[illegible]ates
[illegible]ent of
[illegible]e

[illegible]c
Research
Service

**Agriculture
and Trade
Analysis
Division**

U.S.–Canadian Agricultural Trade Issues

Implications for the Bilateral Trade Agreement

Mary Anne Normile
Carol A. Goodloe

U.S.-CANADIAN AGRICULTURAL TRADE ISSUES: IMPLICATIONS FOR THE BILATERAL TRADE AGREEMENT. By Mary Anne Normile and Carol A. Goodloe. Agriculture and Trade Analysis Division, Economic Research Service, U.S. Department of Agriculture. Staff Report No. AGES880209.

ABSTRACT

In the eighties, U.S.-Canadian agricultural trade has been characterized by a declining U.S. trade surplus, an increase in trade disputes, and an attempt to produce freer trade through bilateral negotiations. Factors influencing the level and composition of bilateral trade include general economic conditions, country size, climatic differences, tariff and nontariff trade barriers, exchange rate shifts, and government support regimes. Differences in domestic farm policies and in the level of government support to agriculture make freer trade in agricultural products difficult to achieve. In January 1988, the United States and Canada signed a comprehensive trade agreement that will reduce many barriers to trade, including some affecting agricultural trade.

Keywords: United States, Canada, agricultural trade, agricultural policy, trade agreement.

ACKNOWLEDGMENTS

Barbara Chattin contributed material and review on U.S. producer subsidy equivalents and government intervention. Barbara Stucker contributed material on U.S. domestic policy. The authors also wish to thank Larry Thomasson (Agricultural Counselor, American Embassy, Ottawa), Nicole Ballenger, Bill Coyle, Lewrene Glaser, Tom Lederer, Mark Newman, Mark Smith, and numerous commodity analysts in the Commodity Economics Division for helpful comments; Monir Brown and Kathleen Doering for research assistance; and Bonita Moore for editorial assistance.

NOTE: All dollar figures are expressed in U.S. dollars, unless otherwise indicated. In 1986, the Canadian dollar was worth 0.72 U.S. dollars.

1301 New York Avenue, NW.
Washington, DC 20005-4788

March 1988

CONTENTS

SUMMARY

In January 1988, the United States and Canada signed a comprehensive trade agreement including several provisions that will affect trade in agricultural products between the two countries. U.S.-Canada agricultural trade is also highlighted by other developments: the diminishing U.S. surplus in U.S.-Canada agricultural trade, the increase in the number of trade disputes between the two countries, and the multilateral trade negotiations' focus on agricultural trade.

The comprehensive bilateral trade agreement signed in January 1988 contains several provisions relating specifically to agriculture:

- Both countries will eliminate all agricultural tariffs within 10 years.
- Tariffs on fresh fruits and vegetables may revert to the Most Favored Nation level, under certain conditions, for a period of 20 years.
- The United States agreed not to put quantity restrictions on imports of Canadian products having 10 percent or less sugar by dry weight.
- Canada agreed to eliminate import licenses for U.S. wheat, barley, oats, and their products as soon as support levels for these products in both countries are equal.
- Canada agreed to remove transportation subsidies for products moving through western ports to U.S. markets.
- Canada agreed to increase global import quotas for poultry, poultry products, and eggs to the annual average of actual shipments during the past 5 years.
- The two countries will exempt each other from their meat import laws.
- Canada agreed to liberalize wine listing, pricing, and distribution practices in order to afford improved access for U.S. wine.

The agreement could affect approximately half of current U.S. agricultural exports to Canada (by value) and about a fourth of U.S. imports from Canada. Commodities most likely to be affected include fresh fruits and vegetables, some oilseed products, beef, wine, poultry and eggs, some grains, and processed agricultural products. The pact also establishes a dispute settlement mechanism to review decisions of national agencies that apply trade remedy laws, which could have an impact on trade of commodities that are currently subject to countervailing or antidumping duties.

Total U.S.-Canada trade is the largest between any two countries in the world. Factors affecting the direction and composition of this trade include relative country size, macroeconomic variables, and the product mix in each country. The United States is a large exporter of agricultural products, with a highly diversified agricultural sector, and is nearly self-sufficient in most temperate-zone agricultural products. Canada, a country with about one-tenth the U.S. population, is a medium-sized exporter. The value of Canada's agricultural exports is approximately one-fifth that of the United

States. Its agricultural sector is more specialized and, as a result, Canada must import much of its food and fiber needs.

Agriculture's share of total U.S.-Canada trade is small--less than 10 percent of either U.S. exports to or U.S. imports from Canada. Canada's trade shares with the United States are larger. U.S. exports to Canada are dominated by products Canada does not produce, or that it produces during a short season, such as fruits and vegetables. U.S. imports from Canada (live animals and livestock products, and grains and grain products) tend to compete with domestic U.S. production.

In the eighties, U.S.-Canada agricultural trade grew, but U.S. imports from Canada grew faster than U.S. exports to Canada, eroding the once-large U.S. surplus in bilateral agricultural trade. The shift in the balance of agricultural trade has coincided with the depreciation of the Canadian dollar relative to the U.S. dollar. Prompted in part by the influx of Canadian products south of the border, many U.S. producers sought recourse through U.S. trade remedy measures, bringing an unprecedented number of appeals for import relief from Canadian products to the U.S. Government. Canada applied the first-ever countervailing duty to a U.S. export, on grain corn, in 1986.

Both countries employ a variety of measures to restrict trade. Tariffs are a significant barrier to trade in some commodities, including seasonal fruits and vegetables, dairy products, and eggs in Canada, and fruits, vegetables, and vegetable oil in the United States. Tariffs in both countries tend to increase with the stage of production: high value-added products are charged a higher tariff than primary products. U.S. tariffs are higher on cheese, soybean oil, potatoes, and soybean meal. Canadian tariffs are higher on poultry meat and most fruits and vegetables. Nontariff barriers tend to be more effective than tariffs in restricting trade between the two countries. Nontariff barriers include quotas, import licensing requirements, health and sanitary restrictions, and certain domestic policies. Domestic policies supporting the agricultural sector may distort resource allocation and production decisions through their effects on producer returns and consumer prices and thereby affect what is traded. These policies include stabilization plans, supply management schemes, and input subsidies in Canada, and price support, target price/deficiency payments, commodity reserve management programs, and acreage reduction programs in the United States.

Estimates of government intervention provide a means for comparing the extent to which each country supports its agricultural sector as well as identifying which commodities are most highly protected and thus most likely to be affected by removal of border measures or changes in domestic policies. Comparisons of prices at all levels in the marketing chain show Canadian prices of dairy products, poultry, and eggs to be higher than the corresponding U.S. prices. Government expenditures and levels of protection for major agricultural commodities have increased in both countries over the past few years. Summary measures of protection suggest that Canada protects oilseeds, livestock, and dairy to a greater extent than does the United States, while U.S. protection of grain and sugar products exceeds that of Canada. Canadian consumers bear much of the burden for supporting agricultural programs affecting dairy and poultry, while U.S. taxpayers pay most of the cost of U.S. agricultural programs.

U.S.–Canadian Agricultural Trade Issues

Implications for the Bilateral Trade Agreement

Mary Anne Normile
Carol A. Goodloe

INTRODUCTION

This report examines issues relating to agricultural trade between the United States and Canada and the underlying factors that affect this trade. The study is motivated by four recent developments:

- the shifting trade pattern in the eighties in favor of Canada and to the disadvantage of the United States;

- the proliferation of trade disputes between the United States and Canada in the mideighties, involving antidumping and countervailing investigations on many agricultural and nonagricultural products;

- the 1986-87 bilateral free trade negotiations, a historic effort to negotiate a free trade agreement between the world's two largest trading partners that brought to light many issues and irritants in bilateral agricultural trade and prompted a closer look at the nature of trade in agricultural products between the two countries;

- the multilateral trade negotiations (MTN) that involve many more countries, for which an understanding of the factors affecting trade between two major trading partners and participants in the talks may provide insight into U.S. trade relations with other countries.

This report describes U.S.-Canadian agricultural trade in the eighties and analyzes a wide range of factors that have influenced this trade, from the general economic and demographic factors to domestic and trade policies. It is intended to serve as a reference document for persons interested in agricultural trade between the United States and Canada, and as general background information for understanding the bilateral trade agreement.

U.S. AND CANADIAN PROFILES

The United States and Canada share many historical and cultural similarities, but also differ in political organization and economic institutions. Both countries are highly developed industrial economies, dominated by manufacturing and services and richly endowed with natural resources. They both possess a well-educated labor force and a large number of affluent consumers, and both provide for a large number of their citizens a standard of living higher than in most other countries in the world.

Both countries are representative democracies, although the Canadian parliamentary system of government resembles that of Great Britain more closely than that of the United States. The Canadian Government takes a more active role in the provision of goods and services to its citizens than does the United States. "Crown corporations" (quasi-governmental organizations that perform a private-sector role) control the marketing of grain, the operation of one of the two major railways, and a wide range of other functions.

General Demographic and Economic Background

Canada's population is approximately one-tenth that of the United States (table 1). Canada is sparsely populated compared with the United States, but both countries are highly urbanized.

- Canada is the second largest country in the world, after the Soviet Union, occupying two-fifths of the North American continent. Canada contains 3.8 million square miles, compared with 3.7 million in the United States, including Alaska.

- The population of Canada is smaller than the population of California.

- 90 percent of Canada's population resides on 12 percent of the land. Population is concentrated in a thin ribbon lying directly north of the U.S.-Canadian border. The United States is more densely populated, but population is less concentrated geographically.

- Two-thirds of Canada's population resides in two provinces--Ontario (9 million people) and Quebec (6.6 million). By contrast, less than 20 percent of the U.S. population resides in the two most populous States, California and New York.

Canada's gross domestic product (GDP) is also about one-tenth that of the United States; on a per capita basis, the countries' economies are about the same size (table 2). 1/ The economies of the two countries are similar in

1/ In 1986, Canada stopped reporting gross national product (GNP) and now reports only gross domestic product (GDP). GDP is the total value of goods and services produced within U.S. borders by both nationals and nonnationals. GNP includes the value of goods and services produced by U.S. residents overseas. GNP and GDP are nearly identical for the United States.

Table 1--U.S. and Canadian population, 1985

Item	United States	Canada
Population, millions	238.7	25.4
Persons per square mile	64.9	7.1
Percent urban population	73.7	75.7
Households, millions	85.4	8.3
Persons per household	2.7	2.9

Sources: (8, 23); see References.

Table 2--Selected macroeconomic indicators, United States and Canada

Item	1982	1983	1984	1985	1986
			Percent		
United States:					
GNP (bil. $US)	3,116.0	3,405.0	3,772.0	4,010.0	4,235.0
Per capita GNP ($US)	13,425.0	14,520.0	15,879.0	16,714.0	17,434.0
Real GNP growth rate	-2.5	3.6	6.4	2.7	2.5
Federal deficit/GNP	4.2	5.6	4.9	5.3	5.2
Prime interest rate	14.6	10.8	12.0	9.9	8.2
Unemployment rate	9.7	9.6	7.5	7.2	7.0
Change in CPI	6.1	3.2	4.3	3.6	1.9
Change in food CPI	-2.1	9.7	3.8	2.3	3.2
Income spent on food 1/	15.4	15.2	14.9	14.7	14.5
Trade/GNP	14.4	13.3	14.2	13.7	13.6
Canada:					
GDP (bil. $US)	304.0	329.0	344.0	351.0	367.0
Per capita GDP ($US)	12,203.0	13,222.0	13,674.0	13,839.0	14,398.0
Real GDP growth rate	-4.3	2.7	5.1	4.3	3.2
Fed. deficit/GDP	6.1	6.7	6.9	6.8	4.9
Prime interest rate	15.8	11.2	12.1	10.6	10.4
Unemployment rate	11.0	11.9	11.3	10.5	9.6
Change in CPI	10.8	5.8	4.4	4.0	4.1
Change in food CPI	7.2	3.7	5.6	2.9	5.0
Income spent on food 1/	14.7	14.7	14.3	14.2	13.8
Trade/GDP	39.9	40.4	46.0	45.9	45.0
Can$/$US exchange rate	.81	.81	.77	.73	.72

1/ Expenditures on food at home and away from home (excluding tobacco and alcoholic beverages) as a percentage of personal disposable income.
Sources: (1, 2, 3, 8, 25, 28); see References.

many respects, although the U.S. economy has performed better in the eighties. The U.S. economy has recorded higher growth rates and lower inflation and unemployment than Canada. The Federal budget deficit as a share of gross national product (GNP) has also been higher in Canada. Despite generally higher interest rates, which Canada maintains to prevent capital from moving south, the Canadian dollar has depreciated against the U.S. dollar during the eighties. Canada's economy relies more heavily on trade, with the trade sector accounting for half of GDP.

The United States and Canada share a common cultural heritage and language; both English and French are official languages in Canada, but most Canadians speak English. However, significant economic and institutional differences exist between the United States and Canada. First, among the major economies of the world, only Canada and Australia have neither a large internal market, like the United States, nor guaranteed access to a market of over 100 million people through a bilateral or other trade arrangement, like the European Community. Because of the small domestic market, production runs are shorter, industry tends to be more highly concentrated, and, in protected sectors, costs are higher as a result. Many Canadian observers contend that it is critical for Canada to open its border to begin to rationalize its industrial sector in order to compete with the newly industrializing countries in the future. Secure access to the large U.S. market was a key objective of Canada in seeking an agreement on bilateral trade.

A second difference between the United States and Canada is the extent of private foreign ownership, control, and influence of the Canadian goods-producing sectors, with more than 30 percent of manufacturing production in U.S.-controlled plants. No other major developed economy exhibits such a degree of dependence on a neighboring economy. Many major private-sector nonagricultural activities experience some degree of U.S. influence--through U.S. corporate ownership of Canadian assets, through growing dependence of Canadian producers on the U.S. market, and through dependence of Canadian corporations on U.S. financial markets. As a result, many Canadians fear that closer economic ties through freer trade would threaten Canada's economic independence.

Third, Canada ships over 75 percent of its exports to the United States. Canada is much more dependent on the United States as a market for its exports and imports than the United States is on Canada. This situation applies to both total and agricultural trade. Changes in factors that affect trade, such as U.S. macroeconomic or border policies, are likely to have a greater impact on the Canadian economy because of its greater reliance on the U.S. market as an outlet and inlet for its products.

Agricultural Sector Profiles

Agriculture represents a relatively small share of GDP in both countries (table 3). The agricultural sector continues to evolve in Canada as well as

Table 3--Selected agricultural indicators, United States and Canada

Item	Unit	1976	1981	1986
United States:				
Agriculture's share of GDP 1/	Pct.	3.1	3.0	2/ 2.3
Agricultural area	Mil. acres	1,054.0	1,034.0	1,007.0
Farm population	Thou.	8,253.0	7,014.0	5,355.0
As percent of total	Pct.	3.8	3.1	2/ 2.2
Number of farms	Thou.	2,497.0	2,434.0	2,214.0
Average size per farm	Acres	422.0	425.0	455.0
Canada:				
Agriculture's share of GDP 1/	Pct.	3.8	4.3	3.6
Agricultural area	Mil. acres	169.0	167.0	168.0
Farm population	Thou.	1,256.0	1,082.0	995.0
As percent of total	Pct.	5.5	4.4	3.9
Number of farms	Thou.	338.0	318.0	293.0
Average size per farm	Acres	499.0	528.0	572.0

1/ Includes forestry and fishing. 2/ 1985.
Sources: (3, 28), see References.

in the United States; farm numbers and persons employed in agriculture have declined since World War II on both sides of the border. Agricultural area has not changed significantly since 1976, but a decreasing number of farms are accounting for an ever increasing share of total output. Both countries have seen their farm sectors undergo severe financial stress during much of the eighties. Farm prices and asset values have fallen in both countries, while input prices have declined only slightly in the United States and not at all in Canada (figs. 1 and 2).

More than half of all U.S. land is used for cropping or for range or pasture, whereas only 4 percent of Canada's area is devoted to crops, with an additional 2 percent in meadows and pastures. Both countries are major producers of grains and livestock and practice land-extensive cultivation of most field crops (table 4). U.S. production is more diverse than Canadian

Table 4--Selected crop data, United States and Canada

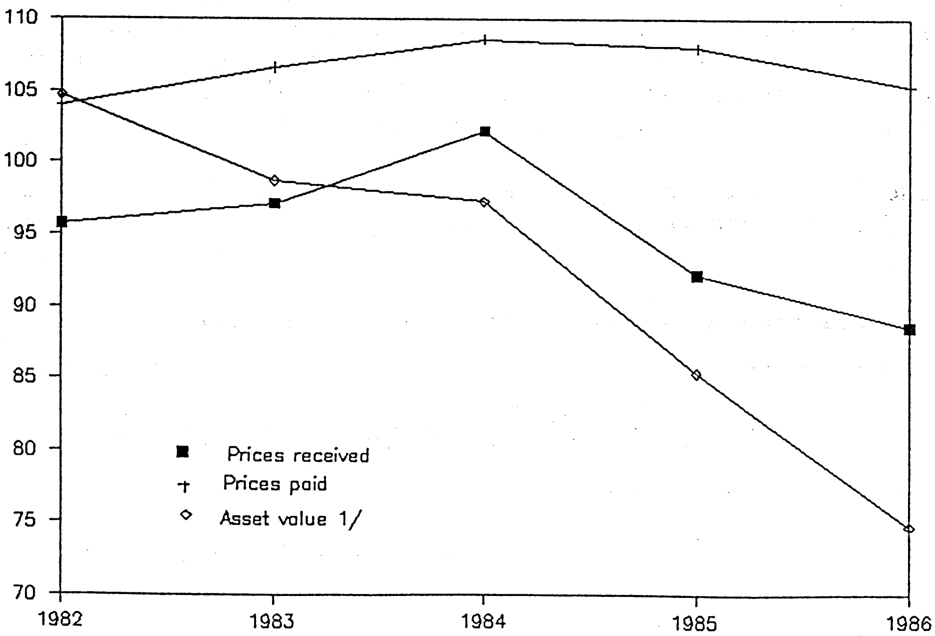
Commodity	United States 1984/85	United States 1985/86	United States 1986/87	Canada 1984/85	Canada 1985/86	Canada 1986/87
	Million metric units					
Wheat:						
Area harvested (ha)	27.1	26.2	24.6	13.2	13.7	14.2
Yield (mt/ha)	2.6	2.5	2.3	1.6	1.8	2.2
Beginning stocks (mt)	38.1	38.8	51.8	9.2	7.6	8.5
Production (mt)	70.6	66.0	56.9	21.2	24.3	31.4
Exports (mt)	38.8	24.9	27.3	17.5	17.7	20.8
Imports (mt)	.7	.5	.6	0	0	0
Corn:						
Area harvested (ha)	29.1	30.4	28.0	1.2	1.2	1.0
Yield (mt/ha)	6.7	7.4	7.5	5.9	6.2	6.0
Beginning stocks (mt)	25.6	41.9	102.6	1.0	1.4	1.5
Production (mt)	194.9	225.5	200.6	7.0	7.5	5.9
Exports (mt)	47.4	31.5	38.2	.6	.7	.1
Imports (mt)	.3	0	0	.6	.4	.6
Barley:						
Area harvested (ha)	4.5	4.7	4.9	4.6	4.8	4.8
Yield (mt/ha)	2.87	2.74	2.73	2.25	2.61	3.02
Beginning stocks (mt)	4.1	5.4	7.1	2.0	2.2	3.3
Production (mt)	13.0	12.9	13.3	10.3	12.4	14.6
Exports (mt)	1.7	.5	3.0	2.8	4.0	6.7
Imports (mt)	.2	.2	.6	neg	neg	0
Major oilseed: 1/						
Area harvested (ha)	26.8	24.9	24.0	3.1	2.8	2.6
Yield (mt/ha)	1.89	2.31	2.28	1.11	1.25	1.44
Beginning stocks (mt)	4.8	8.6	14.6	.1	.5	1.0
Production (mt)	50.6	57.1	54.6	3.4	3.5	3.8
Exports (mt)	16.3	20.1	20.7	1.5	1.5	2.0
Imports (mt)	0	0	0	0	0	0

neg = Negligible. 1/ Soybeans for the United States and rapeseed for Canada.
Sources: (21, 29); see References.

Figure 1

Farm prices and asset values, United States

1981 = 100

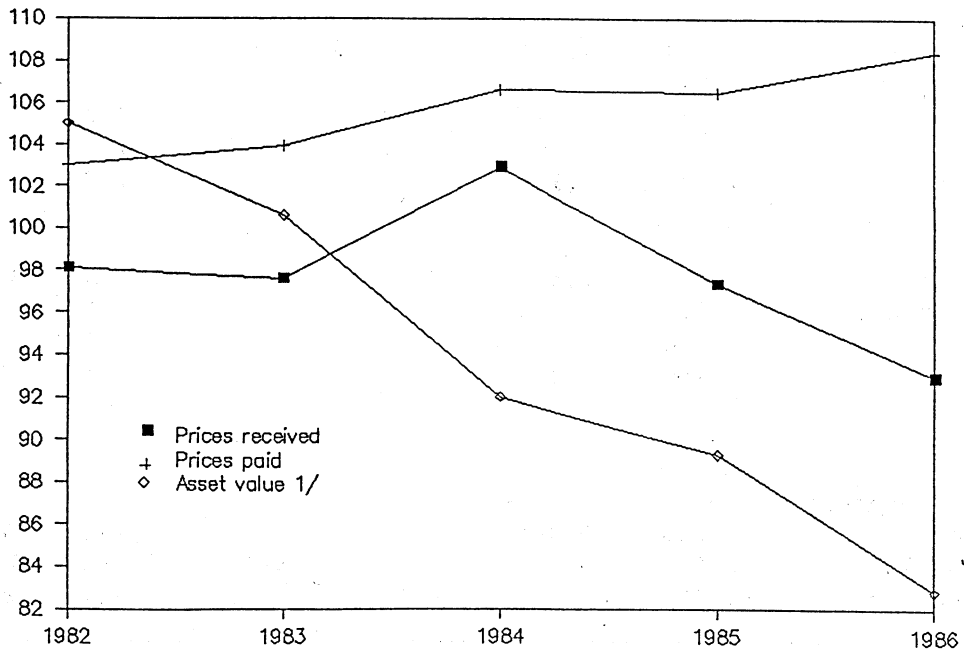


1/ Average farm real estate (land and buildings).

