

# **The Supply Management Cartel**

**Collective Inaction and the  
Failure of Reform**

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Date of First Issue: March 2013.

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ISSN 1491-78

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## Collective Inaction and the Failure of Reform

By Eric Merkley

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# Executive Summary

- Supply management in Canada is a marketing board system that sets production and prices for dairy, poultry and eggs. Farmers must purchase quota in order to produce and sell product, which is collectively valued at \$25-billion. The benefits of the system include stability and product quality for producers, processors and consumers. These benefits, however, are limited and are outweighed by the cost.
- Inefficiencies in the system ensure, on balance, higher market prices for milk than in the United States at the production level and, to a lesser extent, the retail level.
- Supply-managed commodities limit consumer choice by imposing massive over-quota tariffs. Tariffs ranging from 200 per cent to 300 per cent over quota make imports cost prohibitive. Due to the lack of foreign competition, the incentive for value-added innovation is lessened.
- Non-dairy farmers are negatively affected by supply management's ability to chill Canada's market access abroad. More than 90 per cent of farmers are dependent on exports for their living. They benefit from multilateral trade.
- The transfers received by the supply-managed sector dwarfs other agriculture commodities. With the excessive subsidization of its dairy sector, Canada is becoming increasingly isolated on the international stage.
- All political parties enthusiastically support supply management despite their awareness of its flaws. The sector is a concentrated interest. Producer wealth comes at the expense of low-income citizens and, more broadly, consumers, who are poorly organized and ignorant of the costs of the system. There is no political incentive to abandon the system.
- Reform was only possible in Australia and New Zealand because their dairy systems are fundamentally distinct from Canada's—different incentives are apparent. They achieved reform because their dairy industries wanted to acquire market access abroad.
- The Trans-Pacific Partnership (TPP) negotiations represent the best chance to deal with the supply management issue. The negotiations will form a countervailing interest to supply management—the industries that could potentially lose out if Canada remains intransigent on the issue. The failure of processors to block Chobani yogurt from Canada also presents opportunities.
- Any attempt to dismantle supply management should encourage a soft landing for the sector. The progressive devaluation of quota combined with targeted transition assistance as done in Australia is a promising option.

# Introduction

The system of supply management in dairy, poultry and eggs has long drawn the ire of trade negotiators, think-tanks, economists, the media and business leaders. To our trading partners, it is perhaps perplexing that a nation of exporters with a professed commitment to free trade could maintain a system that fixes prices and controls production behind massive tariff walls. Not only does Canada support this system, but the three major parties also jockey for the status of the staunchest defender of the status quo. The Conservatives argue for marketing freedom for wheat and barley farmers but not for dairy, poultry or egg producers. The NDP, which rails against the corporatization of agriculture, supports a system that redistributes wealth from those who spend the highest proportion of their income on staple foods to wealthy producers.

Using collective action theory, this paper will integrate an examination of the costs of supply management with an analysis of the political environment. This theory posits that power and influence within democratic institutions are largely a result of actors competing and co-operating based on cost-benefit calculations. The supply-managed industry can be understood as a concentrated interest that is able to extract 'rent,' or benefits from the government in the form of a regulatory environment that creates what is, in essence, a cartel: an arrangement between producers that inflates prices and restricts competition. The cost is product prices above market value, and it is borne by consumers. There is little incentive to organize a countervailing interest against the cartel, as the costs of the system are dispersed evenly among a diffused group that is ignorant of the costs. The organizational costs for consumers outweigh the benefits, as political actors also make cost-benefit calculations. In this scenario, there is little to gain from undermining producers, an organized interest, for little electoral payoff in the form of votes.

Collective action theory explains the relative success or failure of interest groups that seek to maximize their interests. It is in stark contrast to the dominant pluralist model of public policy, which sees policy as the output of various interest groups that compete on an equal footing within the electoral arena for dominance. It also stands opposed to other streams of thought that see policy through the lens of the median voter theorem: political parties design their policies to drift towards the centre to maximize votes. The collective action framework allows a concentrated minority to advance their interests over the interests of a dispersed majority if the benefits outweigh the costs. Collective action theory best explains how Canadian policy is slanted toward the interests of producers over consumers.

# Marketing boards in theory

Most people think of dairy and poultry when they think of marketing boards. However, there are many different types of boards. At one extreme, a marketing board can focus solely on sales promotion. A non-profit extracts a small levy from producers, so it can invest in advertising their product. At the other extreme are marketing boards that manage the supply of a commodity through the sale and distribution of quota licenses (Groeki, 1982: 29; Tamilia and Charlebois, 2007: 123). Others, such as the former Canadian Wheat Board (CWB), are Crown corporations that have a monopoly on sales but do not set quotas. In the case of the CWB, this included non-feed wheat and non-feed barley. A common characteristic of all versions of marketing boards is their mandatory nature. Voluntary prairie co-operatives struggled to maintain viability due to free rider problems—larger farmers would stand to gain from subverting the co-operative framework and would secure a better price for their product independently (Tamilia and Charlebois, 2007: 127). This weakened the marketing power of the co-operatives. Marketing boards, in contrast, prevent this. For example, until very recently, it was illegal for farmers to sell their wheat and barley in the non-feed market; they had to sell to the CWB.

The rise of marketing boards occurred around the time of the Great Depression. Economic literacy was not well established, and the agriculture sector was far more fragmented than it is today. The inherent instability of agriculture production heightened the desire for price stability. Producers can suffer for reasons that have nothing to do with productivity, but rather drought and weather conditions, crop disease or parasites. Due to the inelastic demand of agricultural products, producers are vulnerable to swings in supply. For commodities such as dairy, this is even more problematic, as producers have transactional dependence on processors due to the perishability of their product (Tamilia and Charlebois, 2007: 126). There was a perception that individual farmers were at a disadvantage when negotiating prices with the large grain companies or dairy processors. Marketing boards spoke for producers as a whole and weakened the power of food processors and middlemen (Groeki, 1982; Tamilia and Charlebois, 2007). Since membership was mandatory, producers could avoid the free rider problems and act as a countervailing power to the food processors.

Given the farmers' unique circumstances during economic depression, it is perhaps understandable that they turned to marketing boards as a cure for their plight. However, the agriculture sector has undergone massive transformation since. Technology and the desire to achieve economies of scale in agriculture have concentrated the sector in fewer and fewer hands. The number of dairy farms has shrunk 91 per cent from 145,000 to 12,746 since the adoption of supply management (Findlay, 2012: 8). The idealized family farm is dead, and government subsidy props up the remnants for reasons of nostalgia or, as Hart (2005) calls it, farm fundamentalism (4-5). Farms are big businesses that receive record farm-gate income. It is harder now to argue that producers are at the mercy of food processors than it was then. Currently, fewer than one-third of farms account for 80 per cent of agricultural production (Tamilia and Charlebois, 2007: 127). Stanbury (2002) argues that the average dairy farm has nine times the net worth of the median net worth of all families in Canada (17).



There are more than 100 marketing boards in Canada, with half of them located in Quebec and Ontario (Tamilia and Charlebois, 2007: 125). The focus of this paper is on the marketing boards that operate on the principle of supply management. The supply-managed sector has the most problematic market distortions in Canadian agriculture. In fact, the sector does not operate in a market context. The board sets the price received by the producer based on a cost-of-production formula and total production, which is rationed to producers in the form of quota (Lippert, 2001: 10-11; Groeki, 1982: 27; Findlay, 2012: 4-5). This creates several perverse incentives. Firstly, an absence of competition offers little reason to lower the cost of production or improve efficiency by having a greater economy of scale or through best farm practices (Groeki, 1982: 32-33). Because of the existence of quota, there is no incentive to expand production—in fact, if a farmer overproduces, the farmer must dump the product and not report it out of fear of financial penalties from the board (Charlebois and Astray, 2012: 23). Additionally, newer entrants into the system apply constant pressure for higher prices to make up for the high value of quota (Groeki, 1982: 34). These factors lead to the sale to food processors of product at well above the market value. These costs are then passed to consumers due to the inelasticity of the product (Lippert, 2001).

# The history of milk supply management

The supply management regime is the product of decades of producer pressure on provincial and federal governments to restrict supply. Dairy producers associated with the Grange and co-operative movements attempted to restrict the supply of their product (Tamilia and Charlebois, 2007: 124). However, such voluntary movements tended to fail due to free rider problems. Established producers were able to undercut the prices of the co-operatives, weakening their bargaining power. Producers agitated for a mandatory marketing board to avoid this problem. By 1927, the British Columbia legislature passed the *Produce Marketing (BC) Act* and the *Dairy Relief Act*, which sought to equalize prices for all producers. The Supreme Court struck down these prices as a violation of section 91 and 121 of the *British North America Act, 1867*. Federal policy shifted when a 1934 royal commission recommended granting producers a monopoly to counter the oligopolistic practices of the food processors. The Supreme Court struck down the resulting Dominion Marketing Board, because the federal government did not have the authority to restrict interprovincial trade. This new loophole allowed the provinces to establish their own marketing boards, which sprang up in every province but Quebec before the Second World War (Lippert, 2001: 24-25; Tamilia and Charlebois, 2007: 124-125).

The provincial milk marketing boards were unable to control supply and price as effectively as they had hoped. Provincial boards sold surplus product in other provinces and thus negated quota in these provinces. The Subsidy Eligibility Quota was also not a hard cap on supply. Milk sold above the quota would simply forgo a federal subsidy (Lippert, 2001: 26-27). The provincial boards negotiated with the federal government for the creation of a national supply management program in 1970—the Canadian Milk Supply Management Committee (CMSMC)—the centrepiece of the dairy supply-managed system (Lippert, 2001: 27). The poultry sector evolved in much the same way due to the inability of provincial boards to manage supply. Due to disputes among the provincial marketing boards about quota allocation and the disposal of surplus, their system was established later. The Canadian Chicken Marketing Agency came into being in 1978 with the passage of the *Farm Products Marketing Agencies Act*, along with the Canadian Hatching Egg Producers to control the supply of broiler hatching eggs (Chicken Farmers of Canada, 2011).

The CMSMC has the 10 provincial milk marketing boards as members and representatives. The provincial representatives are usually producers. The National Dairy Council, which is made up of processors, used to be a consulting member, but it no longer exists. The CMSMC establishes the Market Sharing Quota (MSQ) on the advice of the Canadian Dairy Commission (CDC) based on anticipated demand plus 5 per cent (Lippert, 2001: 27-28). Quota is distributed to the provincial milk marketing boards based on a ratio of historical market share and population growth of the province to anticipated national demand. The quota for an individual producer will fluctuate based on the province's MSQ (Lippert, 2001: 29-31). The CDC sets the industrial price of milk based on a cost-of-production formula plus profit, and it has the power to enforce quota (Lippert, 2001: 32-33). The system is heavily slanted toward the producer, although the Consumers' Association of Canada is allowed to observe. The *Commission of Inquiry Into Certain Allegations Concerning Commercial Practices of the Canadian Dairy Commission* led by Justice Gibson into industrial milk policy found that "the interests of the consumer do not appear to have been a substantial concern" (Groeki, 1982: 32). Again, poultry and egg producers are organized in much the same way.



# The case for supply management

The concentrated interests that benefit from government transfers organize aggressively to defend their entitlements. The supply management sector is a case in point. It argues that supply management benefits producers, processors and consumers alike. Further, in the case of dairy, it argues that supply management is essential for defending producers from transactional dependence on processors. Each alleged benefit has merit, but these benefits are balanced with associated costs that the industry does not acknowledge. As well, supply management is less of a necessity in a globalized market. Each argument is assessed below.

## Producers

Producers certainly extract a benefit from supply management. Demand for their product is guaranteed, so they have long-term stability. Before supply management, dairy producers in particular were vulnerable to wild swings in supply. This stability has not been without its benefits. It has allowed dairy farmers to invest in dairy genetics and high-quality care of their herds, which increases product quality. Productivity per cow has grown faster in Canada than it has in most of our trading partners (McIsaac, 2008). Producers receive larger profit margins as a result; a cap on production ensures that these savings are not passed to consumers. Additionally, concentration in the dairy processing sector left individual producers vulnerable to oligopolistic exploitation. In the case of dairy producers, this problem was acute due to the perishability of their product—if they did not sell their product, it spoiled. The supply management monopoly is able to give producers a voice to increase their market power vis-à-vis the middleman and processors (Groeki, 1982; Tamilya and Charlebois, 2007). A voluntary co-operative arrangement would suffer from free rider problems. Proponents argue that supply management ensures that producers are protected from the wild price swings that can decimate farmers in other jurisdictions. It also frees them from the need of arbitrary farm-support subsidies (Doyon, 2011a).

Many producers certainly benefit from the status quo. If this were not true, more producers would be calling for reform. However, the benefits of supply management do not apply to all producers equally. Supply management dissuades enterprising individuals from exploring market opportunities—they cannot sell product outside the system domestically or for export. The system has led to the continual value increase in quota, an artificial asset. Quota was given free when the system was established, so smaller producers were able to enter the market and cash in later by selling their quota. However, quota is now prohibitively expensive. It has the effect of locking smaller producers out of the market. As a result, the supply-managed sector is beginning to resemble an oligopoly of wealthy producers. Supply management started with noble intentions—protecting “the little guy”—but over time began to do the opposite.

