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The New Regionalism

A Country Perspective

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Regional integration is on the rise again — but from different starting points and with different objectives than in the past.

This paper — a product of the Trade Policy Division, Country Economics Department — is part of a larger effort in the department to improve our understanding of the economics of regional integration. The paper was revised to reflect comments received at the Conference on New Dimensions in Regional Integration, (funded by the Bank's Research Support Budget under RPO 677-12). Copies of this paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Dawn Ballantyne, room N10-029, extension 37947 (February 1993, 47 pages).

Regional integration is on the rise again, despite its apparent failure among developing countries in the past.

De Melo, Panagariya, and Rodrik survey the ambiguous economics of customs unions, emphasizing that the traditional dichotomy between "trade creation" and "trade diversion" is not particularly helpful for policy. In a world with trade restrictions, regional integration presents certain advantages, including enhanced bargaining power and market access.

The authors point out that integration enforces arbitrage in institutions as well as in markets for goods and factors. This kind of

arbitrage can lead to improved economic outcomes by making decision-making less sensitive to economically harmful factional interests — especially when regional institutions are designed properly.

An empirical evaluation of existing schemes produces no evidence that membership in integration schemes has any effect on growth.

Finally, the authors note that recent attempts at regional integration have different starting points and objectives than past efforts — so history is a poor guide to the future of regional integration.

The New Regionalism: A Country Perspective

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1. Introduction

Three decades ago, under the impetus of European arrangements, the developing world launched the first wave of regional integration (RI). Free trade areas and customs unions mushroomed in Latin America and Africa. Unfortunately, expectations of economic development through regional integration were not realized and two decades later virtually all regional arrangements among developing countries were judged as failures.

By the early eighties, multilateral tariff cutting by developed countries and unilateral trade liberalization by developing countries had substantially weakened the case for regional arrangements. Yet, paradoxically it is then that a second round of regionalism got under way. More arrangements (eight) have been signed during the eighties than during the sixties, and still more (half-a-dozen or so) are under consideration. The GATT process is running out of steam and many countries are turning back to the bilateral alternative.

From the viewpoint of developing countries, the current regionalism differs from the regionalism of the sixties in two important respects. First, the regionalism of the sixties represented an extension of the import-substitution-industrialization strategy from the national to the regional level and was therefore inward-looking. The current regionalism is by contrast taking place in an environment of outward-oriented policies. Second, in the sixties, developing countries pursued regional integration exclusively with other developing countries. Today these countries, especially those in Latin America, have their eyes on integration with large, developed countries.

In this paper, we review and extend the theory of regional integration and evaluate empirically its contribution to growth. Our objective is to assess the benefits of regional integration from the viewpoint of participating countries rather than the world as a whole. In particular, we do not focus on the systemic implications of regional integration emphasized in the preceding papers. A central issue we address is whether the regional approach can accomplish objectives that cannot be

accomplished via unilateral trade liberalization. We also study the role of economic institutions in the process of regional integration. In analyzing these issues, we draw a sharp distinction between the nature of regional integration today and that in the sixties.

In Section 2, we introduce the conventional welfare economics of regional integration via freer trade among partner countries. We conclude the section by alluding to motivations behind current integration efforts which go far beyond trade integration. This theme is developed in greater detail in Section 3 where it is formally recognized that integration enforces a certain degree of arbitrage among national institutions. In Section 4, we provide an empirical evaluation of past integration schemes. Finally, in Section 5, we turn to forward-looking lessons for the "new" approaches to regionalism.

2. Welfare Economics of Free Trade Areas

To avoid confusion, we begin by defining the terms preferential trading arrangement (PTA), free trade area (FTA), customs union (CU), and unilateral trade liberalization (UTL) precisely. A PTA refers to an arrangement under which partner countries impose lower tariffs on imports from each other than on imports from the outside world. An FTA involves zero tariffs on trade among partner countries but positive tariff on imports from outside countries. Both PTA and FTA allow for different tariffs by partner countries on imports of similar goods from the outside world.¹ A CU is an FTA with a common external tariff by partner countries. Finally, UTL is defined as a non-discriminatory reduction in trade barriers.

The literature on regional integration is full of "anything may happen" type of results. What we present below is what we regard as helpful insights from the literature.² Unless otherwise noted, we assume throughout that the partner countries are small relative to the rest of the world.

In Section 2.1, we present the basic Vinerian analysis and derive conditions under which an FTA is likely to be welfare improving. In Section 2.2, we consider the Kemp-Wan problem of designing a welfare improving FTA and apply it to the analysis of FTAs in the presence of quotas. In Section 2.3, we address the problem of compensation among union members. In Sections 2.4-2.6, we compare FTAs successively to UTL, PTAs and CUs. In comparing FTAs to unilateral trade liberalization, we discuss, *inter alia*, the roles of the import-substitution objective, tariff-revenue constraint and economies of scale. In comparing FTAs to PTAs, we show that when chosen correctly the latter are superior, and then proceed to explain why the GATT approach of forbidding PTAs is, nevertheless, sensible. In comparing FTAs to CUs, we pay attention to the rules-of-origin issue and political-economy implications of the two regimes. In Section 2.7, we relax the "small-union" assumption and analyze the strategic advantages of an FTA. In Section 2.8, we assess explicitly the relevance of regional integration between developing and developed countries. Finally, in Section 2.9, we summarize the main conclusions which follow from the review.

2.1 The Basic Economics of FTAs

Can an FTA be welfare improving? Yes but not always. This is the central point made by Viner in chapter 4 of his (1950) classic work, The Customs Unions Issue. Viner introduced the key concepts of trade creation and trade diversion and concluded that a trade-creating customs union is welfare improving while a trade diverting customs union is welfare worsening.³

In the following, we introduce the conventional analysis of an FTA formally with the help of a two-goods, three-country model. The goods are denoted 1 and 2 and countries A, B and C. A and B are potential partners in an FTA and C represents the outside world. In this setting, there are two possible trade patterns: A and B import the same good or they import different goods.

In the case when A and B import the same good, they will import it from C and there will be no trade between them in the initial equilibrium. Moreover, if the formation of an FTA leaves the tariff on C unchanged, the initial equilibrium will continue to obtain; the FTA will be vacuous. This situation may well describe the reality of some regional integration schemes in developing countries, particularly Africa. In many of these schemes, the partner countries had very similar patterns of trade and integration attempts had a very limited impact on trade patterns (see Foroutan, this volume).

In the more substantive case when the partner countries import different goods, assume that country A imports good 1 and country B exports it. For now, we concentrate on tariffs levied by country A only. Later we introduce explicitly tariffs in both B and C. In Figure 1, $M_1^A M_1^A$ and $E_1^B E_1^B$ are the general-equilibrium import-demand curve of A and export-supply curve of B, respectively. The horizontal line $p^C p^C$ is the relative price at which C is willing to buy and sell good 1 in the world market.

Autarky prices in A and B are given by the respective heights of their curves at their points of origin. Under free trade, the gains from trade are represented by the area under the import demand curve and above the world price for A, and that above the export supply curve and below the world price for B. Given constant costs and free trade in C, it neither gains nor loses from trade.

Assume that initially A levies a nondiscriminatory tariff at rate t on imports from B and C. A's import demand curve as perceived by B and C is now given by $M_1^{A'} M_1^{A'}$ where the latter lies below $M_1^A M_1^A$ by the amount of tariff per unit. The border price facing A is p^C and total imports are RS (=DL). Of these, RH come from B and HS from C. Domestic price in A is given by p^A

which is the height of the import demand curve as perceived by A's residents. The gains from trade in A are given by area $M_1^A LD$ plus tariff revenue $DRSL$ and those in B by area RHE_1^B .