Figure 2

Farm prices and asset values, Canada

1981 = 100



1/ Average farm real estate (land and buildings).

production, reflecting the greater variation in soils and climate. Corn, soybeans, and wheat are the major crops produced in the United States, but fruits, vegetables, nuts, cotton, and wine are also important. Canada's most important crops are wheat, barley, and rapeseed, produced primarily in the western "Prairie" provinces of Manitoba, Saskatchewan, and Alberta. Crop alternatives in western Canada are limited by soil and weather conditions. The Prairies are characterized by a short growing season, limited precipitation, and long harsh winters. The milder climate and more abundant rainfall in parts of Ontario and British Columbia allow a greater variety of crops to be grown--fruits and vegetables, corn, and soybeans.

Livestock production is also a significant enterprise in both countries (table 5). Beef cattle are found in most U.S. States, but cattle feeding is

Table 5--Selected animal products data, United States and Canada

Item	United States			Canada		
	1984	1985	1986	1984	1985	1986
	1,000 metric tons					
Beef and veal:						
Beginning inventory (mil. head)	114	110	106	11	11	11
Production	10,929	10,997	11,292	997	1,035	1,040
Beginning stocks	151	169	149	17	15	18
Imports	838	948	978	115	115	112
Exports	152	151	239	105	117	105
Consumption	11,597	11,814	12,036	1,009	1,030	1,051
Pork:						
Beginning inventory (mil. head)	57	54	52	11	11	11
Production	6,719	6,716	6,379	863	900	908
Beginning stocks	137	124	104	11	12	10
Imports	433	512	509	15	17	14
Exports	74	58	39	175	196	215
Consumption	7,091	7,190	6,864	702	723	708
Poultry:						
Production	7,427	7,865	8,263	559	608	629
Beginning stocks	125	120	146	20	26	27
Imports	0	0	0	41	34	38
Exports	209	211	276	2	5	4
Consumption	7,223	7,628	7,967	592	636	665
Dairy:						
Beginning inventory (mil. head)	11,109	10,805	11,177	1,731	1,723	1,674
Output/cow (kg)	5,673	5,894	6,030	4,677	4,580	4,689
Milk production	61,439	64,930	65,354	8,096	7,891	7,850

Sources: (22, 23, 24, 29); see References.

concentrated in the Southwest because of the dry climate and inexpensive land. Hogs tend to be raised near the biggest supply of corn, and the dairy industry is concentrated in areas with an abundance of roughage--the Northeast, Lake States, and the west coast. Poultry production is concentrated in the Southern and mid-Atlantic States. Ontario and Alberta have over half of Canada's cattle, while Ontario and Quebec have about 60 percent of the hogs; Ontario and Quebec are also the main poultry and dairy producers.

Based on cash receipts, the U.S. agricultural sector is about 10 times as large as Canada's (table 6). Cash receipts are evenly divided between crops and livestock in both countries. Cash receipts from crops (net of government payments) have been declining recently due to falling prices. Cattle and calves are the most important livestock activity in both countries, followed by dairy. Wheat is the most important crop in Canada, but feed grains predominate in the United States.

Both countries are major agricultural exporters. The main agricultural exports for the United States are feed grains, wheat, soybeans and products, cotton, rice, and horticultural products. Canada's major exports are wheat, barley, rapeseed, pork, and beef. Agricultural exports represent a larger share of total exports for the United States than for Canada, although agricultural exports as a share of total exports have fallen in both countries (table 7). The agricultural trade surplus has declined in both countries during the eighties, but much faster in the United States.

Table 6--Cash receipts from farm sales, United States and Canada

Commodity	United States			Canada		
	1984	1985	1986	1984	1985	1986
			Billion U.S. dollars			
Livestock and products	72.9	69.8	71.6	7.5	7.1	7.2
Cattle and calves	30.7	29.1	29.0	2.8	2.6	2.6
Hogs	9.7	9.0	9.7	1.5	1.3	1.5
Dairy products	17.9	18.1	17.8	2.1	2.0	2.0
Poultry and eggs	12.2	11.2	12.7	1.1	1.0	1.0
Other livestock	2.5	2.4	2.4	.2	.2	.2
All crops	69.4	74.4	63.6	7.2	5.8	5.4
Food grains	9.6	9.1	5.9	3.2	2.3	2.2
Feed grains	15.8	22.5	17.8	1.2	1.0	.9
Cotton	3.3	3.7	2.9	NA	NA	NA
Oilseeds	13.9	12.6	10.5	1.0	1.0	.9
Tobacco	2.8	2.7	1.9	.3	.1	.3
Fruits and nuts	6.8	6.8	6.9	.2	.2	.2
Vegetables	9.1	8.6	8.7	.6	.6	.6
Other crops	8.0	8.4	8.9	.6	.6	.6
Total	142.3	144.2	135.2	14.7	12.9	12.6

NA = Not applicable.
Sources: (20, 29); see References.

Table 7--Agricultural trade profiles, United States and Canada

Item	1982	1983	1984	1985	1986
			Billion U.S. dollars		
United States:					
Agricultural exports	36.6	36.1	37.8	29.0	26.0
Agricultural imports	15.4	16.6	19.3	20.0	21.1
Agr. trade balance	21.2	19.5	18.5	9.1	5.0
Agr. exports as share of total exports (%)	17.7	18.4	17.8	14.0	12.6
Canada:					
Agricultural exports	7.6	7.7	8.0	6.5	8.4
Agricultural imports	4.1	4.2	4.7	4.4	6.6
Agr. trade balance	3.5	3.5	3.2	2.1	1.8
Agr. exports as share of total exports (%)	11.4	10.7	9.4	7.7	7.2

Sources: (1, 30); see References.

AGRICULTURAL TRADE AND TRADE POLICIES

Trade between the United States and Canada is large and growing. Bilateral trade amounted to $124 billion in 1986, the largest between any two countries in the world (table 8). The main items traded include automobiles and parts,

Table 8--Summary of U.S. trade with Canada 1/

Year	Total trade	Agriculture	Forest products
		Million U.S. dollars	
1980:			
U.S. exports	41,581	2,494	431
U.S. imports	40,874	1,023	2,282
1981:			
U.S. exports	45,469	2,753	492
U.S. imports	45,776	1,115	2,218
1982:			
U.S. exports	38,833	2,513	333
U.S. imports	46,329	1,351	2,050
1983:			
U.S. exports	43,897	2,515	481
U.S. imports	51,982	1,504	3,118
1984:			
U.S. exports	52,903	2,780	497
U.S. imports	66,343	1,848	3,374
1985:			
U.S. exports	54,505	2,491	496
U.S. imports	68,884	1,894	3,544
1986:			
U.S. exports	55,633	2,591	557
U.S. imports	68,163	2,010	3,351

1/ Import data for both countries. Sources: (1, 30); see References.

machinery and equipment, primary metals and minerals, and forest products. Agricultural products account for less than 5 percent of total U.S. trade with Canada. In the eighties, the United States has consistently incurred a deficit in merchandise trade with Canada. In 1986, the U.S. trade deficit with Canada was second only to that with Japan. However, the U.S. balance of nonmerchandise trade, which includes services, travel, and investment, with Canada is in surplus.

The eighties saw many changes in U.S.-Canadian agricultural trade relations. The total and agricultural trade balances have been steadily shifting in Canada's favor in the eighties. From 1980-86, the U.S. trade surplus in agricultural products shrank from $1.5 billion to $600 million. This shift in the trade balance reflects the steady deterioration in the value of the Canadian dollar against the U.S. dollar in the eighties and an appreciation in the Canadian dollar against other currencies.

Level and Composition of Agricultural Trade

The United States and Canada tend to export bulk, raw, or semi-processed products to third countries and to each other, but bilateral trade in highly processed products is also significant (tables 9 and 10). Bilateral agricultural trade reflects geographic and climatic factors in the two countries.

U.S. exports to Canada include many products that Canada cannot grow because of its cold climate--fresh fruits and vegetables, rice, cotton, and nuts. Horticultural products account for almost half of Canada's agricultural imports from the United States (fig. 3). Live animals and meat products are Canada's most important commodity exports to the United States (fig. 4). Wheat, feed grains, oilseed products, and vegetables are also important U.S. imports from Canada.

A serious problem exists when comparing U.S. and Canadian trade data. Canadian trade data still show the same deterioration in the U.S. total and agricultural trade balance, but they record U.S. exports much higher than official U.S. data. For example, in 1986, total U.S. exports were underreported by over $10 billion. According to U.S. data, the U.S. trade deficit with Canada was almost $25 billion, whereas according to Canadian data the deficit was only about $14 billion (fig. 5).

U.S. trade data show the United States was a net agricultural importer from Canada in 1986, but using Canadian import data rather than U.S. export data shows the United States to be a net agricultural exporter. The discrepancy in the agricultural trade balance was over $1 billion in 1986 (fig. 6). That is, Canada reported a trade deficit with the United States of about $600 million, whereas the United States reported a trade deficit with Canada of about $500 million. For agricultural trade, about half of the discrepancy is caused by underreporting of U.S. export data of fruits and vegetables, much of which is shipped by truck and evidently not recorded when it leaves the United States (36). 2/

2/ Underscored numbers in parentheses cite sources listed in the References.

Table 9—U.S. agricultural exports to Canada

Item	1982		1983		1984		1985		1986	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
	1,000 m ton	Million dollars	1,000 m ton	Million dollars	1,000 m ton	Million dollars	1,000 m ton	Million dollars	1,000 m ton	Million dollars
Animal products	—	387	—	459	—	522	—	503	—	465
Beef and veal	8	39	11	46	20	84	20	79	20	77
Pork	12	30	13	30	7	15	5	10	6	15
Poultry meat	16	24	19	29	26	45	21	37	24	40
Grains and products	—	264	—	236	—	294	—	253	—	255
Corn	776	84	324	46	467	69	500	61	676	58
Rice	105	45	101	44	103	46	102	38	111	34
Animal feeds	254	55	228	59	159	59	183	60	201	70
Fruits and nuts	—	627	—	602	—	651	—	595	—	630
Vegetables and products	—	401	—	421	—	449	—	422	—	466
Oilseeds and products	—	313	—	316	—	367	—	285	—	279
Soybeans	462	104	312	78	274	76	206	43	148	28
Soybean meal	388	88	418	103	567	128	583	106	618	121
Cotton, excluding linters	40	57	54	77	51	90	38	52	8	10
Sugar, refined	7	12	26	18	41	24	99	28	112	40
Wine and malt beverages	25	14	37	16	31	14	84	36	32	13
Other	—	405	—	386	—	376	—	340	—	460
Total	—	2,480	—	2,531	—	2,787	—	2,514	—	2,618

— = Not applicable.
Source: (1).

Agricultural Trade and Market Share

Appendix tables 1 and 2 show the importance of agricultural imports from each country relative to total imports and consumption for commodities that are traded between the United States and Canada. For example, while Canada supplied the United States with 100 percent of its wheat imports in 1985, total U.S. wheat imports made up only 1 percent of U.S. wheat consumption.

Most U.S. agricultural imports are commodities that Canada does not produce, such as coffee and bananas. In only a few cases does the United States import more than a fifth of its consumption of temperate-zone commodities--certain oilseeds (rapeseed, flaxseed, and their products), tobacco, wine, and sugar.

Table 10—U.S. agricultural imports from Canada

Item	1982		1983		1984		1985		1986	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
	1,000 m ton	Million dollars	1,000 m ton	Million dollars	1,000 m ton	Million dollars	1,000 m ton	Million dollars	1,000 m ton	Million dollars
Animal products	—	728	—	729	—	967	—	986	—	947
Live animals 1/	920	271	824	280	1,716	393	1,640	348	785	240
Beef and veal	57	114	59	116	76	143	88	153	79	131
Pork	126	245	124	207	160	262	189	299	217	395
Grains and products	1,008	221	1,192	239	1,217	262	1,134	257	1,464	294
Wheat	54	6	53	6	100	15	271	37	254	26
Vegetables and products	313	76	325	90	337	100	358	94	354	104
Potatoes	217	28	139	24	135	31	166	33	160	33
Fruits and products	56	42	69	39	61	42	69	46	82	57
Oilseeds and products	164	44	249	64	264	69	359	85	323	71
Sugar and products 2/	60	43	177	71	226	92	292	105	314	125
Malt beverages	215	119	223	128	238	138	233	139	239	145
Other	—	83	—	144	—	178	—	182	—	267
Total	—	1,351	—	1,504	—	1,848	—	1,894	—	2,010

— = Not applicable.
1/ Excludes poultry.
2/ Includes cane and beet sugar, molasses, and confectionery products.
Source: (30).

In 1985, meat imports made up about 5 percent of total U.S. consumption; imported grains accounted for only 1 percent of consumption, except for oats; milk and cream imports were negligible, but cheese imports represented approximately 6 percent of consumption. Fruits and vegetables varied, with fresh apple imports claiming 7 percent of consumption, while imported potatoes contributed 1 percent, and carrots and onions 6 percent of U.S. consumption. Malt beverage imports, including beer, comprised about 4 percent of U.S. consumption.

Despite the small share of U.S. consumption met by imports, Canada is a major supplier of U.S. imports, supplying more than half of U.S. imports of live animals, wheat and feed grains, flaxseed, oilcake and meal, carrots and potatoes, and field and garden seeds. Imports of Canadian flaxseed represent a significant portion (47 percent) of U.S. consumption. In no case, however, does Canada supply consumption levels comparable to U.S. market penetration of the Canadian market for fruits and vegetables.

Figure 3

U.S. agricultural exports to Canada, 1986

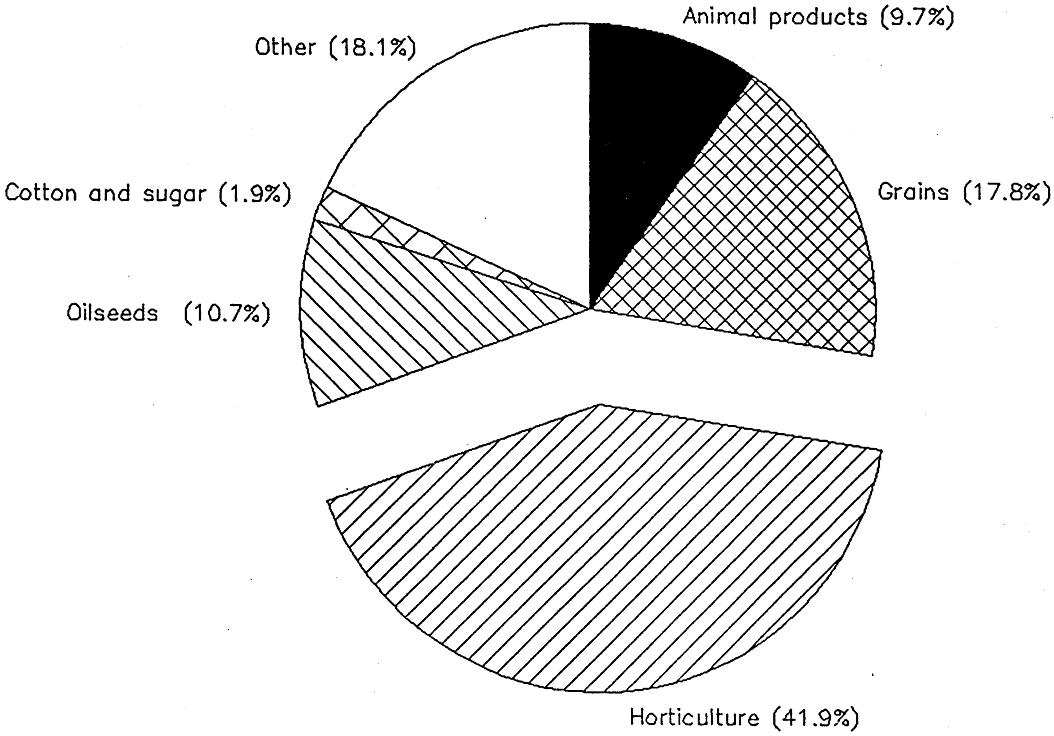


Figure 4

U.S. agricultural imports from Canada, 1986

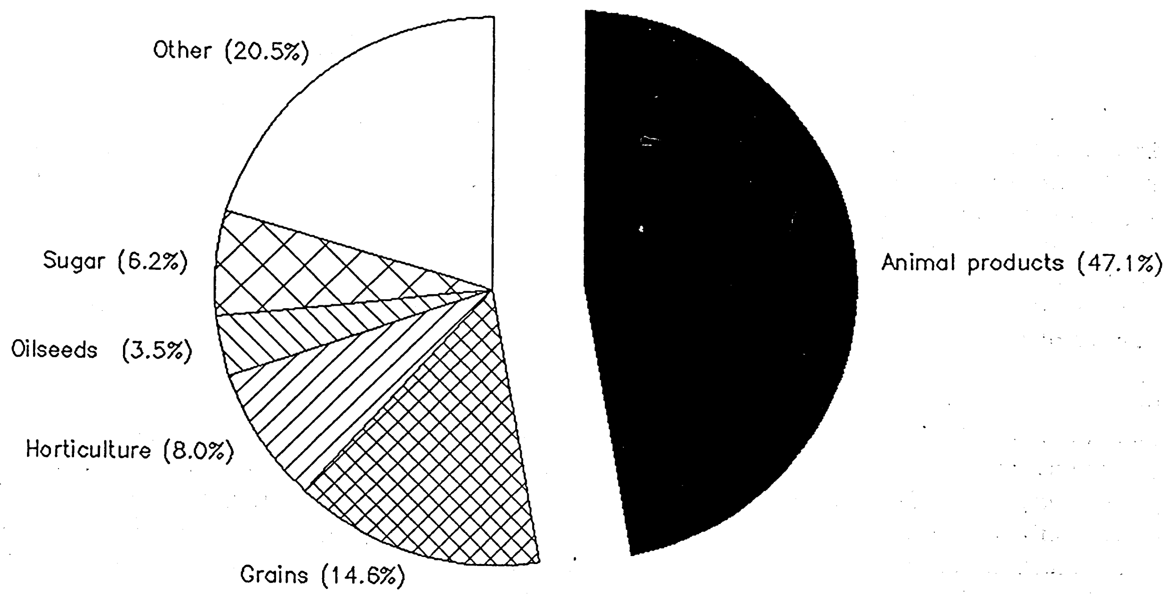


Figure 5

U.S. total trade balance with Canada

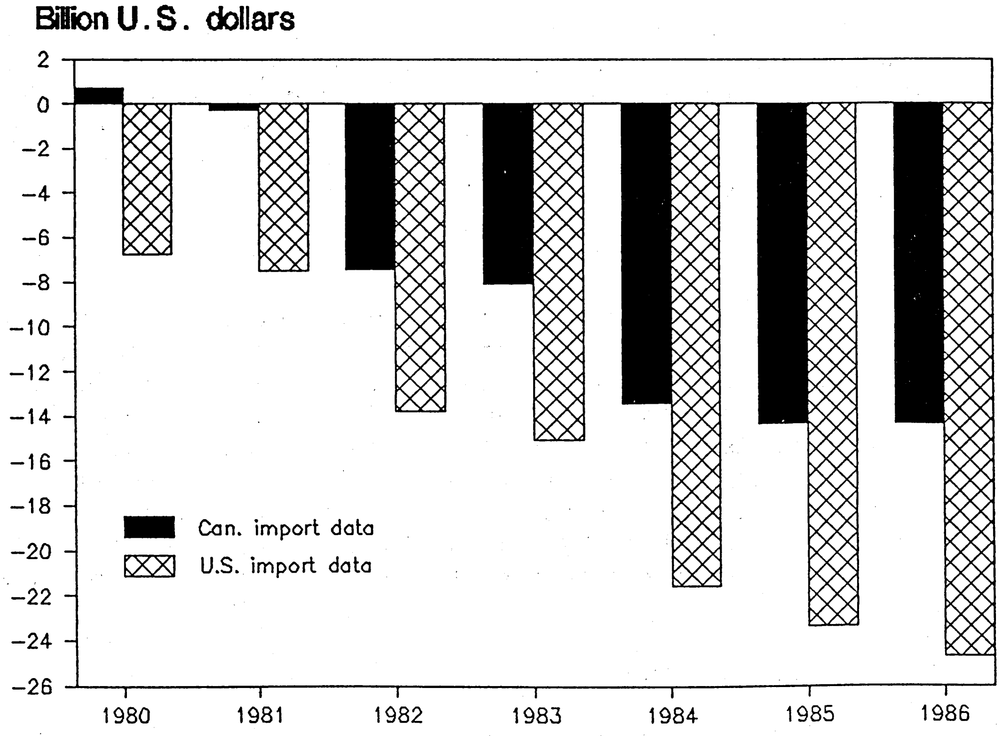
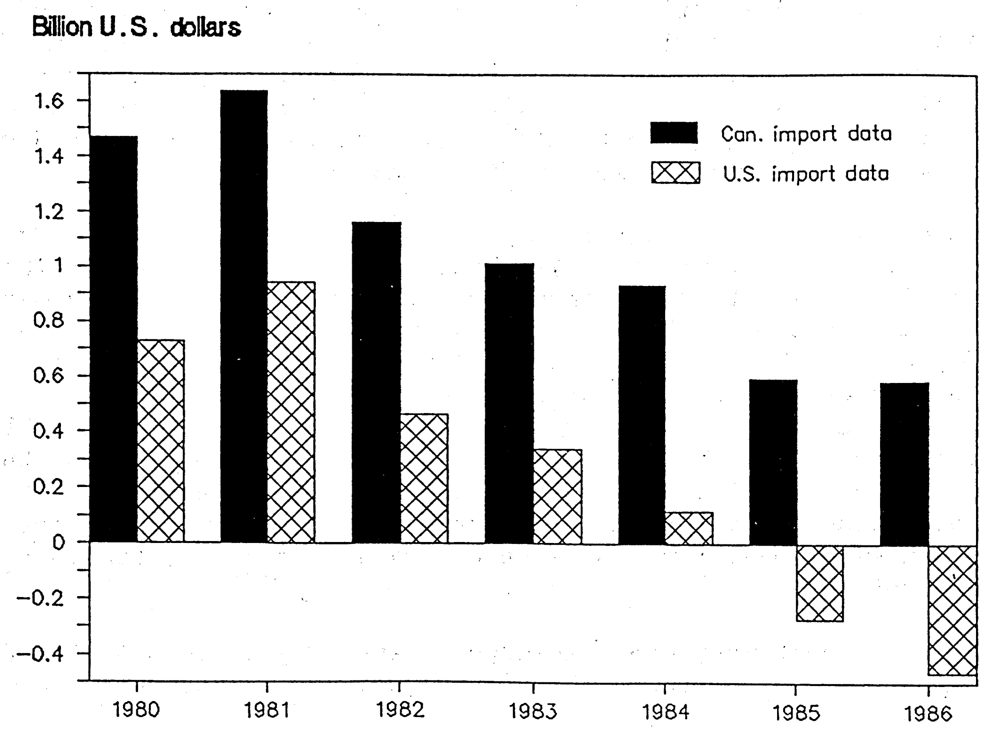


Figure 6

U.S. agricultural trade balance with Canada



Canada is a large importer of fresh fruits and vegetables because of its cold climate; the United States is the major supplier. The U.S. share of Canada's fruit and vegetable imports and consumption is very high for many items. In some periods, the United States supplies 100 percent of Canadian consumption of some fresh fruits and vegetables.

