What do trade negotiators do, what motivates them (i.e., what are they out to achieve) and how do they score their successes and failures?

Analytically speaking one can identify two basic models that explain the motivation and the structure of a country's participation in multilateral market access negotiations. The two models, which we label the "mercantilist bargaining model" and the "common good" model are described below. The models need not be mutually exclusive -- reality may involve aspects of both of them. In this spirit, the models will be used to interpret the measured results of the Uruguay Round tariff bargaining.

The mercantilist bargaining model

What you get is what you pay for. The mercantilist bargaining model, to economists, is the obvious model. Trade negotiators (at least those who conduct the market access negotiations, the subject of this paper) bargain over market access -- to gain a reduction of other countries' tariffs at the cost of a reduction of ones own. Ernest Preeg (pp. 27, 28) explaining why a multi-sector negotiated approach to liberalization is more effective than unilateral liberal or sector-specific negotiations:

> Governments [in the latter case] confront sharply focused political opposition that can best be neutralized by counterbalancing gains for particular export industries in other sectors. The overall "gains from trade" for consumers unfortunately lack political force. A balance of specific "benefits" and "concessions" thus constitutes the political basis for the comprehensive approach for trade negotiations."

Paul Krugman (p. 114) is even more direct:

> Anyone who has tried to make sense of international trade negotiations eventually realizes that they can only be understood by realizing that they are a game scored according to mercantilist rules, in which an increase in exports ... is a victory, and an increase in imports ... is a defeat. The implicit mercantilist theory that underlies trade negotiations does not make sense on any level ... but it nonetheless governs actual policy.

Likewise, Gilbert Winham, (p. 62) in his analysis of the Kennedy Round, notes that "the principle of reciprocity is a determinant of bargaining behavior." This principle "leads negotiators to develop certain procedures and measures for evaluating the progress of a negotiation ... [f]or example, 'duty reduction' and 'volume of imports,' ... [that] no doubt make trade bargaining easier, but do not make much sense in economic terms."

Though the Kennedy Round was a multilateral negotiation which (formally) applied an across-the-board tariff cutting formula rather than item-by-item bargaining, Winham observes (pp. 64-65) that "participants quickly found that meaningful concessions usually could be given only between the principal supplier of individual goods and the major importers."

Within this model, what you get is what you pay for. It treats market access bargaining as an application of the straightforward mercantilist calculus that measures gaining access to foreign markets as a benefit, giving up access to the domestic market as a cost.[1]

Complications to the mercantilist bargaining model

There are two basic sources of complications, the possibility of non-economic objectives, and the frictions that might occur in balancing of the interests of industries that will gain (export industries) versus those that will lose (import-competing industries) in the reciprocal bargaining of market access.

Non-economic objectives

War, according to Clausewitz, is the pursuit of diplomacy through other means. Often, so is trade policy. While the mercantilist bargaining model describes well the commercial interests that pressure government policy, the government may itself have other -- non-economic -- objectives. After World War I, a number of leaders saw freedom of commerce as an important instrument for maintaining world peace. Freedom of international commerce was the third of US President Wilson's Fourteen Points. To Cordell Hull, secretary of state for President Franklin D. Roosevelt, the link was straightforward, "[U]nhampered trade dovetailed with peace; high tariffs, trade barriers and unfair economic competition with war." (Hull, p. 81)

Likewise, after World War II leadership in Europe and in the United States saw economic union in Europe and the construction of an open global trading system perhaps more as strategic objectives than as economic ones. Their view of the good of such arrangements paid more attention to the prevention of future wars than to the dollars and cents calculations of efficiency or welfare gains that economists are conditioned to interpret as gains.

The presence of such non-economic objectives need not however discredit the mercantilist bargaining model of the negotiating process. To leaders motivated by such objectives, reciprocal bargaining is a tactic by which they can move toward their

[1] A variant of the reciprocal bargaining model that is relevant to developing countries that have unilaterally liberalized focuses on binding such liberalization internationally as defense against later backsliding. Against pressures for new import restrictions the government can respond that to do so would violate an international commitment. If further pressed, the government can mobilize export interests by pointing out that under the international agreement, unauthorized import restrictions can lead to authorized retaliation by trading partners.

objective. The reduction of trade barriers -- by whatever process and without regard to the motives of the interests that support the process -- moves them toward their objective. Indeed, a government that can mobilize non-economic motives into significant support for trade liberalization will be in a position to play a hegemonic role (as the US did) and give up larger concessions that it receives in exchange.

frictions, transferring national gains to national losers

For a government motivated toward trade liberalization, the deciding trade-offs are not between it and foreign governments, but between domestic winners and losers -- between exporting and import-competing domestic industries. The bargaining process ties access to foreign markets to the granting of access to the domestic market, and thereby mobilizes export interests to favor import liberalization. In the US political process, an important application of the leverage export interests provide is in the passage of legislation that grants the President the authority to negotiate -- that grants him the legal authority to reduce US tariffs.