Now introduce an FTA between A and B. Imports from B are no longer subject to a tariff. As drawn, there is a "sudden death" of imports from C with all imports "diverted" to B. The union benefits B both because its terms of trade improve and its exports expand. The country's net gain equals area $RHGV$. The effect on A is ambiguous in general because, on the one hand, A's terms of trade deteriorate (or equivalently it loses all tariff revenue) while, on the other, the distortion between the domestic and (new) border price is eliminated. The country gains or loses as area LGW is larger or smaller than the rectangle $RSWV$. As drawn, the country loses. The effect on joint welfare of A and B is also ambiguous. They benefit jointly if the horizontally shaded area, LGU , is larger than the vertically shaded area, HSU , but loses otherwise. As drawn, the union as a whole benefits from the FTA.⁴ That is to say, B's gains exceed the losses of A and it can compensate the latter.⁵

Figure 1 has been drawn in such a way that an FTA between A and B eliminates the imports from C entirely. This is done to highlight the point that an FTA will generally generate both positive and negative effects and that the effect on the union's welfare is likely to be ambiguous.⁶ If we draw B's export supply curve so that it crosses A's solid curve to the left of point L, the FTA does not eliminate imports from C. In this case, the internal price facing A is unchanged while its terms of trade with B deteriorate by the full amount of the tariff. B's share in imports rises but total imports remain unchanged. A's welfare declines because its terms of trade with B worsen without any improvement in efficiency; B's welfare rises because its terms of trade improve and exports expand; and the union's welfare declines because over some range imports coming from B cost more than C's price and there is no gain in efficiency in A.

What factors make the gains from an FTA larger or losses smaller? If we are willing to restrict ourselves to the case depicted in Figure 1 where both positive and negative effects are present,

a number of points can be made.⁷ First, the higher the initial tariff in a given sector, the larger the favorable effect (area LUG) and smaller the unfavorable effect (USH) of the FTA. Second, the lower the post-FTA tariff on extra-union countries the less likely that the lower priced goods of the latter will be displaced. Third, the higher the tariffs in the outside world on the partner, the larger will be the gain or smaller the loss. In terms of Figure 1, the higher the tariff in C, the higher will be p^c facing A and B and the smaller will be the area HSU. Fourth, the greater the complementarity in import demands of A and B, the larger the gains from FTA. In terms of Figure 1, the farther apart are the import demand and export supply curves of A and B, the larger will be the gains (area LGW) and smaller the losses (area HSU).

On this last issue, it is worth noting that at low levels of income, complementarity is more likely to arise between countries that are different in terms of factor endowments and perhaps, therefore, countries with different per-capita incomes. As we will discuss shortly (Section 2.3), this is precisely the condition under which the compensation issue is critical and implementation difficulties most serious. Complementarities among high income countries are more likely to arise among countries with similar per-capita incomes. This is because the bulk of high-income countries' trade is of intra-industry nature which correlates negatively with differences in per-capita incomes of partner countries.

2.2 Designing A Welfare-Improving FTA in the Presence of QRs

Can a welfare improving FTA always be designed? Yes. This is the essence of the Kemp and Wan (1976) analysis. These authors demonstrate that under very standard assumptions, A and B can adopt a set of common external tariffs which improve their welfare without hurting the outside world. The essential idea is that the common set of tariffs may be chosen in such a way that the

external terms of trade and hence the quantities traded with the outside world are unchanged while internal trade is rearranged to maximize the gains from it.

The Kemp-Wan result has important implications for the analysis of FTAs in the presence of quantitative restrictions (QRs). These implications have not been explored in the literature so far and will be considered here briefly. In Figure 2, we look at the two-good model. Suppose that initially A restricts its total imports to GH by a global quota. Assuming that quota licenses are auctioned competitively to domestic residents, quantity GL will be imported from B and LH from C. If we now introduce an FTA such that C is subject to a quota at its original level of imports (LH) while imports from B are freed of any restrictions, total imports will expand. Subtracting quantity L_H horizontally from $M_1^A M_1^A$ everywhere, we obtain $M_1^{A'} M_1^{A'}$ as the demand curve facing B. This yields SF quantity of imports from B and $FN (=LH)$ from C. Once again, as in Figure 1, we have a positive effect (horizontally shaded area) on A due to reduced gap between the domestic and border prices and a negative effect (vertically shaded area) due to a deterioration in the terms of trade with B. The net welfare effect on A is ambiguous in principle although as drawn it loses.

Country B necessarily gains in this case. This gain, represented by area $SFRP_1^C$, is larger than the vertically shaded loss of country A. Therefore, B can compensate A, should it lose from the FTA on balance. The FTA leads to unambiguous benefits for the union as a whole. In the spirit of the Kemp-Wan result, the FTA has not reduced trade with the outside world and has expanded trade between the partners. The outside world's welfare is unaffected so that the FTA improves the world welfare as well.

2.3 The Compensation Issue

In the preceding sub-sections, we have considered regional integration from the viewpoint of the union as a whole. We implicitly relied on lump sum redistributions between partners to ensure

that neither partner loses. In practice, compensation mechanisms are difficult to implement, particularly in developing countries. Because a detailed discussion of the issue is contained in the paper by Foroutan (forthcoming), we confine ourselves here to brief remarks.

Partner countries in integration schemes in developing countries often have very diverse levels of per capita incomes. If integration leads to a migration of industries from the poor to the relatively more advanced economies, compensation is essential. In some cases, special funds are created to help the industrial development of the poorest members. The criteria for contributions to and disbursements from these funds often become contentious, leading to very complicated formulas that generally defy economic logic.

In the case of CEAO and UDEAC in Africa, unions have provided for preferential duties on industrial products based on the protection needs of the poorer of the members. This has resulted in different tariff rates for the import of the same product depending on the source. The duty is lower on imports coming from the least developed members and higher on others.

2.4 FTA vs. UTL

We now consider what is perhaps the strongest criticism of the regional approach from the viewpoint of small economies: An FTA is usually dominated by unilateral trade liberalization.

To begin with, observe that in Figure 1 country A's welfare is maximized by liberalizing its trade unilaterally. That is to say, the FTA with B is welfare inferior to unilateral free trade. Moreover, the same conditions which make FTA desirable (e.g., high initial tariff) make unilateral trade liberalization even more desirable. Thus, there is nothing which B can offer A that the latter cannot get on its own. Why should A then bother to enter a bilateral arrangement with B?^a

A number of complications must be introduced to answer this question. Before we do so, however, it is useful to introduce a dramatic example. Suppose the developed and newly

industrialized countries are divided into three blocs: North America, Western Europe and East Asia. Also suppose that each one of these blocs allows free internal trade but imposes high duties or voluntary export restraints on extra-bloc imports. Under these circumstances, will developing countries in Africa, Asia and Latin America benefit more from unilateral trade liberalization or from joining one of the blocs? Common sense dictates that the latter option is likely to be welfare superior even though it involves adopting and maintaining the bloc's barriers to trade with extra-bloc countries. In sections 2.4.1 and 2.4.2, we develop the argument underlying this example.

2.4.1 Partner Country Tariffs. A natural starting point is the introduction of tariffs in B.⁹ Figure 1 assumes that B is a free trader even before the FTA is formed. This means that B has nothing to offer A as a part of the FTA agreement. In practice, B will have tariffs initially and an FTA will buy A a tariff free access to B's markets. In terms of Figure 1, the deterioration in A's terms of trade which accompanied the FTA need not take place. Indeed, B may end up offering it better terms of trade than C, making FTA a better option than unilateral liberalization. It turns out, however, that this cannot happen unless B chooses a suboptimal option for itself.

In Figure 3, solid curves show A's general-equilibrium demand for imports of good 1 and B's general equilibrium supply of exports of the same good under free trade. The horizontal line gives C's supply price which A and B are too small to influence. Both A and B impose tariffs in the initial equilibrium. The tariff in A causes its import demand as perceived by B and C to shift down to the dashed curve. The tariff in B causes its supply-of-export curve as perceived by A and C to shift up as shown by the upward sloped dashed curve.¹⁰ In the presence of nondiscriminatory tariffs, A and B trade along dashed curves at the price offered by C. A imports ML and B exports RL. It is not necessary for A and B to trade but if they do, B exports up to ML to A and MR to C. Domestic prices in the two countries are given by their respective solid curves. For each country, the gains from trade are measured by the area enclosed by the world price, quantity traded, and its solid curve.

If A now liberalizes unilaterally, its imports will rise to LN and its welfare will improve. The critical question is can A do better by forming an FTA with B. Suppose A and B eliminate tariffs between themselves and impose prohibitive tariffs on C. This will yield G as the equilibrium with A benefitting more than from unilateral trade liberalization.