Canada imports a large share of its total livestock and product needs from the United States, yet these imports account for only a small share of Canadian consumption. The United States provides most of Canada's imports of grains and oilseed products. U.S exports still account for a significant share of Canadian soybean and soybean meal consumption. However, the trend is toward increasing Canadian self-sufficiency in oilseed products.

Barriers to Agricultural Trade

Trade barriers exist at the border in both the United States and Canada in the form of tariffs, quotas, nontariff barriers such as import licensing and other requirements, and agricultural policies and programs that affect commodity trade. In the United States, absolute and tariff-rate quotas, marketing orders, consumer safeguards, and a host of regulations related to product standards--health, labeling and packaging--all restrict trade to varying degrees. Canada relies more on mandatory supply management programs, which require controls on imports, than the United States, but also has a wide range of health restrictions, labeling requirements, quotas, and other measures that restrict trade.

U.S. and Canadian Tariffs and Quantitative Restrictions

U.S. tariffs on Canadian imports are similar to those imposed by Canada on imports from the United States. U.S. and Canadian tariffs and quotas for selected agricultural products are presented in appendix tables 3 and 4. Both countries levy tariffs on like products that are differentiated by stage of processing--that is, higher on more highly processed products to protect domestic value-adding activities--and similar in magnitude. For example, both countries have zero or low tariffs on imports of oilseeds (soybeans and rapeseed), impose a higher tariff on crude oil, and a still higher tariff on refined oil. Based on tariff rates expressed as a percentage of the per-unit value of imports (*ad valorem* equivalent), tariffs afford the most protection to dairy products and eggs, fresh fruits and vegetables in season, and most high-value or processed products such as wine and tobacco.

Many differences that existed in tariff rates between the two countries were realigned under the Tokyo Round of multilateral trade negotiations (MTN), which ended in 1979. Tariff reductions negotiated during this round were implemented during 1982-87. The MTN lowered and equalized tariffs on a number of processed products, but tariffs are still unequal on many products. U.S. tariffs are higher on cheese, soybean oil, potatoes, and soybean meal. Canadian tariffs are higher on poultry meat and most fruits and vegetables. Canadian tariffs tend to be higher on products that are imported from the United States (such as fruits and vegetables), while U.S. tariffs are higher on a number of products that are not imported from Canada and would not likely be imported even with lower tariffs, such as soybean products, tomatoes, cucumbers, and melons.

United States. Although many Canadian exports are subject to U.S. tariffs, the *ad valorem* equivalent is small--less than 10 percent--for most products except soybean oil, cheese, and some fruits and vegetables (app. table 3). For many commodities, the steady depreciation of the Canadian dollar against the U.S. dollar (by more than 20 percent since the late seventies) has more than offset the tariff.

The United States also uses tariff-rate quotas and absolute quotas to limit imports. Tariff-rate quotas, which apply different tariff rates according to the level of imports, are currently in effect on fluid milk. Absolute quotas, which fix quantitative limits on imports, apply in principle to meat products covered under the Meat Import Law (fresh, chilled, and frozen beef, veal, mutton, and goat meat), although imports are usually restricted by voluntary restraint before the quota becomes effective. Quotas have been placed on dairy product imports under Section 22 of the Agricultural Adjustment Act of 1933 (amended). Quotas are also maintained for cotton, which Canada does not produce. Sugar imports have been subject to a country-by-country quota since 1982. Until 1961, quotas were in effect under Section 22 for grains. Wheat and wheat flour quotas were removed in 1974. However, authority to reimpose these quotas if imports threaten to compromise domestic price support operations is retained under Section 22.

Canada. Canadian tariffs on agricultural imports are generally low. An exception is Canadian imports of fresh fruits and vegetables, most of which are subject to seasonal tariffs. The *ad valorem* tariff equivalent ranges from 10-15 percent (app. table 4).

Canadian import quotas are important restraints to trade in chicken, turkey, eggs, cheese, and occasionally beef. Except for beef, these quotas are part of domestic supply management programs and are allowed under GATT. 3/ The cheese quota has been fixed since 1978, whereas poultry and egg quotas are adjusted annually to reflect changes in production and consumption.

Canada's Meat Import Act was enacted in 1982 and works countercyclically, like the U.S. law, to limit imports. Canada's law was invoked for the first time in 1985, but was aimed at limiting beef imports from the EC.

U.S. and Canadian Qualitative Trade Barriers

In addition to tariffs and quotas, many commodity imports are subject to other nontariff barriers, such as licenses, health regulations, packaging requirements, either at the border or as a result of the operation of a domestic program. Appendix tables 5 and 6 summarize the various qualitative barriers operating in the United States and Canada for a number of important traded commodities. The last column ("binding barrier to trade") identifies the barrier that is most effective in restricting trade.

United States. U.S. imports of fruits and vegetables must meet marketing order restrictions on grade, size, quality, and maturity. The United States uses marketing order restrictions on fruits and vegetables to provide for orderly marketing and to enforce quality standards. Marketing orders and agreements affect prices for these commodities by managing markets--whether markets are defined by geographic boundaries, by flow of product, or by seasonal considerations.

3/ Article XI of the GATT generally prohibits countries from using quantitative trade restrictions. Exceptions from this prohibition are made for agricultural commodities when quotas are necessary for the enforcement of government measures to restrict production of domestic products.

Consumer safeguard protections are another set of trade barriers. These include certificates verifying the health of inspected live animal imports; sanitary safeguards imposed on milk and cream imports; inspection certificates on commercial shipments of plants, seeds, and bulbs; and fair and adequate product-labeling requirements. The U.S. Food and Drug Administration (FDA) regulations effectively prohibited the importation of rapeseed oil for food use until 1985, when "Generally Recognized As Safe" status was granted to low-erucic acid rapeseed oil.

Product standards may also serve as qualitative barriers to trade. Different consumer preferences between countries may be reflected in product standards. For example, one country's consumers' preference for grain-fed beef may influence grading standards that make entry of the grass-fed variety more difficult. Differences in grading, degree of leanness, carcass presentation, or types of cuts between the two countries may also make trade in meat more difficult. In most cases, product standards do not present a formidable barrier to trade, but require a minimum market size to make repackaging or retooling of operations to meet foreign standards economically feasible.

Canada. Canadian imports of livestock and products are subject to health-related restrictions. There is a 30-day pseudorabies quarantine on slaughter hog imports. Live cattle imports must meet requirements for brucellosis, blue tongue, tuberculosis, and anaplasmosis, although these have been relaxed recently for feeder cattle imports. Meat imports are subject to inspection requirements.

For Canadian livestock and dairy product imports, the binding constraints on imports are quotas on poultry, eggs, cheese, and occasionally beef, and health-related restrictions on live animals. The binding constraint on other dairy products, such as butter and skim milk powder, are import licenses, which are rarely issued.

Nontariff barriers affecting Canadian imports of grains include licensing requirements for wheat, barley, and oats. The Canadian Wheat Board issues licenses for wheat and wheat flour only if domestic supplies are not available. Other wheat products, such as baked goods and pasta products, are imported under unlimited-volume licenses, subject to some packaging restrictions. Oats and barley licenses are under the authority of the Department of External Affairs. Prior to the imposition of a countervailing duty of US$0.85 per bushel in 1986, U.S. corn moved freely into eastern Canada.

Restrictions on oilseeds and derived products are minimal. The most significant barrier affecting Canadian imports of oilseed products is the tariff on vegetable oils. Oilseed meals enter Canada duty-free.

Imports of fruits and vegetables are subject to various restrictions. There is a ban on consignment selling of imports of fruits and vegetables because of a requirement that such imports must have a pre-arranged buyer. Bulk imports are not permitted without a waiver of packaging regulations under the Canadian Agricultural Products Standards Act (CAPS). The CAPS mainly affects potatoes and apples. Imports of canned or processed fruits and vegetables are subject to packaging and labeling requirements.

Canadian provincial policies affecting wine and beer are significant barriers affecting imports. U.S. and other countries' wines have been subject to discriminatory listing, markup, and distribution policies. These policies limit market access and raise prices for U.S. wines. Some provinces also have domestic content requirements for wine blending and bottling. The United States has been discussing Canadian wine practices for several years under the auspices of the U.S. 1984 Wine Equity Act.

Packaging and labeling requirements pose barriers to U.S. exports of processed products. U.S. processors contend with a multitude of regulations and regulatory bodies in Canada governing packaging and labeling. Metric packaging restrictions and bilingual (English and French) labeling requirements make it difficult to export processed products to Canada.

Domestic and International Rules Affecting Agriculture

Both the United States and Canada maintain domestic laws regarding measures that each country can take to protect domestic industry from import competition. Both countries are also contracting parties to the General Agreement on Tariffs and Trade (GATT) and are thus subject to international rules on trade and trade remedies.

The GATT and Agriculture

The GATT is a multilateral agreement that provides a comprehensive set of rules governing most aspects of international trade in goods. As signatories to the GATT, the United States and Canada are obligated to observe GATT rules regarding the application of tariffs to imports from other GATT member countries. GATT codes (agreements on nontariff measures) establish guidelines regarding the use of subsidies and the measures that may be taken in response to increased or injurious imports. For example, GATT rules require that a country must determine that imports are causing material injury to its domestic industry before a countervailing duty can be applied to the imports from a signatory to the subsidies code. As an international organization, GATT also provides a forum for sponsoring multinational trade negotiations and for resolving disputes among member countries (37).

GATT rules may influence domestic trade policies because signatory countries may challenge trading practices that are in conflict with GATT rules and guidelines. Despite general prohibitions on quantitative restrictions, many countries are able to employ these and other nontariff barriers under GATT exceptions and waivers if certain guidelines are followed (32). For example, Canada's 1982 Meat Import Act is consistent with the GATT because it specifies a minimum access level that increases with population growth. The United States was granted a waiver of GATT Article XI for Section 22 restrictions on imports of cotton, dairy products, and peanuts. The GATT waiver allows the United States to impose quantitative trade restrictions on agricultural imports when imports interfere with commodity program operations (7).

The United States and other parties to the GATT are participating in an eighth round of multilateral trade negotiations. The negotiations were launched in Punta del Este, Uruguay, in September 1986 with the signing of a ministerial declaration. The prominence of agriculture in these negotiations is related to current problems in the international agricultural trade environment. The relationship between agricultural trade policies and domestic agricultural policies has, for the first time, become a legitimate subject for negotiation (13).

The United States submitted its proposal for agriculture in July 1987. The centerpiece of the proposal called for the complete phase-out over 10 years of all agricultural subsidies that directly or indirectly affect trade. The proposal also called for a freezing and then phase-out of the quantities exported with the aid of subsidies and the phase-out of all import barriers.

Canada presented its own proposal to the GATT in October 1987 and also submitted a separate proposal as a member of the Cairns Group, a coalition of 13 "non-subsidizing agricultural exporters." Both of these proposals were less sweeping than the U.S. initiative, but nevertheless called for reductions in agricultural subsidies that distort trade and improved market access for agricultural products.

Domestic Trade Legislation Affecting Agriculture

U.S. trade remedy laws can be distinguished according to those relating to import relief and those related to unfair trade. Import relief laws provide for measures to safeguard U.S. industries from injurious and increased levels of imports when fairness of trade practices are not at issue. These include Section 201 actions and Trade Adjustment Assistance (table 11). Unfair trade laws are designed to counter the effect of foreign imports benefiting from unfair trade practices, such as dumping, subsidized exports, and unfair competition (37). The United States and Canada have similar legislation regarding the application of antidumping and countervailing duties on imports. In both countries, industry or producer groups may file a complaint for import relief when they believe their industry to be injured, or threatened by injury, due to increased imports. A preliminary investigation is made by an appropriate agency to determine whether there is evidence of subsidy and injury before the complaint proceeds. In 1986, Canada imposed a countervailing duty on imports of U.S. grain corn, the first action of this nature ever applied to a U.S. export.

Agricultural Trade Disputes

A growing number of agricultural trade disputes have accompanied the shift in bilateral trade in Canada's favor during the eighties. Disputes have arisen over trade in fruits and vegetables, livestock, grains, wine, and wood products (app. table 7). Many of these disputes resulted in the imposition of restrictive trade measures, such as quotas, import exclusions, and antidumping or countervailing duties. Use of domestic trade remedy laws to reduce or restrict imports has itself been a source of disagreement between the United States and Canada and was a major focus of the 1986-87 bilateral trade talks.

Many of the trade actions in the eighties originated in the United States because of increased imports of Canadian goods--lumber, potatoes, hogs, and sugar blends. Canada took action against U.S. onions, potatoes, sugar, and corn. The proliferation of U.S. trade remedy actions provided an important impetus for Canada's initiating trade talks with the United States. Negotiation of a trade agreement was seen by many Canadians as the only way to ensure that Canadian access to the U.S. market would not be further impeded by application of U.S. trade remedy measures. The United States felt that use of these measures was necessary to protect domestic producers from an influx of Canadian products that benefit from Canadian Government programs.

Table II--U.S. and Canadian trade legislation

Statutory provision	Provisions of law	Administering authority	Form of action
United States:			
Trade and Tariff Act of 1984	Most recent U.S. legislation governing trade policy; amends and modifies earlier trade legislation, including the: Trade Agreements Act of 1979 Trade Act of 1974 Tariff Act of 1930.		
Antidumping law	Import price at less-than-fair value causes, or threatens to cause, material injury to domestic industry.	U.S. International Trade Commission (ITC) determines industry injury. U.S. Department of Commerce (USDC) determines antidumping margin.	Antidumping duty
Countervailing duty law	President may initiate or industry may petition USDC to investigate whether an import is subsidized by an exporting country. Material injury must be found to apply CVD against MTN signatory.	ITC determines industry injury. USDC determines subsidy.	Countervailing duty (CVD)
Section 201 ("Safeguard" provision)	Industry may petition ITC to investigate whether increased import surge seriously injures, or threatens to injure, domestic industry.	ITC recommends action and determines injury. President decides whether to impose sanction.	Temporary import relief duty--tariff-rate quota, quantitative restriction, or orderly marketing agreement with export country(ies), or adjustment assistance.
Section 301	Provides authority to respond to unfair trade practices that restrict U.S. commerce by enforcing rights under trade agreements. President may initiate or industry may petition USTR to investigate unfair export trade practices.	Office of the U.S. Trade Representative (USTR) conducts, and initiates investigation. President decides whether to impose sanction.	Rescind trade concession for exporting country or impose duties, fees to compensate for restrictive foreign trade practices.
Section 337	Government may initiate or industry may petition ITC to investigate and declare unlawful unfair practices in import trade that injure domestic industry or restrain trade.	ITC conducts investigation, determines exclusion order. President may disapprove order.	Cease-and-desist order; import exclusion.

Continued--

Table II--U.S. and Canadian trade legislation--Continued

Statutory provision	Provisions of law	Administering authority	Form of action
Agricultural Adjustment Act of 1933 (amended 1935) Section 22	Authorizes President to impose import restrictions when imports interfere, or threaten to interfere, with price support or production adjustment programs.	ITC conducts investigation. Secretary of Agriculture may request emergency action. President imposes sanction.	Quotas, fees
Meat Import Act of 1979	Authorizes President to impose quotas on imports of fresh, chilled, frozen beef, veal, mutton, goat if imports threaten to exceed trigger level. Voluntary restraint agreements may be negotiated to avoid quotas.	U.S. Department of Agriculture determines import levels. President imposes quota.	Quotas, voluntary restraint agreements
Canada:			
Special Import Measures Act (1984)	Provides protection through anti-dumping, countervailing duties; established Canadian Import Tribunal (replaced Anti-Dumping and Countervailing Duties Acts).	Canadian Import Tribunal determines injury. Revenue Canada determines subsidy.	Antidumping duty on imports sold at less-than-fair value. Countervailing duty on imports found to benefit from subsidies.
Exports and Import Permits Act (1947)	Primary instrument for implementation of border controls on imports or exports to ensure domestic supply; support agricultural policies; establishes export, import control lists which require license restricts imports of most products under supply management; implements import restrictions under Agricultural Stabilization Act, Agricultural Products Board Act, and Canadian Dairy Commission Act.	External Affairs	If commodity is on control list, a license is required by importer or exporter
Meat Import Act (1982)	Parallels provisions of U.S. Meat Import Act. Sets limits on fresh, chilled, and frozen beef and veal that may be imported into Canada. Formula incorporates adjustment to offset cyclical pattern of domestic beef supplies. Import level may be increased for countries who agree to restrain their beef exports to Canada.	Minister of Agriculture External Affairs	Quotas, voluntary restraint agreements

DOMESTIC AGRICULTURAL POLICIES

Both countries have a legacy of farm programs designed to support farm prices and incomes, smooth price variability, share the burden of production risks, and assure a safe and adequate food supply for their populations (tables 12 and 13). Many border measures (tariff and nontariff barriers that apply to goods entering a country) are in place to protect domestic programs like supply management or price support programs. Canadian provinces enjoy a higher degree of political autonomy than do State governments in the United States. In particular, the responsibility for agricultural policy in Canada is shared by the provinces and the Federal government. In contrast, State governments in the United States have a more limited role in providing assistance to agriculture.

U.S. Agricultural Programs

U.S. farm policy includes programs to stabilize and support farm incomes, provide for orderly marketing of agricultural commodities, and promote U.S. farm exports. The principal enabling legislation for U.S. agricultural programs is the "farm bill," the familiar name for the legislation that was first instituted in 1933 and that has been renewed and modified periodically by subsequent laws. The current law providing authority for farm price and income support and other programs is the Food Security Act of 1985 (FSA) as amended. The FSA attempted to make U.S. farm support more "market-oriented" by lowering target prices and loan rates, and by giving the Secretary of Agriculture greater discretionary authority to reduce surplus supplies and to make U.S. commodities more competitive in world markets (26).

Agricultural programs include nonrecourse loans, commodity stock management, target price/deficiency payments, and acreage reduction programs. These programs are the key elements of U.S. agricultural policy. Each program has a specific objective, such as cash flow protection, price support, income support, or commodity price stabilization. Other programs, such as farm commodity export programs, crop insurance, and farm credit programs address a specific area of farm policy. Many U.S. agricultural programs are commodity-specific, although credit and other general programs are also used.

Program commodities include wheat, feed grains, cotton, dairy, rice, soybeans, sugar, honey, wool and mohair, tobacco, and peanuts. Support for program commodities may be achieved by means of commodity loan programs, marketing quotas, marketing loans, government purchases, target price/deficiency payments, or a combination of these. The principal features of U.S. agricultural programs are described below.

Acreage Reduction Programs

Acreage reduction programs are used by the United States to offset the supply-stimulating effects of price and income support programs, to strengthen prices indirectly by reducing output, and to limit government outlays for price support and income stabilization. Acreage reduction programs are voluntary and require participating farmers to divert a percentage of their acreage base to conservation uses. Participation rates depend on the sizes of the acreage reduction requirement, the expected deficiency payment, and the diversion payment, if any; the costs of production on idled acreage; and the size of the farm (due to the payment limitation) (9, 14). The FSA authorizes the Secretary of Agriculture to implement acreage reduction programs if he

Table 12--United States: Major commodity-specific policy instruments affecting output, consumption, and trade

Commodity	Commodity support				Trade controls				Input subsidies	
	Target price	Loan rate	Direct purchase	Supply control 1/	Tariffs	Quotas	Export subsidy 2/	Food aid	Storage	Crop insurance
Crops:										
Wheat	x	x		x	x	3/	x	x	x	x
Corn	x	x		x	x	3/		x	x	x
Barley	x	x		x	x	3/	x		x	x
Sorghum	x	x		x		3/	x		x	x
Oats	x	x		x	x	3/			x	x
Soybeans		x				3/				x
Rice	x	x		x	x	3/	x	x		x
Cotton	x	x		x	x	3/				x
Sugar		x			x	x				x
Potatoes					x					x
Fruits and vegetables					x					x
Tobacco		x		x	x	3/				x
Peanuts		x		x	x	3/				x
Honey		x			x					
Livestock and products:										
Cattle							4/			
Hogs					5/					
Beef, veal					x	6/				
Pork					x					
Lamb, mutton					x	6/				
Chicken					x		x			
Turkey					x					
Eggs					x		x			
Fluid milk		7/			x	3/				
Butter			x		x	3/		x		
Cheese			x		x	3/				
Nonfat dry milk			x		x	3/		x		
Wool and mohair	x	x	x		x					

1/ Includes acreage reduction or other nonmandatory supply control.
2/ Includes Export Enhancement Program sales. No products are exported to Canada under the EEP program.
3/ Section 22 of Agricultural Adjustment Act of 1933, which permits quotas to be implemented in the event that imports materially inflict or threaten to inflict damage to price support programs.
4/ Export Enhancement Program sales of dairy cattle.
5/ Countervailing duty.
6/ 1979 Meat Import Act for beef, veal, mutton, and goat (fresh, chilled, or frozen).
7/ Fluid milk price is supported through government purchases of dairy products. Federal milk marketing orders, when in effect, set minimum prices for fluid milk sold to processors.

