

What's the Point of Reciprocal Trade Negotiations?
Exports, Imports, and Gains from Trade

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WHAT'S THE POINT OF RECIPROCAL TRADE NEGOTIATIONS?

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This paper explains why trade-policy makers may prefer reciprocal trade negotiations (RTN) to unilateral tariff reductions (UTR) for *economic* reasons. It answers puzzles like “Why WTO reciprocity?” and strengthens the unnecessarily weak case made for the WTO by those who downplay or dismiss benefits from foreign tariff reductions (FTR).

RTN is superior to UTR because it provides economic benefits that UTR cannot -- namely, FTR benefits which are clearer than potentially important UTR benefits: Whereas each policy offers efficiency gains, any terms-of-trade effect of UTR generally detracts from these gains, while any terms-of-trade effect of FTR is typically beneficial (especially for a small price-taking country) with this benefit augmenting FTR's efficiency gains. Moreover, benefits from reductions in foreign barriers may come from several sources; they are not solely the result of terms-of-trade improvement -- or economies of scale (the two benefits already noted in the literature, though often dismissed). E.g. with foreign NTB elimination, possible home benefits are shown even with rising costs and terms-of-trade deterioration.

RTN is also superior to UTR because, by eliminating protection in either NTB or tariff form, RTN provides an escape from not only a terms-of-trade prisoners' dilemma, but many other previously unrecognized prisoners' dilemmas, including one in international rent transfers, and several others with no economies-of-scale or terms-of-trade motivation.

If reciprocity is an option, but only in a narrower CU or FTA form, such reciprocity *may* still be superior to UTR, or it may be inferior; theory cannot unambiguously rank these.

The case for free trade is perhaps the most durable and central of all the policy recommendations of economists. For an individual country, a general move toward free trade can provide two types of gains: (1) those that arise from the lowering of its own tariffs on its imports, and (2) those that arise from foreign tariff reductions on its exports (FTR). Business executives and government negotiators generally focus on the second source of gains -- the advantages that arise when they have better access to foreign markets. Indeed, negotiators sometimes take the view that the second is the *only* source of gain, and thus the aim is to maximize the reduction in foreign barriers while giving up as little of their own trade barriers as

possible. This approach is often criticized by economists -- and rightly so -- on the ground that, by viewing the reduction of home barriers as a costly concession, it ignores the efficiency gains that can come from unilaterally lowering home's barriers.

On the other hand, economists have often focused on the first source of gain -- from own unilateral tariff reductions (UTR) -- sometimes to the exclusion of the second. Perhaps the clearest early statement came from Harry Johnson's pen in 1965 (p. 270):

...the form and logic of bargaining for reciprocal tariff reductions [are] phenomena which are incomprehensible to the classical approach to tariff theory, according to which the source of gain is the replacement of domestic production by lower-cost imports, whereas increased exports yield no gain (improved terms of trade apart) to the exporting country, but a gain to the foreigner through the same replacement of domestic production by lower-cost imports. Since these gains are attainable by unilateral action, the classical approach provides no explanation of the necessity and nature of the bargaining process.

Johnson's puzzle has been a recurring theme in the international trade literature. For example, in addressing the question in the title of his paper, "What Should Trade Negotiators Negotiate About?" Paul Krugman (1997, p. 113) reiterates Johnson's conclusion: "The economists' case for free trade is essentially a *unilateral* case" (ital. added). But the puzzle -- why do countries actually engage in reciprocal trade negotiations (RTN)? -- deserves an answer. One reason often given is that the case for RTN is not economic, but political: for example, there may be an explicit political objective, such as the Europeans' desire, in negotiating their Common Market, to avoid the risk of military conflict; or RTN may provide political cover for reducing one's own tariffs.

The purpose of this paper is to demonstrate that the claim that RTN offers little or no economic advantage over UTR is not correct. Consequently, the Johnson-Krugman puzzle -- why do countries engage in RTN (say, in the WTO) rather than simply cutting trade barriers unilaterally? -- is really no puzzle at all. Each country engages in RTN in order to acquire (1) something it cannot get through UTR, namely, the economic gains on the export side that come from FTR; and (2) assurance (e.g., in the form of WTO tariff bindings) that partners won't damage its export gains by backsliding into increased protection.

We do not argue here that economic benefits on the export side have been totally overlooked. Instead we demonstrate below how frequently many authors still tend, implicitly or

explicitly, to downplay the export benefits from FTR, either (1) by using models that pick up some, but not all, of the important benefits (e.g., Kyle Bagwell and Robert Staiger, 1998, 1999); (2) by inappropriately discounting FTR benefits (Jaime de Melo, Arvind Panagariya and Dani Rodrik, 1993); or (3) by implicitly dismissing these benefits, especially those associated with changes in terms of trade (e.g., Harry Johnson's parenthetical phrase in the above quotation, and Paul Krugman, considered later).

