The Role of the State in International Trade: Dairy Products in Canada

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Comments Welcome

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A. Introduction

State trading enterprises (STEs) have emerged in the last decade as a more important element of world trade, particularly in the agricultural sector, which makes them an institution worthy of closer study. A simple, general definition of what we mean by an STE is, a public or private enterprise that engages in trading, and if it is private it is somehow given special rights and privileges by the state. When it comes to the role of STEs in the dairy industry, Canada is a case worth examining. The Canadian industry features both marketing boards at the provincial level and a national dairy agency (the Canadian Dairy Commission or CDC), and these two institutions, among others, jointly implement the various elements of dairy policy. Both can have impacts on international trade in dairy products, by dictating policy issues that affect trade and, in the case of the CDC, by directly engaging in dairy product trade. The latter organization can readily be described as a state trading enterprise, and the former meet a broader definition of STEs by virtue of their actions that indirectly affect this trade.

It is these actions that affect trade that we are most interested in for this paper. They would be of interest to understanding just how varied, complex and heterogeneous are the activities of such STEs, even in developed countries. But the actions of these STEs are even more interesting when one can observe how they have *changed* in response to the Uruguay Round Agreement commitments that were made by Canada. The pace and number of changes since the adoption of the URA commitments have been substantial, which makes the task of this paper more interesting, but also places limits on the data which are available and on their interpretation.

We will begin with a review of the details of current Canadian dairy industry policy, with attention to how it has changed in the past few years, and follow that by an attempt to interpret how the elements of this policy are affecting international trade in dairy products. The effects on trade will be considered through the effect on international markets, trading partners and domestic players. The third element of the paper will be to review how this policy works analytically, and this will be followed by the lessons that can be drawn from the Canadian policy on the role of state trading in the context of international trade, with particular attention to how STEs handle explicit and implicit export subsidies.

B. Background to the Industry

Like most dairy industries around the world, the Canadian dairy industry is highly regulated. This state of affairs arose particularly in the early 1970s when the industry abandoned open-ended government support and put in place a system of quotas in order to manage aggregate supply. To implement this regime there are four main institutions, the Canadian Dairy Commission (CDC),

the Canadian Milk Supply Management Committee (CMSMC), the provincial marketing boards, and the Export and Import Control Bureau.

1. *The Canadian Dairy Commission*

The central agency is the CDC which was created in 1966 by an Act of the federal government. It is an advisory body for the Minister of Agriculture and Agri-Food but its key role in coordinating and managing the national dairy industry, across provincial and federal governments, producers, processors, further processors, and consumers, makes it more important than any other institution. Its mandate is A*to provide efficient producers of milk and cream with the opportunity of obtaining a fair return for their labour and investments; and to provide consumers of dairy products with a continuous and adequate supply of dairy products of high quality*.@ (Canadian Dairy Commission, 1997)

Its specific responsibilities include (a) administering the federal government direct subsidy to farmers, (b) providing leadership and undertaking research on behalf of the Canadian Milk Supply Management Committee (a federal/provincial government/industry committee that looks after milk supply and quota levels), (c) establishes support prices for butter and skim milk powder, (d) purchases these products at the support prices when necessary, (e) stores, processes and sells these purchased commodities as needed, (f) it works with the private sector to import and export milk products, (g) it directs butter imported under federal permit to further processors, (h) establishes the producer target price and processor margin for industrial milk, and (i) administers national pooling agreements on behalf of producers. For many years, the CDC has been (and still is) the first receiver of butter imports and was the major exporter of milk products that were surplus to domestic requirements. Now its export activities involve mainly butter, evaporated milk and milk powder exports to other countries= state trading agencies. As well, it serves as an advisory body to the federal Minister of Agriculture and Agri-Food and as a centre of knowledge and expertise for the dairy industry.

