CAPI
THE CANADIAN AGRI-FOOD POLICY INSTITUTE

Understanding Agricultural Support

SUMMARY REPORT

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AGRI-FOOD ECONOMIC SYSTEMS

Douglas Hedley
Kamal Karunagoda
Brenda Dyack
Al Mussell

CAPI
THE CANADIAN AGRI-FOOD POLICY INSTITUTE

The Canadian Agri-Food Policy Institute
960 Carling Avenue, CEF
Building 49, Room 318
Ottawa, ON K1A 0C6

Telephone: 613-232-8008 or toll-free 1-866-534-7593
Fax: 613-232-8008

www.capi-icpa.ca

Canada

Foreword

With the support of the Canadian Federation of Agriculture and Ontario Ministry of Agriculture, Food and Rural Affairs, the Canadian Agri-Food Policy Institute (CAPI) has been examining the effect of various countries' domestic agricultural support systems on the competitiveness of Canadian farmers and food manufacturers and the returns available to them. Clearly, some of our competitors and many of our customers offer significant income support to their producers beyond what they receive from the market. CAPI set out to better understand the domestic income support and its impacts.

The resulting study, *Understanding Agricultural Support*, was born out of the observation that Canada is often both the lowest-cost and highest-quality supplier of certain food commodities, such as pork, but still faces enormous pricing pressures from higher-cost and lower-quality competitors, who appear to have considerable surpluses to clear on the global market.

Similarly, many of the countries to which Canada exports are structurally uncompetitive yet have policies to promote self-sufficiency. This results in production occurring in areas where it would not otherwise happen. Again, using pork as the example, some Asian countries promote hog production despite enormous feed-grain deficiencies. It is well understood that mathematically it is not possible to sustain a grain-fed pork industry, let alone beef or dairy production, by moving feed grains or forages from the Americas to Asia, without significant domestic support.

Along the way we observed something else that is quite destructive. The various forms of producer support are also encouraging highly unsustainable practices — such as water-mining of aquifers. These domestic support programs often lead to abuse of the classification of "green" subsidies and other under-reporting practices under the World Trade Organization reporting system.

Each of the topics and markets explored in this study could justify a full research paper on its own. CAPI is hoping to elicit interest from various agricultural sub-sectors or governments in Canada to fund a consortium of agriculture and food researchers to go much deeper into one or more of the topics raised. CAPI will happily collaborate with the interested parties to improve our understanding of these issues, which are of critical importance to the competitiveness of our industry.

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Introduction

Since the mid-1990s, the most distorting types of domestic agricultural subsidies employed by World Trade Organization (WTO) member countries have been reduced significantly. The implication is that the worst distortionary effects of domestic agricultural support policies have been mitigated. However, much work remains, and it is in Canada's interest to push for further reductions in domestic support.

Since the multilateral trade agreements of 1994, a broader understanding has developed that other types of subsidies, not just the "most distorting" (and subject to limits) can have distortionary effects. This was illustrated when Brazil successfully challenged US cotton programs, even though the programs were decoupled from current production. It is also supported by research linking lump-sum payments to supply responses among risk-averse agricultural producers.

This report is a summary of a paper prepared for CAPI by Al Mussell, Douglas Hedley, Kamal Karunagoda and Brenda Dyack. It is available (in English only) on request by contacting CAPI.

Even as the most distorting support programs identified in the 1994 Agreement on Agriculture have declined, other forms of domestic support have increased — significantly in many cases. This waters down the benefit of reductions in the most distorting forms of support. Figure 1 (page 6) provides an illustration, based on the producer support estimate (PSE) for member countries of the Organisation for Economic Co-operation and Development (OECD). It shows that market price support — the most distorting form of support — has decreased significantly since the late 1980s. However, other forms of support, traditionally viewed as less distorting, have increased. In particular, there has been a marked increase in payments based on historical production in which current production rates are not considered — the Non-current A/An/R/I category.[1] Recently, estimated total producer support for OECD countries in 2014 was just under $US240 billion. This is not that much different than was the case in the late 1980s, and throughout the Uruguay Round of negotiations within the General Agreement on Tariffs and Trade (GATT).