Overcoming resistance from import-competing industries has been, in practice, part power --using export industries to win more congressional votes than the opposition could rally -- and part compensation. Adjustment assistance, which in 1980 dispensed $1.6 billion to import-competing industries and workers is the best example of compensation, though public works and other programs that would be more literally described as bribery than as compensation have also been used.[2]

Another way in which governments attempt to minimize the problem of compensating losers is by taking advantage of the large volume of intra-industry trade that characterizes the modern trading system. To the extent that concessions given by an industry can be offset by concessions received on the products exported by the same industry, the government need not develop inter-industry mechanisms for balancing losers against winners. Gilbert Winham reports (p. 65) that during the Kennedy Round there evolved a tendency to look for such "self-balancing sectors." From a political standpoint this informal negotiating practice would be practical as it would reduce the need for cross-industry compensation mechanisms.

Taking into account that the politics of negotiations across industries will require cross-industry compensation mechanisms -- and that these mechanisms will not be frictionless -- does not change the basic mercantilist metric of the reciprocal bargaining model. It does, however, suggest that -- other factors given -- a country's concessions given and concessions received will tend toward industries where intra-industry trade is large.

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[2] Zeller provides examples of the trades President John F. Kennedy made to win Congressional approval of the Trade Expansion Act of 1962, which gave him the authority to negotiate in what came to be called the Kennedy Round.

A variant of the reciprocal bargaining model that is relevant to developing countries that have unilaterally liberalized focuses on binding such liberalization internationally as defense against later backsliding. Against pressures for new import restrictions the government can respond that to do so would violate an international commitment. If further pressed, the government can mobilize export interests by pointing out that under the international agreement, unauthorized import restrictions can lead to authorized retaliation by trading partners.

The common good model

Individual sacrifice for the common good. Many of the participants in the initial ITO and GATT negotiations viewed their task as the construction of a system, from which all countries would derive significant non-economic benefits -- perhaps economic benefits also, but the emphasis was usually on non economic benefits. The model differs from the mercantilist bargaining model in that the benefits a participant gets are not unequivocally identified with the particular market access concessions that the country receives -- the link between contribution and benefit is amorphous, resulting from the from the collective nature of the system rather than from any particular element of it..

Within the mercantilist bargaining model, the appropriate yardstick for an individual country's success in the negotiations would be the excess of its concessions conceived over its concessions given. The common good model focuses not on the successes of individual countries, but on the success of the group. Within this model, success would be gauged in a collective way, e.g., by overall reduction of trade restrictions, and fairness by comparing the contributions of countries to the system -- e.g., concessions given by one country compared with concessions given by other countries.

This model, in which negotiators see their activity as reaching agreement to accept individual sacrifice for the common good, describes well the situation in which the shared objective is non-economic, such as creating a web of economic activity, interests and enterprises that spans international borders so as to minimize the likelihood of armed conflict. It underlies several insightful analyses of previous rounds, such as Robert Hudec's analysis (1987) of the position of developing countries in the GATT system. Hudec's focus is to explain how GATT members came to accept "special and differential treatment" as the appropriate attitude toward developing countries. In constructing any system out of the contributions of its members, it is difficult to ask the less well off members to contribute proportionally with the better off members.

LESSONS FROM EXPERIMENTAL ECONOMICS

Experimental economics has paid considerable attention to bargaining experiments, thus this literature can offer insights into a better understanding of both the negotiating process and the likely outcomes of international trade negotiations. In the experimental bargaining context, bargaining structures (institutions) and bargaining or market interactions turn out to be key elements in determining possible outcomes.

In simple bilateral bargaining games researchers have found 50/50 splits to be more the rule than the exception (Davis and Holt, 1993). This is true even when the bargaining is structured so that one of the subjects has the opportunity to capture all of the prize that is at stake. In situations[3] in which one party (called the "controller") enjoys the power to decide how the outcome will be allocated, these controllers recurrently fail to exploit their full bargaining position and accept an equal split. It is interesting to notice, however, that this "benevolent" behavior tends to occur more often in cases where the property rights are randomly assigned (as with the toss of a coin). If the party in control (the one making the offer) feels that he has "earned the right" of being the controller, then the incidence of an equal split offer tends to be reduced.

The important lesson from those bargaining experiments is that there is something more than individual payoff maximization in explaining behavior (and the realized outcomes). The idea of fairness plays an important role in the outcomes. Players often will not exploit their advantage and claim the entire reward unless the bargaining situation is structured so as to provide a sense that they have earned this reward, i.e., a reason to think that it is reasonable and fair to do so. Benevolent controllers may be motivated by the fear of rejection of "unreasonable" proposals, or they may be concerned with the opinion of outsiders. But even in cases in which the controller is given dictatorial power -- the other party cannot refuse the outcome that the controller specifies --.experimenters have observed that controllers do not necessarily claim all of the prize for themselves. (Other things equal, controllers in a dictatorial position do tend to take a larger share than in cases in which the other party can refuse to accept, or block the game.)

Why, however, would a dictator be reluctant to maximize his own payoff? An attempt to answer this question looked at the case where every action and decision were absolutely anonymous so that no one would know who made which decision -- not even the person who designed and ran the experiment. In this experiment dictators dramatically increased their share of the prize, taking all of it in more than 60 percent of the trials. From these results, the experimenters conclude that opinions of outsiders do influence bargaining behavior, more so than the payoffs available to other players (Hoffman et al, 1991).