2. *The Canadian Milk Supply Management Committee*

A second major institution is the Canadian Milk Supply Management Committee (CMSMC), a federal-provincial committee made up of representatives from each provincial marketing board and provincial governments with the chair of the CDC acting as chair of the CMSMC. There are also non-voting representatives from the national associations of dairy farmers (Dairy Farmers of Canada), dairy processors (National Dairy Council), and consumers (Consumers Association of Canada). In terms of general functions, the CMSMC directs the implementation of the National Milk Marketing Plan and provides for the discussion and coordination of provincial board activities on a national basis, as well as other issues such as pricing. As noted above, it handles the Aquantity side@ of the industry by setting aggregate milk quotas and distributing the national quota among provinces. It adjusts the national industrial milk quota in line with changes in demand, between and within years, and provides for the provincial sharing of any increase or decrease. It does not allocate provincial quotas to individual producers, which is a provincial

responsibility. In terms of its relationship with the CDC, formally it reviews and monitors CDC marketing activities and promotional programs, but it is not really independent. It has no staff of its own, it relies on CDC staff to forecast marketings and changes in demand in the setting of the national industrial milk quota, and the chair of CMSMC is the chair of the CDC.

3. *Provincial Marketing Boards*

Provincial marketing boards are a third major institution which are largely producer-run and interact directly with dairy farmers. One major responsibility is to implement a number of the decisions of the national actors discussed above, although the boards also have a hand in making those decisions through their membership in the CMSMC. They were established under provincial regulatory authority and many entered into operation through a vote of that province's milk producers. Turning specifically to their tasks, they look after the details of pricing, and set the fluid milk price. The farm level pricing of milk that goes into specific industrial milk products is done by these boards, although the general price level for industrial milk is determined by the support prices set by the CDC. However, with the shift to pooled milk returns since the Uruquay Round Agreement on Agriculture, more harmonization across provinces is taking place in terms of individual product pricing. With this increased use of milk pooling, the boards now have been added the task of operating the pools in collaboration with their partners in the regional pools.

The provincial boards also determine how milk quotas are allocated to individual farmers, and in general determine the ground rules by which quota is used, exchanged, increased or decreased, who may own it, how much may be held by each farmer, and myriad other details. Finally, these boards can establish which farm milk goes to which processor, how much milk each processor gets, how much milk may be produced in each region of the province, the type and level of health standards that must be met, and other regulations on entry and licensing affecting both farmers and processors. More recently, boards also have some powers over the exports of milk products by allowing and supervising optional export programs for producers within the province (discussed below).

4. *Export and Import Controls Bureau, Department of Foreign Affairs and International Trade*

Jurisdiction for imports, like all elements of international trade, falls to the federal government. Administration of tariff rate quotas since 1995 has been undertaken by the Export and Import Controls Bureau of the Department of Foreign Affairs and International Trade, just as it was previously responsible for the administration of all import quotas. For most dairy products, individual private firms have held these import quotas and the quota allocations are decided upon annually. Although this means the Aproperty right@ to the quota is weak in legal terms, there has been a great deal of continuity in allocations over the years. There is considerable variation in the number of holders of import permits/quotas across dairy products. In 1991, there were 237 quota holders for cheese, 33 for ice cream, 28 for yoghurt, and 1 for buttermilk and 1 for

evaporated and condensed milk (Canadian International Trade Tribunal, 1992).

TRQs have been handled in much the same way as the previous import quotas. The number of quota holders by product has not changed appreciably, although now there is a TRQ for butter (held solely by the CDC) when previously there was no specific import quota. One change is that now the quotas can be rented and sold. In some jurisdictions there has been a problem in the "underfilling" of TRQs but this has not been an issue in Canada, with the exception of some less widely traded product items like whey. This result, desirable from the viewpoint of the WTO, seems to be a natural outcome of vesting the TRQs in private hands outside the dairy industry itself, where there is a commercial incentive to import the products in question. Another issue is that there are available permits, supplementary to the TRQs, for those processing firms wishing to import dairy raw materials or products, manufacture or further process other dairy products and export them internationally. Apparently, there are restrictions that prevent firms from simply importing and re-exporting.

