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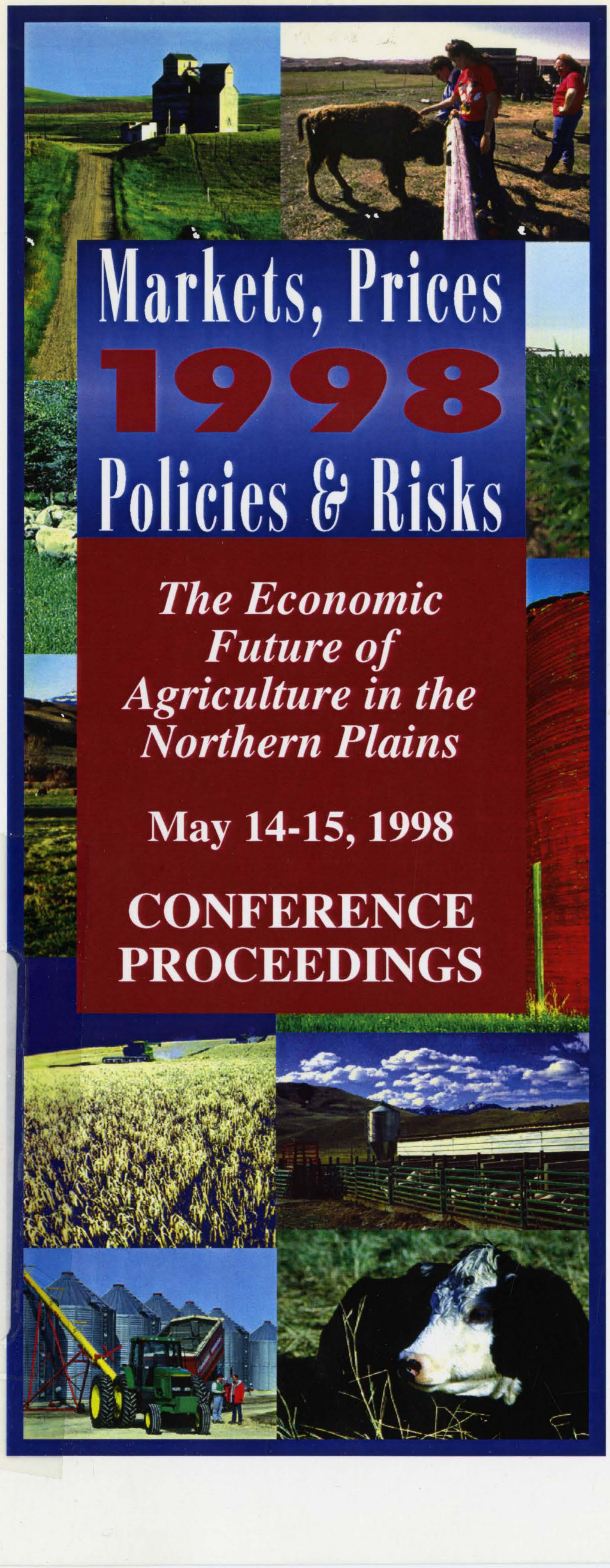

Markets, Prices 1998 Policies & Risks

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NAFTA and GATT: Implications for U.S. Beef Market Prices

John M. Marsh

Introduction

U.S. beef trade has increased substantially since the late 1980s due mostly to the expansion in beef exports. U.S. beef exports were 690 million pounds in 1988 and had increased to 2,136 million pounds in 1997. Growth markets for exports have been the Pacific Rim region, Mexico, and Canada with a threefold increase in exports to these areas (see Table 10). U.S. beef exports increased from 2.9 percent to 8.4 percent of domestic production between 1988 and 1997.

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Table 10. U.S. Beef Exports, by Country

Country	Export Year 1988	Export Year 1997
	million pounds	
Japan	503.5	1,053.6
Canada	52.6	282.7
Mexico	37.4	312.6

In contrast to beef exports, beef imports into the United States declined between 1988 and 1997. U.S. beef imports were 2,405 million pounds in 1988 and 2,342 million pounds in 1997. U.S. beef imports consist of low grade manufacturing type beef (80 percent ground beef), with the bulk of the imports from Australia and New Zealand. The decline in U.S. beef imports was largely attributed to a nearly 30 percent decline in real U.S. beef prices and the effects of periodic drought conditions in Australia and New Zealand on cattle inventories.

