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THE ECONOMIC CASE FOR RECIPROCAL TRADE NEGOTIATIONS: GAINS FROM BOTH IMPORTS AND EXPORTS

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Abstract

This paper bridges a gap in perception. In discussing gains from trade, governments emphasize exports - a view sometimes dismissed by economists as mercantilist. In contrast, economists (e.g., Johnson and Krugman) sometimes emphasize imports, leading to the conclusion that there is no economic case for Reciprocal Trade Negotiations; *all* gains come from lowering one's own barriers. Trade negotiators and business executives consider this view to be hopelessly naïve.

Neither one-sided view is complete; to study gains, we must look at both exports and imports. This paper focusses on the gains from access to foreign markets, including those arising from economies of scale and changes in the terms of trade.

It is also shown that international rent transfers weaken the case for unilateral tariff reductions, but not for reciprocity (insofar as rent transfers occur in both directions).

In discussing international trade policy, business executives and government officials generally emphasize the gains that come from foreign tariff

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reduction (FTR):² Their exporters will have *greater access to foreign markets*. Indeed, negotiators sometimes take the view that better access to foreign markets is the *only* source of gain, and thus the aim is to reduce foreign barriers while giving up as little of their own trade barriers as possible.

On the other hand, a significant thread running through economics is the idea that gains come from cheaper imports. This may perhaps be traced to a simplified view of our Ricardian heritage. In his famous example of comparative advantage, Ricardo illustrated how a country can gain by producing for export, and *trading these exports for imports*, rather than trying to produce everything for itself. Often, professors oversimplify Ricardo's theory with a quick summary: "See, we got *imports more cheaply* than we could have produced them at home!" This focus on imports sometimes leads to the conclusion all the economic gains from trade may be achieved by reducing one's own barriers unilaterally, thus obtaining cheaper imports. According to this view, there is no economic gain from the reduction in foreign trade barriers, and accordingly there is no *economic* case for Reciprocal Trade Negotiations (RTN).

The first view -- the politician's one-sided emphasis on the gains from exports -- 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 lowering one's own barriers. The politician's view is sometimes dismissed as a hangover of mercantilist thinking. In turn, politicians and business executives consider the enthusiasm of some economists for cheap imports to be hopelessly naïve.

Neither one-sided view is complete. To study gains from trade, we must look at *both* exports and imports.

Perhaps the clearest early example of an economist's one-sided focus on gains from the reduction in one's own barriers, and the dismissal of FTR, was written by Harry Johnson 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

² Except where otherwise noted, we follow much of the literature in using "tariffs" generically, to include not only tariffs proper but also other trade barriers.

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.³

Johnson's puzzle has been a recurring theme in the international trade literature.⁴ For example, in addressing the question, "What Should Trade Negotiators Negotiate About?" Paul Krugman (1997, p. 113) comes to a similar conclusion:⁵ "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? -- 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.⁶

The purpose of this paper is to demonstrate that it is not correct to claim that RTN offers no economic advantage over Unilateral Tariff Reduction (UTR). Consequently, the Johnson-Krugman puzzle -- why do countries engage in RTN

³ Note that, in highlighting "the replacement of domestic production with lower-cost imports," Johnson slid over Ricardo's central point: the *way* a country gets cheaper imports is through additional exports.

In spite of this criticism, we might perhaps be permitted a personal note: how much we have missed Harry since his untimely death, particularly his remarkable insights on a wide range of other issues.

⁴ Others who raise and recast the Johnson puzzle include Bagwell and Staiger (1998, p. 1163) and de Melo et al (1993, p. 166).

⁵ There was, however, a difference between Johnson and Krugman. Johnson was dealing with reciprocal negotiations leading to a customs union (CU), whereas Krugman was writing about multilateral negotiations through the WTO.

Regarding Johnson's parenthetical mention of terms of trade -- to which we will return later -- it is worth noting that Johnson saw a possible gain to the CU members if their terms of trade improved at the expense of outside countries. On this point, see Jovanovic (1992), p. 26, who also discusses (p. 19) some of Johnson's broader points.