Herein lies a puzzle: some of these authors have, in one way or another, recognized how FTR may provide home with possible benefits, in particular from the terms-of-trade effect (as, for example, shown in a standard offer curve diagram) or from economies of scale. Yet these recognized benefits are often assumed away in their statements on trade policy. This paper will not only establish how scale and traditional terms-of-trade benefits have been understated or dismissed. We also show that removing foreign as well as home barriers provides *other* benefits that have so far been inadequately recognized, if at all (e.g., see the two sections below on International Rent Transfers and Other Prisoners' Dilemmas). Until international economists appropriately emphasize the benefits from removing both sets of trade barriers, we risk losing credibility in advising trade negotiators.

This is not a technical paper, because its major conclusion that FTR can provide countries with substantial benefits -- indeed less ambiguous benefits than those available from UTR -- is so simple and fundamental that it can be established without mathematical elaboration. If our argument below stands, it will challenge an extensive literature based on apparent puzzles that are not puzzles at all -- a literature that, in particular, includes incomplete and unnecessarily complicated answers to questions like "what's the point of reciprocal trade negotiations?" But before we examine these questions, it is important to clarify the export benefits that have so frequently been downplayed.

I. THE CASE FOR RECIPROCITY: THE IMPORTANCE OF LOWERING FOREIGN BARRIERS

Benefits from FTR may be considered in several ways.

(1) The most broadly recognized benefit is the traditional terms-of-trade gain for the home country because FTR will increase the demand for, and price of its exports.

(2) In a world of decreasing returns, efficiency gains (Harberger triangles) are created

not only (i) in the familiar textbook diagram where country A removes its tariff on its imports and thereby acquires a good for less than the marginal cost of producing it at home, but also (ii) when A's partners remove their tariffs against its exports and A is then able to sell an increased output for export for more than the marginal cost of producing it. On the other hand, the terms-of-trade effects of the two types of liberalization are different. With FTR, any change in the terms of trade will generally be in the home country's favour. In contrast, UTR is not necessarily beneficial for the home country, because any terms-of-trade change will generally be negative, thus detracting from that country's triangular efficiency gains. Thus, the overall benefit from FTR will be clearer than the more ambiguous overall benefit from UTR. This can also be seen in the simple case where there are no NTBs such as quotas. To be precise: An extension of Lerner's classic symmetry theorem establishes that the elimination of an x per cent across-the-board tariff by all foreign countries is superior for the home country to the elimination of its own x per cent across-the-board tariff. Moreover, it will be shown that when one goes beyond traditional terms-of-trade effects and takes into account international rent transfers under imperfect competition, the benefits of FTR are further augmented, while benefits from UTR become even more ambiguous. Thus it is more difficult to make a general claim that the case for free trade is essentially a unilateral one of import liberalization, than to claim that the free trade case is essentially a unilateral one of getting foreign trade barriers reduced. In reality, neither of these unilateral claims is correct.

We emphasize in passing that *our conclusion provides no basis for opposing UTR*. Indeed UTR may be the best policy if a reciprocal negotiation is not possible. Our only point is that an *equivalent FTR -- so often dismissed -- provides even clearer benefits than UTR*. Thus, the eagerness of business executives and trade negotiators to achieve better access to foreign markets through FTR makes economic sense; it is not simply the result of economic illiteracy. What *doesn't* make economic sense is if negotiators view any lowering of home barriers as a cost, to be minimized in their effort to bargain down foreign barriers.

These first two points depend on improvements in terms of trade. However - - and this is one of our central arguments - - gains from FTR are *not* confined to situations where terms of trade improve. *Indeed, there may be gains from FTR even in instances where this policy causes deterioration in the terms of trade, as explained in points 3 and 4.*

3. In a world with economies of scale, a country's expected gains from RTN (i.e., both

UTR and FTR) are greater -- possibly *much* greater -- than with constant or decreasing returns. The reason: with increased specialization and expanded output for export due to RTN, costs fall and Harberger triangles are superseded by large horizontal slices' of efficiency gain reflecting cost reduction on both additional and original units of output. In a nutshell: with expanded output for export specialization, rising costs put a brake on gains from trade; but with economies of scale, falling costs augment gains from trade. Thus economies of scale can substantially increase the benefits available from the better access to foreign markets that reciprocity provides.

