

CAN BILATERALISM EASE THE PAINS OF TRADE LIBERALIZATION?

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Can Bilateralism Ease the Pains of Trade Liberalization?*

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Abstract

Using the influence-driven approach to endogenous trade-policy determination, we show how a free-trade agreement (FTA) with rules of origin can work as a device to compensate losers from trade liberalization. The FTA constructed in this paper is characterized by external tariff structures that are negatively correlated across member countries, ensuring efficiency gains and, through reduced average protection, compatibility with the multilateral trading system's requirements. It is also politically viable, and we demonstrate that, in the countries concerned, governments are willing to include its formation in the political agenda in spite of the fact that, in equilibrium, political contributions from producer lobbies decline after the agreement.

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During the American Civil War a friend of mine, who was a careful student of the military operations, used often to remark that the war was one in which the South had all the victories, and the North, all the substantial successes. Protectionists do score many victories, or so-called victories. What I wish to point out is the continual and substantial success of Free Trade throughout the world.

Sir Robert Giffen¹

1 Introduction

Regionalism is mushrooming and appears to be here to stay. The first wave, which appeared in the 1960s, was made up primarily of North-North and South-South regional trading arrangements (RIAs), the latter being generally recognized to have been less successful than the former. Different, primarily North-South arrangements appeared during the 1980s in a second wave which sparked a vast literature on the role of regionalism in a multilateral world (see the edited volumes by Anderson and Blackhurst, 1993; de Melo and Panagariya, 1993; and Bhagwati and Panagariya, 1996). This literature has largely focused on two issues: (i) Should a division of the world economy into regional trading blocs be expected to raise or to lower welfare? (ii) Does regionalism help or hamper multilateral efforts at trade liberalisation?

Whether RIAs hamper or reinforce the multilateral trading system is still a relatively open debate (see e.g. the recent survey by Winters, 1996). In most of the literature addressing issue (i), the common rationale for regional and multilateral trading arrangements is to internalize terms-of-trade externalities, as in Krugman (1992). This approach is probably best suited to analyze the first wave of regionalism, although it is not clear that optimal-tariff considerations weigh heavily in trade-policy decisions. In addressing issue (ii), the arguments have instead been couched in a political-economy setting emphasising institutional differences between various types of regional arrangements. On the negative side, Levy (1997) uses a political-economy approach à la Mayer (1984) to argue that RIAs may jeopardise the multilateral trading system if they offer disproportionately large gains to agents in integrating countries, raising their reservation utility over the multilateral free-trade level. Bandyopadhyay and Wall (1995) argue that lobbying can lead to a strengthening of protectionist pressure with integration rather than to the more traditional 'dilution of preferences' (de Melo, Panagariya and Rodrik, 1993). On the positive side, Ethier (1996) interprets the new wave of regionalism as an endogenous response to the development of the multilateral system, suggesting that regional integration can spur multilateral liberalization by facilitating coordination. In their comments on Irwin (1993), Eichengreen

¹Speech delivered at the annual dinner of the North Staffordshire Chamber of Commerce at Soke, December 15th 1897, and reported in Giffen (1904).

and Olson argued that in world characterized by a declining hegemon (the U.S.), bilateralism could contribute to the adequate provision of a liberal world trading system, the latter being interpreted as a public good.

The political-economy literature also provides a useful perspective on why governments may see gains in trade liberalization while still perceiving that negotiated trade liberalization is an exchange of market access. Hillman et al. (1995) argue that governments exchange market access in the WTO or in RIAs because the mutual political gains conferred by reciprocity lower the political costs of liberalization. Under negotiated trade liberalization, the exchange of market access is in effect an agreement by each government to transfer income to the other government's constituency of exporters. Implicit transfer agreements of this kind, reflected in terms-of-trade effects, would not be available under unilateral trade liberalization.

