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THE DICEY BUSINESS OF AGRICULTURAL TRADE POLICY: WHERE DOES NAFTA TAKE US?

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I. INTRODUCTION

In 1934 Henry Wallace, then U.S. Secretary of Agriculture, wrote a short book entitled America Must Choose. In it, he extolled the benefits to be gained from free trade and pointed out the dangers of continued protectionism, as institutionalized in the United States' Hawley-Smoot Tariff Act of 1929 and similar protective measures in Europe and the world at large. Fortunately, President Franklin Roosevelt took the lead toward rectifying a messy trade situation. One key step in that direction was the enactment of the Reciprocal Trade Act of 1934 and its propagation under the leadership of Secretary of State Cordell Hull. Under the Act, tariffs and other protective measures were arrested and progressively reduced during the 1930s. Since then, the world has come a long

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progress made under eight rounds of trade negotiations since World War II (Geneva 1947; Annecy 1949; Torquay 1951; Geneva 1956; Dillon 1960-61; Kennedy 1964-67; Tokyo 1974-79; Uruguay 1986-92) bear witness to the trend to reduce or remove barriers to international trade.²

In the mid-1990s, the world faces many important changes in the trading environment that will put to the test the general trend in favor of multilateralism that has prevailed since the end of World War II. Space permits us to mention only the most important of these.³ Foremost among these changes is that the stimuli provided by the size of the United States import market and by its relatively open trade policy for more than three decades can no longer be taken for granted. In fact, both of these stimuli have faded sharply in importance. Export market competitors have taken advantage of the openness of American markets, and it is no longer possible to ignore an annual United States trade deficit gap of more than $100 billion per year.

Additionally, the success of such U.S.-led efforts as the Marshall Plan and the Green Revolution has shifted the position of the United States in many respects. Moreover, in fifty years America has shifted from a net oil exporter to net importer, and a world of technical parity in high-tech products has nullified the huge comparative advantage enjoyed by the United States at the end of World War II.

As a result of these and many other changes in production and trade, both in the United States and throughout the world, governments have slowly but surely intervened in the international trade process. “Managed” trade by governments has emerged often under the euphemism of “fair” trade (not to be confused with fair trade). Non-tariff barriers have replaced the tariffs or customs duties as the favorite instrument of protection.⁴ Governments agree to “voluntary” export agreements when primary importing countries threaten to close their markets completely. And, equally importantly, regionalism in the form of “special arrangements,” as exemplified by the European Economic Community

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² Since 1980 alone, world merchandise trade has almost doubled and now approaches $4 trillion (U.S.). Since the end of World War II the value of total world trade has increased more than 100-fold. GATT Annual Report (1950-1990).

³ A good non-technical elaboration of this phenomenon can be found in Lester Thurow, New Rules for Playing the Game, 72 Nat'l F., J. Phi Kappa Phi, 10-13 (Year). See also Ron Sandrey & Jimmye S. Hillman, Emerging Trading Blocs: A Retreat From Multilateralism? XXI International Conference of Agricultural Economists, Tokyo, Japan (Aug. 22-29, 1991) (Keynote paper for the concurrent discussion session on Emerging Trading Blocs: A Retreat from Multilateralism?).

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(EEC), North American Free Trade Agreement (NAFTA), and the European Free Trade Agreement (EFTA), etc., is clearly on the rise. Bilateral negotiations and similar dealings counter to multilateralism, which are clearly prohibited under the General Agreement on Tariffs and Trade (GATT) and differ fundamentally from the principle of most-favored-nation status, are rampant around the world. With appropriate warning, Professor Thurow has stated the issue quite succinctly:

"Most of these negotiations are held under the cover of setting up a ‘common market.’ Technically, the common-market escape clause from the [GATT] most-favored-nation principle is supposed to be used only if the ultimate objective of the common market is a real political union. Europeans can argue that this is the case in Europe, but in North America there is not even a pretense that the Canadian, Mexican, and American economic talks are a prelude to political union. The Structural Impediment Talks between Japan and America did not even bother with this legal “fig leaf.” The world has forgotten what it learned in the 1920s. Bilateral negotiations cannot lead to a stable trading system."

History is rife with examples of arguments by political and economic powers—even great powers—for accords whose tenets characterize less than fully multilateral trade policy. These arguments and the resulting agreements have always fallen short of the long-range ideal, although many, such as the British Commonwealth Agreement, begun at Ottawa in 1932, do solve many temporary and important problems. However, experience suggests that at least with regard to agricultural trade, preferential or regional trading blocs can result more in trade diversion than trade creation. In the agricultural sector this results from trade-distorting domestic policies, as shown by McCalla. In fact, prospects for liberalizing agricultural trade either under the GATT or regional and preferential arrangements are limited unless domestic trade distorting policies are addressed first.

In this article, we shall explore the possibilities for increasing trade under one such regional bloc, the North American Free Trade Agreement (NAFTA). This agreement has received much attention from the American public as well as from professional economists over the past two years: Thus the need for further analysis and elaboration. Before turning our attention to trade relations between the U.S., Mexico, and

5. Thurow, supra note 3.
Canada, we will discuss the relevance of basic economic trade concepts to NAFTA.

II. ECONOMIC TRADE THEORY AND NAFTA

The first economic theory of gains from international trade is generally attributed to Adam Smith's *Wealth of Nations*, in 1776. Smith challenged the mercantilists, who claimed regulation was necessary to provide a favorable balance of trade (surplus of exports over imports), and argued for laissez-faire. That is, nations would benefit from free trade if they were allowed to specialize in the production of a particular good or set of goods that they could produce at low cost. Smith's theory of trade is today known as the theory of absolute advantage.