5. *Which Institutions are State Traders?*

CDC

From this list of important players in the institutional framework for dairy policy in Canada, there is one clear STE and that is the CDC. It is primarily a state trading *exporter*, given that the Canadian milk industry tends to generate, increasingly, exports of basic milk commodities that are surplus to domestic needs. In that role it does not always undertake the exports itself as much as in past years, but it contributes to the decision as to which products are surplus to domestic requirements and which exporters will undertake the exportation. It is also a state trading *importer* of butter, indeed the sole importer.

CMSMC

Given the ties between the CMSMC and the CDC, it is difficult to separate out the trade-related aspects of the CMSMC. Basically, the CMSMC undertakes a largely mechanical function, to set and control domestic supply. How well it does its job influences the amount of exports from the system, but the most important policy levers that control trading are in the hands of the CDC. Because its job is to set quotas to meet domestic requirements, this by itself would not lead to systematic milk product exports. On this basis, I would judge the CMSMC *not* to be an STE. However, if the CMSMC were to define the industrial milk quota above domestic consumption levels on an ongoing basis, possibly even against the advice of the CDC, then it would be playing an instrumental role in generating surplus exports from Canada and could be judged to be an STE. Which definition is most appropriate depends upon how the CMSMC *acts.* In addition, it would come under WTO disciplines only if it were defined to be an STE, even though it would not be directly trading in the commodity. This shows two dimensions to the difficulty in defining what is an STE, the issue of legal mandate in comparison to actual activities, and the issue of whether an agency is an STE if it sets policies or regulations that are trade-related, despite not engaging in trade directly.

Provincial Marketing Boards

In Canadian milk policy, important influence does not end with federal government agencies. Through their policies and enforcement efforts, provincial marketing boards exert influence over milk product exports and imports on both the fluid and industrial milk sides. On fluid milk, the provincial boards= policies are instrumental in determining exports and imports of fluid milk, given the general policy framework dictated by the UR Agreement on Agriculture. They price it, define quotas for it, and regulate both farms and processors that engage in fluid production in many ways that differ by province. On the industrial side, the provincial boards mostly implement national policy, but even here, this can influence provincial surplus production, and thereby influence national surpluses and exports. So the provincial boards can affect exports, even though they do not trade in milk products. They also approve exports proposed under the optional export program (OEP). Therefore, I would place them in a category of *indirect* state traders. And because each province can be different in its policies and implementation, provincial marketing boards represent a collection of such state traders.

However, these classifications beyond the CDC are somewhat arbitrary. Both the CMSMC and the provincial marketing boards are part of a regime that generates exports and includes imports, and that involves three to four institutions. So it is arbitrary to define one component institution as being or not being an STE, when they often jointly influence the amount of milk products that are exported or imported.

We can categorize the Canadian system differently by defining four categories of STEs:

1. promotional agencies
2. domestic monopolies but no trade monopoly
3. trade monopoly but no domestic monopoly, and
4. both monopolies.

The institutional regime in Canada fits category 4. We can decompose the regime into the roles of the four different institutions involved. There is a domestic monopoly through farm marketing quotas that are defined at the national level by the *CMSMC* and defined and enforced locally by the *provincial boards*. The right to set trade constraints in fluid milk is delegated by the federal government to the provinces, and in industrial milk products, federal government control is defined in regulations under the Canadian Dairy Commission Act. So we can say that the federal government in conjunction with the *CDC* is responsible for the trade regime (it is difficult to characterize it as a full trade monopoly) in milk products, albeit constrained by the Uruguay Round Agreement on Agriculture. Implementation of the import quotas, now tariff-rate quotas, which are central to the trade regime, is undertaken by the *Export and Import Control Bureau* (DFIA) and, in turn by the CDC and other actual importers.

But trying to fit the Canadian system into the above specific categories can lead one to miss the

point. It is ultimately a package of institutions and policies that make up the dairy trade regime in Canada and that regime features state trading enterprises that have large effects on the nature of dairy product trade. Our focus should be on the regime itself, especially how STEs are configured and used, and its effects on this dairy product trade.