This paper takes the view that regionalism can help sustain multilateralism, arguing that regional arrangements such as free-trade agreements (FTAs) offer three political-economy advantages that have hitherto been neglected. First, they provide a way of compensating losers. Second, following the logic of Kemp-Wan (1976), they can be designed so as to yield welfare-enhancing reductions in protection. Finally, by reducing the average protection of member countries, they help meet the requirement of 'offers' that all WTO members face when joining regional agreements.² This can represent a non-negligible advantage for the many newcomers to the WTO. We focus on the role that RIAs can play in facilitating the compensation of losers, an aspect so far neglected by the literature (except for Hillman et al., 1995), but of key practical importance.³

Our treatment of the political viability of FTAs is a fairly comprehensive one. Following Grossman and Helpman (1995), we first assume that the formation of an FTA is on the political agenda and show that the agreement under consideration is politically viable using an extension of their notion of a "pressured stance". But we also verify that governments are willing to put the formation of an FTA on the political agenda; that is, that any decline in equilibrium contributions after the agreement's signature is offset by efficiency gains. (We also verify that the FTA's external tariff vector is a truthful Nash equilibrium in each member country.) Using this two-step approach, we show by construction how an FTA with rules of origin can enable both countries to cooperate towards a selective reduction of external tariffs while simultaneously maintaining producer prices in import-competing sectors at their initial level, a key condition for continued political support.

An example will illustrate the gist of the argument. Consider two countries (A and

²For instance, Argentina and Uruguay decreased their average tariff from 40% in 1986 to 12% in 1996 while forming the MERCOSUR with Brazil and Paraguay.

³In the language of trade negotiations, tariff concessions in multilateral rounds deviate from straight-line proposals in order to compensate losers, usually labour-intensive industries (see Ray, 1991, for a survey of empirical results on this issue). Similar exceptions are also found in FTAs, as 'sensitive' sectors are usually exempted from tariff reductions, at least during the early stages of implementation.

B) whose textiles and electronics producers compete with imports from the rest of the world, and suppose that each country is too small in each sector to meet its partner's import demand at the initial (tariff-ridden) domestic prices. Let the two countries form an FTA with rules of origin in which *A* maintains an unchanged external tariff on textiles but eliminates protection in electronics, while *B* does the reverse. Free trade within the area enables *B*'s textiles producers to ship their output tariff-free to *A*, enjoying *A*'s protection; likewise, *A*'s electronics producers can export to *B* and enjoy *B*'s protection. Under suitable demand conditions, producer prices are unchanged, so that import-competing interests do not oppose the FTA. Moreover, as we show that equilibrium post-FTA contributions (based on external tariffs) are inferior to pre-FTA contributions (based on MFN tariffs) by just the valuation of the FTA's efficiency gains in the objective function of governments, the latter have no reason to oppose placing the formation of the FTA on the political agenda. The arrangement's most interesting aspect is that it leads to reduced *consumer* prices, as *B*'s consumers can now obtain electronics at their world price, while *A*'s ones can obtain textiles at their world price. (Consumer-price differences between *A* and *B* cannot be arbitrated because of rules of origin, which prevent the trans-shipment of goods originating from the rest of the world through the area's internal borders.) Although tariff revenue shrinks in both countries, we show that the consumer-price reductions raise welfare in *A* and *B*; with no opposition from import-competing lobbies, these welfare gains are sufficient to make the agreement politically viable.

2 The model

Two small (price-taking) and symmetric⁴ countries, *A* and *B*, produce and consume three goods, labeled 1, 2 and 3. Goods 1 and 2 are made with sector-specific capital and intersectorally mobile labour. The presence of a fixed endowment of specific capital generates diminishing returns in sectors 1 and 2, whereas sector 3 employs only labour under constant returns to scale. Thus, the productivity of labour in sector 3 determines the economywide wage rate, as in Grossman and Helpman (1994). Both countries import goods 1 and 2 from the rest of the world and export good 3 to it, with no transportation costs between any pair of countries. Consumers of both countries have identical, quasilinear preferences represented by an intertemporal utility function $U = \sum_t u_t$, where $u_t = \ln c_{1t} + \ln c_{2t} + c_{3t}$. Good 3 serves as numéraire.

We model the formation of an FTA in a two-period framework. In period 1, each country's trade policy is nondiscriminatory and is determined as the outcome of a game *à la* Grossman-Helpman, in which lobbies representing owners of specific capital bid for protection with truthful contribution schedules.⁵ We will call these contributions 'type-1' contributions. At the end of period 1, governments decide

⁴The symmetry assumption is discussed in section 4.

⁵In each country, industry lobbies simultaneously face their government with contribution functions conditioned on the vector of domestic prices. Those functions satisfy Bernheim and Whinston's

whether or not to put the formation of an FTA on the political agenda in A and B ; if they do, lobbies contribute, once and for all, in favor of the agreement or against it. We will call these one-off contributions ‘type-2’ contributions. If the agreement is adopted, the governments of A and B seek type-1 contributions again in period 2, but now conditioned on external rather than MFN tariffs. If the agreement is rejected, period 2 is identical to period 1. The political viability of the FTA depends on the welfare gains it is able to generate and on the net sum of aggregate type-2 contributions. Whether or not governments are willing to put the FTA’s formation on the political agenda depends not only on type-2 contributions and welfare effects, but also on a comparison of the level of type-1 contributions before and after the agreement.

