

Preferential Trade Agreements: Trade Diversion and Other Worries

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Whether preferential trade agreements impede or help the effort to liberalize trade is hotly debated in the economics literature. There is, however, broad agreement among economists on four points: First, preferential agreements create losses by diverting trade away from the most efficient producers. Second, although these losses are typically small, we can find cases where they appear to be important. Third, such losses could become a major problem if the world becomes divided into a small number of competing trade blocks. Fourth, a world of overlapping preferential trade agreements requires a complex set of rules to govern trade, and such complex rules are sand in the wheels of international commerce.

Introduction

Do preferential trade agreements (PTAs) impede or enhance the prospects for global free trade? That was the question addressed by Soamiely Andriamananjara in the last issue of this *Review*.² The conclusion was that PTAs, also called regional trade agreements, create incentives for countries to resist broad-based trade liberalization, although careful policy can diminish these incentives. In this second article in a series on PTAs we compare the effects of PTAs to the effects of multilateral agreements. Although both regional agreements and multilateral agreements might seem different means toward the same end, namely free trade, the economics literature has identified a number of concerns about regional accords. Taken together, the literature's message is that although regional agreements create gains for member countries, they can also create losses for both members and nonmembers.³ As such, PTAs are often a poor substitute for multilateral trade liberalization, although careful trade policy can again diminish some of their negative effects. After briefly review-

ing the increasing trend toward regional agreements, we will turn our attention toward explaining the literature's reservations about PTAs.

Trends Toward Regionalism

A preferential trade agreement lowers tariffs among the member countries, while maintaining member protection against nonmember trading partners. Free trade agreements (FTAs) and customs unions (CUs), both PTAs, differ in that FTAs allow individual countries to maintain their own tariff against outside countries, whereas members of a CU adopt a common external tariff. The North American Free Trade Agreement (NAFTA) and the European Union (EU) are prominent examples, respectively, of a FTA and a CU.⁴

For much of the post World War II period the United States resisted membership in regional accords, although this reluctance changed to enthusiastic embrace in the mid-1980s. With the help of the United States the number of PTAs has increased markedly. According to the World Trade Organization (WTO) it took nearly 50 years for the first 124 such agreements to be formed (from 1948 to 1994), but only 6 years since the creation of the WTO in 1995 to add an additional 90 agreements.⁵ These numbers exclude agree-

¹ The views and conclusions expressed in this article are those of the author. They are not necessarily the views of the U.S. International Trade Commission as a whole or of any individual Commissioner.

² Soamiely Andriamananjara, "Preferential Trade Agreements and the Multilateral Trading System," *The International Economic Review*, January/February 2001, USITC publication 3402.

³ On perhaps the most critical side of this debate is Jagdish Bhagwati, Arthur Lehman Professor of Economics at Columbia University. Speaking candidly, he has called PTAs "a pox on the world trading system." Jagdish Bhagwati, "Fast Track to Nowhere," *The Economist*, Oct. 18, 1997, p. 22.

⁴ More precisely, the EU is a common market. Their integration has moved beyond trade policy to allow free movement of people, as well as other reforms.

⁵ See WTO, "Regionalism: Facts and Figures" found at Internet address http://www.wto.org/english/tratop_e/region_e/regfac_e.htm.

ments still being negotiated, like that between the United States and Jordan, the United States and Singapore, and the United States and Chile.

Preferential trade agreements are growing in number, and they also seem to be growing in influence. A look at the trade data reveals that countries near each other trade a lot more with each other than with more distant countries. Simple intra-regional trade concentration ratios (dividing a region's share of trade between each other by their share of trade with the rest of the world) would equal one if there were no bias toward regional trade. Frankel⁶ finds concentration ratios in 1994 of 2.2 for NAFTA, 1.6 for the EU, and 12.8 and 12.6 for Mercosur and the Andean Pact, respectively.⁷ Although there are non-PTA based explanations for high values of regional trade, like the trade-enhancing effect of proximity *per se*, the increasing trend for each of these ratios suggests a role for PTAs.⁸

More sophisticated empirical analysis also supports the proposition that a growing percentage of world trade has been created by regional trade liberalization. After controlling for distance, economic size, and other factors, Frankel finds strong effects for the Association of South-East Asian Nations (ASEAN), which boosts trade among member by an estimated fivefold, and the Andean Pact and Mercosur, which are both estimated to increase trade by a factor of 2.5. Intra-EC trade is estimated to be 65 percent larger by virtue of the common market between the members. In sum, and not surprisingly, PTAs seem to cause member countries to trade more with member states, and less in relative terms with nonmember countries.

⁶ Jeffrey Frankel, *Regional Trading Blocs in the World Economic System* (1997, Institute for International Economics: Washington DC).

⁷ The NAFTA consists of Canada, Mexico, and the United States; the *Mercado Común del Sur*—known as Mercosur—is a FTA composed of Argentina, Brazil, Paraguay, Uruguay (Bolivia and Chile are associate members); the Andean Pact is a CU composed of Bolivia, Colombia, Ecuador, and Venezuela; the EU is a common market consisting of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom.