C. History and Past Operations

Early Years

Although government intervention in the dairy sector has a long history in Canada, prior to the mid-1960s, it was not that unlike policies in other agricultural sectors. There were support prices and regulations, and in at least one province (B.C.) there were quotas to limit access to the higher fluid market prices, much like the current California system, but there was not a general orientation toward supply control. This started to change in the mid-1960s with the introduction of fluid milk quotas in Ontario and the Canadian Dairy Commission in 1966. To limit the costs of a direct milk subsidy program, the CDC introduced in 1968 one of the earlier *decoupled* programs, a Asubsidy eligibility quota@ where the quota simply gave you access to this subsidy. Not all provinces opted into this program.

Introduction of supply control

There was no limit on production until this subsidy access quota was gradually replaced by a marketing quota (Amarket sharing quotas,@ or MSQ). These were first introduced in 1970 and by 1974 all provinces except Newfoundland were signatories to a national milk marketing plan embracing these quotas. Given that many provinces by then had fluid milk quotas, the addition of industrial milk quotas meant that all milk production in Canada, except for Newfoundland, was now under quota or supply management. A national cheese import quota was established in 1976, butter imports were generally not allowed and always under the control of the CDC, and skim milk powder and/or evaporated milk exports were made to dispose of any surpluses.

Key elements: import controls and interprovincial agreement

Import controls were central to the effective operation of this supply control scheme, and they were imposed under the provisions of Article 11 of the GATT. The other important element of the scheme, necessary for compliance with Art.11 and necessary to impose effective domestic supply control, was agreement among all provinces. Understandably, provincial disagreements often arose over interprovincial quota allocations. The initial allocation in the early 1970s was arguably on the basis of market forces. But over time comparative advantage may have changed, whereas the basic quota allocation remained fixed. The flexibility of interprovincial farm-level quota transfers has been introduced only within the last year, and even that has involved a limited number of provinces and it recently resulted in a hiatus in trading. Most of the subsequent history of the milk supply management regime has been dealing with conflicts on both fronts: trade disputes with the U.S. and other trading partners concerning aspects of Canada=s import quotas, and interprovincial disputes over quota shares and related matters.

Recent changes

Since 1994, a number of changes have occurred in Canada=s dairy policy, a sample of which are discussed below. These changes have been precipitated particularly by the signing of the Uruguay Round Agreement and by federal government budget cuts, but they also reflect other factors (Agriculture and Agri-Food Canada, 1996; Barichello and Romain, 1996). First, the direct subsidy to producers has been reduced from $6.03/hectolitre in 1992/93 to $3.80/hl. in 1996/97, with federal government plans to phase out the subsidy entirely by February 2002. Second, any price increases to farmers are now weighted heavily onto skim milk powder support prices. This has kept the butter support price relatively constant and has increased the skim milk powder support price when an increase in the farm price was called for, and to compensate for the reduction in the direct subsidy. Third, multiple component pricing has become adopted more widely and most provinces have plans for its introduction. Fourth, the regulation of fluid and industrial milk markets has become more integrated in terms of the collection of levies and the administration of quotas (single quotas covering both fluid and industrial milk are now common).

Fifth, there has been a substantial increase in the pooling of milk returns. This involves not only fluid and industrial milk revenues but also the pooling of some export sales, and pooling among provinces. The export pool is shared among all nine provinces (both for the Special Classes and for over-quota production), and for other revenues there is an Eastern pool and a Western pool. This step was necessary in the case of exports to meet URA commitments, so that producers would receive the world price for those sales, but other pooling is a response to changing domestic market conditions. These arrangements are still evolving. Finally, an Optional Export Program (OEP) has been introduced where producers and processors can agree upon a milk price for sales into export markets that do not encroach upon existing markets or jeopardize domestic market supplies. In other words, a separable and marginal export transaction is now legal for processors if they procure their milk supplies from producers on terms agreeable to both parties. This is an important change, both for OEP and over-quota production, because now producers are not restricted in any way, by marketing boards or by national agencies, to their quota levels. Farmers are more able than ever before to produce beyond their quota for export, and make this decision on a purely commercial basis, comparing the costs and returns of that extra production.

