BUREAU DE COORDINATION DES ÉTUDES
Fiche d'identification de la mise à jour

COMMISSION : Commission d'étude des questions afférentes à l'accession du Québec à la souveraineté.

ÉTUDE ORIGINALE

Référence : Volume 3, page 251

Auteur : Robert A. Jenness (Informetrica)

Titre : L'impact de l'accession du Québec à la souveraineté sur l'industrie agroalimentaire

MISE À JOUR

Auteur : Robert A. Jenness (Informetrica)

Titre : Quebec's Supply-Managed Agricultural Sectors : Recent Developments and Prospects

2001-12-19

Quebec's Supply-Managed Agricultural Sectors: Recent Developments and Prospects

a study prepared for:

The Quebec Ministere du Conseil executive

R.A. Jenness
Informetrica Limited
November 2001

Informetrica Limited

ABSTRACT

In a study ten years ago of the supply-managed industries – dairy, poultry and eggs – in the context of a possible separation of Quebec from Canada, Informetrica indicated that there would likely be considerable disruption for producers in Quebec and elsewhere. For Quebec, which risked losing its market for processed milk products in the rest of Canada, the potential cost to dairy producers in the form of lost sales, a foregone subsidy from taxpayers outside Quebec, and reduced quota value for their output, could be sizeable. The same situation confronted poultry producers, although not on the same scale. On the other hand, separation would provide an opportunity for Quebec's egg producers to expand production.

In the intervening years Canada's dairy and registered egg production industries have become much leaner, with fewer, larger and more productive farms. While Quebec chicken producers no longer produce the same proportion of chicken that is surplus to that province's consumption, they are selling into an expanding market and their output per producer is significantly higher than their competitors in Ontario. The food processing and retailing industry in Canada has become more concentrated, with the largest firms active in all parts of Canada. But most important has been the change in the exchange rate, with the Canadian dollar dropping from about $.86 U.S. in the early 1990s to its current rate of less than $.65 U.S. today. As a result Canadian dairy products and eggs now retail for less than the corresponding U.S. products, and the U.S. price advantage for chicken has shrunk significantly.

Thus this study reaches a different conclusion than that of a decade ago. Separation by Quebec from Canada, in whatever form, and with a spirit of mutual cooperation and support on both sides, is not likely to significantly change the production and marketing arrangements or the asset values of supply-managed producers of either country.

Table of Contents

Quebec's Supply-Managed Agriculture Sectors: Recent Developments and Prospects

Introduction

A decade ago Informetrica undertook two studies of Canada's supply-managed agricultural sectors as part of its Economics of Confederation series, a sector by sector examination of the possible consequences for Quebec and for the rest of Canada of Quebec separation, including sovereignty association. One study dealt with dairy, the other with poultry and eggs. These sectors form a vital part of Canada's domestic agri-food business and in adopting supply-management Canadian governments have opted for a policy of domestic self-sufficiency in production and consumption. This has entailed national agencies that set overall provincial production quotas, provincial agencies that allocate quotas to individual farmers, and tariff and non-tariff barriers to control imports. Farm prices are determined either by the national agency or the provincial agency based on cost of production formulae. Thus farmers are assured of a relatively stable market for their output.

Not a great deal has changed in the markets or marketing structure of these farm products in the intervening years. The original U.S.-Canada and the subsequent North American Free Trade Agreement provided that the parties would agree to GATT rights and responsibilities, including those under Article XI which accommodated import restrictions on supply-managed commodities. And while, following the Uruguay Round Agreement, most of the quantitatively based import quotas were replaced by Tariff Rate Quotas (TRQs) these were set high enough to control external purchases to the limited amounts necessary to give processors flexibility in handling periodic or seasonal shortages. Overall, the domestic demand for milk has remained flat, the demand for chicken continues to grow and the demand for eggs, which fell off in the earlier period on worries of cholesterol, has been recovering since the mid 1990s.

This study takes the following form. First, it reports on the individual industries as they were regulated a decade ago, and our conjectures at that time on the possible outcomes for Quebec and other farmers of a positive vote for Quebec separation. Second, we report on changes that have occurred in the respective industries and the economy at large, including world markets, since that time. Finally, we speculate on what the consequences might be for dairy, poultry and egg producers should Quebec elect to separate sometime in the future.

