

Harmonization and Convergence of Canadian and U.S. Grains and Oilseeds Policies: 1985-1996

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This paper was originally delivered at the annual workshop "Understanding Canadian-U.S. Trade Disputes" in the spring of 1997.

The United States and Canada share the longest common border and largest bilateral trading relationship in the world. Recent trading agreements—CUSTA, NAFTA and WTO—have enhanced trade by encouraging elimination of many remaining trade barriers. However, one cause for concern about the effectiveness of these trade agreements has been the frequency of Canadian-U.S. trade disputes over bilateral wheat and barley trade arrangements and trade flows. To some extent, these disputes have arisen because of differences in and lack of harmonization between the domestic and trade policies implemented by the two countries, although other political factors have also clearly been important causes of these disagreements.

Since 1986, many dimensions of the agricultural policies of both countries have undergone radical changes, perhaps especially with respect to small grains and oilseeds. Here we provide assessments of whether important aspects of the two countries' domestic and trade grains and oilseeds have converged towards harmonization since implementation of the Canada-U.S. Free Trade Agreement in 1989. It should also be noted that many of the changes in each countries' agricultural policies cannot be attributed to free trade agreements. Rather, they reflect government responses to budgetary pressures, commitments under international trade agreements, changes in the relative political importance of rural and urban voters, and other factors.

Changes in General Levels of Support

Producer Subsidy Equivalents are indicators of the proportion of total revenues from sales of a crop resulting from government subsidies and other income support policies such as tariffs. U.S. producer subsidy equivalents for wheat and other grains have declined substantially from their 1993–1995 average levels as a result of the decoupling of income support payments under the 1996 FAIR Act. Similarly, the average wheat, other grains and oilseeds producer subsidy equivalents reported for Canada over the same period overstate current producer subsidy equivalents because of the elimination in 1995 of Canadian grain transportation subsidies. Thus, generally, levels of government support for wheat and small grains have fallen quite considerably both in the U.S. and in Canada, indicating some movement in the direction of policy harmonization for these commodities.

Farm Income Supports

Over the past twenty years, farm income support in Canada has been delivered through several different programs. Increasing budgetary pressures and a

greater focus on market orientation led to the elimination of the Gross Revenue Insurance Program and the western grain transportation subsidies by 1996. The only current direct income support program is the Net Income Stabilization Account (NISA), which provides modest subsidies on interest rates paid to farmers on moneys they themselves pay into an income stabilization account.

In the United States during the 1980s and early 1990s, changes were made to the deficiency payment/loan rate farm income support programs for wheat and small grains that tended to reduce the size of government payments to wheat and barley producers. Then, in 1996, the FAIR Act changed the entire farm income support mechanism, largely decoupling direct government payments to producers of those crops from current production decisions.

In summary, the distortionary effects of Canadian and U.S. income support programs for wheat and other grains have been substantially curtailed, especially over the past three years. Similarly, the distortionary effects of Canadian income support programs for oilseeds have also been reduced towards the relatively modest levels associated with the U.S. oilseeds program, which has changed relatively little over the past ten years. There has been convergence in this area of farm policy.

Grain Marketing and Export Subsidy Programs

To the extent that U.S. export subsidy programs have become subject to GATT disciplines and funding for the U.S. export enhancement program has been reduced, the U.S. has moved towards a less distortionary set of trade policies for grains and oilseeds. The removal of freight subsidies has also moved Canada's grains trade policy in a less distortionary direction. However, Canada's export marketing board policy for wheat and barley (operated through the Canadian Wheat Board) has not changed in recent years. With respect to export credit guarantees, both countries operate roughly comparable programs, although under the GSM-103 program, the U.S. is able to offer somewhat longer term (3-7 year) lines of credit. These programs have been subject only to relatively modest changes over the past ten years. On balance, there has probably been less harmonization of U.S. and Canadian export policies than of the two countries' income support programs. Thus, export policies, particularly the existence of the U.S. export enhancement program and the marketing powers of the CWB, will continue to be part of bilateral trade issues.

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Table 1. Pertinent U.S. and Canadian Policies

Title	Acronym	Year Initiated	Country
General Agreement on Tariff and Trade	GATT	1947	Both
Uruguay Round Agreement of the GATT	GATT	1995	Both
Agriculture and Consumer Protection Act	ACPA	1973	U.S.
Western Grain Stabilization Program	WGSP	1976	Canada
Export Credit Guarantee Programs	GSM-102	1980	U.S.
	GSM-103	1985	U.S.
Western Grain Transportation Act	WGTA	1983	Canada
Export Enhancement Program	EEP	1985	U.S.
Conservation Reserve Program	CRP	1985	U.S.
Food Security Act	FSA	1985	U.S.
Canada-U.S. Trade Agreement	CUSTA	1989	Joint
Food, Agriculture, Conservation, and Trade Act	FACT	1990	U.S.
Integrated Farm Management Program	IFMP	1991	Canada
Gross Revenue Insurance Program	GRIP	1991	Canada
Net Income Stabilization Account	NISA	1991	Canada
Permanent Cover Program	PCP	1992	U.S.
North American Free Trade Agreement	NAFTA	1994	Joint
Federal Crop Insurance Reform Act	FCIRA	1994	U.S.
Federal Agricultural Improvement and Reform Act	FAIR	1996	U.S.

