

The Move Toward Free Trade Zones

By Paul Krugman

From World War II until about 1980, regional free trade agreements and global trade negotiations under the GATT could reasonably be seen as complements rather than substitutes—as two aspects of a broad march toward increasingly open international markets. Since then, however, the two have moved in opposite directions. The 1980s were marked by stunning and unexpected success for regional trading blocs. In Europe, the EC not only enlarged itself to include the new democracies of Southern Europe, but made a lunge for an even higher degree of economic unity with the cluster of market-integrating measures referred to as “1992.” In North America, Canada ended a century of ambivalence about regional integration by signing a free trade agreement (which is also to an important extent an investment agreement) with the United States; even more startlingly, the reformist Salinas government in Mexico has sought, and appears likely to get, the same thing. And in East Asia, while formal moves toward regional free trade are absent, there was after 1985 a noticeable increase in Japanese investment in and imports from the region’s new manufacturing exporters.

Meanwhile, however, the multilateral process that oversaw the great postwar growth in world trade seems to have run aground. The major multilateral trade negotiation of the decade, the Uruguay Round, was supposed to be concluded in late 1990. Instead, no agreement has yet been reached. And while some kind of face-saving document will probably be produced, in reality the round has clearly failed either to significantly liberalize trade or to generate goodwill that would help sustain further rounds of negotiation.

The contrast between the successes of regional free trade agreements and the failure of efforts to liberalize trade at the global level has raised disparate reactions. Official pronouncements, of course, call

Paul Krugman is professor of economics at the Massachusetts Institute of Technology. The article is based on his presentation at the symposium on “Policy Implications of Trade and Currency Zones,” sponsored by the Federal Reserve Bank of Kansas City at Jackson Hole, Wyoming, August 22-24, 1991. The views expressed in the article are the author’s and do not necessarily reflect the views of the Federal Reserve Bank of Kansas City.

for renewed progress on all fronts. In practice, however, choices of emphasis must be made. Some politicians and economists despair of the multilateral process under the GATT, and would like to see further effort focused on regional or bilateral negotiations that seem more likely to get somewhere. Others, seeing the multilateral process as ultimately more important, fear that regional deals may undermine multilateralism. It is possible to find respected and influential voices taking fairly extreme positions on either side. For example, MIT's Rudiger Dornbusch has not only been a strong partisan of a U.S.-Mexico free trade pact, but has called for a U.S. turn to bilateral deals even with countries far from North America, such as South Korea. On the other side, Columbia's Jagdish Bhagwati, now a special adviser to the GATT, not only advocates remaining with the traditional process but has actually condemned the prospective U.S.-Mexico deal.

How can reasonable and well-informed people disagree so strongly? The answer lies in part in the inherent ambiguity of the welfare economics of preferential trading arrangements; it lies even more in the peculiarly contorted political economy of international trade negotiations.

Even in terms of straightforward welfare economics, the welfare effects of the creation of free trade areas are uncertain; indeed, it was precisely in the study of customs unions that the principle of the "second best," which says that half a loaf may be worse than none, was first formulated. A customs union, even if it only reduces trade barriers, may worsen trade distortions; moreover, consolidation of nations into trading blocs may lead even intelligent governments with the welfare of their citizens at heart to adopt more protectionist policies toward the outside world, potentially outweighing the gains from freer trade with their neighbors.

Worse yet, however, the motives of governments as they engage in trade negotiations are by no means adequately described by the idea that they maximize national welfare. In general, trade policy (like any microeconomic policy) is very much influenced by pressure from organized interest groups; the traditional framework of trade negotiation under the GATT channels these political pressures in a way that has generally led toward freer trade, but from an economist's point of view this framework has led to the right results for the wrong reasons. Given this, it is very difficult to decide whether a shift in the domain of negotiations will be a good or a bad thing.

Should the move toward free trade areas be applauded or condemned? The purpose of this paper is to help clarify the issues in a fundamentally murky debate. It is primarily a discussion of conceptual issues rather than a survey of actual recent moves toward free trade areas, although since the key questions about that move are inherently empirical, some appeal to facts and cases is necessary.

The paper is in three parts. The first part reviews the relatively straightforward economics of preferential trading arrangements. The second is an attempt to describe and analyze the political economy of trade negotiations, and the reasons why changes in this political economy have recently pushed the world in the direction of regional free trade areas. The third part tries to pull the economics and politics together, for a general discussion of the problem of free trade areas versus multilateralism.

The Economics of Trading Blocs

In spite of the major rethinking of the theory of international trade that has taken place over the past dozen years, few economists would disagree with the proposition that a world with free trade will be better off than

under any other plausible set of trade policies. Yet preaching the virtues of global free trade somehow does not seem to get us there, and it often seems easier to negotiate free trade or at least trade liberalization on a more local basis. Indeed, in spite of the growing ease of international communication, the 1980s saw a shift of emphasis away from global trade negotiations toward regional deals.

The apparent conflict between what economists say should be in everyone's interest and what actually seems to happen politically should be a warning flag—it suggests that whatever is going on in international trade negotiations, it is not welfare maximization. And as I will argue in the second part of this paper, any assessment of the move toward free trade areas depends critically on understanding what governments actually do as well as what they should do. Still, suppose one takes it as a given that for some reason it is possible to negotiate a degree of trade liberalization among subsets of countries that goes beyond what is possible at a world level. The question is then, should trade liberalization be permitted to proceed at two speeds? Or should one try to ban special deals and insist that countries offer to everyone the same terms they offer to anyone?

A naive view would be that since free trade is a good thing, any move toward freer trade should be welcomed. Unfortunately, the case is not that simple. At least three (not entirely unrelated) objections may be offered to preferential free trade agreements:

(i) *Trade diversion*: Trade liberalization among a subset of countries, even if it is not accompanied by an increase in protectionism against extra-bloc imports, may create perverse incentives that lead to specialization in the wrong direction.

(ii) *Beggar-thy-neighbor effects*: The formation of free trade areas may well hurt countries outside those areas, even without any

overt increase in protectionism.

(iii) *Trade warfare*: Regional trading blocs, being larger than their components, will have more market power in world trade; this may tempt them to engage in more aggressive trade policies, which damage the trade between blocs and may (through a kind of Prisoners' Dilemma) leave everyone worse off.

The analysis of the effects of preferential trading arrangements is the subject of a huge and intricate literature. We can, however, quickly survey some of the main results that seem to be relevant to the current problem of regionalism in world trade.

Trade creation vs. trade diversion

In a classic analysis, Jacob Viner (1950) pointed out that a move to free trade by two nations who continue to maintain tariffs against other countries could leave them worse rather than better off. Viner's insight remains fundamental to all analysis of preferential trading arrangements, and is worth restating.

The essential idea can be seen from a numerical example (Table 1).¹ Imagine that one country—which, not entirely innocently, we call Spain—can produce wheat for itself, import it from France, or import it from Canada. We suppose that the cost to Spain of producing a bushel of wheat for itself is 10, that the cost of a bushel of wheat bought from France is 8, and that the cost of a bushel bought from Canada is only 5.