Table 13--Canada: Major commodity-specific policy instruments affecting output, consumption, and trade

Commodity	Commodity support				Trade controls						Input subsidies		
	Full cost price	Floor price	Price support	Supply control 1/	Tariffs	Quotas	Licensing	Export subsidies 2/	Food aid	State trading	Storage	Crop insur.	Transport
Crops:													
Wheat		x	x		x		x		x	x		x	x
Barley		x	x		x		x		x	x		x	x
Oats		x	x				x			x		x	x
Rapeseed												x	x
Soybeans			x									x	
Corn			x		x							x	
Sugar			x		x								
Potatoes			x		x						x		
Fruits and vegetables			x		x						x		
Tobacco			x		x							x	
Livestock and products:													
Cattle			x		x								
Hogs			x										
Beef, veal					x	x	x						
Pork					x								
Lamb			x		x								
Chicken	x			x	x	x	x			x			
Turkey	x			x	x	x	x			x			
Eggs	x			x	x	x	x	x		x			
Fluid milk	x			x	x		x			x			
Butter	x			x	x		x			x			
Cheese	x			x	x	x	x	x		x			
Nonfat dry milk	x			x	x		x	x	x	x			

1/ Mandatory programs, not including the Canadian Wheat Board (CWB) delivery quotas.
2/ Direct subsidies only. Does not include indirect subsidies through the CWB pool deficits.
Sources: (5, 9, 11).

determines that supplies are excessive. If stocks reach a certain level, an acreage reduction program is automatically triggered (26). Producers participating in the (unpaid) acreage reduction program are also eligible for any paid land diversion, whereby farmers are paid to divert additional acreage. Payment under this program may be made in cash or in generic commodity certificates. Paid land diversion and acreage reduction programs limit production by reducing the acreage planted in a given year. Both programs are voluntary, but producers must comply with the acreage reduction program in order to be eligible for deficiency payments and nonrecourse commodity loans. The FSA also requires cross-compliance; that is, if an acreage limitation program is in effect for a grain crop, in order to be eligible for program benefits, a participating farmer must not plant an alternate grain crop in excess of the acreage base for that crop if an acreage reduction program is also in effect for that crop.

A conservation acreage reserve program was also mandated by the FSA. This program is a long-term acreage retirement program to assist owners of highly erodible land in conserving and improving soil and water resources. The government pays an annual rental rate plus a portion of the cost of establishing a cover crop (7). During the 1986-90 crop years, the FSA mandates that at least 40 million acres, but no more than 45 million acres, be placed in the conservation reserve.

Commodity Loan Programs

The U.S. Government provides cashflow protection, and sometimes price support, to producers of wheat, most feed grains, cotton, rice, soybeans, and sugar through the Commodity Credit Corporation's (CCC) nonrecourse loan program. Under this program, eligible producers may receive a loan to enable them to hold their crop for later sale. The amount of the loan is equal to the loan rate--the price per unit established by the Government--times the quantity of the collateral crop placed under loan. When the loan is due, the farmer has the option to pay off the loan with interest and recover the collateral, or forfeit the collateral without penalty or payment of accrued interest and have the loan canceled. When the market price is below the loan rate, the farmer will usually choose the second alternative--canceling the loan and forfeiting the commodity.

Under the FSA, loan rates for the major crops (wheat, feed grains, cotton, rice, and soybeans) are established with respect to a 5-year moving average market price, where the high and low years are dropped. However, the basic loan rate may not be reduced by more than 5 percent from the previous year's rate. Minimum loan rate levels are also specified for cotton, rice, and soybeans.

Under the so-called Findley amendment to the FSA, the Secretary of Agriculture may also reduce basic loan rates for grains (except rice) and soybeans below the computed levels by up to 20 percent in any year in order to improve a commodity's export competitiveness or if its average market price was less than 110 percent of the announced loan rate during the previous year.

Regular CCC nonrecourse loans are made for a period of 9-12 months, and may mature too soon to allow farmers to carry their crops over into subsequent years when prices may be higher. The farmer-owned reserve (FOR), authorized by the Food and Agriculture Act of 1977, provides extended nonrecourse loans to wheat and feed grain farmers in order to stabilize grain prices across marketing years. The FOR operates as a type of buffer stock by encouraging farmers to accumulate stocks of grain when supplies are relatively large and price expectations are low, and to sell grain when free stocks are reduced and prices rise. The FOR extends a farmer's nonrecourse loan for 3 to 5 years, with extensions as warranted by market conditions, and may provide interest and storage subsidies. Grain may not be sold from the reserve without penalty until a specified price level is reached (commonly called the release price). At prices above the release level, storage payments are stopped, and producers are encouraged to redeem their loans and market the grain (15).

The FSA also requires the Secretary of Agriculture to implement marketing loans for rice and cotton when the world market price falls below the loan rate. He may also implement marketing loans for wheat and feed grains. A marketing loan may be repaid at a level below the rate at which the loan was made. By 1988, marketing loans had been implemented for rice and cotton only.

Commodity Stock Management

The accumulation and disposal of commodity stocks has been an integral part of U.S. agricultural programs. The major objectives of U.S. stock management programs have been to assure adequate supplies of farm commodities and to reduce the variability of market price and farm income. In practice, the stock management program has also frequently been used to provide income and price support in conjunction with the loan program (15). U.S. stock management programs exist for wheat, feed grains, cotton, rice, soybeans, sugar, tobacco, peanuts, honey, and dairy products. Stock management is achieved primarily through the use of CCC-owned inventories. Although farmers retain legal title to commodities placed under CCC regular and FOR loan programs, these commodities have also been used as part of the PIK and generic commodity certificate programs.

The CCC acquires stocks of grains, soybeans, cotton, and dairy products through its price support activities, either when producers default on nonrecourse loans or by direct purchases of program commodities. CCC stocks are drawn down through domestic or foreign donations or sales, or through the use of payment-in-kind (PIK) or generic commodity certificate programs.

Payment-in-Kind (PIK) and Generic Certificates

The PIK program was used in 1983 to reduce agricultural production and government stocks simultaneously. Eligible farmers (participants in acreage reduction and paid diversion programs) diverted up to 30 percent additional acreage and were paid in commodities (corn, rice, cotton, grain sorghum, and wheat) equal to 80-95 percent of average yields, or bid to take all their program acreage out of production. Commodity payments come from CCC inventories and, in the case of wheat and sorghum, from CCC and FOR commodity loans.

The 1985 FSA authorized USDA to issue generic commodity certificates, which are negotiable certificates redeemable for CCC-owned commodities or commodities under CCC and FOR loans. Certificates are paid in lieu of cash to farmers participating in a number of government programs, including acreage reduction, paid land diversion, the Conservation Reserve, rice marketing loans, and disaster and emergency programs. They may also be issued to merchants through the Export Enhancement and Targeted Export Assistance programs (41). The certificates have a fixed dollar face value and may be used to acquire CCC stocks, can be exchanged for commodities placed in CCC and FOR loan programs, or may be sold. They may also be returned by farmers to CCC for their cash value. Both PIK and generic certificate programs help to reduce large CCC inventories with minimal budget impact. In fiscal 1987, $7.5 billion in certificates were issued.

Target Price/Deficiency Payment

Income support is provided by means of deficiency payments to producers of feed grains, wheat, rice, and cotton who participate in any required acreage reduction program. The per-unit deficiency payment rate is equal to the amount by which the announced target price exceeds either the commodity's average market price for the first 5 months of the marketing year or the loan rate (whichever is higher). The quantity eligible for deficiency payments equals the individual's farm planted program acreage multiplied by farm program payment yield. Under the FSA, additional deficiency payments may be made to eligible producers of wheat and feed grains. These payments would be equal to the difference between the basic loan rate and the higher of the reduced (Findley) loan rate or the market price.

Target prices, which affect producer planning prices for production decisions, are set by the FSA. Prior to 1981, target prices were automatically adjusted for changes in the cost of production. The 1981 farm bill set specific target prices for 1982 through 1985. The 1985 FSA froze target prices in 1986 and 1987, and provided for a phased decline in target prices over the subsequent periods covered by the act (1988-90 crop years).

Deficiency and diversion payments are limited by law to $50,000 per producer per year; this limitation does not apply to commodity loans and purchases, Findley deficiency payments, disaster payments, and any gain realized from repaying a marketing loan at a lower level.

Export Assistance

The U.S. Government promotes exports of agricultural commodities through a variety of export programs, including export credit guarantees, targeted export subsidies, and other assistance. The CCC's export credit guarantees facilitate the extension of private, commercial credit for the purchase of U.S. agricultural commodities by guaranteeing repayment of most of the credit extended. The FSA authorized $5 billion annually for short-term export credit guarantees and also established a new, intermediate-term export credit guarantee program. The FSA authorized the Export Enhancement Program (EEP), under which CCC-owned bonus commodities may be provided to U.S. exporters, processors, and foreign purchasers to offset the effects of unfair trade practices, U.S. price supports, and exchange rate fluctuations and, thus, to make U.S. commodities more competitive in export markets. EEP assistance has been used primarily to export wheat, wheat flour, and barley, although other commodities have also been exported with EEP funds. The act also established the Targeted Export Assistance (TEA) program, which requires the Secretary of Agriculture to use CCC commodities for export assistance to offset adverse effects on exported U.S. agricultural products due to a subsidy, import quota, or other unfair trade practices of a foreign country. Priority assistance is given to producers of those agricultural commodities that have been found to have suffered from unfair trade practices under Section 301 of the Trade Act of 1974, or which have suffered from retaliatory actions related to such a finding.

Food Aid

The United States provides food aid under the P.L. 480 program and also under authority of Section 416(b) of the Agricultural Act of 1949, as amended. P.L. 480 authorizes food aid shipments to developing countries. The major commodities recently shipped under this authority have been wheat and wheat products, soybean oil, and rice. The law authorizes sales on concessional terms of credit or for local currencies, as well as donations. The Section 416 program provides for donations of edible CCC-owned commodities.

Crop Insurance and Disaster Payments

The United States offers producers federally subsidized crop insurance (that is, insurance against crop losses from natural hazards). The U.S. Government pays the operating costs of the Federal Crop Insurance Corporation in addition to subsidizing insurance premiums paid by producers. Until recently, disaster payments were made to producers for whom Federal crop insurance was not available if they were prevented from planting crops due to a natural disaster.

Farm Credit

The Farmers Home Administration (FmHA) offers loans to assist farm ownership, to expand or improve existing operations, to cover short- to medium-term operating expenses, to improve soil and water, and to assist farmers in the event of an emergency (disaster or economic emergency). FmHA lending activities include direct loans at subsidized rates of interest, as well as guarantees of loans made by private lenders.

Transportation Programs

The United States provides an indirect subsidy to the transport of all agricultural commodities through government payment of construction and operating costs of inland waterways.

Dairy Program

The minimum price of milk used for manufactured products is set by law, and supported by Government (CCC) purchases of butter, nonfat dry milk, and cheese. Prices for these products are also maintained through import quotas and tariffs. The support price may be reduced by the amount of a levy assessed on milk marketed for commercial use to defray program costs. Prior to the introduction in 1984 of a paid diversion program for milk, there were no national-level supply controls on milk production, and support prices in excess of market-clearing levels resulted in surplus dairy products. The FSA provides for reductions in the milk support price, with further reductions mandated if purchases of dairy products are estimated to exceed 5 billion pounds (milk-equivalent). The support price must be increased if purchases fall below 2.5 billion pounds. A voluntary milk production termination program (whole-herd buyout) was also initiated for 1986 and 1987, whereby producers bid for contracts to terminate their milk production for a period of 5 years by selling their dairy herd for export or slaughter. The CCC purchased 400 million pounds of red meat during the 18-month program to minimize the effect on those markets.

Federal milk marketing orders regulate regional marketing of fluid milk. Federal milk marketing orders set minimum prices that processors pay for fluid milk where milk producers have elected to come under marketing orders (accounting for about 70 percent of this milk). Marketing orders generally keep the price of fluid milk above the price of manufacturing milk.

Sugar Program

Sugar is supported through a price support program achieved through a nonrecourse loan program and strict limitations over imports. Imports are limited through the use of country-by-country quotas; tariffs and fees are also assessed on sugar imports. The 1985 FSA requirement that the sugar program be run at no net cost to the Federal Government has resulted in a tightening of import quotas.

Peanut Program

Peanut producers receive a support price which is maintained through the use of production quotas. A national quota is established and apportioned among the States according to historical production shares. Excess peanuts marketed for domestic edible use are subject to an over-quota penalty. Additional peanuts may be purchased from producers for crushing or export.

Other Commodities

There are no long-term price support programs for beef, pork, poultry, eggs, fruits, and vegetables. When grain prices exceed target prices, livestock products may benefit indirectly from lower grain prices resulting from release of grain through FOR reserve operations; they may similarly be subject to a tax in the form of higher grain prices when loan rates exceed market-clearing levels.

Federal Marketing Orders and Marketing Agreements

Marketing orders and marketing agreements are regulatory programs operating under government authority that "legally obligate commodity handlers to abide by certain trade practices and restrictions on sales" (11). They may stabilize seasonal price fluctuations by regulating the flow of product to market, and enhance producer prices by setting minimum prices to be paid by processors or by restricting access to a market through minimum size or grade requirements. Marketing orders are issued and supervised by the Secretary of Agriculture. Marketing agreements are voluntary between signatory handlers but operate under the authority of the Secretary of Agriculture. Both are instituted or organized at the request of producers. They frequently operate on a regional level, or cover only certain submarkets (for example, fresh fruits and vegetables only). Where marketing orders are in effect, imports may be limited by the same restrictions that apply to the domestic product. In the early eighties, marketing orders covered all or part of U.S. production or sale of 33 different fruits, vegetables, nuts, and horticultural specialties (11).

Canadian Agricultural Programs

Canada has a wide array of programs and institutions for agricultural commodities. Programs tend to be focused on specific commodity groups, such as grains and oilseeds, red meats, and dairy and poultry. Programs cover areas such as marketing and transportation, price and income support, supply management, and credit and inputs. The objective of many programs is to stabilize prices or income.

Marketing Boards

Marketing boards are a distinctive feature of Canadian agriculture. Marketing boards cover a wide range of commodities--from apples to wool. Products accounting for about half of Canada's farm sales are represented by the 100 such agencies. Because the regulation of Canadian agriculture is a shared federal-provincial responsibility, all but five of the boards are provincial. The federal boards regulate wheat, barley, and oats grown in the Prairie provinces, and manufacturing milk, chicken, turkey, and eggs on a national basis. These boards function as state monopolies, regulating the production, pricing, and marketing of these commodities.

Canadian Wheat Board (CWB)

The CWB is a state trading agency that is the sole legal exporter for wheat, barley, and oats grown in western Canada. The CWB also has a marketing monopoly on these grains for domestic human or industrial use. The CWB operates a price pooling system. Each year, initial prices (guaranteed floor prices) are set for the different grades of grain in each of six pools (wheat, durum wheat, feed barley, barley for human use, feed oats, and oats for human use). Initial prices are set conservatively, in relation to anticipated world prices. At the end of the crop year, if receipts from grain sales in a pool account are greater than the initial payment plus handling and administrative costs, a final payment is returned to producers. If the funds in the pool are not sufficient to cover the initial payments and other costs, producers receive only the initial payment. The Federal Government makes up the deficit.

The CWB controls access to the grain-handling system through delivery quotas. Quotas are used to regulate deliveries throughout the year to avoid elevator congestion and to provide equal delivery opportunity to all farmers. Quotas are changed throughout the crop year, depending on sales. The CWB is authorized to make credit sales, generally for 3 years at commercial rates. Credit sales have been declining in recent years.

Licenses are required for imports of wheat, barley, and oats and their products. Prior to 1985, the CWB controlled import licensing for the board grains. This responsibility has been given to the Ministry of External Affairs for barley and oats, but the CWB still retains control over wheat imports.

Transportation

Grain and oilseed exports are extremely dependent on the railroads because the major producing areas in western Canada are long distances from ports. The rail system is highly regulated and subsidized. Major expenditures include: a subsidy on rail freight rates that is paid to the railroads; payments for branch line rehabilitation; and hopper car purchases and boxcar repairs. In 1984, the first significant change in many years was made to rail freight rates. The Western Grain Transportation Act (WGTA) replaced the previous freight rate structure established by the Crow's Nest Pass Agreement in 1897. Under the WGTA, the federal government provides a permanent payment of Can$659 million to the railroads, and also pays a share of railway cost increases.

Producers are scheduled to pay an increasing share of railway costs, but recently the increases have been limited by legislation.

Western Grain Stabilization Program (WGSP)

The WGSP, implemented in 1976, is a voluntary program designed to support net cash flow for western producers of wheat, barley, oats, rye, rapeseed, flaxseed, and mustardseed. Producers contribute 1.0-2.5 percent of their gross receipts of these commodities up to Can$60,000. Levy rates have changed over the years, depending on the financial status of the fund. The federal government contributes $2 for every $1 paid by producers. Payments, based on deliveries of the seven crops, are made when either net cashflow or net cashflow per ton, whichever is larger, falls below the average of the previous 5 years.

Prior to 1984, payments from the fund were infrequent, but substantial payments have since been made. Following large payments in 1985/86 and 1986/87, the fund was in deficit by approximately Can$1.5 billion. The government wrote off about Can$750 million of the fund deficit. Large payments are likely for another year or two before low prices reduce the 5-year average that triggers payments.

Agricultural Stabilization Act (ASA)

The ASA provides price support for certain "named" commodities: wool; industrial milk and cream; corn; soybeans; wheat, oats, and barley grown outside the designated area of the CWB; and, prior to 1986, cattle, hogs, and lambs. (Dairy payments are made under the ASA, but the dairy program operates under another authority, described below.) Other commodities, mainly horticultural commodities, can also be designated for support.

A support price is set at not less than 90 percent of the previous 5-year average market price, adjusted by the difference between average production costs in the current year and average production costs in the previous 5-year period. The support price is used to determine the size of deficiency payments if the market price falls below the support price. Recent payments to producers of products other than industrial milk and cream have been infrequent.

Beginning in 1986, the ASA was modified to allow voluntary tripartite stabilization programs. The federal government, provincial governments, and producers can contribute equally to a fund that makes payments to producers when market prices fall below established support prices. Support prices are based on formulas that include both costs of production and historical market prices. Provinces can choose to join the program for all or some of the covered commodities. Tripartite programs have been established for red meat, sugar, and apples.

Special Canadian Grains Program

Under this program, Can$923 million in deficiency payments were made to growers of wheat, barley, oats, rye, mixed grains, corn, soybeans, rapeseed, flaxseed, and sunflowers. Payments were based on seeded area and regional yields. Assistance rates to each commodity were proportional to the price decline attributed to the impact of the U.S.-European Community (EC) "subsidy war." This kind of program is unprecedented in Canadian agricultural history. A similar program for Can$1.1 billion was announced for 1987/88.

Two-Price Wheat Program

This program, in effect in various forms since 1967, is designed to insulate domestic wheat prices from the volatility of the international market. Wheat sold for domestic human use is subject to a floor and ceiling price. Until 1978, the Federal Government paid farmers the difference between the domestic price and the higher export price. In April 1986, the domestic price was set at Can$7 per bushel (equivalent to US$5.04 at the time). In August 1986, the range was increased to Can$6-$11 per bushel (equivalent to US$4.32-$7.92), although the actual selling price was not changed.

During the early eighties, the two-price system worked to transfer small gains to consumers because domestic prices were lower than export prices. However, with the recent changes and falling export prices, consumers are now transferring income to producers because domestic prices are much higher than export prices. The government has announced that it will phase out the program, but has made no specific proposals.

Supply Management Programs

The dairy sector is regulated by a supply management program. Fluid milk pricing and marketing are under provincial control. Provincial marketing boards price fluid milk based on calculated costs of production. Output is limited by producer quotas. Little milk crosses provincial boundaries and can only be imported under license. The Canadian Dairy Commission (CDC) regulates manufacturing milk at the federal level. Manufacturing milk policy is based on a target price, implemented by a fixed subsidy (deficiency payment) and government purchases of butter and skim milk powder (SMP) at support prices. The domestic price is maintained by production quotas and quantitative restrictions on imports of manufactured dairy products. Excess supplies of skim milk powder and evaporated whole milk are exported at subsidized prices. Export subsidies are financed through producer levies.

Production controls are also an integral feature of Canadian supply-management programs for chickens, turkeys, and eggs. Production is regulated by quotas, and producers are assured an adequate return over costs through regulated prices. Imports are strictly controlled by quotas and licensing restrictions and are based on the previous year's production.

Other Federal Programs

The federal government operates various programs that provide general benefits to all of agriculture. These programs fund research, inspection, regional development and infrastructure, marketing, and promotion. Other government programs provide benefits by reducing risk and input costs.

There is a joint federal-provincial crop insurance program, whereby in most provinces, the federal government pays 50 percent of the premium costs and the provincial governments pay the administrative costs. Two other programs, Prairie Grain Advance Payments Act and the Advance Payments for Crops Program, provide cash advances to producers of storable crops in the form of interest-free loans. The feed freight assistance program subsidizes transportation costs of feed grains to feed-deficit areas. The feed freight adjustment fund provides grants for enhancing local feed grain production. Other programs provide drought assistance to livestock farmers, fuel tax rebates to offset federal sales and excise taxes, and credit assistance to producers. A large federal payment was made in 1981/82 to compensate wheat, barley, and oats producers for compliance with the U.S. grain embargo on the USSR. Canada also provides food aid, mainly wheat and wheat flour, through the Canadian International Development Agency and the CWB.

Provincial Programs

The provincial governments in Canada play a significant role in farm programs. Provincial governments have introduced a wide variety of support payments and commodity stabilization programs for producers in their provinces. Many of these programs augment benefits from the Agricultural Stabilization Act. Provincial programs have been pervasive in the red meat sector, although the tripartite program is intended to replace provincial programs. Other programs provide subsidies or rebates on farm taxes, interest payments, fertilizer, lime, and feed.