In conclusion, the findings of experimental economics suggest that the idea of fairness will be important to outcomes in a bargaining situation such as bilateral or multilateral trade negotiations. Public exposure matters, perhaps more than an abstract sense of fairness. A party in a strong bargaining position is less inclined to exploit that power when it will be evident to all participants that the stronger party has more or less dictated the outcome; i.e., when he senses that a relevant peer group might not approve.

[3] Well defined property rights are another property of these games.

However, when the process provides the party in the stronger position a sense of having earned that position, there is a notably increased tendency to exploit it.

CONVERSATIONS WITH NEGOTIATORS

Examining quantitatively the balance of concessions given and received is one way to evaluate hypotheses about delegations' objectives and standards. It is also possible to evaluate such hypotheses by asking delegations how they negotiated and how they evaluated and presented the outcome they achieved. Such conversations were held in September, 1994, after the Uruguay Round Agreements had been signed in Marrakech on April 15, 1997. These conversations brought out several related points:

- Powerful constituencies had to be accommodated.
- Selling the agreement at home. i.e., gaining approval, was an important consideration, particularly in the last months when the negotiations were being mopped up.
- A sense of fairness, of appropriate contribution, was an important concept.

Accommodating constituencies and selling the agreement at home

The first two points are perhaps obvious, but their weight on how delegations evaluated the outcome of the negotiations needs a word of explanation. From our conversations we developed the impression that satisfying powerful constituencies was much more important than any evaluation of the overall balance of concessions received versus concessions given. Because of the obvious need to gain governmental approval (implementation) for any agreement reached, delegations sought to avoid calling attention to concessions given. Evaluation tended to be across general issue areas (TRIPs, antidumping, dispute settlement) and in areas in which a delegation accepted losses (i.e., areas in which the outcome was opposed at home) the delegation's presentations tended to emphasize what was gained on other items within the issue area and how the final agreement on the losing issue was better than other alternatives that had been on the table. The tendency was to present everything as a victory, nothing as a concession given.

No delegation of the ten with whom we spoke mentioned having tallied concessions received versus concessions made, either within the tariff access negotiations or across the span of the Uruguay Round agreements. One delegation did comment that SELA had provided useful tabulations of concessions tabled by trading partners of the South American and Caribbean countries.

Several delegations explained that their governments, internally, did recognize the irrelevance of a mercantilist toting up and saw the round as an instrument of their domestic reforms. But even they, in selling the round domestically, found it useful to make certain mercantilist points. For them, the mercantilism of the process was somewhat more for appearance sake than for substance -- the domestic politics of the situation rather than the international politics. The more however that client oriented domestic politics was the determining characteristic of a delegation's behavior, the more was that delegation's evaluation in substance mercantilist. But even delegations whose evaluations were substantially mercantilist in concept made no attempt at a formal tallying up of overall domestic benefits versus domestic costs. (As already noted, there was considerable reluctance to present anything as a cost.) No delegation was aware of any calculation of concessions received such as we have presented here.

As to how powerful constituencies were assuaged, there seem to have been many ways. The US delegation, for example, under pressure from the US textile industry, negotiated hard to extract concessions on fibers and fabrics from major exporters of apparel. In other cases, a powerful domestic constituency was honored by the delegation holding out until the deadline before accepting an agreement that gave less than what the constituency wanted. The Korean delegation, for example, to emphasize that what was given was the minimum that could be given, did not concede on a commitment to increase its imports of rice until the final moments before the deadline for completing the round.

Achieving appropriate contributions from all

Particularly in the last month of the negotiations (the mopping up) the tariff negotiations devoted significant attention to ensuring that each participating country had made an appropriate contribution to the tariff reduction exercise. Delegations widely but informally accepted that the target for industrial countries was an average reduction of one-third, for developing countries an average reduction of one-fourth.[4] Achieving these targets intertwined with how countries would receive "credit" for unilateral tariff reductions and for extensions of bindings that did not imply tariff cuts. It was also influenced by the fact that founding the World Trade Organization was one of the Uruguay Round agreements.

No specification for measuring "officially" how much a county had reduced its tariffs was ever agreed or for that matter, even debated. The Punta del Este Declaration[5] (Part I.G) mandated that the Group of Negotiations on Goods

[4] At the July 7-9, 1993, G-7 summit in Tokyo, the Quadrilateral Trade Ministers announced a substantial market access agreement plus their goals for what they hoped to achieve overall:

- selected products; reductions to zero or harmonization at low levels,
- tariffs 15 percent and above; 50 percent reduction, subject to certain exceptions and similar reductions by other exporting counties,
- other tariffs; negotiated reduction by an average of at least one-third.

The one-third reduction for industrial countries may thus have come from this agreement, but we have not identified the origin of the one-fourth target cut for developing countries.

[5] The Punta del Este Declaration, formally titled, "Ministerial Declaration on the Uruguay Round," was published in GATT Focus, No. 41, October 1986.

> conduct an evaluation of the results obtained ... in terms of the Objectives and the General Principles Governing Negotiations,

but the relevant objectives and general principles (Part I.D. - Tariffs) establish only broad targets for the tariff negotiations:

> to reduce or, as appropriate, eliminate tariffs including the reduction or elimination of high tariffs and tariff escalation. Emphasis shall be given to the expansion of the scope of tariff concessions among all participants.