With a finite time horizon and no links between periods in either demand or supply functions, the intertemporal aspects of the game can be disregarded and the equilibrium calculated separately for each period. Accordingly, two problems must be solved: one in which governments use MFN tariffs, solved below, and one in which they use external tariffs in an FTA, solved in section 3.

To rule out unnecessary complications, as in Cadot, de Melo and Olarreaga (1996), we assume that capital ownership is sufficiently concentrated to ensure that industry lobbies disregard the effect of trade protection on the cost of living.⁶ Sector 3 is not allowed to lobby for export subsidies. Normalizing world prices to unity in all sectors and letting t_k^i be country i ’s tariff in sector k , the domestic price of good k in i is $p_k^i = 1 + t_k^i$ (consumer and producer prices are equivalent). Type-1 contributions C_k^i from producers of good k ($k = 1, 2$) in i can be written as $C_k^i(t_1^i, t_2^i, b_k^i)$ for some constants b_k^i , whose determination is discussed in section 3. Welfare is $W^i(t_1^i, t_2^i)$. Using vector notation, $\mathbf{t}^i = (t_1^i, t_2^i)$, $\mathbf{b}^i = (b_1^i, b_2^i)$, and the government’s problem in country i can be written as

$$\max_{\mathbf{t}^i} V^i(\mathbf{t}^i, \mathbf{b}^i) \equiv C_1^i(\mathbf{t}^i, b_1^i) + C_2^i(\mathbf{t}^i, b_2^i) + aW^i(\mathbf{t}^i) \quad (1)$$

for some constant a . Let $\bar{\mathbf{t}}^i$ be the solution to problem (1); we will use bars to designate variables evaluated at their period-1 equilibrium values. We need to impose the technical condition that at the period-1 equilibrium level of tariffs $\bar{\mathbf{t}}^i$, the combined output of A and B does not exceed the demand from each one of them individually. Formally, let $\tilde{t}_k^i$ be defined by $y_k^A(1 + \tilde{t}_k^A) + y_k^B(1 + \tilde{t}_k^B) \equiv c_k^i(1 + \tilde{t}_k^i)$ where y_k^i and c_k^i are respectively i ’s output and consumption of good k . The condition can be stated

(1986) ‘truthfulness’ property by which, in a neighbourhood of the equilibrium, the derivatives (with respect to domestic prices) of the industry’s contributions and profit functions are equal. The resulting ‘truthful Nash equilibrium’ is unique and coalition-proof.

⁶Lobbies consider that their share of aggregate consumer surplus is of negligible magnitude compared to their share of aggregate producer surplus. Therefore, they do not internalize the externality that their own protectionist demands exert on consumer expenditure, nor do they lobby against the demands of other sectors.

concisely as:

Assumption 1 $\bar{t}_k^i \leq \tilde{t}_k^i$ for $k = 1, 2$ and $i = A, B$.

Given that A and B are symmetric, Assumption 1 means that in the initial (period-1) equilibrium, import-penetration ratios in sectors 1 and 2 are in excess of one half.

3 Compensating losers in an FTA

Before we turn to the formal analysis of the agreement's political viability, we need to establish a technical result. Lemma 1 shows that an FTA introduces a wedge between the consumer and producer prices of imported goods, provided that rules of origin prevent consumer arbitrage. (We define rules of origin as regulations preventing the transshipment of goods from the rest of the world through the area's internal borders.) More precisely, in an FTA with rules of origin, producer prices are necessarily equalized across the area, whereas consumer prices are not.⁷ We will denote producer prices by p_k^i and consumer prices by q_k^i ; let also $\mathbf{t} = (t_1^A, t_2^A, t_1^B, t_2^B)$ be the area's external tariff vector.