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INTRODUCTION

The United States and Canada share the longest common border and largest bilateral trading relationship in the world. Recent trading agreements—Canada-U.S. Trade Agreement (CUSTA), North American Free Trade Agreement (NAFTA), and the General Agreement on Tariffs and Trade (GATT)—hold the promise of further enhancing trade by encouraging elimination of many remaining trade barriers. However, one cause for concern about the effectiveness of these trade agreements has been the frequency of Canadian-U.S. trade disputes over bilateral wheat and barley trade arrangements and trade flows. To some extent, these disputes have arisen because of differences in the domestic and trade policies implemented by the two countries, although other political factors have also clearly been important. At least in part, therefore, the likelihood that there will be future contentious trade disputes between Canada and the United States hinges on the extent to which the two countries continue to pursue different domestic and trade policies with respect to agriculture.

Large-scale set-aside and export subsidy programs for grains implemented on the U.S. side of the border have tended to raise U.S. prices, encouraging flows of grain from Canada into the United States. The monopoly management of wheat and barley exports by a government-created export marketing board—the Canadian Wheat Board—and, prior to 1995, large transportation subsidies for Canadian small grains have also been sources of controversy in North American grain markets and fuel for international trade disputes. Programs such as these affect market prices, and thus the level of production. For this

To some extent, wheat and barley trade disputes between the United States and Canada have arisen because of differences in domestic and trade policies implemented by the two countries.

Many of the changes in U.S. and Canadian agricultural policies are not due to the Canada-U.S. Free Trade Agreement, but to budget pressures and commitments under other trade agreements.

reason they are viewed as distorting markets. An assessment of the movement toward convergence and harmonization of Canadian and U.S. agricultural policies is thus of particular interest for U.S. and Canadian policymakers and farmers. Policies are harmonized when they are similar in purpose and in form. The process of moving toward harmonized policies is called convergence and can be thought of as a continuum. Some level of convergence can be achieved even when policies continue to be different if the level of government intervention, and its market-distorting effects, is reduced.

This paper examines changes in U.S. and Canadian grains and oilseeds programs over the period 1985 to 1996 and provides an assessment of whether different aspects of the two countries' domestic and trade grains and oilseeds policies have converged toward harmonization since implementation of the Canada-U.S. Free Trade Agreement in 1989. However, many of the changes in each country's agricultural policies discussed in this study cannot be attributed to that agreement. Most adjustments that have taken place since 1988 reflect government responses to budgetary pressures, commitments under other international trade agreements (GATT and NAFTA), changes in the relative political importance of rural and urban voters, and other factors. World markets have played a large role in determining grain prices in Canada's export-oriented grains and oilseeds sectors, affecting how much grain is produced, consumed, and exported. Both sectors have also been the recipients of many government programs designed primarily to enhance and stabilize farm income, particularly during periods of low prices. As in Canada, small grains, feed grains, and oilseeds (wheat, barley, oats, corn, soybeans, and other oilseeds) are fundamentally important components of the U.S. agricultural sector. For both countries, exports are an important component of the aggregate demand for these commodities, although to a greater degree in Canada. Producers of these commodities in both Canada and the United States have benefited directly or indirectly from a multitude of government programs in the past sixty years.

In Canada and the United States, as in the European Union and elsewhere, producers of these commodities have encountered substantial changes in government programs that support agriculture in general and grain and oilseed producers in particular. In the United States, the provisions of the Federal Agricultural Improvement and Reform (FAIR) Act of 1996 have altered the mechanisms by which many U.S. farmers receive subsidies, largely decoupling them from both current price levels and current production decisions. In Canada, grain and oilseed producers have experienced substantial reduction in levels of support derived from income and transportation subsidies over the period 1991–1996.

A GENERAL OVERVIEW OF COMMODITY-SPECIFIC SUPPORT LEVELS: PRODUCER SUBSIDY EQUIVALENTS

Aggregate measures of intervention such as producer subsidy equivalents are useful indicators of the general degree to which commodity-specific policies in different countries are converging toward harmonization. Figures 1, 2, and 3 present average producer subsidy equivalents for the United States and Canada for the periods 1986–1988, 1990–1992, and 1993–1995, for wheat, other grains, and oilseeds. Between 1986–1988 and 1993–1995, the producer subsidy equivalents in Canada for each of the three commodity groups declined by about half, from 51 to 24 percent for wheat, from 60 to 28 percent for other grains, and from 31 to 17 percent for oilseeds. In the United States, during the same period, the producer subsidy equivalent for wheat declined by about one-third, from 54 to 36 percent, a smaller proportional decrease from about the same initial level as in Canada. For other grains, the U.S. producer subsidy equivalents declined by about half from 42 to 20 percent, a similar proportional decrease to that implemented in Canada. For oilseeds, the United States producer subsidy equivalents remained constant at the relatively low level of about 10 percent. Producer subsidy equivalents for U.S. wheat and other grains have almost certainly declined substantially from their 1993–1995 average levels as a result of the decoupling of income support payments under the 1996 FAIR Act. Similarly, the average producer subsidy equivalents for wheat, other grains, and oilseeds reported for Canada have also declined due to the elimination of Canadian grain transportation subsidies in 1995.

The data presented in Figures 1-3 indicate that distortionary income support programs for wheat and other grains appear to have been curtailed in both countries and by somewhat similar amounts. For oilseeds, Canadian income transfer programs have been substantially reduced and appear to have converged toward the modest levels of support provided to U.S. oilseeds producers.

Distortionary income support for wheat and other grains has been curtailed in both countries and by approximately equal amounts.