Smith's theory of absolute advantage is incomplete because it assumes that every country can export at least one good as a low cost producer. In 1817, David Ricardo published *Political Economy and Taxation*, in which he extended Smith's theory by introducing the concept of comparative advantage. The concept of comparative advantage explains how a country can benefit from trade when it does not have an absolute cost advantage in any good.

Comparative efficiency is central to the concept of comparative advantage. For example, if the U.S. can grow 2 bushels of corn or 4 pounds of tomatoes for $5.00, while Mexico can grow 1 bushel of corn or 3 pounds of tomatoes for $5.00, the U.S. clearly has an absolute cost advantage in the production of both corn and tomatoes.

The theory of absolute advantage suggests that no gains from trade are possible in this simplified two-country, two-good scenario. However, the concept of comparative advantage demonstrates that the U.S. should export corn to Mexico and Mexico should export tomatoes to the U.S.: The U.S. gives up only 2 pounds of tomatoes for every bushel of corn produced, while Mexico forgoes 3 pounds of tomatoes for every bushel of corn produced. Thus, U.S. has the lowest comparative cost in the production of corn. U.S. gives up 1/2 bushel of corn for every pound of tomatoes produced while Mexico gives up only 1/3 bushel of corn for every pound of tomatoes raised. Mexico has the lowest comparative cost, or a comparative advantage, in the production of tomatoes. Gains from trade (e.g., more total corn and tomatoes) are available to countries whenever comparative costs of production differ by more than appropriate transportation costs.

Comparative costs of production are determined by the availability of factors of production—land, labor, technology, and capital inputs.
For perishable commodities such as vegetables, seasonal weather variations will cause the comparative advantage to shift from one region to another throughout the year. Differences in costs of production for geographic regions within the U.S. cause goods to flow within the U.S. in a manner similar to that in which the potential for trade flows beyond U.S.'s borders. But trade across borders around the world has historically been complicated by protectionist policies that violate the conditions necessary for trade based solely on comparative advantage and transportation costs. Broadly speaking, these policies fall under three categories: Commercial policies; monetary policies; and institutional arrangements. Trade flows that result in response to a set of policies, industry marketing skills, location, and comparative advantage are referred to as competitive advantage. Competitive advantage encompasses all policy and industry forces and the law of comparative advantage. It is important to keep in mind that competitive advantage or competitiveness is often dynamic in nature because of changing macroeconomic environments.

Free trade allows countries to specialize in producing those goods and services in which they have a comparative advantage and increase the total wealth of the participating countries. However, not all sectors will be “win” as trade becomes more free: In the example given above, the corn industry in Mexico and U.S. tomato industry would lose. However, gains for the corn industry in the U.S. and tomato industry in Mexico would more than offset the losses suffered by the other industry in each country. If there is no way to compensate the losing sectors for gains in the winning sectors, reducing trade barriers can result in a redistribution of income among sectors in each country.

Comparative and competitive advantage may not be responsive to social costs that inevitably are a part of a country's total production costs. For example, social costs of water and air pollution (which are external to direct production costs), especially those within Mexico and along the U.S.-Mexico border have been a primary concern of environmentalists. While not every border problem results directly from U.S.-Mexican trade, environmentalists argue that increased industrialization along the border has worsened existing environmental problems. Because the enforcement of environmental regulations in Mexico has been lax, some U.S. maquiladora 8 firms dispose of environmentally harmful

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8. Under the Maquila program, businesses export U.S.-made parts to Mexico duty free for assembly and then sell the finished product in the United States, paying duty only on the assembly costs.
wastes illegally in Mexico\textsuperscript{9} even though such firms are required to ship hazardous wastes back to the U.S. for proper disposal. More than forty furniture manufacturers that have been unable to meet Southern California's air quality standards have relocated to Mexico.\textsuperscript{10}

Proponents of NAFTA, and Mexico in particular, argue that freer trade is a necessary vehicle for a cleaner and healthier environment. As Environmental Protection Agency Administrator William K. Reilly argued, "[e]nvironmental improvement will not occur in Mexico . . . without the money to reduce pollution, apply new technologies, support government programs, and pay for inspectors, regulators, and prosecutors."\textsuperscript{11} In 1991, Mexico spent only 48 cents per person on environmental protection while, the U.S. spent over $24 per person for the same purpose.\textsuperscript{12} Additionally, Mexico's ability to enforce environmental law is important since Mexico is noted for having stringent regulations. However, inadequate staff, training, and technical capabilities have resulted in sporadic and inefficient environmental law enforcement.

External costs, including environmental considerations, are not the only factors that affect comparative advantage. Indeed, while comparative advantage is a major reason for increased overall output under free trade, an important outcome of free trade is factor price equalization. Essentially, in the absence of barriers to trade, the price that consumers pay for goods and services should become very similar in the trading countries, thus causing differences in the price of such inputs as labor and capital to decline. This occurs even in the absence of the free movement of factors between countries.