## Processors

The supply-managed sectors also argue that processors benefit from the status quo. This is true to an extent. Processors are also ensured stability. They know exactly how much product they will receive, and they can plan accordingly. This allows them to invest in improving product quality (McIsaac, 2008). Supply management comes with extremely high over-quota tariffs and small quotas to protect processors from competition. This is necessary because processors pay artificially high inputs due to price controls. Competition in the processing industry is limited and forces processors to find efficiencies and savings aside from their fixed level of inputs. Therefore, despite producer

prices that are well above average, not all of that cost is passed on to consumers. Processors are not necessarily as stagnant as critics believe.

Hardly a business or industry objects when the government implements policies to shelter them from competition. As a result, processors do not forcefully object to the status quo. However, supply management does have costs. Processors are not able to exploit market opportunities and cannot expand their operations. The limited nature of competition inhibits the development of value-added products. Nonetheless, the supply-managed sector is correct in arguing that processors benefit from the status quo.

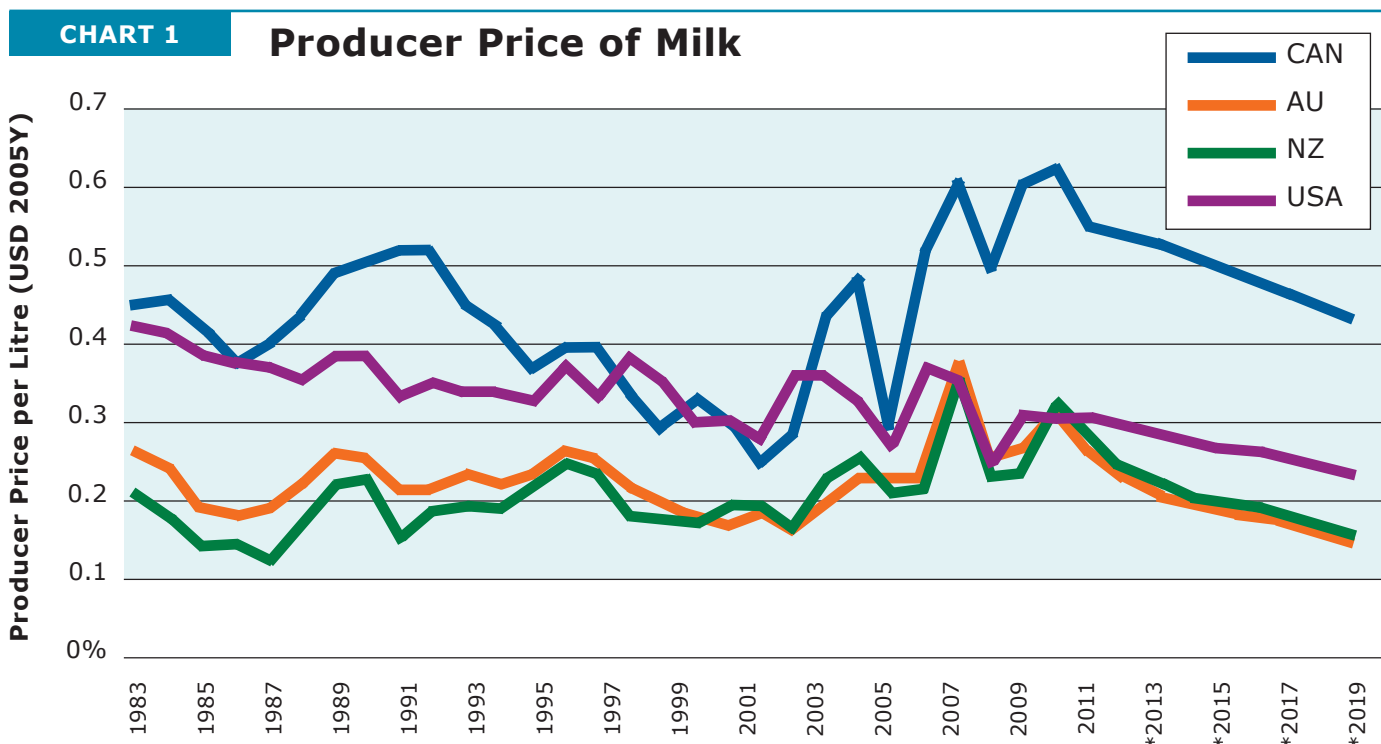
## Consumer

Advocates of supply management also argue that there are benefits for the consumer. They benefit from higher quality product, as the stability of the system allows producers to invest in genetic enhancements and quality care (McIsaac, 2008). Consumers are also assured that the herds are properly cared for, in contrast to factory farms in the United States with larger herd sizes. The industry also claims that prices are competitive with the United States (Doyon, 2011a). This is a more dubious claim that lacks comprehensive theoretical or empirical support. The next section will explore the costs of the supply-managed system.

In sum, the supply-managed sector has a credible case. Certainly not all the effects of the system are negative for all the actors involved. However, changes that have occurred since the 1970s make it far less clear whether such a system is necessary. Non-dairy farmers thrive in the open market. In an era of globalization, it is much harder for oligopolistic exploitation to occur unless it is backed by protectionist government policies. Producers have more options. Additionally, it is far from certain that a competitive market environment would fail to address consumer concerns over quality and product safety. This is not a substantial issue in other agriculture sectors. It is unclear why dairy and poultry are exceptions. Dairy sectors in the United States, Australia and New Zealand flourish in the market. Additionally, these benefits come with steep costs for consumers and non-dairy farmers, which we will now turn to.

# The cost to the consumer

The perceived benefits of supply management do not come without a cost. Monopolies can be expected to charge higher costs to consumers. They do this to cover inefficiencies caused by a lack of competition and because they have the market power to do so. Supply management is not different in this regard. Perverse incentives that are present in supply management limit productivity. It is true that sufficient incentive exists to keep costs of production down through efficiencies. Since producers do not have to worry about demand, any savings improve their profit margins. However, there is little incentive to reach economies of scale—any product beyond quota goes to waste. As a result, average Canadian herd size lags well behind the United States: 79 to 139. In dairy states such as Vermont, average herd size is even larger at 200 (Doyon, 2011b: 51-52). The inefficiencies that result are passed to consumers. Additionally, to cover the expensive cost of quota, supply-managed producers can lobby for higher prices without fear of repercussions. Consumers can be expected to pay a price for monopoly.



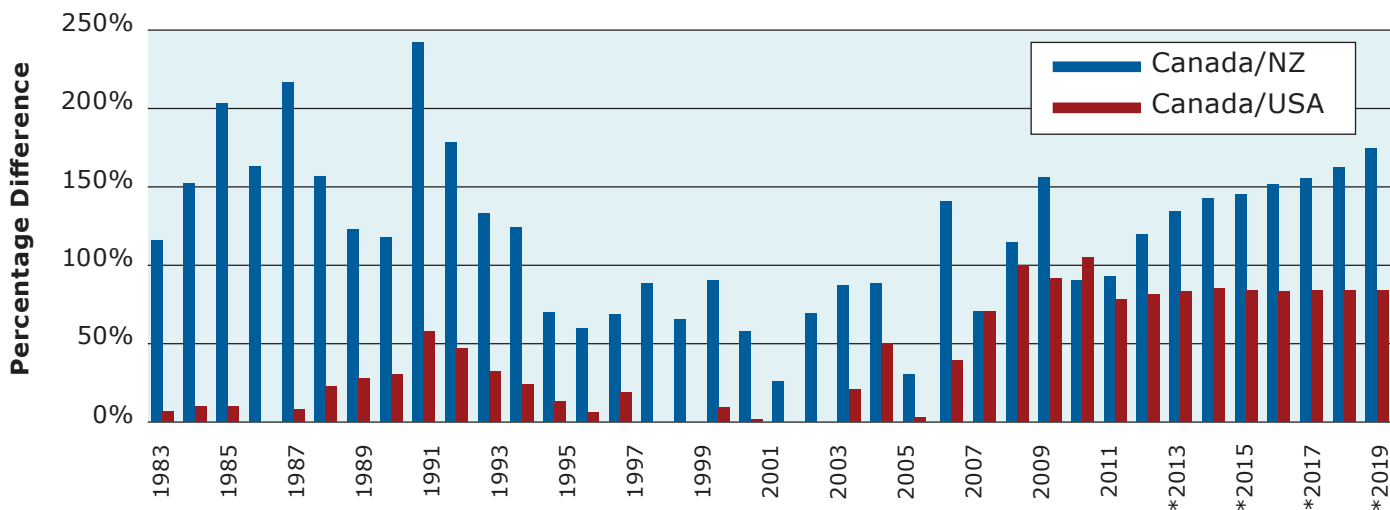
Source: OECD-FAO Agricultural Outlook 1983-2020; \* Extrapolated from trends.

As supply-managed producers have monopoly power, we can expect prices to be higher in Canada than elsewhere. Their product is inelastic, and tariffs protect them from imports. Proponents of supply management argue that the costs to the consumer are overstated. However, if this were true, it is unclear why a barrage of import tariffs on milk, poultry and eggs would be necessary. The OECD has tracked the producer price of milk over time, and it reveals significant distortions in the market. Canada always has higher milk prices than New Zealand or Australia, and it usually has higher prices than the United States as shown in Chart 1 above.

The dairy industry is correct in pointing out that at times the United States has higher milk prices. This fluctuates depending on the exchange rate. U.S. prices become less competitive with a lower Canadian dollar. These years are exceptions to the rule—the U.S. producer price was higher than Canada’s in only five years. Chart 2, next page, shows the percentage difference between the Canadian producer price and that of the United States and New Zealand. Between 1983 and 2010,

on average, Canadian prices were 115 per cent higher than New Zealand’s and 23 per cent higher than the United States’. The OECD-FAO projects that this difference will grow between 2010 and 2020. Canada will have, on average, prices that are 140 per cent higher than New Zealand’s and 86 per cent higher than the United States’.

**CHART 2**      **Producer Price Difference Between Canada and USA/New Zealand**



Source: OECD-FAO Agricultural Outlook 1983-2020; \* projected

The dairy industry argues that while producer prices are higher in Canada, prices at the retail level are not. Economically, this argument is questionable. There are no effective substitutes for an entire food group such as dairy. Prices can increase measurably and have minimal affect on consumer demand. There is also a high level of concentration in the food processing industry, which is protected from foreign competition. The industry can safely pass the costs of high producer prices to consumers. The Conference Board of Canada (2009) released a report that calculated retail prices for supply-managed products in Canada and abroad. The average retail price for a litre of whole milk is consistently higher in Canada than in Australia or in the United States. It peaks at an extra 60¢ and 64¢ per litre compared with American and Australian prices respectively. The cost of a 454g package of butter was periodically higher in the United States from 2000 to 2005, but it has been lower since then. In Australia, prices have consistently been much lower—\$1.50 less per package in 2009 (14). A report recently released by the Macdonald-Laurier Institute (MLI) compared regional milk prices in Eastern Canada, New York/New Jersey and the Upper Midwest and found, aside from a couple of exceptions, consistently higher prices in Canada. The gap has grown larger over the past decade (12).

At first glance, the difference in prices is small. However, when added up over the course of a year, it can represent a substantial cost for a family—an estimated \$320 per year for a family of four (Stanbury, 2002: 10). Low-income families will feel this pain the most. As argued by the MLI (2012), low-income families spend a higher proportion of total income on food. They spend almost 24 per cent on food, while only 6 per cent is spent on food in the highest income bracket. Furthermore, milk in particular has no close substitutes and thus suffers from price inelasticity (12-13). By constraining consumer choice in supply-managed goods, we lock in what amounts to a hidden tax on the poor.

There is some dispute as to how much higher retail prices are in Canada than in the United States. It is common on both sides of the supply management debate to cherry-pick spot prices in certain cities to suit their argument. There is no comprehensive tracking of retail prices over time. Most research not sponsored by the dairy industry points to higher prices in Canada for most dairy

products most of the time. However, a complex web of factors determines Canada’s retail prices and relative competitiveness, including the exchange rate, distribution structure and processing subsidies (Doyon, 2011b: 49). Prices in the 1990s, for example, were much more competitive with the United States due to the favourable exchange rate. Furthermore, if supply management were reformed, it is hard to say how much prices would decline at the retail level. This largely depends on the amount of foreign entry into the Canadian market, which would force processors to pass on their savings to Canadian consumers due to competitive pressure. On balance though, it does appear that consumers pay more for dairy in Canada and that ending the monopoly would yield savings for them, much as it did in Australia.

## Limiting consumer choice

It appears that supply management policy comes at a cost to consumers. An additional non-financial cost is the system’s limitation of consumer choice. The only way that low production and artificially high prices are sustained is through protection by limited quotas and formidable tariff walls. Before 1995, Canada had an outright embargo on dairy imports. This was relaxed as Canada sought to be WTO compliant (Conference Board of Canada, 2009: 23). Dairy products under quota are allowed to enter Canada at low tariff rates of between 1 per cent and 8 per cent. However, as a share of consumption, quota rates are trivially small. For example, Hart (2005) calculated that for yogurt this amounts to one teaspoon per Canadian each year (3). Beyond-quota tariffs skyrocket to as high as 300 per cent for butter. Table I below is a comparison of in-quota and over-quota tariffs.