Lemma 1 *In an FTA with rules of origin satisfying Assumption 1, the consumer price of good k is $q_k^i = 1 + t_k^i$ in country i , but its producer price is $p_k^i = 1 + \max\{t_k^A, t_k^B\}$ in the entire area.*

Proof If $t_k^A = t_k^B$, the lemma holds trivially; suppose that $t_k^A \neq t_k^B$, and label countries so that $t_k^A > t_k^B$. As transportation costs are nil between A and B , B 's producers sell in A ; as $t_k^A \leq \tilde{t}_k^A$, they can sell their entire output without depressing k 's market price in A . Thus, the price relevant to B 's producers is not $1 + t_k^B$, but $1 + t_k^A$: producer prices are equalized at $p_k^B = p_k^A = 1 + t_k^A$. As B 's output is shipped entirely to A , B 's consumption is met by imports from the rest of the world priced at $q_k^B = 1 + t_k^B$. In A , rules of origin prevent consumers from purchasing quantities of good k imported by B from the rest of the world; consequently, $q_k^A = 1 + t_k^A (= p_k^A)$. Thus, $q_k^B = 1 + t_k^B < q_k^A = 1 + t_k^A$. $\square$

Lemma 1 highlights the key role played by rules of origin in an FTA. Together with Assumption 1, rules of origin ensure that the price of k in the more protected market (A) is sheltered from downward pressure arising from the relatively low price prevailing in the less-protected market (B). As a result, if B forms an FTA with A while simultaneously reducing its external tariff on k , its producers can avoid being exposed to the competitive pressure of imports from the rest of the world by simply diverting

⁷The reader may wonder why symmetric countries would ever want to set different tariffs. In the initial (period-1) equilibrium, no strategic interaction exists between A and B ; in such a context, symmetry implies that they must set equal tariffs. But in a strategic context like an FTA, asymmetric tariffs can emerge both in cooperative and noncooperative settings (see e.g. Cadot, de Melo, and Olarreaga, 1996).

their output to A 's protected market. Stated differently, as in Krueger (1993), rules of origin enable A to 'export its protection' to B . This is the mechanism on which we rely to protect losers from trade liberalization.

Suppose now that the formation of an FTA is on the political agenda, and consider the following proposal. Barriers to intra-bloc trade (i.e. to trade between A and B) are of course to be removed. But in addition, A and B agree to set their external tariffs cooperatively⁸ : A eliminates its external tariff on good 1 and maintains an external tariff on good 2 just equal to its pre-FTA MFN tariff, while B does the reverse. In order to demonstrate that such an agreement is politically viable, we need to adopt a definition of political viability. In each country, lobbies offer type-2 contributions for or against the FTA to their government. Grossman and Helpman (1995), who pioneered this approach, showed that truthful contributions are in this context simple amounts representing the loss or gain that the lobbies expect from the FTA. Thus, if lobby k expects to gain from the agreement, it will offer a contribution $F_k^i = \Delta\pi_k^i$ (the change in industry profits attributable to the FTA) in its favor; if it expects to lose, it will offer a contribution $N_k^i = -\Delta\pi_k^i$ against it. In this section, we will suppose that A and B can use inter-country transfers to compensate for tariff-revenue losses due to the agreement; section 4 shows how the FTA can be implemented without such transfers. Let ΔW^i denote the welfare change attributable to the agreement.

Definition 1 *An FTA is politically viable with compensatory transfers if*

$$\sum_{i=A,B} \sum_{k=1,2} F_k^i - N_k^i + a\Delta W^i \geq 0.$$

Definition 1 extends Grossman and Helpman's definition of a 'pressured stance' to a context where compensatory transfers are possible. Using Definition 1, we construct in the following proposition a politically viable FTA. Let $\hat{\mathbf{t}} = (\bar{t}_1^A, 0, 0, \bar{t}_2^B)$; that is, $\hat{t}_1^A = \bar{t}_1^A$; $\hat{t}_2^A = 0$; $\hat{t}_1^B = 0$; $\hat{t}_2^B = \bar{t}_2^B$.

Proposition 1 *An FTA with rules of origin and with an external tariff vector equal to $\hat{\mathbf{t}}$ is politically viable with compensatory transfers.*

Proof By symmetry, the initial (period-1) tariffs of A and B on k are identical: $\bar{t}_k^A = \bar{t}_k^B$ for $k = 1, 2$; consequently, $\bar{p}_k^A = \bar{p}_k^B$. As $t_1^A > t_1^B = 0$, B 's output of good 1 is sold in A ; applying Lemma 1, $p_1^A = p_1^B = 1 + t_1^A$. Moreover, as $t_1^A = \bar{t}_1^A$, it follows that $p_1^A = \bar{p}_1^A = p_1^B = \bar{p}_1^B$. By the same argument, $p_2^A = p_2^B = \bar{p}_2^A = \bar{p}_2^B$. Thus, producer prices are unchanged in both countries, implying that $F_k^i = N_k^i = 0$ for all k and i . It follows that the agreement is politically viable if and only if it raises the area's aggregate welfare.