⁶ For example, Krugman, 1997, p. 118: "...free-traders who know that the economic case for liberal trade is essentially unilateral are nonetheless usually staunch defenders of the GATT: . . . by setting exporters as counterweights to producers facing import competition, [trade negotiations] are politically crucial to maintaining more or less free trade." (We might note in passing that we are not concerned here with the important central argument in Krugman's paper, regarding negotiations over environmental and labor standards.) See also Bagwell and Staiger, 1999, p. 216, footnote 2, and the works cited therein.

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, notably the greater access to foreign markets; and (2) assurance -- e.g., in the form of tariff bindings in the World Trade Organization (WTO) -- that partners won't damage its export gains by backsliding into protection.

We do not argue here that economic benefits on the export side have been totally overlooked.⁷ 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, including those associated with changes in terms of trade (e.g., Harry Johnson's parenthetical phrase in the above quotation).

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

⁷ Examples of how various economic benefits from FTR have been recognized include Jagdish Bhagwati (2002, p. 3, 21-25); Ronald Findlay (in de Melo and Panagariya, 1993, p. 196); Gene Grossman and Elhanan Helpman (1995, pp. 672-73, 687); Miroslav Jovanovic (2006, pp. 192-3) and T.N. Srinivasan et al. (in Anderson and Blackhurst, 1993, p. 55). Advantages of market access for exports have also been recognized by Brian Hindley and Patrick Messerlin (in Anderson and Blackhurst, 1993, p. 360) with their left-out-in-the-cold effect; Carlo Perroni and John Whalley (2000) in their insurance theory of trade negotiations; Mark Cronshaw and James Markusen (1995) using game theory to analyze trade policy; and Bagwell and Staiger (1998, 1999) and others who recognize a terms-of-trade benefit from partners' tariff reductions. In spite of Paul Krugman's argument -- noted above -- that "the economists' case for free trade is essentially a unilateral case," he elsewhere recognizes the benefits of RTN, particularly the benefits for a developing country from foreign (in this case, U.S.) reductions in trade barriers:

"...application of the US trade laws raises the costs of and uncertainty of exporting to the US market. Individual developing countries would therefore find it of interest to strike a bargain where *unimpeded access to the US market* is the *quid pro quo* for a privileged opening to the US of their own markets." [Dornbusch, Krugman and Park (1989, p. 36), ital added.]

the benefits from removing both sets of trade barriers,⁸ we risk losing credibility in advising trade negotiators.⁹

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 BARRIERS¹⁰

As we have noted, gains occur in the basic Ricardian example when countries export in order to get cheaper imports. Any barriers -- whether domestic or foreign -- that interfere with this trade can reduce the benefits. In more detail, a reduction in foreign trade barriers can lead to gains in the following ways:

⁸ In focussing on the benefits from FTR, we are not criticizing the first-class analysis (e.g., by Max Corden, 1987 and Anne Krueger, 1998) of gains from the reduction in home barriers. Indeed, there is a natural flow to it: when the initial question is the cost of a country’s own protection, this easily translates into a flip-side study of the benefits from reducing that protection -- i.e., UTR. Thus UTR is clearly the appropriate focus in Corden’s IMF study because UTR, rather than reciprocity, is the trade policy that the IMF sometimes considers as part of a reform package required of a country seeking financial relief. In his conclusion (p. 27), Corden specifically recognizes the superiority of reciprocal to unilateral liberalization.

⁹ Some years ago, a senior staff member of the Council of Economic Advisers stated boldly, in an interagency meeting, that the only reason for negotiating down other countries’ trade barriers is to make a reduction in our own trade barriers politically acceptable. This pronouncement was met with embarrassed silence.

¹⁰ The rest of this paper is drawn from our earlier study (2005).

(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.¹¹

(2) In a world of decreasing returns, efficiency gains (Harberger triangles) are created not only (i) in the familiar textbook diagram when 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, augmenting the triangular efficiency gains in export industries. In contrast, UTR is not necessarily beneficial for the home country, because any terms-of-trade change will generally be negative,¹² thus detracting from that country's triangular efficiency gains.¹³ Thus, the overall benefit from FTR will be clearer than the more ambiguous overall benefit from UTR.¹⁴

This can also be seen in the simple case where there are no NTBs such as quotas. To be precise: Lerner's classic symmetry theorem (1936) may quickly be extended to show 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. Lerner demonstrated that, in a two-country framework in which the only international transactions are merchandise trade, an across-the-board export tax of x per cent by the home country would

¹¹ As detailed below in section II, this is *especially* true for a small price-taking country that is sometimes erroneously assumed to face unchanging terms of trade. True, its terms of trade won't change if it reduces its *own* tariff, but they will change if *partners* reduce theirs and thereby offer it better terms of trade.

