
INTERNATIONAL ECONOMIC REVIEW

**United States International Trade Commission
Office of Economics**

International Trade Developments

*Measuring the Link Between Trade and Environment: An Application
to North American Fisheries*

Preferential Trade Agreements: Trade Diversion and Other Worries

U.S. Trade Developments

International Economic Comparisons



OFFICE OF ECONOMICS

Robert B. Koopman, *Director*

The *International Economic Review* is a regular staff publication of the Office of Economics, U.S. International Trade Commission. The opinions and conclusions contained in this publication are those of the authors and are not the views of the Commission as a whole or of any individual Commissioner. The *IER* is produced as part of the Commission's international trade monitoring program. Its purpose is to keep the Commission informed about significant developments in international economics and trade and to maintain the Commission's readiness to carry out its responsibility to provide technical information and advice on international trade matters to policymakers in the Congress and the Executive Branch. The information and analysis in this series are for the purpose of this publication only. Nothing in this publication should be construed to indicate how the Commission would find in an investigation conducted under any statutory authority. The *IER* is available to Government officials outside the Commission on a request basis. The *IER* also is available on the Commission's Internet web site (<http://www.usitc.gov/>) and through the U.S. Department of Commerce National Trade Data Bank (NTDB). Inquiries or comments on information appearing in the *IER* may be made directly to the author, or to:

Editor, *International Economic Review*
Country and Regional Analysis Division/OE, Room 602
U.S. International Trade Commission
500 E Street SW., Washington, DC 20436
Telephone (202) 205-3255

TABLE OF CONTENTS

Page

International Trade Developments

Measuring the Link Between Trade and Environment: An Application to North American Fisheries.

Using a method designed to provide an upper bound for measuring the effects on production and environmental indicators from trade liberalization for North American fisheries, the authors' final results imply that such effects are negligible.

(Grace Chomo and Michael Ferrantino, 202-205-3125 and 202-205-3241) 1

Preferential Trade Agreements: Trade Diversion and Other Worries.

Do preferential trade agreements hinder or help the effort to liberalize trade: this issue is hotly debated. There is, however, broad agreement among economists on four closely related issues: First, preferential agreements create losses by diverting trade away from the most efficient producers. Second, whereas these losses are typically small, we can find cases where they appear to be important. Third, such losses could become a major problems 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.

Michael Anderson, 202-205-3056) 5

U.S. TRADE DEVELOPMENTS

(Michael Youssef, 202-205-3269) 9

INTERNATIONAL ECONOMIC COMPARISONS

(Michael Youssef, 202-205-3269) 15

Statistical Tables 19

INTERNATIONAL TRADE DEVELOPMENTS

Measuring the Link Between Trade and Environment: An Application to North American Fisheries

Grace Chomo and Michael Ferrantino¹
vchomo@usitc.gov and mferrantino@usitc.gov
202-205-3125 and 202-205-3241

Using a method designed to provide an upper bound for measuring the effects on production and environmental indicators from trade liberalization for North American fisheries, the authors' final results imply that such effects are negligible.

Introduction

Despite substantial interest in measuring the links between trade liberalization and the environment,² economic theory offers an ambiguous causation between trade liberalization and environmental quality. Trade liberalization may help the environment, harm the environment, or leave it relatively unaffected, depending on particular circumstances. Little empirical work has addressed the issue of sustainability of fisheries under trade liberalization. The production of

ocean catch fisheries³ can result in an overutilization of a renewable resource if the stocks of fish fall below a level that supports the maximum sustainable yield. Fishery stocks can also be underutilized if the current stocks are above the level necessary to support the maximum sustainable yield. Thus, changes in imports and exports—due to price changes—can affect production of fishery products, which can influence the utilization status of the fishery, moving it closer to or further away from the ideal situation of production at maximum sustainable yield. In this paper, the authors develop a method for measuring effects of NAFTA tariff elimination on North American fisheries production and such environmental indicators as stock levels and utilization rates.

The primary constraint in analyzing the links between trade liberalization and natural resource use is the incompatibility of trade, production, and environmental data. In the case of North American fisheries, these trade data are compiled in terms related to consumer goods. The HS tariff codes do not in fact identify fishery products by region of catch, and the tariff

¹ The views and conclusions expressed in this article are those of the authors. They are not necessarily the views of the U.S. International Trade Commission as a whole or of any individual Commissioner. This article is based on research presented at the First North American Symposium on Understanding Linkages Between Trade and the Environment, sponsored by the Commission for Environmental Cooperation, Oct. 11-12, 2000, Washington, DC. For symposium coverage, see <http://www.iisd.ca/sd/cec/index.html>.

² Proceedings of recent international expert conferences on the topic include Per Fredriksson, ed. (1999), *Trade, Global Policy, and the Environment* (The World Bank: Washington, DC), OECD (1999), *Assessing the Environmental Effects of Trade Liberalisation Agreements: Methodologies* (OECD: Paris); and World Wildlife Fund and Futuro Latinoamericano (2000), *Background Material Prepared for the International Experts Meeting on Sustainability Assessments of Trade Liberalisation: 6-8 March 2000, Quito, Ecuador*; and the subsequent rapporteur's reports published

²—Continued
under the title *International Experts Meeting on Sustainability Assessments of Trade Liberalisation: 6-8 March 2000, Quito, Ecuador* (WWF International and Fundacion Futuro Latinoamericano: Gland, Switzerland and Quito, Ecuador).

³ In this study, the authors examine common property ocean catch fisheries, as opposed to private fish farming enterprises.

codes are not always species-specific. On the other hand, fisheries production data and environmental indicators are compiled in terms of regions and species and not consumer goods. Imperfect concordance of trade statistics with production and environmental indicators complicates the analysis of many product and species categories. Currently available data cannot directly chart the changes in trade flows to sustainability of individual fisheries in North American waters.

The results, however, do suggest that NAFTA tariff elimination has a minimal impact on North American fishery trade flows. Although data constraints drawing conclusions regarding the specific effect of NAFTA on environmental indicators for most specific North American fisheries, currently available data on the size of trade flow changes relative to NAFTA country production and supply of fisheries products make it possible to observe indirectly the effect of NAFTA tariff liberalization on overall sustainability of North American fisheries. Even when using a methodology designed to provide an upper bound, the authors still find that final results are negligible. In the case of Mexico, which had the highest pre-NAFTA tariff rates, trade liberalization under NAFTA may have slightly relieved pressure on fisheries in the aggregate by permitting substitution of imported fish for domestic fish production. In the cases of Canada and the United States, the fact that trade occurs primarily in unprocessed fisheries products, with correspondingly low pre-NAFTA tariffs, implies that the effect of NAFTA tariff elimination on fisheries production also has been negligible.