**TABLE 1**
**Canadian Quota and Tariff Comparisons**

	Quota as share of consumption (%)	In-quota tariff (%)	Over-quota tariff (%)
Fluid Milk	2.3	7.5	241
Yogurt	0.1	6.5	238
Butter	3.7	6.5	299
Cheese	5	1	246
Ice Cream	0.1	6.5	277
Skim Milk Powder	0	6.5	270

Source: Conference Board of Canada, 2009

These export quotas eliminate competition for dairy processors and inhibit the development of product varieties. To keep its share in a liberalized market, the industry would be forced to diversify and to develop consumer choices. As Hart (2005) argues:

“With little competition from outside, consumers are condemned to what the industry will produce: largely unimaginative, undifferentiated products, with a small amount of high-end goods competing with the relatively small amounts of high-end foods allowed to be imported, at relatively steep prices (7).”

Consumers are forced to pay high prices for non-innovative products.

## ***Chobani vs. Canadian Dairy Processors***

The high tariff walls and restrictive quotas of supply management protect processors from outside competition. This protection is necessary in the supply management framework due to the artificially high price of their inputs. This lack of competition dramatically restricts consumer choice. Agro-Farma, a U.S. company, recently attempted to break into the Canadian market with its popular Chobani Greek-style yogurt. This yogurt entered the U.S. market in 2007, and in the subsequent five years, it captured almost 20 per cent of the yogurt market (Shaw, 2012b). Minister of International Trade Ed Fast granted Agro-Farma a one-year import permit to market Chobani yogurt at 64 retail stores. Agro-Farma has to pay a reduced tariff of only 5 per cent on sales, as opposed to the over-quota tariff of 238 per cent. Chobani wants to expand into the Ontario market with the development of a \$76-million manufacturing plant in the province. This plant is expected to create approximately 1,300 direct and indirect jobs (Corcoran, 2012).

The dairy processors rallied to try to prevent the entrance of Chobani yogurt into the market. They launched a court challenge of Minister Fast's import permit, arguing it was inconsistent with Canada's supply management regime and contrary to established regulations. The plaintiffs argued that import permits apply to novel products only—and this does not apply in the case of Chobani yogurt, because dairy processors also produce a version of Greek-style yogurt. The processors also challenged the development of the Chobani plant as being inconsistent with supply management regulations (Corcoran, 2012).

This court case has laid bare the problems that supply management creates in the food-processing sector. The dairy processors are concerned that allowing Chobani, which uses cheaper U.S. milk for processing, will permit Agro-Farma to undercut the prices of Canadian processors and establish an artificial foothold in the market. The DFO is seeking to divert a portion of the annual milk surplus in order to provide the milk necessary for yogurt production. The processors argue that the DFO does not have this power. Greek-style yogurt requires more milk to produce than does regular yogurt. The provincial dairy boards receive quota based on current consumption. If the surplus goes to Agro-Farma, the Canadian processors will not have the milk supply available to expand their production of Greek-style yogurt (Shaw, 2012b). As Tom Kane of the Ontario Dairy Council explained:

“If we could have a system whereby new entrants were allowed into the industry and the milk supply came with it, not a problem. But we don't have milk, especially in the kind of volume that [Chobani] is talking about. It is not allowing us as processors to grow and it is not allowing dairy farmers to grow ... and for all of us, if we can't grow the market, we are going to stagnate (Shaw, 2012b).”

It can be argued that supply management is shackling the growth and expansion of Canadian food processors.



# The cost to the farmer

Academics, think-tanks, consumer activists and trade negotiators have long acknowledged the costs of supply management to the consumer. As a result, the debate is often framed as one of producers versus consumers. This is false. 210,000 beef, pork and grain farmers have no stake whatsoever in the supply management system. This compares to the fewer than 13,000 dairy farms that remain (Findlay, 2012: 14). Some people argue that supply management compromises the ability of the vast majority of farmers to secure market access abroad for their products. Claims by the industry that supply management is simply an alternative to government subsidy are not convincing. Supply-managed farmers receive far more transfers than their beef, pork and grain counterparts do. Additionally, much like the CWB of old, supply management can be said to encroach on property rights.

## Trade and Market Access

**TABLE 2**

**Farm Dependence on Exports by Region**

Prov./Region	Export-dependent Farms (%)	Exports as percentage of farm-gate Recipients
British Columbia	91.1	65.9
Alberta	97.9	91.4
Saskatchewan	99.2	95.9
Manitoba	96.2	89.0
Ontario	88.4	70.3
Quebec	75.0	54.7
Atlantic Canada	88.0	56.5
Canada	91.6	77.6

Source: Canadian Agri-Food Trade Alliance, 2008

Trade negotiators have long been critical of supply management—the albatross around Canada’s neck during trade negotiations. They argue that Canada’s maintenance of supply management has made it harder to gain access to foreign markets in other areas, including agricultural commodities such as beef, pork, oilseeds and grain. Non-dairy farmers are one of the biggest victims of this compromised market access. According to the Canadian Agri-Food Trade Alliance (2008), a coalition of farm groups that represent 80 per cent of Canada’s agriculture exports, Canadian farmers are dependent on exports. This is true regardless of region, as shown in Table 2 above.

Canadian farmers in commodities such as oilseeds and grains hold a clear comparative advantage over other countries due to the relatively low cost and availability of land. Canadian farmers depend on access to markets abroad for their livelihood, because production is well above domestic consumption. With access to the U.S. market largely secured, the priority has shifted to increased market access in Europe and the emerging markets in Asia. For this reason, a successful and comprehensive resolution of negotiations for the *Canada-EU Trade Agreement* (CETA) and the TPP offer a tremendous opportunity for Canadian farmers. The TPP in particular will allow farmers greater access to rapidly growing markets with a combined value of \$22-trillion (Grain Growers of

Canada, 2012). It also has the potential to further integrate the North American market, given the participation of the United States and Mexico in the negotiations.

As with any multilateral trade deal, one of the biggest obstacles in the TPP is agriculture. Despite the rhetoric of world leaders in support of free trade, the agriculture sector retains substantial protections in the form of export subsidies, import tariffs, farm-gate subsidies and, at the extreme, supply management. Over the past decade, transfers to dairy farmers began to fall internationally (Chart 4 below). This left Canada increasingly isolated on the world stage and manifested itself in Australia's and New Zealand's refusal to allow Canada to take part in TPP negotiations until recently (Dawson, 2012: 7-8). Canada was allowed entry by committing to put every issue on the negotiating table. International Trade Minister Ed Fast publicly stated the government's desire to defend supply management (Schnurr, 2012: March 12). This suggests that supply management will be one of the major points of contention at the trade talks.

There are still other major agricultural hurdles for the TPP. Intellectual Property (IP) protection is perhaps the most contentious issue in the negotiations. Many countries are suspicious of American intent to saddle them all, at the behest of the pharmaceutical industry and Hollywood, with extremely onerous commitments for IP and copyright legislation. They are also reluctant to agree to provisions that they think may shackle their economic development. Additionally, there is great uncertainty as to whether Japan will become an official participant in the TPP negotiations. The Japanese government is under intense pressure from fishing, agricultural and labour groups to not participate. Japan maintains high levels of protectionism in many fields—particularly agriculture. The value of TPP would be seriously questioned if Japan fails to join, which could compromise the negotiations. The fate of the TPP is precarious, but if it can come to a successful resolution, it offers farmers a great opportunity.

Out of more than 210,000 farmers nationally, approximately 13,000 are dairy farmers, 1,000 are chicken farmers, 500 are turkey farmers and 500 are egg farmers. Currently, policy prioritizes these producers over the broader community of farmers. If TPP and CETA were signed without sacrificing supply management, it would be achieved by giving up something in return. This could be beef import restrictions in the EU or canola tariffs in Japan. When determining whether to carry on with the status quo, policy-makers must assess the opportunity cost of supply management.

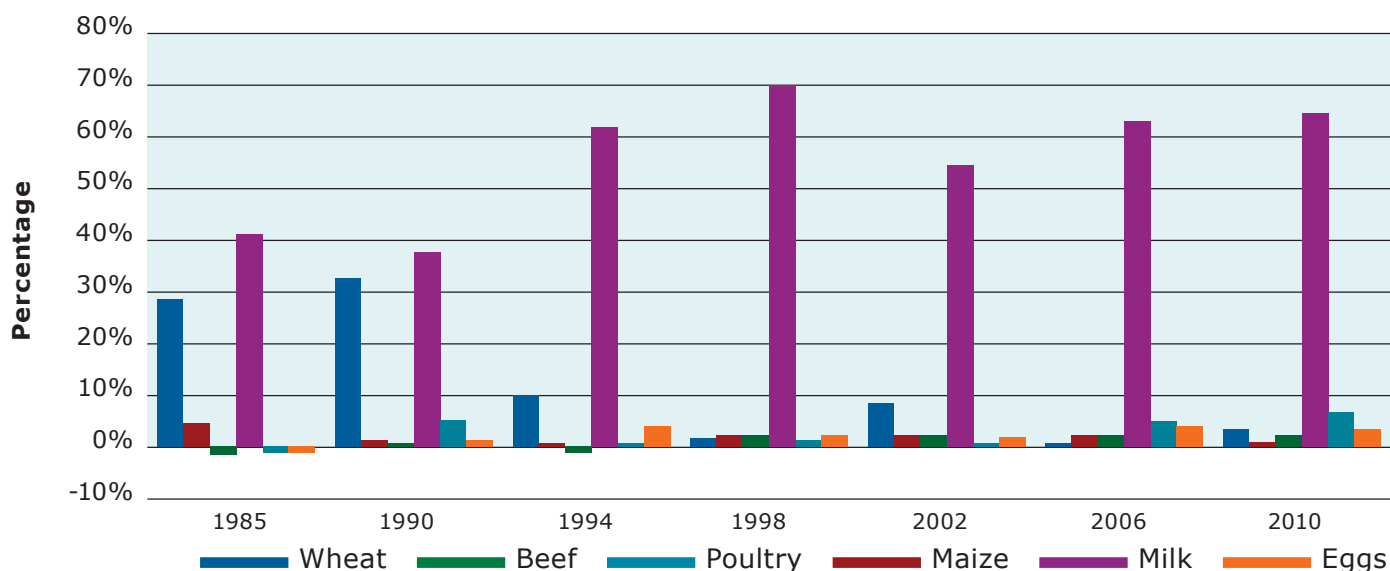
## Transfer dependency

The ability of supply-managed boards such as the CDC to set a production quota essentially renders market-pricing mechanisms inoperable. Proponents of supply management suggest that this process is preferable to the suite of taxpayer-funded support mechanisms common in other crops. There can be no doubt that Canada still subsidizes agriculture, but the data show that the supply-managed sectors are vastly more subsidized regardless of the source of the transfer. Additionally, the nature of these transfers ensures that they are far less transparent than government programs approved in the budget.

The Producer Single Commodity (PSC) transfer statistics from the Organisation for Economic Co-operation and Development (OECD) estimate the total taxpayer and consumer support that flows to producers of each commodity. Figure 3 below shows the share of the total PSC transfer for different commodities. The supply-managed sectors represent fewer than 10 per cent of farmers but account for almost 75 per cent of all transfers. This trend has accelerated as agriculture in other fields has modernized—the supply-managed sectors captured only 40 per cent of total transfers in 1986.

CHART 3

### Share of PSC Transfer by Commodity

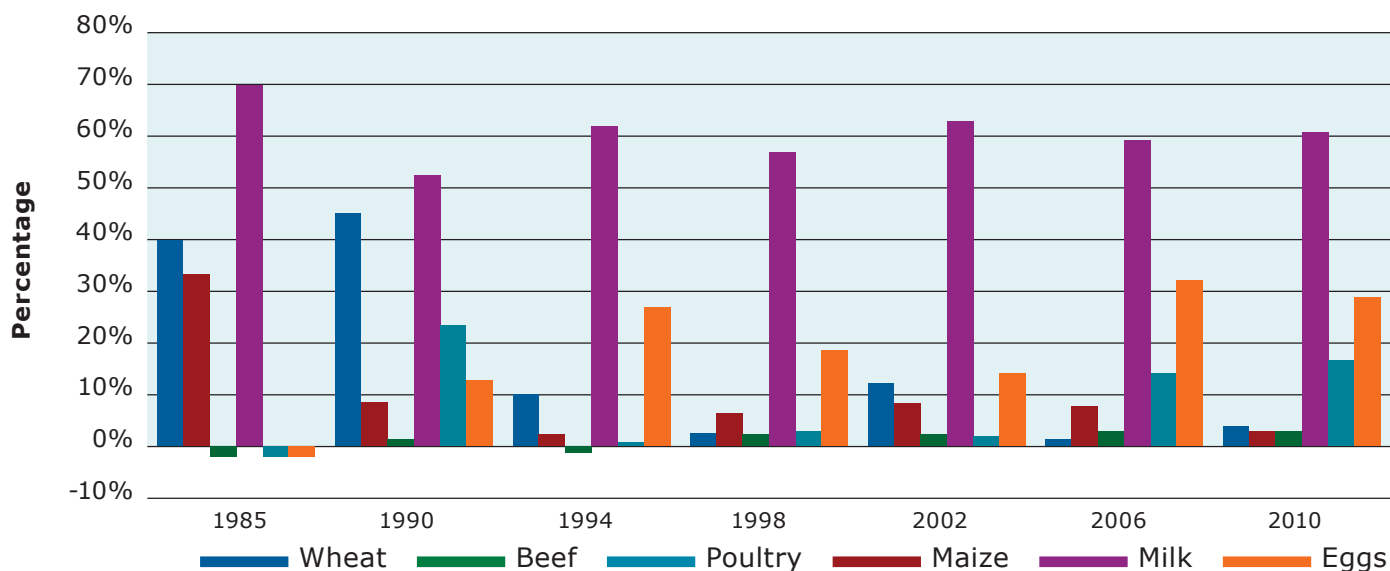


Source: OECD Producer Single Commodity Transfer, 1986-2010

The degree of transfer dependence is also vastly higher in dairy, poultry and eggs than in other commodities. Transfers amount to 60 per cent of the dairy farmer’s farm-gate income. The equivalent for beef and wheat is 2.3 per cent and 3.6 per cent respectively. Chart 4 below shows transfers as a percentage of farm-gate income over time. Dependence on transfers remains a fact of life only for the supply-managed sectors. The liberalization of wheat and corn is particularly stark. In 1986, transfers amounted to 39 per cent and 33 per cent of farm-gate income respectively. By 2010, these numbers dropped to 3.6 per cent and 2.4 per cent. Other commodities have liberalized and transformed into robust, export-orientated sectors, but dairy and, to a lesser extent, poultry remain anachronisms.