D. Current Dairy Policy in Canada

The basics of the current dairy policy begin with price setting. Farm prices for both fluid and industrial markets are set at levels higher than would occur without regulation, guided by the target price for industrial milk established by the CDC. Wholesale prices are determined off the farm price by the addition of agreed-upon processing margins, and price differentials for higher valued industrial milk products are market determined by competition among processors for the raw milk supply. Second, marketing quotas are set to limit the quantity of milk marketed to the level of domestic consumption, and various additional rules are set forth to enforce the system.

This is done in the context of trade barriers for milk and milk products which ensure that international milk product quantities are inframarginal, that domestic market factors at the margin drive that system.1 The rules apply to both the fluid and industrial milk sectors, and are complicated by a mix of federal and provincial government responsibilities. Agreement (or lack of it) among the provinces is also a factor in the design, as well as the implementation, of this policy. More recently, the industry has embraced pooling of milk supplies across end uses and regions of production, partly in response to Uruguay Round commitments.

1. Industrial Milk Pricing

Like the U.S., the Canadian system prices milk differentially according to the end use of that milk. Milk that is used for industrial production (i,e, manufactured products) historically has been priced at the farm level by a formula (target returns adjustment formula) and more recently by a cost of production (COP) model. Additional flexibility has been introduced so the pricing is now guided by the cost of production formula and provinces can set prices for individual milk products on their own. However, as pooling has become more widespread, similar prices across different milk price categories are also more common due to the harmonized marketing conditions that were negotiated in the pooling agreements. But pooling

This COP pricing model applies directly to the milk that is used for butter and skim milk powder production. However, higher-valued end uses result in higher prices into the pool as competitive pressures force processors to pay more for that milk.

With the increased flexibility toward manufactured milk product exports, their pricing has become important now. Some exports are included in the pooling described above (see details below), but the increase in exports that has occurred is particularly in the category of over-quota production. This category of production is now given a separate pool, nation-wide, made up only of export market returns and, because of the unplanned nature of such production, product prices in this category tend to be low (close to world market prices for the lowest value products, skim milk powder and butter, less a processing margin; e.g., farm level prices for this category are now in the range of C$20-25/hl., equivalent to US$6-7/cwt.).

2. Fluid milk pricing

The pricing of fluid milk is undertaken by each province. This has been often on the basis of a pricing formula, but the basis of the pricing formulae differ considerably by province. Further, there are in some cases public hearings involved, as for public utility rate increases. Increasingly there is some flexibility built in to formula pricing, so that a formula price increase will not

1 As the Canadian dollar has declined in value over the last three years, as Canada's regime has become more open to the possibility of private exports, and as export opportunities are increasingly being sought by processors and producers, it is less clear that exports are inframarginal. To those producers choosing to produce systematically above their quota and those engaging in optional export program contracts, the margin of production may now be U.S. or offshore exports.

necessarily result in an actual price increase. This flexibility is more common now with the pooling arrangements, where milk prices are becoming harmonized across provinces.

3. Pricing Implementation

In the case of fluid milk, prices are calculated as described above, and these prices are imposed on processors through the provincial milk marketing board of that province. For industrial milk, the target price is set first, as described, and that is financed through a combination of the direct subsidy to farmers (currently $3.80/hl.) plus the farm price arising from wholesale support prices for butter and skim milk powder. How this works in practice is shown by the response to reductions in the direct subsidy payments. It was agreed as a policy decision that consumers would pay for the reduced federal subsidy. So wholesale support prices were raised by enough to compensate for the subsidy reduction and leave target milk prices unchanged. Further, only the skim milk powder price was raised in keeping with the desire to shift more of the milk price to non-fat solids and less to butterfat.