Suppose initially that Spain has a tariff that applies equally to all imported wheat. If it imports wheat in spite of the tariff, it will buy it from the cheapest source, namely Canada. This case is illustrated in the table by the column labelled "Tariff = 4." If the tariff is high enough, however—as in the case where it equals 6—Spain will grow its own wheat.

Now suppose that Spain enters a customs

union with France, so that French wheat can enter free of tariff. Is this a good thing or a bad thing?

If the tariff was initially 6, the customs union is a good thing: Spain will replace its expensive domestic production with cheaper imported French wheat, freeing its own resources to do more useful things. If, however, the tariff was initially 4, the customs union will cause Spain to shift from Canadian wheat to more expensive French wheat, shifting from a low-cost to a high-cost source. In that case the customs union may well lower welfare.

As Viner pointed out, in the first, favorable case the customs union causes Spain to replace high-cost domestic production with imports; it thus leads to an increase in trade. In the unfavorable case, by contrast, Spain shifts from a foreign source outside the free trade area to another source inside. Thus Viner suggested that “trade creating” customs unions, in which increased imports of trading bloc members from one another replace domestic production, are desirable; “trade diverting” customs unions, in which imports are diverted from sources outside the union to sources inside, are not. Loosely speaking, if the extra trade that takes place between members of a trading bloc represents an addition to world trade, the bloc has raised world efficiency; if the trade is not additional, but represents a shift away from trade with countries outside the bloc, world efficiency declines.

This simple criterion is extremely suggestive, and makes it easy to understand how regional trade liberalization can actually reduce rather than increase world efficiency. Perhaps the most obvious real-world example, as the illustration itself suggested, is the effect of EC enlargement on agricultural trade. The Southern European countries are induced, by their entry into the EC, to buy grain and other cold-climate products from costly European

Table 1

Hypothetical example of free trade area

| | <u>Tariff rate</u> | | |
|-----------------------------------|--------------------|----------|----------|
| | 0 | 4 | 6 |
| <u>Cost of wheat from:</u> | | | |
| Spain | 10 | 10 | 10 |
| France, before customs union | 8 | 12 | 14 |
| France, after customs union | 8 | 8 | 8 |
| Canada | 5 | 9 | 11 |

sources rather than the low-cost suppliers on the other side of the Atlantic. Meanwhile, the northern European countries are now induced to buy Mediterranean products like wine and oil (and perhaps also labor-intensive manufactured goods) from Southern Europe rather than potentially cheaper suppliers elsewhere, e.g. in North Africa. It is by no means implausible to suggest that because of these trade-diverting effects on agriculture, EC enlargement reduced rather than increased world efficiency.

While the creation/diversion idea captures the essence of the problem, however, its suggestion that customs unions are about as likely to cause harm as good is somewhat too pessimistic. For both theoretical and empirical reasons, one needs to bear in mind that the simple creation/diversion idea misses some potential gains from customs unions, even ones that are mostly trade-diverting.

First and least interesting of these additional gains is the reduction of consumption distortions. Even if Spain’s initial tariff does not prevent it from importing Canadian wheat, the tariff will still distort consumer incentives. And shifting to free trade with France will reduce this consumer distortion even while diverting trade.

A second gain from regional free trade, which is very important in practice, comes from

the increased size and hence both productive efficiency and competitiveness of oligopolistic markets subject to economies of scale. When the European Common Market was formed in 1958, substantial trade diversion seemed a likely outcome. What turned the arrangement into a strong economic success was the huge intra-industry trade in manufactures, and the associated rationalization of production, that the Treaty of Rome made possible.²

Finally, a third gain from formation of a customs union is that regional integration characteristically improves a region's terms of trade at the rest of the world's expense.

This last effect is obviously something less than an unmitigated good thing. It makes a regional trade deal more attractive, but it also suggests that such deals can in effect be beggar-thy-neighbor policies.

The beggar-thy-neighbor effect

Imagine a world consisting of three countries, A, B, and C. It is easiest to imagine that each country is specialized in the production of a different set of goods. Also suppose initially that all three countries maintain the same tariff rate against all imported goods. Now suppose that A and B form a customs union, eliminating the tariff on goods shipped to each other, while maintaining their tariffs on goods imported from C. What happens to C?

The presumption is that C is made worse off, through a deterioration of its terms of trade. To see why, consider what would happen as the result of the customs union if the prices of all goods remained the same. Then A and B would each tend to buy more of each others' products, substituting away from consumption both of their own products and from consumption of goods imported from C. The net effect on the demand for A's and B's goods would be ambiguous, because each country would buy less of

its own goods but sell more to the other. The demand for C's products, however, would unambiguously fall. Thus to clear markets, the relative price of C's goods will normally have to fall; unless there is too much asymmetry, the prices of both A's and B's products will rise in terms of C's.

This terms of trade loss will increase the benefits of a customs union to A and B. Indeed, a customs union may well be desirable from their point of view even if it leads primarily to trade diversion rather than trade creation — because it is precisely trade diversion, that is, a shift of demand away from imports from the outside world, that leads to the improvement in the terms of trade. The extra gain will, however, come at the rest of the world's expense. The point is that even if formation of a customs union does not involve any increase in external tariffs, it can still in effect be a beggar-thy-neighbor policy.

Again, this is not an abstract point. The United States has been concerned that the enlargement of the EC deprives its agricultural exporters in particular of traditional markets, and has sought offsetting *reductions* in EC protection against agricultural products. And indeed this is what must happen if a customs union is not to be a de facto beggar-thy-neighbor policy: formation of the union must be accompanied by a reduction in external tariffs.

A customs union that also reduces tariffs on imports from outside can still be beneficial, through the normal gains from trade and specialization. Indeed, the idea that one could adjust tariffs so as to keep a customs union's trade with the outside world unchanged is the basis of a well-known demonstration that a customs union is always potentially beneficial to its members (Kemp and Wan 1976). But will a group of countries forming a trade area normally lower their external tariff sufficiently to avoid any trade diversion?

This depends on their motivations in forming the customs union in the first place. In practice, trading areas are formed for a variety of reasons, in which a careful assessment of costs and benefits is not usually high on the list. In the messy world of motivations discussed in the second part of this paper, it is possible either that a trading area might offer the rest of the world concessions in order to mollify it, or that the new bloc might have economically irrational autarkic tendencies as a way of emphasizing the political content of integration. For example, in the context of fairly amicable trade relations, one could imagine the EC cutting tariffs and subsidies in order to compensate the United States for any loss of markets due to increased European integration. In another context, one could imagine the emergence of a political context in which Fortress Europe shows a preference for self-sufficiency even beyond the beggar-thy-neighbor point.

Before we turn to political economy, however, let us at least ask what the economically rational action would be. And it is fairly obvious: not only would it not normally be in the interest of a trading bloc to throw away all of its terms of trade gain by reducing external tariffs, it would normally be in the bloc's interest to *raise* its external tariffs.