⁸ For the argument that these high ratios are caused by the trade-enhancing effects of proximity, see Paul Krugman, "The Move to Free Trade Zones," in *Policy Implications of Trade and Currency Zones*, 1991, presented at a symposium sponsored by Federal Reserve Bank Kansas City, pp. 7–41. For a rebuttal in favor of the position that PTAs are behind such high trade volumes, see Arvind Panagariya, "Preferential Trade Liberalization: The Traditional Theory and New Developments," *Journal of Economic Literature*, 2000, vol. 35, pp. 287–331.

The Effect of Preferential Agreements on Trade and Welfare

Economic theory teaches us that multilateral trade liberalization increases the well-being, or welfare, of the liberalizing countries. PTAs create a similar benefit by lowering trade barriers with partner countries, while maintaining protection against nonmember countries. In both cases, consumers benefit from lower cost imports, and producers lower their costs by using more and cheaper imported inputs. Producers who compete with those imports stand to lose by facing stiffer competition, and the government loses revenue when tariffs are reduced or eliminated. In a multilateral liberalization, the total of the losses are substantially smaller than the sum of the gains. Thus, when economists say that free trade increases a country's welfare, they mean that the gains from this free-trade policy exceed the losses.

The first problem with PTAs is that the gains do not necessarily exceed the losses. Jacob Viner was the first to distinguish how a regional trade agreement both creates trade and diverts it.⁹ For example, if Mexico is the lowest cost supplier of fresh vegetables to the U.S. market pre-NAFTA, then NAFTA will create trade, much like a multilateral agreement would, by lowering tariffs on Mexican produce. The fact that the tariff on other countries remains at its original level matters little given Mexico's lowest cost status. By contrast, if a third country—say Argentina—were the lowest cost producer, then Mexico's accession to NAFTA may divert trade away from the lowest cost producer, Argentina. In such a case, it is possible that U.S. losses exceed gains.¹⁰

From the point of view of an excluded country, trade diversion—i.e. the loss of exports to the PTA—can be a welfare loss. If its exports to members of a PTA are severely diminished, it may be forced to lower the price of its exports, resulting in an overall welfare loss. This effect is unlikely to be important economically,

⁹ Jacob Viner, *The Customs Union Issue* (1950, Carnegie Endowment for International Peace: New York).

¹⁰ The U.S. Government, in this example, will lose the tariff revenue collected on imports of produce from Argentina. Although U.S. consumers will see a price decrease when the tariff on Mexico is reduced or removed as a result of NAFTA, because Mexico is a higher cost producer than Argentina, the price decrease seen by consumers will not match the change (per unit of imports) in tariff revenue lost by the U.S. Government. For a complete explanation of weighing trade diversion versus trade creation, see Panagariya (2000).

however, unless the PTA imposes large tariffs (or non-tariff restrictions) on the excluded country, and the PTA accounts for a significant percent of total demand for the excluded country's goods.¹¹ The economics literature suggests that most PTAs show little evidence of economically important trade diversion, but there are exceptions.

Frankel summarizes much of the trade-diversion literature up to 1997.¹² The U.S.-Canada Free Trade Agreement (known in the United States as the CFTA), NAFTA, and the various stages of the EU, have all produced trade diversion, but not enough to create significant losses for most excluded countries. Winters and Chang's study of Spain's accession to the EU, for example, estimates the loss in finished manufactures markets to the United States at \$80 million.¹³

However, Winters noted an exception in reviewing Kreinin and Plummer's 1992 study of the EU's "Southern Enlargement" when it expanded from 9 to 12 member states.¹⁴ Kreinin and Plummer put the losses to ASEAN and Korean exports at \$468 million and \$324 million, respectively, when the two countries' exports were displaced by the accession to the EU of Greece, Portugal, and Spain.¹⁵ Whereas these values might not be large relative to the U.S. economy, they may be considerably more significant for the smaller economies incurring such losses.

Haaland and Norman's study of the 1992 EU internal market program, also reviewed by Winters, looks at the effects of the EU's deepening integration on Japan and the United States.¹⁶ In their computable general equilibrium model both countries lose, but the losses are small due to the small proportion of their transactions with the EU. In an earlier paper, Norman predicted significant losses for Sweden from "1992." Unlike Japan and the United States, Sweden sells a significant share of its output to the EU.¹⁷

¹¹ See Panagariya (2000).

¹² Frankel (1997, pp. 107-113).

¹³ L. Alan Winters, and Won Chang, "Regional Integration and Import Prices: An Empirical Investigation," *Journal of International Economics*, 2000, vol. 51, pp. 363-377.

¹⁴ L. Alan Winters, "Regionalism and the Rest of the World: Theory and Estimates of the Effects of European Integration," *Review of International Economics*, 1997, Special Supplement, pp. 134-147.

¹⁵ Pomfret raises an important critique of these results, arguing that they are biased upwards. Richard Pomfret, "Measuring the Effects of Economic Integration on Third Countries," *World Development*, 1993, vol. 21, pp. 1437-1439.

¹⁶ Jan Haaland and Victor Norman, "Global Production Effects of European Integration," ch. 3, in L. Alan Winters (ed.), *Trade Flows and Trade Policy after 1992* (1992, Cambridge University Press: Cambridge UK).