FARM INCOME SUPPORTS

Canadian Farm Income Supports

Farm income support in Canada has been delivered through several different programs. In the last decade alone, the federal government has operated four different income stabilization programs and made three major ad hoc payments to producers. The picture is further complicated by provincial variations in program designs. The only current direct income support program is the Net Income Stabilization Account (NISA). The predecessors to this program were the Agricultural Stabilization Act, the Western Grain Stabilization Program (WGSP) and the Gross Revenue Insurance Program (GRIP).

U.S. and Canadian Producer Subsidy Equivalents for Grains and Oilseeds, 1986–1995

Figure 1.

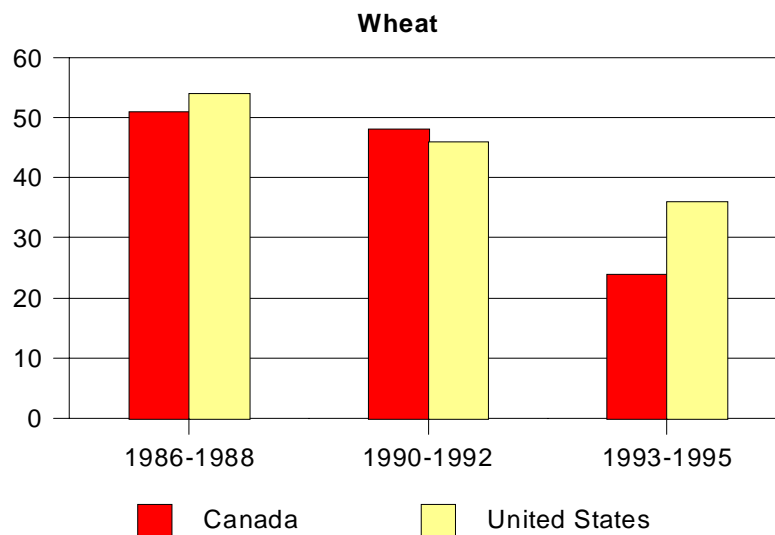


Figure 2.

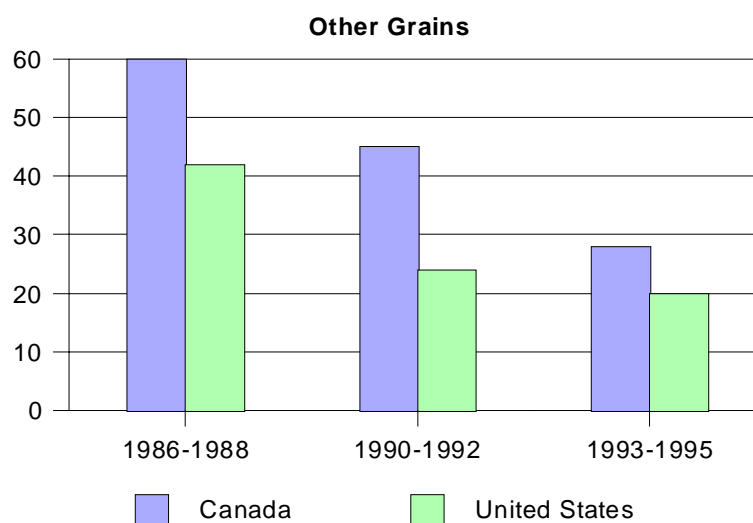
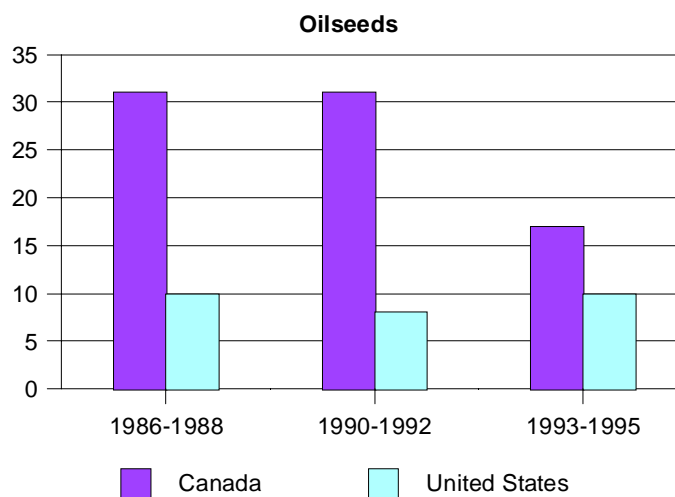


Figure 3.



The WGSP, introduced in 1976, was designed to stabilize income in the western Canadian grain sector. Producers and the federal government contributed to a buffer fund that made payments to producers when aggregate cash flows in the grain sector fell below a five-year moving average. A second trigger, added in 1982, resulted in payments whenever net cash flow per marketed ton fell below the previous five-year average (Miranda, Novak, and Lerohl 1994). By the time the WGSP was eliminated, the fund had accumulated a large deficit and the income trigger values had fallen to very low levels.

The WGSP was replaced by two new programs: the Gross Revenue Insurance Program and the Net Income Stabilization Account. The GRIP guaranteed a minimum gross revenue for producers by giving them the option of insuring a target revenue per acre for virtually any grain or oilseed crop. The insured level of gross revenue equaled each producer's long-term average yield for each crop multiplied by a target price for that crop. A producer received crop specific payouts when his actual production multiplied by the crop year average market price was less than the producer's guaranteed revenue. The producer paid 33 percent of the premium cost of the program, the federal government 42 percent, and the provincial government 25 percent. After large payouts during the 1991–1992 crop year, the GRIP paid much smaller amounts in the 1992–1993 crop year as grain prices rose. Lack of political support for the program, combined with more restrictive fiscal situations at both the provincial and federal level, resulted in the elimination of the GRIP program for the entire country by 1995–1996.