Background

Dairy

In 1990 dairy products accounted for about 16 per cent of consumer food and beverage store purchases. Dairy farming generated more than $3 billion in farm cash receipts while dairy products shipped from processing plants were valued at over $7 billion. Canadian milk producers sell to either the "fluid" market, such as table milk and cream, or the "industrial"

market, milk used in butter, cheese, yoghurt, ice cream and other products. Of the 7.3 million kilolitres of milk produced, 2.7 million went to the "fluid" market, 4.6 million to the "industrial" market. Between them, Quebec and Ontario accounted for 72 % of the milk produced and sold in Canada. Quebec was the dominant producer of "industrial" milk, with 75% of its production going to manufactured use. Ontario was the largest producer of "fluid" milk, even though 60 per cent of its milk went to "industrial" use. In terms of net farm cash receipts Quebec producers received over 37%, Ontario producers 34% and western producers close to 23% (See Table 1).

Table 1
Dairy Farm Net Cash Receipts 1990
(millions of dollars)

	Fluid	%	Industrial	%	Total	%
Atlantic*	109.6	7.5	72.2	4.4	181.8	5.8
Quebec	366.0	25.1	801.5	48.5	1,167.5	37.5
Ontario	557.4	38.2	499.2	30.2	1,056.6	34.0
West	425.5	29.2	280.5	17.0	706.0	22.7
Canada	1,458.4	100.0	1,653.4	100.0	3,111.9	100.0

*excludes Newfoundland

Source: Statistics Canada, cat. 23-001, The Dairy Review, January 1991.

Government regulation and subsidization of the Canadian dairy industry extends as far back as the 1930s. Following the war dairy farmers pressed for more orderly dairy support measures and this resulted in the provinces establishing milk marketing boards, and the federal government setting up the Canadian Dairy Commission (CDC) in 1967. It subsequently introduced a quota system for the industrial milk market. An integral part of the system was an import control list on virtually all dairy products, administered by External Affairs and International Trade Canada. In 1991 the prices in C$ of U.S. milk and butter were almost half, and skim milk powder two-thirds, the corresponding Canadian price. This posed a number of problems at the time. First, since the U.S.-Canada FTA was eliminating tariff protection for processed foods using dairy products, Canadian food producers were under a severe competitive disadvantage against their U.S. counterparts. Second, while GATT accommodated import restrictions on milk as a commodity it was questioning their use for milk in processed form, and a GATT panel ruling went against Canada's restrictions on ice cream and yoghurt. And third, as a Task Force on National Dairy Policy noted at the time, large numbers of Canadian consumers were crossing the border to buy dairy products on a regular basis.

The CDC, among other things, calculates the target price for industrial milk; directs support payments for industrial milk shipments; provides market support for the target price by offering to purchase butter and skim milk powder; and undertakes international marketing of surplus dairy products. Through a Committee it allocates the Market Share Quotas (MSQ) for industrial milk to the provinces. They in turn operate their own supply-managed system for fluid milk. But because the two types of milk are indistinguishable at source, the federal and provincial systems are inextricably interlocked. In 1991, we estimated that the federal direct cash contribution of over $6 per hl. for industrial milk in the form of direct support payments to the industry worked out to about $7500 per farm, with the subsidy related to output and therefore benefiting the larger producers.

In addition, producers enjoy economic rents resulting from the import restrictions, quotas and prices set for milk by the CDC and provincial marketing boards, which tend to become embodied in the value of each dairy farmer's quota. In Quebec these quota are determined by la Federation des producteurs de lait du Quebec, which is responsible for milk marketing, with agreements with the Quebec milk producers syndicate and with private processing plants and cooperatives. In 1991 we estimated that for the average Quebec dairy farmer the additional rents embodied in the quota were probably worth another $7500 per year. Noting at the time that the average cash earnings of individual producers in Quebec were between $40-50,000 annually, we concluded that in an internationally competitive and admittedly less stable market with no trade barriers and no federal subsidy, that income would likely be lower by about $15,000.