The actual calculation relating farm level prices and wholesale support prices is similar to the process followed in the U.S. The farm level target price is calculated from the cost of production formula, the direct subsidy is calculated, and the balance is what must come from the market support prices. Then the agreed-upon processor allowance is added to arrive at the wholesale level support prices for each of butter and skim milk powder. This is a floor price; when other milk products are made with the milk, the processor price is higher. Then, all sales of individual milk products are collected and pooled to arrive at the average price paid for industrial and fluid milk, and now that pool has been enlarged to two regional pools, cover all provinces in that pool.

4. Quota Calculations

For industrial milk, prospective wholesale milk product prices are used to calculate expected demand (or more accurately, changes in demand), and an aggregate level of milk consumption is arrived at. Then, in addition to these domestic demand predictions, a buffer Asleeve@ is calculated and added to arrive at the total industrial milk quota (MSQ). This is to account for unexpected increases in demand and short term reductions in production that may occur. This sleeve accounts for about 8-10 percent of total domestic demand for industrial milk. Provincial quota allocations are determined from historical levels, and annual changes are made in a pro-rata fashion, in accordance with how the total MSQ has changed. Similarly, each marketing board must adjust producer quotas in line with provincial increases or decreases. There have been some differences across provinces in how these calculations are made, to take into account maximum size limits, a desire to make cutbacks proportional but increases in a linear fashion, to reserve enough new quota to finance a new entrant program in some provinces, etc.

There are some complications in translating these supply demand balances from whole milk equivalents into changes in individual components. One issue is the growing butterfat surplus (“skim-off”) in fluid markets which adds to the total supply of butterfat in the industrial market.

One implication of this is that total MSQ could be reduced to deal to accommodate the surplus, although different provinces are using a variety of other options, such as penalizing producers who ship more butterfat (higher percentage test) above some declared level.2

5. Changes to Comply with URA Commitments

As mentioned in section C, to comply with URA commitments on export subsidies, the handling of milk product exports has been changed away from producer levies that covered the losses incurred from paying high domestic prices for the raw milk and receiving low world prices for the exported product. Now an end-use pool for exports is used, where the revenues will be world prices. For over-quota milk production, farmers will be in roughly the same net position, but the world price level on that milk will be more transparent and will affect only those farmers who produce over their quota. For exports of products within the domestic quota (and whose revenues are within the domestic revenue pool) the tie may be considerably weaker.

6. Exports

One might expect that in a system with relatively high milk prices like Canada=s compared to prices in the world market or in most trading partner countries, exports would be unprofitable and rare. However, exports have a long history in the Canadian milk marketing regime and since the mid-1990s milk product exports have been growing, as can be seen in Table 1. What is striking about this export performance is that over the period from 1988 to 1994, exports were relatively stable and declining modestly over this period from $193 million to $174 million (nominal values). However, the situation changed dramatically in 1995, the first year of the Uruguay Round Agreement. Exports doubled from 1994 to 1997, in abolute terms and as a percent of total production, and grew at an average annual rate over these three years of 30 percent.3,4 Given the timing and size of this increase, it suggests that the changes introduced in the Uruguay Round, augmented by other factors such as the decline of the Canadian dollar and stronger world dairy product prices, encouraged Canadian dairy exports significantly.

Table 1: Canadian Dairy Exports

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2 Another issue surrounding moving from whole milk equivalents to individual milk components, although not directly quota-related, is that the Canadian system is still focused on butterfat self-sufficiency (i.e., the aggregate industrial milk quota is set at a level that yields domestic self-sufficiency in butterfat). This leads to a surplus of non-fat solids (e.g., skim milk powder) at current component (and end product) prices. This “structural” surplus is usually exported from Canada and these revenues are pooled with the rest of the 5(a) to (d) (“special class”) categories. This size of this surplus has now declined to a level of 17,800 tonnes of skim milk powder.

3 Smoothing with a three year moving average also gives a 30% growth rate for 1994-1996.

4 Incomplete data for the 1997/98 dairy year suggests this 30%/year growth rate is continuing, not tailing off as is suggested in Table 1. For August to November (4 months), 97/98 export volumes exceed 96/97 volumes by 37%, looking at all products in milk equivalents.