Some U.S. observers fear that the NAFTA and a changing economic climate in Mexico may induce many U.S. businesses to relocate abroad and take American jobs with them. Such an exodus would put additional downward pressure on the wages of low-skill American workers even though it might potentially increase wages for low-skill Mexican workers. Recent studies have found evidence that factor price equalization occurs between countries that have relatively open trade with each

\textsuperscript{12} Satchell, \textit{supra} note 10, at 36.
other. In particular, wages in OECD countries have tended to converge. Countries that restrict trade, on the other hand, have experienced reduced wage rates.

Some economists maintain that part of the reason for the decline in the real wage of low-skill American workers in the last decade has been increased liberalization of trade. Other economists point to many other factors, including lagging productivity in low-skill sectors and shifts in labor demand that may or may not be related to changing international trade relations.

The NAFTA may continue to put downward pressure on the wages of low-skill American workers. However, the positive effect of the NAFTA on Mexican low-skill labor wages is likely to be much greater than the negative pressure on U.S. low skill wages because of the relative sizes of the U.S. and Mexican economies. The Mexican Gross National Product (GNP) is less than four per cent of the United States' gross national product (GNP).

III. TRADE RELATIONS BETWEEN NAFTA COUNTRIES AND ECONOMIC CHANGES IN MEXICO

Much of the discussion in this section focuses on changes occurring in Mexico. In fact, the focus of most analyses of the agricultural provisions of NAFTA has been with Mexico since the Canadian-U.S. Trade Agreement (CUSTA) has already addressed many agricultural trade issues between Canada and the U.S. and because direct trade between Mexico and Canada is quite small. Canada's role in the negotiations has largely been to ensure that Canadian agricultural exports to the U.S. are not displaced by Mexican farm products. Most agricultural products fall under Article 401, section C of the CUSTA, which requires a ten-

year tariff elimination in ten equal and annual periods, duty free on Janu-
ary 1, 1998.\textsuperscript{19} After decades of inward-looking economic policy, Mexico has begun
to open up to foreign trade and investment.\textsuperscript{20} It was only in 1986 that
Mexico became a full member of GATT. This shift in economic policy
has been brought about by the U.S. educated technocrats who run Mex-
ico and who see foreign debt and aid-driven economic development as
counterproductive. The motto "trade not aid" seems to have gained mo-
mentum in Mexican government economic development circles. At least
one study, conducted in 1984 by Kim and Turrubiate, indicates that the
change is well justified. The study indicates that a switch from import-
substitution to export-orientation would create substantially more in-
come in Mexico and that import-substitution was especially detrimental
to the poor. The study also indicated that export-oriented agriculture
could create significantly more income for poorer Mexicans than manu-
factoring or the petroleum industry.\textsuperscript{21} Hence, the importance of agricul-
ture in the NAFTA from a developmental perspective becomes clear.

Even as closed as Mexico was before the mid-1980s, the United
States has long been an important trading partner for Mexico. In 1970,
almost 65\% of all imports to Mexico came from the United States, and
over 70\% of all exports from Mexico were sold in the United States In
1987, imports from the United States still constituted approximately
66\% of all imports into Mexico, while exports to the United States had
declined to 65\% of total Mexican exports.\textsuperscript{22}

Mexico is the United States's fourth largest trading partner behind
Canada, Japan and the European Community (EC). Total trade between
the United States and Mexico was $64.5 billion in 1991, more than
double the amount of five years earlier. However, the share of U.S. im-
ports from and exports to Mexico were only 6.4\% and 8.3\% of total U.S.
from and exports to Canada constituted 18.7\% and 21.2\% of total U.S.
imports and exports respectively. Total trade between Canada and the

\textsuperscript{\footnotesize 19} Carol Goodloe & Mark Simone, U.S. Dep't of Agriculture, Bulletin No. 644, A
North American Free Trade Area for Agriculture: The Role of Canada and the
\textsuperscript{20} Mexico. The New Model Debtor, The Economist, Oct. 6, 1990, at 85-87.
\textsuperscript{21} See Kwan S. Kim & Gerard Turrubiate, Structures of Foreign Trade and Income Distribu-
tion: The Case of Mexico, 16 J. Dev. Econ. 263 (1984).
U.S. reached $176 billion in 1991, up almost 60% from 1984.23

Some observers maintain that the figures on trade between the U.S. and Mexico are misleading because part of total trade is in the maquiladora sector. In 1989, for example, it was estimated that one-third of all U.S. exports to and imports from Mexico were in the maquiladora sector.24 These reports, are somewhat misleading, as two-thirds of all trade between the United States and Mexico occurs outside of the maquiladora sector. Not surprisingly, a large portion of U.S. imports to and exports from Mexico have been within the same general sectors: machinery and equipment, automotive products, and electronic equipment.

Overall trade flows to and from Mexico have indeed increased since Mexico joined the GATT, but not as dramatically as the growth in Mexican petroleum exports. Between 1970 and 1985, petroleum as a percentage of total Mexican exports increased from 3% to 60%. At the same time, all food items and agricultural raw material fell from 49% to 9% of total Mexican exports. Agricultural exports actually increased 270% between 1970 and 1985, but total, overall exports increased by 1,552% during the same period.25 In sum then, Mexico has made significant strides towards diversifying its exports away from petroleum products since 1985.