If, at the other extreme, the home country is large enough, it will determine terms of trade, which accordingly won't change in the face of FTR. Because no country in the world today is that large -- not even the U.S. or EC, because of each other -- this case is hereafter set aside.

¹² These terms-of-trade effects under FTR and UTR hold for reductions in tariffs and, with some exceptions, for reductions in NTBs. [For an exception, see point (4) below.]

¹³ E.g., a country that has in the past established the mythical optimal tariff will, as a result of UTR, suffer not only a terms-of-trade loss, but one sufficiently large to result in a net economic loss.

¹⁴ However, if foreign barriers are sufficiently low initially, the benefits from UTR may exceed those from FTR.

have the same general-equilibrium effects as its own across-the-board import tariff of x per cent. But an x per cent export tax is the same as an across-the-board x per cent foreign tariff, with one important difference: the home country's export tax goes to the home treasury, whereas the foreign tariff goes to the foreign treasury. Accordingly, on the flip side with barriers being reduced, the elimination of an x per cent tariff by all trading partners (which reduces foreign treasury revenue) is better for the home country than an elimination of its own x per cent tariff which reduces its own treasury revenue.

Moreover, we will show 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.¹⁵ Our only point is that an *equivalent FTR -- so often dismissed -- provides even clearer benefits than UTR*.¹⁶ 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 inevitably costly, to be minimized in their effort to bargain down foreign barriers.

¹⁵ Or will involve a substantial delay, with uncertainty about whether a reciprocal (WTO) negotiation will eventually take place; or if it does, further uncertainty about how substantial the reductions in barriers will be. This is especially true for a small country, since it acquires clear UTR benefits and has little or no ability to influence the worldwide decision to proceed with WTO negotiations and thus need not be concerned about retaining its own protection as a bargaining chip. Moreover, following its own UTR, any successful WTO negotiation will give it a "free ride" on foreign tariff reductions, whether or not reciprocity is required of small countries. (It will have no barriers left to cut.)

¹⁶ "Equivalent" must be interpreted carefully in this argument. A 10 per cent tariff cut, from 15 per cent to 5 per cent, is (approximately) equivalent to a 10 per cent cut from 20 per cent to 10 per cent. However, a proportional cut of, say, one half in all tariffs is not. For example, if high domestic tariffs of 80 per cent are cut to 40 per cent, the gains may be larger than if foreign tariffs of 8 per cent are halved, to 4 per cent. In addition, the equivalent tariff cuts must not only be across-the-board, applying to all imports, but must also be multilateral, including all trading partners. This point is, of course, relevant for multilateral, GATT-type negotiations. We thank an anonymous referee for clarifying these points.

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 a deterioration in the terms of trade, as explained in points 3 and 4.*

(3) In a world with economies of scale,¹⁷ a country's expected gains from RTN (i.e., both home tariff reduction and FTR) are greater¹⁸ -- 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. This favourable effect can be realized if economies of scale are either internal (the more straightforward case) or external to the firm.

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

¹⁷ For analyses of economies of scale in international trade that preceded the wave of interest in this subject in the past quarter century, see Corden (1972), Markusen and Melvin (1981), and Wonnacott and Wonnacott (1967).

¹⁸ Strictly speaking, very special circumstances may make it theoretically possible for an individual country to lose from reciprocal free trade if there are economies of scale (e.g., see Markusen and Melvin, 1981). While gains are larger in the presence of economies of scale, their international distribution is hard to determine *a priori*. The only assured outcome of reciprocity is that, in the presence of economies of scale, there is a collective gain for all countries (hence, in the absence of more information, a 'first-approximation' expected gain for each) which will be larger than in a constant or increasing-cost case. The difficulty of making simple, firm predictions regarding the pattern of trade or the distribution of gains is one reason why economies of scale have so often been left out of economists' arguments, even though they may be traced back at least to Adam Smith and his pin factory.

prohibitive foreign tariff which has totally eliminated the home country'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.