According to delegations the informal practice was more or less to evaluate from applied rates in 1986 to the bound rate agreed at the Uruguay Round.[6] By this practice, countries which had, after 1986, unilaterally reduced their tariffs would be given "credit" at the round to the extent that they bound these cuts at the round. No delegation that we interviewed had actually performed such calculations.

For how to take into account bindings that did not imply tariff cuts, e.g., ceiling bindings, not even an unofficial approach evolved. Toward the end of 1990, the Mexican delegation circulated a non-paper[7] that argued that credit be given for expansions of the scope of bindings, but did not offer a method for measuring its "tariff cut equivalent." Later, the chairman of the Market Access Group provided guidelines for such measurement, including a matrix of suggested equivalents between depth of tariff cut and scope of expansion of bindings. The view of the negotiators with whom we spoke is that these guidelines were not followed -- there never emerged even notional agreement on how to convert extension of bindings into a tariff cut equivalent.

Though Canada's proposal in April 1990 to create a World Trade Organization was slow to win support (Preeg, p. 114) by the time the negotiations were coming to a close the general sense of agreement that the WTO proposal would be approved did influence the outcome of the tariff negotiations. In the informal tallying up, negotiators informed us, delegations were reluctant not to accept a country's tariff offer that seemed a few percentage points short of the unofficial targets of one-third reduction by the industrial or one-fourth reduction by the developing countries. To do so would prevent the country from being a charter member of the WTO -- leave the country out of the new institution that was being created. In such cases, notice was taken of extension of ceiling bindings, i.e., the extension of ceiling bindings provided a pretext to accept an offer that countries were, for other reasons, inclined to accept.

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[6] The tariffication of NTBs on agricultural products used the 1986-88 average of their tariff equivalent as the target, but the target was not binding.

[7] In GATT/WTO usage, a non-paper is a way to circulate an idea for discussion without proposing that the idea be adopted -- a way to advance preliminary discussion. The non-paper was co-sponsored by 19 other developing countries.

The exercise in achieving appropriate contributions from all parties allows several generalizations about the negotiating process. First, there were obvious trade-offs from one part of the negotiations to another and the all-or-nothing character of the WTO proposal required that a country accept the disciplines of all the agreements if it became a WTO member. In contrast, a country could choose not to accept any or all of the Tokyo Round codes and still remain a full member of the GATT. Accepting all of these disciplines could reasonably be interpreted by trading partners as worth as much as another percentage point coverage of tariff reduction.[8]

DATA AND MEASUREMENTS

Our basic data source was the Integrated Data Base (IDB)[9] that is maintained by the Secretariat of the WTO. The IDB covers all industrial and transition economies that participated in the Uruguay Round, plus twenty-six of ninety-four developing economy participants. Complete data for the calculations described below were available for 33 countries and the European Union[10].

There is no "official" measure of the tariff reductions exchanged at the Round. Strictly speaking, each country agreed to bind its tariff rates at the levels notified -- the levels reported in series MFN09F of the IDB. Legally speaking, the exchange that was consummated was this exchange of bindings.[11] We have developed three different measures of the tariff cuts that were implicitly agreed, the reciprocal reduction, the bound reduction and the total reduction. Each of these is explained below.

The tariff reductions we report below are averages of changes, not changes of averages. The various changes were calculated tariff line by tariff line, then aggregated by country into averages, weighted by own imports that enter at MFN rates.[12] The changes cover only reductions of MFN tariffs, they do not include the tariff equivalent of the agreed elimination of the MFA, nor do they include the agreed tariffication of NTBs on agricultural products and the agreed reduction of these tariff equivalents. Average applied rates cover all tariff lines but average bound rates cover only those tariff lines that are bound, post Uruguay Round.

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[8] The experience shows that there are always fudge factors available. In this case, the treatment of bindings, that could be used as cover for a decision made for other reasons.

[9]. The IDB includes countries that account for 100 recent of non-petroleum imports of North America, Western Europe and WTO members (at the time of the Uruguay Round) in Central and Eastern Europe. The IDB covers 90 percent of Asia's non-petroleum imports, 80 percent of Latin America's non-petroleum imports, but only two sub-Saharan African countries (Senegal and Zimbabwe) who together account for 30 percent of sub-Saharan Africa's non-petroleum imports.

[10] Finger, Ingco and Reincke explain in more detail the IDB and the data it contains.

[11] Some of these bindings -- where the MFN09F rate was below the applied rate -- implied tariff reductions. Some did not. For many developing country tariff lines, the MFN09F rates were above applied rates.

[12] Imports from free trade area or customs union partners were not included in the weights.

Reciprocal reduction

The calculations labeled "reciprocal reduction" were intended to measure reductions agreed at the Uruguay Round and to exclude the unilateral reductions that were, by accident of timing, introduced during the round,[13] i.e., to cover strictly reductions conditioned on reciprocal reductions by trading partners

A number of countries introduced substantial unilateral reductions of their tariff rates during the years of the Uruguay Round. Where these unilateral changes were reflected in the IDB MFN applied rate (MFN03), we used these rates as the "before"[14] rates to calculate the reciprocal reductions. Where the MFN03 rates did not reflect the unilateral reductions we used 1992 applied rates from the TRAINS data base. The "after" rate for this calculation we took to be the minimum of the Uruguay Round final offer rate[15] (MFN09F) and the "before" rate. Thus we counted as reciprocal reductions only those instances in which the binding was a commitment to reduce the post unilateral-liberalization applied rate.