Does this suggest that the FTA in the present case is superior to unilateral free trade? The answer is in the negative. For we have not said anything yet about B's welfare. As is easy to see from Figure 3, compared to point G, country B can improve its welfare by liberalizing unilaterally and moving to point S. The FTA can be superior only if A could compensate B to ensure the latter the income level at S and still come out ahead relative to unilateral liberalization. This is impossible, however, since the amount by which A's income at G exceeds its income at N is less than the required compensation by area NGS. Looked at differently, combined gains from trade of A and B under unilateral liberalization are larger than those under an FTA by area NGS.

The conclusion from this discussion is that partner country tariffs do not negate the overall superiority of unilateral trade liberalization over regional integration. Only if one of the countries -- country B in Figure 3 -- is willing to accept a suboptimal position for some exogenous reasons (e.g., political hegemony), can the other country benefit more from an FTA than from unilateral liberalization.

2.4.2 Third Country Tariffs. Another possible explanation for a preference for an FTA over unilateral trade liberalization is the presence of trade restrictions and/or transport costs in the outside world, country C. Thus, suppose that there are tariffs initially in not just A and B but also in C. This means that if C is a buyer of good 1 in the world market, it will offer a price lower than its internal price. Similarly, if C is a seller of good 1 in the world market, it will charge a price higher than its internal price.

In Figure 3, suppose now that C's selling price is p^C , its buying price is $p^{C'}$, and its internal price is somewhere in the middle. This means that B no longer has the option of trading at R. Indeed, the terms offered to it by C, $p^{C'}$, are worse than those offered by A. Likewise for A, the terms of trade offered by B are better than those offered by C. The two countries will trade with each other at H. Now if A and B eliminate tariffs on each other, they can trade at G and both do better than if only one of them was to liberalize trade unilaterally. The FTA turns out to be superior to unilateral trade liberalization.¹¹

An important point to note is that in this example, there is no difference between an FTA and complete free trade by A and B. High tariffs in C make that country irrelevant for optimal trade policies in A and B. In order to reach G, A and B do not need any external tariffs. In this sense, the only role of an FTA is to solve the prisoners' dilemma for the two countries and bring them to the negotiating table.

A useful application of the example provided in this subsection is that if the world gets divided into inward-looking blocs, unilateral trade liberalization will become a less attractive option for the countries outside the bloc than it is today. The countries will then be better off either seeking access to one of the blocs and adopting its trade policy or engaging in regional integration so as to promote freer trade among themselves.¹² Of course, the current world being quite far from consisting of closed blocs, the example does not justify a preference for regional integration over unilateral trade liberalization.

2.4.3 The Import Substitution Objective. The most common justification for pursuing regional integration instead of unilateral liberalization comes in the form of an implicit or explicit noneconomic objective. In the early development literature, industrialization via import substitution was considered an eminently respectable objective. This, either on grounds of infant industry,

"training ground argument" or other reasons, meant that the option of unilateral free trade was simply not available. Under such circumstances, an FTA which, in the spirit of Kemp and Wan, keeps the imports of industrial goods from country C fixed and exploits the gains from specialization between partner countries is beneficial.¹³

During the sixties, the import substitution objective played a key role in the proliferation of regional integration schemes in the developing world. But the gains from specialization expected of various schemes were not realized for reasons we need not go into here. Suffice it to note that today the policy environment has changed dramatically and import substitution as a policy objective has fallen out of favor with policy makers except perhaps in the early stages of development. This means that an FTA as an alternative to unilateral trade liberalization is harder to defend on grounds of import substitution.

2.4.4 The Tariff Revenue Constraint. Another objective which may preclude free trade as a viable option is tariff-revenue constraint. In many developing countries, domestic-tax machinery is limited and they must rely on trade taxes as the major source of revenue. In this situation, the option of unilateral trade liberalization is simply not available and we can ask whether regional integration may be a superior option than nondiscriminatory tariffs.

For concreteness, assume that A and B choose their initial revenue-constrained tariffs optimally. With some qualifications, this implies relatively high tariffs on goods with low elasticities of demand. If A and B now form an FTA, they will have to restrict their tariff structure so as to impose no tariffs on each other's goods. Under standard assumptions, including fixed world prices, this restriction will lead to a lower level of welfare. The same forces which make unilateral free trade superior to an FTA under standard assumptions make nondiscriminatory tariffs superior to preferential tariffs in the presence of a revenue constraint.

2.4.5 Economies of Scale and Product Differentiation. During the first wave of regional integration arrangements, many economists relied on the notion that an FTA can serve as vehicles for the exploitation of economies of scale. Yet, broadly speaking, scale economies by themselves do not make regional integration superior to unilateral trade liberalization.¹⁴ Intuitively, if the minimum cost of production of a good along the long-run average cost curve is below the world price, both potential partners in the FTA should expand production until the marginal cost is less than or equal to the world price. They should then consume domestically as much as is demanded at the world price and export the residual. Goods for which minimum cost is above the world price should not be produced. Unilateral free trade will generally ensure this outcome.

If the case for regional integration over unilateral trade liberalization already exists due to considerations cited in sections 2.4.2 or 2.4.3, scale economies generally make it much stronger. This is perhaps the reason why economies of scale are often a part of the case for an FTA. The point can be illustrated with the help of two examples of which we develop the first one in detail and refer the reader to Corden (1972) for the second one: (i) an import substitution objective involving a target level of industrial output as in Section 2.4.2; and (ii) tariffs and transportation costs on exports to the outside world which limit access to the latter's market as in Section 2.4.3.

Suppose that both A and B have a target level of aggregate import-competing industrial output. As noted before, starting from a nondiscriminatory tariff, the two countries can benefit from an FTA under such circumstances even under constant returns. If scale economies are present, however, the gains from specialization are likely to be larger. For specialization in the presence of scale economies yields gains in the form of larger rectangular areas rather than conventional triangular areas. Thus, the case for an FTA is stronger.

The above analysis assumes (implicitly) that products are homogeneous and the scale economies are external to the firm.¹⁵ Suppose now that scale economies are internal to the firm and

products are differentiated. These assumptions drive us automatically into the world of imperfect competition, where individual firms are able to exercise market power. In view of market power on the part of firms, potential partners in an FTA cannot be viewed as small in relation to the outside world. Therefore, their optimal tariffs are positive and UTL is nonoptimal even in the absence of the import substitution objective.

Beyond this point, the implications of imperfect competition are rather complex. Depending on the behavioral assumptions, a myriad of models can be constructed.¹⁶ We resist temptation and restrict ourselves to the monopolistic competition model. On balance, the results which emerge from this model are intuitively more plausible than those arising from oligopoly models.¹⁷

Assume that potential partners consume differentiated goods for which markets are monopolistically competitive and that consumers appreciate variety. Starting from an initial protected equilibrium, formation of an FTA can yield two additional types of gains not available in the conventional models. First, after the FTA is formed, each partner will have tariff-free access to the varieties produced by the other. To the extent that consumers prefer more variety to less, welfare must rise. Second, as the market for each variety is likely to be larger in the post-FTA equilibrium, its scale of operation will expand. Given decreasing costs, this will yield further gains.

Against these gains, we must weigh the losses which are likely to accrue from increased distortion between varieties imported from the partner country and those imported from the outside world. Preferential tariff reduction will reduce imports from the outside world, which is harmful for members of the FTA. Although, in general, the net result is ambiguous, there is a strong presumption that due to decreasing costs welfare will rise. Indeed, if the members freeze their vectors of imports from country C, the FTA will be unambiguously welfare-improving.

Two important policy implications of this analysis may be noted. First, to the extent that intra-industry trade is predominantly among rich countries, these gains are less relevant to FTAs

between poor countries. Second, contrary to the results based on models of inter-industry trade, similarity among partner countries does not diminish the case for FTAs when potential trade is of the intra-industry variety.

2.5 FTA vs. PTA

We now show that preferential trading arrangements can be superior to an FTA. That is to say, partial preferences can yield a better outcome than a 100 percent preference granted under FTAs.

The point is made most easily with the help of a three good model in which each of A, B, and C exports one good and imports two goods.¹⁸ Goods imported into each country from the other two – say, those into A from B and C – are imperfect substitutes. A and B are small with respect C so that their terms of trade are fixed. Given symmetry in the trade pattern, we need to consider the effects of a PTA on one partner only, say A. The effects on B are similar.

Denote the goods exported by A, B, and C by 1, 2, and 3, respectively.