It might be noted in passing that economies of scale can lead to flourishing intra-industry trade.¹⁹

(4) An exporting home country may also gain from the elimination of a foreign quantitative restriction, such as a quota or "voluntary" export restraint (VER) introduced as a result of pressure from the foreign country. If the restriction is an import quota with the rights held by the foreign importing country, the gain from its elimination 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 the home country benefits from an elimination of the VER, even though its terms of trade deteriorate. To illustrate,

¹⁹ At least as far back as the early 1960s, economies of scale and intra-industry trade have been a major focus of trade policy in Canada, both by academics and in official publications. For example, the Bladen Plan (Report of Royal Commission on the Automobile Industry) focussed on the high costs of short production runs. It recommended that duties on automobile parts be waived as a reward for additional exports of parts -- leading to increased two-way trade in parts, specialization in parts production, and economies of scale.

This plan was adopted in substantially modified form by the Canadian government, but ran into difficulties because the implied export subsidies led to lawsuits in the United States that would have required countervailing duties. A conflict was avoided when the AutoPact of 1965 was negotiated, providing for two-way duty-free automotive trade in both directions. The AutoPact was a precursor to the U.S.-Canadian Free Trade Agreement, in somewhat the same way that the European Coal and Steel Community presaged the European Union.

suppose that home country H has been administering 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 a deterioration in its terms of trade.²⁰ 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.²¹

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* the home country's terms of trade remain constant or deteriorate, and (4) gains from relaxed foreign quantitative restrictions on the home country's exports, which may occur *even if* the home country's costs are rising *and* its terms of trade deteriorate.

It follows that the home country'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 that:

**Reciprocal Trade Negotiations may be superior to
Unilateral Reductions in Trade Barriers 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.

²⁰ If the home country has falling costs, it will benefit even more.

²¹ This same conclusion holds if we combine economies of scale and VERs. Theory alone does not establish whether the Japanese were helped or hurt by the VERs into the U.S. auto market in the 1980s. Most obviously, they may have been helped by the VERs if they resulted in a cartel-like exploitation of the U.S. market.

Note that this example weakens our general point, that countries gain from a reduction in foreign (or foreign-imposed) trade restrictions

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.²² 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, although here we do not wish to get into the complications raised by such agreements.

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 policy making suggest that, when the home country unilaterally liberalizes trade, other countries may follow suit. In other words, reciprocal trade negotiations may be unnecessary; the home's UTR may lead to FTR.²³ On the other hand, it may not.

First suppose that any foreign response to the home country's UTR is strictly economic. It may not be in the economic interest of a country with terms-of-trade influence to respond to the home country's UTR with its own liberalization (e.g., if it has an optimal tariff). Nevertheless, a small price-taking

²² In analyzing the elimination of various tariffs, Cox and Harris estimated that the gains to Canadian welfare, real GNP and GNE from WTO reciprocity would be more than double the gains from UTR. Indeed, their estimates implied that FTR gains would range from slightly greater, to 2.5 times as great, as gains from UTR.

²³ If one begins with a regional focus (considered in more detail below), Kemp and Wan (1976) have explained how, in the presence of compensation schemes, a CU may lead to a broadening of the union until world-wide free trade is achieved. Reservations regarding Kemp-Wan may be found, e.g., in Jovanovic (1998), pp. 27-28 and Wonnacott and Wonnacott (1981).

country would find it in its interest to respond to its partner's reduction in barriers by reducing its own. But such a country has already been in a position to benefit by reducing its own barriers. If it hasn't seized this opportunity in the past, why would it now? Why do countries maintain protection which is not in their economic interest?

The most convincing explanation of why UTR *may* lead others to cut their barriers lies in the fact that trade policy is made, not just in pursuit of economic objectives, but at least in part by government responding to domestic lobbies and other political pressures. For example, Krishna and Mitra (2003) included such political considerations and showed in a 2-country model how unilateral liberalization "could *induce* reciprocal liberalization by partner [even] in the absence of any ... negotiation between these two countries."²⁴ 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 may lead 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.²⁵

However, the foreign response to the 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 the home country 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 (GSP), and in particular the difficulty of getting developing

²⁴ Pp. 1-2, italics in original. The authors draw on the Grossman and Helpman model (1994) of endogenous tariff formation based on the interplay between the government and competing lobby groups.

²⁵ See, for example, Krishna and Mitra (2003), fn 5.