Measuring the Link Between Trade Flows and Environmental Indicators

Trade liberalization can stimulate increased trade, increasing production in the exporting country's fisheries sector. Similarly, substitution of imports for domestically caught fish may reduce pressure on the importing country's fisheries. Thus, the environmental effect of NAFTA trade liberalization on the sustainability of North American fisheries may be positive, negative, or negligible *a priori*. The health of the fishery prior to trade liberalization, as measured by its utilization status, will have a key impact on the effect of trade policy changes. If a fishery is underutilized by an exporting country, a significant increase in exports can increase the efficiency of resource use. Alternatively, a significant increase in imports will reduce stress on the

importing country's fishery. The data analysis must include environmental indicators on specific species and fisheries to estimate these trade liberalization effects on the health of a given fishery.

Data Issues

Some analysts express concern about the feasibility of showing cause-and-effect between trade policies and environmental indicators.⁴ These difficulties arise as a result of data constraints, measurement errors, or choice of modeling. Concordance problems are particularly severe in trade-environment research since data on environmental indicators are frequently collected for different purposes, and use different categories, than data on economic indicators. In order to estimate potential effects of NAFTA tariff liberalization on North American fisheries, data were examined on tariffs, trade flows, fisheries production, and environmental indicators.⁵

Data on trade flows between Canada, Mexico, and the United States are available by HS categories. All of HS chapter 3 and two subheadings in chapter 16 (1604-1605) capture most trade in fisheries products. The HS tariff line descriptions in chapter 16 represent processed consumer products, such as frozen fillets, fish roe, or canned tuna. Many tariff lines include unidentified or mixed species. The categories used in production and trade data are primarily motivated by commercial interests rather than environmental interests. Data on fisheries environmental indicators are based on species-specific regional locations that account for habitats and migration routes of the fish. A fish species habitat identified by an environmental indicator may not match regions identified in production data. Moreover, the categorization of fisheries regions by different organizations collecting production and sustainability data is nonstandard. The U.S. National

⁴ Commission for Environmental Cooperation (CEC) (1999), *Assessing Environmental Effects of the North American Free Trade Agreement (NAFTA): An Analytic Framework (Phase II) and Issue Studies* (Montreal, CEC), p. 45.

⁵ Data and information sources: Food and Agricultural Organization of the United Nations, *Fish and Fishery Products*, FAO Fisheries Circular No. 821 Revision 4 (1998), Rome, Italy; Food and Agriculture Organization of the United Nations, *The State of the World Fisheries and Aquaculture 1996*, Rome, Italy, (1997); Stock Status Reports of the Canadian Stock Assessment Secretariat (CSAS), Fisheries and Oceans Canada, found at Internet address <http://www.ncr.dfo.ca/csas/csas/status>; National Marine Fisheries Service, *Our Living Oceans: Report on the Status of U.S. Marine Resources, 1999*; U.S. Department of Commerce NOAA Technical Memo NMFS-F/SPO-41; and U.S. International Trade Commission data web, compiled from official statistics of the U.S. Department of Commerce, found at Internet address <http://www.usitc.gov>.

Marine Fisheries Service's (NOAA) environmental indicators include only fisheries within the 200-mile Exclusive Economic Zone (EEZ) of the United States, while the data of the U.N. Food and Agricultural Organization (FAO) include all oceans. Thus, data on U.S. fisheries in the Pacific Ocean are divided into the Alaska Region, the Pacific Coast Region (continental United States), and the Western Pacific Region (the EEZ around Hawaii and other U.S. islands), while the comparable data for the FAO are categorized under the Western Pacific, the Eastern Central Pacific, and the Western Pacific, none of which come close to matching the NOAA regions or the regional indicators available for some species in the U.S. trade data.

Trade Policy Analysis

The strongest conclusion from the current research concerns the magnitude of NAFTA tariff-induced changes on North American trade flows and the relative importance of these trade flow changes with respect to North American production and supply of fisheries products. Table 1 illustrates that most tariffs on fisheries trade in North America were low even prior to NAFTA tariff liberalization. Categories with significant applied tariffs included imports of processed products (HS 1604-1605) by all three NAFTA countries and imports of primary products (HS chapter 3) by Mexico. Although Canada and the United States had low pre-NAFTA average applied tariff rates in HS chapter 3, there were a few lines with tariff peaks. (See Table 1.)

Canada and Mexico are consistently net exporters of fisheries products, while the United States is consistently a net importer. For the period 1992-1995,⁶ Canada exported approximately two-thirds of fishery output and imported approximately two-thirds of supply for the domestic market. Over the same period, U.S. exports constituted 20 to 25 percent of output and imports contributed 40 percent to U.S. supply. The Mexican market is the most protected of the three, as measured by the height of tariffs, as well as the most closed as measured by the ratio of trade to supply and demand, with exports accounting for only 5 to 20 percent of output and imports contributing about 3 to 6 percent of Mexican supply.⁷

⁶ This data period contains two pre-NAFTA and two post-NAFTA observations.

⁷ For a more detailed description of trade shares for the first 5 years of NAFTA, see the USITC Office of Economics Working Paper EC2000-09b, "NAFTA Environmental Impacts on North American Fisheries," table 2, downloadable at <ftp://ftp.usitc.gov/pub/reports/studies/EC200009b.pdf>.

It should be noted that intra-NAFTA trade accounts for a minority of fishery products trade of the NAFTA member countries. About 42 percent of Canada's fisheries imports, 50 percent of Mexico's imports, and 78 percent of U.S. imports during the first 5 years under NAFTA were from non-NAFTA countries. When the intra-NAFTA fisheries products trade is limited to high-tariff NAFTA trade (HS 1604-1605 for all NAFTA members and HS 03 for Mexico), the volume is relatively small compared to total fisheries trade for Canada and the United States. High-tariff NAFTA trade shares were 7.2 percent for Canadian fishery exports and 9.2 percent for imports. High-tariff NAFTA imports accounted for 4.8 percent of total U.S. exports and 2.4 percent of U.S. imports of fishery products. Mexico was the exception with a 19.4-percent share for high-tariff NAFTA fisheries exports and a 50.4-percent share for imports. As previously mentioned, Mexico had the largest share of high-tariff NAFTA trade to total trade due to the higher incidence of significant pre-NAFTA tariffs in HS chapter 3 and HS 1604-1605.