The reason is that a trading bloc will normally have more monopoly power in world trade than any of its members alone. The standard theory of the optimal tariff tells us that the optimal tariff for a country acting unilaterally to improve its terms of trade is higher, the lower the elasticity of world demand for its exports. So for a trading bloc attempting to maximize the welfare of its residents, the optimal tariff rate will normally be higher than the optimal tariff rates of its constituent countries acting individually.

This implies that the adjustment of external tariffs following formation of a regional trading

bloc will not only not eliminate the beggar-thy-neighbor aspect, it will tend to worsen it.

Trading blocs and trade war

An individual trading bloc will tend to gain even in the face of trade diversion by improving its terms of trade at the rest of the world's expense. If one goes from envisioning a single bloc to imagining a world of trading blocs, however, the blocs may beggar each other. That is, formation of blocs can in effect set off a beggar-all trade war that leaves everyone worse off.

Imagine a world of *four* countries, A, B, C, and D. Imagine also that A and B enter negotiations to form a free trade area. They find that the area will primarily produce trade diversion rather than trade creation, but that it will still increase their welfare by improving their terms of trade at C and D's expense. Thus A and B will, correctly, form a free trade area; and this area will have an incentive to act as a trading bloc and raise its tariffs on imports from C and D. But suppose that C and D make the same calculation. Then both blocs will raise tariffs in an effort to exploit their market power. Obviously both cannot succeed; one bloc's terms of trade will actually deteriorate, while the other's will improve less than if it were acting on its own. Meanwhile, trade diversion will be taking its toll on world efficiency. The result of the tariff warfare may therefore be to leave all four countries worse off than they would have been had the trading blocs not been formed. And yet the members of each bloc are better off than they would have been if they had not joined their bloc, and thus left themselves at the mercy of the other bloc. So the game of free trade area formation itself may (though it need not) be a form of Prisoners' Dilemma, in which individually rational actions lead to a bad collective result.

This hypothetical example provides a

simple justification for those who fear that the indirect costs of the move toward free trade areas will exceed the direct benefits. While it is an extremely stylized picture, it captures at least some of the concern of critics of regional trading arrangements, like Jagdish Bhagwati. The basic logic here is that the regional deals undermine the multilateral system, and that the gains in intra-regional trade are more than offset by losses of inter-regional trade. In effect, bilateralism or regionalism leads to global trade diversion.³

Of course this is only a possibility, not a certainty. Indeed, it is perfectly possible that the gains from free trade between the pairs greatly outweigh the losses from multilateral trade diversion. This is essentially an empirical question, but it is one on which some numerical exercises can shed at least some light.

Trading blocs and world welfare

In an earlier paper (Krugman 1991) I offered a way of making a suggestive back-of-the-envelope calculation regarding the effects of a move toward the formation of regional trading blocs. The formal model is in the appendix to this paper; here I sketch out the approach and its results.

The basic idea is to examine how world welfare changes as a highly stylized world economy is organized into progressively fewer, progressively larger trading blocs. A trading bloc is envisaged as consisting of a large number of small geographic units ("provinces"), each specialized in the export of a different good. (Countries, which presumably themselves consist of one or more provinces, play no explicit role in the analysis.) Each trading bloc chooses an external tariff to maximize the welfare of its members, taking other blocs' tariffs as given.⁴

How does world welfare change as the

number of blocs is reduced? There are two effects. On one side, the smaller the number of blocs, the more potential trade is unencumbered by tariffs; in the limit, with only one trading bloc, we have global free trade. On the other side, every time one merges blocs into larger blocs, there will be trade diversion; this effect will be reinforced by the fact that bigger blocs will have more market power and thus normally set higher external tariffs.

Which effect dominates? We know that free trade is best, so as the number of blocs goes from 2 to 1 welfare must rise. On the other hand, in a world of many small blocs nobody would have much market power, and since most of each bloc's consumption would be imported and hence subject to the same external tariff, there would be little trade diversion. So a fall in the number of blocs from a very large number to a somewhat smaller number might well reduce welfare. We would therefore expect a U-shaped relationship between the number of blocs and world welfare: while the best of all possible worlds has only one bloc, the worst is not a totally fragmented world but one with a moderate number.

In the simplest version of this story, all provinces stand in symmetric relationship to one another, so that there are no "natural" trading blocs. In this case, as is shown in the appendix, there are only two parameters: the number of blocs and the elasticity of substitution between the products of any two provinces. Figure 3, in the appendix, shows the relationship between the number of blocs and world welfare for three values of this elasticity: 2, a number that implies very large monopoly power in trade (although it is still high compared with empirical estimates, which tend to be not much greater than 1); 4; and 10. Remarkably, for this wide range of elasticities we consistently get the same answer: world welfare is minimized for a world of three trad-

ing blocs. The resemblance to the apparent current trend makes this an extremely interesting result!

It is a result that should, however, be treated with considerable caution. Like any abstract model, this one makes a large number of simplifying assumptions; perhaps the most objectionable in this case is the assumption that under free trade any arbitrary pair of "provinces" would have the same volume of trade as any other. This amounts to assuming away geography, the extent to which some countries would be each others' major trading partners even in the absence of preferential trading arrangements. If trading blocs are formed, not with arbitrary membership, but among countries that would be each others' main markets anyway, the consolidation of the world into a limited number of such blocs is less likely to be harmful.

The importance of "natural" trading blocs

If transportation and communication costs lead to a strong tendency of countries to trade with their neighbors, and if free trade areas are to be formed among such good neighbors, then the likelihood that consolidation into a few large trading blocs will reduce world welfare is much less than suggested by the simple numerical example in Figure 3. The reason is straightforward: the gains from freeing intra-regional trade will be larger, and the costs of reducing inter-regional trade, than the geography-free story suggests.

Imagine, for example, a world of six countries, which may potentially form into three trading blocs. If these countries are all symmetric, then three blocs is the number that minimizes world welfare, and hence this consolidation will be harmful. Suppose, however, that each pair of countries is on a different continent, and that intercontinental transport

costs are sufficiently high that the bulk of trade would be between continental neighbors even in the absence of tariffs. Then the right way to think about the formation of continental free trade areas is not as a movement from 6 to 3, but as a movement of each continent from 2 to 1—which is beneficial, not harmful.

In practice the sets of countries that are now engaging in free trade agreements are indeed "natural" trading partners, who would have done much of their trade with one another even in the absence of special arrangements. A crude but indicative measure of the extent to which countries are especially significant trading partners comes from comparison of their trade with what would have been predicted by a "gravity" equation, which assumes that trade between any two countries is a function of the product of their national incomes.

Even casual inspection of such gravity-type relations reveals the strong tendency of countries to focus their trade on nearby partners; that is, in spite of modern transportation and communications, trade is still largely a neighborhood affair.