But why are some of these economies-of-scale benefits attributable to FTR? That is, why couldn't UTR alone provide all these benefits? With UTR and a depreciation of the home currency, some decreasing-cost products will be able to enter or expand in the export market (thus acquiring economies of scale), while others may be eliminated. But the degree of, and hence benefit from, specialization will clearly be less under UTR than reciprocal free trade since those foreign barriers that remain under UTR alone will still act as an impediment to larger-scale production for export; in other words, either a home or foreign tariff inhibits the full two-way trade that is necessary to reap the benefits from economies of scale. This point is most transparent in the case of a prohibitive foreign tariff which has totally eliminated home's export of a product. Thus under RTN the home country now able to export that product would acquire economies-of-scale benefits from removal of that foreign tariff, i.e., from FTR. Furthermore, insofar as reciprocal trade negotiations provide assurance against unexpected increases in foreign trade barriers, they reduce risk and thus increase the expected gains from large-scale production for export.

Economies of scale are not simply the result of the recognized terms-of-trade gain, but are an additional benefit. A country can acquire an economies-of-scale benefit from FTR even if its terms of trade remain constant -- or indeed *even if its terms of trade deteriorate*. As a hypothetical example, suppose a home country, say, Japan is exporting computer chips to China which reduces barriers it has been imposing on these chips. With better access to and hence increased exports to the (foreign) Chinese market, Japanese chip producers may find their costs falling, and sell to China at a price lower than they were originally receiving. In this case, the terms of trade of the home country (Japan) can deteriorate, while it reaps an economies-of-scale gain from its increased exports.

4. An exporting home country may also gain from the elimination of a foreign quantitative restriction, such as a quota or “voluntary” export restraint. If the quota rights have been held by the foreign importing country, this gain is straightforward: the home country will export more and its terms of trade will improve. Alternatively, if the foreign restriction is a VER with rights held in the exporting home country, the outcome is uncertain. One possibility is that home benefits, even though its terms of trade deteriorate. To illustrate, suppose that home country H has a VER on its export to foreign country F. If this VER is removed, H may benefit *even if* it has *rising costs and* there is deterioration in its terms of trade. With the elimination of the VER, the domestic price in F, and accordingly the price received by H -- might fall. However, despite this terms-of-trade loss, H might nevertheless be better off because its export price and its marginal revenue would still be above its rising marginal cost, and more would be sold to the foreign country. The net effect on H may be positive or negative since its gains from additional sales may be greater than or less than the effect of its worsened terms of trade.

To sum up so far, we have established that benefits to home from FTR may come in several ways -- namely, (1) terms-of-trade benefit, (2) triangular efficiency gains under increasing costs, (3) gains from economies of scale which may occur *even if* home’s terms of trade remain constant or deteriorate, and (4) gains from relaxed foreign quantitative restrictions, which may occur *even if* home’s costs are rising *and* its terms of trade deteriorate. It follows that home’s benefits from reductions in foreign barriers are not solely the result of terms-of-trade improvement and/or economies of scale. Since such benefits from a reduction in foreign barriers are available from RTN but not UTR, this then establishes *possible* RTN superiority over UTR for reasons unrelated to terms-of-trade or economies-of-scale. Such RTN superiority is also illustrated in a number of other examples in the section below on “Several Other Prisoners’ Dilemmas”, in an analysis that applies whether the trade barriers being eliminated are tariffs or NTBs.

To return to the gains from FTR: to ignore these benefits is to argue that, if a country has already eliminated all of its own trade barriers, it has nothing to gain from multilateral free trade; and that developing countries have not gained from the reduction in trade barriers by the United States, the European Union, and others in recent decades, *nor would they be hurt by an increase in U.S. (or other) protection in the future*. But anyone looking even superficially at the

problems of the developing world would scarcely make that case.

This list of benefits from reductions in foreign barriers establishes the clear superiority of WTO reciprocity over UTR, as Cox and Harris (1985, p. 127) estimated for Canada in their path-breaking model combining industrial organization and trade theory, with emphasis on economies of scale. There are, in addition, other possible economic benefits from reciprocity. Countries may, for example, prefer a reciprocal trade negotiation because it includes agreements on intellectual property or investment.

II. PUZZLES RESOLVED

‘Why reciprocity?’ is not the only misunderstanding that has arisen in evaluating trade policies.

Won’t UTR Bring All the Gains from RTN because it’s in the Interest of all Other Countries to Follow Suit with Their Own UTR?

The dynamics of trade policymaking suggest that, when home unilaterally liberalizes trade, other countries may follow suit. In other words, reciprocal trade negotiations may be unnecessary; home’s UTR may lead to FTR.

First suppose that any foreign response to home’s UTR is strictly economic. While it may not be in the economic interest of a country with terms-of-trade influence to respond to home’s UTR with its own liberalization, this response would be in the economic interest of a small price-taking country. But such a country has already been facing this beneficial opportunity. If it hasn’t seized it in the past, why would it now? Why do countries maintain protection which is not in their economic interest?