How can NAFTA tariff eliminations in the high-tariff NAFTA trade categories be linked to potential changes in production and domestic supply in the NAFTA member countries? These effects can be calculated using the following method. The relative importance of intra-NAFTA exports as a share of domestic production was determined for each NAFTA member using HS-based trade flow data as measured in product weight. A ratio of high-tariff NAFTA fisheries exports to NAFTA member fisheries exports to the world gives the relative importance of trade in the pre-NAFTA high-tariff categories. Another ratio was constructed of NAFTA member fisheries exports to the world divided by fisheries production measured in live weight equivalent. The first ratio was multiplied by the second ratio to obtain high-tariff NAFTA fisheries exports as a share of domestic fisheries production. Using the same method, the relative importance of intra-NAFTA fisheries imports was calculated as a share of a each NAFTA member country's domestic fisheries supply. The calculated ratios show high-tariff NAFTA fisheries exports as a percent of domestic fisheries production to be approximately 5 percent for Canada, 2 percent for Mexico, and 1 percent for the United States. High-tariff NAFTA imports as a percentage of domestic supply are approximately 7 percent for Canada, 2 percent for Mexico, and zero for the United States.⁸ (See table 2)

⁸ These numbers are probably biased upward because the high-tariff processed fish products (HS 1604-1605) have higher unit values, and the ratio of product weight to live weight is lower than in primary products (HS 3).

Finally, the effect was estimated on high-tariff intra-NAFTA trade flows from elimination of NAFTA tariffs⁹ in these high-tariff fisheries categories.¹⁰ Assuming fisheries supply is perfectly elastic will give an upper bound estimate,¹¹ or the maximum possible effect on intra-NAFTA fisheries trade flows from

⁹ The tariffs are approximately 6 percent on Canadian and U.S. imports of processed fisheries products (HS 1604-1605) and 20 percent on Mexican imports in HS chapter 3 and HS 1604-1605.

¹⁰ This is a long-run analysis with no attempt to adjust for tariff phase-in. All tariffs are assumed to go to zero upon implementation of the agreement.

¹¹ This is an unrealistic assumption in fisheries production, where scarcity from over-fishing or environmental degradation can affect catch and catch effort. However, data constraints prevent distinguishing between individual fisheries and precludes fine-tuning of fisheries supply response in over- or in underutilized fisheries.

NAFTA tariff elimination.¹² Despite several sources of upward bias in the calculations, the results illustrate that NAFTA tariff elimination has a negligible effect on intra-NAFTA fisheries trade, and thus production (table 2). Canadian fisheries exports as a share of domestic production increase approximately 1 percent. Mexican and U.S. fisheries exports increase by less than one-half of 1 percent of domestic production levels. Fisheries imports by Canada and Mexico increase by less than 2 percent of domestic supply. The change in U.S. imports relative to U.S. supply is approximately zero. (See table 3.)

¹² Elasticity estimates in the literature range from -0.5 to -2.0, with some as large as -3 for Mexican consumer goods. We chose an elasticity of -4 to obtain an upper bound on the impact of NAFTA tariff elimination on intra-NAFTA fisheries trade.

Table 1
Pre-NAFTA (Pre-Uruguay Round) applied tariffs, HS chapters 3 and 1604-1605
(Percent)

Country	Chapter 3		Chapter 1604-1605	
	Simple average	Range	Simple average	Range
Canada	0.8	0.0 to 6.8	6.2	0.0 to 15.0
Mexico	19.6	0.0 to 20.0	20.0	20.0 to 20.0
United States	1.3	0.0 to 15.0	5.7	0.0 to 35.0

Source: WTO-IDB database, 1996 tariff schedules.

Table 2
High-tariff NAFTA trade as a percentage of production and supply
(Percent)

Country	High-tariff NAFTA exports/production	High-tariff NAFTA imports/supply
Canada	5.1	6.9
Mexico	1.8	1.9
United States	1.1	0.1

Source: Compiled by the authors. See footnote 7 for sources and methods.

Table 3
NAFTA-induced changes in fisheries product trade, as a percentage of production and supply
(Percent)

Country	Increased exports/production	Increased imports/supply
Canada	1.20	1.70
Mexico	0.40	1.50
United States	0.40	0.02

Source: Compiled by the authors. See footnote 7 for sources and methods.

Preferential Trade Agreements: Trade Diversion and Other Worries

Michael Anderson¹
andersonm@usitc.gov
202-205-3056

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).

U.S. TRADE DEVELOPMENTS

Michael Youssef¹
myoussef@usitc.gov
202-205-3269

The U.S. Department of Commerce (*Commerce News*, FT-900 (01-03)) reported that seasonally adjusted total exports of goods and services of \$89.5 billion and imports of \$120.6 billion in March 2001 resulted in a goods and services trade deficit of \$31.2 billion, \$4.3 billion more than the \$26.9 billion in February. March 2001 exports of goods and services were \$0.9 billion less than February 2001 exports of \$90.4 billion. March imports of goods and services were \$3.4 billion more than the February imports of \$117.2 billion.

March 2001 merchandise exports decreased to \$64.1 billion from \$65.2 billion in February 2001. Merchandise imports increased to \$101.7 billion from \$98.4 billion, causing the merchandise trade deficit to increase in March by \$4.4 billion from February to \$37.6 billion from \$33.2 billion in February. For services, exports increased to \$25.4 billion from \$25.2 billion, and imports of services increased to \$18.9 billion from \$18.8 billion resulting in a surplus of 6.5 billion about \$0.1 billion higher than the \$6.4 billion in February.

Exports of merchandise goods in February-March 2001 reflected decreases in capital goods; and "other goods" (a statistical category). Increases occurred in exports of automotive vehicles, parts, and engines; industrial supplies and materials; and foods, feeds, and beverages. Consumer goods were virtually unchanged. Imports of goods reflected increases in consumer goods; capital goods; and automotive vehicle parts and engines. Decreases occurred in other goods; and foods, feeds and beverages. Industrial supplies and materials were virtually unchanged. Additional information on U.S. trade developments in agriculture and specified manufacturing sectors, in February-March 2001, are highlighted in tables 1 and 2 and figures 1 and 2. Services trade developments are highlighted in table 3.

In March 2001, exports of advanced technology products were \$20.6 billion and imports of the same were \$18.6 billion, resulting in a March of \$2.0 billion, about the same as February surplus. The March 2001

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.

trade data showed U.S. surpluses with Australia, Argentina, Brazil, Egypt, Singapore and Hong Kong. Deficits were recorded with Japan, China, Western Europe, Canada, Mexico, Korea, Taiwan, and OPEC member countries.