Assume that initially, A imposes the same ad valorem tariff on B and C. That is to say, the initial marginal distortion across B and C is the same. Suppose now that the tariff on B is lowered by a small amount. This will raise imports of good 2 and, given substitutability, lower imports of good 3 and raise exports of good 1. Because exports rise, there is a net expansion of imports implying that imports of good 2 expand more than the contraction of imports of good 3 at world prices. The initial distortion in the two imports being the same, the gain from increased imports of good 2 is larger than the loss due to reduced imports of good 3. The PTA is welfare improving.

As we lower the tariff on good 2 further, net imports will continue to expand. But the gain from the expansion of imports of good 2 will be evaluated at the lower tariff than the loss from the contraction of imports of good 3. Therefore, there is no guarantee that welfare will continue to rise as we lower the tariff on good 2. Indeed, assuming monotonicity, we can find a critical, second-best

optimal tariff at which the gains in good 2 from a small additional reduction in tariff are exactly offset by the losses in good 3. Any reductions beyond this tariff rate will lower welfare. By obvious extension, an FTA which pushes the tariff on good 2 down to 0 will yield a lower welfare than the PTA with the second-best optimum tariff.

This conclusion clearly brings into question the wisdom of the GATT Article XXIV which prohibits PTAs but permits FTAs and CUs. Viner provided at least two reasons why in practice a 100 percent preference may be superior to something less than that. First, there are likely to be some economies in administrative costs. "The burden on trade of a customs tariff,..." reasoned Viner, "arises...also from the costs involved, for exporter and importer, in meeting the customs regulations, and the costs involved, for the tariff-levying government, in administering the customs machinery. These costs are often, in fact, more important than the duties themselves as hindrances to trade..."

A second and perhaps more important reason for the preference for an FTA over PTA is that even though superior PTAs exist, there is no guarantee that those are the ones that will be picked. It is entirely possible, even plausible, that the PTAs that are actually picked are inferior to the FTA.

Once again, it is worthwhile to quote Viner,

Customs Union...involves a cross-the-board removal of the duties between the members of the union; since the removal is non-selective by its very nature, the beneficial preferences are established along with the injurious ones, the trade-creating ones along with the trade-diverting ones. preferential arrangements, on the other hand, can be, and usually are, selective, and it is possible, and in practice probable, that the preferences selected will be predominantly of the trade-diverting or injurious kind. (Viner, 1950, pp. 50-51).

2.6 FTA vs. CU

An issue of great significance in the formation of regional integration schemes is whether the countries should retain their own tariffs (FTA) or erect a common external tariff (CU) on extra-union partners. Economists are divided on this issue.

There are three main arguments given in favor of FTAs. First, they do not result in an increase in tariffs in member countries. By contrast, when a common external tariff is imposed, countries with lower initial tariffs are able to raise their tariffs. This is because Article XXIV of the GATT requires that the external tariff be no higher than the average of the tariffs in the partner countries prior to the formation of the union. Second, an FTA gives the member countries a greater freedom to pursue their trade policy reforms. In a customs union, more reform-oriented countries may find their hands tied by the agreement to maintain a common external tariff. If lobbies are powerful, the common external tariff may be set at a level high enough to protect producers in the least efficient country in the union. Finally, due to enforcement difficulties under an FTA, the union finds itself importing goods through the border of the country with the lowest tariff. This puts pressure on countries with higher tariff to bring their tariffs down to the level of the least protective country. Thus, there are dynamic processes at work in favor of ever declining tariffs under an FTA.

In principle, at least some of these arguments can be turned on their heads. First, if a customs union is formed, the least protective country can force the more protective countries to lower their tariffs to its level. This will make the likelihood that integration is welfare improving higher and result in a lower cost to the rest of the world. Second, in practice, FTAs are accompanied by elaborate rules of origin and content requirement which become powerful instruments of protection. In a customs union, such rules are *not* required. Finally, if protection lobbies are active, their effectiveness may be diluted in a customs union since the latter requires union-wide lobbying, whereas under an FTA tariffs are responsive to the lobbying at the national level. In the ultimate, the issue would seem to hinge on whether we can expect institutional arbitrage across countries (in the sense of section 3) to lead to superior outcomes for all, in which case a CU would be preferable. If such arbitrage leads to worse outcomes, then it is better to leave each country with its own external tariffs. Perhaps put differently, if the "center" country, when one exists, has a clean trade policy, a CU can

be more desirable, since we can expect that region-wide tariff policies will be determined more by this country.

2.7 Strategic Advantages of an FTA

Up to this point, we assumed that the union is small in relation to the outside world. We now allow these terms of trade to change and consider the strategic advantages of an FTA for union members. Our discussion is in two parts. First, we summarize the effects resulting directly from the formation of an FTA. Second, we discuss the gains which may arise from increased bargaining power of the union vis-a-vis the outside world.

In the two-good model of Figure 1, the terms of trade effects of an FTA are straightforward. Suppose that C's supply price is not constant but increases with quantity. At a constant price of C, formation of an FTA reduces the demand for imports from C. This leads to a decline in C's price. Formation of an FTA improves the union's terms of trade vis-a-vis the outside world.¹⁹

The second type of gain from an FTA can result from increased bargaining power of the union. The terms of trade of union members depend not merely on their external tariffs, but also on tariffs imposed on them by the outside world. To the extent that the level of these tariffs can be influenced through bargaining, an FTA which increases the joint bargaining power of member countries can confer further gains on the latter. Interestingly, unlike the first type of gains, these gains need not come at the expense of the outside world. The union as well as the outside world may benefit from mutual tariff reduction.²⁰

Viner provides several examples from history where decisions to forge economic unions were influenced, in part, by expected gains from increased bargaining power with respect to other countries. In the U.S., the Articles of Confederation had left each state with its separate tariff. The argument that this put the United States at a disadvantage vis-a-vis Britain and other European

countries in matters of commercial policy was instrumental in mobilizing public opinion in favor of a federal union with a centralized tariff policy. The recent movement for a "United States of Europe" sprang in large part from the feeling that a European economic union was necessary to deal with a large America.

A case can be made that the existence of the EC has been instrumental in allowing Western European countries to cut out better deals with the U.S. in bargaining tariff reductions than would have been possible if they had dealt individually with the U.S. More recently, the restraint shown by the U.S. towards the EC in using Super 301 threats is a direct result of the EC's ability to inflict injury on the U.S. through retaliation. By contrast, the U.S. has used this instrument with relative ease against individual countries such as Japan, Brazil and India.

Bargaining power of a union is a direct function of its economic size relative to the outside countries with which it must negotiate. In this respect, formation of the EC did prove beneficial to its member countries. By contrast, economic unions in Africa and Latin America were much too small relative to their counterparts in the developed world (see papers by Foroutan, and Nogues and Quintanilla). As a result, any expectations of these countries regarding benefits from joint negotiations with the U.S. and the EC were bound to result in a disappointment.

2.8 Implications for Efficiency

The above discussions give some clues about the likely effects of RI arrangements. First, countries with high barriers to trade (e.g., India) are likely to benefit most from unilateral trade liberalization. The gains from such liberalization are likely to be much bigger than those from FTAs. Only if the world is divided into closed trading blocs is regional integration a superior option. Second, in the absence of closed trading blocs, the case for FTAs must be based on an exogenous objective such as import-substitution industrialization. Third, economies of scale by themselves do

not provide a reason for justifying regional integration over unilateral trade liberalization. If there are other reasons for a preference for regional integration, however, economies of scale can reinforce them. Fourth, regional integration among low-income, developing countries is unlikely to yield major gains. This is because either these countries import very similar goods from developed countries or differences in income levels among them lead to very diverse distribution of gains. In the former case, gains from specialization between partner countries are limited while in the latter case compensation schemes which emerge are highly distortionary. Fifth, similarity in per-capita incomes reinforces the gains from regional integration among developed countries. Sixth, a priori, it is not clear whether an FTA is superior to CU. Much depends on how these are implemented. Finally, the larger an FTA, the greater the strategic advantages. For instance, the EC has been generally insulated from the Super 301 threats of the U.S. while countries such as Japan, India and Brazil had to face these threats.

