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# Deepening Our Understanding of the New International Trade Environment: Discussion

#### **Dale Colyer**

International trade continues to be an important topic for the U.S. agricultural sector and its economic well-being, especially with the launching of a new round of negotiations following the World Trade Organization (WTO) meeting in Doha. Agricultural issues are a prominent and controversial part of the new Doha round, as they became in the Uruguay round when agriculture was included in a prominent way for the first time. In addition, the North American Free Trade Agreement (NAFTA), negotiations for the Free Trade Area of the Americas, the U.S.-Chile agreement, and other trade agreements have had or will have major impacts on agriculture. Thus, a better understanding of international problems, issues, and policies is essential for the sector and for development of domestic sector policies and programs, including agricultural legislation being developed to replace the 1996 Federal Agricultural Improvement and Reform (FAIR) Act. International trade issues are important factors that affect legislative action, but international trade provisions, especially those of the WTO, are constraints that limit the scope of policies with respect to domestic subsidies, export subsidies, etc.

The papers in this session contribute to a better understanding of the complex and interrelated issues of domestic and foreign agricultural polices. They address three crucial aspects of trade and agriculture: (1) globaliza-

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tion and its effects on competitiveness, (2) foreign direct investment versus trade, and (3) exchange rate impacts on agricultural trade. They also indicate that these issues and problems are complex, with varied, complex, and multidimensional options that cannot be easily resolved. There are several important topics that cannot be covered adequately in a single session. These include the environment, domestic subsidies, export subsidies, and multifunctionality. Some of these issues are discussed in other sessions of these meetings.

### Globalization and Agricultural Competitiveness

Kennedy and Rosson (KR) analyze some of the important impacts of globalization on agricultural competitiveness. They note and briefly discuss four key issues that affect competitiveness: (1) domestic agricultural policies, (2) agricultural trade agreements, (3) processed and differentiated products, and (4) biodiversity. Any one of these could easily be the topic of an entire paper (or even a book) and, thus, the discussions are necessarily incomplete. For example, they state that the FAIR Act is "consistent with increased market orientation, decreased government regulation, and the desire to lower the costs of agricultural programs," but fail to note that the FAIR Act has been a colossal failure with respect to many of its basic objectives. Although it did decrease government interventions by eliminating acreage set-asides and contributed to maintaining U.S. agricultural competitiveness via low prices, it did so only with very massive costs in the form of supplemental government appropriations. The publication by the Environmental Working Group of the government subsidies received by individuals has been a source of embarrassment for many in the agricultural sector, and may affect the outcome of the current debate on the new legislation.

After presenting those four issues and discussing definitions of competitiveness, KR then examine the NAFTA and agricultural trade with respect to two important factors that have influenced competitiveness: changes in exchange rates, and trade preferences. Appreciation of the U.S. dollar with respect to both the Canadian dollar and Mexican peso has had negative impacts on the competitiveness of U.S. exports. Orden discusses this in more detail in his paper. The trade preferences under NAFTA involve the reduction and eventual elimination of tariff and nontariff barriers to trade, and thus result in preferences for products of the three member countries vis-à-vis those of other countries. This, of course, should result in increased trade with patterns determined by comparative advantage, although the other factors affecting competitiveness will enter into the process. KR use graphics to show how these two factors affect trade and prices, graphs that are basic but nonetheless useful for understanding the processes affecting trade.

KR then examine an indicator of competitiveness, changes in market shares, for five agricultural commodities (beef and veal, corn, sugar, tomatoes, and wheat) traded by the three NAFTA countries. This is an important contribution and one not always apparent in discussions that focus only on the changes in trade volume or value. The changes in market shares are indicative of competitiveness, but as they are discussed in the definitions section, KR do not address the underlying causes. Were these changes due to exchange rate changes, changes in tariffs and nontariff barriers, or other factors? A combination of factors undoubtedly contributed to those changes. For one product, corn, KR say "it would appear that NAFTA has done little to alter U.S. competitiveness," but the United States increased its share of both the Canadian and Mexican markets substantially at a time that exchange rate changes should have had a negative impact. Thus, it would be interesting to know how much of the change was due to trade preferences, how much was due to natural endowments, or how much was due to the long-term investment of the United States in agricultural research that has made U.S. corn producers highly efficient. If the latter is as important as I believe, we may need to be especially concerned that in the current fiscal year's budget, agricultural research had the smallest percentage increase among all research activities, and that was only after Congress increased funding; the administration had recommended a decrease (American Association for the Advancement of Science).

The use of the market share approach provides useful information here in view of pre-NAFTA expectations about corn, which were that U.S. production and exports to Mexico would increase and Mexican production would decrease (see Carpentier for a comparison of pre- and post-NAFTA estimates, and Colyer or deJanvry, Sadoulet, and Davis for an analysis of trade effects of NAFTA). The latter expectation has not happened, although the first two have. But it is uncertain how much influence NAFTA had on those results due to pre-NAFTA trends and other changes that have taken place since NAFTA was implemented, especially changes in the domestic agricultural policies in both Mexico and the United States.

The interpretation by KR raises the need to remember some of the problems we encounter in interpreting numbers, especially percentages. They say "the Canadian beef industry has experienced large gains in the U.S. market share... with an increase of 129%." Although the U.S. share of the Canadian market only increased by about 31%, the increase in the U.S. share was nearly double that of Canada, 0.0232 versus 0.0123. Because the original Canadian share of the U.S. market was so small compared with the U.S. share of the Canadian market, 0.0096 versus 0.0752, a small increase in the share is a large percentage in-

crease. However, it might be noted that, because of the size of the U.S. market, the volume/value of the increase of beef and veal exports to the U.S. by Canada is large relative to the increase in sales by the U.S. to Canada. Thus, how you express the data depends on what you want to show.