CHART 4

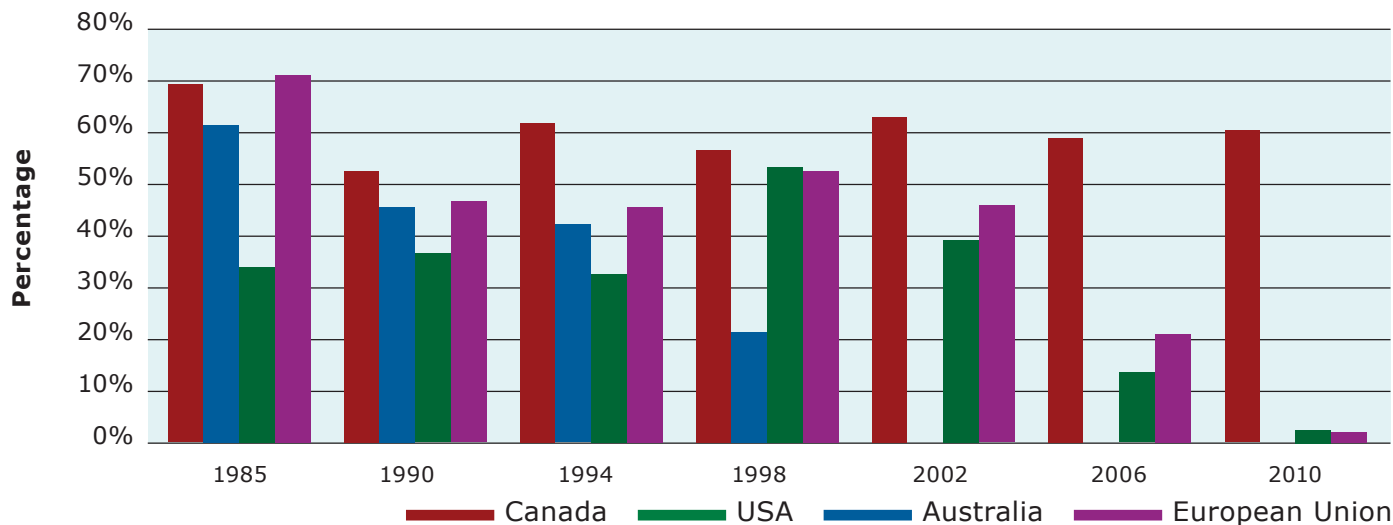
### Transfers as a Percentage of Farm-gate Income



Source: OECD Producer Single Commodity Transfers, 1986-2010

It has been argued that removing supply management will flood Canada with taxpayer-subsidized U.S. dairy products. A legitimate case can be made that Canadian producers will face tough competition from U.S. producers if supply management disappears. It is less true now that this is due to excessive subsidization. Chart 5 below shows the PSC in milk as a percentage of international farm-gate income over time. In 1986, dairy was very heavily subsidized. However, Australia fully deregulated its dairy sector in 2000, while the EU and the United States have reduced dairy subsidies over the past decade. Other countries do subsidize dairy, but there is no equivalence between Canadian policy and our trading partners' policies.

**CHART 5 International Transfers to Milk Producers**



Source: OECD Producer Single Commodity Transfers, 1986-2010

## Property rights

An often overlooked consequence of supply management is the violation of property rights that the system requires. Farmers are not legally allowed to sell milk, eggs or poultry without a prohibitively expensive quota license, and they are not legally allowed to sell beyond quota. A farmer who violates these rules is subject to rather harsh treatment by the cartel and its government allies. This does not receive much attention in the press.

Many examples of family farmers trying to survive outside of the supply management system exist. They have repeatedly come under successful legal attack by the supply-managed sector. For example, the Georgian Bay Milk Company exported milk outside of the system for a handful of dairy farmers. A 2008 court ruling declared the enterprise illegal and ordered that it again be regulated by the DFO (McKenna, 2012). Bill Denby of Dairy International made similar efforts, which were also blocked by the courts. These entrepreneurs sought to provide a means for small dairy farmers who cannot afford the inflated price of quota to market their product (Callahan and Washburn, 2003). It is a myth that supply management benefits the family farm. Benefits accrue to the wealthy, who can afford the high price of quota. They maintain the system by shutting out the enterprising "little guy."

Another overlooked fact is that the Canadian Food Inspection Agency (CFIA), on behalf of the supply-managed sector, has the ability to raid farms and seize product that is produced above quota. This practice has led to allegations that the agency acts above the law. In 2006, the CFIA, the Egg Farmers of Ontario and the Ontario Provincial Police (OPP) launched a raid on Shawn Carmichael's farm. They accused him of selling eggs and owning fowl beyond his allotted quota of 100 hens. The CFIA and OPP seized his chickens, and the OPP arrested him. Hundreds of hens were jammed

into cages and transported off his property. More than 350 hens died because of their treatment by CFIA officials, and another 800 died of shock after the incident (Eastern Ontario AgriNews, 2006). Carmichael brought a lawsuit against the CFIA and the Egg Farmers of Ontario for willful destruction of property, but it was dismissed. The Crown did not pursue animal cruelty charges despite a recommendation from the Ontario Society for the Prevention of Cruelty to Animals. As Jacqueline Fennell, president of the Leeds and Grenville Landowners Association, remarked at the time, “I think it’s a travesty of justice. The only reason no charges were laid is the charges would be against the government” (Thompson, 2006).

The status quo also prevents farmers from supplying the raw milk niche market. Farmers cannot sell raw milk to anyone but the cartel, where it is pasteurized. Health experts argue that raw milk leads to a higher risk of salmonella and E. coli infection. However, many consumers and farmers argue that raw milk provides substantial health benefits and poses minimal risk when produced properly. A recent survey showed that more than 88 per cent of farmers admit consuming raw milk (Selick, 2010). Canada is one of only a few countries that does not allow a raw milk market. The raw milk debate has recently received greater attention due to the advocacy of German-born farmer Michael Schmidt. Schmidt organized an arrangement to exploit a perceived loophole in the law. He provided raw milk to 150 families who bought \$300 memberships for partial shares in 26 cows (Nguyen, 2011). The argument is that the families own the cows, and he simply provides a legitimate service in processing the milk. This raw milk is not being sold, so much as his service—the cows and milk are the property of the shareholders. A similar arrangement occurred in British Columbia when 450 citizens jointly purchased a herd of 25 cows and hired farmer Alice Jongerden to feed them, milk them and provide the owners with the raw milk (Selick, 2010).

The courts have thus far restricted the rights of these owners to make use of their property. Armed police raided Michael Schmidt’s farm and charged him with 13 counts of selling and distributing raw milk. While he was victorious in being acquitted by the Ontario Court of Justice, the acquittal was overturned on appeal. Schmidt was fined more than \$9,000 and sentenced to one year of probation. He is challenging the constitutionality of the law (Nguyen, 2011). If successful, his appeal could seriously damage the constitutionality of Canada’s supply management regime. Similarly, the British Columbia Supreme Court ordered Jongerden to cease distributing the raw milk produced by the co-owned herd. She is challenging the ruling, but as this court case proceeds, the herd owners have no choice but to dump the milk, which is a needless waste (Selick, 2010). The only people who can consume raw milk are quota-licensed dairy farmers.

# The politics of supply management

“The *Marketing Freedom for Grain Farmers Act* will give Western Canadian grain farmers the right to choose how they sell their wheat and barley... Our Government is delivering on our long-standing promise to give Western Canadian grain farmers marketing freedom, just as they have when selling their canola or pulses.”

– *Federal Minister of Agriculture Gerry Ritz, October 18, 2011*

“You show me an economic study where if the Dairy Farmers of Canada were disbanded or the Poultry Farmers were disbanded that somehow that would benefit consumers ... Show me where that would flow through to consumers. I don’t see that.”

– *Federal Minister of Agriculture Gerry Ritz, December 13, 2011*

The above quotes capture the inherent political dilemma in supply management. Despite evidence that supply management harms consumers and the broader community of farmers, the political will to reform the system has stubbornly refused to materialize. This dilemma reached new heights with the Conservative government’s aggressive attack on the CWB while steadfastly supporting the existence of supply management: an equal affront to marketing freedom and property rights. No political party has filled the vacant policy space and opposed supply management. Collective action theory helps explain why this is the case.

## The logic of collective action

Critics of supply management are often perplexed at how such a system can remain in a free trade nation such as Canada. What they often fail to take into account is the inherent incentive structures that allow it to thrive. Mancur Olson (1965) first explored what he called “the logic of collective action.” He challenged pluralism, the conventional wisdom of the time, in which groups of individuals with common interests organize and compete with other groups to pursue their interests in the public sphere. Olson recognized that not all groups are equal—incentives matter. If a group of like-minded individuals is dispersed and the costs of organizing to pursue their interests outweigh the benefits, there is no incentive to mobilize. Conversely, if the benefits of a policy are concentrated in a few hands, the benefits outweigh the costs of organizing. A small, cohesive minority is often in a better position to lobby for its interests than a large, dispersed majority (Stanbury, 2002: 10-11).

The logic of collective action applies perfectly to the case of supply management. Supply management allows a small number of dairy farmers to extract benefits above the market price for dairy and poultry products. Based on OECD statistics, the value of this wealth extraction is estimated to be \$120,000 annually per farm. The costs, however, are evenly dispersed among all consumers of dairy and poultry—costing the ordinary family \$320 per year (Stanbury, 2002: 10). The free rider problem also emerges with group organization. There is little incentive for consumers to help finance an anti-supply management lobby when they can extract the benefits of success without suffering a cost (Stanbury, 2002: 10). The supply-managed sector gets around this problem with its mandatory structure. Dairy and poultry farmers who purchased quota would suffer significant losses if supply management were abolished. Consumers, on the other hand, may hardly know the difference, since the costs are extracted incrementally on their grocery bills.

Supply management takes the collective action problem to the next level due to information asymmetries that are present. Dairy and poultry farmers know the benefits they receive from the supply management regime and organize fiercely to defend it. Consumers are largely ignorant of the costs they incur. A consumer survey conducted by Sylvain Charlebois et al. (2007) shows that 80 per cent of consumers think that Canadian dairy prices are lower, while 80 per cent do not know



the purpose of the Canadian Dairy Commission (91). Canadians are unaware of the proper market price for milk and do not understand how the industry functions. Even with the dispersed nature of the costs associated with supply management, consumers with little knowledge of the costs have no incentive to mobilize and pressure government to serve their interests.

This logic also applies to farmers who operate outside of the supply management system. Even though they suffer from curbed market access because of Canada's stance on supply management, the benefits they could receive are difficult to quantify. It is hard to say definitively how much market access has been lost and the impact of this at the farm-gate. Thus, the ordinary farmer has little incentive to mobilize against supply management.

Collective action theory also explains how supply management has thrived with the Conservative government's supposed free market ideology while the CWB came under attack. The CWB did not have the authority to set prices or ration production through quota. Without limits on production, profit incentives remained to improve efficiency and reach economies of scale. The modernization of agriculture created a new generation of young, business-orientated farmers who maximized efficiency and expanded production. The CWB monopoly prevented them from securing a better price for their product and served to inflate the price received by smaller, less-efficient farmers who would have held less market power outside of the monopoly. It is no coincidence that the monopoly was far less popular among younger farmers, according to the CWB's polling (CWB, 2011). The primary victim of the CWB's monopoly was this new generation of farmer as opposed to the consumer as is the case with supply management. These producers were a significant counterbalancing interest to the CWB bureaucrats and the National Farmers Union, which looked after the interests of smaller, less-productive farmers. The political incentives created by different public policies are essential to allow the assessment of the political environment and the prospects for reform.

## Implications

A recent report released by the Calgary School of Public Policy and written by former Liberal MP Martha Hall Findlay explores the politics of supply management. She argues that the sway of the dairy lobby is weaker than it has ever been due to the steady decline in their numbers since the introduction of supply management, from 145,000 farmers to fewer than 13,000. Findlay (2012) superimposed these farms onto riding maps and found only 13 ridings with more than 300 dairy farms. The Conservatives comfortably won the five ridings in Ontario by more than 10,000 votes. The other eight ridings are located in Quebec, with the Conservatives holding only two of them, but by easy margins. Findlay argues that there is little to fear politically in removing supply management (21-22).