Total reduction

The "total reduction" measures the overall tariff reduction from "before" the Uruguay Round, chronologically speaking, to the "after" Uruguay Round rate, again chronologically speaking. The "after" rate for this calculation is the same as that used to calculate reciprocal reductions -- the lower of the post Uruguay Round bound rate or the rate that resulted from unilateral liberalization. The before rate is the Uruguay Round applied rate for 1986, as provided by the IDB.

Bound reduction

The "before" rates for the calculations labeled "bound reduction" are the same as the "before" rates for the "total reduction." The "after" rates are the post Uruguay Round bound rates.

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[13] By the same token, we did not include tariff changes resulting from regional integration that took place during the round; e.g., the formation of NAFTA; Austria, Finland and Sweden joining the European Union.

[14] "Before," of course, relates here to cause, not to chronology.

[15] The Uruguay Round agreement allows for year-by-year staged introduction of tariff reductions. Generally, the MFN final offer rates will be effective no later than January 1, 1999, but some countries have, for some commodities, negotiated later deadlines. The MFN09F rates are the final rates -- after all stages are completed.

Comparing the three concepts

Simplistically speaking, we have for each tariff line for each country, three tariff rates:

- A: the 1986 MFN applied rate,
- B: the 1992 MFN applied rate,
- C: the post Uruguay Round bound rate.

The changes then are defined as follows:

- Total Reduction: from A to the smaller of B or C.
- Bound Reduction: from A to C.
- Reciprocal Reduction: from B to the smaller of B or C.

Please note that the bound reduction and the reciprocal reduction do not add up to the total reduction.

Concessions received

The second and perhaps the motivating side of the negotiations coin is concessions received. In addition to tabulating concessions given by each participant, we will also tabulate concessions received. Just as concessions given are measured by the depth of cut and the value of imports on which a country agrees to reduce its tariffs, concessions received are measured by the depth of cut of trading partners' cuts on products that a country exports, and the value of exports to those countries. Arithmetically, once concessions given are calculated, by tariff line; for each country as an importer, concessions received can be tabulated for any country by aggregating over the imports of all other countries from the subject country.[16]

MEASUREMENT OF PARTICIPATION IN THE TARIFF NEGOTIATIONS

One of the objectives of the study is to document the countries' participation in the Uruguay Round. From tariff line information recorded by the GATT/WTO Secretariat, we will tabulate the extent to which countries agreed at the Round to reduce and to bind their import restrictions. Reductions and bindings by countries will be compared, as will be resulting levels of import restrictions and of bindings.

The second side of the negotiations coin is concessions received. In addition to tabulating concessions given by each participant, we will also tabulate concessions received. (Just as concessions given are measured by the value of imports on which a country agrees to reduce its tariffs, concessions received are measured by the value of a country's exports on which a trading partner reduces its import restrictions.)

[16] Concessions given are tabulated only over imports from other countries included in the sample. Thus our measures cover concessions given only to other countries in the sample, concessions received only from other countries in the sample.

TARIFF CONCESSIONS GIVEN: THE COMMON GOOD HYPOTHESIS

The common good hypothesis has a straightforward empirical implication: that countries will reduce tariffs by more or less the same amount. GATT's history of special and differential treatment for developing countries suggests that this proposition will be modified by a mercantilist "ability to pay" equity consideration, so that developing countries will be expected to make smaller reductions than industrial countries.

Reciprocal concessions

The size of reciprocal concessions given by selected countries are given in Table 1. The first column follows normal GATT usage and measures the change as a percentage of the initial ad valorem or ad valorem equivalent tariff level. The second column measures the tariff reduction as the change divided by unity plus the ad valorem tariff rate. For many purposes this a more economically meaningful measure of the impact of the tariff cut than the percentage change of the ad valorem rate. For a small country, one whose imports do not affect world prices, $dT/(1+T)$ measures the percentage by which the domestic price of the imported product will decline as a result of the tariff cut. If the concern is market access, it would be inappropriate, for example, to treat the halving of a 2 percent tariff as equivalent to the halving of a 50 percent tariff. The latter change would allow a 20 percent improvement of the (after tariff) price the importer receives, the former a less than one percent improvement -- as $dT/(1+T)$ measures.

The common good model implies that countries will be expected to make equal contributions or sacrifices, perhaps modified by some accepted ability-to-pay-criterion. At the Uruguay Round, ability to pay was reflected in the informal criterion that industrial countries reduce their tariffs overall by one-third, developing countries by 1/4. To incorporate this criterion, we scaled each country's tariff reduction by the targets -- 33.3 percent reduction for industrial countries, 25 percent for developing countries. (Thus an industrial country that reduced its tariff by an average of 33.3 percent or a developing country that reduced its tariff by 25 percent would have an index value of 100.)