1. A is area planted, An is animal numbers, R is receipts, and I is income.

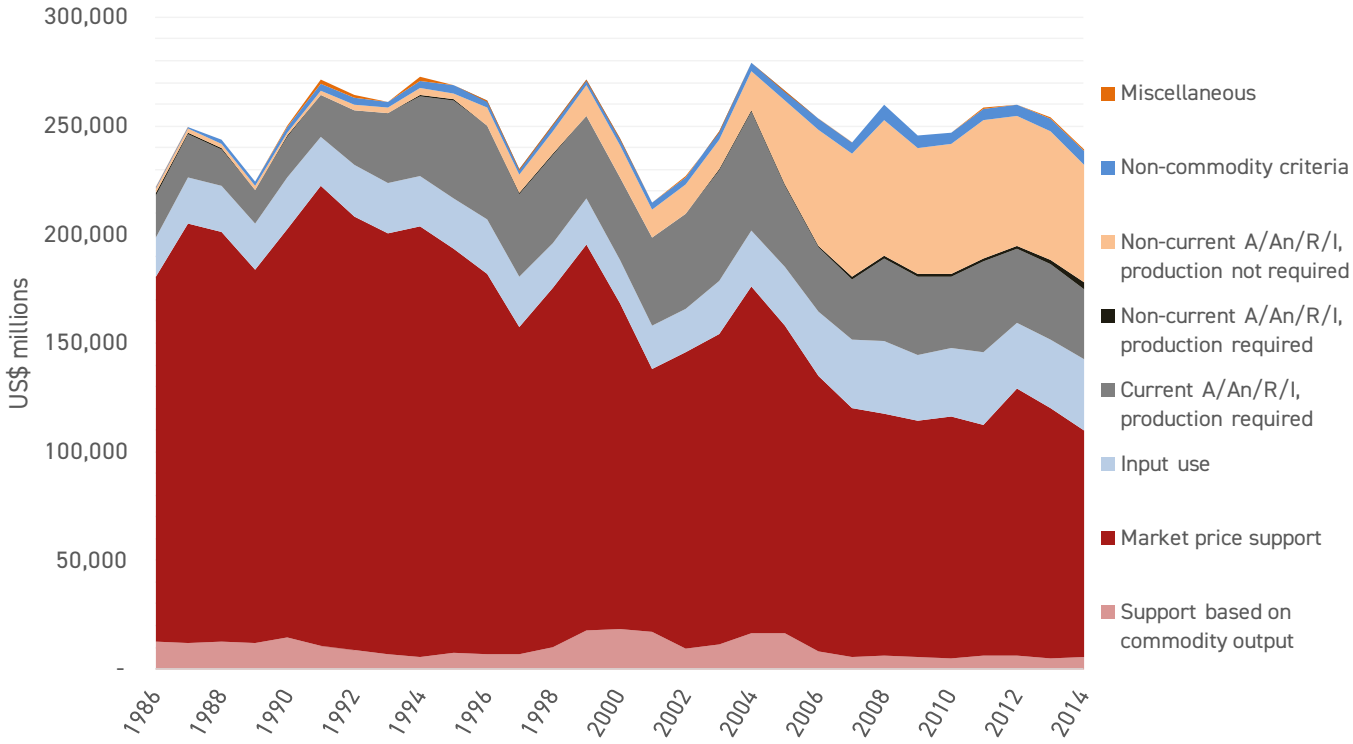


Figure 1. Producer support estimates, OECD countries. Source: OECD

This has rolled out differently across countries. Figure 2 (below) provides an illustration. Trends among the EU, US, and Canada have converged over time, with the percentage PSE falling as production value increased. In China, steady growth in agricultural support has exceeded growth in the value of output, leading to an increased percentage PSE. The nature and magnitude of agricultural support across countries has been in flux, and not necessarily in the direction of liberalized trade.