As a prelude to the next section, nothing has been said explicitly so far about North-South integration, which has been gaining popularity in recent years, e.g., Mexico and the U.S. Countries engaged in this type of integration have relatively free trade regimes (the average Mexican tariff is 9 percent). The gains for a developing country from integration with a rich country go beyond the trade efficiency gains discussed here. First, should the world get divided into inward looking blocs, such integration guarantees future access to a large market.²¹ With this large market, the competitive pressure to ensure efficiency and availability of new technology is also guaranteed. Second, such integration involving international obligations ensures that the country's reforms will not be reversed. This is critical for the credibility of the country's policies. Finally, as a part of the integration effort, the country may be able to import pro-growth economic institutions (e.g., more liberal labor markets, stable macroeconomic policies, etc.) of the developed country.

We now proceed to develop this last point in greater detail.

3. Institutional Dimensions of RI

The implications of RI go beyond trade in goods, services, and factors. Almost by definition, any regional arrangement worth its name entails the imposition of some common rules of conduct on the countries entering the arrangement and a set of reciprocal commitments and obligations. Regional integration thereby enforces a certain degree of arbitrage among national institutions, just as it brings about arbitrage in markets for goods and services. The importance of this political dimension of RI may well exceed that of the more direct implications having to do with trade flows.

That the effects of RI can extend beyond trade has long been recognized. More than two decades ago, Hirschman argued that surrendering autonomy to supra-national authorities had both costs and benefits for governments:

[C]ommon markets would not only provide preferential treatment for the industrialists of the participating countries; for these mutual arrangements to be durable, monetary and foreign exchange policies would have to become more uniform and stable than they have been; and such a development would be even more important than the customs preferences themselves in promoting exports from the common market countries, not only to each other, but also to third countries. It is, however, precisely the prospect of less freedom of movement in monetary and foreign exchange policies which makes national governments so skittish about entering effective common market commitments. (Hirschman, 1971, 122.)

The issues go well beyond monetary and foreign exchange policies, and skittishness about losing autonomy is not confined to them alone. RI can also serve as a conduit for industrial policies, environmental preferences, social and welfare policies, and so on.

If the cost of integration is reduced autonomy, the benefit (as Hirschman suggests) may be superior economic outcomes. Much of the recent trend towards regional integration can be understood as reflecting the desire of certain countries to "borrow" or "import" desirable institutions from their neighbors. A central aim of the exchange-rate mechanism of the European Community was to enhance the credibility of anti-inflationary policies by effectively surrendering monetary

autonomy to the Bundesbank. By entering a quasi-irrevocable arrangement in the context of the NAFTA, the Mexican government is as anxious to cement its new, open trade policies as it is in obtaining specific trade privileges via the arrangement.²² In both cases, regional integration is used to commit to desirable policies in a context where discretion is feared to produce sub-optimal results.

The literature on rules versus discretion provides the natural reference point for evaluating such institutional implications (see Fischer, 1990, for a survey). However, we should be clear that membership in an RI scheme does not purchase commitment in any direct way. The arrangements that occur in practice rarely involve the complete subordination of a member's preferences to exogenous rules or to the preferences of another member. We will highlight here three other channels through which regional institutions can alter economic outcomes.

(a) The preference-dilution effect. Irrespective of the institutional setup, a regional arrangement implies a larger political community and hence a smaller role in determining policy for politically-important groups in each of the countries. This renders decision-making less responsive to factional interests, and may thereby enhance efficiency.

(b) The preference-asymmetry effect. Unless members have identical economic structures and preferences, policy-making at the regional level will have to compromise over the perceived needs of different countries. Somewhat paradoxically, the compromise solution may present a more efficient outcome for some members than could be obtained in the absence of integration. For others, the compromise solution may be worse.

(c) The institutional-design effect. Within established nation-states, policy makers have to live with the inherited institutional setting. But when a regional institution is set up from scratch, it may be possible to optimize in the choice of certain institutional dimensions in a way that would not normally be possible in the domestic context. This greater flexibility in institutional design may enhance efficiency in all members.

3.1 An Exploratory Model

To make these arguments more concrete and to draw some implications, we now turn to a simple model. As in the rules-versus-discretion literature, our focus is on the interaction between governments and their private sectors, and the changes in this interaction that would follow from integration. We develop the case of a single country first, and then turn to the case where two countries become integrated.

We suppose that government behavior can be summarized by a quadratic-loss objective function which allows for both an economic motive and a non-economic ("political") motive:

$$G = -[(\bar{g} - g)^2 + \gamma (\theta - g)^2] \quad (1)$$

The government's choice variable is denoted by g . It represents government intervention on some relevant policy dimension (e.g., trade protection, industrial subsidies, aggregate demand-management policies, etc.). The optimal level of g in a strictly economic sense is given by $\bar{g}$. Hence, the first term in the above expression captures a purely economic motive in government decision-making. In addition, we suppose that the government comes under pressure to intervene on account of political motives also, represented here by the second term in (1). Politically-powerful groups in the private sector have a most preferred level of intervention given by θ . The second term captures the idea that the government pays a penalty whenever g diverges from θ . γ is the relative weight placed by the government on the political motive. We attach no normative importance to this objective function; it is simply meant to characterize government behavior in a transparent fashion.

The level of θ is endogenous, and is selected by a lobby representing politically-active groups in society. These groups derive private benefits from government intervention, but they also bear a cost whenever g diverges from the economically most efficient level. This trade-off is represented by a utility function of the following sort:

$$U = \alpha g - (\theta - \bar{g})^2 \quad (2)$$

The first term here represents the private benefits of government intervention, while the second term stands for its economy-wide costs. These costs are positive whenever the private-sector lobby expresses a preference for a g that is different from $\bar{g}$, and they are assumed to be partly internalized by the lobbying group.

The game proceeds as follows. In the first stage, the private-sector lobby announces θ , its most preferred level of government intervention, taking into account how the government will respond to this announcement. In the second stage, the government determines its optimal level of g , taking θ as given. As we shall see, in this sequence the government suffers a loss in welfare from being unable to precommit to a specified level of g in advance of the political process.

We solve the second stage of the game first. Maximizing (1) with respect to g yields:

$$g = (1 + \gamma)^{-1} (\bar{g} + \gamma \theta) \equiv g(\theta) \quad (3)$$

This is the government's best-response function with respect to θ . In the first stage of the game, the lobby in turn maximizes (2) subject to (3). The solution is:

$$\theta = \bar{g} + \alpha \gamma / 2 (1 + \gamma) \quad (4)$$

which is larger than $\bar{g}$ as long as $\alpha > 0$. Substituting this back in (3), we get the equilibrium level of government intervention:

$$g = \bar{g} + (\alpha/2) [\gamma/(1 + \gamma)]^2 \quad (5)$$

Hence g exceeds $\bar{g}$ as long as α and γ are both positive. Therefore, there is more intervention than is economically desirable. We can also show that:

$$(\theta - g) = (\alpha/2) [\gamma/(1 + \gamma)]^2 > 0, \quad (6)$$

which implies that the government chooses to moderate the lobby's demands. For future reference, we plug (5)-(6) in (1) to express the value taken by the government's objective function in the non-integrated equilibrium:

$$G_N = -(\alpha^2/4) [\gamma/(1 + \gamma)]^3 \quad (7)$$

By being responsive to political pressure, the government suffers a cost. To see that this cost originates from the specific timing of moves adopted here, suppose that we reverse the order of moves. Now the government can precommit to a specific level of g . Since the lobby moves second, it must take g as given. In view of (2), its optimal θ is then equal to $\bar{g}$. In turn, the government can maximize (1) by setting $g = \bar{g}$. Hence, when the government can precommit, its objective function attains its bliss point (of zero). We can interpret this framework also in terms of time-inconsistency: the government's optimal ex-ante policy diverges from its optimal ex-post policy. We note that the private-sector lobby is the beneficiary of this time-inconsistency, as it attains a higher level of utility when the government cannot precommit than when it can.

3.2 Modeling Regional Integration

We now turn to the case where two countries decide to integrate. We model this integration by requiring that the level of government intervention be the same in the two economies. We suppose that the two countries differ only with respect to the economically desirable level of intervention.

Hence, the foreign government's objective function is given by:

$$G^* = -[(\bar{g}^* - g^*)^2 + \gamma (\theta^* - g^*)^2], \quad (8)$$

while the private-sector lobby in the foreign country maximizes:

$$U^* = \alpha g^* - (\theta^* - \bar{g}^*)^2. \quad (9)$$

Note that α and γ are common to the two countries.