¹⁷ Victor Norman, "EFTA and the Internal European Market," *Economic Policy*, 1989, vol. 9, pp. 423-466.

As noted by Frankel,¹⁸ Yeats claims to find the "smoking gun" of trade diversion arising from Mercosur.¹⁹ Trade in the member countries grew most quickly in goods for which they do not have a comparative advantage--generally highly capital intensive goods. Chang and Winters, in a result they call "very preliminary," find U.S. trade diversion losses from Mercosur to total \$496 million for 1996.²⁰ By contrast, Wall notes that U.S. exports to Mercosur have kept pace with changes in the GDPs of the United States and Mercosur members.²¹ If exports closely track incomes, he argues, then this is evidence against the idea that the PTA has diverted U.S. exports.

It's possible to create PTAs that minimize the chance for trade diversion. Krugman argues that PTAs formed between "natural" trading partners--those geographically near each other--who trade extensively before the trade agreement is created, can expect trade creation typically to outweigh trade diversion, and can therefore expect welfare gains.²² The logic is that the extensive trade prior to the agreement is evidence that the members are the low-cost supplier of the products traded between them, which minimizes the potential for trade diversion. By this standard, the CFTA was wise policy, as each country was the other's largest trading partner prior to the agreement. Likewise for the agreement between the United States and Mexico in NAFTA, bilateral trade between the two countries was quite large well before the agreement.²³

Other Concerns: Rules of Origin and Trade Conflicts

There are other concerns over PTAs besides trade diversion. Krueger notes the problems that arise from overlapping FTAs and rules of origin.²⁴ Rules of origin

¹⁸ Frankel (1997, pp. 111-112).

¹⁹ Alexander Yeats, "Does MERCOSUR's Trade Performance Raise Concerns About the Effects of Regional Trade Arrangements?," *Policy Research Working Paper*, no. 1729 (1997, World Bank: Washington DC).

²⁰ Won Chang and L. Alan Winters, *The Price Effects of Regional Integration: Non-Member Reaction to MERCOSUR*, 1998, processed.

²¹ Howard Wall, "Have Regional Trade Blocs Diverted U.S. Exports?" *International Economic Trends*, Feb. 2001, the Federal Reserve Bank of St. Louis, p. 1.

²² Paul Krugman, "The Move to Free Trade Zones," 1991.

²³ Canada and Mexico, by contrast, had little trade with one another prior to NAFTA, raising the possibility of some trade diversion. As each country does the bulk of its trading, prior and post PTA, with the United States, trade diversion is unlikely to be very important.

²⁴ Anne Krueger, "Problems with Overlapping Free Trade Areas," in Ito and Krueger (ed.), *Regionalism versus Multilateral Trade Arrangements* (1997, University of Chicago Press: Chicago), pp. 9-24.

are the criteria used to define a good as coming from another member of a PTA.²⁵ For example, if Mexico imports automobile parts from Argentina, adds parts of its own and assembles automobile engines, NAFTA's rules of origin will determine whether the resulting automobile engines have enough Mexican content to be eligible for duty free trade with the United States. The difficulty is that rules of origin can vary across different agreements. For example, the United States has different rules of origin for imports from NAFTA, the Caribbean Basin Initiative, and the Agreement on Textiles and Clothing. As Krueger notes, "Trade lawyers specialize in litigation over the origins of particular imports even without overlapping FTAs. With overlaps, even more ... disputes ... would be likely."²⁶ Rules of origin can also be intentionally written in ways that limit competition. When the PTA is being negotiated, before the rules of origin are completed, import-sensitive industries have an opportunity to lobby for rules that shield them from competition.

Finally, the trend in trade negotiations toward regionalism—the focus on PTAs instead of broad multilateral trade liberalization—has the potential to make trade diversion more salient. Whereas individual members

²⁵ It should be noted that customs unions do not need rules of origin, since they apply a common tariff to all non-member trading partners.

²⁶ Krueger (1997, p. 18).

of a PTA may be too small to have market power, the PTA as a whole may be large enough to raise the welfare of its members at the expense of excluded countries. By raising tariffs against nonmembers, the PTA forces excluded countries to lower the prices they charge to PTA members. Worse still, there is the potential for reciprocal tariff increases, a trade war, between pairs of large PTAs. In economic simulations, assuming that large PTAs do try to raise tariffs against each other, the worst outcome for global welfare is a world divided into two or three trading blocs.²⁷

In conclusion, whether regional trade agreements ultimately help or impede the effort to liberalize trade is an issue hotly debated. There is broad agreement, however, on a few closely related issues. First, PTAs create losses from trade diversion, losses which are not present in multilateral trade liberalizations. Second, although these losses are typically small, we can find cases (like Mercosur) where they appear to be important. Third, trade diversion could become a major problem if the world becomes divided into a small number of competing trade blocks. Finally, a world of overlapping PTAs requires a complex set of rules of origin, and such complex rules are sand in the wheels of international trade.

²⁷ These insights come from Paul Krugman in 1991. See also the review in Panagariya (sec. 5, pp. 309–310).