While she is correct in pointing out how few and far between dairy farms are, she misses some key points. First, the stakeholders in supply management stretch beyond the owners of the 13,000 dairy farms, 1,000 poultry farms and 500 egg farms. The employees of these farms and those in spin-off industries are also important. Furthermore, as in Australia, dairy farms serve as an anchor for broader dairy communities. This is why the Australian government approved an adjustment package for these communities (Edwards, 2003: 87). Many rural communities have their success tied to the dairy farms that are located in them. The votes to be lost are greater than Findlay estimates.

Second, the political costs of eliminating supply management may well be small, but they are still higher than the benefits. No one votes for a party because of opposition to supply management, but there are communities that will vote against a party for opposing the system. There is no effective countervailing interest. Consumers are dispersed and ignorant of the costs (Stanbury, 2002: 8). Export-orientated farmers do not know how much they lose from missed trade opportunities. Processors are sheltered from competition, so despite paying high prices for milk and poultry, they are not punished in the marketplace (Findlay, 2012: 9). The only organized opposition to supply management is the Canadian Restaurant and Foodservices Association (CRFA), but MPs are more

likely to listen to farmer constituents who argue that their livelihood will be destroyed if the system is abolished than to A&W, Pizza Pizza and Starbucks, which are represented by the CRFA.

Third, the above process is truer today than it was in the past. Although there were 145,000 dairy farms at the beginning of the system (Findlay, 2012), the quota value was much lower, as it was dispersed among more farmers. The supply management system is trapped in a vicious circle, which is outlined by the Conference Board of Canada (2009):

Every year the Commission raises the price it pays for butter and skim milk powder to support its established target producer price. Provinces apply the increase to their prices for each milk class and component. Processors reduce demand, substitute with imports, and substitute with non-dairy ingredients. This increases milk sales into lower-paying milk classes, which in turn lowers the blend price farmers receive to below the national target price. To effectively keep the blend prices proportional to that target, the Commission must effectively tighten the Canadian production quota. Less overall quota means that (all else being equal) the value of the individual quota rises. This drives the demand for future price increases, and the cycle continues. (21)

Over the years, the value of quota has progressively increased due to this “treadmill.” New entrants are also increasingly shut out of the market due to the high value of quota, resulting in a steep decline in the farm population. These two phenomena have ensured an endless upward pressure on quota value. The supply-managed farmer has far more to lose now with the demise of the system than in the past. The system becomes more entrenched as time goes on. The politics of the public policy process is not as simple as a matter of votes but rather the extent of the influence of concentrated special interests on politicians and even more importantly, bureaucrats who direct the majority of Canadian public policy. If reform is to happen, a concentrated counterbalancing interest must manifest itself and actively oppose the system. This will be returned to later in this paper.

# International comparisons

The political situation in Canada appears to be hopeless for opponents of the supply management regime. Australia and New Zealand are often pointed to as examples of how reform is possible. However, differences in the structure of the dairy industry in both of these countries ensured the presence of a countervailing interest to oppose the supply-managed status quo. The collective action problem was overcome. Australia and New Zealand are certainly stunning examples of market-based success in dairy, but Canada's regulatory system is far more entrenched than Australia's and New Zealand's ever were.

## Australia

Opponents of supply management frequently use Australia as a model for dairy deregulation. The extent of the previous regulatory regime in Australia exceeded Canada's in many ways. Not only was there regulation at the farm-gate, but there were also price controls all the way through the value-added chain that shackled the entire industry (Harris and Rae, 2004: 5). Although Australia is frequently thought of as a former proponent of supply management, its support regime was less extensive and more complex than Canada's. The sector was broken up by state, and regulations separated manufacturing (industrial) milk and market (fluid) milk. Supply management did not govern manufacturing milk. The federal government managed a complicated regime of price supports, import restrictions and export subsidies (Edwards, 2003: 79-80, Harris, 2004: 2). State agencies set prices for market milk at a level close to double that of manufacturing milk. In Victoria, Tasmania and South Australia, a system of 'equitable marketing' was established where each farmer was paid for milk as if a set percentage was sold as market milk. In the remaining states, where market milk made up a larger share of production, a quota system was established (Edwards, 2003: 77-78). The total value of quota was much lower than the Canadian equivalent, since it only applied to a minority portion of production. Nonetheless, it reached as high as several hundred-thousand dollars for farmers in New South Wales (Edwards, 2003: 78).

## The road to deregulation

A common perception is that deregulation was unleashed on the dairy sector in Australia in 2000. The truth is that the road to deregulation can be traced back to the mid-1980s. Dairy farmers in Australia had long assumed that industry deregulation was inevitable. Large-scale changes in the industry preceded the termination of domestic support programs. First, New Zealand and Australia signed a free trade agreement in 1983. This allowed New Zealand dairy entry into the Australian market. Second, in 1986, the Kerin Plan was adopted, which set deregulation in motion. The plan removed the regulatory regime post-farm-gate. Next, it simplified the support mechanisms for manufactured milk. Farmers paid a broad-based levy on milk production that went toward an export subsidy. Although at first glance this appears to be a producer-funded support mechanism, the cost was inevitably passed on to consumers. The Kerin Plan aimed to gradually scale back the levy to reach parity with imported products from New Zealand before it expired in 2000 (Edwards, 2003: 81, Harris, 2004: 2, Harris and Rae, 2004: 5). In 1995, further changes were made so that Australia could comply with the Uruguay Round of the World Trade Organization (WTO)—the support mechanism ceased to be tied to exports. Ironically, the Domestic Market Support (DMS) encouraged New Zealand to export to Australia and undercut its inflated prices (Edwards, 2003: 82).

These changes forced the industry to make considerable reforms. Over the course of the 1980s and 1990s, the herd size and the number of farms decreased substantially. This was particularly true

in the less-protected manufacturing milk sector—between 1986 and 2000, the number of farms decreased by 33 per cent (Harris, 2004: 3). However, herd size increased, while productivity went up from 3,340 litres/cow in 1986 to more than 5,000 litres/cow by 2000 (Harris and Mae, 2004: 6). These gains gradually convinced many farmers of the potential profit opportunities in a deregulated regime, such as interstate trade and the growing export markets in Asia. Each Australian state embarked on a systematic review of dairy regulations to determine whether they passed a “public benefit test.” All but Victoria decided to maintain their support programs for market milk. A plebiscite was held, and 89 per cent of the farmers supported deregulation (Harris, 2004: 5). Maintaining quota or ‘equitable marketing’ became untenable for the other states (Edwards, 2003: 84-85), since Victoria is home to 65 per cent of Australian dairy production (ACCC, 2011: 28).

In 2000, all remaining dairy regulations were terminated. The dairy lobby successfully secured a financial adjustment package composed of the following items:

- Dairy Structural Adjustment Package (DSAP) for all producers;
- Dairy Exit Program (DEP) for producers who wished to exit the industry;
- Dairy Regional Adjustment Program (DRAP) to manage the impact of deregulation on communities dependent on the dairy industry.

The DSAP package of approximately \$1.6-billion was funded by an 11¢ levy on milk sales over a period of eight years (Charlebois and Astray, 2012: 18-19; Edwards, 2003: 86-87; Harris, 2004: 6). Producer surveys indicated that in general farmers made use of the assistance to reform their operations. The dairy industry accelerated the decade-long trend toward a more-productive, export-orientated sector (Harris, 2004). Despite the levy, the price of retail milk dropped an average of 22¢ per litre—more than most experts predicted (Charlebois and Astray, 2012: 19). The DSAP was criticized as being unnecessary. Critics argued that with the elimination of the support for manufactured milk, the market milk regulatory regime was untenable. Furthermore, Victoria agreed to deregulation even before the DSAP proposal. The DRAP was also criticized as being nothing more than pork-barrel spending. Nonetheless, consumers were better off with the reforms in place (Edwards, 2003: 90-94).

## The impact of deregulation

The slow progression toward deregulation in Australia had a substantially positive impact on the dairy sector. The effects were magnified in states other than Victoria due to their reliance on market milk. Table III below summarizes some of the key indicators for industry productivity. Between 1980 and 2000, the industry consolidated, with the number of farms declining by 52 per cent. This trend accelerated with a 54 per cent drop outside of Victoria after the last stage of deregulation in 2000. To compensate, herd size increased 97 per cent between 1980 and 2000 and another 52 per cent after the final stage of deregulation. After deregulation, the increase in farm output was greater in market milk regions, almost doubling between 2000 and 2010. Despite a decline of 21 per cent in the farm-gate price of milk in New South Wales, milk income increased 5.5 per cent and farm-gate receipts increased 15 per cent (Harris, 2002).

The dairy industry’s last 10 years has not been a complete success. Overall production in the industry has stagnated or declined since 2000. It is unclear how much of this is due to deregulation. Many farmers used the exit incentive and left the industry. Retirement rates were six times the average immediately after deregulation. However, a drought in 2002-2003 did substantial damage to producers, and input costs of feed and fertilizer have gone up considerably, which eat into the producers’ profit margins. Overall, deregulation is a success in Australia. A leaner, more competitive industry is thriving, while the retail costs of milk have declined considerably. Both producers and consumers have benefitted from reform.

**TABLE 3**
**The Impact of Deregulation on Dairy Producers**

			1980	1990	2000	2010
Dairy farms	Other States	number	10,527	6,556	5,090	2,352
	Victoria	number	11,467	8,840	7,806	5,159
Herd size	Other States	cows/farm	79	105	156	237
	Victoria	cows/farm	91	110	176	193
Milk yield	Other States	litres/cow	2,732	3,608	5,009	5,804
	Victoria	litres/cow	3,015	3,912	4,989	5,807
Farm output	Other States	'000 litres	217	378	781	1,374
	Victoria	'000 litres	275	428	880	1,122

Source: Harris, 2011

## Differences in Australian and Canadian political contexts

The Australian deregulation success story may leave Canadians puzzled as to why such reform has been impossible here. What is truly remarkable about the Australian example is how dairy farmers played a constructive role in the gradual deregulation of the industry. The Canadian dairy industry has, in contrast, framed the debate for policy-makers in black-and-white terms: Canada must maintain supply management or witness the destruction of the sector (Gifford, 2005: 2). The previous section highlighted the fact that dairy policy in Canada is a victim of a classic collective action problem. A concentrated interest in the dairy sector is able to extract rent from government at the expense of a more diffuse interest: the consumer and, in an indirect way, non-dairy farmers. However, many structural factors made the collective action dilemma less of an issue in Australia.

Firstly, unlike Canada's, the Australian dairy market was divided among the states, and regulations separated manufacturing milk and market milk. A quota system and price fixing existed in the market milk sector only, which was geared toward domestic consumption. Manufacturing milk more closely resembled the world price and was directed toward export markets. In Victoria, the dominant milk producer, 93 per cent of the milk was manufactured milk (ACCC, 2001: 30). These producers had little vested interest in the quota system. The dairy farmers acted as a countervailing interest to the status quo. In Canada, there is no regulatory distinction between market milk and manufactured milk, and the system is nationally integrated. Production has stagnated in Canada, leaving very little product for export. All farmers purchase quota, the value of which is far higher than was the case in Australia—an average of \$2.5-million per farm. Dairy producers have a united interest in the status quo regardless of region. Any policy that causes quota to lose value is financially problematic (Stanbury, 2002: 6).

Secondly, the *Australia-New Zealand Closer Economic Relations Trade Agreement* (ANZCERTA) liberalized dairy trade between the two countries. New Zealand imports began to compete with Australian dairy farmers' product, and they stimulated industry restructuring in the 1980s. Although full deregulation only occurred in 2000, the industry had been gradually moving toward that point. When regulations were removed in 2000, the industry was already well positioned to compete internationally. Additionally, the manufactured milk price supports encouraged further New Zealand imports, causing a net loss to the Australian dairy industry (Edwards, 2003: 81-82). Comparatively, Canada had an exemption for supply management in the *North American Free Trade Agreement*



(NAFTA). This allowed Canada to maintain import tariff levels to block U.S. dairy farmers from the Canadian market. The industry has not been moving toward reform and has remained rather stagnant since the 1970s.

Lastly, Australian government legal experts thought that the market milk regulatory regime was unconstitutional. The milk premium could only be maintained by restricting imports from other states; however, section 92 of the Constitution provides for free interstate trade. It is unclear why a legal challenge was not mounted against the system. Harris (2004) argued that the prospect of the sunset of DMS provided a disincentive for dairy processors to assume the legal costs of litigation. If the government re-established the status quo after 2000, however, the prospect of a legal challenge increased (4). Many producers thought they could have deregulation on their own terms or deregulation forced on them by the courts if the constitutionality of the regulations were successfully called into question. In Canada, no such constitutional issue exists.