How is decision-making accomplished at the regional level? It is natural to think that the regional institution will maximize an objective function that has the same structure as the ones in the two countries:

$$G_r = -[(\bar{g}_r - g)^2 + \gamma(\theta_r - g)^2], \quad (10)$$

where the subscript "r" refers to the regional institution. To save on notation, we do not subscript g , as this is now common to both countries -- it may stand, for example, for the common external tariff. As this expression makes clear, there are basically two issues here: first, given that $\bar{g}$ and $\bar{g}^*$ differ, what objective does the center see itself as fulfilling (i.e., what is $\bar{g}_r$)? Second, as the respective lobbying demands θ and θ^* may in principle differ also, how does the regional institution "aggregate" these preferences (i.e., what is the relationship between θ and θ^* , on the one hand, and θ_r , on the other)? We make what seems to be the neutral assumption by equating $\bar{g}_r$ and θ_r to the averages of the preferences in the two countries. That is,

$$\bar{g}_r = \frac{1}{2}(\bar{g} + \bar{g}^*) \quad (11)$$

$$\theta_r = \frac{1}{2}(\theta + \theta^*). \quad (12)$$

Note that having the regional institution maximize the sum of the two governments' objective functions would yield equivalent results to the approach taken here.²³

Now we can solve for the outcome of the game under regional integration once again by working backwards. The regional institution's best-response function is:

$$g = (1 + \gamma)^{-1}(\bar{g}_r + \gamma\theta_r) = g(\theta_r). \quad (13)$$

The national lobbies in turn maximize their objective functions, internalizing this best-response function, but taking the actions of the other lobby as given. Using (12), this yields:

$$\theta = \bar{g} + \alpha \gamma / 4(1 + \gamma) \quad \text{and} \quad \theta^* = \bar{g}^* + \alpha \gamma / 4(1 + \gamma) \quad (14)$$

By comparing (14) with (4), we can see that regional integration moderates the national lobbies' demands for intervention. The reason is simple: each lobby now has a smaller impact on decision-making, as the central institution has to contend with not one but two groups clamoring for attention. Since the marginal benefits of lobbying have gone down, the groups rationally choose to do less of it.²⁴ This is the preference-dilution effect mentioned above.

That larger political communities may be less susceptible to harmful factionalism is in fact an old insight. This was one of the main arguments used in The Federalist Papers in support of a "well-constructed Union" of American states. As James Madison argued, individual factions could well come to dominate the political agenda in small political communities, but they would be unlikely to do so in a federal setup where they would have to contend with many more pressure groups:

The smaller the society, the fewer probably will be the distinct parties and interests composing it; the fewer the distinct parties and interests, the more frequently will a majority be found of the same party; and the smaller the number of individuals composing a majority, and the smaller the compass within which they are placed, the more easily will they concert and execute their plans of oppression. Extend the sphere, and you take in a greater variety of parties and interests; you make it less probable that a majority of the whole will have a common motive to invade the rights of other citizens; or if such a common motive exists, it will be more difficult for all who feel it to discover their own strength and to act in unison with each other. (Hamilton et al., 1981 [1787], 22.)

However, note that θ and θ^* also depend on $\bar{g}$ and $\bar{g}^*$, respectively, so that the overall pressure for intervention may not be reduced for both countries simultaneously. Combining (12) and (14),

$$\theta_i = \bar{g}_i + \alpha \gamma / 4(1 + \gamma) = \frac{1}{2}(\bar{g} + \bar{g}^*) + \alpha \gamma / 4(1 + \gamma). \quad (15)$$

On account of the second term, each of the two countries experiences a reduction in lobbying (cf. [4]). But the effect of the first term works differently for the two countries. This is the preference-asymmetry effect mentioned above. If $\bar{g} > \bar{g}^*$, the home country gets an additional reduction in lobbying from regional integration, while the foreign country gets an offsetting increase. Using (14), we can now state the equilibrium level of intervention in the union:

$$g = \frac{1}{2} (\bar{g} + \bar{g}^*) + (\alpha/4) [\gamma/(1 + \gamma)]^2. \quad (16)$$

Comparing this with (5), we can see that the direction of change in g after integration depends on the relative magnitudes of the preference-dilution and preference-asymmetry effects. The first effect pulls g down in both countries, while the second effect reduces g in one country but increases it in the other.

Now we are ready to evaluate the consequences of integration for each of the two countries. We will do this from two different perspectives, and ask in turn: (i) does integration lead to more efficient outcomes from a strictly economic standpoint? and (ii) does integration make each of the governments better off in terms of their own objective functions, including their political motives?

3.3 Economic Consequences of RI

The economic evaluation hinges on whether integration helps close the gap between the economically desirable levels of government intervention and the actual levels chosen in equilibrium. That is, we need to check whether $(\bar{g} - g)^2$ and $(\bar{g}^* - g)^2$ are smaller under integration. Let us denote the economic component of the government's objective function by $\bar{G}$ and use the subscripts "N" and "I" to refer to the non-integrated and integrated cases respectively. Then:

$$\bar{G}_N = \bar{G}_N^* = -(\bar{g} - g)^2|_N = -(\alpha^2/4) [\gamma/(1 + \gamma)]^4, \quad (17)$$

$$\bar{G}_I = -(\bar{g} - g)^2|_I = -\left\{\frac{1}{2}(\bar{g} - \bar{g}^*) - (\alpha/4)[\gamma/(1 + \gamma)]^2\right\}^2 \quad (18)$$

$$\bar{G}_I^* = -(\bar{g}^* - g)^2|_I = -\left\{\frac{1}{2}(\bar{g}^* - \bar{g}) - (\alpha/4)[\gamma/(1 + \gamma)]^2\right\}^2. \quad (19)$$

(Asterisks denote the foreign country as before.)

Consider first the case where $(\bar{g} - \bar{g}^*) = 0$, that is when the two countries are identical. By inspection, we can see that in that case $\bar{G}_N = \bar{G}_N^* < \bar{G}_I = \bar{G}_I^*$. This is due entirely to the preference-dilution effect, and represents the beneficial economic consequence of a larger political union. This effect operates for both countries. When $(\bar{g} - \bar{g}^*) \neq 0$, on the other hand, the preference-asymmetry effect comes into play. For "small" differences, this effect benefits the country with the larger level of economically desirable intervention. The reason is as follows. In the absence of integration, government intervention is over-provided in both countries. Under integration, the preference-asymmetry effects works to reduce g in the country with the higher level of desirable interventions, and to increase it in the other country. Given the initial distortion, this benefits the first country and hurts the second. For a "large" divergence between $\bar{g}$ and $\bar{g}^*$, however, both countries are made worse off by integration.

Finally, note an important implication. As the number of countries entering an arrangement increases, the condition that each must be made better off becomes more and more stringent, as long as the countries are not identical. Hence the relatively small number of participants is one significant advantage of regionalism over multilateralism.²⁵

We have assumed so far that the regional institution selects as its target for intervention the simple average of the two countries' targets [i.e., $\bar{g}_r = \frac{1}{2}(\bar{g} + \bar{g}^*)$]. As discussed above, this creates a

positive externality for the high-intervention country and a negative externality for the low-intervention country. Now suppose that the regional institution can be designed in a manner that would maximize the joint economic benefits to the two countries. In terms of the present framework, this would allow us to select the weighting of the two countries' economic targets in an optimal manner. That is, through weighted voting or other means, the regional institution's objective function could be altered to the benefit of both economies. Hence we now assume that the countries could jointly commit to an institutional setup at the regional level, even though they cannot commit to particular policies, once the institutions are in place. The fact that these institutions are being set up from scratch may enable such institutional engineering at the international level when they are ruled out domestically.

The analysis proceeds as before, except that the game is now in three stages, with the first stage of the game consisting of choosing the weighing scheme that determines the importance to be attached by the regional institutions to each countries' bliss points. It can be shown [see de Melo, Panagariya and Rodrik (1992)] that the institutional-design question will result in putting a larger weight on the low-intervention country's preferences.

3.4 Political Consequences of RI

Our framework suggests that political considerations and the constraints placed by private-sector lobbying activities should be taken into account in evaluating the benefits of RI. For the same reasons, political considerations should also weigh heavily in the determination of when countries are likely to enter regional arrangements.