It must be emphasized that these estimated rents and subsidy benefits were available to all dairy farmers in Canada, varying with their herd size, and not confined to Quebec producers alone. But in the context of a possible separation of Quebec from Canada one other phenomenon was important, - the very large proportion of Quebec milk going to industrial use, and consequently the large proportion that represented of Canada's processed dairy products. (See Table 2.) In our earlier study we observed that "assuming that Quebec's consumption is roughly in line with its share of the Canadian population, i.e., one-quarter, Quebec's surplus…turns out to be 12% of all butter produced in Canada, 19% cheddar, 25% variety cheeses, 57% concentrated milk and 28% skim milk powder. Taken altogether, in volume terms, Quebec's surplus on processed dairy items amounts to 25% or about $1 billion of all Canadian production. Add in a modest multiplier effect for those serving and served by the industry, i.e., feed suppliers, wholesalers and distributors, and that translates into roughly $1.75 billion worth of dairy related products and services annually. That, at the extreme, is the potential loss to the Quebec industry if it can no longer access the Canadian market or find other outlets for its domestic surplus."

Table 2
Processed Dairy Production, 1991 and 2000
(per cent of total output)

	Quebec		Ontario	
	1991	2000	1991	2000
Butter	37.8	40.8	32.9	32.7
Cheddar	44.4	49.9	32.1	31.1
Variety cheeses	50.8	58.0	35.6	30.3
Concentrated milk	82.3	n.a.	n.a.	n.a.
Skim milk powder	53.9	n.a.	15.5	n.a.

Source: Statistics Canada, cat. 23-001, The Dairy Review, January 1991 and July-Sept 2000.

But this was not the end of the story. "Quebec producers would no longer qualify for the industrial milk subsidy from the CDC…if after achieving independence Quebec chose to maintain the same income support for its dairy farmers…the additional cost to Quebec taxpayers would be about $67 million." Indeed, the report noted, "For the producers of industrial milk this worst-case scenario is even more dismal. Many have made heavy investments to modernize

their equipment and to upgrade their herds, sure in the knowledge that upon retirement their industrial milk quotas have very substantial sales value. But if their milk has no market because processors cannot gain entry into the new diminished Canada, roughly half their industrial milk quota becomes redundant, their overall value diminished. So not only might they lose their CDC subsidy, they would see either the amount or the value of their industrial milk quota cut in half…Thus for the average dairy farmer this translates into an asset loss of between $55-60,000."

Were the prospects really that bleak for Quebec's dairy farmers in 1991? Probably not. "The best alternative…would have a sovereign Quebec government negotiate successfully with Canada to preserve its historic market entry in dairy products, as part of a common market or free trade deal…But" we cautioned "this is not likely to be a stable arrangement. Canadian producers and processors themselves will press hard to expand their share of the market. For its part, the United States has already GATT support for its challenge of Canada's import restrictions on yoghurt and ice cream, and it is not likely to look kindly upon an apparently cosy and discriminatory deal at its expense. And consumers in the diminished Canada are bound to query the continued purchase of high-price Quebec processed dairy products when the same products can be bought much less expensively from the U.S. and world markets."

Poultry and Eggs

In 1990 the combined production of eggs, chicken and turkey generated farm receipts of close to $1.7 billion. At retail they commanded a value of roughly $3.5 billion. There were about 4,500 regulated poultry farms in Canada. About 1,600 were egg producers and the rest were producers of chickens and turkeys. There were, and are, also farms with small flocks that produce outside the supply-managed system. For example, unregulated egg producers with less than the minimum 500 laying hens have traditionally outnumbered regulated producers by three to one, but their share of industry production and farm receipts is minimal. Within the industry, broiler chicken production and egg production are quite different and separate activities. The only overlap is where egg producers sell off their redundant hens as stewing hens to soup and other processed food manufacturers. Stewing hens account for less than 3 per cent of the farm-gate value of chicken meat sold in Canada.

Since 1972 the poultry industry has been regulated by the National Farm Products Marketing Council (NFPMC), which oversees poultry and egg production in Canada through the four national marketing agencies that set global and provincial quotas. These are:

- Canadian Egg Marketing Agency (CEMA)
- Canadian Chicken Marketing Agency (CCMA)
- Canadian Turkey Marketing Agency (CTMA)
- Canadian Broiler Hatching Egg Marketing Agency (CBHEMA)

These, in turn, are supported by corresponding provincial marketing boards which allocate quotas among individual producers, regulate quality standards, etc. Here we deal only with the practices of the first two federal agencies, CEMA and CCMA, and their provincial counterparts.