The export of goods and services during January-March 2001 increased to \$269.4 billion, up from \$255.9 billion during January-March 2000, an increase of 5.3 percent. However, imports of goods and services increased to \$360.7 billion, up from \$341.2 billion during the same period, an increase of 5.7 percent. As a consequence, the trade deficit increased to \$91.3 billion for the January-March period, up from \$85.3 billion during January-March 2000, an increase of 7.0 percent.

The export of goods during January-March 2001, increased to \$193.9 billion from \$183.7 billion during the same 2000 period, an increase of 5.6 percent, but imports of goods rose to \$304.2 billion, up from \$289.7 billion in January-March 2000, an increase of 5.0 percent. Consequently, the merchandise trade deficit rose to \$110.4 billion from \$106.0 billion, a 4.2-percent increase. Regarding trade in services, exports in January-March 2001, increased to \$75.6 billion up from \$72.3 billion in the same period of 2000, an increase of 4.6 percent. Imports of services rose to \$56.5 billion, up from \$51.5 billion, an increase of 9.7 percent. The surplus on trade in services decreased to \$19.1 billion from \$20.8 billion.

The January-March 2001 exports of advanced technology products rose to \$57.2 billion up from \$51.5 billion in January-March 2000, an increase of 11.1 percent. Imports rose to \$52.4 billion from \$47.8, in the same period, an increase of 9.6 percent. The trade surplus increased to \$4.8 billion from \$3.8 billion in January-March 2001, an increase of 26.3 percent.

The January-March 2001 trade data in goods and services showed trade deficits with Canada, Mexico, Western Europe, the Euro area (EU-11), the European Union (EU-15), EFTA, Eastern Europe, China, Japan, Korea, Singapore, Taiwan, and OPEC. Trade surpluses were recorded with Belgium, the Netherlands, Spain, Australia, Argentina, Brazil, Hong Kong, and Egypt. U.S. trade developments with major trading partners are highlighted in table 4.

Table 1
U.S. trade in goods and services, seasonally adjusted, Feb.-Mar. 2001
(Billion dollars)

Item	Exports		Imports		Trade balance	
	Mar. 2001	Feb. 2001	Mar. 2001	Feb. 2001	Mar. 2001	Feb. 2001
Trade in goods (see note) <i>(Current dollars)</i>						
Including oil	64.1	65.2	101.7	98.4	-37.6	-33.2
Excluding oil	64.0	65.1	92.1	88.3	-28.1	-23.2
Trade in services <i>(Current dollars)</i>						
Trade in goods and services						
<i>Current dollars</i>	89.5	90.4	120.6	117.3	-31.1	-26.9
Trade in goods (Census basis)						
<i>(1996 dollars)</i>	70.7	72.0	109.0	105.2	-38.3	-33.2
Advanced technology products						
(not seasonally adjusted)	20.6	18.1	18.6	16.2	2.0	1.9

Note.—Data on goods trade are presented on a balance-of-payments (BOP) basis that reflects adjustments for timing, coverage, and valuation of data compiled by the Census Bureau. The major adjustments on BOP basis exclude military trade, but include nonmonetary gold transactions and estimates of inland freight in Canada and Mexico not included in the Census Bureau data. Data may not add to totals shown because of rounding details.

Source: Compiled from U.S. Department of Commerce, "Exhibit 1. U.S. International Trade in Goods and Services," "Exhibit 16. Exports, Imports and Balance of Advanced Technology Products," FT-900 (01-03), Mar. 2001, found at Internet address <http://www.bea.doc.gov/bea/newsrel/trad0301.htm>.

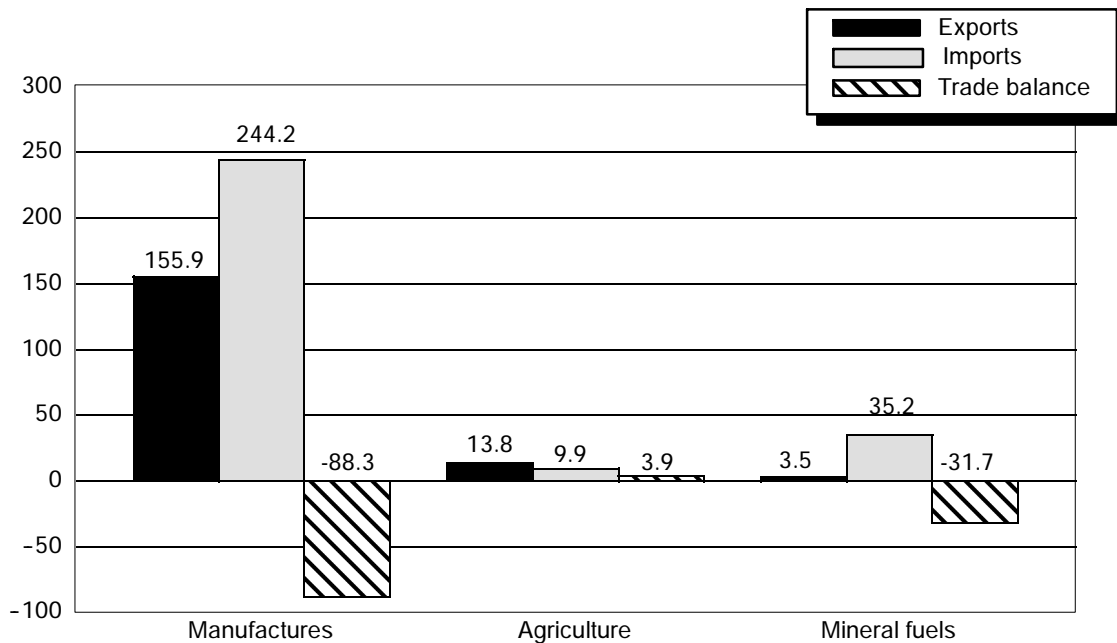
Table 2
Nonimal U.S. exports and trade balances, agriculture and specified manufacturing sectors, Jan. 2000-Mar. 2001

