

NEWSLETTER

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U.S. Agricultural Trade in the Western Hemisphere and the Free Trade Area of the Americas Jeremy Mattson and Won Koo

Negotiations to create the largest single market in the world, the Free Trade Area of the Americas (FTAA), are in progress. The goal of the FTAA is to stimulate trade flows of all goods by eliminating trade and investment barriers within the Western Hemisphere. Such an agreement could have significant effects on U.S. agriculture because it could create an opportunity to increase U.S. exports of agricultural commodities and products.

As the figures show, Canada and Mexico are the United States' two major trading partners in the Western Hemisphere, but the United States also imports a considerable quantity of agricultural products from South America. The United States has an agricultural trade deficit with South America that has averaged \$2.5 billion during the 1989-2000 period. The United States also has an agricultural trade deficit with Central America and a growing trade deficit with Canada, but has agricultural trade surpluses with Mexico and the Caribbean.

Excluding Canada and Mexico, the Western Hemisphere countries that the United States imports the most agricultural products from are Brazil, Colombia, Chile, Costa Rica, and Guatemala. A substantial percentage of the imports from these countries is made up of products that are not produced in the United States - mostly coffee and bananas. The countries that the United States exports the most agricultural products to, excluding Canada and Mexico, are Venezuela, the Dominican Republic, Colombia, and Brazil.

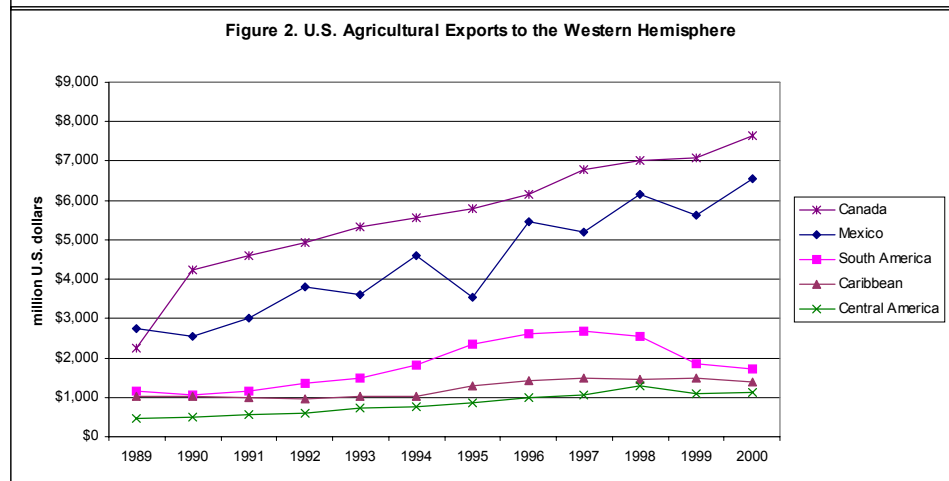
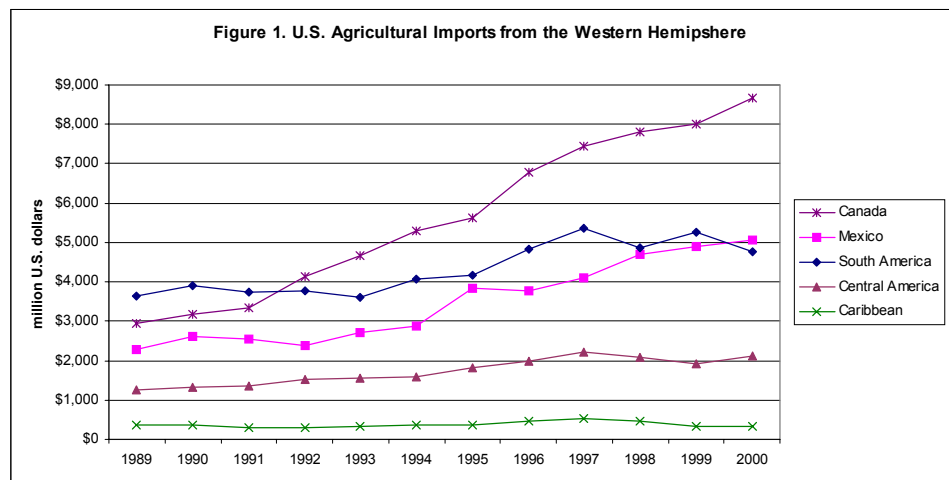
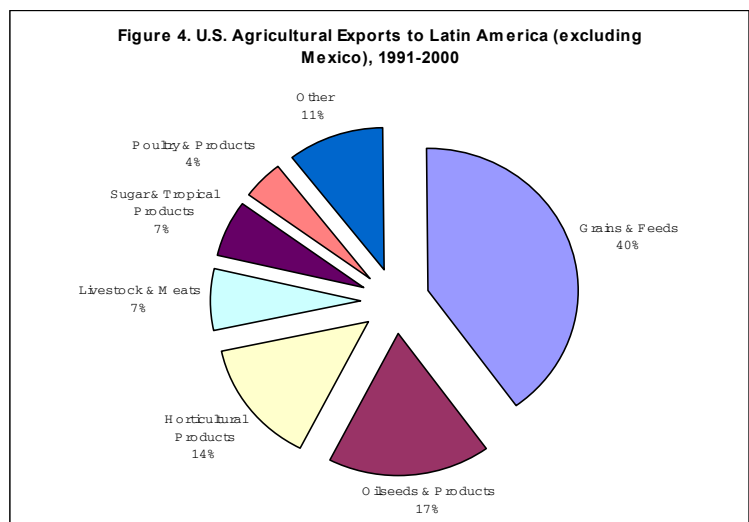
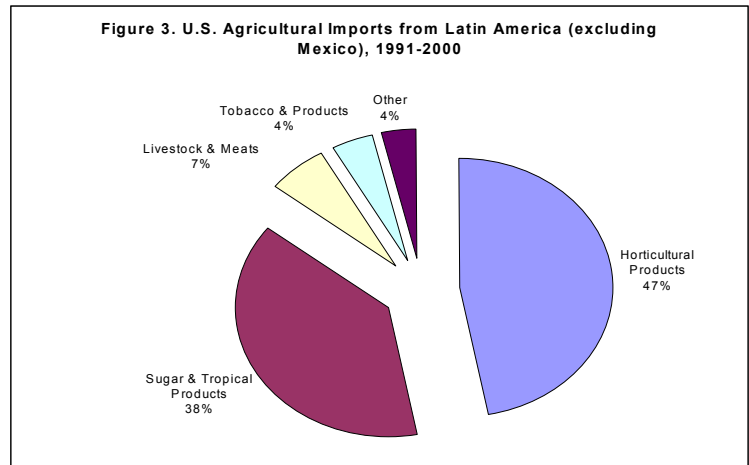