Despite the decline in the relative importance of agricultural exports, agricultural provisions of the NAFTA are of great concern to Mexico for developmental reasons. Like the economy in all developing countries, Mexico's economy is substantially more dependent on agriculture than either Canada or the U.S. About 8.1% of Mexico's GNP is attributed to production agriculture, compared with only 3.2% and 2.6% for Canada and the United States, respectively. Over 26% of Mexico's labor force is employed by agriculture, compared to only 3.6% and 1.3% in Canada and the U.S., respectively.26

Over the last two decades, the importance of trade in general has increased for all three North American countries. Canadian exports and imports (including services) constituted 44% and 53% of GNP in 1970 and 1987, respectively. United States exports and imports accounted for only 15% of GNP in 1970, compared to 22% in 1987. In comparison,

Mexican exports and imports increased from 18% of GNP in 1970 to 25% in 1987.27

The NAFTA is only one part of a larger change that is occurring in Mexico's economic institutions. The main motivation behind this change is not to open the floodgates to foreign made products, but to encourage foreign investment in Mexico in order to increase Mexican export earnings.28 The Mexican government has also taken steps to entice Mexican capitalists to repatriate at least part of the estimated $60-100 billion in Mexican-owned capital invested abroad.29 As an indication of the size of this “capital flight,” total U.S. direct investment in Mexico amounted to about $17 billion in 1990, out of total direct foreign investments of $27 billion.30 From the Mexican government's perspective, the NAFTA is important to assure the foreign and domestic business communities that the changes currently being made will not be quickly or easily reversed by future administrations.

In addition to joining the GATT, the Mexican government has improved the investment environment by successfully curbing inflation. It has privatized most public enterprises and deregulated many important sectors, including the financial sector. Reform in the financial sector has made banking less restrictive in some respects than in the U.S. In particular, financial institutions in Mexico have greater freedom to expand geographically and to offer a broader range of financial products, including insurance. However, opportunities for foreign banking activity in Mexico are still fairly limited.31 The national petroleum company (PEMEX) still contributes about 20% of all government revenues and, notably, is likely to remain part of the public sector.32

The most recent reforms have included the January 1992 amendment to the Mexican constitution's land tenure and ownership provisions. Individuals are still limited to owning only a maximum of 247 acres of irrigated land for row crops, 720 acres of irrigated land for orchards, or enough land to raise 500 head of cattle. However, three important changes were made. First, redistribution of the land is now

28. Mexico: The New Model Debtor, supra note 20, at 86.
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prohibited. Second, communal or ejido land can now be rented and in some cases sold. Since ejidos cover roughly three-fourths of all Mexican farm land and well over half of the irrigated land, this reform could have major impacts. The third important change is the lifting of a constitutional prohibition against corporate farming. Both foreign and domestic corporations may farm but, the land that each corporation may own is limited to 25 times the size of individual holdings. No limit is placed, however, on the land that corporations can rent. Foreign land ownership is still prohibited for 100 kilometers inland from all borders and for 50 kilometers inland from the coast. These areas include much of the land currently in vegetable production in Mexico. 33

Although the focus of this article is the potential effects of the NAFTA on agriculture in the United States, clearly other changes being made in Mexican laws and regulations will have a major impact on decisions by American, Canadian, and Mexican firms on where to invest and where to market their products.

IV. OVERVIEW OF AGRICULTURAL TRADE BETWEEN THE U.S., MEXICO AND CANADA

As previously noted, total 1991 trade flows between Canada and the United States were nearly $176 billion, or almost three times the $64.5 billion trade flow between the U.S. and Mexico. However, Mexican and Canadian agricultural trade flows to the U.S. are much closer in value. Mexico's agricultural trade flows were equivalent in amount to 70% of Canada's agricultural trade with the U.S. for 1991. U.S. agricultural exports to Mexico grew 173% between 1986 and 1991, making Mexico the fastest growing major agricultural export market for the U.S. Currently, the United States accounts for around 75% of Mexico's agricultural imports and over 57% of Canada's agricultural imports. 34

Overall, Japan is the most important export market for U.S. agriculture, followed by the European Community, Canada, and Mexico. However, Canada and Mexico combined are expected to surpass Japan as the leading market for U.S. agricultural exports for the first time in 1992, and are expected to receive $8.3 billion in U.S. farm goods. 35 Figures for

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35. Lori Huthoefer & Mike Dwyer, Foreign Agricultural Service, Run for the...
Japan and the EC are expected to show $8.1 and $7.1 billion of imported farm goods from the United States in 1992, respectively. Canada and Mexico combined have purchased about one-fifth of all U.S. farm exports since 1990, up from only 10% in 1986. Mexico's trade liberalization, which began in 1986, and the implementation of CUSTA have definitely impacted agricultural trade. About 90% of Mexico's agricultural exports and 37% of Canada's agricultural exports go to the United States. The importance of the U.S. as a market for both Mexican and Canadian farmers is thus quite evident.