The data do not support the hypothesis that countries would be induced to make uniform reductions. As a test of the common contribution hypothesis, the most striking property of the results reported in Table 1 is the lack of uniformity in contributions. As a percentage of the target contributions of a 1/3 reduction by the industrial countries and a 1/4 reductions for the developing countries, the actual figures for reciprocal reductions range from zero percent to 170 percent. (Column c). In the following section we will look into the possibility that the target criteria applied to the bound or the total reductions rather than to the reciprocal reductions.

Total and bound concessions

Table 2 compares the uniformity of reciprocal, bound and total tariff reductions given at the Uruguay Round. As there was informal agreement at the round to grant credit for tariff reductions that had been made unilaterally but were now bound under the GATT/WTO, we would expect that countries would measure their contributions to the common goods by the metric of bound concessions rather than concessions whose reduction was narrowly conditioned on the Uruguay Round negotiations.

Results reported in Table 2 show that this was indeed the case. The coefficient of variation of tariff reductions[17] across all countries falls by one half when we move from reciprocal cuts to bound cuts --for developing countries, it falls by two thirds. It seems evident then that the binding of unilateral tariff reductions was treated at the round as an action of substantial value.

Table 3 shows that the same result applies when we measure the tariff reductions by the formula dT/(1+T). Again the coefficient of variation is much lower for bound reductions than for reciprocal reductions. Again, the reduced variation is mostly among the developing countries.

What then can we conclude from our examination of the "equal contributions to the common good" hypothesis?

The most dramatic finding is the lack of uniformity across countries in the depth of concessions given.

In evaluating this lack of uniformity, we should of course remember that the tariff were only a part of the negotiations. There were fourteen other negotiating groups, hence what a country gave or did not give in the tariff negotiations may reflect what the country received or did not receive in the other negotiations. The other negotiations were however mainly about rules (antidumping, dispute settlement, etc.) in which the outcome for one country was the same as for another. While there might be reason for different countries to evaluate differently the value of such an outcome, that evaluation should have been more or less the same among similar groups of countries, e.g., among the industrial countries or among the developing countries.

We do not find uniformity even among groups. Excluding Hong Kong, whose free trade policies leave her no tariffs reductions to contribute, bound cuts among the industrial countries still range from about two-thirds of the 33.3 percent target to over 200 percent. Likewise, among developing countries, bound cuts for a number of countries were less than half of the target 25 percent cut, for other developing countries bound cuts were well over 100 percent of the target -- for Korea, over twice the target.

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[17] The standard deviation divided by the mean.

While many delegations informed us that there was a shared concern that all negotiating countries contribute equally (or equitably), loyalty to this concern seems to have been more notional than rigorous. There was minimal policing of the standard, no official tabulation of depth of cut by country, and from what we learned from delegations, minimal informal tabulation.

Binding unilateral concessions did seem to count in the round. When we take these liberalizations into account along with cuts tied to reciprocal cuts agreed at the round, the contributions across countries are considerably more uniform.

CONCESSIONS RECEIVED VERSUS CONCESSIONS GIVEN: THE MERCANTILIST BARGAINING HYPOTHESIS

The view of tariff bargaining most familiar to economists focuses not on the amount of concessions that a country gives but on the net of concessions received over concessions given. According to this model the objective of each negotiator is to gain a net advantage, or "profit," but the negotiating or competitive process pushes the level of profits toward zero. We should expect therefore that for each country the net of concessions received over given will be close to zero.[18]

To evaluate this hypothesis, we tabulated the amount of concessions received by each of the countries in our sample, then the net of concessions given over concessions received.[19] In the first three columns of Table 4 we compare the depth of tariff cut received and given for each country in our sample. (The cuts are calculated according to the more economically sensible measure $dT/\{1+T\}$.) It is obvious that the net cuts are not uniform over countries. India agreed (reciprocal cut) to reduce its tariff by about 6 percent, in exchange for a slightly larger than 1 percent cut by trading partners on India's exports. Hong Kong, on the other hand, had no tariffs to cut, but received an average cut of almost 2½ percent on its exports. Because the economically sensible formula $dT/(1+T)$ assigns higher values to cuts in higher tariffs than does the formula dT/T, those higher tariff countries that made substantial cuts generally tended to have negative balances.

The second fourth, fifth and sixth columns of Table 4 take into account not only the depth of tariff cuts but also the value of exports or imports on which the cut applies -- measures concessions received and given in "percentage-point dollars." We see again a very large variation in the "mercantilist balance" of concessions received over concessions given. Of thirty-three countries for which we have figures, twenty-three had an imbalance – positive or negative – at least half as large as their concessions given.

[18] Again, we found no evidence that any country had ever attempted to tabulate at any GATT round the amount of concessions that it had received. This fact certainly argues against the hypothesis as a description of what negotiators actually do.

[19] We took into account only concessions given to the countries in our sample -- concessions tabulated over imports from these countries only.

At the bottom of the table we provide two summary measures of this variation: the sum of the absolute difference divided by the sum of concessions received, and the overlap index.[20] The overlap index measures the percentage of the total number of two different things that have "mates" when both items are distributed among the same categories. For example, if one box contains one knife and nine forks, the other box contains zero knives and nine forks, then of the total of 19 forks and knives, only two (one fork and one knife) have mates within their category, or box.[21] According to the overlap index, only 29 percent of percentage point dollars of concessions given were matched by concessions received by the same country.