## New Zealand

New Zealand is often used as the model for a deregulated dairy market. Dairy has long been a staple of the New Zealand economy, and even prior to deregulation the vast majority of product was exported overseas. New Zealand structured its dairy sector much like Australia's. There was an artificial regulatory division between manufactured milk and fluid milk, which is referred to as town milk. There were limited farm supports for manufactured milk, and over 80 per cent of product was exported. The New Zealand Dairy Board (NZDB) had a monopoly over the export of milk products. Producers sold their milk to one of a large number of dairy co-operatives for processing. If the co-operative wished to market its product abroad, it had to sell to the NZDB (Ohlsson, 2004: 7). In many ways, the NZDB was New Zealand's dairy equivalent of the CWB, though the CWB monopoly dealt with farmers directly and had a monopoly on all non-feed sales.

Town milk regulations were designed to ensure that New Zealand had a safe and stable supply of milk. In the early 20th century, this was problematic due to the nature of the dairy industry. Unlike Canada's, New Zealand's dairy sector is pasture based. As a result, during the winter, productivity declines sharply and costs rise for farmers. The government established a daily quota system for town milk producers, which came to be administered by the New Zealand Milk Board (NZMB) in the 1960s. It set the prices of town milk high enough to compensate farmers for the increased costs of year-long town milk production (Lattimore and Amor, 1998: 2-3; Mofitt and Sheppard, 1988: 3-5). The board also organized the processing and distribution of fresh milk. The town milk industry was only a small portion of the broader industry, which was fiercely competitive. Of 16,000 dairy farmers, only 1,300 provided for the town milk industry (Mofitt and Sheppard, 1988: 3). In the 1930s, more than 400 dairy co-operatives were in existence. This shrank to 168 by the 1960s and to 13 by 1995. In the process, dairy co-operatives became stronger, more efficient and more productive (Fonterra, 2011).

## The road to deregulation

Deregulation in New Zealand spanned more than two decades, much like the case of Australia. Beginning in 1986, the initial wave of deregulation was part of a much broader set of reforms to New Zealand's most protected industries. The town milk industry was largely deregulated to combat what had been a sharp rise in the price of milk over the preceding decade. Quota was abolished and prices were negotiated between the producers and the processors (although a minimum price was set). Additionally, the distribution of town milk was deregulated, which allowed supermarkets to sell milk alongside the maintenance of a home delivery system by processors. NZMB vendors were absorbed into the dairy processors. However, in order for a dairy co-operative to receive a milk vendor licence, it had to commit to maintaining the home delivery service. This provision was



removed in 1993. The NZDB was retained, and its monopoly on export sales continued (Moffitt and Sheppard, 1988: 15-16; Gilmour, 1992: 77-78).

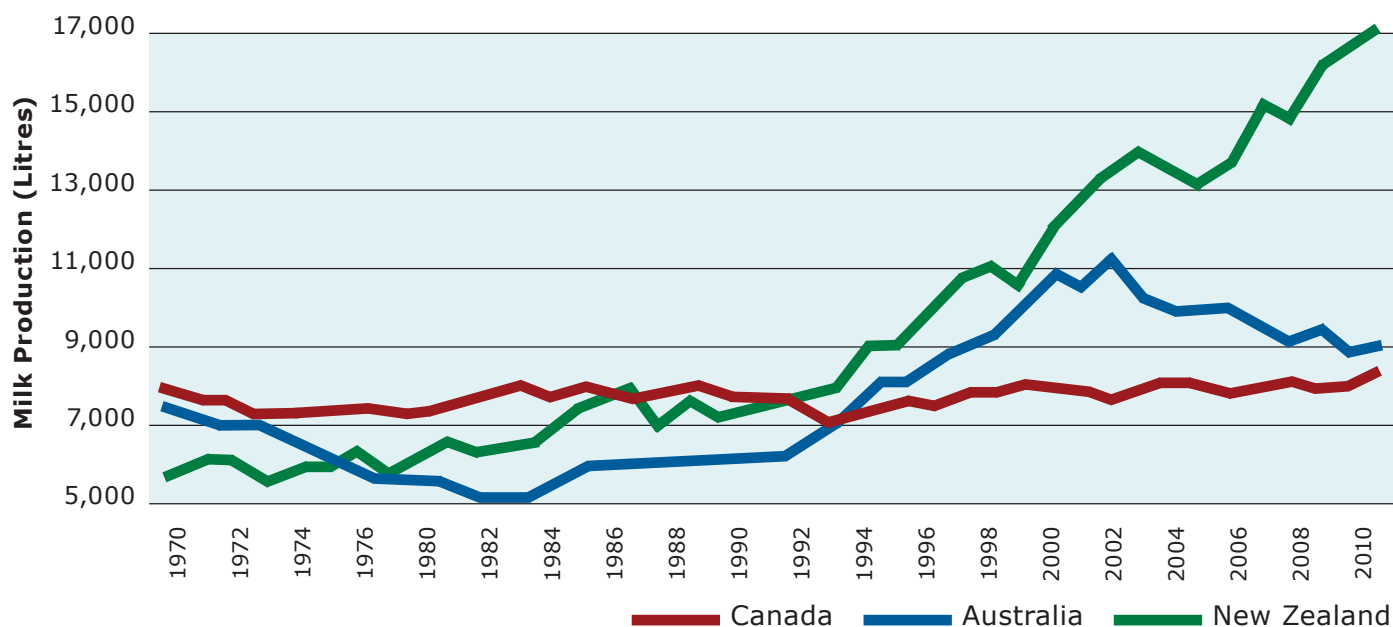
The final stage of deregulation occurred in 2000 with the abolishment of the NZDB. Production increased massively through the 1990s, and the dairy industry consolidated further into four major co-operatives. It became increasingly apparent that the NZDB was a major disincentive to investment in the industry and to the development of value-added products. Discussions about reform were held among the NZDB, the dairy co-operatives and the government. The industry proposed selling NZDB assets to Fonterra, a new co-operative formed by the merger of New Zealand Dairy Group and Kiwi Co-operative Dairies, the two largest co-operatives that together controlled 95 per cent of the market. The Commerce Commission of New Zealand ruled against the merger, fearing the market power of the new co-operative. However, the government passed the *Dairy Industry Restructuring Act, 2001*, to approve the merger with conditional regulations to guard against potential abuses of Fonterra’s power (Ohlsson, 2004: 8-9; Commerce Commission of New Zealand, 2012). Aside from these regulations, the dairy industry in New Zealand operates in a free and open market.

## The impact of deregulation

As with Australia, it is difficult to pinpoint one time when deregulation occurred. Deregulation had been occurring since the first wave of reforms in the mid-1980s to the final sale of the NZDB in 2000. During that time, the New Zealand dairy sector met with unprecedented success and was increasingly able to capitalize on its comparative advantage due to the extremely low cost of production. Figure 6 below shows nationwide milk production over time. The initial wave of deregulation led to the rapid growth in production in the 1990s. Production grew only 25 per cent in the two decades before deregulation, whereas this number rose to 127 per cent between 1990 and 2010.

CHART 6

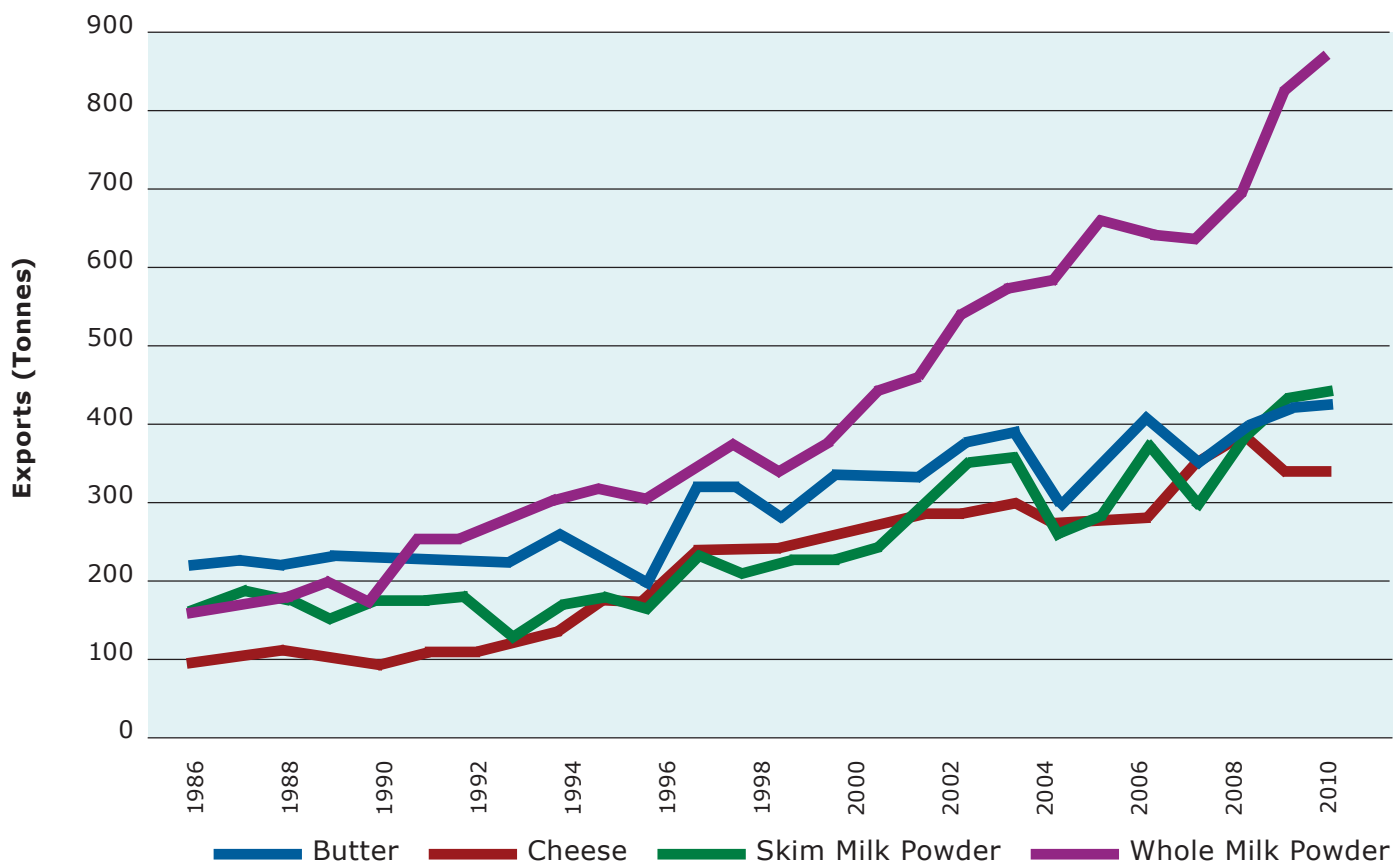
Milk production 1970-2013



Source: OECD-FAO Agriculture Outlook 1970-2020

Throughout this period, New Zealand also began to dominate the global market for dairy products, and it became the lead exporter of dairy products in the world. Chart 7 below shows the growth of New Zealand's exports in the era of deregulation. Of particular note are the incredible 430 per cent increase in whole milk powder and the 260 per cent increase in cheese exports. The sale of the NZDB, which prior to 2000 had a monopoly on exports, did little to impede the rapid expansion of New Zealand's dairy market power. The industry is facing challenges. It is pasture based and is thus heavily dependent on the acquisition of land (which is in short supply) in order to expand further. To maintain its growth, it will have to find ways to increase the productivity of its herd, while keeping its production costs low. Nonetheless, those who opposed dairy deregulation have not seen their fears materialize.

**CHART 7** New Zealand Dairy Exports 1986-2011



Source: OECD-FAO Agriculture Outlook 1970-2020

## The differences in the New Zealand and Canadian political contexts

New Zealand, more than any other country, is held up as an example of the free market at work in the dairy sector. The OECD uses New Zealand as the baseline against which other countries' dairy supports are compared, as it has the fewest market distortions. Despite being a small country, New Zealand is now the largest exporter of dairy products in the world (Armentano et al., 2004: 7). It is also at the forefront of international pressure to end dairy subsidies and supply management at the WTO and in the TPP. However, certain structural features of the dairy sector allowed New Zealand to move down a progressive course, much like Australia and unlike Canada.

First, there was a division between manufacturing milk and liquid milk regulations. The elimination of quota for liquid milk was even easier in New Zealand than in Australia, because its share of the market was even smaller. Dairy co-operatives—owned by farmers—stood to gain the most from town milk deregulation. The interests of the dairy industry were largely served by deregulation, even if the few town milk producers that remained lost out with the elimination of quota.

Second, the pasture-based dairy system in New Zealand has one of the lowest production costs in the world. A study by the Babcock Institute at the University of Wisconsin estimated that the costs are more than 30 percentage points lower than in Australia and more than 80 percentage points lower than in Wisconsin, which has a similar dairy farm structure as Canada (Armentano *et al.*, 2004: 30). Ninety-five per cent of all milk production is exported, giving New Zealand a large comparative advantage. When production soared in the 1990s, farmers became impatient with the limitations of the NZDB and supported its abolition. Canada's industry is domestic-orientated and resistant to market expansion.

Third, there is a high degree of vertical integration in the New Zealand dairy industry. It is integrated among producers, processors and vendors, which manifested itself in the co-operative giant Fonterra. Fonterra accounts for 7 per cent of New Zealand's GDP, controls 95 per cent of the market and, for the moment, is the only co-operative that is in a position to export product (Painter, 2007: 7). Fonterra is producer controlled. Farmers are able to acquire shares in Fonterra based on their level of production. Currently, shareholder status is limited to producers, though this could change as Fonterra continues to move away from its more traditional co-operative roots. Producers receive one vote for each 1,000 kilograms of milk solids that are produced (Ohlsson, 2004: 30). Producers do not fear manipulation by oligopolistic dairy processors, as they have control through every level of the value-added chain. Comparatively, in Canada, the 70 per cent share of the market held by three dairy processors is one of the primary justifications for the maintenance of supply management (Tamilia and Charlebois, 2007: 6).