The magnitude of the strength of natural trading blocs can be crudely calculated from a regression of the following form:

$$\ln(T_{ij}) = \alpha + \beta \ln(Y_i Y_j) + \sum_z \gamma^z D^z_{ij},$$

where T_{ij} represents the value of trade (exports plus imports) between some pair of countries i and j ; and Y_i, Y_j represent the two countries' national incomes. We suppose that the countries belong to several groups that are or might become trading blocs, and we index these groups by z , with D^z equal to 1 if the pair of countries i and j belong to group z , 0 otherwise. Then we would say that a potential trading bloc is natural to the extent that the estimated γ is strongly positive for that z .

The simplest regression of this kind that one can perform uses the G7 countries (which

after all account for most of world output in any case) and defines the two groupings as $z=1$: the United States and Canada, $z=2$: Europe. The results of that regression are shown in Table 2. To nobody's surprise, they point out very strongly the local bias of trade: the United States and Canada, according to the regression, do 13 times as much trade as they would if they were not neighbors, while the four major European countries do seven times as much.

Of course these results are in part due to the fact that there are already special trading arrangements between the United States and Canada, on one side, and within the EC on the other. Yet the results are so strong that they make it overwhelmingly clear that distance still matters and still creates natural trading blocs.

To reemphasize why this matters: if a disproportionate share of world trade would take place within trading blocs even in the absence of any preferential trading arrangement, then the gains from trade creation within blocs are likely to outweigh any possible losses from external trade diversion.

While the coincidence between potential trading blocs and natural blocs helps allay fears of global immiserization, however, it also raises a warning flag about the indiscriminate use of the free trade agreement as a weapon of policy. U.S.-Canada free trade is almost certainly a good thing, not just because we like each other, but because the two countries plus Mexico clearly form a natural bloc. U.S.-Korea or U.S.-Israel free trade, to take examples of less neighborly proposals that have been floated, do not share the same virtue; indeed, Israel is if anything a natural member of the European bloc. Such "unnatural" free trade areas are highly likely to cause trade diversion rather than creation.

On the whole, however, the fact that geography has already given international trade a strong regional bias makes the concern that allowing free trade agreements at a regional

Table 2
A G7 gravity regression

| | Estimated value | T-statistic |
|----------------|-----------------|-------------|
| α | -8.4302 | -6.894 |
| β | 0.7387 | 8.966 |
| γ' | 2.6092 | 6.576 |
| γ^2 | 1.9823 | 9.479 |
| $R^2 = 0.7796$ | | |

level will lead to a Prisoners' Dilemma a minor one. That is, if governments maximized the welfare of their citizens, prospective moves toward regional free trade would almost surely do more good than harm to the members of the free trade areas.

The major problem with this optimistic statement is, of course, that governments do no such thing. Before turning to the political economy of trade, however, we should also note an important point: while most of the world's output is generated by countries that appear likely to be inside one or another big free trade area, most people live outside. And it is these non-neighbors who are most likely to be beggared.

The innocent bystander problem

A turn to increased protectionism against outsiders by groups of countries that have formed free trade areas and as a result start behaving as a bloc toward the outside world is unlikely to leave the members of the blocs worse off. It can, however, quite easily do a lot of damage to countries that for whatever reason do not get inside the blocs.

Consider the following back-of-the-envelope example. Imagine that the world's

industrialized countries plus a few developing countries were in fact to consolidate into three blocs, consisting of Europe, North America, and an East Asian collection centered on Japan. On average, these three blocs currently import about 10 percent of gross bloc product from outside themselves. Leaving aside agriculture, the average tariff equivalent they impose on these extra-bloc imports is currently fairly low; call it 10 percent.

Now suppose that because the blocs have more market power than their constituent nations, and in general behave more belligerently, they increase their external tariff equivalent to 30 percent. Given typical estimated elasticities, the effect of such a tariff rise would be to reduce extra-bloc imports by about 20 percent. We can use standard methods to come up with an estimate of the welfare loss from this tariff increase. The implied efficiency loss is the average of the initial and final tariff rates, multiplied by the fall in imports: 0.2 times 2 percent of gross bloc product, or 0.4 percent. This is a small though not negligible cost; more to the point, it could easily be outweighed by the gains from free trade within the trading blocs.⁵

But consider the same situation from the point of view of a nation that is not part of one of the blocs. This nation simply sees an increase in the tariff its exports must pay to enter the world's major markets. It will therefore suffer a terms of trade loss, which may be close to the size of the tariff increase. For example, a country that exports 15 percent of its GNP to the OECD nations, faced with a 20 percent rise in the external tariffs of the newly formed blocs, could suffer a real income loss of close to 3 percent—with no compensating gain in market access elsewhere. The point, then, is that the biggest costs of a consolidation of the world into a few large trading blocs would likely be borne not by the countries in the blocs but by those left out in the cold.

Summary

The purely economic analysis of free trade areas suggests that in principle formation of such areas might hurt rather than help the world economy. Trade diversion could outweigh trade creation even with external protectionism unchanged; and the increased market power that countries gain by consolidating into trading blocs could lead optimizing but noncooperative governments to raise tariffs increasing the cost.

While some moves toward free trade surely do produce costly trade diversion, however, it seems unlikely that the net effect on world efficiency will be negative. The reason is geography: the possibly emergent trading blocs consist of more or less neighboring countries, who would be each others' main trading partners even without special arrangements. As a result, the potential losses from trade diversion are limited, and the potential gains from trade creation are large.

The main concern suggested by this economic analysis is distributional: inward-turning free trade areas, while doing little damage to themselves or each other, can easily inflict much more harm on economically smaller players that for one reason or another are not part of any of the big blocs.

The Political Economy of Free Trade Areas

In a fundamental sense the issue of the desirability of free trade areas is a question of political economy rather than of economics proper. While one could argue against the formation of free trade areas purely on the grounds that they might produce trade diversion, in practice (as argued above) the costs of trade diversion are unlikely to outweigh the gains from freer trade within regions. The real objection is a political judgement: fear that regional deals will under-

mine the delicate balance of interests that supports the GATT. Implicit in this concern is the idea that government do not set tariffs to maximize national welfare, that they are instead ruled by special interest politics disciplined and channeled by an international structure whose preservation is therefore a high priority.

To discuss the political economy of free trade areas, it is necessary to offer at least a rough outline of how trade policy actually works, and of why free trade areas rather than multilateral agreements seem to be the current trend. Only then can we ask whether such preferential agreements will help or hurt the overall prospects for trade.

GATT-think and trade negotiations

International trade policy has many horror stories. Examples of outrageous policy, like the sugar quota that for a time led U.S. producers to extract sucrose from imported pancake mix, are easy to come by. All microeconomic policy areas, however, offer similar stories of government actions that disregard efficiency and cater to organized interests. Indeed, one may argue that the surprising thing about trade policy is how good it is. Think of the way that the U.S. government handles water rights in the West, or tries to control pollution: these show a disregard for even the most elementary considerations of economic logic or social justice that make trade policy seem clean and efficient. Arguably trade policy is one of our best microeconomic policy areas—largely because it is disciplined by international treaties that have over time led to a progressive dismantling of many trade barriers.