The most convincing answer is that trade policy is made, not just in pursuit of economic objectives, but at least in part by government responses to domestic lobbies and other political pressures. Including these responses in economic models may explain why the foreign reaction to home’s UTR may be to follow suit with its own UTR. For example, Krishna and Mitra (2003) showed in a 2-country political-economy model how unilateral liberalization “could induce reciprocal liberalization by partner [even] in the absence of any ... negotiation between these two countries.” Specifically, unilateral liberalization by a large home country H may increase the incentive in the foreign country F for the formation of an effective export lobby to compete with the existing import-competing lobby in F. The resulting change in the political

balance in F leads to a liberalization of its trade policy, i.e., UTR. Using a more complex set of assumptions, Coates and Ludema (2001, esp. pp. 1, 3) derive a similar response by F to home's UTR.

It should be emphasized that these authors who support the use of UTR do not argue that this policy is superior to reciprocity. Instead, it is useful as a way of achieving reciprocity.

However, the foreign response to home's UTR may not be to follow suit. For example, F may have an incentive to stand pat, enjoying the benefits from home's UTR while avoiding the political cost of reducing its own tariffs and possibly the economic cost of a terms-of-trade loss. Or home may discover that shrinking its bargaining chip (its own tariff) leaves it less to offer to F in a reciprocal negotiation and hence makes F less interested in such a deal. For example, the Hillman and Moser analysis (1996) of the political gains for governments from exchange of market access implies that a sufficient unilateral reduction in home's tariff will induce partners *not* to reciprocate. Of particular interest is their discussion (p. 307) of the Generalized System of Preferences, and in particular the difficulty of getting developing countries benefiting from the GSP to reduce their own protection by participating in a reciprocal negotiation. Indeed the authors suggest that an incentive for these countries to participate would be to "exit or graduate" from the GSP, in which case they would be left facing increased protection in the form of a restored European tariff. This could induce these countries to participate in reciprocal liberalization. Ethier and Horn (1996) identify conditions under which a large home country may induce foreign liberalization by a unilateral commitment to *higher* home tariffs if F fails to liberalize.

Such political-economy models yield a wide set of conclusions, depending on the specification of initial assumptions. Indeed, these papers demonstrate just how sensitive the results are to the assumptions made about political players, as authors themselves point out. In attempting to derive relatively robust principles in trade policy, it seems more difficult to use political-economy models to answer the question "What *will* governments do?" than to use economic theory to answer the question "What *should* governments do?" At the same time, political-economy studies are enlightening since they add to our understanding of the various ways political agents may affect economic policy. However, these studies do not lead to a firm conclusion on how other countries will respond to home's UTR.

Thus there seems to be little support for the strong conclusion - - put forward to us orally

on a number of occasions -- that UTR can provide the benefits of reciprocally freer trade because trading partners can be counted on to respond by reductions in their barriers, and, accordingly, the home country H can, through its own UTR, be confident of obtaining the same result as a multilateral freeing of trade. The literature suggests that it *may* happen. But on the other hand, it may not. Moreover, even when these political economy models suggest that UTR can lead to reciprocal liberalization, it is bilateral, not the more demanding multilateral liberalization required to argue that UTR can lead to free trade.

We know of no example satisfying this strong requirement -- i.e. no example in which a country's UTR has led to a similar tariff reduction by all its trading partners. There are, of course, cases where UTR has led to some FTR. For example, the unilateral repeal of England's Corn Laws in the 19th century led a number of other countries to reduce their barriers, some unilaterally and some with bilateral tariff agreements with England.

In sum, UTR *may* lead to foreign liberalization, but neither history nor theory allows us to count on full multilateral liberalization. Even if one believes that the odds on this are good, reciprocal negotiations can still offer an economic benefit by improving these odds.

In Comparing Trade Policies, Doesn't the 'Small Country' Assumption Allow Terms-of-Trade Effects to be Ignored?

The answer is no. While the assumption -- even if realistic -- treasury that a country is small sounds as though it should freeze its terms of trade, it does so *only* under UTR, but *not* FTR or RTN, since either of these last two policies provide the small country with a terms-of-trade gain from foreign tariff reductions.

To illustrate this in a simple, hypothetical context, consider a two-country world in which small home country H, through RTN, negotiates the elimination of its own tariffs and those of partner F, a country large enough to determine terms of trade. Because F now gives the small country H the advantage of trading with it for the first time at large country F's domestic terms of trade, H's terms of trade improve, i.e., its exporters escape from their past tariff payments to F's. To illustrate in Figure 1, large foreign country F has a linear offer curve OF: home country H cannot affect its terms of trade by unilaterally changing its tariff. (Its tariff reduction moves it from A to C.) However, if F is persuaded to also cut its tariff as part of a reciprocal deal, F's linear offer curve will rotate to OF', and equilibrium shifts to D where H's terms of trade have

improved. *In short, in a reciprocal negotiation, a small country with no unilateral terms-of-trade influence can do something it cannot do on its own: improve its terms of trade.* It does so by persuading its large partner, whose barriers *do* affect the terms of trade, to reduce its tariff; i.e., on the exports of H, F offers price-taking H a better price to take.