FINAL REMARKS

Though it seems obvious that mercantilism (aversion to imports, attraction to exports) provides the thrust for the GATT/WTO trade negotiations we found little evidence that governments evaluate their own performance by a mercantilist standard of export concessions received less import access concessions given. None of the delegations we interviewed were aware of such calculations, either by their own governments or by others. Likewise, we found that when measured by net concessions received, the outcome of the negotiations varied enormously from one country to another.

While the process may be driven by the mercantilist instinct, there did seem to be imposed on it a mercantilist sense of community, or equal sacrifice (import concessions) for the common good. Delegations emphasized that as the Round was coming to an end, the standard of 1/3 cut by the developed countries, ¼ cut by the developing economies, became an important yardstick. This system of control is however, anything but precise. Comceptually, the conversations and non-papers that demonstrate a concern for equal sacrifice (tempered by ability of the developing countries to pay) did not go into how to measure tariff cuts – e.g., dT/T or dt/(1+T) –how to balance off depth versus scope of cut, or how to take into account that some countries started from different levels of protection – e.g., it would be difficult for Hong Kong, China or Singapore to contribute to the tariff cuts. Empirically, the data a lot of variation from country to country in the depth and in the scope of cuts.

We do however observe in the results indications that the developing countries were given credit for binding under the WTO tariff cuts that had been made unilaterally, and even for tariff cuts that were applied but not bound. Bound cuts were more uniform

[20] We did not calculate coefficients of variation because the expected value over all countries of percentage point dollars of concessions received minus concessions given is zero.

[21] The overlap index is by definition equal to $100 * [2 * \sum Min(\underline{Ri}, Gi)] / \sum (Ri + Gi)$. Since the total of percentage point dollars of concessions received and given are equal the overlap index for those columns must be equal to ½ of the sum of the absolute differences divided by the total of concessions received.

than the cuts the developing countries added at the Uruguay Round, total cuts – that included unbound cuts of applied rates – even more uniform than bound cuts.

Two other findings are also important, though we cannot fit them in to any particular analytical model – except perhaps the obvious one of agents' self-interest:

- delegations attended to their country's powerful constituencies – powerful constituencies were attended to,
- delegations avoided calculations that would allow a comparison of one delegation's "score" with another's.

Table 1: Depth of Reciprocal Tariff Reductions Agreed at the Uruguay Round by Selected Countries and Groups

Country or group	dT/Tb (as %) (a)	dT/(1+Tb) (as %) (b)	Index[a], dT/T (c)	Index[b], dT/(1+T) (d)
Australia	18.2	3.18	54	158
Austria	32.2	3.60	97	178
Canada	9.6	0.87	29	43
European Union	35.5	2.13	107	105
Finland	23.1	2.43	69	120
Japan	22.6	1.02	68	50
New Zealand	5.3	0.78	16	39
Norway	17.3	2.11	52	105
Sweden	29.3	1.48	88	73
Switzerland	27.8	0.89	84	44
United States	23.2	1.03	70	51
Target, industrial c's	*33.3*	*2.03*	*100*	*100*
Argentina	0.0	0.00	0	0
Brazil	0.0	0.00	0	0
Chile	0.0	0.00	0	0
Colombia	0.0	0.02	0	0
Czech & Slovak U.	19.8	0.98	79	20
Hong Kong	0.0	0.00	0	0
Hungary	16.7	1.69	67	34
Iceland	0.8	0.18	3	4
India	13.8	5.52	55	110
Indonesia	0.7	0.23	3	5
Korea Rep.	42.6	5.64	170	113
Malaysia	21.5	1.84	86	37
Mexico	0.0	0.00	0	0

Country or group	dT/Tb (as %) (a)	dT/(1+Tb) (as %) (b)	Index[a], dT/T (c)	Index[b], dT/(1+T) (d)
Peru	0.0	0.02	0	0
Philippines	5.0	1.22	20	24
Poland	10.9	1.26	44	25
Singapore	3.8	0.78	15	16
Sri Lanka	0.0	0.01	0	0
Thailand	17.1	5.29	68	106
Tunisia	0.0	0.02	0	0
Turkey	13.2	2.85	53	57
Uruguay	0.0	0.00	0	0
Venezuela	0.4	0.12	2	2
Target, developing c's	*25*	*5.00*	*100*	*100*

Notes, Table 1

[a] Each country's tariff reduction as a percentage of the Uruguay Round informal targets of 1/3 reduction by industrial countries and 1/4 reduction by other countries.

[b] Each country's tariff reduction as a percentage of the target calculated as follows: (i) The pre Uruguay Round average tariff for industrial countries and for developing countries were 6.5 percent and 25 percent, respectively. A 1/3 reduction of the 6.5 percent rate comes to 2.03, when measured by dT/(1+T); likewise a 1/4 reduction of the 25 percent rate comes to 5 percent when measured by dT/(1+T). Consequently in this column, 2.03 is the base for the index values for the industrial countries, 5 percent for the index values for the developing countries.