One might be inclined to ascribe credit for this to the economists. After all, economists have for nearly two centuries preached the virtues of free trade. It seems natural to think of the GATT, and the relatively free trading system built around the GATT, as the result of the

ideology of free trade.

Yet if one examines the reality of international trade negotiations, one discovers that the GATT is not built on a foundation laid by economic theory. That is not to say that there are no principles. On the contrary, one can make a great deal of sense of trade negotiations if one adopts a sort of working theory about the aims and interests of the participants, a theory that is built into the language of the GATT itself. The problem is that this underlying theory has nothing to do with what economists believe.

There is no generally accepted label for the theoretical underpinnings of the GATT. I like to refer to it as “GATT-think”: a simple set of principles that is entirely consistent, explains most of what goes on in the negotiations, but makes no sense in terms of economics.

The principles of GATT-think. To make sense of international trade negotiations, one needs to remember three simple rules about the objectives of the negotiating countries:

1. Exports are good.
2. Imports are bad.
3. Other things equal, an equal increase in imports and exports is good.

In other words, GATT-think is enlightened mercantilism. It is mercantilist in that it presumes that each country, acting on its own, would like to subsidize exports and restrict imports. But it is enlightened in that it recognizes that it is destructive if everyone does this, and it is a good thing if everyone agrees to expand trade by accepting each others' exports.

GATT-think is also, to an economist, nonsense. In the first place, general equilibrium theory tells us that the trade balance has very little to do with trade policy: a country that restricts imports will indirectly be restricting its exports as well. So even if one agreed with principles 1 and 2, one would argue that countries gain nothing from import restriction.

Nor do economists agree that exports are

good and imports bad. The point of trade is to get useful things from other countries, i.e., imports, which are a benefit, not a cost; the unfortunate necessity of sending other countries useful things in return, i.e. exports, is a cost rather than a benefit.

Moreover, standard trade theory does not see export subsidies and import restrictions as similar policies. On the contrary, in general equilibrium an import tariff is equivalent to an export *tax*. Furthermore, in standard trade theory an export subsidy is a stupid policy but not a malicious one, since it generally worsens a country's terms of trade, and thus benefits the rest of the world. As Avinash Dixit once put it, when the Commerce Department ascertained that European nations had been subsidizing steel exports to the United States, its appropriate response should have been to send a note of thanks.

Finally, standard trade theory generally argues that free trade is the best *unilateral* policy, regardless of whether other countries do the same. That is, in standard theory one does not need to justify free trade in the context of international agreements. (The qualification is the optimal tariff argument, which generally plays no part at all in real-world trade discussion.)

In effect, GATT-think sees the trade policy problem as a Prisoners' Dilemma: individually, countries have an incentive to be protectionist, yet collectively they benefit from free trade. Standard trade theory does not agree: it asserts that it is in countries' unilateral interest to be free traders—as Bastiat put it, to be protectionist because other countries are is to block up one's own harbors because other countries have rocky coasts.

Yet although GATT-think is economic nonsense, it is a very good model of what happens. Indeed, it is embedded in the very language of the negotiations. Suppose that the United States succeeds in pressuring the European Com-

munity to stop exporting wheat that costs it three times the world market price to produce, or Japan to take a little rice at one-tenth the cost of domestic production. In GATT parlance these would represent European and Japanese “concessions”: things that they would do unwillingly (and at present appear unwilling to do at all). That is, as GATT-think predicts, countries seem to treat exports—almost any exports, at almost any price—as desirable, and imports—no matter how much better or cheaper than the domestic substitute—as undesirable.

Moreover, over the years a trading system based on the principles of GATT-think has on the whole done very well. No amount of lecturing by economists on the virtues of free trade could have achieved the extraordinary dismantling of trade barriers accomplished by lawyers in the 30 years following World War II. If there are problems with the system now, they have more to do with perceptions that some countries are not playing by the rules than with a dissatisfaction of the political process with the rules themselves.

GATT-think, then, is very wrong yet somehow turns out mostly right. Why?

The hidden logic of GATT-think. GATT-think is not, presumably, the product of a continuing mercantilist tradition, preserved by legislators and lawyers in defiance of economists—although it is probably true that a more or less mercantilist view of trade comes more naturally to the untutored than the economist's blanket endorsement of free trade. The reason why GATT-think works is, instead, that it captures some basic realities of the political process.

Trade policy is a policy of details. Only a tiny fraction of the U.S. electorate knows that we have a sugar import quota, let alone keeps track of such crucial issues (for a few firms) as the enamel-on-steel-cookware case. What Mancur Olson (1965) taught us is that in such

circumstances we should not expect government policy to reflect any reasonable definition of the public interest. Political pressure is a public good, and tends to be supplied on behalf of small, well-organized groups. In the case of trade policy, with few exceptions this means *producers*: producers of exported goods, producers of import-competing goods. The consumers who might have benefited from cheap imports, or the lower prices that would prevail if firms were not subsidized to provide goods to foreigners rather than themselves, count for very little.

This explains the first two principles of GATT-think: we need only append the words “for export producers” and “for import-competing producers,” and one has statements with which economists can agree. Add that trade policy is set one industry at a time, so general equilibrium is disregarded, and that consumers are not at the table, and the mercantilist tone of trade negotiations is explained.

The third principle is more complicated. One would like to think that it reflects a residual concern with efficiency. Maybe it does. But it is also true that on average a dollar of exports adds more domestic value added than a dollar of imports subtracts, simply because not all imports compete directly with domestic goods. So perhaps the idea of gains from trade plays no role at all.

Yet the result of applying the principles of GATT-think has up to now been pretty good. The reason is the process of multilateral negotiation, which in effect sets each country’s exporting interests as a counterweight to import-competing interests; as trade negotiators bargain for access to each others’ markets, they move toward free trade despite their disregard for the gains from trade as economists understand them. (Notice also that in this context the GATT’s harsh attitude toward export subsidies makes a great deal of sense:

without such subsidies, export interests become a force for free trade; with free access to subsidies, they are not.)

During the 1980s, unfortunately, the effectiveness of the GATT process seemed to wane, with the focus shifting to regional free trade agreements. We must next ask why.

The erosion of the multilateral process

Everyone who thinks about it has his own list of problems with the GATT process. I would list four main factors that have eroded the effectiveness of the GATT mechanism at channeling special interests.

First is the decline of the U.S. leadership role. There is considerable disagreement among political scientists about the extent to which international policy coordination requires a hegemonic power. What is clear is that the dominant position of the United States in the early postwar period was helpful as a way of limiting free rider problems: the United States could and did both twist arms and offer system-sustaining concessions as a way of helping the GATT process work. With the United States accounting for a progressively smaller share of gross world product, and with U.S. dominance in productivity and technology progressively eroded, the United States has been losing both the means and the desire to serve as global trade hegemon.⁶

A second long-term trend that has undermined the GATT process is the growing subtlety of the issues that must be dealt with. Increasingly, trade negotiations must deal with problems for which regulating the policies imposed by nations at their borders are insufficient. The manufactured goods that enter world trade are increasingly knowledge-intensive; this implies both that traditional criteria for “unfair” trade practices are inappropriate and that domestic policies in support of R&D become

issues of trade conflict. The growing role of direct investment blurs the lines between trade policy, which is subject to GATT discipline, and investment policy, which is not. And the role of government itself, and its intrusiveness into the economy, has (in spite of conservative ideological triumph) grown to a point where the distinction between international and domestic policies is difficult to draw.