	<u>Exports</u>		<u>Imports</u>	<u>Exports</u>		<u>Imports</u>	Change in exports, Jan.-Mar. 2001 over Jan.-Mar. 2000	Share of total exports, Jan.-Mar. 2001	<u>Trade balance</u>	
	Mar. 2001	Jan.-Mar. 2001	Jan.-Mar. 2001	Jan.-Mar. 2000	Jan.-Mar. 2000	Jan.-Mar. 2001			Jan.-Mar. 2001	Jan.-Mar. 2001
	<i>Billion dollars</i>						<i>Percentage</i>	<i>Billion dollars</i>		
ADP equipment and office machinery	4.3	11.6	20.3	10.9	20.7	6.4	5.9	-8.7	-9.8	
Airplanes	3.0	7.0	3.7	5.7	2.3	22.8	3.6	3.3	3.4	
Airplane parts	1.5	4.1	1.6	3.6	1.3	13.9	2.1	2.5	2.3	
Electrical machinery	7.3	21.5	24.6	20.0	24.4	7.5	11.0	-3.1	-4.4	
General industrial machinery	3.1	8.7	8.9	8.0	8.7	8.8	4.4	-0.2	-0.7	
Iron and steel mill products	0.5	1.5	3.0	1.4	3.9	7.1	0.8	-1.5	-2.5	
Inorganic chemicals	0.6	1.5	1.7	1.3	1.4	15.4	0.8	-0.2	-0.1	
Organic chemicals	1.6	4.6	8.2	4.3	6.3	7.0	2.3	-3.6	-2.0	
Power-generating machinery	2.9	8.2	9.2	8.1	8.6	1.2	4.2	-1.0	-0.5	
Scientific instruments	2.9	7.9	5.6	7.0	4.9	12.9	4.0	2.3	2.1	
Specialized industrial machinery	2.5	7.6	5.7	7.2	5.6	5.6	3.9	1.9	1.6	
Televisions, VCRs, etc	2.3	6.5	15.1	6.3	14.2	3.2	3.3	-8.6	-7.9	
Textile yarns, fabrics and articles	1.0	2.7	3.6	2.5	3.7	8.0	1.4	-0.9	-1.2	
Vehicles	5.0	13.1	39.5	14.9	41.0	-12.1	6.7	-26.4	-26.1	
Subtotal	38.5	106.5	150.7	101.2	147.0	5.2	54.3	-44.2	-45.8	
Other manufactures exports not included above	17.7	49.4	93.5	47.8	89.3	3.3	25.2	-44.1	-41.5	
Total manufactures	56.2	155.9	244.2	149.0	236.3	4.6	79.5	-88.3	-87.3	
Agriculture	4.9	13.8	9.9	13.0	9.8	6.2	7.0	3.9	3.2	
Subtotal	61.1	169.7	254.1	162.0	246.1	4.8	86.6	-84.4	-84.1	
Other exports, not included above	9.5	26.3	41.5	25.3	36.2	4.0	13.4	-15.2	-10.9	
Total	70.6	196.0	295.6	187.3	282.3	4.6	100.0	-99.6	-95.0	

Note.— Data may not add to totals shown because of rounding details. Data are presented on a Census basis.

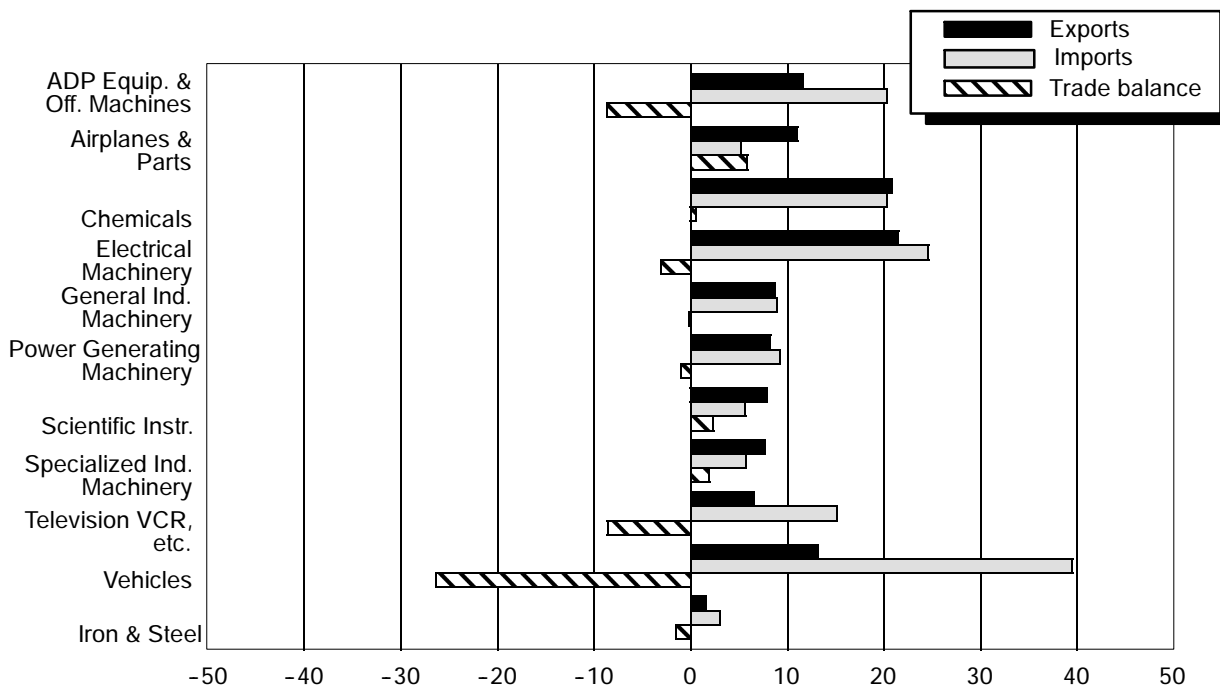
Source: Compiled from U.S. Department of Commerce, "Exhibit 15. Exports and Imports of Goods by Principal SITC Commodity Groupings," FT-900 (01-03), Mar. 2001, found at Internet address <http://www.bea.doc.gov/bea/newsrel/trad0301.htm>.

Figure 1
U.S. trade by major commodity, billion dollars, Jan.-Mar. 2001



Source: U.S. Department of Commerce, FT 900 (01-03).

Figure 2
U.S. trade in principal goods, billion dollars, Jan.-Mar. 2001



Source: Compiled from U.S. Department of Commerce, "Exhibit 15. Exports and Imports of Goods by Principal SITC Commodity Groupings," FT-900 (01-03), Mar. 2001, found at Internet address <http://www.bea.doc.gov/bea/newsrel/trad0301.htm>.