Another important aspect of the U.S. beef trade involves live cattle exchange with Canada and Mexico. The United States is a net importer, primarily importing slaughter cattle from Canada, and importing mostly feeder and stocker cattle from Mexico. The 1.33 million head of U.S. live cattle imports in 1988 and 2.05 million head in 1997 were for the most part from Canada and Mexico (see Table 11). The United States exports breeding stock and some slaughter and feeder cattle. U.S. live cattle exports decreased from 321,000 head in 1988 to 282,000 head in 1997. The net import status of the United States reflects its excess demands in feedlots and packing plants.

Table 11. U.S. Live Cattle Imports from Canada and Mexico

Country	Import Year 1988	1997
	---------- *thousand head* ----------	
Canada	487.5	1,376.8
Mexico	844.2	669.4

Economics of Export Changes

Expansion in U.S. beef exports (pork and poultry exports, also) began in the mid-1980s. U.S. beef exports consist primarily of prime, choice, or select grade table cuts, with grades specific to destination markets. The United States exports relatively more high choice to low prime beef to Japan, high select to low choice beef to Canada, and primarily standard to select beef to Mexico. Recently, the strengthening of the Mexican economy has increased U.S. exports of choice beef (Peel 1996). Japan accounted for 50 percent of total U.S. beef exports in 1997, followed by Mexico, Canada, and South Korea with 15, 13, and 12 percent respectively (USDA 1998). U.S. exports of variety meats (edible offal, etc.) have also been directed toward markets in the Pacific Rim and Mexico.

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U.S. beef exports have increased for several reasons: (1) the dollar depreciation against the Japanese yen in the mid-1980s made U.S. beef exports less costly to Japanese consumers compared to beef from other exporters; (2) reductions in trade restrictions through the U.S.-Canadian Free Trade Agreement (CUSTA), the North American Free Trade Agreement (NAFTA), and the General Agreement on Tariffs and Trade (GATT); (3) increases in foreign incomes and dietary preferences for animal source proteins; and (4) technologies allowing shipments of chilled rather than frozen meat, permitting importers to purchase higher-quality chilled meat at prices similar to previously discounted frozen meat (Brester et al. 1997).

Trade Policy Changes

Liberalization of beef trade policies has played a major role in expanding world beef exports and imports. The United States enacted the Meat Import Law in 1964 to regulate inflows of foreign beef. This law functioned via base quotas and trigger levels, with supportive measures through voluntary restraint agreements. The 1979 Meat Import Law amended the 1964 law by establishing quotas that were countercyclical. That is, as U.S. beef production increased, U.S. beef imports decreased. The GATT replaced these import quotas, beginning in 1995. The initial tariff rate, set at 31.1 percent, will be reduced to 26.4 percent by the year 2000 and is specific to a tariff-rate quota of 656,621 metric tons. The tariff rates are applicable to all imports in excess of this quota. It is estimated that the increase in U.S. beef imports could range from 6 to 19 percent over 1990–1994 average levels (Brester and Wohlgenant 1997).

U.S. beef exports account for approximately 17 percent of world beef trade.

The United States is one of the world's largest producers and exporters of beef. U.S. beef exports account for approximately 17 percent of world beef trade. Japan is the primary importer of U.S. beef. Until 1988 the Japanese domestic market was highly protected by import quotas and *ad valorem* tariffs (Jeong 1995). In 1991 Japanese import quotas were replaced by a 70 percent *ad valorem* tariff, which was subsequently reduced to 60 percent in 1992 and 50 percent in 1993 (Doyle et al. 1995). Under the GATT the tariff-rate quota will be gradually reduced to 38.5 percent by 2001. However, Japan retains the right to reinstate the higher tariff rate under safeguard provisions if imports of frozen or chilled beef increase more than 17 percent over the previous year's level.

South Korea, as the second largest market in the Pacific Rim for U.S. beef, accounts for 10 to 20 percent of U.S. exports (Brester and Wohlgenant 1997). Prior to 1993, annual beef imports were determined according to projections of domestic supply and demand made by the Korean government. Since 1993 a "simultaneous buy/sell" quota system has been in effect. Under this system a "supergroup" acts on behalf of its members to coordinate beef imports and prices between end users (e.g., wholesalers, meat manufacturers, restaurants, and hotels) and suppliers (Jeong 1995). Under GATT, South Korea agreed to increase market access by expanding its beef import quota from 123,000 tons (retail weight) in 1995 to 225,000 tons in 2000. In 2001 South Korean import quotas will be replaced by a 44 percent tariff that will be reduced to 40 percent by the year 2004 (Doyle et al. 1995).