A third problem is the changing character of protectionism itself, based on the creativity of bureaucrats. In the early postwar period, protectionism was a matter of explicit, unilateral government policies: tariffs, quotas, exchange controls. The great postwar liberalization steadily ratcheted these measures down, to the point where except in agriculture they are now fairly unimportant. But the new protectionism that emerged with increasing force after the mid-1970s was more slippery, exploiting the weaknesses of the system. "Voluntary" export restraints, orderly marketing agreements, harassment by countervailing duty cases, red tape barriers, etc., have all proved much more difficult to police than straightforward tariffs and quotas.

Finally, the legitimacy of the GATT system has been undermined by the growing importance of new players in the world economy—above all Japan—who are institutionally different enough from the original players to raise questions about what is being negotiated. The GATT is a system largely imposed by the United States, and created in our own image. That is, it is a legalistic system that focuses on process rather than results. Whatever the facts of the (much disputed) case, the widespread perception is that such legalisms are ineffective when dealing with Japan; that the Japanese economy may be as open *de jure* as one likes, and yet that the collusive institutional structure of Japan's economy will continue to produce an economy that is *de facto* highly protectionist.

From the economist's point of view, none of these trends should affect the desirability of free trade. Leaving aside some of the recent strategic trade policy arguments, the basic economic argument is still that unilateral free trade is the best policy; it doesn't matter whether there is a hegemon to enforce the rules, whether the rules are inadequate to the new game, whether players have become more adept at cheating, or whether there are new players for whom the rules are meaningless. Given the real political factors that underlie GATT-think, however, these factors do matter very much. And if the evidence of the 1980s is anything to go by, the cumulative effect of these problems has been to erode the effectiveness of the GATT process to the point where further progress has effectively ground to a halt.

The regional answer

The same checklist of frustrations with the GATT process helps explain why regional free trade agreements have gained so much force as an alternative.

First, the decline of the hegemonic role of the United States at a global level can be ignored in regional agreements where there either is a local hegemon or a special correlation of forces that makes such a hegemon unnecessary. In North America the United States obviously remains and will remain for the indefinite future the overwhelmingly dominant player; and U.S. political interest in helping Mexican reformers gives the U.S.-Mexico deal, at least, some of the national security gloss that used to be attached to the idea that free trade helped fight Communism. In Europe the case is somewhat more complex: in effect the idea of a single market is being pushed by a Franco-German entente, in which Germany for historical reasons needs to be seen as a good European nation, and France sees its national influence best served by being

part of a European whole. In the EC enlargement, as in the U.S. embrace of Mexico, politics played a large part: the wealthy EC nations wanted to reward and safeguard the Southern European transition to democracy.

Our second and third problems with the GATT—the complexities of dealing with modern trade and with modern trade barriers—are also, on the evidence, more easily dealt with at a regional level than at a global level. Europe's 1992 is not so much a trade agreement as an agreement to coordinate policies that have historically been regarded as domestic. That is, it is in effect a mutual sacrifice of national sovereignty. The Canada-U.S. FTA also involves significantly more than free trade: it is a pact over investment rules, and involves creation of dispute settlement mechanisms that limit the ability of the countries to act unilaterally.

Why can regional pacts do what global negotiations cannot? The answer appears to be that neighbors understand and trust one another to negotiate at a level of detail and mutual intrusiveness that parties to global negotiations cannot. One does not hear U.S. businessmen raising the arguments against free trade with Canada that they raise against Japan—nobody claims that Canada is so institutionally different from the United States, so conspiratorial a society, that negotiated agreements are worthless and ineffective. We think that we understand and can trust the Canadians; apparently the European nations have reached a similar point of mutual understanding and trust. North Americans and Europeans have not reached a comparable state with regard to one another, and both deeply distrust the Japanese.

And this is the final point. Whether or not Japan is really a radically different kind of player from other advanced nations,⁷ the perception that it is has done a great deal to undermine the perceived effectiveness and legitimacy of the GATT in the United States and Europe.

So the great advantage of regional pacts is that they can exclude Japan.

One could argue that the surge of interest in regional free trade agreements is actually a godsend to world trade. Given the loss of momentum in global trade negotiations, regional pacts offer a route through which trade can still increase. Of course this trade increase might in principle be diversion rather than creation, and hence make the world worse rather than better off. As argued in the first part of this paper, however, the importance of natural blocs is such that this is unlikely.

The real case against free trade agreements is that they may undermine the effort to deal with the problems of the multilateral system.

Free trade agreements and the international system

In the past two years there has been a schizophrenic mood in Washington regarding trade policy. On one side, the dismal prospects for the Uruguay Round, and the perceived lack of public spirit by the Europeans, have led to disillusionment with the prospects for the GATT—and, to at least some extent, a resigned acceptance of the likelihood of greater U.S. protectionism against Japan. On the other side, prospects for free trade with Mexico have brought out the traditional export sector support for liberalization with full force. It has been noted by a number of observers that the U.S. business community has put much more effort into supporting Mexican free trade than into any other trade area, even though Mexico remains a considerably smaller market than either the EC or Japan.

European enthusiasm over 1992 has similarly gone hand in hand with a rather sour attitude toward trade with non-European nations, and in particular with a fairly notable failure to make any concessions on agriculture

that would help make the Uruguay Round a success and thus help sustain the GATT's credibility.

Suppose that one could make the following two-part argument:

(i) By focusing on regional free trade, the United States and the EC have diverted political energies away from working on the problems of the GATT.

(ii) Had they committed themselves to working within a multilateral framework, they could have achieved a solution to the GATT's difficulties that would have led to better results than the local solutions they have achieved instead.

If one believed this argument, one could then believe that the rise of free trade agreements has had an overall negative effect.

Part (i) of the argument clearly has some validity. Free trade agreements in Europe and North America have diverted some political, administrative, and intellectual capital away from the multilateral negotiating process. They have also reduced the sense of urgency about getting on with that process.

But would the GATT process really have done much better in the absence of moves toward regional free trade? This does not seem too plausible. The GATT's problems are deep-seated; it is hard to imagine achieving anything at the global level remotely approaching what the EC and the Canadian/U.S. pact have accomplished. And the problem of Japan seems extremely intractable.

It is understandable that economists and trade negotiators who have grown up in a world in which multilateral negotiations were the centerpiece of trade policy would be disturbed by a shift in emphasis toward regional agreements, especially if that shift seems to impair the effectiveness of the multilateral process—which it does. But while the move to free trade areas has surely done the multilateral process

some harm, it is almost surely more a symptom than a cause of the decline of the GATT.