Table 3
Nominal U.S. exports and trade balances of services, by sectors, Jan. 2000—Mar. 2001, seasonally adjusted

Service sector	Exports		Change	Imports		Trade balance	
	Jan.-Mar.	Jan.-Mar.	Jan.-Mar.	Jan.-Mar.	Jan.-Mar.	Jan.-Mar.	Jan.-Mar.
	2001	2000	2001 over 2000	2001	2000	2001	2000
	<i>Billion dollars</i>		<i>Percentage</i>	<i>Billion dollars</i>			
Travel	22.1	20.5	7.8	17.1	15.8	5.0	4.7
Passenger fares	5.4	5.1	5.9	6.5	5.8	-1.1	-0.7
Other transport services	7.3	7.3	0.0	10.4	9.6	-3.1	-2.3
Royalties and license fees	9.8	9.4	4.3	4.3	3.6	5.5	5.8
Other private sales	27.2	26.4	3.0	13.8	12.7	13.4	13.7
Transfers under U.S. military sales contracts	3.6	3.6	0.0	3.6	3.3	0.0	0.3
U.S. Government miscellaneous services	0.2	0.2	0.0	0.7	0.7	-0.5	-0.5
Total	75.6	72.3	4.6	56.5	51.5	19.1	20.8

Note.—Services trade data are on a balance-of-payments (BOP) basis. Data may not add to totals shown because of rounding details and seasonal adjustments.

Source: Compiled from U.S. Department of Commerce, "Exhibit 3. U.S. Services by Major Category — Exports," FT-900 (01-03), Mar. 2001, found at Internet address <http://www.bea.doc.gov/bea/newsrel/trad0301.htm>.

Table 4
U.S. exports and imports of goods with major trading partners, Jan. 2000-Mar. 2001

(Billion dollars)

Country/areas	Exports			Imports			Trade balance	
	Mar. 2001	Jan.-Mar. 2001	Jan.-Mar. 2000	Mar. 2001	Jan.-Mar. 2001	Jan.-Mar. 2000	Jan.-Mar. 2001	Jan.-Mar. 2000
Total	70.6	196.0	187.3	103.2	295.6	282.3	-99.6	-95.0
North America	24.8	69.5	71.5	31.9	90.4	88.1	-20.9	-16.6
Canada	15.6	42.7	45.6	19.8	57.3	56.4	-14.6	-10.8
Mexico	9.2	26.8	25.9	12.0	33.1	31.6	-6.3	-5.7
Western Europe	17.3	48.6	44.4	21.9	62.2	57.3	-13.6	-12.9
Euro Area	10.9	31.2	27.3	15.3	42.7	38.6	-11.5	-11.3
European Union (EU-15)	15.3	43.7	39.4	20.1	57.1	52.5	-13.4	-13.1
France	2.0	5.7	4.8	3.3	8.2	7.0	-2.5	-2.2
Germany	2.9	8.4	7.0	5.4	15.1	14.3	-6.7	-7.3
Italy	1.0	2.8	2.5	2.2	6.2	5.9	-3.4	-3.4
Netherlands	1.9	5.6	5.3	0.9	2.4	2.4	3.2	2.9
United Kingdom	3.7	10.6	10.2	3.7	11.1	10.6	-0.5	-0.4
Other EU	1.1	3.3	2.8	1.9	5.7	4.3	-2.4	-1.5
EFTA ¹	1.4	3.8	3.8	1.4	4.1	3.9	-0.3	-0.1
FSR/Eastern Europe	0.6	1.7	1.7	1.8	4.4	4.0	-2.7	-2.3
Russia	0.2	0.6	0.8	1.1	2.3	2.1	-1.7	-1.3
Pacific Rim Countries	18.1	49.7	46.4	32.9	95.6	93.0	-45.9	-46.6
Australia	1.0	2.8	3.0	0.5	1.5	1.4	1.3	1.6
China	1.9	4.4	3.2	7.6	22.4	20.0	-18.0	-16.8
Japan	5.9	16.4	15.7	12.1	34.7	34.8	-18.3	-19.1
NICs ²	7.0	20.0	19.1	8.4	24.8	24.9	-4.8	-5.8
Latin America	5.3	14.8	13.5	6.2	18.3	17.6	-3.5	-4.1
Argentina	0.4	1.2	1.1	0.3	0.8	0.8	0.4	0.3
Brazil	1.4	3.9	3.2	1.2	3.6	3.2	0.3	0.0
OPEC	2.3	5.4	4.7	5.6	16.2	14.8	-10.8	-10.1
Other Countries	2.9	8.5	7.3	5.4	15.9	14.8	-7.4	-7.5
Egypt	0.5	0.9	0.9	0.1	0.2	0.2	0.7	0.7
South Africa	0.3	0.8	0.6	0.3	1.1	0.8	-0.3	-0.2
Other	2.2	6.8	5.7	4.9	14.6	13.8	-7.8	-8.1

¹ The European Free Trade Area (EFTA) includes Iceland, Liechtenstein, Norway, and Switzerland.

² The newly industrializing countries (NICs) include Hong Kong, the Republic of Korea, Singapore, and Taiwan. FSR = Former Soviet Republics.

Note.—Country/area figures may not add to the totals shown because of rounding. Exports of certain grains, oilseeds, and satellites are excluded from country/area exports but included in total export table. Also some countries are included in more than one area. Data are presented on a Census Bureau basis.

Source: Compiled from U.S. Department of Commerce, "Exhibit 14. Exports, Imports and Balance of Goods by Selected Countries and Geographic Areas," FT-900 (01-03), Mar. 2001, found at Internet address <http://www.bea.doc.gov/bea/newsrel/trad0301.htm>.

INTERNATIONAL ECONOMIC COMPARISONS

Michael Youssef¹
myoussef@usitc.gov
202-205-3269

U.S. Economic Performance Relative to Other Group of Seven (G-7) Members

Economic Growth

U.S. real GDP—the output of goods and services produced in the United States measured in 1996 prices—grew at a revised annual rate of 1.3 percent in the first quarter of 2001, following a 1.0-percent growth rate in the fourth quarter of 2000, according to advance estimates by the U.S. Bureau of Economic Analysis (BEA News Release, BEA 01-10). For the year 2000, real GDP grew by 5.0 percent.

The annualized rate of real GDP growth in the fourth quarter of 2000 was 1.4 percent in the United Kingdom, 2.6 percent in Canada, 4.0 percent in France, 0.8 percent in Germany, 2.8 percent in Italy and 3.0 percent in Japan. The annualized rate of real GDP growth in the fourth quarter was 2.8 percent for EU members linked by the Euro currency, the Euro area (EU-11).

Industrial Production

The Federal Reserve Board (*Federal Reserve Statistical Release*, G.17 (419)) reported that U.S. industrial production declined by 0.3 percent in April after a drop in output in the first quarter that was steeper than previously reported. Industrial production in April was 1.0 percent lower than in April 2000. Manufacturing output also fell 0.3 percent in April and has contracted nearly 3.5 percent since its recent peak in September 2000. Manufacturing output excluding motor vehicles and parts declined by 0.4 percent in April. Output of

utilities moved down by 1.0 percent, and production of mining rose by 0.6 percent. increased by 0.4 percent in March 2001, its first increase since September 2000. Total capacity utilization in April 2001 was 4.0 percent higher than in April 2000.