CEMA determines regulated egg production and sets provincial allocations in line with federal-provincial agreements. It establishes the price of Grade A large eggs which the provincial boards follow, using a cost of production formula. While there is inter-provincial trade in table eggs, mainly from eastern Ontario into Quebec, and Manitoba into Ontario, the aim originally was for each province to be more or less self-sufficient. Those that are surplus to consumer requirements are bought by CEMA and resold to egg processors, i.e., the breaker industry, at a formula price related to the producer price. CEMA imposes penalties on provincial boards that exceed quotas, and licences persons engaged in inter-provincial or export trade.

CCMA similarly determines global production quotas for broilers and allocates them among the provinces. Unlike the situation with eggs, CCMA does not set or regulate the farm price of broiler chicken. That is done by provincial boards. CCMA authorizes the inter-provincial or export marketing of chicken, and recommends to External Affairs the issuing of supplementary import licences when requests cannot be filled by domestic sources. The federal government does not provide a direct subsidy to poultry and egg producers. But in 1991 the complex set of production quotas, cost-of-production formulae and tight import restrictions had led to poultry and egg prices in Canada considerably higher than in the United States, encouraging cross-border shopping and putting Canadian food processors at a substantial disadvantage against their U.S. competitors.

In 1990 Ontario was the dominant egg-producing province in Canada, with 40% of registered producers and 38% of allocated laying hens. Quebec had 11% of registered producers and 17% of allocated layers thanks to larger flock sizes. In Quebec there is relatively free trade of production quotas under the overall surveillance of the provincial board, le Federation des producteurs d'oeufs de consommation du Quebec (FEDCO). FEDCO has a sales agency to market all the eggs under its jurisdiction and it controls about half the egg-grading stations in the province. While Quebec is a deficit-producing province in eggs there is some cross-border flow with Ontario. In 1990, for instance, of the 180 million dozen eggs produced in Ontario 20 million dozen, or 11%, were exported to Quebec. And of the 82 million dozen eggs produced in Quebec 3 million dozen, or almost 4%, were exported to Ontario.

In the decade leading up to 1990 there was a consolidation of chicken production in Quebec that saw a drop in the number of regulated producers by 22 %, while elsewhere, in Ontario and the West, the number of producers rose. La Federation des Producteurs de Volailles du Quebec (VOLBEQ) is responsible for the marketing of chicken and turkeys in Quebec. It sets the prices to producers based on a cost of production formula, allocates quotas and sees to the marketing of poultry through agreements with L'Association des abattoirs avicoles du Quebec. Quebec is traditionally a net exporter of chicken, much of it in processed form, principally to Ontario.

As with dairy products, supply management, with its accompanying global and supplementary import quotas has given a value to the production quotas held by producers. In 1986, an Agriculture Canada source put the average quota value per egg producer at somewhat over $288,000 and in the order of $264,000 per average chicken producer. We used a 10% discount rate - the same as for dairy - to impute an annual rent from the supply-managed system to the average egg producer of $28,800, and to the average chicken producer of $26,400, with larger or more efficient producers earning more, and smaller or less efficient producers less. We

cautioned however that the use of a "higher discount rate would yield a higher figure, a lower rate a lower figure. Whatever the "correct" rate chosen for estimating the imputed rents of egg and chicken producers, it is not crucial to the main thrust of our analysis."

We also noted that "quota values should be recognized for what they are: the capitalized value of the rents accruing as a result of production quotas, administered pricing and trade restrictions common to cartels and monopolies, paid for by consumers through prices higher than those in truly competitive markets. Using the estimates of imputed rent adopted earlier, these higher prices work out to about an extra $.09 for a dozen of eggs and $.10 a kilogram for chicken." Nonetheless, we also observed that "supply management in the poultry and eggs industries has brought order, stability and a measure of income security for their producers. Canadians generally appear supportive of the system, albeit they recognize that it results in higher food costs."

As to the possible separation of Quebec we said "This by itself would have little disruptive effect since the industries in Quebec are viable, and FEDCO and VOLBEQ already administer the system of allocating quotas to producers, setting producer prices, ensuring that quality standards are met, and arranging for expeditious transport to processors. But because Quebec is a net importer of eggs from and a net exporter of poultry to the rest of Canada, separation would likely alter the rules of the game for the amounts of eggs and poultry meat that would be produced in Quebec, and in Canada (Ontario in particular)."