#### **Foreign Direct Investment**

Marchant, Cornell, and Koo (MCK) analyze foreign direct investment (FDI) and international trade from the aspect of being substitutes or complements. As MCK indicate, research on these relations has produced contradictory results. This is especially important from the standpoint of the U.S. food processing industry, since these firms can approach enhancing their bottom lines by either expanding trade through exports of their products, or through investing overseas in plants to process and market their products in the foreign country. However, a U.S. firm in Mexico might, for example, import its raw products, thereby increasing the exports of commodities from the United States. Many trade agreements promoting free trade in commodities (e.g., WTO, NAFTA) have also included provisions that allow greater FDI. Thus, although trade flows in goods, both bulk commodities and processed goods, are enhanced by the trade agreement, capital flows also occur. The examination of relations between FDI and exports is important to understanding the impacts of trade liberalization.

MCK developed and estimated models to test for complementarity versus substitutability of U.S. FDI and exports for processed food products. They found that the relations were complementary for the five Asian countries, and that increased sales by FDI firms were accompanied by increased U.S. exports. Although these results were not related to specific trade agreements except to the extent that the flows are affected by the GATT and WTO, they nonetheless have implications for specific agreements. Increased FDI by U.S. firms will not necessarily result in reductions in U.S. exports. However, since the results of other studies reviewed by MCK are in conflict with their

findings, we cannot be sure that both exports and FDI will rise.

MCK expressed surprise that the compensation variable in their FDI model was positive since it was expected that domestic higher wage rates would discourage FDI. They discussed two factors that might have caused this, but omitted one possible explanation. Gopinath, Pick, and Vasavada, in an article cited by MCK, found that per capita GDP was the most important factor in increased sales by FDI affiliates. MCK did not include that variable in their model, and it is probable that their compensation variable acted as a proxy for per capita gross domestic product. In addition, MCK referred to the countries in their study, except for Japan, as developing countries and, although true, it is more common and appropriate to refer to Singapore, Taiwan, and South Korea as newly industrialized countries and now more industrialized than developing. They are in a different category from China and other developing countries with low per capita incomes. Thus, thinking of them as developing countries could have led to an inappropriate expectation about the sign for the compensation variable.

#### **Exchange Rate Impacts**

Orden examined how exchange rate regimes and changes affect U.S. agricultural exports. He provides an excellent history of exchange rate changes and their impacts on agricultural exports since fixed exchange rates were abandoned by the United States in 1971. He illustrates their importance for agricultural trade and trade in general. KR also recognized the role of exchange rates in their discussion of NAFTA and agricultural competitiveness, as did MCK in their analysis, indicating the importance of the topic, which gives emphasis to Orden's analysis.

I find little to disagree with in Orden's paper, but want to add some emphasis to one finding and draw out some further implications for agricultural policy. He compared the effects, using the law of one price, of the appreciation of the U.S. dollar relative to the Canadian dollar on the prices of agricultural

commodities and agricultural inputs. Whereas the exchange rate changes had large and rapid impacts on agricultural commodities (about 21 to 35%), farm machinery price changes were relatively small (4.5%). He finds this "consistent with a fixed price/flex price concept with farm commodity prices more responsive to the exchange rate than industrial prices," but does not elaborate on the reasons for the differences. Although we should know what these are, recent discussions of agricultural policy have ignored them or found them to no longer be relevant. Whereas Paarlberg and Orden recognized the possibility of much lower prices. they did not predict it. Tweeten and Forster probably represented a more typical approach, seeing that "the massive resource disequilibrium characterizing agriculture since the 1930s has been dissipated."

The promoters of the FAIR Act assured us that it would have beneficial effects for agriculture, maintain or raise farm prices, increase exports, and free farmers from 'onerous' government regulations (acreage restrictions, setasides, and cross compliance), together with many other benefits. An analysis by Knutson, Keeling, and Ray, for example, predicted a 2000 corn price of \$2.34 per bushel, whereas the actual average price was \$1.85 (U.S. Department of Agriculture). The market worked, of course, as it always does. But, in the agricultural sector with flexible prices, this meant much lower prices as farmers planted all the land released by ending set-asides, while demand also declined because of, in part, the Asian financial crisis. With an inelastic demand, much lower prices and lower incomes (excluding large increases in subsidies) resulted. When a sector is noncompetitive (oligopolistic), as in the case of farm machinery, supply is controlled in the face of declines in demand, and prices change relatively little. The promoters of eliminating government intervention argued that farmers would shift to the more profitable crops when faced with lower prices for one. Farmers did shift to soybeans, with the result that soybean prices fell and subsequently the crop was subsidized for the first time. Had the FAIR Act promoters remembered the history of the 1930s and the 1980s, they should have expected this. The lesson should be that policies designed to support the agricultural sector that do not include supply control provisions will either fail or be very costly, or both.

#### **Conclusions**

The Trade Negotiations Committee for the Doha round of WTO has agriculture as one of its proposed five working groups (others are services, environment, rules, and industrial tariffs), an indication of the importance (and controversial nature) of the sector in international trade. However, the negotiators have not yet reached an agreement on who will chair the Committee. The papers in this session have addressed several of the important issues facing the negotiators. At the same time the U.S. Congress is in the process of developing a new farm bill to replace the FAIR Act. This bill will have important consequences for international trade and the agricultural provisions of the WTO agreement, as will macroeconomic and other policies that affect exchange rates, inflation, and other variables that affect the competitiveness of the nation's agricultural sector. However, U.S. participation in the WTO, and achievement of its objectives with respect to the agricultural policies of other countries, necessarily imposes constraints on our own domestic policies. At present, all of these issues and concerns are clouded in uncertainty.

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