As producer prices are unchanged, so is producer surplus. Therefore the variation in welfare is the sum of the changes in consumer surplus and tariff revenue. Consider

⁸Although A and B agree to set external tariffs cooperatively, they still set them separately, unlike in a customs union, where they would necessarily agree on a *common* external tariff.

country A . The change in A 's consumer surplus is $\bar{t}_2^A \bar{c}_2^A + \delta_2^A$, where $\delta_2^A > 0$ is the deadweight loss induced in A by a tariff $\bar{t}_2^A$. The change in A 's tariff revenue has two components. In sector 1, trade diversion reduces tariff revenue by an amount equal to $\bar{t}_1^A \bar{y}_1^B$. In sector 2, tariff revenue equal to $\bar{t}_2^A (\bar{c}_2^A - \bar{y}_2^A)$ is eliminated. Thus, the total variation in A 's welfare is:

$$\begin{aligned} \Delta W^A \equiv W^A - \bar{W}^A &= \bar{t}_2^A \bar{c}_2^A + \delta_2^A - \bar{t}_1^A \bar{y}_1^B - \bar{t}_2^A (\bar{c}_2^A - \bar{y}_2^A) \\ &= \delta_2^A - \bar{t}_1^A \bar{y}_1^B + \bar{t}_2^A \bar{y}_2^A. \end{aligned}$$

Similar calculations for B yield $\Delta W^B = \delta_1^B - \bar{t}_2^B \bar{y}_2^A + \bar{t}_1^B \bar{y}_1^B$. Thus, the aggregate welfare change for the FTA is:

$$\Delta W \equiv \Delta W^A + \Delta W^B = \delta_2^A + \delta_1^B + (\bar{t}_1^B - \bar{t}_1^A) \bar{y}_1^B + (\bar{t}_2^A - \bar{t}_2^B) \bar{y}_2^A = \delta_2^A + \delta_2^B > 0. \quad \square$$

Proposition 1 established that, once on the political agenda, an appropriately designed FTA would meet no opposition from producer lobbies but would generate welfare gains, thereby being politically viable. As changes in A and B 's policy stance have, by the smallness assumption, no effect on the rest of the world's welfare, an immediate corollary follows; namely:

Corollary 1 *The FTA constructed in Proposition 1 is globally welfare-improving.*

Given that aggregate type-2 contributions are nil, it remains to be shown that member governments are willing to put the formation of the FTA on the political agenda in the first place; i.e., that the net effect of the agreement's efficiency gains and of any variation in type-1 contributions after its signature would leave the governments of A and B at least as well off as before in terms of V .

In each period, type-1 truthful contribution schedules are of the form $C_k^i = \max \{\pi_k^i - b_k^i; 0\}$, where the constants b_k^i determine how the rents generated by protection at the expense of consumers are shared between lobbies and the government. Let $\bar{V}^i$ and $\hat{V}^i$ stand respectively for the equilibrium value of the government's objective function before and after the FTA (i.e. in period 1 and in period 2). Let also $\bar{V}_{-k}^i$ and $\hat{V}_{-k}^i$ stand for the pre- and post-FTA values of V^i when sector k is not allowed to lobby; for instance, $\bar{V}_{-1}^i$ is the pre-FTA value of V^i when only sector 2 is active in lobbying. Finally, let W_F^i be the free-trade level of i 's welfare, and note that the functions V^i and W^i coincide at free trade.

Proposition 2 $\bar{V}^i = \hat{V}^i = W_F^i$; moreover, with no cross-border lobbying, $\hat{t}^i = \arg\max \hat{V}^i$.