Figure 3 shows the types of agriculture products the United States imports from Latin American countries (excluding Mexico). Most of the imports fall into either the horticultural products category or

the sugar and tropical products category. The horticultural products category includes mostly fruits and vegetables, and the sugar and tropical products category includes coffee, cocoa, sugar, tea, spices, honey, and a few other products. Sixty-three percent of the imports classified as sugar and tropical products from these countries during the 1991-2000 period were coffee and coffee products. The rest was mostly sugar and sugar related products or cocoa. Figure 4 shows the types of agricultural products the United States has exported to Latin American countries (excluding Mexico). Forty percent of these exports are grains and feeds, and the next largest groups are oilseeds and oilseed products and horticultural products.

The FTAA will enhance the existing trade flows of agricultural commodities and products; U.S. exports of grain, feed, oilseeds, and livestock and meats could increase, while the United States could import more horticultural products and sugar and tropical products. Results from a current study indicate that the increase in U.S. agricultural exports would be greater than the increase in U.S. agricultural imports. Tariffs are generally higher in these countries than they are in the United States, and food consumption is more price-sensitive in these countries. One concern is the impact on the U.S. sugar industry. Latin American countries form a major sugar-producing region. The FTAA could substantially increase U.S. sugar imports from these countries, which could result in a much lower sugar price in the United States.



**Profit Consistency and Management Characteristics
For Successful North Dakota Farms, 1995-2000**
Richard D. Taylor, Won W. Koo, and Andrew L. Swenson

Since the Federal Agricultural Improvement and Reform Act (FAIR Act) was passed in 1996, commodity prices have fallen, and government spending has increased substantially. The price of spring wheat fell from \$4.71 in 1996 to \$2.85 in 2000, and North Dakota net farm income dropped from \$1,119 million in 1996 to \$417 million in 1999, before increasing to \$749 million in 2000. Regardless of aggregate farm income, North Dakota farm profitability varies widely among farms each year, according to the Farm and Ranch Business Management Education Program records. The average return on assets (ROA) was the highest in 1996, at 8.38 percent, and the lowest in 1997, at 1.71 percent. The average ROA for the five most profitable farms ranged from 48.86 percent in 1996 to 21.10 percent in 1997, while the ROA for the five least profitable farms ranged from -22.02 percent in 1997 to -7.92 percent in 2000. The question is, are the same farms in the higher profit categories year after year and, if they are, what characteristics do those farms have?

Farm managers employ limited resources such as land, labor, and capital to their best use toward the generation of profits. Managers control activities relating to the organization and operation of a farm for the attainment of specific ends. The success of a manager is measured by profits generated over time. The manager's decisions affect both the level of production and the costs associated with that production.

The data for this study are from the North Dakota Farm Business Management Education Program from 1995-2000. About 222 farms were in the program and submitted records for at least four out of the six years. Farms with less than four years of records were omitted from the study because there would not be enough data to show consistency of profits.