The next two largest markets for U.S. beef are Canada and Mexico. These two countries receive approximately 25 percent of U.S. exports. GATT and NAFTA provisions provide for increased market access to these countries. However, sanitary and other quality regulations continue to restrict trade and must be based on scientific evidence. An example is the 1997 Northwest Pilot Project. This involved exploring ways to reduce regulatory restrictions and costs of Washington and Montana feeder cattle trade with Canada (Young and Marsh 1997).

The CUSTA reduced trade barriers regarding meat and live cattle (both ways). Prior to this trade agreement, U.S. tariffs were 1.7 cents per kilogram on live cattle imports and were 3.9 cents per kilogram on beef carcasses. After CUSTA, these tariffs were phased out. Additionally, each country exempted the other from quotas under their domestic meat import laws. The subsequent implementation of NAFTA reinforced the CUSTA by eliminating all tariffs and providing a means for less restrictive sanitary regulations.

U.S. live cattle and beef trade with Mexico prior to NAFTA was characterized by trade barriers. The United States imposed import tariffs on beef cattle of 2.2 cents per kilogram, and imposed import tariffs of 4.4 cents per kilogram on chilled and frozen beef, while allowing variety meats to enter duty free. Mexico utilized periodic export and import licensing and tariffs on meat and live cattle imports. When NAFTA took effect, beef cattle and meat trade between Mexico and the United States was exempted from quotas and all tariffs were lifted.

GATT Effect on Beef Prices

The GATT provides for the reduction of trade restrictions through tariffication, minimum access commitments, and reduction of domestic subsidies. In addition, the GATT provides safeguards for import surges and special tariff allowances for developing countries. The implementation period for these GATT provisions began in 1995 and is to be completed in 2000. Countries signing the GATT became members of the World Trade Organization. This organization is charged with the evaluation of trade disputes, such as competitive trade practices (i.e., dumping), and food safety. Food safety issues are to be addressed on their scientific merit rather than political factors.

Increased exports cause the prices of table cut beef, fed cattle, and feeder cattle to increase.

GATT policy impacts on U.S. beef cattle prices depend upon expected changes in imports and exports over the implementation period. Overall, projections indicate 6 to 19 percent increases in U.S. beef imports and 10 to 75 percent increases in U.S. beef exports (Brester and Wohlgenant 1997). The estimated effects of GATT policies on prices of boxed beef, fed and nonfed slaughter cattle, and feeder cattle are shown (see Table 12). Increased imports decrease the price of ground beef and increase U.S. per capita ground beef consumption. Increased beef imports also reduce nonfed cattle prices and slaughter volume. Increased exports cause the prices of table cut beef, fed cattle, and feeder cattle to increase. U.S. per capita consumption of table cut beef declines slightly. U.S. fed cattle slaughter and feeder cattle production both increase.

Table 12. Impacts of Small, Medium, and Large Increases in U.S. Beef Imports and Exports on U.S. Beef and Cattle Prices

Variables	Mean (1990–94)	Small Increases in Imports and Exports[a]	Medium Increases in Imports and Exports[b]	Large Increases in Imports and Exports[c]
Price of ground beef (dollars/lb)	$1.70	-$0.01	-$0.03	-$0.04
Price of table cut beef (dollars/lb)	$4.08	$0.01	$0.05	$0.09
Price of boxed beef (dollars/lb)	$1.17	$0.05	$0.07	$0.10
Price of fed cattle (dollars/cwt)	$74.22	$0.62	$2.86	$5.46
Price of nonfed cattle (dollars/cwt)	$49.24	-$0.71	-$1.56	-$2.55
Price of feeder cattle (dollars/cwt)	$89.09	$0.61	$2.82	$5.40

[a] A "small" change refers to a 6 percent increase in U.S. beef imports and a 10 percent increase in U.S. beef exports over 1990–94 average levels.
[b] A "medium" change refers to a 12 percent increase in U.S. beef imports and a 40 percent increase in U.S. beef exports over 1990–94 average levels.
[c] A "large" change refers to a 19 percent increase in U.S. beef imports and a 75 percent increase in U.S. beef exports over 1990–94 average levels.
Sources: Brester and Wohgenant 1997; and Marsh 1997.

Explicit price effects of a 12 percent increase in U.S. beef imports and a 40 percent increase in U.S. beef exports were made (see Table 12, Column 3). The combined effects decrease the price of ground beef by $0.03/lb. Table cut beef price increases by $0.05/lb and the price of boxed beef increases by $0.07/lb. Fed cattle price increases by $2.86/cwt, feeder cattle price increases by $2.82/cwt, and the nonfed cattle price declines by $1.56/cwt.