Proof We first determine $\bar{V}^i$. Sector k 's constant b_k^i is set endogenously to verify $\bar{V}^i(b_k^i) = V_{-k}^i$; in words, sector k sets b_k^i so as to leave the government just indifferent

between choosing the equilibrium tariffs $\bar{t}^i$ and ignoring sector k altogether.⁹ Solving by induction, if sector 1 is not allowed to lobby, sector 2 behaves as a single principal and sets b_2^i so as to leave the government just indifferent between free trade and the tariff maximizing $C_2^i(t_2^i, b_2^i) + aW^i(t_2^i)$. Thus, $V_{-1}^i = W_F^i$; it follows that sector 1 sets b_1^i so as to satisfy $\bar{V}^i = W_F^i$. (Starting the induction with sector 1 leads to the same result.) It is now a simple matter to establish the second equation, namely $\hat{V}^i = W_F^i$. In the FTA, by Lemma 1, producers of good 1 sell only in A and producers of good 2 sell only in B ; therefore, the only active lobbies are those of sector 1 in A and sector 2 in B . Using an argument already made, each lobby acts as a single principal and leaves the relevant government indifferent between free trade and the distorted equilibrium, by an appropriate choice of the constant b_k^i . It follows directly that $\hat{V}^i = W_F^i (= \bar{V}^i)$.

We now establish that $\hat{t}^i$ maximizes the function $\hat{V}^i$, i.e. that it is a best response to truthful type-1 contribution schedules. Consider country A , where $\hat{t}^i = (\bar{t}_1^A, 0)$. With no cross-border lobbying, the only source of type-1 contributions in sector 1 is domestic producers of good 1. As producer prices are unchanged and technologies are unaffected by the FTA, y_1^A is also unchanged. With no cross-price effects and a fixed wage rate, $\partial^2 W^A / \partial t_1^A \partial t_2^A = 0$; therefore, $\partial W^A / \partial t_1^A$ is unaffected by the elimination of A 's tariff on good 2. It follows that, at $t_1^A = \bar{t}_1^A$, $\partial \hat{V}^A / \partial t_1^A = \partial \bar{V}^A / \partial t_1^A = 0$. In sector 2, A 's producers who sell in B do not contribute to their government, because A 's tariff is irrelevant to their profits; therefore, setting $t_2^A = 0$ is optimal. $\square$

Proposition 2 demonstrates that the utility of governments, inclusive of type-1 contributions, is unaffected by the formation of the FTA. This result seems at odds with that of Proposition 1, which established that producers were indifferent to the FTA but that governments weren't because of welfare gains. The reason for this apparent discrepancy is that lobbies are able to appropriate all the efficiency gains generated by the move from MFN tariffs to a regional arrangement through reduced type-1 contributions rather than increased profits.¹⁰ In turn, the ability of lobbies to appropriate the entire rents from protection (and consequently the efficiency gains generated by an FTA) stems from the absence of inter-lobby rivalry in a model where the wage rate is fixed and cost-of-living externalities are not recognized. Should some element of rivalry be present, the basic result of this paper —namely, that an appropriately-designed FTA is politically viable— would remain valid (indeed, it would be strengthened), but member governments would be able to retain some of the induced efficiency gains.

⁹This principle has close parallels in agency theory. A detailed analysis of the endogenous determination of the constants b_k^i can be found in Grossman and Helpman (1994).

¹⁰An alternative formulation of type-2 contributions would lead to a different perspective on the rent-sharing issue. Suppose that $F_k^i = \Delta \phi_k^i$, where $\phi_k^i = \pi_k^i - C_k^i$. With such a formulation, type-2 contributions would reflect the expected reduction in type-1 contributions (i.e., type-2 contributions would now be strictly positive). The government's power to set the agenda would then enable it to appropriate the efficiency gains generated by the FTA.

4 Extensions

4.1 Implementation without compensatory transfers

The FTA constructed in Proposition 1 relies on monetary transfers between member countries. In the present framework, where governments trade off domestic welfare against monetary contributions from lobbies, inter-country transfers to compensate for welfare losses are quite natural. Moreover, such transfers are common in RIAs (a prominent example is the structural-funds system in the European Union). Indeed, Sapir (1993) stressed the role of compensation funds in the success of the EC's second enlargement to Southern European countries. By contrast, the fact that many of the early South-South regional agreements of the 1960s failed has been largely attributed to the lack of compensatory mechanisms between unequal partners (see e.g. Foroutan, 1993). However, one may object that there is a logical inconsistency in ruling out lump-sum transfers domestically (such transfers would enable governments to solve income-distribution problems without having recourse to distortionary trade taxes) while at the same time using them to solve distributional problems between countries. Therefore, we consider in this section how the FTA characterized in Proposition 1 can be implemented without compensatory transfers. Let us call "import goods" the goods imported by the regional bloc from the rest of the world (goods 1 and 2 in our example).