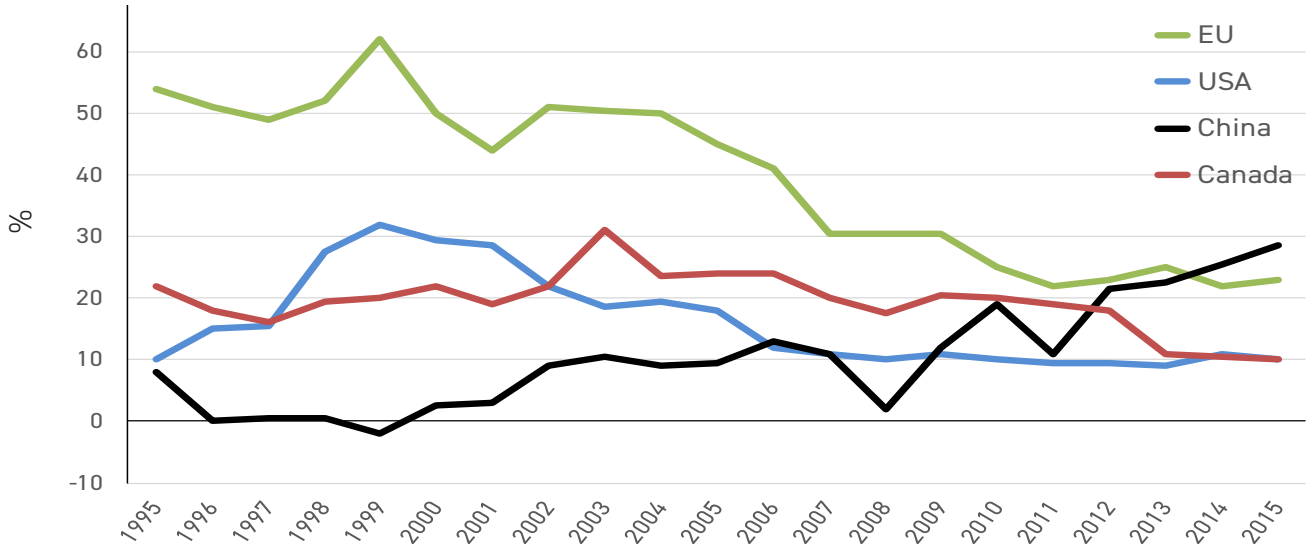


Figure 2. Producer support estimates as a percentage of the value of agricultural production, adjusted for market price support. Source: OECD

This study is intended to update and improve our understanding of domestic agricultural support in terms of Canada's trade policy interests and the competitive positioning of Canada's agri-food sector. With this in mind, the agricultural support practices of China, the EU, the US, and Canada were analyzed. China represents both a large agri-food market and a powerful competitor in many of Canada's exported farm products, and one that has grown rapidly. The EU represents a partner to Canada under a new trade agreement in which farm and food products assume a high profile. The US is a traditional trading partner and competitor in a largely North American market, but our relationship may be under review given the prospect of a renegotiation of the North American Free Trade Agreement (NAFTA).

A full range of commodities and whole-farm subsidies and support was included in the scope of the study, with a particular focus on those that affect Canada the most, including:

Corn: As the most widely traded feed grain in the world, corn plays a central role in livestock production systems. Corn also serves the industrial market for ethanol and related food products, including high-fructose corn syrup, starch, and others.

Oilseeds: Canada is a major exporter of canola and canola products, competing with soybeans (and some other oilseed and oil crops) from the US and South America. Soybeans are the most widely traded oilseeds in the world, particularly as exports to China, and they compete directly with canola. Canola and soybean meals complement corn (and other feed grains) in the livestock industry; canola, soybean, and corn oils represent the largest volumes of cooking and salad oils in world trade. As well, edible flaxseed and oil, developed in Canada, offer a long-term export growth opportunity.

Pulses: Peas, beans, and lentils have become large and growing export crops, particularly in western Canada. Other countries are looking to expand their own production of these crops. Maintaining Canada's advantage and building on this foundation by continuing to expand exports will depend on ensuring that other countries do not use subsidies or comparable export-enhancing methods to unfairly gain market share.

Dairy: Changes are forthcoming in both domestic and international trade agreements for Canadian dairy products. These changes include greater access to the Canadian market for dairy products through the Canada-European Union Comprehensive Economic and Trade Agreement (CETA), and potentially a NAFTA renegotiation.

Hogs and pork: Hogs and pork represent major Canadian exports to the US, Asia, and EU markets. The Canadian industry relies on corn and barley as a major feedstock.

Approach

The study delineated, and drew upon the comparison between, monitoring of domestic support conducted by the OECD and domestic support notifications by member countries to the WTO. Where we identified significant divergences between OECD measures and WTO notifications, we acquired information on program budgets and design parameters to understand the source and explore the nature of divergences. This approach was applied broadly for the countries of interest, and then focused on the specific commodities of interest.

Findings

The results of the study raise a range of concerns for Canada stemming from the domestic support practices of China, the EU, and the US. All three have generally been creative in finding ways to circumvent limits mandated by the WTO Agreement on Agriculture, as described below. Moreover, these countries have not made efforts to validate claims of zero or minimal distortionary impact on markets. Meanwhile, natural capital has been drawn down, through policies that encourage overuse of natural capital in agriculture directly and other forms of support that lead to depletion of natural capital.