But why would large country F be willing to participate in an agreement that, by cutting its tariff, would damage its terms of trade? The answer may be either foreign policy or other non-economic reasons; *or* economic reasons already noted such as H's agreement to reform its treatment of foreign investment or intellectual property. Or F may benefit economically because, in an n-country world, it is negotiating for mutual gain with other large third countries (with small country H acquiring a terms-of-trade benefit as a side effect). Alternatively in an RTN, F may have an economic incentive to reduce its tariff because domestic political pressures have raised it substantially above its optimal level.

To sum up: the assumption that the home country is small that has been used to freeze its terms of trade under UTR and thus guarantee it against a loss, also ensures it a terms-of-trade gain from RTN in which large partners reduce their tariffs. Thus even a small country -- indeed, *especially* a small country -- cannot compare these two policies without recognizing that reciprocity can be expected to provide better terms of trade than UTR, because reciprocity reduces foreign tariffs. This is another illustration of the theoretical damage done in any analysis of RTN that is preoccupied only with own tariff removal and thus overlooks FTR.

Thus, red flags should go up whenever an attempt is made to freeze the terms-of-trade in any theoretical analysis. *No matter how strong the assumption that a country is small and a price-taker, its terms of trade are still not frozen in a reciprocal negotiation.* Because they will instead improve with reciprocal tariff cuts, the case for reciprocity will be unfavourably biased if the common assumption is made that terms of trade are constant.

Finally, Figure 2 shows the benefits to a small home country of its own and foreign tariff reduction. Its familiar textbook gain from removing its own tariff is C_1C_2 . However, in free trade (RTN), the home country gets a further benefit C_2C_3 from foreign tariff reduction which improves its terms of trade from the slope of P_2C_2 to the slope of P_3C_3 .

Terms of trade in the literature. In our introductory quotation, Harry Johnson parenthetically mentioned terms of trade, but promptly ignored them in concluding that the classical approach provides no explanation of the necessity and nature of the bargaining process.

Figure 1
Terms-of-Trade Improvement for Small Country H from Tariff Reduction by its Large Partner F