Taking the extreme case, that each country chooses to pursue domestic self-sufficiency, that would mean that Quebec, through FEDCO, would encourage its producers to increase egg production by 21%. Ontario producers would face a corresponding reduction of sales and a loss of over 9% of their quota. With chickens it would be the other way round. Quebec, through VOLBEQ would see a reduction in sales, and its producers would see a 10% cut in quota. CCMA would increase the global quota for the remaining provinces by over 5%.

We added that "Among individual producers it is not clear how the gains and losses would be distributed. If the quota increases are distributed without charge on a pro rata basis to existing producers there should be a corresponding percentage increase in the average value of the quotas they hold. If given to new entrants, they alone benefit. Or, if sold at going rates or at auction the marketing board could pocket the gains. Similarly the production and therefore the quota losses could be widely disbursed, narrowly focused (as, for instance, on mainly Eastern Ontario egg producers), or, most likely, absorbed by the marketing boards by buying up the quota at full face value. At any rate, however distributed, we seem to be talking the equivalent of windfall gains to quota values held by Quebec egg producers on the order of about $55,000 per producer, and to the quota values of chicken producers across Canada of close to $15,000 per producer. The respective losses in quota values look to be the equivalent of close to $25,000 each for Ontario egg producers and Quebec chicken producers."

Parenthetically we raised the interesting question of whether, with encouragement, some Quebec chicken producers might convert to egg production, and, similarly, some Ontario producers convert to chicken production.

Of course, a less extreme alternative would have an independent Quebec and Canada negotiating with each other to preserve traditional trade in poultry and eggs, with import restrictions applied only against third countries. But as in the case of dairy, and for the same reasons, we suggested that this would not likely be a stable arrangement. Political pressures from producers for domestic self-sufficiency might prove seductive. The United States would undoubtedly strongly oppose it. And consumers in each country would likely query the purchase of each other's surplus when the same could be bought so much less expensively from the United States.

Recent Developments

Dairy

As noted earlier, there has been virtually no expansion in the domestic consumption of milk, which has remained at about 7.5 million kilolitres annually over the decade 1990-2000. The respective shares of fluid and industrial milk have also remained the same at about 40:60. However, over the course of that decade the sector has seen a 38 per cent reduction of dairy farms from 34,620 in 1990 to 21,320 in 1998/99. Over 13,000 dairy farmers left the business. Their disappearance occurred in all regions, but more than proportionately in the west. However the shares of production in all regions remained roughly the same, which reflected productivity gains of two-thirds in milk output per farm as measured in kilolitres (See Table 3). And the shares of dairy farm net cash receipts for each region remained roughly as they were a decade earlier.

Table 3
Milk Produced and Sold, 1990 and 1998/1999

	Dairy farms		Fluid		Industrial		Total		Output/farm	
	number		000 kilolitres						kilolitres	
	1990	1998/99	1990	1998/99	1990	1998/99	1990	1998/99	1990	1998/99
Atlantic	1,923	1,111	191.7	219.4	214.9	215.7	406.6	435.1	211.4	391.6
Quebec	14,903	10,266	704.7	640.3	2,124.0	2,180.5	2,828.7	2,820.8	189.8	274.8
Ontario	10,976	7,027	1,017.5	1,014.7	1,453.9	1,528.5	2,471.4	2,543.2	225.2	361.9
West	7,796	2,916	797.5	855.9	813.9	847.1	1,611.4	1,703.0	206.7	584.0
Canada	34,620	21,320	2,711.3	2,733.6	4,606.7	4,760.6	7,318.0	7,502.2	211.4	351.9

Source: Statistics Canada, cat. 23-001, The Dairy Review, January 1991 and the Dairy Farmers of Canada, Dairy Facts and Figures at a glance 1999.

The increase in productivity reflects both the economies of larger herd size and significant increases in milk output per cow. Canadian cows, on average, have generally produced more than cows in the European Union, but less than those in the United States. In 1992 the average Canadian cow produced 5.5 thousand litres of milk annually, 78% the milk output of U.S. cows. By 1998 the average Canadian cow was producing 6.6 thousand litres of milk annually, or 85% the average of U.S. cows. Of the two main producing provinces Quebec dairy farms are still more numerous than in Ontario (48% to 33%of the total, but they are smaller on average and are

about one-quarter less productive. Nonetheless, over the decade 1990-2000 Quebec's dairy farm cash receipts rose by 40%, Ontario's by 31% (See Tables 1 and 4).