NAFTA Effects on Beef Prices

The elimination of trade barriers between the United States and Canada and the United States and Mexico has led to increased trade flows of live cattle and boxed beef. U.S. imports of live cattle from Canada increased an average of 29 percent per year for the 1988 through 1993 period and increased an average of 12 percent per year for the 1994 through 1997 period. Live cattle imports from Mexico increased an average of 11 percent per year for the 1988 through 1993 period, and they decreased an average of 8 percent per year for the 1994 through 1997 period. U.S. exports of live cattle to both countries decreased 10 and 7 percent, respectively, for these periods.

The GATT will impact U.S. beef and cattle prices. There will be positive effects for fed cattle and feeder cattle prices but negative impacts on the nonfed cattle price.

U.S. net beef exports to Canada decreased an average of 7 percent per year for the 1988 through 1993 period and net exports decreased an average of 35 percent per year for the 1994 through 1997 period. U.S. net beef exports to Mexico increased an average of 44 percent for the 1988 through 1993 period and increased an average of 10 percent per year for the 1994 through 1997 period.

The effects of trade changes on U.S. feeder cattle prices for both pre- and post-NAFTA periods are presented (see Table 13). Price effects of trade are analyzed separately for net imports of live cattle and boxed beef with respect to Canada and Mexico. Changes in net live cattle imports into the United States led to greater decreases in feeder prices after NAFTA. Pre-NAFTA price declines with respect to Canada and Mexico were $0.375/cwt and $0.117/cwt, respectively. Post-NAFTA price declines with respect to Canada and Mexico were $0.396/cwt and $0.473/cwt, respectively. Annual effects on U.S. feeder price due to net beef exports were positive prior to NAFTA and negative (for Canada) after NAFTA. The pre-NAFTA price increases were $0.010/cwt and $0.521/cwt for Canada and Mexico, respectively. The post-NAFTA price decrease for Canada was $0.612/cwt and there was a price increase for Mexico of $0.243/cwt. These marginal impacts are small. But the relatively larger effects after NAFTA reflect increasing U.S. net live cattle and beef imports from Canada and decreasing U.S. net beef exports to Mexico.

Conclusions

Multilateral trade liberalization called for in the GATT will impact U.S. beef and cattle prices. There will be positive effects for fed cattle and feeder cattle prices but negative impacts on the nonfed cattle price. There will be additional revenues for feedlot operators and beef packers. Cow-calf producers should also benefit as gains from increased feeder cattle prices will more than offset reductions in cull cow prices. These estimated impacts are conditional, depending upon relative trade stability and the effects of NAFTA holding constant.

Table 13. Feeder Price Effects of Pre-NAFTA and Post-NAFTA Years, Live Cattle and Beef Trade

Years		Net Cattle Imports (Canada)	Net Cattle Imports (Mexico)	Net Beef Exports (Canada)	Net Beef Exports (Mexico)
		($ per cwt)			
1988-1993	total	-2.247	-0.704	+0.042	+3.127
	annual	-0.375	-0.117	+0.010	+0.521
1994-1997	total	-1.187	-1.418	-1.836	+0.730
	annual	-0.396	-0.473	-0.612	+0.243

Notes: The years 1988–1993 are pre-NAFTA and the years 1994–1997 are post-NAFTA. In the "years" column, "total" is the sum of marginal price impacts for the relevant years while "annual" is the average per year.

NAFTA's effects from agreement inception through 1997 on U.S. feeder cattle prices are estimated to be small. The removal of tariffs and quotas and easing of health restrictions will increase trade flows. Since 1994, under NAFTA, U.S. net imports of live cattle from Canada have increased and from Mexico have decreased. Net exports of beef to Canada have decreased and net exports of beef to Mexico have increased. The recent expansion in beef packing capacity in Alberta may reduce U.S. slaughter cattle imports from Canada and increase U.S. feeder cattle exports to Canada. However, increases in Canadian beef exports to the United States and to the Pacific Rim are expected. Attempted reductions in animal health restrictions between the United States and Canada (i.e., the Northwest Pilot Project of 1997) may eventually facilitate U.S. feeder cattle moving north.

Comparison of pre- and post-NAFTA effects on U.S. feeder price from changes in boxed beef and live cattle trade indicate greater reduction in prices after NAFTA. However, it would be misleading to attribute the reductions exclusively to liberalized trade as other factors have confounded the issue. These include the previous effects of CUSTA (1989), devaluation of the peso and Mexican drought conditions in 1995, and delays in Alberta packer capacity expansion in 1996.

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John M. Marsh is a Professor of Economics in the Department of Agricultural Economics and Economics, Montana State University–Bozeman. He has published in the areas of livestock and meat demand and supply and marketing issues. He also conducts research in livestock and meat trade issues relevant to NAFTA and GATT.