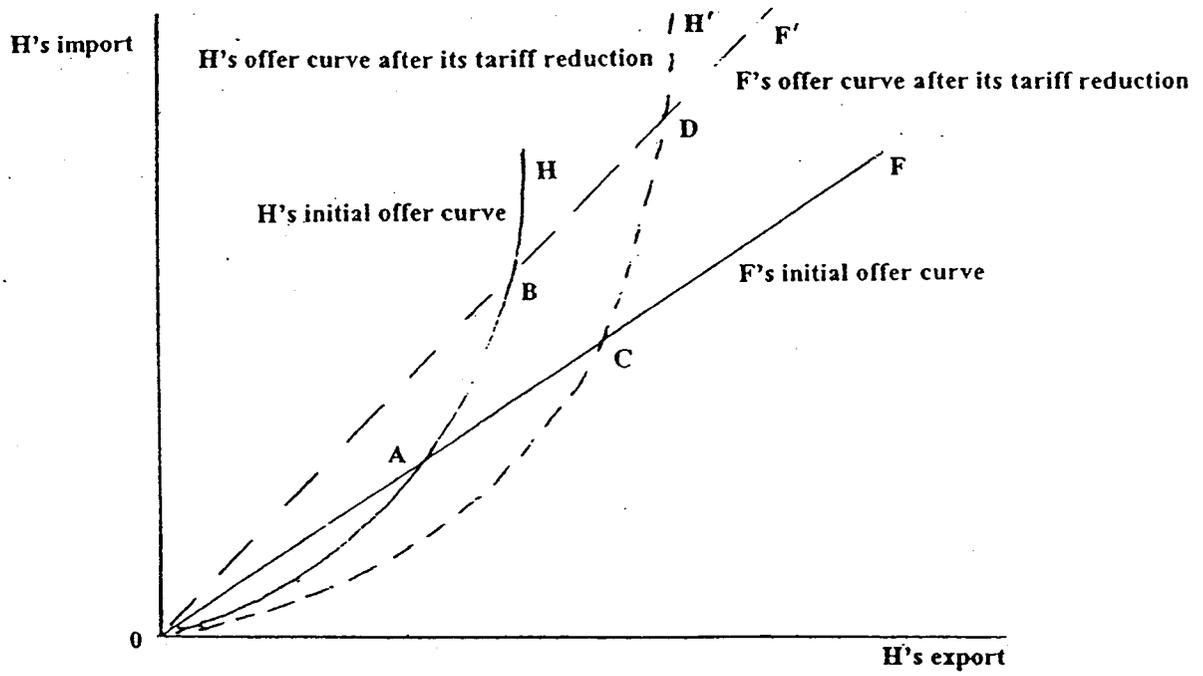
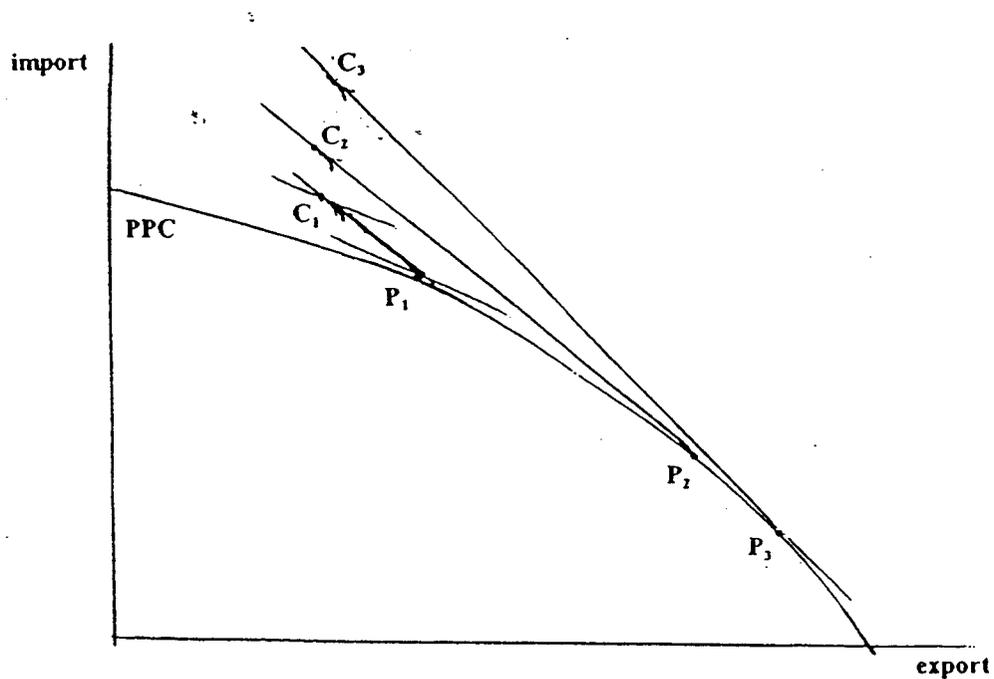


Figure 2
In an RTN, a Small Country Gains C_1C_2 from a Reduction in its Own Tariff, and C_2C_3 from a Reduction in Foreign Tariff



In his analysis of the WTO, Krugman (1997, p. 113, footnote 1) takes a stronger position. He notes that the optimal tariff argument plays “almost no role in real-world disputes over trade policy,” suggesting that, as a result, terms of trade are not an important motive for RTN. Krugman is right about the optimal tariff: negotiators make little or no reference to what many view as an arcane argument. But terms-of-trade related effects nevertheless do provide an incentive for countries to seek WTO negotiations that reduce foreign barriers. Negotiators just use different terms. For example, when they say “the WTO provides us with better access to foreign markets,” they may be recognizing that the WTO provides more favourable terms of trade than would unilateral liberalization. The desire to gain better access exists whether or not negotiators mention -- or have even heard of -- the optimal tariff; indeed that same motivation would exist even if the optimal tariff idea had never been discovered. Thus one cannot dismiss terms-of-trade motivations for RTN simply by pointing out that negotiators do not explicitly mention the optimal tariff.

Two of the authors most prominent in analyzing terms-of-trade considerations in WTO negotiations are Kyle Bagwell and Robert Staiger (1998, 1999) who conclude that “trade agreements provide an escape from a terms-of-trade driven prisoners’ dilemma” (1998, p. 1163). In considering this issue, recall that the WTO has two roles: (1) it encourages a move toward free trade by providing each country with assurance that others will participate; and (2) it deters any country from a protectionist move *away* from free trade by imposing tariff bindings (that, if broken, can result in authorized retaliation). It is in this second role that the WTO is most readily seen to provide an escape from a terms-of-trade prisoners’ dilemma, in which each participant (country; prisoner) has an individual incentive to take an action (raise tariffs to improve its terms of trade; confess in order to get a reduced sentence) even though they have a collective interest in all parties avoiding this action. Bagwell and Staiger also state that providing this escape from a traditional terms-of-trade prisoners’ dilemma “is *all* that trade agreements do” (1998, p. 1163, italics theirs).

However, the traditional terms-of-trade issue is not the only prisoners’ dilemma from which trade agreements may provide an escape. International rent transfer is another.