Corollary 2 *The FTA characterized in Proposition 1 is politically viable without compensatory transfers whenever the price elasticity of demand for import goods is sufficiently large in both member countries.*

Proof As type-2 contributions are nil, the FTA is politically viable without inter-country transfers if and only if $\Delta W^A \geq 0$ and $\Delta W^B \geq 0$. The former condition is equivalent to $\bar{t}_2^A \bar{y}_2^A \geq \bar{t}_1^A \bar{y}_1^B - \delta_2^A$; the latter to $\bar{t}_2^B \bar{y}_2^A \leq \bar{t}_1^B \bar{y}_1^B + \delta_1^B$. As symmetry implies that $\bar{t}_k^A = \bar{t}_k^B$ and $\bar{y}_k^A = \bar{y}_k^B$, superscripts can be disposed of and the political-viability condition can be rewritten, after slight rearrangement, as $-\delta_2^A \leq \bar{t}_2 \bar{y}_2 - \bar{t}_1 \bar{y}_1 \leq \delta_1^B$. It can be seen by inspection that, as deadweight-loss terms δ_k^i are increasing in the own-price elasticities of demands, higher values of those elasticities enlarge the range of pairs $(\bar{y}_1, \bar{y}_2)$ satisfying the political viability condition. $\square$

Corollary 2 has a normative implication beyond that of Proposition 1. The welfare efficiency of *any* given FTA can be enhanced at no political cost by selective elimination of external tariffs, pairwise, in sectors with high demand elasticities. Such a move, while preserving across-the-board internal free trade, would allow member countries to exchange protection among themselves while generating consumer-surplus gains. It is also worth noting that, if trade protection took the form of quantitative restrictions, importing countries would typically retain only a fraction of the quota rents, so that the issue of compensation for loss of such rents would lose importance.

4.2 Asymmetric FTA partners

While the symmetry assumption permits the construction of a clearcut argument at minimum computational cost, it is too strong to provide a sound basis for policy prescriptions. Its role in our analysis is to ensure that period-1 MFN tariffs are equal, so that producers in import-competing sectors are indifferent between selling at home or abroad at the initial tariff vector. Suppose, then, that tariffs are not equal in period 1. The FTA's external tariff structure must provide undiminished protection to producers in the whole area while opening up one country in each sector to external competition. This dual requirement, which is the essence of our argument, can be achieved by setting, in each sector, an external tariff equal to $\max \{\bar{t}_k^A, \bar{t}_k^B\}$ in one country and zero in the other one. (The availability of compensatory transfers makes the identity of each country irrelevant.) Then, in both of the area's import-competing sectors, the common producer price is at least as high as it was in either country before the FTA. As a result, import-competing interests do not oppose the agreement; in fact, producers of good k in the country that was initially the least protectionist in sector k support the agreement, as internal free trade enables them to share in the other country's high level of protection. However, one country's producer-surplus gains are the other one's tariff-revenue losses, and the net effect on the agreement's political viability depends on the parameter a , introducing an indeterminacy that symmetry avoids. As for consumer-surplus gains, they are ensured, as in the symmetric case, by the elimination of one member's external tariff in each sector. Thus, relaxing the symmetry assumption does not affect the logic of our argument but clouds it with an indeterminacy of little practical significance, since it hinges on the unobservable parameter a .

5 Concluding remarks

Trade liberalization inevitably generates political conflicts, but we argued here that regionalism can help mitigate those conflicts by letting governments trade political support among themselves. Essentially, the policy prescription coming out of our analysis is that, as countries join FTAs, they should adopt external tariff structures negatively correlated with those of their partners. Seen from a positive rather than normative perspective, this is in fact an easily testable proposition.

Beyond a systematic treatment of the political viability of regional trading arrangements, this paper provided a fresh perspective on the relationship between such arrangements and the multilateral trading system. Member countries, having reduced their average tariff, are, as a result of the FTA's formation, in a position to offer multilateral tariff reductions. If the bargaining taking place during the formation of an FTA is driven by political-economy considerations, and if —indeed as required by GATT article XXIV— the average tariff rate of member countries must be reduced, trade diversion within the FTA may well turn out to be globally welfare-increasing.