The maximized values of G and G^* in the absence of integration are:

$$G_N = G_N^* = -(\alpha^2/4)[\gamma/(1 + \gamma)]^3, \quad (20)$$

Using (14) and (16), we obtain the analogous expression under integration:

$$G_1 = G_1^* = - \{ [(1 + \gamma)/4] (\bar{g} - \bar{g}^*)^2 + (\alpha^2/16) [\gamma/(1 + \gamma)]^3 \} \quad (21)$$

Consider first the case where the two countries are identical and $\bar{g} = \bar{g}^*$. In this case, integration is unambiguously beneficial. This derives entirely from the preference-dilution effect discussed above. Integration reduces the influence of the national lobby, and allows the government to get closer to achieving its dual objectives. When $\bar{g} \neq \bar{g}^*$, on the other hand, the benefits of integration are unambiguously reduced for both partners. The reason is that any economic gains from preference asymmetry are offset by political losses arising from a wider gap between the national lobby's preferences (θ and θ^*) and the common level of intervention. This captures the political cost of giving up national autonomy: while economic performance may be improved, this comes at the cost of a reduction in the government's ability to satisfy politically-important groups' demands. On balance, asymmetry hurts. A comparison of (20) and (21) makes clear that regional integration would not pay for either government when $\bar{g}$ and $\bar{g}^*$ are too far apart.

To summarize, regional integration entails a commitment to abide by supra-national rules. However, since these rules are endogenous and chosen by governments themselves, there is no real sense in which integration can solve the dynamic-inconsistency problems that afflict policy making. What integration can do, as this framework has highlighted, is to alter the parameters of the situation in certain ways to alleviate the costs of dynamic-inconsistency. Hence regional integration can help governments achieve superior outcomes, even when integration does not involve specific commitments to either other partners' policies or to arbitrarily selected policies. Under certain conditions, the arbitraging of institutions across national borders can be mutually beneficial. But regional partners have to cross a threshold of similarity before integration can become beneficial in this institutional sense and, as argued by Winters in his contribution to this volume, the adoption of common policies and common rules become additional objectives in their own right.²⁶

4. Growth Effects of RI Schemes

The institutional considerations discussed above suggest that successful RI schemes benefit from a convergence in objectives, from having few partners, and from the willingness of countries to surrender some national autonomy and to commit to supranational rules. If these institutional considerations are met, it is likely that dynamic gains, reflected in higher growth, will be reaped. We have not referred above to the "dynamic" effects, not only because they are rarely addressed in empirical work²⁷ but also because, like scale efficiency effects, they are not particular to RI arrangements. However these effects, though difficult to identify, are in practice likely to be more important than the static efficiency effects alluded to above. On macroeconomic grounds "good" policy coordination and less instability is likely to raise long-run growth. In past RI schemes, the benefits of coordination through delegation to supra-national bodies was largely absent from developing country arrangements because of a combination of conflicting objectives (e.g., in Africa) and weak central institutions. On the other hand, such benefits were apparent in the EC. (See the contributions by Foroutan and Winters to this volume.)

The most often-cited dynamic effects are spillover effects and moving down learning curves. For example, technological diffusion is more likely to be rapid if increased competition from trade puts pressures on domestic firms to adopt these new technologies. An enlarged market also increases the stimulus for investment to take advantage of the enlarged market and to meet the expanding competition. Thus reduced barriers to trade would provide another strong impetus to the convergence predictions of neoclassical growth theory based on diminishing returns. On Gershenkronian grounds, one would argue that this catch-up effect would be stronger for developing countries provided, of course, that few impediments exist on the importation of technology from developed countries. Since

such barriers were erected rather than removed as they were part of the inward-looking development strategy, this dynamic effect was not exploited to its full potential for past developing-country RI schemes.

Perhaps the most important potential dynamic benefit for developing RI schemes comes from economic cooperation in areas where significant externalities and public goods (education, research and development, infrastructure, environment) exist. Of course, cooperation can take many different forms ranging from the simple exchange of information through the provision of joint training facilities to the mutual recognition and adoption of rules and regulations, to the implementation of joint policies and the establishment of joint institutions with quasi-legislative powers. Given the general lack of institutional development when the early RI schemes were implemented in the early sixties, it would appear that the potential for gains even from limited regional cooperation would be great.

Is there any evidence of positive dynamic effects from RI? In other work [de Melo, Montenegro, Panagariya (1992)] we look for the evidence by fitting a simple growth equation to a cross-section of 101 countries stratified into a group of OECD developed (23) and developing (78) countries. We test for the eventual influence of belonging to an RI scheme by the inclusion of a dummy variable. The model is estimated over the period 1960-85 and by subperiods (1960-72 and 1973-85). Besides investment, the explanatory variables include initial per capita income and an estimate of the stock of human capital.

We tested for the effects of RI by including dummy variables for the following arrangements (years of implementation in parenthesis): (i) among developed countries, EC (1960) and EFTA (1960); (ii) among developing countries CACM (1960), LAFTA (1960), SACU (1969) and CEAO (1974). Among the latter group, SACU (Botswana, Lesotho, South Africa and Swaziland) is an

example of a North-South RI scheme and CEAO which includes former French colonies are also part of a monetary union since they are all members of the CFA zone. ²⁸

Three results stand out. First, with one exception,²⁹ none of the integration dummies was significant. Insofar as splitting the sample controls for some of the effects of omitted variables, which would capture the effects of RI, belonging to an RI had no apparent effect on long-run growth. There is apparently no effect of membership, even for developed countries when the sample was split into two sub-periods: 1960-72 and 1973-85. To some extent this should not come as a surprise since trade liberalization was being carried out multilaterally and benefits were therefore being spread out fairly evenly. Thus there is no apparent effect of membership in terms of higher growth even for EC, EFTA and CACM during the 1960s when intra-regional trade was growing rapidly.

The second result is that splitting the sample into developed and developing country groups reveals an interesting difference in the role of investment and education in explaining growth. Investment has the expected positive (and statistically significant) sign for both groups and both periods, but the human capital variable, though of the right positive sign, is only significant for the developing country group. This result has two interesting interpretations. First, as emphasized by the "new" growth literature, human capital is a contributing factor to growth for poor countries. Second, as emphasized in the institutional analysis, and in the literature emphasizing cooperation, there would appear to be benefits from institution-building and joint training. This aspect of integration, largely neglected during the first wave of RI arrangements, would appear to promise benefits.

Third, initial income per capita enters with a negative and statistically significant sign for all regressions except for developed countries during 1973-85. This corroborates recent findings in the growth literature [e.g. Barro (1981)]. From the point of view of RI arrangements this result, which

supports the catch-up hypothesis of neoclassical growth theory, suggests that the new form of North-South RI is promising for developing country members.

The first result, however, invites a note of caution in interpreting the no-effect results on growth. It could be argued that some of the regressors are correlated with the dummy variable controlling for RI membership -- for example the investment share in GDP could be higher among RI countries because of the positive effect of membership on the macro and institutional environment. In particular, it was found that the investment rate in the EC, and especially in EFTA, was significantly higher (about 5 percentage points) than for other developed countries until 1973. This significantly higher investment rate is consistent with the positive effects that one would expect from effective integration among institutions and also corresponded to the period when the liberalization policies were strongest and the EC's relative growth performance was strongest. While this result is not strong evidence of "dynamic" effects of RI, it suggests the possibility of an association between comprehensive RI and growth. Interestingly, the same increased investment effect also accompanied the announcement of NAFTA negotiations in Mexico. [See Whalley (forthcoming)].

5. Conclusions

Where do we stand? The evidence discussed in section 4 supports earlier findings that countries involved in RI schemes did not fare any better than comparators. But then, neither was their performance any worse. The outcome was thus quite consistent with the theoretical discussion in section 2 which pointed out that conflicting factors determine the efficiency consequences of RI arrangements. However, history won't repeat itself as circumstances today are quite different from those prevailing during the first wave of RI arrangements: fewer trade restrictions, an agenda in most RI arrangements that extends beyond the measures considered under the GATT, and a new form of

integration involving reciprocal arrangements between developed and developing partners. On the whole, our conclusion is that under today's circumstances, the new form of arrangements is likely to result in a more favorable outcome for RI schemes provided that real authority is delegated to well-designed regional institutions that do more than respond to pressure groups, which is a big if.