Issues with the Rules on WTO Notifications

The establishment of rules and limitations on domestic subsidies by the WTO through the 1994 Agreement on Agriculture was a major step forward, based on the experience of both developed and developing countries. However, renewed attention to the rules governing domestic subsidies for agriculture is warranted. For example, the shift from commodity-specific subsidies in the EU to exemptions for decoupled single-farm payments with roughly the same level of non-exempt expenditures as in earlier periods raises questions about the open-endedness of so-called decoupled payments.

Calculation of *de minimis*: Double Counting of Value of Production

The *de minimis* feature in the reporting of domestic support compares current support levels with the value of production to determine how support is counted relative to limits placed on support.

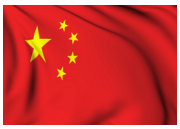
- ☐ For countries with a Bound Total Aggregate Measure of Support (BTAMS) commitment of zero, the *de minimis* represents a hard limitation on any support above the *de minimis* rate across both commodity-specific and non-commodity–specific calculations.
- ☐ For countries with a positive amount in their BTAMS commitment, the *de minimis* can be interpreted as a threshold. For commodity-specific or non-commodity–specific support, when most distorting support amounts to less than 5% of the value of production, the support is not counted against the BTAMS limit. For support exceeding 5% of the value of production, all of the support is counted against the BTAMS limit.

In establishing these rules, only two possibilities were envisaged: commodity-specific support and non-commodity–specific support; the latter normally seen as "general" support across the full range of commodities. However, experience has shown that, in cases in which some support is provided across a group of commodities (but not all of them), the level of support for each commodity separately cannot be determined. When this occurs, the value of production can end up being double-counted for the purposes of the *de minimis*, in effect allowing for greater levels of support within committed limits. Any discussion of tightening the rules on domestic subsidies will need to consider more detailed arrangements for calculating support under the *de minimis* limitations.

Natural Capital

The Agreement on Agriculture is silent on the rates of utilization of natural capital, specifically water, soils, and the genetic base for plant and animal agriculture, as well as the negative externalities that come from under-priced and over-used resources used in agriculture. Under-pricing in this context means that the utilization of the stock of natural capital is preferentially priced to agricultural users at a level that erodes the capital stock at rates that are not recoverable with time, and generates additional farm product supplies that depress prices. It can result in resource use at a rate that creates negative off-site externalities, including pollution, increased soil salinity, nutrient runoff, and the like. In this case, the costs of resource use are not fully borne by agricultural producers, and off-loaded instead to other parts of society.

This issue will continue to grow in importance as the effects become increasingly hard to ignore, particularly in the form of groundwater depletion from irrigation in China, the EU, and the US. At the same time, the growth in demand for food, if left unchecked over the next several decades, will create pressure to further erode the natural capital base, creating longer-term pressures on food supplies.



China

The US challenge to China's support programs for wheat, rice, and corn currently before the WTO has focused attention on government stock purchases ostensibly related to food security. These concerns extend directly to other commodities of particular concern to Canada, notably canola and soybeans. The difficulty is that China appears to have abandoned the stock purchases for food security programs, with new arrangements for support being developed. Detailed information on these new arrangements is not available. China also maintains one of the largest crop insurance programs in the world, but provides no reporting of that support to the WTO.

European Union

The extensive commodity-specific support arrangements formerly in use in the EU have been abandoned to a large degree and replaced with decoupled payments to farms, but with at least as much funding as the commodity-specific support programs they have replaced. An important aspect is the measurement of the apparent supply responses of each of the commodities generated from these decoupled payments.

For example, the EU beef industry is not sustainable in its current form without decoupled payments. Indeed, virtually all of the net income for beef farms is provided through decoupled payments. In the EU dairy industry, about 70 percent of net farm income is provided by decoupled payments. Based on the precedent established in the Brazil-US cotton case, the relevant issue is whether the rise in EU dairy exports is causing price suppression in world dairy markets, based on the decoupled payments.

In pork, the EU is the world's largest exporter, and its exports are growing. However, the costs of hog production in EU member states are well above market prices for pork, and production costs are sharply above those in other major pork producing countries, including Canada. The apparent gap in economic feasibility is consistent with decoupled payments supporting increased production and exports of pork from the EU, in a fashion similar to EU beef and dairy.

United States

The US has made a number of changes in the structure of its domestic agricultural support programs that affect its WTO notifications and ease constraints on the support it can provide. The US changed the way in which it notified crop insurance expenditures, beginning in 2011. Previously, crop insurance premium subsidies were notified as a lump sum under non-exempt and non-commodity–specific expenditures. Beginning in 2011, the subsidies were notified as non-exempt, commodity-specific. The change allowed the US to reduce support notified against its BTAMS as the crop insurance premium subsidy for many commodities, along with any other commodity-specific subsidies, fell under the 5% *de minimis* level.