## Limitations

Critics of supply management often point to New Zealand and Australia as examples of successful deregulation. They argue that by following their example, the Canadian supply-managed sectors can thrive in the export market. Unfortunately, we cannot assume Canadian dairy will be as successful in an open market as its Australian and New Zealand counterparts are. Two major differences make such a comparison problematic. Firstly, their pasture-based industry is fundamentally different from Canada's industry. It allows Australia and New Zealand to have cost-of-production structures that are far more competitive (Doyon, 2011b: 55). As previously mentioned, the New Zealand dairy cost of production is 80 percentage points lower than Wisconsin's. This gap can be expected to be even larger in Canada. Additionally, Australia and New Zealand are much closer to Asian markets. Canadian farmers are at a fundamental disadvantage in tapping into these high-growth export markets. Comparatively, in Western countries, dairy consumption is declining. Opportunities for export may be more modest than critics would suggest.

Secondly, Canada borders an economic superpower with a strong and vibrant dairy sector. Neither Australia nor New Zealand had this issue. Canadian producers have never been directed toward the export market, and after years of stagnant production, they are ill-prepared to meet a challenge from U.S. imports in the short term. Before deregulation, the Australian and New Zealand dairy sectors were geared toward exports. This is not to say that the Canadian dairy sector will not thrive in a liberalized market in the future, but the transition can be expected to be a rocky one. Critics of supply management are wrong to have such a rosy short-term prognosis from simply looking at Australian and New Zealand deregulation.

# The prospect for reform

## The importance of TPP

Thus far, the prospects for eliminating supply management may appear bleak. The distribution of the costs and benefits of supply management ensure that a small, concentrated minority extract 'rent' from a large, dispersed majority. New Zealand and Australia were able to overcome this problem, because the dairy sector was not one cohesive interest. Dairy farmers in Victoria wanted deregulation in order to exploit greater value-added opportunities and export markets. They forced the other states to go along with deregulation by threatening to undercut the prices of the cartel. In New Zealand, the dairy industry was traditionally export-orientated. Its co-operative framework diminished any fear farmers had of being taken advantage of by dairy processors. Quota was also established in only a very small segment of the town milk industry. In Australia and New Zealand, countervailing interests successfully pushed for reform—concern for the consumer had little part in it.

The Canadian situation is different. Quota applies to both liquid and manufactured milk, and the value has been pushed higher and higher due to attrition in the sector and the supply management "treadmill." The sector also has very little exporting experience, and therefore little stake in trade negotiations beyond protecting the regulatory status quo. The supply-managed sector is a powerful, cohesive special interest with enormous lobbying power on Parliament Hill and with Agriculture and Agri-Food Canada. The only path to reform is to introduce other concentrated special interests to counter the supply management lobby.

The TPP negotiations offer the best opportunity for reform. To preserve supply management in the trade talks, Canada will have to sacrifice items on its agenda. This will come at the expense of any number of industries in Canada, including non-dairy farmers looking for market access for grains, oilseeds, beef and pork. It is in the interest of all other stakeholders that Canada instead use supply management as a bargaining chip to make gains for other sectors. In this context, the supply management cartel becomes but one lobby among many. An effective countervailing interest is created to overcome the collective action problem. The government also gets the benefit of using the negotiations as political cover to make the necessary reforms.

The pressure to dismantle supply management is only sufficient in a multilateral trade context. Bilateral trade deals almost never go deep enough to deal with sensitive industry protections. Even the most comprehensive, such as NAFTA, allowed the agriculture sector to remain unreformed. The successful completion of the Doha Round of WTO negotiations would be another venue for Canada to agree to the removal of supply management, but the conclusion of those talks is unlikely in the near future. The TPP, however, is complex. Canada is but one player among many in the multilateral context. Other issues have the potential to derail the negotiations, particularly IP protection and Japan's status. These issues intersect. For example, to entice Japan to officially join the TPP or ratify any agreement, concessions may be made on agriculture. If this happens, Canada would be well placed to preserve supply management. Negotiations take place in secret, so it is very difficult to say with any certainty what course they will take. Nonetheless, the potential is present for TPP to give the government the political cover to enact reform as part of a broader international trend toward liberalized agriculture.

## The implications of the Chobani lawsuit

The dairy processors' attempt to block the market entry of Chobani yogurt opened up a second opportunity for further reforms to supply management. A recent court ruling threw out the legal challenge that was mounted by the dairy processors. In doing so, the Court exercised its traditional deference to the minister's prerogative in granting import permits. The Court also rejected arguments that the entry of Chobani yogurt would threaten the supply management regulatory system (Shaw, 2012a). The ruling does not necessarily mean supply management is doomed. The DFO is in favour of granting entry to Chobani, because doing so would increase the demand for dairy. The attitude of the incumbents toward the status quo may soon change as they begin to feel shackled by supply management in responding to Chobani's entry and other competitors that may follow. After decades of benefiting from tariff and quota protection, processors are now victims of supply management. At a minimum, it could push processors to lobby for increased production quota, which would put downward pressure on quota value. This would make reform more practical.

The courts have also opened the door to greater ministerial discretion in granting permits for import and have rejected the notion that doing so harms the supply management system. This gives the government the ability to expand consumer choice without the cumbersome passage of legislation. If the government chooses to do so, it can slowly undermine the foundations for supply management by allowing under-quota imports without going through a public battle to pass legislation. Again, the successful outcome of the Chobani decision does not undermine supply management in the short run; it opens up opportunities for reform in the future.

## The transition to a liberalized market

The issue of compensation is sure to arise if Canada has to give up supply management in any future trade negotiation. The supply management sector would have grounds to argue that it is entitled to compensation. Farmers who purchased quota did so in good faith. Ending supply management would reduce the value of quota to zero, representing a tremendous loss for producers who purchased quota. The damage would be far greater in Canada than in New Zealand, where only a few producers had town milk quota or Australia, where quota values were much smaller and were reserved for market milk producers in only three states.

Critics of compensation also have a point. They argue that the consumer has been milked for decades to the tune of \$25-billion in milk alone. Since supply-managed producers were allowed to live off the backs of consumers, it is unfair for consumers to pay again to help supply-managed farmers to become efficient—something they should have been doing since the very beginning.

It seems unlikely that eliminating supply management will be politically possible without some form of compensation—particularly since Australia set a precedent. The government could explore several potential options to assist supply-managed producers in the transition:

- Full government compensation for a farmer's quota value.
- The Australian solution: compensation payments to farmers to be used to assist them in improving their efficiency and competitiveness and exit payments for those who wish to leave the industry.
- A phased reduction of quota value and a reduction in tariffs over a 20-year span.

The first option is simply not practical. Canada and the rest of the world have entered into an era of austerity. We cannot afford to sink \$25-billion into purchasing an artificial asset. Producers who rightly have a cause for grievance are most likely to advance this option. A sensible compromise would probably be a combination of the last two options.

The C.D. Howe Institute recently proposed a compelling plan for the auction of additional quota as well as the poultry and egg marketing boards in order to abolish price fixing. More-efficient producers

who seek to expand their operations and transition to a liberalized market could purchase extra quota. The supply would determine prices, though a pooled-pricing scheme could be maintained to soften the sharp decline in prices. Over the span of 20 years, prices would move toward the international standard. Throughout this period, there would also be a gradual reduction in tariff protections (Robson, 2010: 7-8). Producers, aware of the future termination of the system, would have time to adjust to a fully liberalized market as they continue to capture above-market returns, albeit at a declining rate.

The revenue raised by the selling of quota would be used for an adjustment package similar to that provided by Australia. Additional government funds or a levy on dairy, poultry and egg sales could supplement this package. Consumers have been gouged for 40 years, so taxpayer funding may be preferable, the burden of which will fall less on lower-income families. To allow for the transition to a liberalized market, the transition package should be conditional upon the development of farm projects that aid in improving farm efficiency.

In all likelihood, there will never be the political will to reform supply management on our own terms. Canada's trading partners will likely force it on us. It is probable they will be unimpressed by a 20-year plan to phase in liberalization. The advantage of the C.D. Howe Institute's approach is that it can be altered to reflect a more-limited timeline, say 10 years as opposed to 20. It would be less of a soft landing for producers, but that can be partially made up for by a larger transitional-assistance package. A variation on the C.D. Howe Institute's approach combined with the best parts of Australia's compensation strategy offers a reasonable solution to bringing Canada's supply-managed sectors into the 21st century. Whatever shape reform takes, it is important that Canada acts now. As quota values are pushed upward, the shock of reform will become increasingly painful for supply-managed producers.

## **The prospects for Canadian dairy in a liberalized market**

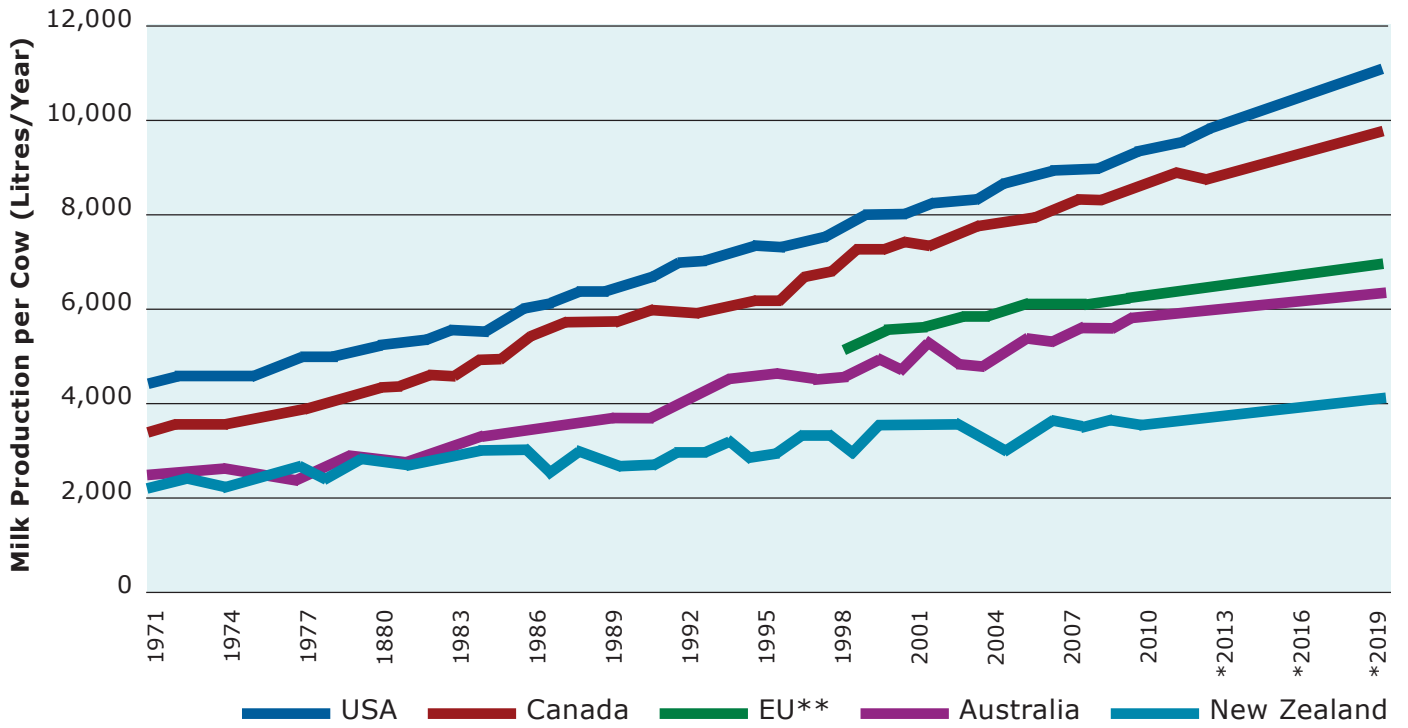
There is no denying that a move to a liberalized market will result in a great deal of restructuring in the industry. This will be painful for many and will likely cause further consolidation of the industry. The U.S. dairy industry's entrance into our market will make this particularly acute. However, some farmers will take full advantage of the tremendous opportunities opened up by deregulation. Canada's dairy sector has much going for it—enough to allow Canada to secure a comparative advantage in the sector and to allow it to turn into a significant player in the export market.

A report written by Sylvain Charlebois and Tatiana Astray (2012) and recently released by the Frontier Centre for Public Policy explores the factors that give the Canadian dairy industry an advantage over the competition. They argue that Canada has an abundance of cheap and available land that would allow producers to grow their own feed at a low cost—a lower cost of production would help Canadian dairy to compete. Advances in dairy genetics would also allow Canadian farmers to generate higher yields and higher quality product. As it stands, Canada's herd productivity, measured in litres per cow, compares favourably with other countries as shown in Chart 8, next page. The availability of land, low-cost feed and high-quality genetics would allow Canadian farmers to reach economies of scale—they just need the incentive to do so. The dairy industry would face short-term pain, but it would thrive in the long run and be in a better position to take advantage of emerging overseas markets.