Government Intervention in Agriculture and Trade

As we have seen, the governments of both the United States and Canada intervene in their agricultural sectors through a variety of measures, ranging from imposition of modest tariffs to price-setting and supply-control programs. Intervention can distort production and trade patterns, thus leading to trade disputes when a subsidized product displaces either domestic production or exports to third countries.

Government Expenditures on Agriculture

Government expenditures on agriculture reflect what the government and, ultimately, taxpayers pay to support the agricultural sector. U.S. expenditures on agriculture, the main portion of which are U.S. Department of Agriculture (USDA) expenditures, have been one of the fastest growing items in the Federal budget, chiefly due to rising expenditures for producer programs. Agricultural expenditures as a share of total Federal Government outlays rose from 2 percent in 1980 to over 4 percent in 1986 (table 14). In the same period, U.S. budget outlays for agriculture grew from 9 percent of cash receipts to over 30 percent.

Canadian Government expenditures in support of agriculture have increased in the eighties. Government expenditures on agriculture have accounted for a stable 3 percent of total government expenditures since 1980, and about 15 percent of cash receipts over the same period (table 15). Federal expenditures for storage and transportation and direct payments through commodity programs accounted for about 50 percent of total government outlays on agriculture.

The provincial governments in Canada provide significant support to agriculture through direct budgetary transfers as well as through marketing boards and stabilization schemes. Provincial expenditures have risen even faster than federal payments. In the United States, State government programs for agricultural producers consist mainly of inspection services, State fairs and other promotional activities, experiment stations, and extension services. The financial stress of farmers in the mideighties prompted some States to expand the scope of their programs, but State governments do not provide the type of price and income support given by provincial governments in Canada.

Table 14--U.S. Government expenditures on agriculture

Item	1979/80 Mil. US$	1979/80 Pct.	1980/81 Mil. US$	1980/81 Pct.	1981/82 Mil. US$	1981/82 Pct.	1982/83 Mil. US$	1982/83 Pct.	1983/84 Mil. US$	1983/84 Pct.	1984/85 Mil. US$	1984/85 Pct.	1985/86 Mil. US$	1985/86 Pct.
Price and income support	3,466.0	30.4	3,817.7	36.2	13,344.6	62.3	20,945.8	70.3	10,960.4	51.9	23,635.6	62.0	29,597.2	71.1
CCC outlays 1/	2,938.8	25.8	4,036.3	38.3	11,518.5	53.8	18,850.9	63.3	7,315.5	34.6	17,683.2	46.4	25,841.2	62.1
Transportation 2/	1.7	neg	1.7	neg	2.0	neg	2.2	neg	2.6	neg	2.5	neg	2.5	neg
Crop insurance	38.4	.3	1.2	neg	219.5	1.0	330.2	1.1	575.6	2.7	505.6	1.3	516.1	1.2
Financial assistance and credit	478.2	4.2	-228.3	-2.2	1597.2	7.5	1750.6	5.9	3059.9	14.5	5440.3	14.3	3233.7	7.8
Other support programs 3/	8.9	.1	6.8	.1	7.4	neg	12.0	neg	6.7	neg	4.0	neg	3.7	neg
Processing, marketing, and trade promotion	165.7	1.5	180.4	1.7	160.7	.8	176.2	.6	180.2	.9	200.4	.5	228.8	.5
Research, extension, and technical information	941.0	8.3	1,040.1	9.9	1,088.7	5.1	1,129.9	3.8	1,174.3	5.6	1,213.5	3.2	1,232.8	3.0
Inspection and disease control	579.8	5.1	622.2	5.9	657.2	3.1	571.0	1.9	647.6	3.1	676.1	1.8	645.1	1.5
Technical and food aid	886.3	7.8	1,253.8	11.9	1,000.0	4.7	992.0	3.3	1,085.4	5.1	1,715.1	4.5	1,095.3	2.6
State programs	1,678.8	14.8	1,768.3	16.8	1,980.5	9.3	2,081.0	7.0	2,168.3	10.3	2,349.8	6.2	2,650.8	6.4
Other 4/	3,652.0	32.1	1,866.6	17.7	3,159.3	14.8	3,886.6	13.0	4,915.1	23.3	8,335.6	21.9	6,190.8	14.9
Total expenditures	11,369.6	100.0	10,549.1	100.0	21,391.0	100.0	29,782.6	100.0	21,131.2	100.0	38,126.1	100.0	41,640.8	100.0
As a percent of cash receipts 5/	--	8.6	--	7.5	--	15.1	--	20.9	--	15.5	--	26.8	--	30.8
As a percent of total government expenditures	--	1.9	--	1.5	--	2.9	--	3.7	--	2.5	--	4.0	--	4.2

neg = Negligible. -- = Not applicable.

1/ Includes CCC expenditures for storage and transportation.

2/ Expenditures for Office of Transportation.

3/ ASCS Dairy Indemnity Program and Forest Service Range Betterment Program.

4/ Other includes environmental programs, rural development, social and labor programs, and administration.

5/ Cash receipts include farm marketings and net CCC loans.

Source: (39).

Table 15--Canadian Government expenditures on agriculture 1/

Item	1980/81		1981/82		1982/83		1983/84		1984/85		1985/86	
	Mil. Can$	Pct.	Mil. Can$	Pct.	Mil. Can$	Pct.	Mil. Can$	Pct.	Mil. Can$	Pct.	Mil. Can$	Pct.
Price and income support	1,009.0	48.0	1,161.2	46.1	1,250.5	45.9	1,620.7	51.0	1,799.3	50.9	1,604.4	47.5
Direct payments through commodity programs	467.0	22.2	617.1	24.5	436.2	16.0	576.4	18.1	557.5	15.8	432.0	12.9
Storage and transportation	381.1	18.1	404.4	16.1	648.8	23.8	874.6	27.5	987.5	27.9	797.0	23.7
Crop insurance	100.1	4.8	115.9	4.6	142.2	5.2	134.0	4.2	188.5	5.3	198.2	5.9
Financial assistance and credit	60.8	2.9	23.2	0.9	23.3	0.9	35.7	1.1	65.8	1.9	177.2	5.3
Processing, marketing, and trade promotion	41.7	2.0	38.4	1.5	30.6	1.1	21.5	0.7	13.3	.4	8.1	.2
Research, extension, and technical information	125.0	5.9	151.6	6.0	185.5	6.8	259.6	8.2	268.3	7.6	267.8	8.0
Inspection and disease control	170.2	8.1	171.0	6.8	212.7	7.8	256.1	8.1	275.1	7.8	310.0	9.2
Technical and food aid	210.4	10.0	256.8	10.2	306.7	11.2	356.4	11.2	387.9	11.0	358.3	10.7
Provincial programs	263.7	12.5	430.1	17.1	443.9	16.3	391.9	12.3	495.5	14.0	612.8	19.1
Other 2/	283.8	13.5	309.4	12.3	296.5	10.9	271.9	8.6	297.6	8.4	219.1	6.5
Total expenditures	2,103.8	100.0	2,517.9	100.0	2,726.4	100.0	3,178.1	100.0	3,536.4	100.0	3,374.3	100.0
As a percent of cash receipts	--	13.6	--	14.1	--	15.3	--	17.6	--	18.7	--	19.1
As a percent of total government expenditures	--	3.2	--	3.3	--	3.0	--	3.2	--	3.1	--	2.9

-- = Not applicable.

1/ April-March fiscal year.

2/ Includes environmental programs, rural development, social and labor programs, and administration.

Sources: (3, 5, 18, 19, 20, 27, 35).

Government budget data shows that, prior to 1983, federal and provincial government expenditures on agriculture relative to farm cash receipts were larger in Canada than Federal and State expenditures in the United States. Based on expenditures alone, Canadian agriculture was more highly supported than U.S. agriculture prior to 1983. Since 1983, U.S. outlays have increased to the point that U.S agriculture received greater support than Canadian agriculture in 1984/85 and 1985/86.

Price Comparisons

Intervention in agricultural markets is ultimately reflected in producer and consumer prices. If products move freely across the border, and internal markets are perfectly competitive, prices of agricultural commodities should differ over time only by a margin equal to the cost of transporting the good between markets. Prices significantly higher than what can be accounted for by freight and handling costs offer limited evidence that the government is protecting the higher cost domestic industry. Consumers often pay the cost of government intervention through higher prices for agricultural products.

Table 16 compares U.S. and Canadian prices for selected program commodities--wheat, corn or barley, and dairy. Canada's final realized price for wheat is higher than the U.S. average farm price, but generally less than the U.S. target price. However, the Canadian price excludes direct payments made from stabilization plans such as the WGSP and the Special Grains Program. Including these direct payments would increase the actual return that Canadian wheat farmers receive. The U.S. loan rate and average farm price for corn are, in most years, higher than the final realized price for Canadian barley. This differential partly reflects relative feeding values: barley has a feed value of about 80 percent of an equal quantity of corn. The milk support price in the United States has been declining since 1982/83, while that in Canada (manufacturing milk) has been rising. Canadian farm prices for fluid milk, regulated at the provincial level, have been higher than U.S. fluid prices. Because of production quotas, Canada has less overproduction and surplus disposal activity than the United States and can maintain its support levels without risking stock accumulation.

A comparison of various Canadian and U.S. commodity prices provides a general indication of differences in relative levels of support between the two countries (table 17). Canadian prices for milk, butter, cheese, chicken, turkey, and eggs are higher at most levels in the production and distribution chain, suggesting that Canadian producers of these commodities are more heavily supported than U.S. producers. Supply management programs, and import barriers that support them, are in effect in Canada for all these commodities. Canadian and U.S. prices for beef, pork, and apples are similar, which reflects the two-way trade that exists for these commodities. The Canadian producer price for pork was lower in 1985, which led to an increased movement of live hogs into the United States. The U.S. producer price for sugar was three times that for Canada, suggesting that protection for U.S. sugar producers was very high. U.S. consumers pay for the sugar support through higher retail prices. On the other hand, Canada's two-price wheat policy results in a higher retail price for flour.

Comparison of Other Measures of Government Support

Government expenditures alone are insufficient to capture the economic benefits provided by border measures or certain domestic programs to the agricultural sector. Tariff and nontariff border measures, production quotas,

Table 16--Comparison of producer prices for selected commodities, United States and Canada

Crop year	U.S. wheat Target	U.S. wheat Loan	U.S. wheat Avg. farm	Canadian wheat 1/ Initial	Canadian wheat 1/ Final
	U.S. dollars per metric ton				
1982/83	148.81	130.44	126.77	141.64	156.12
1983/84	158.00	134.12	128.97	134.74	153.75
1984/85	160.94	121.26	124.56	126.82	139.03
1985/86	160.94	121.26	113.17	115.60	115.60
1986/87	160.94	88.19	88.92	95.73	2/95.73
1987/88	160.94	2/83.78	2/88.99-95.53	82.50	NA
	U.S. corn			Canadian barley	
1982/83	106.30	100.39	100.39	89.29	89.29
1983/84	112.59	104.33	126.37	75.30	109.39
1984/85	119.29	100.39	103.54	82.06	97.95
1985/86	119.29	100.39	87.79	79.48	79.48
1986/87	119.29	2/75.59	59.45	58.91	58.91
1987/88	119.29	2/71.65	62.99-74.80	45.00	NA

Crop year	U.S. dairy Support price	U.S. dairy Avg. farm price 3/ Manufacturing	U.S. dairy Avg. farm price 3/ Fluid	Canadian dairy Support price	Canadian dairy Avg. fluid price
	U.S. dollars per cwt				
1982/83	13.10	12.60	13.80	12.86	15.98
1983/84	12.60	12.61	13.75	13.21	16.23
1984/85	12.60	12.49	13.61	12.89	16.08
1985/86	11.60	11.72	12.90	13.00	16.14
1986/87	4/11.12	11.50	12.60	13.53	16.72

NA = Not available. 1/ No. 1 Canada Western Red Spring.
2/ Findley loan rate. 3/ Calendar years.
4/ After adjustments for deductions.
Sources: (10, 21, 24, 29).

interest rate subsidies, tax benefits, and marketing boards all provide economic benefits to agricultural producers without an accompanying government outlay (except costs of administering programs). Other measures must be used to indicate the magnitude of support provided by these programs. A summary measure of protection, the Producer Subsidy Equivalent (PSE), provides a means for comparing the levels of support between countries and across commodities.

A PSE is an estimate of the revenue required to compensate producers if an existing government program were eliminated. A similar measure, the Consumer Subsidy Equivalent (CSE), estimates the effect on consumers of these programs. For producers, the lower the value of the PSE, the lower the level

Table 17--U.S.-Canadian agricultural prices, 1985

Commodity	Producer	Wholesale	Retail
	U.S. dollars per pound 1/		
Beef	1.10	1.06	1.10
United States	1.27	1.35	2.33
Canada	1.15	1.27	2.11
Pork	1.42	.96	1.12
United States	.71	1.01	1.62
Canada	.50	1.05	1.45
Chicken	.63	.76	.67
United States	.30	.51	.76
Canada	.48	.67	1.14
Turkey	.78	.81	.82
United States	.47	.76	.11
Canada	.60	.94	1.28
Eggs (dozen)	.77	.69	.85
United States	.57	.66	.90
Canada	.74	.95	1.06
Milk (quart)	.79	--	.80
United States	2/ 11.72	--	.57
Canada	2/ 14.75	--	.71
Butter	.86	.80	1.12
United States	1.41	1.41	2.12
Canada	1.64	1.77	1.90
Cheese	2.72	.64	.86
United States	1.25	1.28	2.81
Canada	3/ .46	1.99	3.26
Potatoes	.83	.80	1.62
United States	2/ 3.92	2/ 4.84	.21
Canada	2/ 4.70	2/ 6.05	.10
Sugar	2.86	1.35	1.65
United States	.20	.23	.35
Canada	.07	.17	.23
Apples	2.13	1.03	1.05
United States	.17	.37	.68
Canada	.08	.36	.65
Wheat	1.00	.81	.42
United States	4/ 3.21	4/ 3.73	.21
Canada	4/ 3.21	4/ 4.63	.50

-- = Not applicable. 1/ The first line for each commodity is the ratio of the U.S. to Canadian price. 2/ Dollars per hundredweight. 3/ No support purchases are made. 4/ Dollars per bushel. Sources: (2, 29).

of protection. 4/ For consumers in most developed countries (including the United States and Canada), many CSE estimates are negative, meaning that consumers are being taxed, rather than subsidized. The lower the (negative) value of the CSE, the more support is being provided by consumers to producers in the form of higher prices. The PSE and CSE measures attempt to capture the effects of most federal government programs affecting the agricultural sector, including border measures, price and income supports, marketing boards, supply management programs, transport and input subsidies, credit subsidies, and government programs for research, marketing, inspection, extension services, and environmental programs.

According to the PSE's, support in the United States is highest for sugar producers, followed by dairy (table 18). U.S. PSE's for most grains and oilseeds are moderate but growing; PSE's rose sharply in 1986/87 for wheat, barley, corn, and rice as a result of new or enhanced program initiatives, especially those designed to increase exports. Estimates for Canada are similar to those for the United States in that the dairy PSE is highest but PSE's for western-grown grains and oilseeds are increasing the fastest. Support to Canadian producers of dairy, oilseeds, and poultry exceeds that for the United States. Support to producers of wheat, corn, and sugar in Canada is lower than for U.S. producers of these products. Beef and pork receive relatively low levels of protection in both countries.

In the United States and Canada, all of the average CSE estimates are negative because consumers bear part of the cost of supporting agriculture. Consumers of most agricultural products are subject to relatively low taxes in the form of higher prices paid for farm goods, with a few notable exceptions. The (negative) CSE's for dairy are high in both countries, and U.S. consumers of sugar are taxed at a fairly high level.

PSE's may be used to highlight "problem areas" in bilateral trade. Where support to a commodity is high, removal of trade barriers is likely to be difficult. For example, both countries provide substantial support to their dairy sectors; as a result, no significant concessions were negotiated for dairy products in the trade agreement.

The PSE concept may also be useful as a monitoring device to track whether a country is fulfilling concessions that require reductions in support levels. In the bilateral trade agreement, a PSE-like measure will be used to compare government support levels to determine whether Canadian grain import licenses will be lifted. The measures in the trade agreement will be calculated differently from the PSE's presented in table 18.

As a recent ERS study has pointed out, agreement on a means to measure government support represents an "important first step" in negotiating reductions in support levels by allowing negotiators to "appraise and compare proposed concessions" (32). Both the United States and Canada called for the

---

4/ The United States and Canada participated in a study by the Organization for Economic Cooperation and Development (OECD) to evaluate the extent of government assistance to agriculture in the OECD countries. The study estimated PSE's and CSE's for the OECD countries. ERS extended this work by updating the PSE/CSE measures for the OECD countries, and producing estimates for selected less developed countries. For a description of the PSE/CSE methodology and further discussion of the estimates, see (17) or (32).

Table 18--Producer subsidy equivalents, United States and Canada, average 1982/83-1986/87 1/

Commodity	United States		Canada	
	PSE	CSE	PSE	CSE
	Percent			
Wheat	36.5	-2.0	30.5	-2.7
Barley	28.8	-7.9	32.1	-.1
Corn	27.1	--	10.0	-1.5
Oats	7.6	--	9.7	--
Sorghum 2/	31.5	--	27.1	--
Rice 3/	45.2	--	25.5	--
Rapeseed	--	--	31.2	--
Soybeans	8.5	--	13.3	--
Sugar	77.4	-59.1	34.1	-4.0
Dairy	53.9	--	73.6	-38.4
Fluid milk	--	-27.9	--	-36.4
Butter	--	-32.2	--	-83.1
Cheese	--	-16.4	--	-26.1
Skim milk powder	--	-53.2	--	-42.6
Beef	8.7	-.8	9.9	-.7
Pork	5.8	--	11.0	-.3
Poultry	8.3	-1.2	16.7	-4.1
Weighted avg. 4/	24.6	-12.3	31.0	-11.5

-- = Not applicable.
1/ Estimates for 1986/87 are preliminary.
2/ Rye for Canada.
3/ Flaxseed for Canada.
4/ Weighted average PSE's and CSE's refer only to the commodities for which PSE's and CSE's are calculated.
Sources: (10, 33)

use of an aggregate measure of government support in their proposals to the GATT on agriculture. An aggregate measure like the PSE could be useful in monitoring countries' compliance with negotiated reductions in government support. Some observers believe that the PSE or similar measure could be used as a negotiating tool directly; i.e., by providing a means to quantify the effects of many nontariff barriers, the PSE could be used to achieve formula reductions in both tariff and nontariff barriers. In the U.S.-Canada trade negotiations, both countries agreed to defer discussion of subsidy reductions until the multilateral talks. Thus, the usefulness of the PSE as a tool for negotiating support reductions remains untested.

A COMPREHENSIVE TRADE AGREEMENT

In early October 1987, the United States and Canada signed a preliminary agreement to remove trade barriers and expand market access between the two countries. The signing of the trade agreement followed a walkout by the Canadian negotiators in late September, and was completed only hours before a congressionally mandated deadline. The final version was signed by President Reagan and Prime Minister Mulroney on January 2, 1988.

Background of the Agreement

In an environment of shifting trade patterns and escalating trade disputes, the two countries entered into bilateral negotiations with the objective of producing a free trade agreement. In the fall of 1985, Canadian Prime Minister Brian Mulroney announced a decision by Canada to negotiate with the United States "the broadest possible package of mutually beneficial reductions in tariff and nontariff barriers between the two countries." President Reagan requested and obtained fast-track negotiating authority from Congress in order to expedite the negotiating process.

Under the fast-track negotiating authority extended to the Administration by Congress, both the Senate and the House must vote the agreement either up or down, with no amendments allowed. After the President submits the agreement to Congress, Congress will have 90 legislative days to consider it. The Canadian Parliament and the provincial governments, while not required to ratify the agreement, must pass any legislation necessary to implement the agreement. If the agreement is approved by both countries, it will enter into effect on January 1, 1989.

Agriculture, as a part of the agenda for free trade negotiations, posed a considerable challenge to the two countries. Negotiating freer trade in agricultural products is greatly complicated by the wide range of domestic policies on both sides of the border. Agriculture in both countries benefits from government programs designed to support farmers' incomes and well-being, protect the self-sufficiency of each country's food and fiber production, and promote a successful export position in world trade. Safeguarding the effectiveness of these programs often requires, to some degree, that domestic markets be protected from imports. Thus, discussion of freer trade in agriculture between Canada and the United States implied a broader discussion than simply liberalizing or removing trade barriers at the border; the discussion naturally evolved to include domestic programs as well.

For some subsectors of U.S. and Canadian agriculture, removing all trade restrictions would require significant adjustments in domestic programs. As a result, some agricultural commodities were not included in a meaningful way in the bilateral agreement; for other commodities, reducing trade barriers was conditioned on aligning support levels between the two countries. The more difficult task of reducing support to agriculture through changes in domestic programs will be left to the multilateral discussions. The MTN, which began in September 1986, will highlight the contentious issues involved in attempting to reduce barriers to trade in agricultural products.

The Canadians' overriding concern in the negotiations was to obtain secure access to the U.S. market. They wanted a clear statement regarding which government programs would be allowed under U.S. dumping and countervailing duty laws. They also wanted a binding dispute-settlement mechanism for resolving trade issues, and insisted on maintaining various domestic institutions, including agricultural marketing boards. The United States wanted to see looser restrictions on U.S. investment in Canada, improved access for certain U.S. products in the Canadian market, and elimination of certain Canadian freight subsidies.

The trade agreement produced by the negotiators falls short of creating a free trade area, but goes beyond the sectoral free trade arrangement that had been proposed in the early eighties by the previous Liberal Government in Canada. It is less comprehensive than a customs union, which would equalize both countries' trade barriers relative to third countries, or a common market, which would provide for free flow of factors as well as goods. A free trade area would eliminate all trade barriers between the two countries but leave in place barriers vis-a-vis third countries. The actual agreement leaves many barriers to trade, including many of those affecting trade in agricultural products. The agreement, encompassing across-the-board phased tariff elimination, as well as agreements on specific sectors (including energy, agriculture, forestry, automobiles, investment, and services) nonetheless represents a comprehensive approach to further liberalizing the largest two-way trade in the world.