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.²⁶ 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 liberalization

²⁶ e.g., Coates and Ludema, p. 2.

that is generally being discussed, not the more demanding multilateral liberalization required to argue that UTR can lead to free trade.²⁷

We know of no example satisfying this strong requirement -- i.e. no example in which a country's UTR has actually 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.²⁸

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 realistic²⁹ -- 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.

²⁷ The analysts cited above use 2-country models. In an n-country world, reciprocity between only 2 countries means a preferential FTA or CU that raises a host of well-known problems, and one can no longer be confident that bilateral reciprocity is better even than the status quo. Moreover, an analysis of bilateral reciprocity doesn't address our question: can UTR lead to multilateral reciprocity?

This question, however, does get addressed if the 2-country analysis is in a 2-country world, in which case bilateral reciprocity *is* multilateral reciprocity, since F represents ROW, the rest of the world. (This may well be the analysts' view, since their conclusions/and or applications sometimes refer to foreign *countries*.) While this allows a more manageable analysis, it requires the additional restrictive assumption that all foreign countries respond in the same way to home's UTR; otherwise, some might respond favourably, but others not. Moreover, one can no longer use a large-country, small-country model -- and, in particular, the terms-of-trade behaviour in such a model -- since "small country" is ROW.

²⁸ See Krishna and Mitra (2003), p. 5. For recent cases of countries that have adopted UTR, see Bhagwati (2002).

²⁹ In any two-commodity, large country/small country trade model, the reader is invited to overlook the fact that, in a multi-commodity trading world, few countries are small enough to have no influence over their terms of trade. Even an apparently small country can have some influence because of its importance in a single export market, especially in the short run -- for example, Ghana (cocoa), or Chile (copper).

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.³⁰ 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.



Figure 1 Terms-of-trade improvement for small country H from tariff reduction by its large partner F

³⁰ As an example, suppose a small price-taking home country (say "Mexico") exports a product with essentially no transport costs to the "large" U.S. market in which the price is determined at \$100. Mexican exporters will directly or indirectly pay any U.S. tariff (say, 5 per cent) and therefore receive only \$95. If that U.S. tariff is removed in a reciprocal negotiation, Mexican exporters receive \$100, the full U.S. domestic price -- with this \$5 reduction in the U.S. tariff representing a Mexican terms-of-trade gain. (This argument -- and similar large country/small country arguments below -- still hold if the large U.S. is replaced by a number of foreign countries which together determine terms of trade.)

Of course, if Mexico is a "small" country and removes its own tariff on its imports, there is no terms-of-trade gain for the U.S. since the U.S. determines prices regardless of what Mexico does. In this case, the transfer is not international, but domestic -- from the Mexican treasury to Mexican consumers.

More generally, if one country is large and the other small (as defined in trade theory), there is an asymmetry in the terms-of-trade effects from the removal of the two tariffs.

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 the 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 .



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

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.

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 that negotiators make little or no reference to the optimal tariff, which many view as an arcane concept. But effects related to terms of trade 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 that “lower foreign trade barriers give us better access to foreign markets,” they are saying that exporters may sell more abroad, at higher prices -- that is, in economists’ terms, there will be an improvement in the terms of trade. 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. It is not reasonable to dismiss terms-of-trade motivations for RTN simply by pointing out that negotiators do not explicitly mention the optimal tariff.³¹

³¹ Similarly, one should not argue that business executives are unable to make profits unless they have heard of marginal cost and marginal revenue, or that the great unwashed multitude is incapable of making economic choices because they have never heard of indifference curves.

Furthermore, recent work by Broda, Limao, and Weinstein (2008, p. 2033) indicates that terms of trade in fact play an important role in commercial policymaking: “countries have market power in imports and exploit it in setting their trade policy.” Broda et al. note (p. 2063) that, for more than a century, the terms-of-trade motive has played “a key role in most theoretical models of trade policy, but there has been considerable disagreement about its practical importance. . . . Despite this, no one has thus far tested whether countries set higher tariffs in goods in which they have more market power.” In their empirical study, the three authors undertake to fill this gap, and find out whether countries in fact use their market power. Their answer: yes.

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.³² 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.