Prior to the 2014 Agricultural Act (Farm Bill), the US notified non-exempt payments to the dairy industry exceeded US$3 billion, based largely on the Dairy Product Price Support Program and the Milk Income Loss Contract. The elimination of those programs and the shift to an insurance-type arrangement (Margin Protection Program) drastically reduced US dairy support notified to the WTO. In the most recent notification (2014), non-exempt payments dropped to just US$14.17 million (*de minimis*). What is remarkable about the sharp decline in support notified to the WTO for dairy by the US is how little actually changed, as actual purchases under the price support program had been minimal (or zero) for several years. This lies in contrast with the OECD estimate of US market price support at US$5.3 billion to $6.6 billion for dairy, based on US milk prices exceeding reference price levels due to the protective effect of US tariffs, the price-supporting effect of Federal Milk Marketing Orders, or both.

The use of groundwater supplies for irrigation at current levels in US agriculture is unsustainable and contributing to pollution, salinity in soils, and waterlogging. From an economic point of view, irrigation water is under-priced as a common property resource in agricultural use. It increases total production of some crops and decreases production of others that have lower moisture requirements. The greater production has price-lowering effects on the irrigated crops locally, nationally, and internationally. Grazing fees for ruminants on public lands managed by the Forestry Service and the Bureau of Land Management are also well below private-sector grazing rates, although it does not appear that these have significant distortionary effects.

Canada

The sources of Canada's major domestic support programs and policies tracked by the OECD and notified to the WTO are AgriStability, AgriInvest, AgriInsure, provincial deficiency payment programs, and market price support for dairy. There are no significant differences in the structure of reporting between OECD reporting and WTO notifications by Canada. The architecture for Canada's reporting allows for transparent reporting of its payments counted against BTAMS on both a product-specific and non-product specific basis.

Conclusion

This study was intended to identify agricultural support policies in three jurisdictions that may be materially affecting Canada's competitive position in global markets. It was not intended to measure or estimate the economic effects of such policies in terms of prices, production, and trade flows. To estimate these economic impacts, the use of large-scale empirical economic models will be required.

Based on these findings, the priorities for further analytical and empirical work are:

- ☐ **Canola and soybeans in China:** The use of stock-holding to support domestic rapeseed/canola prices parallels China's use of stock-holding and the current challenge by the US to stock-holding (and related issues) on rice, wheat, and corn. Canada's existing export trade with China in canola/canola products and in soybeans, and the prospect for expanded trade under a future trade agreement with China, makes understanding these effects fundamental to Canadian trade interests.

- ☐ **Support to beef, dairy and hog sectors in the EU:** The evidence compiled from EU sources in this study provides ample support for the position that the decoupled whole-farm payments along with other payments are having a significant effect on production and prices for beef and dairy in the EU. Canada has a direct export interest in beef and pork, and the EU is a growing competitor. In dairy, Canada has been pressed to defend changes to elements of its dairy policy; understanding the nature and effects of EU support for dairy could open an offensive dimension for Canada in its broader strategy for dairy policy, especially as CETA comes into force.

- ☐ **US crop insurance subsidies for feed grains:** These subsidies fuel the livestock industry and need to be examined carefully. A critical element of Canada's competitiveness in livestock production is its low-cost supply of feed grains. If the US is increasing its production and lowering the prices of feed grains through crop insurance programming that is not appropriately accounted for under its WTO commitments, this could represent illegally subsidized competition for Canadian feed grain and livestock industries.

- **The complex of marketing arrangements:** Along with support employed in the US dairy industry, these arrangements need considerable analysis. It is striking that while the dairy industry has received lower direct support payments under programming in place since 2014, milk production in the US is rising during a period of globally lower prices for dairy products. The US is expected to press Canada on its dairy policy during renegotiations of NAFTA or otherwise; an analysis of US dairy policy could form an element of an offensive strategy for Canada with the US.

- **Natural capital:** The associated problems of unsustainable groundwater draw-down, soil salinity, pollution from run-off, and the conversion of sensitive soils to annual arable cropping warrant further investigation. Their direct effects as well as effects on price suppression in irrigated crops should be considered. The Canadian base of natural capital is an asset, and its rate of depletion of natural capital is relatively low. Other countries that compete with Canada through the depletion of natural capital do so on the basis of an implicit subsidy that erodes Canadian competitiveness. It is in Canada's interest to understand the magnitude of foreign natural capital consumption that harms Canadian competitiveness.

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