The NISA program, introduced in 1991, allows producers to contribute 2 percent of qualifying grain sales to a NISA account in the producer's name. This contribution is matched by two contributions of 1 percent each from the federal and provincial governments. The NISA account earns a subsidized interest rate of prime plus 3 percent. A producer may withdraw funds from the NISA account if either net income falls below \$10,000 (or family income falls below \$20,000) or the current year's gross margin (gross revenue minus cash expenses) falls below the previous five-year average. The government contribution of 2 percent is equivalent to an increase of 2 percent in the expected price of all grains. Given the small amount of the subsidy and the broad nature of the impact on production, the effect of NISA is currently small.

NISA may become more important in the future. Many policymakers view an expanded NISA that includes all agricultural commodities as the only viable Canadian income safety net program. Originally,

In the last decade alone, the Canadian federal government has operated four different income stabilization programs and has made three major ad hoc payments to grain producers.

contributions to the program were expected to increase as the GRIP was eliminated but in fact additional funds have not been forthcoming, partly because of budgetary pressures.

U.S. Farm Income Supports

The 1973 Agriculture and Consumer Protection Act established the institutional framework for U.S. price and income support programs for grains which were implemented in the 1980s and 1990s. The key elements of agricultural support policies for major “program” commodities—including wheat, corn, grain sorghum, barley, oats, and rice—were target prices, deficiency payments, and base acres. The 1973 Act also maintained price supports for each crop through nonrecourse loan programs.

U.S. grain producers participating in farm programs now receive market transition payments that are almost completely independent of their current production decisions.

In contrast, the 1996 FAIR Act created a much simpler system of transfer payments for U.S. grains producers. While nonrecourse loan programs remained in place, price-based deficiency payments were replaced by fixed market transition payments over the following seven-year period, 1996–2002. Participating producers now receive market transition payments that are almost completely independent of their current production decisions. Farmers can plant any crops they choose, other than fruits and vegetables, on land eligible for production that is not restricted by commitments under other programs, such as the Conservation Reserve Program (CRP).

Several aspects of the structure and historical development of agricultural income support programs over the 1973–1996 period are of particular interest in evaluating the degree to which the 1996 FAIR Act represents a radical change in U.S. grains policy and a significant movement toward policy harmonization with Canada. The most important issue in this context is the decoupling of income support payments from actual production decisions. From the outset, the farm program established in 1973 decoupled government income transfers for program commodities from output levels. However, prior to the 1985 Food Security Act, production decisions in one year could affect deficiency payments by altering both base acres and assigned yields in subsequent years. Under the 1985 Act, a farm’s base acreage was set equal to the simple arithmetic average of the acreage planted, or considered planted, to the crop in the previous five years. If a producer overplanted his base, he was ineligible for payments that year. This change substantially reduced the potential for building base because of the relatively stiff penalty it placed on producers who overplanted their base acreage.

Prior to the 1985 Act, payments to farmers could also increase over time as average crop yields increased in response to improvements in technology and/or farm input decisions. The 1985 Act essentially froze program yields at 1985 levels. This meant that at the farm level most links between production decisions and subsequent deficiency-payment income transfers had been severed by 1986. Thus, the 1996 FAIR Act can be viewed as simply completing the decoupling process for production decisions and deficiency payments that began in 1973. The Fair Act ended the system of base acres that required farmers to actually plant crops in order to receive government transfer payments. Moreover, the decoupling process embedded in the 1996 Act, while not a radical departure from the trend line in U.S. grain policy, is a substantial shift toward institutional harmonization between U.S. and Canadian grain programs. The decoupled market transition payments that U.S. grain farmers receive give them a guaranteed income stream that many Canadian grain producers would like to have, but the payments do not act as substantive distortionary incentives for U.S. producers' production decisions. Therefore, they do not present a problem from the perspective of agricultural policy harmonization.

The U.S. soybean and oilseeds income support programs are quite different than the programs for food and feed grains. Under the 1977 Food and Agriculture Act, soybean producers were provided with a mandated nonrecourse loan (guaranteed minimum price) program for the first time. Under the 1980 and 1985 Farm Bills, loan rates or minimum support prices were established at 75 percent of the Olympic average (which drops the lowest and highest market prices) of market prices over the previous five years. In 1990, the nonrecourse loan program was extended to the remaining oilseed crops including canola, safflower seed, flaxseed, mustard seed, sunflower seed, and sesame seed (Halcrow 1984). In addition, a marketing loan program was introduced for soybeans and all other oilseeds. However, there has been no target price-deficiency payment program for oilseeds. The 1996 FAIR Act continues both the nonrecourse loan rate and marketing loan programs for soybeans and other oilseeds. The loan rate for soybeans will not be less than \$4.92 per bushel or more than \$5.26 per bushel, but otherwise will equal 85 percent of the five-year Olympic average of market prices. Minimum and maximum loan rate prices for other oilseeds were reduced very slightly, by about 3 percent, but otherwise no major changes were made to the loan rate and marketing loan programs for other oilseeds. Thus, in the case of oilseeds, there has been very little change in U.S. oilseeds income and price support programs. However, the levels of support provided to U.S. oilseeds producers under these programs have been modest.

The decoupling of payments to U.S. grain producers in the 1996 FAIR Act is a substantial shift toward institutional harmonization between U.S. and Canadian grain programs.