³² In its first role of encouraging a collective move to free trade, it can also be argued that, insofar as it ensures that all countries participate, the WTO provides an escape from a terms-of-trade dilemma: even though countries [the 2 prisoners] have a common interest in freeing trade [not confessing] they may not achieve their common goal because of the fear of each that a decision by the other party [no tariff reduction; confession to crime] will leave the first party worse off. Note that this dilemma is a variant on the one in the text, with a similar payoff matrix. The difference is that in the case in this footnote, both countries start in the fourth (southeast) tariff-ridden quadrant, with a collective interest in moving to the superior, lower-tariff first quadrant. (Compare this to the more familiar view of the prisoners’ dilemma, in which both start in the first quadrant and have a collective interest in *not* moving to the fourth.)

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.

*Table 1 Benefits (+) and costs (–) to a country of trade liberalisation: the effects of WTO reciprocity include the benefits from lowering both own and f tariffs**

Effect		Effects of lowering own tariffs	Effects of lowering foreign tariffs
		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	+**	+

Notes

* 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 $II A = III A = 0$. Otherwise the sign is not clear.

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 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.^{33 34}

To sum up:

Rent transfers weaken the case for UTR but not for reciprocity.

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

³³ Specifically, each country may have an individual incentive to raise trade barriers to acquire rents, even though both countries have an interest in collectively avoiding this policy.

³⁴ Another reason for questioning the recent rent-transfer analysis (that a tariff may provide home with a favourable international transfer) is that the result may be quite the opposite: home’s tariff may induce foreign firms to establish branch plants in home to extract imperfectly competitive rents. When those firms subsequently repatriate their profits, there is a rent transfer away from home.

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.³⁵ 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 --

³⁵ In a prisoners' dilemma the incentive for a participant to make the initial move (confess; increase its tariff) need not be real; it need only be imagined. Thus the prisoner need only believe that he will get a better deal if he confesses, whether he actually will or not. (The police may not eventually deliver on their promise of leniency.) Similarly, in this trade case, a country imposing a tariff to increase employment need only believe that it will get a net benefit, whether or not it actually will.

we now turn to the weaker (sometimes even negative) case for preferential reciprocity, i.e., a regional free-trade agreement (FTA).³⁶

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

As noted, the starting point in much international trade theory is the Ricardian example of comparative advantage, which often leads to a focus on cheaper imports and thus has led some to deny the gains from FTR. Much of the literature on Customs Unions (CU) and Free Trade Associations (FTA) may similarly be traced back to a single source -- Jacob Viner's pioneering study -- which, in introducing the concepts of trade creation and trade diversion, focused even more explicitly on the advantages of low-cost imports. Viner pointed out that, when trade is created, countries get imports more cheaply from their FTA partner than they could have produced the same goods at home -- a desirable outcome. When an FTA leads countries to divert imports from a low-cost external source to a higher-cost source within the union, this is a move in the wrong direction, away from economic efficiency.

The result of the focus on the cost of imports is not surprising. 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. In either case, there has been a tendency to overlook the benefits from greater access to foreign markets when there is a removal of foreign barriers.

Two articles in particular make the case that countries have nothing to gain from an FTA that they cannot gain from Unilateral Trade Liberalization. In Berglas' model (1979), there can be no benefits from the removal of partners' tariffs, because of the assumptions that foreign countries have no tariff barriers to begin with and there are no transportation costs; the home country faces an infinitely elastic demand for its exports at given world prices. Cooper and

³⁶ We use FTA as Viner (1950) used "Customs Union," as a generic term to represent either a Customs Union or an FTA. (The modern discussion of Customs Unions originated with Viner who concentrated on lowest-cost imports; and with Lipsey (1957) and others who broadened the analysis to take into account consumption efficiency.)

An alternative generic term for a CU or FTA used by e.g., Panagariya (2000) is PTA (Preferential Trading Area), but this has sometimes been used (e.g., by de Melo et al., 1993, p. 160) to describe agreements such as the British Imperial System that only partially reduce tariffs and are thus quite different from the CUs or FTAs proper that are consistent with WTO article 24. At the same time, in using the term FTA, we recognize that this sort of agreement has not only the positive effect of liberalizing trade among members but also the negative effect of creating discrimination against outsiders. (One reason for using FTA as a collective term rather than CU is that much regional 'integration' is now in the form of hub-and-spoke or even more complex systems of overlapping FTAs. Theoretically, it is not possible to have overlapping CUs, strictly defined.)