Table 4
Dairy Farm Net Cash Receipts 1999/2000

	$mn	%
Atlantic	252.3	5.9
Quebec	1,626.2	38.3
Ontario	1,382.2	32.6
West	983.1	23.2
Canada	4,245.3	100.0

Source: Statistics Canada, cat. 23-001, The Dairy Review, July-Sept 2000.

Poultry and Eggs

The domestic market for chicken continues to expand. Over the decade 1990-2000, per capita chicken consumption grew from 22 to 29 kg per year, and production from about 545 to 875 million kg per year. The number of registered producers increased from about 2,300 to over 2,800. Roughly three quarters of the additional 490 producers were located in Ontario. But most of the output gain has been in the western provinces. In British Columbia output per producer increased from 260 to 472 thousand kg of eviscerated chicken, or growth of close to 80%. Output per producer in the Prairies increased by 50%, the Atlantic by 66% and Quebec by 40%. In Ontario, by contrast, there was no significant increase in producer productivity, perhaps because of the spate of new producers (See Table 5).

Table 5
Registered Chicken Producers and Quota Allocations, 1990 and 2000

	Producers				Output allocation				Output/producer	
			per cent		eviscerated 000,000 kg.		percent		eviscerated 000 kg.	
	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000
Atlantic	144	137	8.1	4.9	43.9	69.1	6.2	7.9	304.8	504.4
Quebec	721	729	31.0	25.9	169.2	243.3	31.1	27.8	234.7	333.7
Ontario	786	1,150	33.8	40.8	191.6	284.6	35.2	32.5	243.7	247.5
Prairies	449	511	19.3	18.1	81.1	140.4	14.9	16.0	180.6	274.8
B.C.	227	290	9.7	10.3	58.9	137.0	10.8	15.7	259.5	472.4
Canada	2,327	2,817	100.0	100.0	544.8	874.4	100.0	100.0	234.1	310.4

Source: Canadian Chicken Marketing Agency, Annual report 1990 and Chicken Farmers of Canada, Chicken Data Handbook 2000.

On the other hand, the decade 1990-2000 saw a drop in the number of registered egg producers from 1,626 to 1,142, and only modest growth in sales (See Table 6). Most of that growth was in "breaker" eggs for processors. Over half of the 484 producers that left the industry were located in Ontario, suggesting that at least some of the new entrants among registered chicken farmers

converted from egg production. While productivity in the industry has increased, it is unclear how much is due to the increase in flock size, which has occurred in every region, and to output per laying hen.

Although eggs are perishable and most provinces strive for self-sufficiency there are still considerable inter-provincial flows of eggs. Manitoba is still a major producer and exporter to Ontario and the other western provinces. Ontario still sells to egg-deficient Quebec. In 2000, for instance, Ontario producers sold 772 thousand boxes of 15 dozen eggs to Quebec and Ontario buyers imported about half that amount from Quebec suppliers.

Table 6
Registered Egg Producers and Quota Allocations, 1990 and 2000

	Producers				Layer allocation				Layers/producer	
			per cent		thousands		percent		thousands	
	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000
Atlantic	111	76	6.8	6.7	1,743	1,581	9.5	7.9	15.7	20.8
Quebec	171	111	10.5	9.7	3,053	3,308	16.6	16.5	17.9	29.8
Ontario	652	407	40.1	35.6	6,885	7,529	37.5	37.5	10.6	18.5
Prairies	538	416	33.1	36.4	4,408	5,283	24.0	26.3	8.2	12.7
B.C.	154	132	9.5	11.6	2,260	2,350	12.3	11.7	14.7	17.8
Canada	1,626	1,142	100.0	100.0	18,349	20,100	100.0	100.0	11.3	17.6

Source: Canadian Egg Marketing Agency, Annual reports 1990 and 2000.

General

During the early 1990s GATT members at the Uruguay round of negotiations concluded that agricultural products should be treated the same as other traded goods and services, and that tariffs should be the only legitimate form of border protection. Canada agreed, and beyond the limited amounts traditionally allocated to dairy, poultry and eggs (e.g. milk cross border purchases only, cheese 8.2% of domestic production, chicken 7.5%, and eggs under 3% of domestic production) the federal government substituted for its earlier import controls tariffs ranging from 182% to 352% depending on the product. And while these have since been reduced by about 15%, they are effectively as prohibitive a barrier to entry as the earlier quantitative restrictions.

