Graphically speaking

Agricultural subsidies in Canada, Mexico

by Frederick J. Nelson, Mark Simone, Constanza Valdes

Agricultural subsidies affect farm income and budget deficits, and can distort production, prices, and trade. Producers, consumers, and taxpayers, therefore, have a lot at stake in farm legislation and trade agreements that reduce agricultural subsidies. Here we look at agricultural subsidies in the United States and two of our three biggest agricultural trading partners—Canada and Mexico.

A measure called the Producer Subsidy Equivalent (PSE) helps gauge the relative size of agricultural subsidies across countries (see PSE articles and comments by Ballenger and by Jabara in 1988 CHOICES, First Quarter and Second Quarter).

What is a PSE?
A PSE for a commodity or a group of commodities combines estimates of benefits from all relevant policies into a single indicator. A PSE can be expressed as an aggregate value (total transfers), or as a relative measure (percentage PSE).

Total transfers include both income enhancements from government outlays (financed by taxpayers), and from market price distortion policies (paid by consumers). Government outlays include payments to producers (such as deficiency payments), reduction in producer’s input costs or taxes, and other programs benefiting agriculture—research, extension, commodity inspection, marketing assistance, and land development. Market price distortion policies make domestic prices differ from world market prices. Price-distorting policies include import controls (quotas, tariffs, and licenses), export measures (taxes and subsidies), and sometimes monetary exchange rate control (as in Mexico).

The percentage PSE used in the graphs to the right expresses total transfers as a percentage of total gross receipts from farm production. The percentage PSE works best for comparing subsidy rates across countries.

The highest PSEs?
Overall, Canada had the highest PSEs. Between 1982 and 1991, ag subsidies accounted for an average 34 percent of Canada’s gross agricultural receipts. By comparison, PSEs in the U.S. and Mexico averaged 23 percent (figure 2).

Livestock subsidies were highest in Canada and crop subsidies highest in Mexico. From 1982-91 the highest PSEs were for Canadian dairy (69 percent), U.S. sugar (60 percent), and Mexican corn (58 percent).

Which policies contributed the most subsidies?
Market price distortions were the most important support in all three countries, overall. Crops were subsidized most by price distortions in Canada and Mexico, but by income support in the U.S. The Western Grain Transportation Act (rail subsidies) in Canada, import restrictions and price supports in Mexico, and deficiency payments in the United States contributed the most crop subsidies (figure 1).

Price distortions most subsidized livestock sectors in all three countries. Important specific livestock subsidy programs included import restrictions and


price supports in all three countries, exchange rate policies in Mexico, and the Export Enhancement Program in the United States.

**How have PSEs varied over time?**

Subsidies for all three countries' ag sectors followed a similar pattern during 1982-91 (figure 3). They peaked in 1986 or 1987 at about double the level in earlier years of the decade, declined through 1989, and increased again during 1990 and/or 1991. Canada subsidized its agricultural sector more than either Mexico or the United States every year from 1984 to 1991. The difference between Canada's subsidies and those of the other two countries has increased since 1989. The Canadian Wheat Board pool deficit and the new Gross Revenue Insurance Plan, respectively, caused much of the 1990 and 1991 increase in Canadian subsidies.

The similarity in subsidy patterns among the three countries reflects a mid '80s and early '90s sag in world grain prices and common program responses that inversely linked the amount of grain subsidies received to world market price levels. Programs in the three countries helped ag producers by guaranteeing gross returns, reducing risk, and increasing incomes when world prices fell.

Since the mid eighties, the U.S. and Mexico have revised programs to allow market forces increased effect on producer income, but subsidies remained significant. U.S. PSEs leveled off around 19 percent during 1989-91, Mexican PSEs decreased to 12 percent, and Canadian PSEs increased to 40 percent by 1991.

**How are programs changing?**

Several Canadian support programs have been dropped since 1991, but the government implemented a new generation of income support programs for grains with the April 1991 Farm Income Protection Act (FIPA). FIPA introduced the Gross Revenue Insurance Plan and the Net Income Stabilization Accounts.

Mexican agricultural policies are becoming more market oriented. Under the new PROCAMPO program announced in October 1993, current price support policies for crops will be phased out and direct subsidy payments will be made to crop farmers based on acres planted. Crop prices in Mexico—currently fixed at above market levels—will be determined by international markets.

Under major 1985 and 1990 farm legislation, U.S. price support loan levels are tied to moving averages of market prices, and grain reserve programs have been revised—so grain surpluses will cause fewer problems. U.S. acreage reduction programs after 1990 provide producers more planting flexibility, and the new "normal flex acreage" provisions reduce acreage eligible for deficiency payments.

**What does it all mean?**

Ag subsidies historically stabilized and increased incomes of farmers in all three countries. The subsidies remain important. Preliminary calculations indicate that while U.S. support is holding steady, Mexican and Canadian PSEs declined somewhat through 1993. Mexico's recent shift toward reduced support is the most dramatic.