International Rent Transfers in Imperfect Competition: May these Weaken the Case for Free Trade?

If we view free trade inappropriately as just UTR, the answer may be, as widely presumed, 'yes;' in a world of economies of scale and imperfect competition, rent transfers may weaken the case for UTR. In such a world, a tariff (or subsidy) may benefit a home country, for example, by inducing firms earning rents to locate in that country rather than elsewhere (as in Krugman's famous 1987 airbus example). Thus, under UTR, removal of such a tariff may result in a loss of rents to the home country. However, under RTN, foreign tariffs are also being removed, and the expected effect of this is to transfer rents in the opposite direction, back to the home country. With the net effect of these two transfers unclear, there is no *a priori* reason to presume a loss of rents to the home country. Thus under reciprocity, the important effect of economies of scale is not to transfer rents in any specific direction, but rather to increase collective efficiency gains -- possibly by a large amount € even though it may be very uncertain how the gains are distributed.

The two-way rent transfer from reciprocal tariff reductions is shown in line III of Table 1, where we also display the efficiency effects in line I and traditional terms-of-trade effects in line II, as discussed above. Note how the effects of home tariff reduction in column A can be compared with the clearer effects of reciprocal tariff reductions in both columns A and B.

Now let us return to rent transfers in an imperfectly competitive world in row III. Since, under full reciprocity such transfers may, on balance for any country, result in a gain or loss -- i.e., there is no theoretical *a priori* expectation of transfer loss -- the theoretical presumption that any rent transfers will be negative has policy relevance for UTR but not free trade, i.e., full WTO reciprocity. Thus, the case for free trade is seriously understated if one takes a unilateral point of view, concentrating solely on column A and therefore implicitly describing only UTR, in an error often compounded by inappropriate reference to UTR as 'free trade'. To defend free trade, i.e., multilateral liberalization, all that is required is to recognize that rent transfers do not weaken the

TABLE 1

BENEFITS (+) AND COSTS (-) TO A COUNTRY OF TRADE LIBERALIZATION:

The effects of WTO reciprocity include the benefits from lowering both own and foreign tariffs *

		Effects of Lowering Own Tariffs	Effects of Lowering Foreign Tariffs
Effect:		A	B
Efficiency gains (e.g., Harberger triangles, economies of scale slices)	I	+	+
Traditional Terms of trade	II	-	+
Rent transfers	III	-	+
Overall effect of each column	IV	+**	+

TABLE 1
 BENEFITS (+) AND COSTS (-) TO A COUNTRY OF TRADE LIBERALIZATION:
 The effects of WTO reciprocity include the benefits from lowering both
 own and foreign tariffs*

In much of the literature, efficiency gains are more widely recognized in IA than in IB, where they may also be important. Bagwell and Staiger (1998) take into account both elements in row II. Their valuable demonstration of how reciprocity provides an escape from the terms-of-trade prisoner's dilemma implicit in row II has not, to our knowledge, been matched by any author's recognition of the benefit of reciprocity in providing an escape from a similar prisoners' dilemma over rent transfers implicit in row III. Indeed, again to our knowledge, no one has even recognized IIIB -- not even important contributors to rent-transfer research. In addition to rent transfers, there are other theoretically similar, unrecognized prisoner's dilemmas (described below) from which a reciprocal negotiation can provide an escape. Accordingly, this table could be expanded to include other rows, each with the same signs as row III.

*Signs in this table are weak; i.e., + means non-negative, and - means non-positive.

**This sign is positive for a small country in a perfectly competitive world where $IIA = IIIA = 0$. Otherwise the sign is not clear.

* * * * *

general case for RTN. Indeed they strengthen the case for a reciprocal negotiation, because it provides an escape from a rent-transfer prisoners' dilemma that is theoretically similar to the terms-of-trade prisoners' dilemma.'

Several Other Prisoners' Dilemmas

Traditional terms of trade and rent transfers are not the only prisoners' dilemmas from which a reciprocal WTO negotiation can provide an escape. For example, under certain conditions, the home country may perceive an economic benefit from its own unilateral protection that increases its employment, provided its trading partner doesn't follow suit. If its partner does follow suit with protection -- in particular, in response to damage its export industries suffer from the home country's tariff -- then both countries lose. Thus a WTO agreement that avoids this loss by restricting such unilateral protection can provide an escape from an employment-based prisoners' dilemma. More broadly, the justification for a reciprocal WTO agreement is that it restricts tariff or NTB protection, *regardless of its economic or political motivation*, whether it be terms of trade, acquisition of rents, employment, income maintenance in certain sectors, pure vote seeking, or whatever. In preventing each such unilateral policy that is perceived (correctly or not) to be beneficial, but which is mutually damaging, the WTO provides an escape from a prisoners' dilemma. Thus each such escape cited in this section provides an example of the possible superiority of the WTO over UTR. Moreover, note that many of these cases are unrelated to economies of scale or terms of trade -- the two factors possibly leading to RTN superiority that have been noted in the literature (though often dismissed).