A. U.S.-Mexico Agricultural Trade

U.S. agricultural imports from Mexico are summarized in Figure 1. Agricultural imports are led by fresh vegetables, fresh non-citrus fruits, coffee, live feeder cattle, and non-fruit beverages. Fresh tomatoes are the most important U.S. fresh vegetable import from Mexico at $249 million in 1991, yet the United States imported over $370 million in tomatoes in 1990. A healthy U.S. tomato crop (after a 1990 freeze in Florida) and the continued revaluation of Mexico’s peso in relation to the U.S. dollar were primarily responsible for the decline in tomato imports for 1991. The upward revaluation of Mexico's peso increased the dollar denominated costs for Mexican producers and reduced their competitive position.

While over 98% of United States's tomato imports came from Mexico in 1991, that total represented less than 19% of U.S.'s total tomato supply for the year. Between December and May, Mexican tomatoes typically account for about 35% of the U.S.’s fresh supply, with Florida growers supplying most of the balance.

Approximately 40% of the agricultural imports from Mexico already enter duty free, and the remainder enter at subject to an average 7% ad valorem duty. Many duty free goods imported from Mexico are complimentary or non-competitive in nature. Non-competitive products consist of commodities not commercially produced in the U.S. to any significant extent and include such products as coffee, cocoa, bananas, tea, rubber, and plantains. In 1991, 17% of agricultural imports from

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Figure 1. 1991 U.S. Agricultural Imports from Mexico

(in million dollars)

Mexico to the United States were classified as "non-competitive." Coffee imports comprised over 78% of "non-competitive" products in 1991. Other farm goods have entered the U.S. from Mexico duty free through maquilas and the Generalized System of Preferences program. This program is designed to help developing countries by granting specific products duty free access until the product becomes competitive in the world market.

Before 1987, relatively low-value or bulk commodities like coarse grains and soybeans dominated the United States's export market to Mexico. These products are still important exports for the U.S. as shown in Figure 2, but their importance has greatly diminished. In 1987 bulk commodities accounted for 60% of total agricultural exports to Mexico, but today make up only 30% of the export market. High-value products such as meat and poultry products, horticultural produce, dairy products, hides and skins, snack foods, and soybean meal, have lead in this category. Animals and animal product exports rose from $662 million in 1990 to $1,124 million in 1991 to become the leading export category. The increase in live cattle and meat product exports to Mexico increased so much during 1992 that on November 11, 1992, Mexico imposed tariffs of 15% tariff on live cattle, 20% on fresh or chilled beef, and 25% on frozen beef. The previous tariff rate was zero for products imported under an import license.38

Much of the shift from low-value to high-value export products can be attributed to the fact that unlike high-value commodities, bulk commodities were not included in Mexico's trade liberalization reform. In large part, high-value products were excluded from the reform package because corn is the staple of the Mexican diet and is produced by many low-income farmers. About two-thirds of Mexico's corn is grown in communal farms and around 75% of Mexico's corn is used for human consumption. In comparison, less than 10% of U.S.'s corn production is used for domestic human consumption. Flooding the Mexican market with corn imports would definitely compound Mexico's persistently high unemployment and underemployment rates. Thus, corn, dry beans, and non-fat dry milk were classified as most-sensitive goods for Mexico under NAFTA. Tariffs are scheduled to be phased out and eliminated in 15 years for these goods. Sugar, peanuts, and frozen orange juice concentrate are goods classed as most-sensitive for imports into the U.S. under

Figure 2. 1991 U.S. Agricultural Exports to Mexico
(in million dollars)

$2,998 TOTAL

NAFTA. Tariffs on other goods bound for Mexico, such as fresh and frozen fruits, are scheduled to be phased out and eliminated in 10 years. Mexico still maintains a relatively high (20%) tariff on most fruits.39

B. U.S.-Canada Agricultural Trade

Agricultural imports from Canada are dominated by animals and animal products as shown in Figure 3. This category primarily consists of slaughter cattle, breeding stock, and pork meat products. These products have dominated agricultural imports from Canada throughout the 1980s. Biscuits and wafers are disguised in the grains and feed category, contributing almost 25% of the total. Potatoes comprise over 30% of the vegetables and preparations category imported from Canada. The oilseed and oilseed products category has been the fastest growing import category from Canada since the enactment of CUSTA. Rapeseed and flax-seed oil make up over one-half of the oilseed imports from Canada. Imports of non-juice beverages have declined since the enactment of CUSTA, but are still a significant import commodity at $174 million.

As shown in Figure 4, U.S. exports to Canada are primarily high-value products such as fresh and processed fruit and vegetables, meat and poultry products, live animals, nuts, snack foods, and soybean meal. A diverse group of fresh vegetables are exported to Canada from the United States with no particular item standing out. Just as has been the case with U.S. exports to Mexico, growth in high-value products has been most noteworthy. High-value products now account for 94% of all agricultural exports to Canada. Low processing costs and climatic factors in the U.S., in conjunction with CUSTA have contributed to the growth of high-value product exports. Given the relatively strong U.S. dollar for Canadian consumers and the stagnant Canadian economy, growth in high-value exports has been quite remarkable. Not surprisingly, the outlook for expanded trade is most bullish on high-value products.

Export figures for low-value export products such as grains fluctuate depending on annual production levels. Before CUSTA, U.S. exports of grain to Canada were permitted only under special licenses that were rarely issued (generally only when a Canadian drought occurred). CUSTA eliminated import licenses for U.S. wheat, oats, and related products. Domestic farm subsidies remained essentially unchanged by CUSTA, with the exception of the elimination of transportation subsidies.