Summary of Agricultural Provisions

Several provisions relate specifically to agricultural products, and others deal with wine and forest products. Most of the provisions of the agreement that relate to agriculture deal with tariff reduction and quantity restrictions (6). Several provisions pertain to specific commodities. Other language deals more generally with agricultural subsidies and technical barriers. Among the provisions are the following:

- Both countries will eliminate all agricultural tariffs within 10 years. Although nontariff trade restrictions are the principal barrier to trade in most agricultural products, tariffs are significant for some products. U.S. fruits and vegetables, vegetable oil, processed eggs, poultry, cigarettes, and beer are subject to high Canadian tariffs. U.S. tariffs are highest on Canada's exports of rapeseed oil and meal, selected vegetables, tobacco, and wine. Because both countries' tariffs are higher on processed items, trade in high-value and processed agricultural products will especially benefit from tariff reductions.

- With respect to tariffs on fresh fruits and vegetables, a temporary duty will be allowed for 20 years. Fresh fruits and vegetables are subject to the 10-year tariff reduction. But either country may apply a temporary duty if two conditions are met: 1) import prices for each of 5 working days is below 90 percent of the average monthly import price over the preceding 5 years, excluding the highest and lowest years, and 2) planted area for the fruit or vegetable in question is not higher than the previous 5-year average, again excluding the highest and lowest years. This duty may not be higher than the lowest duty that would have been in place and may be applied only once in any 12-month period.

- The United States agreed not to put quantity restrictions on imports of Canadian products having 10 percent or less sugar by dry weight. The United States has had import quotas on certain sugar-containing products since 1985. This provision, although not different from current laws, assures Canada continued market access for some sugar-containing products.

- Canada agreed to eliminate import licenses for U.S. wheat, barley, oats, and their products, as soon as support levels for these products in both countries are equal. This provision would allow greater access for U.S.

products if the licenses are removed. The method for determining support levels is spelled out in the agreement and is similar to the PSE's presented above. In a related provision, both countries have retained the right to impose or reimpose quantity restrictions on a particular grain or grain product if imports of such products increase significantly as a result of a substantial change in grain support programs in either country.

- Canada agreed to remove transportation subsidies for products moving through western ports to U.S. markets. Western Canadian grains and oilseeds destined for export have been eligible for subsidized rail rates for many years. In 1984, the portion of the freight rate paid by farmers rose, and a provision was added that enabled eligible Canadian products destined for the United States to receive the freight subsidy. This provision increased Canadian exports of certain products, particularly millfeeds and rapeseed meal, to the U.S. Pacific Northwest. Products exported to the United States through the port of Thunder Bay on Lake Superior, which were eligible for the subsidized rates prior to 1984, will not be affected. (Freight subsidies to Thunder Bay are extended to all eligible products, whether they are exported or consumed domestically.)

- Canada agreed to increase global import quotas for poultry, poultry products, and eggs to the annual average of actual shipments during the past 5 years. U.S. poultry exports to Canada have exceeded the global quota in recent years. The United States has exported additional quantities under supplemental quotas because Canadian demand has exceeded domestic production. If Canada reduces supplemental quotas in the future, this provision would ensure U.S. access to the Canadian market.

- The two countries will exempt each other from their respective meat import laws. Both countries have countercyclical meat import laws that are designed to limit imports. Although beef already moves freely between the two countries, this provision should provide even greater certainty to exporters that shipments will not be interrupted by quotas.

- Other agricultural provisions and issues. Both countries have agreed not to use direct export subsidies on agricultural products shipped to each other (none are currently used). They have also agreed to work toward eliminating technical barriers that interfere with trade in food and beverages.

Both the United States and Canada make use of a wide range of programs to assist producers in agriculture as well as in other sectors. Because of its global nature, the negotiators decided to defer negotiation on general reductions in agricultural subsidies to the multilateral trade talks, which began in September 1986 in Uruguay under the auspices of the GATT.

In other provisions of the agreement, access for U.S. wine and distilled spirits will be improved by according U.S. products treatment more equal to that given domestic Canadian products. Discriminatory pricing, distributing, and retailing practices have impeded U.S. penetration of the Canadian market. Many of these practices will be phased out.

Both countries will retain their laws regarding dumping and countervailing duties, which have had significant applications in agriculture. Disputes over trade remedy law decisions may be appealed to a binational panel. Duties currently in place because of application of national law will remain, but annual reviews of these duties can now be further reviewed by the binational panel.

Implications for Commodity Trade

Trade is influenced by domestic policies that affect agricultural production, border measures that restrict trade, and consumer preferences in each country. Liberalization of trade barriers or changes in domestic policies, resulting from either the bilateral trade agreement or the multilateral trade negotiations, could alter current trade patterns. This section summarizes bilateral trade flows and restrictions, and provides an assessment of how trade could change if trade barriers were modified, including changes that could result from the U.S.-Canada trade agreement, if it is ratified.

Grains and Oilseeds

Both the United States and Canada produce grain and oilseeds in excess of domestic needs and sell into similar world markets. The United States is a net importer from Canada of grain and grain products, primarily feeds, fodders, and bakery products, whereas Canada is a net importer of oilseeds and products from the United States. U.S. tariffs on most grains have not been prohibitive of trade, thus any increase in grain imports from Canada resulting from tariff elimination is likely to be small. The most important barriers to trade in grains on the Canadian side are import licensing requirements for wheat, barley, and oats. Eliminating import licenses would allow the United States greater access to the Canadian market. Other measures aimed at liberalizing restrictions on bilateral trade would help to make net trade in grains more responsive to price differentials between the two countries. Since both countries are large grain exporters, however, the potential for any significant expansion of bilateral trade in bulk grain is not large, although there is some potential for increased trade in processed products containing grain if Canada removes its licenses.

Canada's freight rate policy also affects bilateral grain and oilseed trade by subsidizing movement of export products to offshore markets and to certain U.S. regions. The United States protested the extension of this subsidy to shipments of grains, oilseeds, and products to markets in the Pacific Northwest. Canada agreed to eliminate subsidies on eligible products destined to that market in the trade agreement. The WGTA subsidy encourages products to be shipped out of western Canada rather than used domestically. Freight subsidies also apply to eastbound western grains that compete with feed grains from the U.S. Corn Belt. These transport subsidies were not removed as part of the trade agreement.

Wheat, Barley, and Oats. Reducing the U.S. tariff would have a negligible effect on wheat trade between the United States and Canada. Exchange rate shifts of 20 percent or more since the early seventies have far outweighed the U.S. tariff rate of 5-6 percent. Canadian wheat also enjoys a transport cost advantage over U.S. wheat in some U.S. border regions. On the Canadian side, the CWB import licensing requirement prohibits U.S. wheat from entering that market.

Canada is a net exporter to the United States of wheat, barley, and oats because Canada's licensing requirements effectively limit U.S. exports (table 19). Some shifts in trade would occur if the licenses were removed. Because Canada's two-price wheat policy currently sets the price of wheat to domestic millers above U.S. prices, this policy would be difficult for the Canadians to maintain if import licensing requirements were removed (table 20). Even at current exchange rates, there is an incentive for Canadian millers to import wheat from the United States because the Canadian mill price is above the U.S. target price. However, the Canadian Government has already announced that it intends to dismantle the two-price policy.

Table 19--U.S.-Canadian trade in wheat, barley, and oats

Commodity	1982	1983	1984	1985	1986
			1,000 metric tons		
Wheat:					
U.S. exports	0	0	0	0	15
U.S. imports	0	53	100	271	254
Barley:					
U.S. exports	0	0	0	26	0
U.S. imports	224	137	118	82	103
Oats:					
U.S. exports	3	1	2	3	1
U.S. imports	25	148	80	28	107

Sources: (1, 30).

Table 20--U.S. and Canadian domestic grain prices

Commodity	1982/83	1983/84	1984/85	1985/86	1986/87
			U.S. dollars per ton		
Wheat:					
United States 1/	145	155	136	119	96
Canada 2/	166	169	167	173	189
Barley:					
United States 3/	81	114	96	70	53
Canada 4/	81	103	99	74	60
Oats:					
United States 5/	97	105	108	80	77
Canada 4/	77	101	92	66	57

1/ Minneapolis, Dark Northern Spring. 2/ Domestic mill price.
3/ Feed barley, Minneapolis. 4/ Winnipeg cash price.
5/ Average farm price.
Sources: (4, 29).

If the import licenses were removed on barley, the United States could export more to Canada because in some years Canadian prices are above U.S. prices. However, even if the licenses were removed on oats, U.S. exports would not likely increase in the short run because U.S. prices have been higher than Canadian prices, reflecting tight domestic supplies.

The United States currently imports barley from Canada subject to a tariff. Barley imports from Canada will continue to receive the freight subsidy from western Canada to Great Lakes ports. Removal of freight subsidies on westbound Canadian grain destined for the U.S. market would mean that transportation rates on these products would increase from about Can$6 per ton to about Can$30, likely reducing Canadian exports of these products.

<u>Corn</u>. The United States is the world's largest corn producer. Canadian corn production, although small, has been rising as short-season varieties have been developed. Eastern Canada, once a feed-deficit area, is approaching feed grain self-sufficiency and Ontario is now a net exporter of feed grains. Both countries reduced tariffs on corn during the last MTN round, but Canada has since imposed a countervailing duty on imports of U.S. corn. The agreement to eliminate tariffs over 10 years does not include countervailing duties. U.S. corn exports to Canada will continue to be subject to Canada's duty.

Domestic policies in Canada also tend to restrict trade in corn. Feed Freight Assistance (FFA) provides freight subsidies for feed grains shipped to feed deficit areas in British Columbia, the Atlantic provinces, and eastern Quebec. Grains from the Prairies also benefit from WGTA-subsidized freight rates for shipment to Thunder Bay. As a result, U.S. corn is not competitive with Ontario corn and western Canadian feed grains in many eastern Canadian markets.

U.S. policies that affect corn production and trade include price support through the loan and the commodity stock management programs and income support through the target price/deficiency payment program. Given its enormous corn production, the United States would not likely import corn from Canada in increased quantity under liberalized trade.

<u>Oilseeds and Products</u>. The United States is a net exporter of oilseeds and oilseed products to Canada. Soybeans and soybean meal are the most important U.S. exports in this category. Canada ships rapeseed meal and oil to the United States. U.S.-Canadian oilseed trade is subject to relatively few restrictions, and tariffs are low or zero on oilseed and oilseed meal. Both countries impose a 7.5-percent tariff on crude vegetable oil that is not re-exported. The 1985 FDA ruling allowing rapeseed oil to be imported for food use has removed a significant barrier to U.S. imports of rapeseed and rapeseed oil. Canadian freight subsidies to the U.S. border have further aided rapeseed exports, although the subsidy to the western U.S. border will be rescinded as part of the trade agreement. Canadian rapeseed is covered by the Western Grain Stabilization Act; U.S. soybeans are covered by the nonrecourse loan program.

Eliminating tariffs on oilseeds and products would increase oilseed trade minimally. Removal of the tariff on soy oil would help U.S. soy oil compete with rapeseed oil in the eastern Canadian market. Canada subsidizes the movement of rapeseed and its products from the Prairie growing area. These subsidies not only discourage oilseed imports from the United States, but have also helped Canada to ship rapeseed meal into the northwestern U.S. market. Oilseed trade could also be affected by changes in trade in livestock and animal products, because protein meal demand depends on livestock production.

Livestock, Dairy, and Poultry

Live animals and animal products are the largest U.S. agricultural import from Canada and the second largest U.S. export to Canada. U.S. imports from Canada are small relative to domestic consumption, but account for a slightly higher share of Canadian consumption.

Dairy Products. The dairy sectors in both the United States and Canada are highly protected and benefit from government support. As a result, U.S.-Canadian trade in dairy products is small. Both countries restrict imports in order to effectively support domestic production and both have programs for disposal of surplus product. Although both countries impose tariffs on dairy products, imports are restricted primarily by import quotas, permits, and prohibitions. Health and sanitary regulations, import licensing requirements, and marketing order regulations effectively prohibit trade in fluid milk. Because of the potential problems involved in opening the border to dairy products, the trade agreement did not include any specific measures for liberalizing dairy trade.

Cheese. Cheese is the sole dairy product traded in any quantity between the United States and Canada. Cheese demand has been rising in both countries. Tariffs are a significant part of the cost to the consumer of imported cheese in both countries. Both countries also have quotas that restrict cheese imports. U.S. shipments of cheese to Canada account for only 6 percent of Canada's global import quota of 20,400 metric tons (60 percent of which is reserved for the EC). Canada has not increased its global quota since 1978, although domestic consumption has expanded. The United States sets a quota on cheese by country and type of cheese based primarily on historical volumes. U.S. quotas allow approximately 2,000 metric tons of cheese to be imported from Canada. Those imports account for only 1 percent of total 1985 U.S. cheese imports under quota (app. table 1). Because quotas are the primary impediment to trade, tariff reduction will have minimal impact on bilateral cheese trade.

Live Cattle. Trade in live cattle is essentially free. Tariffs are low and there are no quotas to restrict movement of live cattle, but both countries have a variety of health and sanitary restrictions governing live cattle trade. Trade in both directions has been dominated by slaughter cattle. Net trade in all classes of live cattle is in Canada's favor. Domestic programs for other commodities may have an indirect impact on live cattle trade. The freight subsidy on export grains tends to make feed grains more expensive in western Canada, making livestock feeding more costly. In the United States, the grain loan rate can act as a tax or a subsidy to the cattle sector, depending on the level of grain prices. However, the grain reserve provides a kind of insurance against too-high grain prices by releasing grain when prices are high. Provincial stabilization programs provide support to cattle producers in Manitoba, Saskatchewan, and British Columbia. Many of these programs are funded at least in part by producers through payment of insurance premiums. Because tariffs are low, phased tariff reduction will have almost no effect on trade in live cattle. The agreement to minimize technical barriers (including health and sanitary regulations) that interfere with trade will further streamline bilateral cattle trade.

Beef and Veal. The United States ships primarily high-quality beef to Canada and imports lower quality beef. Tariffs on beef and veal are low in both countries, thus tariff removal alone should have only a small impact on two-way trade. U.S. imports of beef and veal are subject to the Meat Import Law, which establishes a global import quota. Canada's law operates in a similar fashion. Neither country has invoked its meat import law against the other in recent years, although Canada limited beef exports to the United States in 1982 and 1983 under voluntary restraints. When voluntary restraints are not in effect, beef trade may be self-limiting due to the threat of quota imposition. The trade agreement provides that both countries will exempt each other from their meat import laws, thus providing the opportunity for greater two-way trade in beef.

Pork and Hogs. The trade balance in pork and live hogs is now heavily in Canada's favor. In 1985, the United States imposed a countervailing duty on live hog imports from Canada after finding that subsidized Canadian hogs had injured U.S. producers. Prior to that, tariffs on live hogs and fresh, chilled, and frozen pork had been eliminated under the MTN and reduced on many other pork products. Both countries maintain various health and inspection requirements. Canada requires that imported hogs be quarantined for 30 days to prevent the introduction of pseudorabies; this restriction effectively eliminates U.S. exports of slaughter hogs to Canada. The countervailing duty on Canadian hogs will not be affected by the phased tariff reduction under the trade agreement, but the new binational dispute settlement mechanism will have the power to review any decision or annual review pertaining to this measure.

Poultry and Eggs. Canada imports both poultry and eggs from the United States. Both countries maintain tariffs on these products. Both countries also require that imports come from inspected plants and conform to processing and health requirements. Poultry and egg production in the United States is relatively undistorted by government policy. Canadian chicken, turkey, and table eggs are regulated by national supply management plans that set production quotas, establish prices, and maintain import quotas. Canada agreed to increase global import quotas for poultry, eggs, and products to reflect increased imports from the United States in recent years. U.S. exports of turkey and shell eggs will not likely increase significantly in the short run because in recent years U.S. exports have exceeded the global quota (table 21). However, U.S. chicken exports could benefit from the larger quota. If Canada were to reduce imports under supplemental quotas in the future, the new quotas should provide U.S. producers with greater access to the Canadian market.

Horticultural Products

The balance of bilateral trade in fruits, vegetables, and nuts is strongly in the U.S. favor. Canada is the largest market for U.S. fresh fruits and vegetables, and its imports often substantially exceed domestic production. Canadian exports to the United States are small relative to total U.S. production. Canada has a relatively short growing season for its fruits and vegetables and frequently applies seasonal tariffs to reduce heavy U.S. competition. Surtaxes may be assessed by Canada on imports of some horticultural products when import prices fall below predetermined trigger prices, although this system will be modified or abolished as a result of the trade agreement. The United States also imposes tariffs on imports of fruits and vegetables; some of these duties are higher in season. Some Canadian vegetable exports have made inroads into the northeastern U.S. market. U.S.

Table 21--Canadian poultry imports under old and new quotas

Commodity	1982	1983	1984	1985	1986	1987 (est.)
			1,000 metric tons			
Chicken:						
Production	429.9	430.2	460.8	505.5	523.5	566.0
Actual imports	29.3	34.7	38.9	30.6	33.1	34.0
Imports (old quota)1/	27.2	27.1	27.1	29.0	31.8	33.0
Imports (new quota)2/	32.3	32.3	32.3	34.6	37.9	39.2
Turkey:						
Production	97.5	96.8	97.7	102.4	104.9	114.0
Actual imports	1.9	1.6	1.7	3.5	5.3	6.0
Imports (old quota)3/	2.0	1.9	2.0	2.0	2.0	2.1
Imports (new quota)4/	3.3	3.4	3.4	3.4	3.6	3.7
			1,000 dozen			
Shell eggs:						
Production	450.7	462.1	444.8	442.2	444.6	450.0
Actual imports	7.4	5.1	5.6	10.5	7.9	8.3
Imports (old quota)5/	3.1	3.0	3.1	3.0	3.0	3.0
Imports (new quota)6/	7.5	7.4	7.6	7.3	7.2	7.3

1/ Import quota equal to 6.3 percent of the previous year's production.
2/ Import quota equal to 7.5 percent of the previous year's production.
3/ Import quota equal to 2.0 percent of the current production quota.
4/ Import quota equal to 3.5 percent of the current production quota.
5/ Import quota equal to 0.675 percent of the previous year's production.
6/ Import quota equal to 1.647 percent of the previous year's production.
Source: (23).

tariffs on these products, averaging 5-10 percent, have not materially restricted this trade. Potatoes move across the border in both directions--from New Brunswick and Prince Edward Island into the northeastern United States and from the northwestern United States into western Canada.

Tariff phase-out under the trade agreement will favor expanded U.S. exports of fruits and vegetables to Canada. Both sides have retained the option for the next 20 years to impose an additional duty on fresh fruits and vegetables if imports seriously threaten the domestic industry. However, the temporary duty, in combination with the normal duty, cannot exceed the lowest duty (most-favored nation duty) that would have been in place.

Packaging and labeling requirements act as barriers to trade on both sides of the border. Metric packaging restrictions and bilingual labeling requirements make it difficult to export processed horticultural products to Canada.

Health and sanitary regulations may also constitute a barrier to Canadian imports of U.S. products. U.S. law requires that imports meet the same standards of grade, size, and maturity that apply to the domestic product under marketing orders. Canada prohibits consignment selling of fresh fruits and vegetables from the United States, restricting liberal movement of product into Canada during the peak season. The trade agreement does not directly change these nontariff barriers.

Sugar and Sugar Products

Both countries import raw sugar from third countries and export refined and processed products to each other and to third countries. Canadian raw sugar imports are unrestricted, and tariffs are low. U.S. producers receive support prices above the world price and are protected from cheaper imports through duties, fees and, since 1982, country-by-country quotas.

The United States has also tried to protect its sugar program by restrictions on imports of sugar-containing products. In 1985, the United States imposed quotas on imports of sugar blends from Canada under Section 22 authority. Under the terms of the trade agreement, the United States agreed not to put quantity restrictions on imports of Canadian sugar-containing products having 10 percent or less sugar. The low sugar content specified in the agreement will not provide a strong economic incentive for Canada to increase exports of sugar-containing products.

Wine and Malt Beverages

Trade in malt beverages (beer and ale) and wines is subject to significant tariff and nontariff barriers. The United States is a net importer of these products from Canada, which consist mainly of beer. Canada is the largest foreign market for U.S. wine, although exports have stagnated in the eighties.

While tariffs are high in both directions, nontariff barriers effectively limit U.S. access to the Canadian market for beer and wines. Distribution of alcoholic beverages in Canada is controlled by provincial liquor control boards whose monopoly privileges permit discriminatory practices that hurt U.S. exports. Differential retail markups that are much higher on imported beers and wines than on the locally produced or domestic product are a common practice in some provinces. Some provinces also assess per-bottle handling surcharges on imported wines. Mixing regulations limit the foreign grape content of Ontario and British Columbia wines, and, except in years of shortages, provide Ontario with authority to virtually ban imported grapes for winemaking.

U.S. wine exports could benefit substantially from the trade agreement. The agreement provides for "more equal" treatment of U.S. wine in the Canadian market, meaning that some discriminatory pricing, distributing, and retailing practices will be relaxed for U.S. wines. The agreement did not extend more equal treatment to U.S. beer, however, after strong protests from Canadian brewers.

CONCLUSIONS

The widening U.S. trade deficit with Canada that developed in the eighties, although primarily reflecting the appreciation of the U.S. dollar against the Canadian dollar, also led to an increasing number of trade disputes involving the application of trade remedy laws. Agriculture accounts for only a small share of total bilateral trade between the two countries, yet accounted for a large share of the disputes. This situation partly reflects the numerous complex programs that govern agriculture in both countries, which led to charges of unfair subsidization and dumping of farm products. Despite the growth in its trade surplus with the United States, Canada sought more secure access to the U.S. market through alterations in U.S. trade remedy laws and a binding dispute settlement mechanism. The ensuing trade talks produced a comprehensive agreement that was signed in January 1988.