Is UTR Pareto Optimal?

A frequently repeated view is that -- assuming tariffs are the only trade barriers -- unilateral elimination of own tariffs is the Pareto-optimal trade policy for a small home country, no matter what foreign tariffs may be. The problem is that this unilateral policy is *not* optimal for the home country *if it can influence* foreign tariffs. That is, RTN is superior to unilateral action if the home country can use its own tariff elimination to participate in negotiating down foreign tariffs. Then the home country gets the benefit of foreign tariff elimination as well as its own. In short, the claim for unilateral tariff elimination holds only if reciprocity is not an option.

If it is an option, then this Pareto claim cannot be made.

While the arguments supporting reciprocity apply most strongly to the form so far examined here -- namely, non-preferential reciprocity in the WTO - we now turn to the weaker (sometimes even negative) case for preferential reciprocity, i.e., a regional free-trade agreement (FTA).

Why Enter an FTA? Can't a Country Do at Least as Well With UTR?

Just as there has been a tendency to downplay the advantages of full WTO reciprocity, there has similarly been a tendency to downplay the advantages of more limited, preferential reciprocity in an FTA. [E.g., Cooper-Massell (1965) and Berglas (1979), as discussed below.] In either case, there are export benefits from reciprocity because of the removal of foreign barriers. But of course such benefits are limited in an FTA because only partners' barriers are being reduced. Nonetheless, these FTA benefits *may* still be substantial and are not available from UTR. Accordingly, they provide an economic reason why countries *may* prefer an FTA to UTR.

On the other hand, a country may prefer UTR, because it provides benefits that an FTA does not: under UTR its reduction in its barriers against imports from non-partner countries (1) provides benefits from trade creation with these countries, and (2) ensures against FTA trade diversion which is costly not only to member countries but also to outside countries damaged from export losses. With each policy thus providing benefits that the other does not, we are driven back to Viner's classic conclusion: one cannot *in general* choose either of these policies over the other; each case must be evaluated on its own. Note how this simple idea invalidates the Cooper-Massell (1965) and Berglas (1979) claim that UTR is at least as beneficial for a country as any FTA, the proposition that was described as the most influential idea on regional trade agreements during the preceding two decades by Mel Krauss in his 1972 JEL survey.

To sum up: In evaluating any form of reciprocity, both import *and* export effects must be adequately recognized. If we dismiss export effects by ignoring or trivializing the effects of reductions in partners' trade barriers, we will seriously understate the benefits of WTO liberalization, and continue erroneously to conclude that UTR weakly dominates an FTA -- rather than appropriately concluding that neither is *in general* superior to the other. The only broad presumption -- to which there are few exceptions -- is that, if it is possible, full WTO

liberalization is superior to either UTR or an FTA since it provides the benefits of each plus broader FTR benefits due to the wider range of partner countries.

SUMMARY

This paper explains why trade-policy makers may prefer reciprocal trade negotiations (RTN) to unilateral tariff reductions (UTR) for *economic* reasons. It answers puzzles such as “Why WTO reciprocity?” and strengthens the unnecessarily weak case often made for the WTO by those who downplay or dismiss benefits from foreign tariff reductions (FTR).

Specifically, for any country the superiority of RTN over UTR is that RTN provides economic benefits that UTR cannot -- namely, the benefits from FTR. Moreover, these benefits are clearer than potentially important benefits from UTR: whereas each policy has favorable efficiency effects, any terms-of-trade effect of UTR generally detracts from its efficiency gains, while any terms-of-trade effect of FTR is typically favorable -- especially for a small price-taking country that is offered a better price to take -- with this terms-of-trade benefit augmenting home’s efficiency gains. Moreover, benefits from reductions in foreign barriers may come from several sources; they are not solely the result of terms-of-trade improvement -- or economies of scale (the two benefits that have been noted in the literature, though often dismissed). E.g. with foreign NTB elimination, possible home benefits are shown even with rising costs and terms-of-trade deterioration.

RTN is also superior to UTR because, by eliminating protection in either NTB or tariff form, RTN provides an escape from not only the Bagwell-Staiger terms-of-trade prisoners’ dilemma, but many other previously unrecognized prisoners’ dilemmas, including one in international rent transfers, and several others with no economies-of-scale or terms-of-trade motivation.

Of course, if superior RTN is not an option, UTR may well be desirable.

If reciprocity *is* an option, but only in a narrower CU or FTA form, such reciprocity *may* still be superior to UTR, or it may be inferior; theory cannot unambiguously rank these.

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