Canada also took steps to eliminate another alleged trade irritant. In the mid-1990s as part of the budget tightening process it reduced the industrial milk subsidy. In 1998 it formally commenced the phasing out of the subsidy, which will be complete in 2003.

However, a major change has occurred since the early 1990s in the relative prices of supply-managed commodities compared with those south of the border. Whereas, as noted earlier, lower U.S. prices for dairy products, poultry and eggs were very enticing to Canadian cross-border shoppers and a distinct source of worry for Canadian food processors, and U.S. producers were anxious to have GATT condemn supply-managed agriculture in order to gain access to the Canadian market, these conditions no longer apply. That is because, for the most part, Canadian

producers now wield the price advantage. A basket of dairy products, for instance, is 29% or 36% cheaper in Canada than in the United States, depending on the content and measure. Eggs in Canada's main cities retail for 10-30% less than eggs in the U.S. Only chicken is still cheaper in the United States than in Canada, and that is because Canada's processors take a much larger margin than their U.S. counterparts. The farm gate price per kilo in C$ is much the same in both countries.

The reason for this dramatic change in competitive advantage was not that Canadian producers became much more, or U.S. producers much less, productive, although the evidence suggests a measurable improvement in physical output and farm productivity in Canada. The prime reason for the change was the exchange rate and the deterioration of the Canadian versus the U.S. dollar. In the early 1990s the Canadian dollar was exchanging at roughly $.86 U.S. Today the corresponding exchange rate is less than $.65 U.S., making U.S. commodities much more expensive or Canadian commodities much cheaper depending on which side of the border one is on.

Future Consequences

Ten years ago our study of the supply-managed industries in the context of a possible separation of Quebec from Canada indicated that there would likely be considerable disruption for producers in Quebec and elsewhere. For Quebec, which risked losing its market for processed milk products in the rest of Canada, we estimated that the potential cost to dairy producers in the form of lost sales, a foregone subsidy and reduced quota value for their output, could be sizeable. The same situation confronted poultry producers, although not on the same scale. On the other hand Quebec had for some time been a net importer of eggs, mostly from Ontario. Separation would provide an opportunity for Quebec's egg producers to expand production.

At the same time, we saw a less extreme situation, one in which the new Quebec and Canada negotiated an arrangement to more or less maintain their supply-managed production and marketing arrangements but with import controls against third countries, as a potentially unstable solution. Dairy and poultry producers in the rest of Canada would likely press for increased quota to substitute for imports from Quebec. The United States would not take kindly to special arrangements that discriminated against its producers, and Canadian consumers would question why they should continue to pay the higher Quebec prices instead of the lower U.S. prices. And all the while there was the possibility of additional GATT condemnation of the import restrictions and explicit or implicit subsidies within the dairy, poultry and egg regulatory regimes.

A decade has passed, and while the supply-managed regulatory arrangements remain much the same, there have been significant changes within the industries and in the outside world. Certainly Canada's dairy and registered egg production industries are much leaner, with fewer, larger and more productive farms than ten years ago. While Quebec chicken producers no longer produce the same proportion of chicken that is surplus to that province's consumption, they are selling into an expanding market and their output per producer is significantly higher than their competitors in Ontario. The food processing and retailing industry in Canada has become more

concentrated, with the largest firms active in all parts of Canada. Thus while at the production level supply-management still focuses on provincial self-sufficiency, there is a wider and more inter-woven perspective as one moves up the food chain. It seems much more likely now than it did ten years ago that the producer-processor-retailer marketing arrangements now in place could hold in the event of Quebec separation. This would mean, conceivably, no loss of sales and no loss of quota values for Quebec producers, and no major change in the present inter-provincial trade in supply-managed items. And by 2003 Quebec dairy farmers will have lost whatever industrial milk subsidy they had anyway.

This view is buttressed by the fact that at today's exchange rate, and perhaps even at rates over $.70 U.S., Canadian dairy and egg producers are probably the low cost producers of quality products in North America, and do not have to rely on import restrictions or sky-high tariffs to resist an onslaught of U.S. imports. With chicken it is a slightly different story at the retail level, but even there, if processing costs can be effectively reduced, marketing developments and prices are moving in the same direction.

Thus today we reach a different conclusion than we reached a decade ago. Separation by Quebec from Canada, in whatever form, and with a spirit of mutual cooperation and support on both sides, is not likely to significantly change the production and marketing arrangements or the asset values of supply-managed producers of either country.