Figure 4. 1991 U.S. Agricultural Exports to Canada (in million dollars)

on Canadian grain exports to the United States. Thus, trading of coarse grains will continue to depend greatly on annual production variations.

C. Nontariff Technical Barriers and Trade Institutions

Sanitary and phytosanitary regulations protect human, animal, and plant life from health risks that may arise from diseases, exotic pests, contaminants, toxins, and chemical residues. Sanitary regulations deal with human and animal health while phytosanitary regulations provide for plant protection. Some observers believe that sanitary and phytosanitary rules have been imposed without sufficient scientific evidence and thus that those regulations were erected primarily as trade barriers to protect domestic markets. Reductions in tariff barriers are sometimes closely followed by a proliferation of additional sanitary and phytosanitary requirements. Under NAFTA, the United States, Canada, and Mexico have agreed to harmonize standards, although no country is required to lower its current standards.

Most of the focus on sanitary and phytosanitary regulations has been with Mexico since U.S. and Canadian standards were harmonized under CUSTA. Another reason is that nearly half of all the fruits and vegetables imported by the U.S. originate in Mexico: This fact is significant because some pesticides that are illegal in the United States for fruits and vegetables are legal in Mexico. Currently, seventeen identified pesticides can be used in Mexico but are prohibited in the U.S. Some pesticides can be used in both the U.S. and Mexico as long as they do not exceed certain tolerance levels, although the commodities on which they can be used and the tolerance levels differ. Fifty-eight pesticides have been identified that have the same tolerance levels in both countries, but are registered for use on different crops. Some measures on the part of the United States to ensure compliance with domestic pesticide regulations are thus in order.

In response to increasing produce shipments from Mexico, the Food and Drug Administration (FDA) developed a special program in 1979 to

44. Id.
monitor pesticide residues on Mexican produce and to enforce U.S. regulations strictly. FDA uses a sampling plan based on a knowledge of Mexican pesticide applications and prior testing history. However, less than 1% of all U.S. food imports, including shipments from Mexico, are sampled. If a sample is found in violation of residue for U.S. tolerances, the shipment from which it came will be returned or destroyed. Additionally, the grower/shipper responsible may be placed on automatic detention. Automatic detention requires the grower/shipper to have a private pesticide laboratory complete an analysis of residue on any future food shipments. FDA scrutinizes the scientific procedures of each lab analysis and continues to test residues randomly. A grower/shipper remains on automatic detention until five consecutive samples are free of residue violations. Mexico currently has no government agency responsible for enforcing and monitoring pesticide residues. Mexico has, however, taken steps to assist the private sector in forming a national laboratory system to test and enforce residue standards.

Overall, residue violations from Mexican produce are higher than those found on domestic produce. But residue violations for growers under automatic detention or for growers the FDA suspects have produce with illegal pesticide residues are somewhat lower than in the U.S. The majority of Mexican violations occur when the U.S. has no tolerance for a pesticide on a particular commodity rather than no tolerance for the pesticide under any circumstances whatsoever. For example, a sampled lettuce head may be found in violation because a pesticide residue is discovered that has no U.S. tolerance in lettuce, even though the U.S. might have a tolerance level for this same pesticide on peppers.

Although the United States, Canada, and Mexico have agreed to "upwardly harmonize" standards, the perceived need for certain pesticides and the health threat of diseases and pathogens varies greatly depending on climate, growing conditions, and culture.45 Thus, sanitary and phytosanitary standards will probably be the most formidable obstacle for free trade to overcome. The ability to legally settle disputes of this nature in an acceptable manner among countries will greatly determine the extent to which regional or multinational trading and investment exist in the future for agricultural products.

V. IMPLICATIONS OF THE NAFTA

A. NAFTA as a Form of Managed Trade

In the presence of a GATT agreement, it is possible to argue that the NAFTA does little to further free trade. The presence of the GATT does raise the question of whether the objectives of the NAFTA include factors other than free trade. Mention has already been made of Mexico’s view of the free trade agreement as a means of encouraging private sector investment. The United States Department of State appears to be interested in NAFTA because of its potential to enhance the economy and thus the political stability of the U.S.’s southern neighbor.

The term “managed trade” has been used to describe agreements between countries that go beyond merely establishing the rules of trade and actually determine the outcomes. Both voluntary restraint agreements (VRAs) and quotas have this effect. In fact, managed trade can amount to a euphemism for protectionism, particularly when quotas or VRAs are put in place not just for a transitional period, but indefinitely.46

The NAFTA may represent an attempt at managed trade, particularly for agricultural products. One researcher has referred to the NAFTA as “NAMATA”—the North American Managed Agricultural Trade Agreement.47 The features of the agricultural provisions of the NAFTA certainly support the view that managed trade is as much the NAFTA’s objective as free trade. However, it is also argued that the return to quotas and punitive above-quota tariffs for sensitive agricultural products in the short term (5 to 15 years) provides for an orderly transition in sectors where the effects of liberalized trade are likely to be felt the most.