Other G-7 member countries reported the following growth rates of industrial production. For the year that ended in March 2001, Japan reported a decrease of 2.9 percent and the United Kingdom reported a decrease of -0.1 percent, Germany reported an increase of 1.4 percent, Italy reported a decrease of 0.3 percent, France reported an increase of 1.9 percent, and Canada reported an increase of 1.5 percent for the year ended February 2001. The Euro area reported an increase of 2.3 percent for the year that ended in February 2001.

Prices

The seasonally adjusted U.S. Consumer Price Index (CPI) increased by 0.3 percent in April 2001, following a 0.1-percent rise in March, according to the U.S. Department of Labor (USD L-01-142). For the 12-month period that ended in February 2001, the CPI-U increased by 3.3 percent.

During the 1-year period that ended in April 2001, prices increased by 2.9 percent in Germany, 1.8 percent in the United Kingdom, 1.8 percent in France, and 3.1 percent in Italy. During the 1-year period that ended in March 2001, prices increased by 2.5 percent in Canada, and in Japan prices fell by 0.4 percent. Prices increased by 2.9 percent in the Euro area in the 1-year period that ended in April 2001.

Employment

The Bureau of Labor Statistics (*Employment Situation Summary*, USD L 01-122) reported that the unemployment rate rose to 4.5 percent in April 2001. Large job losses continued in manufacturing, in help supply services and construction. where employment declined by 94,000.

In other G-7 countries, their latest unemployment rates were 7.0 percent in Canada, 9.3 percent in Ger-

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.

many, 5.1 percent in the United Kingdom, 8.7 percent in France, 9.9 percent in Italy, and 4.7 percent in Japan. The unemployment rate in the Euro area was 8.4 percent.

Forecasts

Seven major U.S. forecasters expect real GDP growth in the United States during the second quarter of 2001 to reach an average of about 1.5 percent at an annualized rate, and to increase to 1.7 percent in the third quarter and 2.6 percent in the fourth quarter. The growth rate for the year 2001 is expected to average about 2.0 percent. Table 1 shows macroeconomic pro-

jections for the U.S. economy from January to December 2001, and the simple average of these forecasts. Forecasts of all the economic indicators, except unemployment, are presented as percentage changes from the preceding quarter, on an annualized basis. The forecasts of the unemployment rate are averages for the quarter.

The average of the forecasts points to an unemployment rate of 4.5 percent in the second quarter, and a slight increase in the third and fourth quarters. For the year 2001, the unemployment rate is projected to reach 4.6 percent. Inflation, as measured by the GDP deflator, is expected to remain subdued, reaching an average of about 2.3 percent during 2001.

Table 1
Projected changes of selected U.S. economic indicators, by quarters, Jan.-Dec. 2001
(Percent)

	Conference Board	E.I. Dupont	UCLA Business Forecasting Project	Merrill Lynch Capital Markets	Macro-economic Advisers	DRI-WEFA	Regional Financial Assoc.	Mean of forecasts
GDP, constant dollars								
2001								
Jan.-Mar.	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Apr.-June	4.6	0.0	-0.2	1.5	2.1	1.1	1.4	1.5
July-Sept.	4.7	1.0	-0.7	2.0	3.1	1.3	0.8	1.7
Oct.-Dec.	4.9	2.0	0.1	3.5	3.4	2.0	2.6	2.6
Annual 2001	3.1	1.6	1.2	2.1	2.3	1.8	1.8	2.0
GDP price deflator								
2001								
Jan.-Mar.	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
Apr.-June	3.0	1.1	2.1	1.9	2.6	2.4	2.1	2.2
July-Sept.	3.7	1.5	2.0	1.7	1.8	2.2	1.8	2.1
Oct.-Dec.	3.7	1.8	2.0	1.7	2.2	2.2	1.8	2.2
Annual 2001	2.8	2.0	2.3	2.2	2.3	2.4	2.3	2.3
Unemployment, average rate								
2001								
Jan.-Mar.	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Apr.-June	4.4	4.5	4.6	4.5	4.3	4.6	4.4	4.5
July-Sept.	4.5	4.8	5.0	4.7	4.4	4.9	4.6	4.7
Oct.-Dec.	4.4	4.7	5.3	4.8	4.4	5.0	4.7	4.8
Annual 2001	4.4	4.6	4.8	4.6	4.3	4.7	4.5	4.6

Note.—Except for the unemployment rate, percentage changes in the forecast represent annualized rates of change from the preceding period. Quarterly data are seasonally adjusted. Forecast date, Apr. 2001.

Source: Compiled from data of the Conference Board. Used with permission.

STATISTICAL TABLES

Unemployment rates (civilian labor force basis)¹ in G-7 countries, by specified periods, 1998-Mar. 2001
(Percentage rates)

Country	1998	1999				2000				2001		
		Q:I	Q:II	Q:III	Q:IV	Q:I	Q:II	Q:III	Q:IV	Jan.	Feb.	Mar.
United States	4.5	4.3	4.3	4.2	4.1	4.1	4.0	4.0	4.0	4.2	4.2	4.3
Japan	4.1	4.7	4.8	4.8	4.7	4.8	4.7	4.7	4.8	4.9	4.7	
Canada	7.5	7.1	7.1	6.8	6.2	6.0	5.8	5.8	5.7	5.9	5.8	
Germany	9.3	8.8	8.8	8.8	8.7	8.4	8.3	8.2	8.1	8.1	8.1	8.1
United Kingdom	6.3	6.2	6.1	5.9	5.9	5.8	5.5	5.4	5.3			
France	11.8	11.4	11.3	11.2	10.8	10.2	9.7	9.6	9.2	9.0	8.8	8.7
Italy	12.0	11.8	11.7	11.5	11.3	11.2	10.8	10.5	10.1	10.0		

¹ Seasonally adjusted; rates of foreign countries adjusted to be comparable with the U.S. rate.

Source: U.S. Department of Labor, Bureau of Labor Statistics, "Unemployment Rates in Nine Countries, Civilian Labor Force Basis, Approximating U.S. Concepts, Seasonally Adjusted, 1990-2001," May 4, 2001, found at Internet address <ftp://ftp.bls.gov/pub/special.requests/ForeignLabor/flsjec.txt>.