The Impact of the Move Toward Free Trade Zones

An unsophisticated view would see Europe 1992 and the move toward North American free trade as unadulterated good things. Global free trade would be better still, but these moves at least are in the right direction. And even if one is dismayed by the disappointments of the Uruguay Round, one may still take comfort in the continuing integration of markets at a more local level.

A more sophisticated view sees both economic and political shadows. Free trade areas are not necessarily a good thing economically, because they may lead to trade diversion rather than trade creation. In the highly imperfect politics of international trade, regional free trade zones could upset the balance of forces that has allowed the creation of a fairly liberal world trading system.

The basic message of this paper is that the unsophisticated reaction is wrong in theory but right in practice. The prospects of trade diversion from free trade areas are limited, because the prospective trading blocs mostly fall along the lines of "natural" trading areas, countries that in any case do a disproportionate amount of their trade with one another. While regionalism does to some extent probably undermine the political force behind multilateral trade negotiations, the problems of the GATT are so deep-seated that it is unlikely that a world without regional free trade agreements would do much better.

The world may well be breaking up into three trading blocs; trade within those blocs will be quite free, while trade between the blocs will at best be no freer than it is now and may well be considerably less free. This is not what we

might have hoped for. But the situation would not be better, and could easily have been worse,

had the great free trade agreements of recent years never happened.

Appendix

Trading Blocs and World Welfare

This appendix lays out a simple model of the relationship between the number of trading blocs in the world economy and world welfare. It is based on Krugman (1991); as discussed in the text, it is intended as a guide to framing the issue rather than as a realistic tool for calculating the effects of free trade zones.

We imagine a world whose basic units are geographic units that we will refer to as "provinces." There are a large number N of such provinces in the world. A country in general consists of a large number of provinces. For the analysis here, however, we ignore the country level, focusing instead on "trading blocs" that contain a number of countries and hence a larger number of provinces. There will be assumed to be $B < N$ trading blocs in the world. They are symmetric, each containing N/B provinces (with the problem of whole numbers ignored). In this simplified world, the issue of free trade zones reduces to the following: how does world welfare depend on B ?

Each province produces a single good that is an imperfect substitute for the products of all other provinces. We choose units so that each province produces one unit of its own good, and assume that all provincial goods enter symmetrically into demand, with a constant elasticity of substitution between any pair of goods. Thus, everyone in the world has tastes represented by the CES utility function

$$U = \left[\sum_{i=1}^N C_i^\theta \right]^{1/\theta}, \quad (1)$$

where C_i is consumption of the good of province i , and the elasticity of substitution

between any pair of products is

$$\sigma = \frac{1}{1-\theta}. \quad (2)$$

A trading bloc is a group of provinces with internal free trade and a common external ad valorem tariff. We ignore the realistic politics of trade policy, and simply assume that each bloc sets a tariff that maximizes welfare, taking the policies of other trading blocs as given. This is a standard problem in international economics: the optimal tariff for a bloc is

$$t^* = \frac{1}{\epsilon - 1}, \quad (3)$$

where ϵ is the elasticity of demand for the bloc's exports.

In a symmetric equilibrium in which all blocs charge the same tariff rate, it is possible to show that (see Krugman 1991)

$$\epsilon = s + (1-s)\sigma, \quad (4)$$

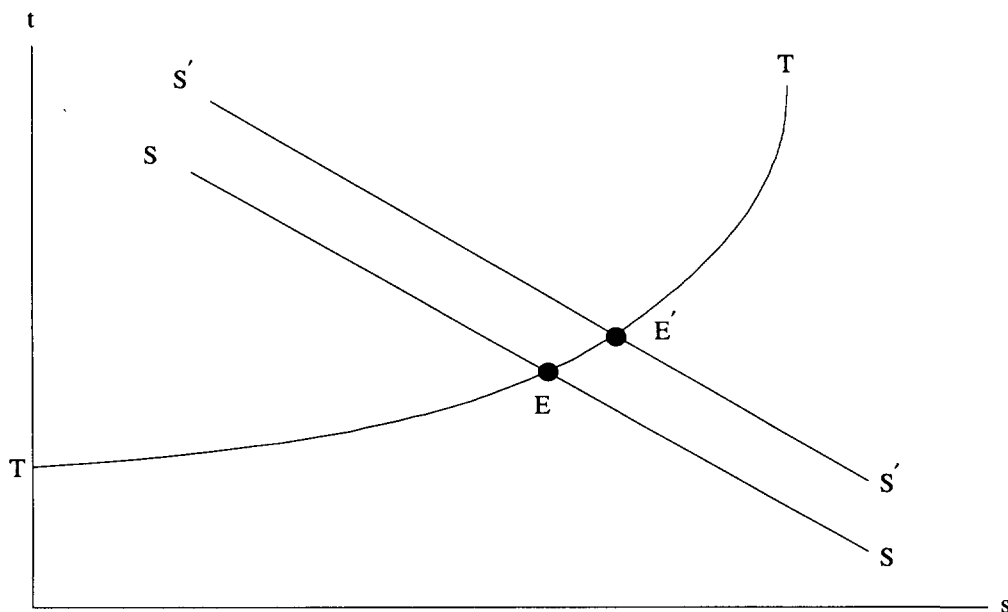
where s is the share of each bloc in the rest of the world's income measured at world prices. The optimal tariff is therefore

$$t^* = \frac{1}{(1-s)(\sigma-1)}. \quad (5)$$

It is apparent from (5) that the larger the share of each bloc's exports in the income of the world outside the bloc, the higher will be the level of tariffs on intra-bloc trade. This immediately suggests that a consolidation of the world into fewer, larger blocs will lead to higher barriers on inter-bloc trade.

One cannot quite stop here, however, because the share of each bloc in the rest of the world's spending depends both on the number of blocs and on the worldwide level of tariffs.

Figure 1



Again after some algebra it is possible to show that this share equals

$$s = \frac{1}{(1+t)^{\sigma} + B - 1}, \quad (6)$$

so that the share of each bloc's exports in the rest of the world's income is decreasing in both the tariff rate and the number of blocs.