CHART 8

Dairy Production per Cow 1971-2019



Source: Milk Production and Herd Size from OECD-FAO Agriculture Outlook 1970-2020, calculations by author; \* Extrapolated at current trends; \*\* EU data begins in 1999.

# Conclusion

As a nation that is dependent on export markets, it is very unfortunate that Canada maintains a system that is, in effect, a government-sponsored cartel. This is not the only example of consumers being at the losing end of a collective action problem. The Bell and Rogers duopoly in the telecommunications market is a result of their capture of the regulatory apparatus in the Canadian Radio-television Telecommunications Commission (CRTC). Protected from foreign competition, they gouge Canadian consumers at will. Air Canada ensures that Canadians pay exorbitant rates for air travel by preventing foreign airlines from offering domestic flights (among other regulations). They do this under the guise of a very primitive form of economic nationalism, as highlighted by the Emirates airline dispute where Air Canada mobilized its political power to block competition. Consumers must be vigilant against such abuses of regulatory power.

Supply management ensures that consumers pay more for staple foods, which disproportionately affects the poor. It has shackled the dairy, poultry and egg sectors, ensuring high costs of production, limited efficiency and little capacity to export into emerging markets. It is a violation of private property rights and marketing freedom. It has soured our trading relations with our neighbours at the expense of export-orientated industries and 90 per cent of Canadian farmers. Supply management once served a purpose because of the legitimate fears of producers toward market exploitation, but times have changed, and it cannot be argued that the status quo benefits the small farmer.

The Trans-Pacific Partnership and the implications of the Chobani lawsuit offer an opening for reform. Countervailing interests to the supply-managed lobby can be mobilized against the supply-managed sectors. In its election platform and in press releases and statements since the election, the current Conservative government committed itself to preserving supply management. TPP, in particular, offers the government much needed political cover to backtrack. If Canada wants to be the global leader for free and open markets, it must reform supply management. The eyes of the world are on us. Prime Minister Harper: It is now or never.

# References

- Armentano**, Louis et al. (2004). "The Dairy Sectors of New Zealand and Australia: A Regional Study." Babcock Institute, Discussion Paper no. 2004-3. Retrieved from [http://babcock.wisc.edu/sites/default/files/documents/productdownload/dp\\_2004-3.en\\_.pdf](http://babcock.wisc.edu/sites/default/files/documents/productdownload/dp_2004-3.en_.pdf).
- Australian Competition and Consumer Commission** (ACCC). (2001). "Dairy Deregulation and the Australian Milk Market." *ACCC Journal*, 33, pp. 18-20.
- Callahan**, Joe and Washburn, Robert. (April 2003). "Non-quota Dairy Farmers Face Uphill Battle to Survive." *Better Farming News*. Retrieved from [http://www.betterfarming.com/archive/cov\\_apr03.htm](http://www.betterfarming.com/archive/cov_apr03.htm).
- Canadian Agri-Food Trade Alliance**. (2008). "Harvesting the WTO Agreement." Retrieved from [http://www.cafta.org/Download/cafta\\_info\\_package\\_march\\_2008.pdf](http://www.cafta.org/Download/cafta_info_package_march_2008.pdf).
- Canadian Wheat Board** (CWB). (2011). "CWB Spring 2010 Producer's Survey Results." Retrieved from [http://www.cwb.ca/public/en/farmers/surveys/producer/pdf/survey\\_062911.pdf](http://www.cwb.ca/public/en/farmers/surveys/producer/pdf/survey_062911.pdf).
- Chicken Farmers of Canada**. (2011). History of Supply Management. Retrieved from <http://chickenfarmers.ca/chicken-industry/history-of-supply-management>.
- Commerce Commission of New Zealand**. (2012). *The Dairy Industry Restructuring Act*. Retrieved from <http://www.comcom.govt.nz/the-dairy-industry-restructuring-act/>.
- Conference Board of Canada**. (2009). "Making Milk: The Practices, Players and Pressures behind Dairy Supply Management."
- Charlebois**, S., Langenbacher, W. & Tamilia, R.D. (2007). "The Canadian Dairy Commission: An Empirical Survey on its Relevance in Today's Civil Society." *International Food and Agribusiness Management Review*, 10(1), pp. 81-99.
- Charlebois**, Sylvain and Astray, Tatiana. (2012). "The Future of the Canadian Dairy Sector in a Post-supply Management Era." Frontier Centre for Public Policy. Retrieved from [http://www.fcpp.org/files/1/PS128\\_DairyPostEra\\_MR23F6.pdf](http://www.fcpp.org/files/1/PS128_DairyPostEra_MR23F6.pdf).
- Corcoran**, Terrence. (March 30, 2012). "Canada's Big Fat Greek Yogurt Drama." *Financial Post*. Retrieved from <http://opinion.financialpost.com/2012/03/30/terence-corcoran-chobanis-greek-yogurt-drama/>.
- Doyon**, Maurice. (2011a). "The Need for Supply Management: An Economic Rationale." Paper prepared for the Dairy Farmers of Canada.
- Doyon**, Maurice. (2011b). "Canada's Dairy Supply Management: Comprehensive Review and Outlook for the Future." Paper prepared for the Centre interuniversitaire de recherche en analyse des organisations.
- Edwards**, G. (2003). "The Story of Deregulation in the Dairy Industry." *The Australian Journal of Agriculture and Resource Economics*, 47(1), pp. 75-98.
- Eastern Ontario AgriNews**. (May 2006). "Carmichael Fights Back, Lays Charges." Retrieved from <http://www.agrinewsinteractive.com/archives/article-7580.htm>.
- Findlay**, Martha Hall. (2012). "Supply Management: Problems, Politics – and Possibilities." SPP Research Papers, vol. 5, no. 19. Retrieved from <http://policyschool.ucalgary.ca/sites/default/files/research/m-hall-findlay-supply-mgmt-final.pdf>.
- Fonterra**. (2011). "Our Heritage." Retrieved from <http://www.fonterra.com/wps/wcm/connect/fonterra.com/fonterra.com/our+business/fonterra+at+a+glance/about+us/our+history>.
- Gifford**, M. & Dymond, B. (2008). "The Doha Round of WTO Negotiations: Implications for the Canadian Dairy Processing Sector." Centre for Trade Policy and Law.
- Gilmour**, Soraiya. (1992). "History of the New Zealand Milk Board: A Study of the Corporatist Alliance between the State and the Domestic Milk Sector." Agribusiness and Economics Research Unit, research paper no. 216. Retrieved from <http://hdl.handle.net/10182/246>.
- Grain Growers of Canada**. (2012). Trans-Pacific Partnership Will Open Up New Markets for Farmers. Retrieved from <http://www.ggc-pgc.ca/docs/2012-06-19-TRADE-TPP-FINAL.pdf>.
- Groeki**, Paul H. (1982). "Canada's Chicken-and-Egg Problem: The High Cost of Price and Output Controls." *Regulation*, pp. 28-36.

- Harris, D.** (2004). "Producer Adjustment to Policy Reform: A Case Study on the Australian Dairy Industry." Presented to the annual conference of the Australian Agricultural and Resource Economics Society, Melbourne. Retrieved from [http://ageconsearch.umn.edu/bitstream/58456/2/2004\\_harris.pdf](http://ageconsearch.umn.edu/bitstream/58456/2/2004_harris.pdf).
- Harris, D. & Rae, A.** (2004). "Agricultural Policy Reform and Industry Adjustment in Australia and New Zealand." Presented to the International Agricultural Trade Research Consortium. Retrieved from <http://ageconsearch.umn.edu/bitstream/15762/1/cp04ha01.pdf>.
- Hart, M.** (2005). "Great Wine, Better Cheese – How Canada Can Escape the Trap of Agricultural Supply Management." C.D. Howe Institute. Retrieved from [http://www.cdhowe.org/pdf/backgrounder\\_90.pdf](http://www.cdhowe.org/pdf/backgrounder_90.pdf).
- Lee, Ian et al.** (2012). "Milking the System: How Agriculture Supply Management Impedes Trade Opportunities and Egregiously Transfers Income." Macdonald-Laurier Institute. Retrieved from <http://www.macdonaldlaurier.ca/files/pdf/Supply-Management-Essays-June-2012.pdf>.
- McIsaac, Alan.** (2008). *The Case for Supply Management*. Ottawa: Canadian Parliamentary Review.
- McKenna, Barry.** (June 24, 2012). "Time to End Supply Management – But it won't Go Quietly." *The Globe and Mail*. Retrieved from <http://www.theglobeandmail.com/report-on-business/time-to-end-supply-management-but-it-wont-go-quietly/article4366885/>.
- Moffitt, R.G. and Sheppard, R.L.** (1988). "A Review of the Deregulation of the New Zealand Town Milk Industry." Agribusiness and Economics Research Unit, discussion paper no. 122. Retrieved from [http://dspace.lincoln.ac.nz/dspace/bitstream/10182/1051/1/aeru\\_dp\\_122.pdf](http://dspace.lincoln.ac.nz/dspace/bitstream/10182/1051/1/aeru_dp_122.pdf).
- Nguyen, Linda.** (December 19, 2011). "Raw Milk Farmer Michael Schmidt Appeals Convictions for Illegal Cow-share Program." *National Post*. Retrieved from <http://news.nationalpost.com/2011/12/19/raw-milk-farmer-michael-schmidt-appeals-convictions-for-illegal-cow-share-program/>.
- OECD.** (2010). OECD Countries: Producer Single Commodity Transfers. OECD.StatExtracts, (database). Retrieved <http://stats.oecd.org/>.
- OECD.** (2012). OECD-FAO Agriculture Outlook 1970-2020, by Commodity. OECD.StatExtracts, (database). Available from <http://stats.oecd.org/>.
- Ohlsson, Camilla.** (2004). "New Zealand Dairy Co-operatives: Strategies, Structures, and Deregulation." Department of Economics, Swedish University of Agricultural Sciences. Retrieved from [http://ex-epsilon.slu.se:8080/archive/00000400/01/Ohlsson%2C\\_Camilla.pdf](http://ex-epsilon.slu.se:8080/archive/00000400/01/Ohlsson%2C_Camilla.pdf).
- Painter, M.J.** (2007). "A Comparison of the Dairy Industries in Canada and New Zealand." *Journal of International Farm Management*, 4(1). Retrieved from [http://www.ifmaonline.org/pdf/journals/Vol4Ed1\\_Painter.pdf](http://www.ifmaonline.org/pdf/journals/Vol4Ed1_Painter.pdf).
- Robson, William.** (2010). "Freeing Up Food: The Ongoing Cost, and Potential Reform of Supply Management." C.D. Howe Institute. Retrieved from [http://www.cdhowe.org/pdf/backgrounder\\_128.pdf](http://www.cdhowe.org/pdf/backgrounder_128.pdf).
- Schnurr, Leah.** (March 12, 2012). "Canada to Defend its Farmers at Trade Talks." *Reuters*. Retrieved from <http://ca.reuters.com/article/idCABRE82B0VJ20120312>.
- Selick, Karen.** (September 24, 2010). "Raw-milk Fans are getting a Raw Deal." *The Globe and Mail*. Retrieved from <http://www.theglobeandmail.com/commentary/raw-milk-fans-are-getting-a-raw-deal/article1213881/>.
- Shaw, Hollie.** (2012a; July 31). "Court Dismisses Challenge Seeking Block on Chobani Yogurt Imports to Canada." *Financial Post*. Retrieved from <http://business.financialpost.com/2012/07/31/court-dismisses-challenge-seeking-block-on-chobani-yogurt-imports-to-canada/>.
- Shaw, Hollie.** (2012b; April 1). "Tempest in a Yogurt Cup: U.S.-based Chobani Seen as a Threat to Local Makers." *National Post*. Retrieved from [http://news.nationalpost.com/2012/03/31/tempest-in-a-yogourt-cup-u-s-based-chobani-seen-as-threat-to-local-makers/?\\_lsa=39144b19](http://news.nationalpost.com/2012/03/31/tempest-in-a-yogourt-cup-u-s-based-chobani-seen-as-threat-to-local-makers/?_lsa=39144b19).
- Stanbury, W.** (2002). "The Politics of Milk in Canada." The Fraser Institute. Retrieved from <http://www.fraserinstitute.org/WorkArea/DownloadAsset.aspx?id=4129>.
- Tamilia, R.D. & Charlebois, S.** (2007). "The Importance of Marketing Boards in Canada: A Twenty-first Century Perspective." *British Food Journal*, 109(2), pp. 119-144.
- Thompson, Catherine.** (August 2006). "Crown Flies the Coop on Chicken Raid Charges." *Eastern Ontario AgriNews*. Retrieved from <http://www.agrinewsinteractive.com/archives/article-7745.htm>.
- The Vancouver Sun.** (June 23, 2012). "Trans-Pacific Trade, Supply Management on the Table." Retrieved from <http://www.vancouversun.com/business/Trans+Pacific+trade+supply+management+table/6830480/story.html>.

February 2012

# **The Future of the Canadian Dairy Sector In a Post Supply Management Era**

By Sylvain Charlebois and Tatiana Astray

[http://www.fcpp.org/files/1/PS128\\_DairyPostEra\\_MR23F6.pdf](http://www.fcpp.org/files/1/PS128_DairyPostEra_MR23F6.pdf)

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