Consumer prices of G-7 countries, by specified periods, 1998-Mar. 2001

(Percentage change from same period of previous year)

Country	1998	1999				2000				2001		
		Q:I	Q:II	Q:III	Q:IV	Q:I	Q:II	Q:III	Q:IV	Jan.	Feb.	Mar.
United States	1.6	1.7	2.1	2.3	2.6	3.2	3.3	3.5	3.4	3.7	3.5	2.9
Japan	0.6	-0.1	-0.3	0.0	-1.0	-0.7	-0.7	-0.7	-0.5	0.1	-0.1	-0.4
Canada	0.9	0.8	1.6	2.2	2.4	2.7	2.4	2.7	3.1	3.0	2.9	2.5
Germany	1.0	0.3	0.5	0.6	1.0	1.8	1.6	2.1	2.3	2.4	2.6	2.5
United Kingdom	3.4	2.2	1.4	1.2	1.5	2.3	3.1	3.2	3.1	2.7	2.7	2.3
France	0.7	0.3	0.4	0.5	1.0	1.5	1.5	1.9	1.9	1.2	1.4	1.3
Italy	1.9	1.4	1.6	1.8	2.1	2.4	2.5	2.7	2.7	3.1	3.0	2.9

Source: U.S. Department of Labor, Bureau of Labor Statistics, "Consumer Prices in Nine Countries, Percent Change from Same Period of Previous Year, 1990-2001," May 4, 2001, found at Internet address <ftp://ftp.bls.gov/pub/special.requests/ForeignLabor/flscpim.txt>.

U.S. trade balances by major commodity categories and by specified periods, Apr. 2000-Mar. 2001¹

(Billion dollars)

Commodity categories	2000									2001		
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Agriculture	0.5	0.5	0.8	0.9	1.1	1.1	1.7	1.4	1.4	1.4	1.5	1.4
Petroleum and selected products (unadjusted)	-8.6	-8.5	-10.0	-10.7	-10.6	-10.6	-9.5	-10.1	-10.1	-12.3	-10.1	-9.9
Manufactured goods	-27.8	-32.9	-31.4	-36.4	-36.8	-36.8	-38.9	-34.8	-34.8	-27.2	-25.2	-30.3
Unit value of U.S. imports of petroleum and selected products (unadjusted)	20.9	20.9	23.2	23.2	26.7	27.8	24.4	28.4	26.5	23.1	23.8	22.8

¹ Exports, f.a.s. value, unadjusted. Imports, customs value, unadjusted.

Source: Compiled from U.S. Department of Commerce, "Exhibit 15. Exports and Imports of Goods by Principal SITC Commodity Groupings," FT-900 (01-03), Mar. 2001, found at Internet address <http://www.bea.doc.gov/bea/newsrel/trad0301.htm>.

WORKING PAPERS

The following is a list of recent Office of Economics working papers. Copies of papers can be downloaded from the Commission's Internet web site, <http://www.usitc.gov> (use the search option at the top of the Reports and Publications page), or may be obtained from the Office of Economics. Please request working papers by reference code, title, and author. All requests to the Office of Economics, U.S. International Trade Commission, 500 E Street, SW, Washington, DC 20436, USA, or by fax at (202) 205-2340.

Reference Code	Title	Author	Status
2001			
01-04-A	Aggregation Bias, Compositional Change, and the Border Effect	Russell Hillberry	Working Paper
01-03-A	Engineers on the Production Floor? Evidence of Co-location of Patenting and Production at the Subnational Level	Christine McDaniel Beata K. Smarzynska	Working Paper
01-02-A	On the Effects of the Expansion of Regional Arrangements: An Intra-Industry Trade Mode	Soamiely Andriamananjara	Working Paper
2000			
00-09-B	NAFTA Environmental Impacts on North American Fisheries	Grace V. Chomo Michael J. Ferrantino	Working Paper
00-09-A	Industry-Level Estimates of U.S. Armington Elasticities	Michael Gallaway Christine McDaniel Sandra A. Rivera	Working Paper
00-02-C	Regionalism Versus Multilateralism: the Response of the Third Country	Soamiely Andriamananjara*	Working Paper
00-02-B	Event Study of Russian Foreign Exchange Market	Michael Barry*	Working Paper
00-02-A	The Russian Financial Crises: a Look Back	Michael Barry*	Working Paper
00-01-A	Exchange Rates: Definitions and Applications	Gerry Benedick* Peter Pogany*	Working Paper
1999			
99-11-B	Preferential Trading Arrangement: Endogenous Response of the Excluded Country	Soamiely Andriamananjara*	Working Paper
99-11-A	Inventing Around and Impacts on Modes of Entry in Japan: A Cross-Country Analysis of U.S. Affiliate Sales and Licensing	Christine McDaniel*	Working Paper

*Staff Economist, U.S. International Trade Commission.

Reference Code	Title	Author	Status
1999-Cont'd			
99-10-A	Modeling the Effects of Trade Liberalization on Forest Cover: Some Methodological Issues	Michael Ferrantino*	<i>Assessing the Environmental Effects of Trade Liberalisation Agreements, OECD</i>
99-09-A	Regionalism and Incentives for Multilateralism	Soamiely Andriamananjara*	<i>Journal of Economic Integration</i> , Vol. 15, No. 1 Mar. 2000
99-04-A	An Overview of Quasiconcavity and its Application in Economics	Peter Pogany*	Working Paper
99-03-A	International and Domestic Product Classification	William Donnelly*	Working Paper
1998			
98-10-A	Latin American Export Sector Dynamics and Economic Growth in International Comparison	Sheila Amin Gutiérrez-de Piñeres & Michael Ferrantino*	<i>Export Dynamics and Economic Growth in Latin America: A Comparative Perspective</i> , Ashgate Press
98-09-A	The Income Elasticity of Trade: Theory, Evidence, and Implications	Peter Pogany* William Donnelly*	Working Paper
98-03-A	Trade, Trade Policy, and Productivity Growth in OECD Manufacturing	Nancy Benjamin* Michael Ferrantino*	Working Paper
1997			
97-09-A	Liberalizing Services Trade in APEC	Nancy Benjamin* & Xinshen Diao	Working Paper
97-06-A	Integration and Competitiveness in the Americas: A General Equilibrium Model for Analysis	Nancy Benjamin* & Peter Pogany*	Working Paper
97-04-A	R&D Activity and Acquisitions in High Technology Industries	Bruce A. Blonigen & Christopher T. Taylor*	Working Paper
97-02-B	APEC: Organization, Goals and Approach	Diane L. Manifold*	Working Paper
97-02-A	The Effect of U.S. MFN Status on China	Hugh M. Arce* & Christopher T. Taylor*	<i>Weltwirtschaftliches Archiv</i> , Vol. 133, No. 4, 1997.

*Staff Economist, U.S. International Trade Commission.