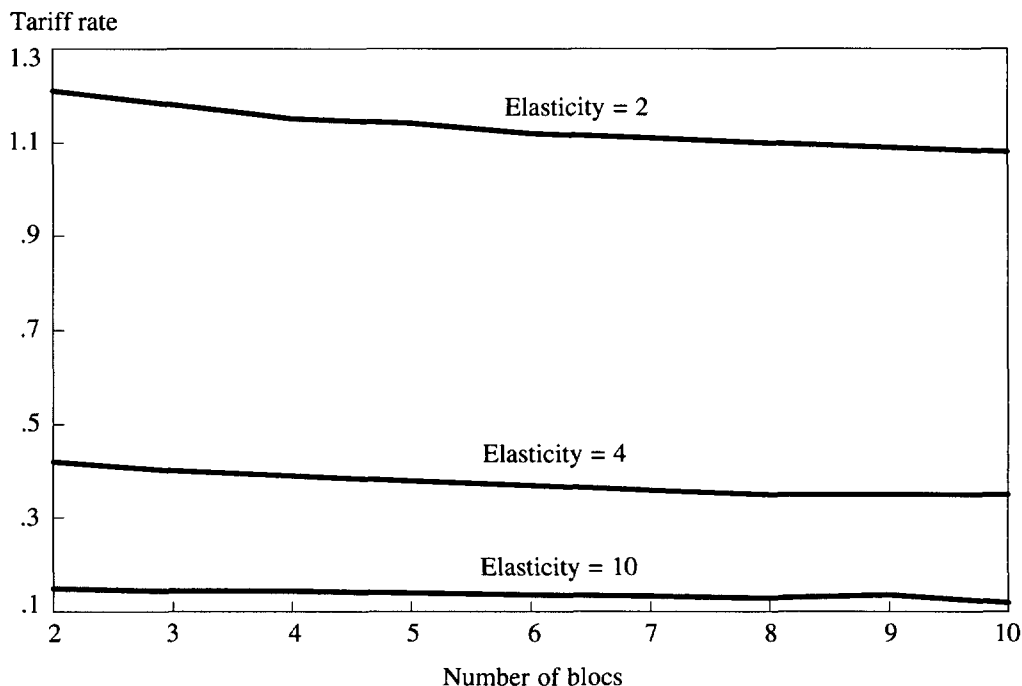
Equations (5) and (6) simultaneously determine the tariff rate and the export share for a given number of blocs B . In Figure 1, the downward-sloping curve SS represents (6); it shows that the higher is the worldwide level of tariffs, the lower the share of each bloc in the spending of other blocs. The curve TT represents (5); it shows that the optimal tariff rate is higher, the smaller that export share. Equilibrium is at point E , where each bloc is levying the unilaterally optimal tariff.

Now suppose that there is a consolidation of the world into a smaller number of blocs. We see from (6) that for any given tariff rate, the effect of the reduction in B is increase s ; thus SS shifts up to $S'S'$. As a result, tariff rates rise, as equilibrium shifts from E to E'

Clearly this change will reduce the volume of trade between any two provinces that are in different blocs. Even at an unchanged tariff, the removal of trade barriers between members of the expanded bloc would divert some trade that would otherwise have taken place between blocs. This trade diversion would be reinforced by the rise in the tariff rate.

We now turn to welfare. Given the utility function (1), it is possible to calculate the welfare of a representative province as a function of the total number of provinces N , the number

Figure 2



of blocs B , and the tariff rate t on inter-bloc trade. Since N plays no role in the analysis, we can simplify matters somewhat by normalizing N to equal 1. Again after considerable algebra, given in Krugman (1991), we find that the utility of a representative province is

$$U = \left[\frac{B}{(1+t)^\sigma + b-1} \right] [(1-B^{-1}) + B^{-1}(1+t)^{\sigma\theta}]^{1/\theta}. \quad (7)$$

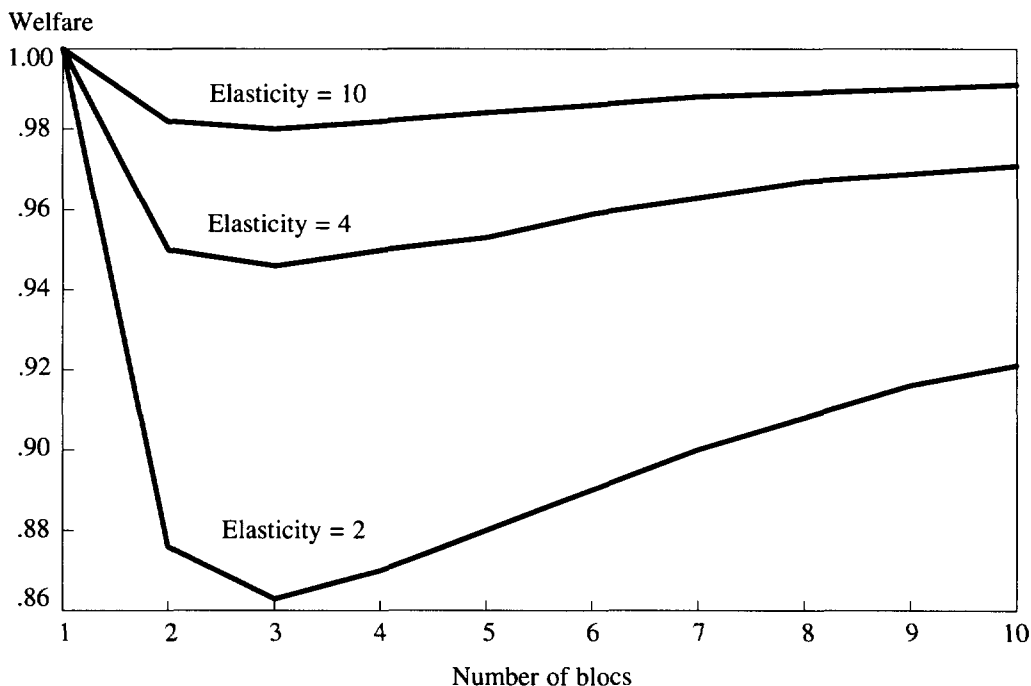
If trade were free, this would imply a utility of 1. Since the tariff rate t is also a function of B , we can use (5), (6), and (7) together to determine how world welfare varies with the number of trading blocs.

The easiest way to proceed at this point is to solve the model numerically. This grossly over-simplified model has only two parameters, the number of trading blocs and the elasticity of sub-

stitution between any pair of provinces; it is therefore straightforward to solve first for tariffs as a function of B given several possible values of the elasticity, and then to calculate the implied effect on world welfare. Here the values of ϵ considered are 2, 4, and 10.

Figure 2 shows how world tariff rates vary with the number of blocs. Two points are worth noting. First, the relationship between tariff rates and the number of blocs is fairly flat. The reason is that when there are fewer blocs, trade diversion tends to reduce interbloc trade, and thus leads to less of a rise in each bloc's share of external markets than one might have expected. Second, except in the case of an implausibly high elasticity of demand, predicted tariff rates are much higher than one actually observes among advanced nations. This is not an artifact of the

Figure 3



economic model: virtually all calculations suggest that unilateral optimum tariff rates are very high. What it tells us, therefore, is that actual trade relationships among advanced countries are far more cooperative than envisaged here.

Finally, we calculate welfare. Figure 3 shows the results. World welfare is of course maximized when there is only one bloc, in other words, global free trade. As suggested informally in the text, however, the relationship between welfare and the number of trading blocs is not monotonic but U-shaped: world welfare reaches a minimum when there are a few large blocs, and would be higher if there

were more blocs, each with less market power.

The figure also shows a startling result: for the full range of elasticities considered, world welfare is minimized when there are three blocs.

As pointed out in the text, however, this result is an artifact of the assumption that under free trade any two provinces will trade as much as any other pair. That is, it ignores geography, which gives rise to natural trading blocs; as argued there, in practice the strength of this natural linkage is strong enough to make it unlikely that consolidation of the world into regional blocs would actually reduce welfare.