The establishment of a board for settling trade disputes between the United States and Canada in the CUSTA is regarded by both sides as one of the most important features of that agreement. A similar body for resolving trade disputes between Mexico, Canada and the United States is likely to play an important role in the NAFTA. The NAFTA review board has more power than the existing CUSTA board because the NAFTA includes procedures for dealing with noncompliance or negation of the NAFTA Panel Rulings. The rulings of the NAFTA board could help counter attempted management of trade for purposes other

than easing the short term adjustment process. 48

Given the weak agreement on agricultural trade in the GATT, the negotiations of a NAFTA seem to offer some real potential for gains. However, if the agricultural trade provisions in GATT are strengthened, many of the NAFTA’s provisions may offer little more than would have been gained under GATT.

B. NAFTA with a GATT Agreement

At the insistence of the United States, agriculture was excluded from the original charter of GATT (Article XI) and has been a problematic area ever since the original agreement was signed by 23 countries in 1947. GATT now has 107 member countries, which account for about 90% of world trade. At the beginning of the Uruguay round in 1986, the U.S. and Cairns Group (which includes Argentina, Australia, Brazil, Canada, Chile, Colombia, Hungary, Indonesia, Malaysia, Philippines, New Zealand, Thailand, and Uruguay) insisted that major agricultural trade reform was necessary before agreements in other areas could be made. The growth in agricultural productivity has surpassed the growth rate in consumption for most countries. Subsequently, “surplus” production has resulted in fierce export competition abroad, declining farm prices, and increases in government expenditures for farm programs.

As the end of an extended GATT round approached in 1992, it was clear that no major reforms in agricultural trade would be agreed upon but that some sort of an agreement was politically necessary. On November 19, 1992 the United States and EC reached a bilateral agreement resolving a farm subsidy dispute that related primarily to oilseeds. But as multilateral talks continued, on December 14 GATT Director-General Arthur Dunkel invited the member nations to reopen talks on details that were implicitly thought to have been settled.49

Any GATT agreement reached in the near future would have to be thought of as relatively weak with regard to agricultural products. Most trade liberalization between the EC and United States will probably occur in the grains and oilseed sectors with little change for the animal and sugar sectors. On November 19, the United States and the EC bilaterally agreed to support a GATT agreement that reduced the volume of agricultural exports that receive subsidies by 21% and reduced subsidy outlays by 36%, utilizing a base period of 1986-90. Internally, the EC and United States have agreed to reduce the average level of domestic farm

48. Id.
supports by 20% from a 1986-88 base period. Initial proposals called for the total elimination of farm subsidies in 10 years. The so-called “Aggregate Measure of Support” (AMS) will be used to determine the amount of the reduction in farm subsidies. Building a framework such as the AMS for measuring direct and indirect subsidies may be the most important outcome of the Uruguay Round for agriculture, as long as future negotiations continue the same process. Future negotiations will likely focus more on domestic supports and environmental issues after trading policies are settled.

The greatest losers from a weak Uruguay Round will be the consumers in importing countries like Japan and the EC. Agricultural producers that are highly efficient, such as the United States and many Cairns group countries, also “lose” from a weak GATT. But the taxpayers in both exporting and importing countries also lose. Domestic agricultural subsidies could increase as the growth in agricultural productivity outpaces consumption growth and countries try to maintain market shares in the face of increasing competition. Furthermore, countries like Japan and Korea continue to insist on high subsidies for rice as necessary protection for food security reasons. The implications of these factors for the NAFTA are that the NAFTA appears to offer notable liberalization of agricultural trade in North America, at least for long-term investment decisions.

C. NAFTA as a Trade Bloc

Yet another way to view the NAFTA is as the establishment of a powerful North American trade bloc in response to the economic integration of Western European countries and the potential for the formation of trade blocs in Asia and elsewhere. As part of the means for establishing a North American trade bloc, the NAFTA is viewed suspiciously by some economists and by countries not included in the bloc.

A trade bloc is a preferential trade agreement between a group of countries. It can take a variety of forms, some leading to closer economic integration of countries than others. Many such preferential trade agreements already exist, including the Caribbean Basin Initiative, the CUSTA, the Generalized System of Preferences (GSP), the Lome Convention, and the Australia-New Zealand Trade Agreement.

51. Brand, supra note 50.
Trade blocs tend to reduce trade gains globally to the extent that countries outside the trade bloc have comparative advantage in the production of some goods, but are unable to sell these goods to countries that are part of the bloc because of trade barriers. In a world full of barriers to trade, it cannot be shown a priori that preferential trade agreements between a small number of countries are any worse from a global perspective than no such agreements. To fully evaluate an agreement from a global perspective, it is necessary to examine not only the impact on members of the agreement, but also the impact on nonmembers.\textsuperscript{52} It is also important to note that no global trade agreements currently exist. Even the GATT does not claim all nations of the world as members. However, the GATT is open to any country requesting membership and willing to follow the agreement’s provisions.