Table 2. U.S. and Canadian Grain Policies, 1985–1996

Policy	U.S. 1985	Changes 1985-1996	Canada 1985	Changes 1985-1996	
Farm Inputs	Farmer's Home Administration Loans, Investment Tax Credits	Reform of the Farm Credit System. Abolition of Investment Tax Credits under the 1986 Tax Reform Act	Farm Credit Corporation Active Lender, Road Tax Rebates, Investment Tax Credits	Investment Tax Credits removed, Farm Credit Corporation put on a more commercial basis	
Crop Insurance	Basic Coverage, simple program	Expanded program, large program loss to premium ratios, 1990–1993. Premiums raised in 1994 but overall subsidies increased during 1990s	Generally available, 50% premium plus administration subsidy	More coverage options, individual coverage adjustment added, large deficit 1987–1989, 1997 debt write-off, simple program offered	
Income Support: Grains	1985 Food Security Act, program acres, deficiency payment	1996 "FAIR Act" represents an end to coupled income support	WGSP area revenue support	GRIP: 1991–1995, ad hoc drought and expost acreage payments 1988–1991, NISA: 1991 to the present	
Income Support: Oilseeds	1985 Food Security Act, marketing loan provisions. Program crop base acres and cross compliance affect oilseed acres	1990 FACT gave 15% flex acres. Some marketing loan provisions in 1996 FAIR Act	WSGP area revenue support. Little impact on oilseeds	GRIP: individual gross revenue insurance 1991–1995, ad hoc drought and expost acreage payments 1988–1991, NISA: 1991 to present	
Transportation	Support for inland water-ways. Railways and trucking deregulated	Very little change	WGTA provided 70% of the cost of rail transport. Government support to ports	WGTA removed. Freight rates regulated until 1999 at average rail cost. Greater cost recovery in ports	
Export Policy: Grains	EEP introduced	EEP used extensively during low-price periods. EEP still in budget	CWB control of exports of wheat, barley, and oats	1989 oats removed from CWB control	
Export Policy: Oilseeds	Oilseeds traded with very little support or EEP	Marketing loan and EEP available	Oilseeds traded in the open market	Very few changes	
Export Promotion	PL 480 Export credit guarantees, and market promotion programs	Very little change	Export credit guarantees, CEDA, some product development work	Very little change	
Research	Research in grains and oilseeds funded through the government	Some check-off funds	Research government funded with the exception of the Canola Council of Canada	More producer check-off funding, hybrid research beginning in Canola, matching grant programs	
Land Retirement	Large ARP; CRP introduced, Swamp and Sodbuster provisions	1996 FAIR Act eliminated ARPs, CRP continues	Permanent Cover Program, 1991: removed 1 million acres erodible acres, 10-year, mostly 21-year contracts, grazing permits	Funding for PCP ended in 1993 but land remains out of cultivation	

Economic Convergence		Institutional Convergence
	Some convergence, but assessments are difficult because of the complexity of the tax codes of the two countries.	Some convergence but the situation is complex because of issues associated with depreciation.
	Some convergence, but difficult to measure as both programs are complex, vary by commodity, and vary by province in Canada.	The U.S. uses private agents, Canada uses public. Both programs are addressing actuarial soundness.
	Income transfers to Canadian grain producers have declined more than to U.S. grain producers. Substantial convergence has occurred in economic incentives for production.	Both countries have moved to decoupled grain programs representing a substantial change in policy.
	For oilseeds, only small changes have been made to the modest U.S. price support program. Canadian policies have converged to modest support levels.	Little change.
	Substantial convergence. Freight rates in Canada now similar to U.S. competitive rates.	The Canadian rail system is still heavily regulated. Potential convergence in 1999.
	Some convergence with higher prices and less EEP. Both EEP and CWB create price discrimination.	CWB is very different than multinational trading companies. Convergence in oat policies.
	Policy convergence had largely occurred by 1985 for oilseeds.	Institutions very similar in both countries. In Canada, large grain cooperatives play an active role in the export market.
	Very little convergence although U.S. and Canadian policies have been very similar and probably have little economic impact.	Some negotiation of 3 year (Canadian) versus 10-year (U.S.) loans.
	Little change.	Perhaps some divergence with the growth of check-off funds and private research in Canada.
	The elimination of the ARP removes U.S. annual programming. U.S.CRP is larger than Canadian PCP program.	Both policies were voluntary programs which had the goal of taking fragile land out of production, which suggests some convergence in policy.

Harmonization of Farm Income Support

The extent to which Canadian and U.S. income support programs for wheat and other grains distort production has been substantially curtailed over the period 1990–1996. Similarly, the distortionary effects of Canadian income support programs for oilseeds have also been reduced toward the relatively modest levels associated with the U.S. oilseeds program. Although income support programs for these commodities have not been harmonized, there has been economic convergence in that producers of these commodities in both countries operate in policy environments that force them to rely more heavily on market signals.

**Environmental policy
has had very limited
effects on the grains
and oilseeds sectors of
western Canada.**

LAND RETIREMENT AND ENVIRONMENTAL POLICY

Canadian Land Retirement and Environmental Policy

Environmental policy has had very limited effects on the grains and oilseeds sectors in western Canada, having largely been restricted to programs that deal with soil depletion and the loss of wildlife habitat. Many of the soil erosion problems have been diminished by the widespread adoption of zero and minimum tillage practices. Government policy has limited cultivation and retired cultivated land into noncultivated uses. The government controls large acres of fragile lands and leases them to producers only for the purposes of livestock grazing. This has restricted the cultivation of land in southwest Saskatchewan and southern Alberta.