The agricultural chapter of the agreement deals primarily with tariffs and quantitative restrictions on trade. All agricultural tariffs will be phased out over 10 years. A temporary duty can be applied to imports of certain fresh fruits and vegetables for up to 20 years. Other main provisions liberalize quantitative restrictions (licenses and quotas) affecting trade in sugar-containing products, poultry products, some grains, and red meat. The agreement will not result in any fundamental changes in agricultural programs or subsidies. However, one provision does present a detailed method for measuring government support to producers of wheat, barley, and oats, which will be used to determine whether Canada will remove its import licenses on these commodities.

About half of the current value of U.S. agricultural exports ($2.6 billion) to Canada and a quarter of U.S. imports ($2.0 billion) from Canada could be affected by specific provisions of the new agreement. Much of the value of U.S. agricultural exports is accounted for by fruits and vegetables, which could benefit from tariff reduction. If fruits and vegetables are omitted, the remaining value of agricultural trade that could potentially be affected by the trade agreement is small. For most agricultural commodities, nontariff barriers are more restrictive of trade than tariffs. Thus, the overall phased tariff reduction will have little impact on trade in most primary agricultural products. Because higher tariff rates currently apply to processed products, tariff reduction will have a greater impact on trade in processed and high-value agricultural products. Specific commodities whose exports will likely benefit from the trade agreement include U.S. fruits and vegetables, wine, poultry and eggs, some grains, and high-value and processed products; and Canadian storage vegetables (potatoes, onions, and carrots) and beef.

REFERENCES

1. Agriculture Canada. Canada's Trade in Agricultural Products, various issues.

2. _______. Handbook of Food Expenditures, Prices, and Consumption. Ottawa, Ontario. November 1986.

3. _______. Handbook of Selected Agricultural Statistics 1986. Regional Development Branch. Ottawa, Ontario. December 1986.

4. Canada Grains Council. Statistical Handbook. Winnipeg, Manitoba, various issues.

5. _______. Government Policies Supporting Grain Production and Marketing, Canada and the United States. Winnipeg, Manitoba. October 1986.

6. Canada-United States Free-Trade Agreement, final text, Dec. 9, 1987.

7. Chattin, B., T. Fulton, and S. Langley. "Country Policy Paper: United States." Economic Research Service, U.S. Department of Agriculture. Unpublished ERS document.

8. Economic Report of the President, various issues.

9. Ericksen, M.H., and K. Collins. "Effectiveness of Acreage Reduction Programs," in Agricultural-Food Policy Review: Commodity Program Perspectives. AER-530. Economic Research Service, U.S. Department of Agriculture. July 1985.

10. Goodloe, Carol A. Government Intervention in Canadian Agriculture. Staff Report No. AGES871216. Economic Research Service, U.S. Department of Agriculture. January 1988.

11. Jesse, E.V., and A.C. Johnson, Jr. Effectiveness of Federal Marketing Orders for Fruits and Vegetables. AER-471. Economics and Statistics Service, U.S. Department of Agriculture. June 1981.

12. Johnson, D. Gale, Kenzo Hemmi, and Pierre Lardinois. Agricultural Policy and Trade: Adjusting Domestic Programs in an International Framework. New York University Press, New York and London, 1985.

13. Kennedy, Richard M. "Agriculture and Food Supplies," Encyclopedia Britannica Yearbook 1987.

14. Langley, J., and M. Newman. "The Role of Acreage Control Programs in U.S. Agricultural Policy," Policy Research Notes. Issue 23. Economic Research Service, U.S. Department of Agriculture. May 1987.

15. Langley, J.A., R.D. Reinsel, J.A. Craven, J.A. Zellner, and F.J. Nelson. "Commodity Price and Income Support Policies in Perspective," in Agricultural-Food Policy Review: Commodity Program Perspectives. AER-530. Economic Research Service, U.S. Department of Agriculture. July 1985.

16. Menzie, E.L., and B.E. Prentice. Barriers to Trade in Agricultural Products between Canada and the United States. Staff Report No. AGES830414. Economic Research Service, U.S. Department of Agriculture. April 1983.

17. Organization for Economic Cooperation and Development. National Policies and Agricultural Trade. Paris, 1987.

18. Rodier, Monique. Federal Agri-food Expenditures, 1982/83 and 1983/84. Regional Development Branch, Agriculture Canada. Ottawa, Ontario. September 1985.

19. _______. "Federal Government Expenditures in the Agri-food Industry, 1970-71 to 1982-83," Canadian Farm Economics, Vol. 19, No. 1, 1985.

20. Statistics Canada. Agriculture Economic Statistics. Catalogue 21-603E. Ottawa, Ontario. February 1987.

21. _______. Cereal and Oilseeds Review. Catalogue 22-007, various issues. Ottawa, Ontario.

22. _______. Livestock and Animal Product Statistics. Catalogue 23-202. Ottawa, Ontario. July 1987.

23. _______. Production of Poultry and Eggs. Catalogue 23-202. Ottawa, Ontario. June 1987.

24. _______. The Dairy Review. Catalogue 23-001, various issues. Ottawa, Ontario.

25. _______. Canadian Statistical Review. Catalogue 11-003E, various issues. Ottawa, Ontario.

26. Stucker, B.C., and K.J. Collins. The Food Security Act of 1985: Major Provisions Affecting Commodities. AIB-497. Economic Research Service, U.S. Department of Agriculture. January 1986.

27. Todd, Susan. "Federal Agri-food Expenditures, 1984/85 and 1985/86," Agriculture Canada. Unpublished computer printouts. Ottawa, Ontario.

28. U.S. Department of Agriculture, Agricultural Statistics 1986.

29. U.S. Department of Agriculture, Economic Research Service. Agricultural Outlook. Various issues.

30. _______, Foreign Agricultural Trade of the United States. Various issues.

31. _______. Consortium on Trade Research, Agriculture, Trade, and Development: A Comparative Look at U.S., Canadian, and European Community Policies. Staff Report No. AGES850208. January 1986.

32. _______. Government Intervention in Agriculture: Measurement, Evaluation, and Implications for Trade Negotiations. FAER-229. April 1987.

33. _______. Estimates of Producer and Consumer Subsidy Equivalents: Government Intervention in Agriculture. Staff Report AGES880127. Forthcoming.

34. _______, Foreign Agricultural Service. "Canadian Tariff Schedule for Selected U.S. Agricultural Exports, effective 1987." Unpublished document.

35. _______, "Market Promotion/Competition Annual," Attache report. Various issues.

36. _______, Report on U.S./Canadian Agricultural Trade Discrepancy, 1987 Update.

37. U.S. International Trade Commission. Operation of the Trade Agreements Program, 38th Report, 1986. July 1987.

38. _______. Tariff Schedules of the United States Annotated, 1987. U.S. ITC Publication 1910, 1986.

39. U.S. Office of Management and Budget. The Budget of the United States Government, Fiscal Year. Various years.

40. Warley, Thorald K. "Issues in Canadian Agricultural Trade Policy," Canada-United States Free Trade. John Whalley, Research Coordinator, with Roderick Hill. Toronto Press in cooperation with the Royal Commission on the Economic Union and Development Prospects for Canada and the Canadian Government Publishing Centre, Supply and Services Canada, Ottawa, 1985.

41. Westcott, P., and M. Hanthorn. "Generic Certificates Help Meet Goals of 1985 Farm Act," Agricultural Outlook, Economic Research Service, U.S. Department of Agriculture, April 1987.

Appendix table 1--Canada's share of the U.S. market, 1985

Commodity	U.S. imports: Total	U.S. imports: As a share of U.S. consumption	U.S. imports from Canada: Total	U.S. imports from Canada: Share of-- Total imports	U.S. imports from Canada: Share of-- U.S. consumption
	Metric tons	Percent	Metric tons	- - - Percent- - -	
Animal products (mil. $)	4,222	NA	986	23	NA
Live animals 1/ (1,000)	2,171	1.7	1,640	76	1.3
Cattle (1,000)	836	2.1	359	43	.9
Hogs (1,000)	1,227	1.5	1,226	100	1.5
Meats and products	1,139	NA	283	25	NA
Beef and veal	677	6.0	88	13	.8
Pork	424	6.0	190	45	.6
Poultry products (mil. $)	98	NA	25	27	NA
Live poultry (1,000)	7	Neg	7	97	Neg
Poultry meat	3	Neg	2	69	Neg
Eggs (mil. $)	15	NA	10	71	NA
Shell eggs (1,000 doz)	8,587	.2	1,765	21	Neg
Shell equivalent of egg products (1,000 doz)	4,123	.5	3,982	97	Neg
Dairy products	414	NA	95	23	NA
Milk and cream	16	.1	5	31	Neg
Butter and butterfat	1	.2	Neg	14	Neg
Cheese	137	6.3	2	1	.1
Grains and feeds	3,419	NA	1,493	44	NA
Wheat, except seed	271	1.0	271	100	1.0
Oats	445	5.3	31	7	.4
Barley	105	1.0	68	65	.6
Corn, except seed	50	Neg	20	40	Neg
Oilseeds and products	1,359	NA	359	26	NA
Soybeans	4	Neg	4	100	Neg
Soybean oil	12	.3	3	25	.1
Rapeseed	1	100.0(e)	1	100	100.0(e)
Rapeseed oil	15	100.0(e)	15	100	100.0(e)
Rapeseed meal	139	100.0(e)	139	100	100.0(e)
Sunflower seed	23	3.4	22	96	3.2
Flaxseed	126	47.2	126	100	47.2
Fruits and vegetables	3,506	NA	426	12	NA
Potatoes	168	1.3	166	99	1.3
Onions	118	6.5	16	14	.9
Carrots	67	5.7	61	91	5.2
Lettuce	17	.6	8	47	.3
Cabbage	18	NA	8	44	NA
Celery	6	.7	4	67	.5
Dried beans and peas	34	NA	7	20	NA

Continued—

Appendix table 1--Canada's share of the U.S. market, 1985--Continued

Commodity	U.S. imports: Total	U.S. imports: As a share of U.S. consumption	U.S. imports from Canada: Total	U.S. imports from Canada: Share of-- Total imports	U.S. imports from Canada: Share of-- U.S. consumption
	Metric tons	Percent	Metric tons	- - -Percent- - -	
Apples, fresh	124	6.6	35	28	1.9
Cherries	4	2.3	1	33	.7
Raspberries	9	NA	7	78	NA
Other high-value or processed products:					
Unmanufactured tobacco	196	30.2	8	4	1.2
Cigarettes (mil.)	884	.1	279	32	Neg
Wine (1,000 hl)	5,080	23.1	4	Neg	Neg
Beer	9,289	4.3	2,262	24	1.0
Sugar and products 2/	4,290	NA	292	7	NA

NA = Not applicable or not available. Neg = Negligible. e = Estimate.
1/ Excludes live poultry.
2/ Includes cane and beet sugar, molasses, and confectionery products.
Sources: (29, 30).

Appendix table 2--U.S. share of Canada's market, 1985

Commodity	Canadian imports		Canadian imports from U.S.		
				Share of--	
	Total	As a share of Canadian consumption	Total	Total imports	Canadian consumption
	Metric tons	Percent	Metric tons	- - Percent - -	
Animal products (mil. $Can)	1,032	NA	578	56	NA
Slaughter cattle (1,000)	58	1.3	58	100	1.3
Slaughter hogs (1,000)	0	0	0	0	0
Beef and veal	76	11.2	20	26	2.9
Pork	14	2.4	5	33	.8
Live poultry (1,000)	5,018	1.4	5,018	100	1.4
Poultry meat	21	5.3	21	100	5.3
Eggs, total (1,000 dz)	4,722	5.3	4,722	100	5.3
Fluid milk (hl)	0	0	0	0	0
Skim milk powder (kg)	0	0	0	0	0
Evaporated milk (kl)	0	0	0	0	0
Butter (kg)	0	0	0	0	0
Cheese	21	10.9	1	6	.6
Grains and oilseeds (mil. $Can)	911	NA	734	81	NA
Wheat	0	0	0	0	
Barley	45	.1	45	100	.1
Rice	115	100	102	91	91.2
Corn	500	7.0	500	100	7.0
Soybeans	243	27.9	206	85	23.6
Soybean oil	7	4.0	7	100	4.0
Soybean meal	583	47.4	583	100	47.4
Sunflower seed	6	7.9	6	100	7.9
Fruits and vegetables (mil. $Can)	2,227	NA	1,387	62	NA
Potatoes, table	137	8.8	137	100	8.8
Tomatoes:					
Fresh	138	17.7	119	88	15.5
Canned	30	19.8	3	13	4.7
Onions	70	26.5	67	93	24.5
Carrots	51	22.5	51	100	22.5
Cucumbers	35	29.7	25	71	39.7
Peppers	41	75.2	33	81	61.1
Lettuce	211	81.9	211	100	81.9
Cabbage	29	17.0	27	93	15.8
Celery	85	68.9	85	100	68.9
Grapes	158	62.8	128	82	51.4
Apples	99	19.6	57	66	12.9
Apricots	2	52.9	2	96	50.7
Pears	33	69.4	22	75	52.3
Peaches	15	42.6	15	98	41.9
Cherries	4	30.4	4	99	30.1

Continued--

Appendix table 2--U.S. share of Canada's market, 1985--Continued

Commodity	Canadian imports: Total	Canadian imports: As a share of Canadian consumption	Canadian imports from U.S.: Total	Canadian imports from U.S.: Share of--Total imports	Canadian imports from U.S.: Share of--Canadian consumption
	Metric tons	Percent	Metric tons	- - - Percent	- - -
Strawberries					
Fresh	21	42.6	21	99	37.6
Frozen	5	49.9	1	21	10.5
Raspberries	219	1.9	219	100	1.9
Cantaloups	64	98.8	58	88	87.4
Plums	25	86.5	22	96	83.2
Other, high-value or processed (mil. $Can)	964	NA	512	53	NA
Unmanufactured tobacco	979	2.8	964	99	2.8
Cigarettes (1,000)	531	0.1	451	85	.04
Wine (1,000 hl)	127,973	59.0	12,189	10	6
Beer, malt bev. (1,000 hl)	910	4.5	724	80	3.6
Sugar	1,158	100.0	106	9	9.1
Cotton, raw	44	100	38	95	95.0

NA = Not applicable, or nor available.
Source: (1, 2).

Appendix table 3--U.S. tariffs, ad valorem equivalents, and quotas

Commodity	Tariffs and fees 1/	Ad valorem equivalent 2/	Import quota
	U.S. dollars	Percent	
Grains and oilseeds:			
Wheat--			Authority exists to impose quotas under Sec. 22 of AAA 1933 if imports materially interfere with price support program.
Food	0.21/bu	5.7	
Feed	5%	5.0	
Barley	0.05/bu	1.5	See wheat
Oats	Free	0	See wheat
Corn	0.05/bu	1.7	See wheat
Rapeseed	0.004/lb	1.9	--
Rapeseed oil:			
Inedible	0.007/lb	2.0	--
Edible	7.5%	7.5	--
Rapeseed meal	0.0012/lb	2.7	--
Soybeans	Free	0	See wheat
Soybean oil	22.5%	22.5	--
Soybean meal	0.003/lb	5.4	--
Flaxseed	0.22/bu	3.2	--
Livestock and products:			
Live cattle (except dairy cows)	0.01/lb--less than 200 lb	NA	--
	0.025/lb--200-700 lb	NA	
	0.01/lb--over 700 lb	1.4	--
Live hogs	Countervailing duty of 0.039/lb	8.2	--
Beef and veal (fresh/frozen)	0.02/lb	2.6	1979 Meat Import Act sets base quota, adjusted annually by formula, minimum level 1.25 bil lb
Pork, fresh/frozen	Free	0	--
Lamb and mutton	0.015/lb	1.5	--
Live poultry:			
Baby chicks	0.02 each	4.5	--
Other live	0.02/lb	4.2	
Eviscerated poultry	0.05/lb	5.9	--
Eggs, shell	0.035/doz	8.6	--
Fluid milk or cream:			
1-5% butterfat	0.02/gal on first 3 million gallons		2.2% (average) Sec. 22 sets quotas
	0.065/gal over 3 mil gal		
5.5-45% butterfat	0.12/gal		
Skim milk powder	0.015/lb	4.2	Sec. 22 sets quotas
Butter	0.056/lb	9.8	Sec. 22 sets quotas

Continued--

Appendix table 3--U.S. tariffs, ad valorem equivalents, and quotas--Continued

Commodity	Tariffs and fees 1/	Ad valorem equivalent 2/	Import quota
	U.S. dollars	Percent	
Cheddar cheese:			
Processed	16%	16.0	Sec. 22 sets quotas based on historic volumes
Not processed	12%	12.0	
Fruits and vegetables			Section 8e of the Agricultural Marketing Agreement Act of 1937 requires that imports meet same minimum grade or quality standards as domestic produce if a Federal marketing order is in effect.
Potatoes	0.035/100 lb	3.9	Federal marketing order
Tomatoes, fresh	0.015/lb, July 15-Aug. 31, 0.015/lb, Nov. 15-Feb. 15, 0.021/lb, otherwise	9.1 (avg)	Federal marketing order
Onions, excl. sets or pearl)	0.0175/lb	11.4	Federal marketing order
Carrots (over 4")	0.005/lb	5.7	
Cucumbers, fresh	0.022/lb, Dec. 1-Feb. 28 0.03/lb, Mar. 1-Nov. 30 0.015/lb, July 1-Aug. 31	11.2 (avg)	--
Peppers	0.025/lb	5.7	--
Lettuce	0.02/lb, Nov. 1-May 30 0.004/lb, June 1-Oct. 31	7.0 (avg)	--
Cabbage	0.0055/lb	5.2	--
Celery	0.0025/lb, Apr. 15-July 31, 0.01/lb otherwise	8.2 (avg)	--
Grapes	0.04/cu ft, Feb. 15-Mar. 31, 0.06/cu ft, July 1-Feb. 14, free Apr. 1-June 30	NA	--
Apples	Free	0	--
Apricots:			--
Fresh	0.002/lb	0.7 (avg)	--
Dried	0.001/lb		--
Pears, fresh	0.005/lb, June 30-Mar. 31, free otherwise	1.1 (avg)	-- --
Peaches, fresh	0.002/lb, June 30-Mar. 31, free otherwise	0	--
Cherries:			--
Not stored	Free	0	--
Stored	0.01/lb	NA	--
Strawberries:			
Processing, fresh	0.002/lb, June 15-Sept. 15, 0.0075/lb otherwise	1.0 (avg)	--
Frozen	14.0%	14.0	--
Raspberries, frozen	7.0%	7.0	--

Continued--

Appendix table 3--U.S. tariffs, ad valorem equivalents, and quotas--Continued

Commodity	Tariffs and fees 1/	Ad valorem equivalent 2/	Import quota
	U.S. dollars	Percent	
Cantaloups	20% Aug. 1-Sept. 15, 35% otherwise	20.0-35.0	--
Oranges, fresh	0.01/lb	4.7	Federal marketing order
Other, high-value or processed:			
Tobacco	0.20/lb	19.0	Sec. 22 authority to uphold price support program
Cigarettes	$1.06/lb and 5%	NA	--
Cigars	0.57/lb and 3%	NA	--
Wine	0.315 to $1.17/gal, depending on type, proof, plus special taxes	6.4 - 24.0,	
Beer, malt beverages	0.06/gal	2.6	--
Sugar			Raw sugar imports are subject to quotas under Sec. 22. Canada is allotted 1.1% of total quota. Total U.S. quota sugar was 1.85 million short tons in 1985/86.
Raw	0.00625/lb	3.7	
Refined	0.00625/lb duty (depends on degree of polarity) plus 0.01/lb import fee	7.3	

NA = Not available. -- = Not applicable.
1/ Some tariffs are already on an ad valorem basis rather than a specific basis.
2/ Specific tariff as percentage of 1985 average import unit value.
Sources: (30, 38).

Appendix table 4--Canadian tariffs, ad valorem equivalents, and quotas

Commodity	Tariffs and fees 1/	Ad valorem equivalent 2/	Import quota
	Canadian dollars	Percent	
Grains and oilseeds:			
Wheat	0.12/bu	No imports	--
Barley	0.05/bu	No imports	--
Oats	Free	--	--
Corn	0.85/bu 3/	1.2	--
Soybeans	Free	--	--
Soybean oil	7.5%	7.5	--
Soybean meal	Free	Free	--
Other veg. oil	7.5-15%	7.5-15.0	--
Livestock and products:			
Live cattle	0.005/lb	0.5	--
Live hogs	Free	Free	--
Beef and veal	0.02/lb	0.8	Global quota, only used in 1985, set at 66,500 metric tons.
Pork	Free	Free	--
Lamb, mutton	0.03/lb	1.2	--
Live poultry	0.02/lb	3.0	--
Poultry meat	12.5%, NLT Can0.05 or NGT Can0.10/lb.	12.5	Set equal to 6.3% of previous year's prod.
Eggs, shell	0.035/doz	4.2	Set equal to .675% of previous year's prod.
Skim milk powder	0.035/lb	No imports	--
Evaporated milk	0.03/lb	No imports	--
Butter	0.12/lb	No imports	--
Cheese	0.035/lb	1.4	Global quota of 20,400 metric tons.
Fruits, vegetables:			
Potatoes	0.35/cwt	2.9	--
Tomatoes	0.025/lb, NLT 15%,	15.0	--
Onions	0.015-0.025/lb, NLT 12.5%-15%	12.5-15.0	--
Carrots	0.005-0.01/lb, NLT 5.0%, up to 40 weeks, otherwise free	5.0	--
Cucumbers	0.0225/lb, NLT 15%	15.0	--
Peppers	0.02/lb, NLT 10%, up to 12 weeks, otherwise free	10.0	--

Continued--

Appendix table 4--Canadian tariffs, ad valorem equivalents, and quotas--Continued

Commodity	Tariffs and fees 1/	Ad valorem equivalent 2/	Import quotas
	Canadian dollars	Percent	
Lettuce	0.013/lb, NLT 15%, up to 16 weeks,	15.0	--
Cabbage	0.013/lb, NLT 15%, up to 20 weeks	15.0	--
Celery	0.02/lb, NLT 15%, up to 18 weeks	15.0	--
Grapes	Vinifera free; Labrusca 0.01/lb, 15 weeks, otherwise free	2.4	--
Apples	Free	Free	--
Apricots	0.025/lb, NLT 12.5%, 10 weeks, otherwise free	12.5	--
Pears	0.015/lb, NLT 12.5%, 24 weeks, otherwise free	12.5	--
Peaches	0.03/lb, NLT 12.5%, 14 weeks, otherwise free	12.5	--
Cherries, sweet	0.04/lb, NLT 12.5%, 10 weeks, otherwise free	12.5	--
Strawberries, fresh	0.03/lb, NLT 10%	10.0	--
Frozen	0.03/lb, NLT 10%	10.0	--
Raspberries	0.025/lb, NLT 7.5%, 6 weeks, otherwise free	7.5	--
Cantaloups	Free	Free	--
Plums	0.007/lb-.015/lb, NLT 12.5%	12.5	--
Other, high-value or processed:			
Tobacco:			
Flue-cured	0.20/lb	3.0	--
Unmanufactured	0.046/lb	2.0	--
Cigarettes	20.0%	20.0	--
Wine	0.167/gal, varies depending on type, proof; some provinces impose additional handling charge	8.0	--
Beer, malt beverages	0.033/liter	6.6	--
Sugar, refined	0.14/ 100 lb	10.0	--

-- = Not applicable. NLT = Not less than. NGT = Not greater than.