Thus, if, as noted long ago by Jacob Viner, the bilateral approach makes it easier to satisfy ‘protectionists and free-traders alike’, it might be, in our view, because it enables governments to trade political support among themselves, thereby reducing the cost of compensating losers and, in the process, generating welfare gains. This compensation mechanism, which is internal to the FTA, is clearly not available in multilateral negotiations. Nor is it available, incidentally, in a customs union, providing additional ground for our earlier claim that FTAs are likely to welfare-dominate customs unions (see Cadot, de Melo, and Olarreaga, 1996).

If this line of reasoning applies to trade in goods, it is likely to apply as forcefully to trade in services. In this perspective, and notwithstanding earlier arguments relating to free-rider and coordination problems, there is reason to believe that regionalism can work hand-in-hand with the multilateral trading system. In Giffen’s words, if the formation of trade-diverting regional blocs may be seen as a protectionist victory, the substantial success belongs to Free Trade, or at least to freer trade.

References

- [1] ANDERSON, K. and R. BLACKHURST eds. (1993), *Regional Integration and the Global Trading System*, St. Martin’s Press, New York.
- [2] BANDYOPDHAY, S. and H. WALL (1995), “Customs Unions or Free Trade Areas: the Role of Political Asymmetries”, Mimeo, University of West Virginia.
- [3] BERNHEIM, D. and M.D. WHINSTON (1986), “Menu Auctions, Resource Allocation and Economic Influence”, *Quarterly Journal of Economics* **51**, 1-31.
- [4] BHAGWATI, J. and A. PANAGARIYA eds. (1996), *Free Trade Areas or Free Trade? The Economics of Preferential Trading Agreements*, AEI Press, Washington.
- [5] CADOT, O., J. DE MELO and M. OLARREAGA (1996), “Regional Integration and Lobbying for Tariffs Against Non-Members”, CEPR discussion paper # 1448.
- [6] EICHENGREEN, B. (1993) “Discussion” in de Melo and Panagariya eds., 119-22.
- [7] ETHIER, W.E. (1996), “Regionalism in a Multilateral World”, (mimeo): Philadelphia, The University of Pennsylvania.
- [8] FOROUTAN, F. (1993), “Regional Integration in Sub-Saharan Africa: past experience and future prospects” chp. 8 of de Melo and Panagariya eds., 234-71.

- [9] GIFFEN, R. (1904), *Economic Inquiries and Studies*, George Bell and Sons, London.
- [10] GROSSMAN, G. and E. HELPMAN (1994), "Protection for Sale", *American Economic Review* **84**, 833-850.
- [11] — and — (1995), "The Politics of Free-Trade Agreements", *American Economic Review* **85**, 667-690.
- [12] HILLMAN, A., N. VAN LONG and P. MOSER (1995), "Modelling Reciprocal Trade Liberalization: the Political Economy and National Welfare Perspectives", *Swiss Journal of Economics and Statistics* **131(3)**, 503-515.
- [13] IRWIN, D. (1993), "Multilateral and bilateral Trade Relations in the World Trading System: an historical Perspective" chp. 4 of de Melo and Panagariya eds., 90-119.
- [14] KEMP, M. and H. WAN (1976), "An Elementary Proposition Concerning the Formation of Customs Unions", in M. Kemp ed., *Three Topics in the Theory of International Trade: Distribution, Welfare and Uncertainty*, North Holland, Amsterdam.
- [15] KRUEGER, A. (1993), "Free Trade Agreements as Protectionist Devices: Rules of Origin"; NBER working paper # 4352.
- [16] LEVY, P. I. (1997), "A Political-Economy Analysis of Free Trade Agreements", *American Economic Review*, forthcoming.
- [17] MAYER, W. (1984), "Endogenous Tariff Formation", *American Economic Review* **74**, 18-20.
- [18] MELO, J. de and A. PANAGARIYA eds. (1993), *New Dimensions in Regional Integration*, Cambridge University Press, Cambridge.
- [19] MELO, J. de, A. PANAGARIYA and D. RODRIK (1993), "The New Regionalism: A Country Perspective" chp. 6 of de Melo and Panagariya eds., 159-93.
- [20] OLSON, M. (1993) "Discussion" in de Melo and Panagariya eds., 122-27.
- [21] RAY, E. (1990) "Empirical Research in the Political Economy of Trade" in C.A. Carter ed., *Imperfect Competition and the Political Economy*, Westview Press, Boulder.
- [22] SAPIR, A. (1993) "Discussion" in de Melo and Panagariya eds., 230-33.
- [23] WINTERS, A. (1996), "Regionalism versus Multilateralism", CEPR discussion paper # 1525.