The Permanent Cover Program (PCP), which operated between 1992 and 1994, paid producers to take land at a high risk of erosion or salinization out of grain production and place it into forage or pasture production. Payments included a \$20/acre preliminary payment, which was intended to offset the cost of seeding the targeted areas, and a final payment, of \$20 or \$50/acre for a ten- or twenty-one-year contract respectively, made to the farmer once the viability of the permanent crop had been verified and the contract signed. Such contracts, which included an easement on the land title, bound the farmer to ensure maintenance of the permanent cover for the specified time. It must be emphasized that this did not mean that the land could not be put into productive uses. The contract only prohibited the farmer from plowing the permanent cover crop under and planting annual crops. Currently, about one million acres are enrolled in the PCP. The effect of this program on grain is modest given that marginal lands were targeted for the program.

Finally, it should be noted that the North American Waterfowl Management Plan, a joint conservation program between the government and the private sector, has procured wetland and nesting habitat. Under the program, about 150,000 acres of land have been retired permanently from cultivation.

U.S. Land Retirement and Environmental Policy

An important difference between U.S. and Canadian grains and oilseeds programs was removed when annual acreage reduction programs were eliminated under the 1996 FAIR Act. Grain and oilseed farmers now have almost complete control over crop planting and production decisions. Under previous legislation, to be eligible for deficiency payments, a producer had to participate in the annual acreage reduction program. Acreage reduction programs were implemented to control the costs of deficiency payments and nonrecourse loan outlays by restricting the amount of production eligible for payment, by keeping prices high, and by taking land out of production. Higher prices also lowered the deficiency-payment rate. However, by the late 1980s, the role of acreage reduction programs in controlling supplies of wheat and feed grains had diminished considerably, in part because of rundowns in government inventories and higher prices, but mainly because of enrollment in the Conservation Reserve Program (CRP), a voluntary ten-year paid acreage retirement program initiated by the 1985 Act. By the early 1990s, the CRP, ostensibly an environmental program, had resulted in the long-term retirement of over 40 million acres of land, substantially reducing the need for annual acreage reduction programs for wheat and other grains. Thus, the abolition of the acreage reduction program under the provisions of the 1996 FAIR Act is likely to have little impact on U.S. farm level production of grains and oilseeds. However, the removal of acreage reduction programs from the inventory of U.S. farm programs represents a step toward institutional policy harmonization with Canada for grains and oilseeds.

Other U.S. environmental policies have included a plethora of programs such as the Sodbuster and Swampbuster programs, the Wetlands Reserve Program, the Environmental Quality Incentive Program, and the Integrated Farm Management Program, all of which existed prior to 1996. Under the 1996 Act, small changes have been made to some of these programs and some new initiatives have been implemented, all with relatively modest funding levels, except the Environmental Quality Incentive Program which was funded at \$1.3 billion to be expended over seven years. None of these programs are explicitly targeted at grain and oilseed producers, although all such producers are eligible for benefits under most of the programs.

The removal of acreage reduction programs from the inventory of U.S. farm programs represents a step toward institutional policy harmonization with Canada for grains and oilseeds.

Harmonization in Land Retirement and Environmental Policy

For the most part, Canada and the United States have environmental policies targeted toward some domestic environmental concerns, but these policies have also had farm income enhancement objectives associated with supply controls via land retirement. In the United States, acreage reduction programs were implemented to control budgetary outlays under target price-deficiency programs. These have now been formally abandoned but mainly because the need for them has been obviated by voluntary land retirement under the CRP. There is no obvious trend toward convergence and harmonization for either land retirement programs or agricultural environmental programs between the two countries, except with respect to the abandonment of year-to-year management programs such as acreage reduction programs.

There is no obvious trend toward convergence of land retirement or environmental programs between the United States and Canada.

FARM INPUT SUBSIDIES

Canadian Farm Input Subsidies

Farm credit in Canada is provided by a mixture of private sector organizations and provincial and federal government agencies. In the grains and oilseeds sectors, the Farm Credit Corporation (FCC), a federal government Crown Corporation, has played a significant role. Beginning in the mid-1980s, as a result of budget-cutting measures, the FCC became primarily a commercial entity through which funds were raised on financial markets and lent to producers on a commercial basis. Currently, very little subsidized credit is available to grain and oilseed producers.

Other input subsidies have been limited to provisions of the tax system. Provincial governments have rebated provincial road taxes on the use of farm fuel. These rebates currently remain in place. Investment tax credits established by the federal government for farm machinery in the 1960s were abolished in the late 1980s. Other provisions of the tax system, such as capital gains exemptions for farmland, continue to provide indirect input subsidies.

U.S. Farm Input Subsidies

Subsidies for farm inputs have generally been indirect in the United States. One important source of subsidies has been the U.S. Farm Credit System and the Farmers' Home Administration. During the 1980s, access to subsidized credit was expanded. However, under the 1990 FACT, and again under the 1996 FAIR Act, tighter lending

restrictions were placed on Farmers Home Administration loans. In addition, under the provisions of the 1996 Farm Credit System Reform Act, the operation of the Farm Credit System is to be the subject of an extensive review.

The tax structure has also provided the agricultural sector with a variety of input subsidies through provisions permitting accelerated depreciation schedules, investment tax credits, and expensing of a modest amount of investment outlays. However, under the provisions of the 1986 Tax Reform Act, the investment tax credit was abolished and depreciation rules adjusted to be less favorable to farms and firms. An additional source of subsidy involves differential tax rates for agricultural land and real estate. In many states, agricultural land is subject to lower tax rates than land in nonagricultural use.