Table 2: Indices of Reciprocal, Bound and Total Tariff Reductions
Given at the Uruguay Round, by Selected Countries

	Reciprocal[a]	Bound[b]	Total[b]
Industrial countries[c]			
Australia	54	125	195
Austria	97	105	98
Canada	29	152	152
European Union	107	132	132
Finland	69	69	na
Hong Kong	0	0	0
Iceland	2	77	77
Japan	68	203	209
New Zealand	16	174	225
Norway	52	132	132
Singapore	11	193	288
Sweden	88	114	na
Switzerland	84	98	98
United States	70	130	130
Czech & Slovak U	59	71	72
Hungary	50	77	84
Poland	33	122	152
Developing countries[d]			
Argentina	0	78	176
Brazil	0	114	282
Chile	0	113	273
Colombia	0	70	278
India	55	153	190
Indonesia	3	14	150
Korea Rep.	170	204	275
Malaysia	86	125	156
Mexico	0	93	298
Peru	0	76	184
Philippines	20	38	148
Sri Lanka	0	16	75
Thailand	68	77	240
Tunisia	0	14	55
Turkey	53	56	245
Uruguay	0	34	67
Venezuela	2	30	254
*Stdev/Mean*100*[e]			

	Reciprocal[a]	Bound[b]	Total[b]
All countries	111	57	47
Industrial countries	66	42	51
Developing countries	168	67	39

Notes for Table 2

[a] Calculated from average tariff reductions by the formula dT/T_o, where T_o is the tariff rate before the change.

[b] Calculated from average tariff reductions by the formula dT/T_{avg}, where T_{avg} is the average of the tariff rates before and after the change.

[c] For industrial countries, the index is based on the informally presumed 1/3 overall reduction.

[d] For developing countries, the index is based on the informally presumed 1/4 overall reduction.

[e] Calculation of these summary statistics did not include Finland and Sweden.

Table 3: Variation among countries of tariff reductions given at the Uruguay Round, reduction measured as $dT/[1+(T_0+T_1)/2]$

	Reciprocal reduction	Bound reduction	Total reduction
All countries[a]			
Standard deviation	1.79	4.61	8.24
Mean	1.44	5.68	11.50
Stdev/Mean*100	125	81	72
Industrial C's[a]			
Standard deviation	1.02	3.33	4.89
Mean	1.42	4.63	5.90
Stdev/Mean*100	72	72	83
Developing C's[a]			
Standard deviation	2.27	5.34	7.39
Mean	1.46	6.59	16.45
Stdev/Mean*100	155	81	45

Notes for Table 1:

[a] The country coverage is the same as for Table 2.

Table 4: Reciprocal tariff concessions received and given at the Uruguay Round

	Percent tariff reduction[a]			*Mercantilist balance, in* Percentage point dollars[b]		
	Received	Given	Received minus Given	Concessions Received	Concessions Given	Received minus Given, as percent of Received
Australia	0.76	3.35	-2.59	21032	88162	-319
Austria	2.64	3.74	-1.11	74602	108820	-46
Canada	0.22	0.89	-0.67	5291	26205	-395
European Union	1.94	2.19	-0.26	578816	627939	-8
Finland	3.47	2.52	0.95	63924	44021	31
Hong Kong	2.36	0.00	2.36	60258	0	100
Iceland	1.59	0.20	1.39	2151	299	86
Japan	2.06	1.06	1.00	481006	143142	70
New Zealand	0.84	0.83	0.01	5126	4155	19
Norway	1.15	2.17	-1.03	24250	44263	-83
Singapore	1.96	0.85	1.11	50294	32741	35
Switzerland	2.15	0.89	1.25	100659	46829	53
United States	1.21	1.07	0.14	214791	283580	-32
Czech & Slovak U	2.06	1.05	1.01	9773	7312	25
Hungary	1.82	1.69	0.13	7755	13727	-77
Poland	1.36	1.26	0.09	8609	7112	17
Argentina c	0.98	0.00	0.98	6331	0	100
Brazil	1.37	0.00	1.36	38037	98	100
Chile c	0.50	0.00	0.50	3291	0	100
Colombia	1.25	0.02	1.23	6323	81	99
India	1.22	6.16	-4.94	14380	67172	-367
Indonesia	0.87	0.25	0.63	16222	3355	79
Korea Rep.	1.87	5.99	-4.12	100809	262918	-161
Malaysia	1.46	1.97	-0.51	36108	28966	20
Mexico	0.16	0.00	0.16	960	3	100
Peru	0.57	0.03	0.54	1586	58	96
Philippines	2.43	1.29	1.14	19748	12847	35
Sri Lanka	1.36	0.01	1.35	1595	33	98
Thailand	1.33	5.93	-4.60	20564	95953	-367
Tunisia	1.42	0.02	1.40	2506	72	97
Turkey	1.72	3.00	-1.27	12557	32661	-160
Uruguay c	0.52	0.00	0.51	772	6	99
Venezuela	0.21	0.13	0.08	2051	806	61
	Sum abs diff/ Sum of rec'vd, as % = 137			Sum abs diff/ Sum of rec'vd, as % = 58		
	Overlap index = 42			Overlap index = 29		

Notes for table 4

[a] Weighted average of change measured as $dT/(1 + T_{avg})*100$, where T_{avg} is the average of the before and after change rates, calculated across all tariff lines, including those on which there was no reduction.

[b] Tariff cut as measured in the first or second column multiplied by the value (in millions of dollars) of the imports or exports to which the importing country applies mfn tariff rates.

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