Most economic trade studies that have examined the impact of preferential trade agreements such as the NAFTA have compared the amount of additional trade generated by the agreement to the amount of trade diverted away from countries that are not part of the agreement. Most of these studies suggest that trade creation has been greater than trade diversion, with a possible exception in agricultural trade.\textsuperscript{53}

A study by Hamilton and Whalley using a trade model consisting of eight regions suggests that factors other than trade creation/diversion may affect gains and losses from preferential trade agreements. Such factors include the pattern of trade between participating and non-participating countries, the relative sizes of the participating regions, and whether initial protection is higher in some participating countries than in others. When a large country negotiates a series of bilateral agreements in a “hub and spoke” arrangement, it is possible for the large country to exploit both small member countries and trading partners outside the agreement.\textsuperscript{54}

What most trade studies have not explicitly taken into account is the effect of reduced trade barriers on the investment and relocation decisions of multinational corporations (MNCs). National governments cannot be viewed as the only players in the trade arena in a world where some MNCs are larger than most countries. Hamilton and Whalley predict significant gains for Canada under a CUSTA-type agreement Canada and lesser gains for the United States. However, between 1988 and

\textsuperscript{52} McCalla, \textit{supra} note 7.

\textsuperscript{53} Id.

1991, Canada lost more than 300,000 manufacturing jobs. Although these losses are not wholly attributable to the agreement, CUSTA did provide strong incentives for MNCs operating in both the U.S. and Canada to consolidate their operations in one country. Most chose to consolidate in the United States.

Although some of the models used to examine the likely impacts of NAFTA do take into account potential effects on Mexican migration to the U.S., very few do justice to the migration of capital that could potentially result from the agreement. One study that examines changes in foreign direct investment by the United States in Mexico suggests that such flows will further increase benefits for Mexico in terms of jobs and exports.\(^{55}\) To quote Adams: “NAFTA is really about capital movements, transfer of technology and location of production.”\(^{56}\) Models distinguishing between businesses with investments in multiple countries compared to those based in only one country might shed additional light on the distribution of benefits and losses resulting from the NAFTA.

From a national perspective, even when one country has an absolute advantage in the production of all goods, it can still benefit from trade, as demonstrated in the example in Part II. From the perspective of the individual firm, however, there may be little advantage to maintaining production in two countries when one country has an absolute or even a competitive advantage. One effect of NAFTA may be to induce companies based in the United States and other MNCs to move manufacturing operations not only out of the United States, but also out of other non-member countries (particularly in Asia) to Mexico. The magnitude of such moves could exceed those caused by trade diversion according to existing trade models.

Alternatively, MNCs may purchase more Mexican-made parts. Although under the maquiladora program the U.S. was the major source of parts for assembly operations in Mexico, this need not be the case under NAFTA. Content rules will apply, but will include producers from all three nations. Mexican suppliers or suppliers of other nationalities based in Mexico may be in prime position to become the source for parts used in many of the assembly operations in Mexico.

This is all the more possible given the vertical disintegration that is occurring in most large firms, including MNCs. Purchasing components

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or parts from small specialized firms gives these large companies more flexibility in selecting low cost suppliers and in coercing smaller supply companies to meet their specifications. Small batch runs and flexible production make it easier for small suppliers to gear up to meet specifications to fulfill an order. These factors add up to a much more competitive manufacturing environment and help explain why many products contain components from around the world. The NAFTA might not change this scenario dramatically, but it would certainly give Mexico a competitive edge.

This is not to suggest that NAFTA is necessarily a bad agreement. However, until models are developed that better account for the activity of MNCs and for sourcing activities of vertically disintegrating firms, the impacts of the agreement may not be understood as well as they should be to make good policy decisions.

VI. CONCLUDING COMMENTS

Perhaps the most disturbing aspect of the NAFTA is the specter of economic warfare between European, American and Asian trade blocs looming in the future. On the other hand, the U.S. motivation for negotiating the NAFTA includes a strong political element, and Mexico is clearly interested in locking in major domestic economic reforms and encouraging investment. These are not particularly sinister motives for forming a free trade area, although they are clearly not the only ones at play.

If the agricultural trade provisions of the Uruguay Round of the GATT had made significant strides toward reducing global agricultural trade barriers, then the gains from trade under the NAFTA would be very small indeed. However, given the rather weak agreement that is emerging from this round of the GATT, the NAFTA begins to offer some significant gains. In addition, if the NAFTA combined with other economic reforms in Mexico is sufficient to generate significant increases in investment in Mexico, then the effects on North American trade, including agricultural trade, could be amplified. In all of the analysis to date, however, information on the relative impacts of NAFTA on businesses that operate in more than one country versus those that do not, and the related implications for movement of production and capital both within the free trade area and between that area and the rest of the world is notably absent.

As is pointed out in Part IV, differences in phytosanitary standards between the United States, Canada, and Mexico will continue to impede
the free trade of some agricultural products. In addition, comparative advantage may shift from one country to another for fresh fruits and vegetables, depending on the season. Finally, the agreement on agricultural trade over the next five to fifteen years is much more akin to managed than free trade for certain sensitive agricultural products, including some horticultural products, peanuts and sugar exported to the U.S. from Mexico, and grains and oilseeds exported to Mexico from the United States. An optimist might suggest that by the time trade barriers between the United States and Mexico in these areas truly fall, the next round of the GATT may have successfully concluded with major reductions in global agricultural trade barriers. GATT spectators and commentators do not expect any immediate agreement on agriculture, but this scenario is certainly more pleasant to contemplate than a world full of trade blocs, each fortified with high external trade barriers.

The NAFTA thus seems at least to be a step in the direction of liberalizing trade in North America. Whether it will live up to its promise, however, remains to be seen.