What the discussion in section 3 showed, is that regional partners have to cross a threshold of similarity in their economic objectives before such partial surrender of national autonomy can be mutually beneficial. This has apparently occurred. The political benefits of RI are maximized by integrating with countries that are as similar as possible in their objectives. But from an economic perspective, as we discussed in section 3, there is an optimal degree of dissimilarity: Mexico hopes to benefit from NAFTA precisely because standards of government intervention and private property are much more stringent in the U.S. (and Canada) than they are in Mexico. Normally, these benefits are one-sided: continuing the example, U.S. (and Canadian) institutions may well be contaminated by the less advantageous Mexican institutions. But as we have discussed, the economic benefits of dissimilarity can be shared by all parties provided the common institutions are designed in a way that weights the objective functions of each country appropriately. Hence ability to mold regional institutions from scratch is an important determinant of the gains from integration. However, as the experience of the EC suggests, regional institutions should resist communitarising restrictive unilateral actions by members, and the necessary pragmatic approach to negotiating changes should avoid excessive compliance with provisions catering to sectional interests.

Looking ahead, the lessons are:

- (i) If the current trend of unilateral liberalization continues, integration is less likely to have negative efficiency effects and can help cement hard-fought reductions in protection.

- (ii) By including on their agenda areas not covered by multilateral negotiation, such as standards and government procurement, RI arrangements can serve as a catalyst in the pursuit of removing market fragmentations.
- (iii) Integration can confer substantial institutional benefits, but only if real authority is delegated to central institutions. As long as multilateral institutions are weak, and regional arrangements allow for a greater surrender of national autonomy, regionalism may paradoxically remain attractive to reforming governments. However, strengthened multilateral institutions would provide greater benefits than regional ones as they will present a larger political community and a greater scope for the preference-dilution effect.
- (iv) To benefit from integration, some convergence in national economic objectives is necessary. This explains why the prospect of integration with rich neighbors was so unattractive to developing countries when they still believed in import substitution, and why it has become more desirable to do so as they have opened up their economies. It also explains why multilateral institutions may be inherently more difficult to sustain than regional institutions in light of the underlying diversity of national interests.
- (v) However, too much convergence may undercut the economic gains from integration. This explains why developing countries currently stand to benefit least (in economic terms, at least) by integrating with other developing countries with similarly unsettled domestic institutions.
- (vi) The benefits of integration are greater the higher the possibility of shaping the institutions that go along with it in an economically desirable way. Recent regional attempts perhaps offer an additional degree of freedom in this regard compared to existing multilateral institutions.

Endnotes

1. This means that transshipment rules are necessary to prevent imports of high-tariff countries from being channeled via low-tariff countries in the area.
2. In addition to the literature cited later, important contributions to the literature include Corden (1968, 1970, 1972, 1976), Kemp (1969), Lipsey (1957, 1960, 1970), Riezman (1979) and Vanek (1964). Two excellent surveys of the literature are Corden (1984) and Lloyd (1979).
3. According to Viner, trade creation occurs when the formation of an FTA or CU leads to a switching of imports from a high-cost source to a low-cost source. Analogously, trade diversion occurs when imports switch from a low-cost source to a high-cost source. Subsequent authors noted crucial limitations of his conclusion and demonstrated that in general trade diversion need not be welfare worsening and trade creation need not be welfare improving. The concepts have remained highly influential in policy debates, however, and authors have continued to equate trade creation with welfare improvement and trade diversion with welfare deterioration.
4. In terms of Viner's terminology, the FTA just described is trade diverting. Yet the net effect of it on welfare is ambiguous. This is the point made in the post-Viner literature alluded to in footnote 2.
5. As we will argue later, this is easier said than done. In practice, compensation schemes can turn even a welfare enhancing FTA into a disaster.
6. Shortly we will see that once we recognize that the imports from B and C are imperfect substitutes, the positive and negative effects emerge without elimination of trade with C. Figure 1 also provides a less extreme representation of the standard Vinerian analysis in which the supply curves of both B and C are horizontal.
7. In the case described in the previous paragraph, the FTA is unambiguously welfare worsening. Therefore, it is not of much interest from a policy perspective.
8. This was the issue raised Cooper and Massell (1965a) and Johnson (1965) and also discussed by Berglas (1979) and Robson (1980).
9. The following discussion draws heavily upon Wonnacott and Wonnacott (1981). Also see Berglas (1983) and Wonnacott and Wonnacott (1984) in this context.
10. By the Lerner Symmetry Theorem, the tariff on good 2 by B is equivalent to an export tax on good 1 at the same rate. Therefore, the tariff in B implies an upward shift in its export supply curve.
11. As Wonnacott and Wonnacott (1981) show, elimination of trade with C is not necessary to generate this result. What is critical is that the good imported by C before the FTA be different than that after it.
12. Although we did not consider formally the option of accession to a bloc but it is clear from Figure 2 that if the internal price of C is above point G, B will be better off acceding to C than forming an FTA with A.

13. This was the main thrust of the analyses in Cooper and Massell (1965b) and Johnson (1965).

14. See Bhagwati (1968, 1990) in this context.

15. Strictly speaking, the externality implies that if the equilibrium is incompletely specialized, some intervention will be desirable and complete free trade will not be locally optimal. In the discussion just presented, we have ignored this complication.

16. The literature on imperfect competition and FTAs is almost nonexistent. Therefore, the best we can do is infer such implications from the models addressing national trade policies in the presence of imperfect competition. Unfortunately, even here the results depend crucially on the specific structure of the model.

17. For examples of monopolistic competition, see Helpman (1981) and Krugman (1980).

18. This model is due to Meade (1955).

19. In models with three or more goods, the terms of trade effects are more complicated and less clear cut, although the presumption is that the union's terms of trade will improve upon the formation of an FTA. Thus, in Meade's model, as each partner country reduces its tariff on imports from the other, given substitutability, the demand for imports from the outside world declines. The union's terms of trade with respect to the outside world improve.

20. This is, of course, a scenario in which FTAs serve as stepping stones to multilateral free trade.

21. The importance of gaining market access is also stressed by Winters in his discussion of successive enlargements of the EC in his contribution to this volume.

22. "NAFTA is important to Mexico in itself.... But it is still more important as a symbolic guarantee of the nature of the changes in the Mexican economy. Since the mid-1980s, when President Miguel de la Madrid took Mexico into GATT and slashed tariffs, its technocrats have used one word to describe the changes: 'irreversible'. A free-trade agreement would, they hoped, prove the point. "The hard decisions ... were taken before Mr. Salinas was publicly convinced of the case for free trade with Canada and the United States. But by signalling that within ten years he wants borderless trade within North America, he is telling both Mexico's once inefficient industries and the outside world that there really is no going back." (*The Economist*, December 14, 1991, p. 20.)

23. That is because the simple sum of the objective functions differs from expression (9) only by terms that are constant from the perspective of the regional institution. Consequently, the first-order conditions are identical in the two cases.

24. A couple of things could work against this in practice. First, political groups may form transnational alliances. But even if they do, larger groups will likely suffer more from free-rider problems and from diversity of interests. Second, regional institutions may somehow turn out to be more receptive to pressure than the national institutions. This problem can be alleviated by careful institutional design. See below.

25. The advantage of a relatively small number of participants in a world of trading blocs is also made by Mancur Olson in his comments on Douglas Irwin's paper in this volume.
26. On the difficult role and mixed outcome of supra-national institutions to help establish a common market in the EC, see section 4 of Winters' contribution to this volume.
27. Often-cited studies of the dynamic effects are Cline (1978) for the CACM and Baldwin (1991) for the effects of 1992 on EC growth.
28. Other RI schemes that were not included either did not have a long enough existence (e. g. SADC, Canada-U.S. FTA, etc.) or did not achieve much by way of integration.
29. The only exception is the significant effect for the dummy variable for SACU (which is entered for Botswana, Lesotho and Swaziland) for the period 1960-72. SACU is a highly integrated RI in existence since 1910 and the members' relation to South Africa is much like that of Liechtenstein to Austria or Monaco to France.

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Figure 1: Basic Analysis of an FTA.

Figure 2: FTA under a QR

Figure 3: FTA vs. UTR

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