1/ Some tariffs are already on an ad valorem basis rather than a specific basis.

2/ Ad valorem equivalent based on 1985 import unit value.

3/ Countervailing duty of $0.85 per bushel imposed in November 1987.

Sources: (1, 34).

Appendix table 5--United States: Nontariff trade barriers and domestic policies for selected commodities

Commodity	Quotas, licenses, prohibitions, voluntary restraints health standards	Product standards, labeling, packaging, customs valuation, monopoly marketing	Temporary safeguard measures, antidumping, countervailing duties	Domestic programs	Binding barrier to trade
Grains and oilseeds:					
Wheat	Imports of any domestically price-supported commodity can be restricted if imports cause material damage or interfere with price-supported program (Section 22). Voluntary restraint on Canadian exports of wheat millfeeds to U.S.	-- -- --	Imports of any domestically price-supported commodity can be restricted if imports cause material damage or interfere with price-support program (Section 22).	Price support/loan rate target price/def.pmt. Acreage reduction programs Farmer-owned reserve P.L. 480/export assistance Credit policy	Section 22 authority
Barley	See wheat	--	See wheat	See wheat	See wheat
Oats	See wheat	--	See wheat	See wheat	See wheat
Corn	See wheat	--	Countervailing duty	See wheat	See wheat
Rapeseed	--	--	--	--	--
Rapeseed oil	--	Labeling requirement for FDA-approved oil on erucic acid level	--	--	Labeling requirement
Rapeseed meal	--	--	--	None	Tariff
Soybeans	See wheat	--	See wheat	Price support/loan rate, Credit policy	Section 22 authority
Soybean oil	--	--	--	None	Tariffs and fees
Soybean meal	--	--	--	None	--
All other vegetable oil, crude		--	--	None	Tariff
Livestock and products:					
Slaughter cattle	--	Veterinary certificate required; feeder cattle must meet standards for health.	--	May incur indirect tax or benefit from grain programs; credit policy	Product standards
Slaughter hogs	--	Veterinary certificate required; health standards for nonslaughter	Countervailing duty on Canadian hogs credit policy	Indirectly benefits from grain programs;	Countervailing duty

Continued--

Appendix table 5--United States: Nontariff trade barriers and domestic policies--Continued

Commodity	Quotas, licenses, prohibitions, voluntary restraints health standards	Product standards, labeling, packaging, customs valuation, monopoly marketing	Temporary safeguard measures, antidumping, countervailing duties	Domestic programs	Binding barrier to trade
Beef and veal	Meat Import Act 1979 countercyclical formula sets imports no less than 1.2046 bil.lbs.	Must comply with U.S. inspection req'mts, labeling req'mts, pass chemical residue tests, grading standards	--	None at processed level	Meat Import Law (some years)
Pork	--	Same as beef/veal	--	None at processed level	Product standards
Lamb and mutton	Meat Import Act sets quota for mutton only	Same as beef/veal	--	None at processed level	Meat Import Law for mutton
Chicken	--	Same as beef/veal	--	None at processed level	Product standards
Turkey	--	Same as beef/veal	--	None at processed level	Product standards
Eggs	--	--	--	None	Product standards
Fluid milk	Section 22 quotas Tariff rate quotas--	Imports only by permit; permit holder must pass U.S. sanitary inspection	--	Price support program Federal marketing orders Indirectly benefits from grain programs Credit policy	Section 22 quotas
Skim milk powder	Section 22 quotas	--	--	Purchased by government under the milk price support program	Section 22 quotas
Butter	Section 22 quotas	--	--	See skim milk powder	Section 22 quotas
Cheese	Section 22 quotas	--	--	See skim milk powder	Section 22 quotas
Fruits and vegetables:					
	Marketing orders on 13 specific fruits and vegetables	Marketing orders specify size, grade, quality, maturity restrictions			Seasonal tariffs
Potatoes	Marketing orders	--	--		Marketing order standards
Tomatoes	--	Marketing orders	--	--	Seasonal tariff
Onions	--	Marketing orders	--	--	Seasonal tariff
Carrots	--	Marketing orders	--	--	Seasonal tariff
Cucumbers	--	Marketing orders	--	--	Seasonal tariff

Continued--

Appendix table 5--United States: Nontariff trade barriers and domestic policies--Continued

Commodity	Quotas, licenses, prohibitions, voluntary restraints health standards	Product standards, labeling, packaging, customs valuation, monopoly marketing	Temporary safeguard measures, antidumping, countervailing duties	Domestic programs	Binding barrier to trade
Peppers	--	Marketing orders	--	--	Seasonal tariff
Other vegetables	--	Marketing orders	--	--	Seasonal tariff
Grapes	--	--	--	--	Seasonal tariff
Apples	--	--	--	--	Seasonal tariff
Apricots	--	--	--	--	Seasonal tariff
Pears	--	--	--	--	Seasonal tariff
Peaches	--	--	--	--	Seasonal tariff
Cherries	--	--	--	--	Seasonal tariff
Strawberries	--	--	--	--	Seasonal tariff
Raspberries	--	--	--	--	Seasonal tariff
Other fruits	--	--	--	--	Seasonal tariff
Other, high-value or processed products:					
Tobacco	Tariffs	--	--	Domestic quota/allotment program; price support	Tariff
Cigarettes	--	--	--	--	Tariff
Cigars	--	--	--	--	Tariff
Wine	--	--	--	--	Tariffs
Beer, malt beverage	--	--	--	--	Tariffs
Sugar	Sugar imports subject to quota; Canada is allotted 1.1% of global quota	--	Quotas on sugar blends from Canada	Domestic price support program uses import quota to protect support price.	Quota

-- = Not applicable.

Appendix table 6--Canada: Nontariff trade barriers and domestic policies

Commodity	Quotas, licenses, prohibitions, voluntary restraints	Product standards, labeling, packaging, customs valuation, health standards	Temporary safeguard measures, antidumping, countervailing duties monopoly marketing	Domestic programs	Binding barrier to trade
Grains and oilseeds:					
Wheat	Imports require license issued by Wheat Board, granted only when domestic supplies are inadequate	--	Wheat Board controls sale of food wheat, wheat exports in western Canada; controls access to handling system.	Canadian Wheat Board; Western Grain Stabilization Program; rail rate subsidy	CWB import licensing requirements
Barley	Imports require license issued by External Affairs Board, granted only when CWB determines supplies inadequate	---	Wheat Board controls exports and some feed sales; controls access to handling system	Canadian Wheat Board; Western Grain Stabilization Program; rail rate subsidy	External Affairs licenses for feed barley
Oats	Imports require license issued by External Affairs granted only when CWB determines supplies inadequate	---	Wheat Board controls exports and some feed sales; controls access to handling system	Canadian Wheat Board; Western Grain Stabilization Program; rail rate subsidy	External Affairs licenses
Corn	---	---	Countervailing duty on U.S. imports	Federal stabilization program	---
Rapeseed	---	---	---	Western Grain Stabilization Program; Rail rate subsidy	---
Rapeseed oil	---	---	---	Rail rate subsidy	---
Rapeseed meal	---	---	---	Rail rate subsidy	---
Soybeans	---	---	---	Federal stabilization plan	---
Soybean oil	---	---	---	---	Tariff
Soybean meal	---	---	---	---	Tariff
Animal products:					
Slaughter cattle	---	Veterinary certificate; feeders must meet standards for brucellosis, blue tongue, tuberculosis, anaplasmosis	---	Federal and provincial stabilization plans	Health standards on occasion
Slaughter hogs	---	Quarantined for 30 days for pseudorabies	---	Federal & provincial stabilization plans	Quarantine restrictions
Beef and veal	Meat Import Law 1982 established countercyclical meat import quota	Subject to health inspections	---	Federal and provincial stabilization plans	Meat Import Law (some years)
Pork	---	Subject to health inspections	---	Federal & provincial stabilization plans	---
Lamb and mutton	---	Subject to health inspections	---	Federal stabilization plan	---

Continued--

Appendix table 6--Canada: Nontariff trade barriers and domestic policies--Continued

Commodity	Quotas, licenses, prohibitions, voluntary restraints	Product standards, labeling, packaging, customs valuation, health standards	Temporary safeguard measures, antidumping, countervailing duties monopoly marketing	Domestic programs	Binding barrier to trade
Chicken	Global, supplementary quota; import permit required	Certification that processing conforms to Canadian standards, health certificate required	---	Federal supply management system	Import quota
Turkey	Global, supplementary quota; import permit required	Certification that processing conforms to Canadian standards, health certificate required	---	Federal supply management system	Import quota
Eggs, shell	Quota	Must conform with Canadian grading, packing, marketing and inspection requirement	---	Federal supply management system	Quota
Milk	Import licenses (generally not issued)	Provincial health and sanitary regulations on fluid imports	---	Federal/provincial supply management system	Import license; provincial regulations
Skim milk powder	Import permits granted only if unavailable from domestic sources	---	---	Federal supply management system	Import permits
Evaporated milk	Quota	---	---	Federal supply management system	Quota
Butter	Import licenses, granted when domestic production insufficient	---	---	Federal supply management system	Import licenses
Cheese	Global quota	---	---	Federal supply management system	Quota
Fruits and vegetables	Prohibition of consignments sales for imported produce	Canada Agr. Products Standards Act (CAPS) allows restrictions of imports based on standards, labeling, preparation, packaging	"Fast track" system for temporary surtax equal to difference between import price and trigger price	Marketing boards have jurisdiction over marketings of many fruits and vegetables	---
Potatoes	---	Phyto-sanitary certificate required	Antidumping duties on Washington State potatoes; protected by temporary surtax; countervailing duty on table potatoes from western U.S.	Federal stabilization plan	CAPS
Tomatoes	---	---	---	Federal stabilization plan	Seasonal tariff
Onions	---	---		Federal stabilization plan, storage programs	Seasonal tariff
Carrots	---	---	---	---	Seasonal tariff

Continued--

Appendix table 6--Canada: Nontariff trade barriers and domestic policies--Continued

Commodity	Quotas, licenses, prohibitions, voluntary restraints	Product standards, labeling, packaging, customs valuation, health standards	Temporary safeguard measures, antidumping, countervailing duties monopoly marketing	Domestic programs	Binding barrier to trade
Cucumbers	---	---	---	---	Seasonal tariff
Peppers	---	---	---	---	Seasonal tariff
Grapes	---	---	Mixing regulations limit foreign grape content of Ontario, BC, wines except when domestic supplies inadequate	Provincial marketing boards	Mixing regulations
Apples	---	---	---	Federal stabilization plan; provincial marketing board	CAPS
Pears	---	---	---	Federal stabilization plan	Seasonal tariff
Peaches	---	---	---	Federal stabilization plan	Seasonal tariff
Cherries	---	---	---	Federal stabilization plan	Seasonal tariff
Strawberries	---	---	---	Federal stabilization plan	Seasonal tariff
Other, high-value or processed products:					
Tobacco	---	---	---	Supply management proposed for flue-cured	Tariff
Cigarettes	---	---	---	---	Tariff
Wine	---	---	Provincial liquor control boards administer importation and distribution, discriminatory retail pricing by provinces	Provincial liquor control boards	Provincial policies
Beer, malt beverages	---	---	Provincial liquor boards administer importation and distribution	Provincial liquor control boards	Discriminatory provincial
Sugar	---	---	---	Tripartite stabilization plan	Tariff on refined sugar
General	---	Any prepackaged imported product subject to labeling and container requirements; e.g., English-French labels, metric sizes, etc.	---	---	---

-- = Not applicable.

Appendix table 7--U.S.-Canadian agricultural trade disputes

Commodity	Complainant	Nature of dispute	Date	Status/Settlement
Wine	United States Section 337	Handling of imported wines by provincial liquor boards; differences in markup between domestic and imported products; unwillingness to carry U.S. products.	1979	During the Tokyo Round, Canada agreed to eliminate the discriminatory practices of the provincial liquor boards as part of a reciprocal concessions package which included elimination of the "wine gallon" method of tax assessment of Canadian whiskey by the United States.
	United States Section 301	In 1981, several provincial liquor boards established a special handling charge for imported wines as part of a program to assist Canadian wine producers. The U.S. argued that their handling charge violated the Tokyo Round commitment.	1981-83	In 1983, Canada partially recognized a further complaint by the United States and agreed to eliminate the special handling charge.
	United States Section 301	In July 1984 new restrictions were implemented by the provincial liquor boards in the form of increased markup differentials between domestic and imported wines.	1984-87	The U.S. complained, citing violations of the 1979 GATT commitment. Canada offered to phase out restrictions by 1987; U.S. refused offer, and requested immediate removal of barriers. Canada considered its action not unfair, citing differential distribution costs between domestic and imported wines, and thus not in violation of GATT commitment. Bilateral free trade talks emphasized issue of access of U.S. wines to Canadian market; agreement in principle provided for "more equal" treatment of U.S. wines in Canada.
Yellow onions	United States Section 301	A temporary surtax was imposed on yellow onions imported into Western Canada as part of a 1979 "fast-track" import relief system for certain perishable agricultural commodities. The U.S. has questioned the consistency of this surtax system with GATT commitments.	1982-83	In 1983, the U.S. sought compensation in the form of duty relief on agricultural products in an amount equal to the surtax. The temporary surtax expired without renewal in March 1983. The action on yellow onions remains the only use of this surtax to date. The U.S. maintains that the surtax is not consistent with GATT safeguard procedures, and that it will challenge the surtax formally in the GATT if it is used again without evidence of increased imports. Both countries agreed to drop the issue of compensation as a result of the trade discussions.
Yellow onions	Canada Antidumping	British Columbia Vegetable Marketing Commission filed complaint that U.S. was dumping fresh yellow onions into BC at price below cost of production, eroding prices in BC and injuring industry.	1986-87	In 1986, Revenue Canada made a preliminary determination of dumping and levied a provisional antidumping duty of (average) 39%. In 1987, the Canadian Import Tribunal found that dumping had caused, or was likely to cause, injury to Canadian producers.
Potatoes	United States Antidumping	The relatively low value of the Canadian dollar, coupled with a Canadian program to improve the certification and quality of potatoes from eastern Canada intensified competition between Canadian and Maine potatoes. In 1983,the Maine Potato Council filed a petition alleging that potatoes from Canada were being sold in the U.S. at less than fair value. A temporary duty of 17.9 percent was imposed on imports of round white potatoes imported into the Northeast from Canada.	1981-83	In December 1983, the U.S. International Trade Commission (ITC) ruled that no dumping-induced injury had taken place. The cause of the difficulties was determined to be other than imports and the temporary duty on Canadian potatoes was lifted. In 1984, the Maine Potato Council appealed the ITC ruling with the U.S. Court of International Trade.
	Canada Antidumping	Revenue Canada initiated an antidumping investigation dealing with exports of stripper-type potatoes from Washington State into British Columbia.	1983-84	The Canadian antidumping tribunal announced in 1984 a final determination of injury to BC producers from the dumping of Washington stripper potatoes. A countervailing duty was applied.

Continued--

Appendix table 7--U.S.-Canadian agricultural trade disputes--Continued

Commodity	Complainant	Nature of dispute	Date	Status/Settlement
		Another Canadian anti-dumping investigation was initiated against U.S. potato exports into British Columbia, excluding seed potatoes or strippers from Washington.	1985-86	Canadian Import Tribunal determined that dumping of U.S. potatoes was injuring BC potato industry; Revenue Canada determined antidumping margin equal to 32% on table potatoes from Washington, Oregon, Idaho, and California.
Red raspberries	United States Countervailing duty and antidumping	Increased quantities of red raspberries from Canada prompted both antidumping and countervailing duty petitions from interested parties in the northwestern United States.	1985	U.S. antidumping duty investigation resulted in a duty of 2.4%. The countervailing duty case was suspended on Jan. 9, 1986 after British Columbia agreed to excude raspberries from coverage under their farm income insurance program.
Sugar	United States Tariff schedules	U.S. imposes individual country quotas on sugar imports. Canada declines to accept its quota initially. Canada is allotted 1.1% of total quota.	May 1982	No specific Canadian action.
	Canada Antidumping	U.S. established a special re-export program for sugar that was imported in addition to quota sugar, using usual drawback privileges. Canada initiates antidumping investigation.	Oct. 1983-July 1984	Canadian Import Tribunal found no evidence of dumping. Case is concluded.
	United States Section 22	As the gap between U.S. and world sugar prices grows, imports of sugar-containing products from Canada increase sharply.	June 1983-present	Quotas are placed on various Canadian sugar-containing products and blends. Canada is seeking compensation through the GATT.
Livestock	United States Canada	During the 1980 Tokyo Round negotiations, the U.S. and Canada sought to harmonize import duties on a number of items with significant two-way trade, including live cattle. However, the U.S. offer of concessions was contingent upon the completion of successful negotiations with Mexico, traditionally the principal supplier of live cattle. When Mexico decided not to join the GATT, the U.S. became unwilling to bind in the GATT the duty on live cattle.	1980	Nov. 1980, the U.S. offered to reduce duties on live cattle imports on an unbound basis retroactive to Jan. 1980. Should the U.S. increase the rate of duty above the agreed-upon level, certain retaliatory measures would be available to Canada. Canada accepted the U.S. decision not to bind the duty and implemented the Canadian tariff concessions on live cattle in Dec. 1980.
	Canada	South Dakota banned the importation of foreign livestock which may contain the antibiotic chloramphenicol, a drug banned by the U.S. Food and Drug Administration. Canadian livestock producers called the ban an excuse to keep Canadian pork and beef off American markets.	1985	Following an initial decision by the Manitoba government to ban the drug, the Canadian Federal Health and Welfare Agency banned the use of chloramphenicol.
Hogs	United States Countervailing duty	A boom in Canadian live hog and pork exports to the U.S. in 1983 and 1984 caused the U.S. National Pork Producers' Council to call for an ITC investigation into Canadian stabilization programs for hogs.	1983-85	In 1985, the U.S. ITC ruled that, due to substantial subsidization, Canadian live hog imports injured the U.S. hog industry, while Canadian pork imports did not injure pork packers. A countervailing duty on Canadian hogs coming into the U.S. was imposed. Canada maintained that subsidies did not affect the U.S. industry. U.S. producers contested the distinction made between hog raising and pork packing as two distinct industries. Both sides appealed; in 1987, the U.S. Court of International Trade sent the decision back to the ITC, which upheld the countervailing duty.

Continued -

Appendix table 7--U.S.-Canadian agricultural trade disputes--Continued

Commodity	Complainant	Nature of dispute	Date	Status/Settlement
Fresh-cut flowers	United States Antidumping and countervailing duty	Petition brought by Floral Trade Council, a U.S. industry group, against imports of fresh cut flowers from Colombia, Canada, Costa Rica, Ecuador, Israel, the Netherlands, and Peru.	1986-87	The U.S. Department of Commerce (USDC) made an affirmative finding on antidumping duty investigations. Preliminary antidumping duty imposed on Canadian carnations at rate of 11.3%. In late 1987, USDC reached preliminary conclusion that U.S. imports were being subsidized. Because Canada is signatory to GATT subsidies code, ITC must find that imports also injure the domestic industry before a countervailing duty can be imposed on imports from Canada.
Millfeeds	United States	Canada's new transportation law (Western Grain Transportation Act) allowed grain products to be shipped to U.S. border at subsidized freight rates. U.S. millers complained that this gave Canadian millfeeds an unfair advantage in the Pacific Northwest market.	1985	Voluntary restraint agreement: Canada agreed to reduce exports of millfeed products to the United States.
Corn	Canada Countervailing duty	Ontario Corn Producers Association brought CVD case against imports of grain corn from U.S., claiming that U.S. commodity programs provided subsidies to U.S. corn producers and thus to grain corn exported to Canada, resulting in lower market prices and increased government program costs.	1986-87	Revenue Canada determined that corn imports from U.S. were being subsidized and provisional duty imposed. Canadian Import Tribunal inquiry determined that imports of U.S. corn caused material injury to Canadian corn producers, and assessed CVD of 85¢/bushel on most imports of grain corn. The Canadian Import Tribunal has recommended the duty be lowered citing possible injury to domestic corn users.
Softwood lumber	United States Countervailing duty	Softwood lumber producers filed a countervailing duty petition in Oct. 1982, charging that Canada's subsidies to softwood lumber industry, particularly the Canadian practice of selling stumpage at an unfairly low price, were injurious to the U.S. industry.	1981-83	In 1983, USITC initially ruled that Canadian lumber was likely cause of injury to U.S. industry; USDC dismissed case, stating that there was no evidence that subsidy existed. USDC also ruled that stumpage fees were not countervailable because they were not specific to lumber industry alone.
		Coalition re-filed in 1986, following USDC policy change that certain government programs found to benefit "dominant user" may be constitute a subsidy and thus be countervailable.	1986	USITC found that Canadian lumber imports injured U.S. producers; USDC found lumber exports subsidized; set countervailing duty equal to average subsidy margin of 15%. After protests by Canadian Government, a negotiated settlement resulted in Canada imposing 15% export tax in lieu of CVD.

☆U.S. GOVERNMENT PRINTING OFFICE:1988-201-089:80116/ERS