Massell (1965) simply skip over exports. Their article focusses on a single diagram, which shows how countries can gain when they reduce their own barriers.

Nevertheless, countries may benefit from a reduction in foreign barriers within an FTA, in the ways explained above for MFN liberalization. But of course, such benefits are limited in an FTA because the foreign barriers being removed are only those of partners, not those of outside countries. The benefits from the partners' removal of barriers in an FTA *may*, however, be substantial and are not available from UTR.³⁷ Accordingly, they provide an economic reason why an FTA member *may* judge an FTA superior 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 diversion³⁸ (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. This simple idea invalidates the Cooper-Massell and Berglas claim that UTR is at

³⁷ This point is explained in detail in our articles in the *AER* (1981) and *The Manchester School* (1992).

An FTA may be preferred to UTR for political reasons as well, including not only (1) the stronger support for an FTA that can be enlisted from exporters eager for improved market access [see for example, Hillman and Moser (1996), especially p. 297] but also (2) lower adjustment costs because of less competitive pressure.

³⁸ Under hub-and-spoke and even more complex systems of overlapping FTAs (Wonnacott, 1996) that have become the new wave of agreements -- essentially replacing the traditional stand-alone FTAs -- new problems arise in addition to trade diversion. In any such system, it is essential for the home country to recognize the effects not only of reductions in its own barriers, but also of reductions in foreign barriers -- including favourable reductions by its FTA partners (Baldwin, 1994) *and* damaging reductions by countries in new, overlapping FTAs; that is, reductions in barriers damaging to countries in an existing FTA when the hub country enters an agreement with a new spoke

least as beneficial for a country as any FTA,³⁹ 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.⁴⁰

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 exceptions⁴¹ -- 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.

³⁹ Note that Cooper-Massell (CM), Berglas and Krauss used CU rather than FTA as their generic term. In this, they follow Viner's precedent.

Our 1981 article detailing the problems with the CM and Berglas arguments has been criticized by Panagariya in his recent review of the customs union literature (2000, p. 304, fn. 24). He objected to our article on the ground that there was no trade with the third country in our example. This point is valid for the principal example in our 1981 article, and was a result of the two-commodity constraint introduced by the standard offer-curve approach. However, it does not apply when our analysis is extended to an n-commodity case (Wonnacott and Wonnacott, 1992). At any rate, our major point stands: an FTA cannot automatically be rejected in favour of UTR because an FTA offers something that UTR doesn't, namely, greater access to the markets of trading partners.

Panagariya's footnote also depended in part on Berglas' criticism (1983) of our 1981 article. For our response to this criticism, see Wonnacott and Wonnacott (1984).

⁴⁰ In the last decade, a new theoretical argument has been put forward that casts an unfavourable *a priori* light on FTAs (de Melo et al, 1993, pp. 166-168). While they recognize that there is an FTA benefit on exports to partner(s), they shrink this benefit by assuming that any potential member A reaping such a benefit must compensate any partner B for B's welfare loss because B is giving A preferential access to its market; that is, B is not choosing its alternative option of UTR, with imports from the lowest-cost source. But such compensation is not and need not, in fact, be paid, because trade flows are two-way: B also gains from its preferential access to A's market. For example, in the formation of the Common Market, Germany got preferential access to the French market in some products, while France got preferential access to the German market in others; there was no issue of either compensating the other. In short, a biased case against an FTA is created if its export benefits are discounted by a one-way view of trade flows -- in this case, the view that compensation is required from export benefits in one direction, but not the other.

⁴¹ E.g., a country may lose in a move from an FTA to WTO free trade if the preference it has to give up in its partner's market is sufficiently important.

III. CONCLUSIONS

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, the benefits from FTR are clearer than benefits from UTR: whereas each policy has favourable 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 favourable -- especially for a small price-taking country that is offered a better price to take -- with this terms-of-trade benefit augmenting the home country's efficiency gains.⁴² 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). For example, with foreign NTB elimination, the home country can benefit 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 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 provide a ranking.

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⁴² The benefits from FTR are clearer and easier to explain than those from UTR. However, if home tariffs are (substantially) higher than foreign tariffs initially, the gain from UTR may be greater than those from FTR; that is, UTR may provide more than half the benefits that would come from RTN.

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