Harmonization of Farm Input Subsidies

Some degree of convergence has taken place in the United States and Canada with respect to the tax treatment of agricultural inputs. However, the complex nature of each country's tax code makes it very difficult to develop a detailed assessment of whether changes in those codes have led to a greater degree of agricultural policy harmonization. Perhaps most significant, neither country has implemented policies that provide explicit targeted subsidies for individual agricultural inputs.

While some convergence has occurred with respect to the tax treatment of agricultural inputs, the complex nature of tax codes makes assessment difficult.

CROP INSURANCE

Canadian Crop Insurance

In Canada, crop insurance programs vary by province. In 1985, Canadian crop insurance programs offered 70 percent yield protection. At that time, the federal government paid half of the premium costs, producers paid half of the premium costs, and the provincial governments paid the administrative costs. After significant droughts in the late 1980s created large deficits in the insurance fund, many modifications were made to the program to maintain a client base while repaying the outstanding deficit. More coverage and more options for producers were also provided. It was recently announced that the federal government of Canada and the provincial government of Saskatchewan had agreed to pay off much of the outstanding debt in the insurance fund and to reintroduce a more basic 70 percent insurance coverage. Programs in Alberta and Manitoba are generally more complex and more comprehensive than the programs offered in Saskatchewan.

Little progress has been achieved in harmonization of crop insurance programs, which are likely to persist as an important source of income transfer.

U.S. Crop Insurance

As in Canada, federal crop insurance programs provide substantial subsidies for grain and oilseed producers, especially for wheat and barley producers in western states. As noted previously, the 1996 FAIR Act addressed these programs only by removing the requirement, introduced in 1994, that farmers receiving benefits from major government programs purchase catastrophic multiple-peril crop insurance contracts. This was a provision widely sought by producers with very small acreages for whom the fixed catastrophic contract fee of \$50 per crop made the insurance contract quite expensive. However, Congress also addressed federal crop insurance subsidies, which averaged over \$2 billion per year for all crops between 1990 and 1993, in the Federal Crop Insurance Reform Act of 1994. Under the provisions of this act, the Federal Crop Insurance Corporation was given a mandate to achieve substantial reductions in loss ratios and to increase premium rates to accomplish that objective. However, U.S. crop insurance program subsidies have increased in the 1990s relative to the 1980s (Goodwin and Smith 1995), and the programs have become more complex.

Harmonization of Crop Insurance

Crop insurance is likely to persist as an important source of income transfers in both the United States and Canada. Little progress has been achieved with respect to harmonization in relation to these policies, and it is reasonable to be skeptical about the probability that these programs will converge in the future. This is partly because of the increasingly complex mix of insurance contracts being offered in both the United States and Canada and partly because of increased regionalization of these programs in Canada.

TRANSPORTATION POLICY

Canadian Transportation Policy

The Western Grain Transportation Act (WGTA) was a federal statute that paid railways a subsidy for the movement of grain from prairie positions to terminal positions at the West Coast, the Port of Churchill, and for all shipments to Thunder Bay. The 1983 WGTA legislation allowed for a payment of \$659 million to the railways with some small provisions for inflation and branch line costs. Between 1986–1987 and 1992–1993 the payment varied between \$721 and \$726 million (Producer Payment Panel 1994). This payment was reduced to \$560 million in 1994–1995 and was then eliminated with a one-time lump sum payout in 1995–1996. Producers shared a payment of \$1.6 billion based on estimates of land productivity and cropping

intensity. For taxation purposes, this payment was treated as a capital grant to producers, somewhat increasing its efficacy.

Producers now pay a regulated freight rate for grain based on a cost formula of the WGTA. This has resulted in an average increase in the cost of shipping grain by \$22 per ton, making exports less profitable. In turn, the higher cost has increased the supply of grain on the domestic market, lowering its price on the prairies relative to world prices. The result has probably been the establishment of a more favorable environment for the development of a larger livestock sector. In 1999, the regulation of freight rates will be subject to review. If deregulation takes place, and if freight rates approach trucking rates as they have in Montana, producers could pay an additional \$20 to \$30 per ton in freight costs. Deregulation would tend to reduce grain output and increase livestock feeding in the region. It would also increase the economic viability of trucking grain to the U.S. Mississippi system.

U.S. Transportation Policy

In the United States, transportation policy generally has not been targeted toward the agricultural sector over the past decade. Clearly, subsidies for the maintenance of transportation networks, such as those associated with the work of the Army Corps of Engineers on the Mississippi, have indirectly benefited U.S. agricultural producers. However, no direct changes have taken place in U.S. transportation policy in relation to the agricultural sector.

Harmonization of Transportation Policy

The substantial shift in Canadian agricultural transportation policy away from rail freight subsidies and toward a less-regulated environment for rail transportation has resulted in smaller differences between the United States and Canada. It should be noted that differences in fuel and vehicle tax programs may have some effects on the competitiveness of the two countries' agricultural producers in export markets and each other's domestic markets. Future deregulation of the Canadian transportation industry may lead to further harmonization between the two countries' policies.

The Canadian shift away from rail freight subsidies and toward less regulation has narrowed the differences in policies between the United States and Canada.

GRAIN MARKETING AND EXPORT SUBSIDY PROGRAMS

Canadian State Trading, Credit Guarantee, and Market Access Programs

The system of marketing grain in Canada is a subject of some controversy both within Canada and in the United States. With the exception of wheat and barley for human consumption or export, grains in Canada are marketed through the private trade. The grain-handling system is owned and operated by the private grain trade. There are no government payments for the construction of grain storage facilities.