The farm records were sorted by year and divided into quartiles by ROA. Farms in the high quartile had 29 percent more crop acreage than those in the low quartile. Their gross crop return, government payments, and other returns per acre were larger than those in the other quartiles. The percentage of livestock returns increased as the farms went from the high category to the low category. The percentage of owned land increased and cash rent decreased from the highest to the lowest quartile. All the expense ratios increased from high-quartile farms to low-quartile farms. The small grains ratio also increased. Wheat yield decreased about 23 percent from high- to low-quartile farms.

Table 1 shows the consistency of farms within the ROA quartiles. The study determined which ROA quartile a farm was in during the first year of its participation in the record-keeping program. If farms were in the high quartile in their first year, the probability they were in the high quartile during the remaining time period is 49.9 percent, and the probability they were in the high or the med-high quartile is 74.3 percent. Likewise, if farms were in the low quartile their first year, the probability they were in the low quartile during the remaining time period is 56.6 percent, and the probability they were in the low or mid-low quartiles is 77.7 percent.

Table 1. Probability of Return on Assets Achieved During 1995-2000, on Average, and Chi Square Tests, for Farms in Various Return on Assets Groups, North Dakota Farm Business Management Education Program

First year of participation	-----Profit Groups, later years-----			
	High	Med-High	Med-Low	Low
	-----annual probability (%)-----			
High Profit	49.9	24.4	16.9	7.8
Med-High Profit	23.0	43.4	18.5	14.7
Med-Low Profit	17.1	18.5	43.5	20.9
Low Profit	10.1	13.7	21.1	56.6

This study indicates that ROA is more sensitive to changes in the expense variables than to changes in the production variables. The production variables included in this study are total crop acres, crop return per acre, government payments per acre, other payments per acre, livestock ratio, percentage of land owned, percentage of land cash-rented, small grains ratio, and maximum wheat yield. The expense variables are operating expense ratio, depreciation expense per acre, and interest expense per acre. At mean levels of these variables, ROA is estimated at 6.176 percent. When the production variable means are increased 10 percent, ROA increases by 17.2 percent to 7.2 percent. When the expense variable means are decreased 10 percent, ROA increases by 50.6 percent to 9.3 percent. This implies that the expense variables have a greater effect than the production variables on ROA.

Recent Publications

Processed Food Trade and Foreign Direct Investment Under NAFTA - *Agribusiness and Applied Economics Report No. 470*, by Jeremy W. Mattson and Won. W. Koo-U.S. trade in processed foods is rapidly growing, especially with Canada and Mexico. Japan and Canada are the largest importers of processed foods from the United States, followed by Mexico and Korea. Canada is the leading exporter of food products to the United States, followed by France, Mexico, and Italy. Results from this study do not conclusively indicate any type of relationship between foreign direct investment (FDI) and trade in processed foods with Canada and Mexico. The growth in trade can partly be explained by trade liberalization and growth in GDP. Free trade agreements, labor costs, and inflation influence U.S. FDI in Canada and Mexico.

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Economic Analysis of the U.S. House of Representatives Farm Bill, the Senate Agricultural Committee Farm Bill Proposal, and the Agricultural Conservation Rural Enhancement Act of 2001 - *Agribusiness and Applied Economics Report No. 475*, by Richard D. Taylor and Won W. Koo-All farm bill proposals provide substantially higher net farm income than the continuation of the FAIR Act. The Agriculture Conservation Rural Enhancement Act (ACRE Act) provides higher net farm income than either the House bill or the Senate proposal, and net farm income under the House bill is higher than under the Senate proposal given the Food and Agricultural Policy Research Institute's (FAPRI) commodity price estimates. Regions of the state that produce row crops, corn, and oilseeds would have higher net farm income under the Senate proposal. If commodity prices increase faster than FAPRI's estimates, the ACRE Act should provide more support because more of the governmental support is in the form of direct payments. However, if prices lag behind FAPRI's estimates, the Senate proposal should provide higher support because of the higher loan rates.

U.S. Agricultural Trade with Western Hemisphere Countries and the Effect of the Free Trade Area of the Americas - *Agribusiness and Applied Economics Report No. 478*, by Jeremy Mattson and Won W. Koo-See newsletter for report summary.

Profit Consistency and Management Characteristics for Successful North Dakota Farms, 1995-2000 - *Agribusiness and Applied Economics Report No. 472*, by Richard D. Taylor, Won W. Koo, and Andrew L. Swenson-See newsletter for report summary.

To obtain these publications, contact Beth Ambrosio, Center for Agricultural Policy and Trade Studies, NDSU at (701) 231-7334 or download from this website: <http://www.ag.ndsu.nodak.edu/capts/publication.htm>

Center Staff Changes: Ms. Beth Ambrosio is a recent addition to the center. She holds an MA in Government and Foreign Affairs from the University of Virginia and will be working as administrative assistant to the center and to Won W. Koo. Her husband is a faculty member in the Political Science department at NDSU.

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