In contrast to the grain marketing system in the United States, the Canadian Wheat Board has sole powers to market nonfeed wheat originating in the designated region in western Canada for human consumption within Canada. It also has sole jurisdiction for exports. In addition, the CWB has sole jurisdiction of barley produced in the CWB region that is sold on the domestic market for malting and human consumption. The mandate of the CWB is to maximize the return to wheat and barley producers. The CWB pays producers an initial price when grain is delivered, markets the grain, deducts any operating costs of the CWB, and then returns any revenue surplus to producers in the form of a final payment. The CWB has no mandate to retain revenue from producers or to receive any government subsidy except in the case of pool account deficits.

Canadian exports of grains and oilseeds are also eligible for export credit guarantees under the Credit Grains Sales Program. This program allocates each importing country to a risk category that is subject to a global credit ceiling. If credit is provided under this program, loan conditions must reflect prevailing interest rates and loan periods must not exceed three years.

U.S. Export Subsidy, Credit Guarantee, and Market Access Programs

In the United States, targeted agricultural export subsidies for grains and oilseeds are determined under the Export Enhancement Program (EEP). In several years of the late 1980s and early 1990s, annual EEP expenditures amounted to more than \$1 billion. In accordance with U.S. obligations under the GATT, under which the maximum permitted funding for export subsidies in 2000 is \$579 million, the 1996 FAIR Act provides substantially reduced authorizations for EEP subsidies over the period 1996–2002. These annual authorizations range from a low of \$250 million in 1997 to a high of \$579 million in 2000. However, the Secretary of Agriculture has discretionary authority to

The United States and Canada maintain markedly different systems of grain marketing with resulting trade friction.

implement EEP subsidies and did not provide any EEPs for grains or oilseeds in 1996, a year in which grain and oilseed prices were relatively high. In years in which world prices are lower, EEP subsidies are more likely to be implemented. Typically, wheat has been the largest beneficiary of the EEP program, although barley and corn exports have received substantial EEP subsidies over the history of the program. In future low price years, the U.S. government is likely to provide EEP export subsidies for those commodities. On balance, although the institutional structure of the U.S. export subsidy program for grains and oilseeds has not changed since 1988, funding levels for targeted export subsidies have been reduced quite substantially, and the U.S. agricultural export subsidy policy is likely to be further curtailed after the year 2000, in accordance with GATT.

Food aid programs, operated primarily under Public Law 480 provisions, have also been important for grains, wheat, in particular, and oilseeds. These programs, initiated in 1954, were re-authorized under the provisions of the 1996 FAIR Act with assistance levels somewhat in excess of those authorized under the 1990 FACT Act.

Export credit guarantee programs were introduced in the 1980 farm bill (GSM-102) and the 1985 farm bill (GSM-103). The first of these, GSM-102, authorizes the Commodity Credit Corporation to guarantee, for a fee, payments owed to U.S. exporters on deferred-payment sales contracts when the foreign buyer defaults on payment. The second program, GSM-103 (the Intermediate Export Credit Guarantee Program), guarantees loans for three to seven years. Under the 1996 FAIR Act, these programs have been expanded relative to the levels established under the 1985 and 1990 Acts.

In addition to export subsidy, food aid, and export credit guarantee programs, the United States also funds market access programs. Under these programs, funds have been provided to support the work of agricultural commodity marketing organizations, such as U.S. Wheat Associates, who can demonstrate that they have been harmed by other countries' unfair trading practices. Funded at \$200 million per year under the 1990 FACT Act, the Market Promotion Program was subject to cuts under the 1993 Omnibus Budget Reconciliation Act and, again, under the 1996 FAIR Act, which reduced annual funding for market access programs to \$90 million. The FAIR Act also abolished the Cottonseed and Oilseed Assistance Programs, funded at \$50 million per year under the 1990 FACT Act, which were designed to encourage export sales of those commodities.

**Canada's export policy
has not changed in
recent years...the United
States has moved
toward export policies
with less potential to
distort export markets.**

Harmonization in Export Policy

To the extent that U.S. export subsidy programs have become subject to GATT disciplines and funding for the U.S. export enhancement program has been reduced, the United States has moved toward a less distortionary set of trade policies for grains and oilseeds. Although the removal of freight subsidies has also moved Canada's grains trade policy in a less distortionary direction, Canada's export marketing board policy, operated through the CWB, has not changed in recent years. With respect to export credit guarantees, both countries operate roughly comparable programs, although under the GSM-103 program, the United States is able to offer somewhat longer-term (three to seven year) lines of credit. Changes in these programs have been relatively modest during the past ten years.

**GATT and NAFTA
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CONCLUSION AND OVERALL ASSESSMENT

Canadian and U.S. farm programs have undergone substantial changes over the period 1988–1996. Most of these changes have been generated as responses to budgetary pressures, reductions in the political influence of agricultural lobbies, shifts in grain and oilseed prices, and domestic concerns about environmental and other policy objectives. However, the pattern of reduced intervention common to both countries has resulted in considerable economic convergence in the grains and oilseeds programs implemented in the two countries. It is difficult to predict whether this pattern of convergence will continue. It is conceivable that new transfer programs could be developed via farm income safety net programs such as crop yield and revenue insurance. However, GATT- and NAFTA- related disciplines clearly constrain both countries from substantially increasing domestic levels of support through conventional agricultural price and income support programs.

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