Year	Exports ($ million)	Percentage change	Exports as % of Total production
1988	193		
1989	187	- 3.1%	
1990	193	+ 3.2	
1991	185	- 4.1	
1992	186	+ 0.5	
1993	151	- 18.8	2.2
1994	174	+15.2	2.4
1995	234	+34.5	3.1
1996	329	+40.6	4.4
1997	376	+14.3	4.8

Source: Statistics Canada, TIERS

This interpretation is consistent with the number of Canadian dairy farmers who produced milk in excess of their quotas over this period. In 1994/95, 10 percent of dairy farmers produced milk in excess of 105% of their quota, a number that is also consistent with levels observed since 1992. However, in 1995/96, the first year of the post-URA system, 25% of farmers produced in excess of 105% of their quota, and in 1997/98, 34% of farmers did similarly.

There are several types of exports that arise and each has its own category within what is called “Special Classes” or AClass 5" milk sales. First, in rough order of the unit value of those exports, there are historical exports to certain markets, usually product and country-specific, that involve high levels of value-added and high prices. An example is the traditional export of cheddar cheese to the U.K. Second, there are special ingredient sales to domestic further processors who export or compete with imports on their final product. Here, the ingredients supplied domestically but ultimately exported are essentially substitutes for imported raw or intermediate goods, and must be priced accordingly for the product to be competitive. Third, there are Aplanned exports@ which are sales to state trading markets like Mexico, Algeria, Libya, and Cuba. The terms of these sales are not clear, but they tend to be historical markets and are undertaken directly through the CDC. Fourth, there is unexpected surplus (overquota) production which is exported, coming from farmers who ship over their quota. Finally, as to source of supply, there is milk that is from the Asleeve@ but which may not otherwise be used domestically; in this case it would be used for exports, in a relatively low-valued product and market, like unexpected overquota milk.

7. Optional Export Program

There is another option for exports, and that is the Optional Export Program. This is a category with a great deal of flexibility. Each province can set up its own OEP, and it can set its own rules in doing so. For example, it could require a special OEP quota if desired. The provincial board can

seek bids from producers for an export sale proposal brought to the Board by a processor (e.g., Alberta) or let the processor organize the sale and supply procurement itself. A province could handle its fluid Askim-off@ this way by inviting processors to find offshore markets for surplus fluid butterfat (Alberta has done so). There is nothing that would prevent a producer in one province contributing to an OEP in another province, as has already occurred.

One big question, aside from the lack of any national guidelines or restrictions, is whether these revenues could Aleak@ back into the other provincial pools or into the regional pools. There seems to be nothing formal to prevent it, but other producers and other provinces have strong interests to monitor the situation to prevent their higher valued domestic sales from being watered down by such lower priced sales. This could include watching for low valued component sales coming back into a regular provincial pool. Aside from these standard monitoring issues, this program is likely to be akin to a separate pool where farmers will get the marginal market returns for their marginal OEP production. This will be like overquota export sales, except the processor can plan it ahead of time and contract with producers on a case by case basis. For this reason one might expect this category to generate higher unit revenues than overquota sales.

E. Economic and Trade Implications of Export Pooling Arrangements

It is interesting to ask what are the implications for world trade of the changes in trade policies that have occurred in the Canadian dairy industry since the URA became effective in 1995. This is all the more interesting for three reasons. There has been rapid growth of milk product exports from Canada, trade actions have been initiated by the U.S. and New Zealand against Canada on alleged export subsidies, and in those actions they claim that price pooling has been the source of the subsidies. The focus here is on the latter.

In our focus on this pooling, we need to know the details of how each export situation is handled, which pools are involved, and how export revenues mesh with or are isolated from the regular domestic pools. We are not primarily interested in whether Canada's actions will change world prices because in most situations they will not. Canada is likely to be a price-taker on these markets and it certainly is with respect to export to the U.S. We are interested in whether Canada is subsidizing its exports, hence increasing exports compared to what would happen in an open market without state trading institutions and without interventions that give some advantage to its exports. This section will start with more details about how the export categories are operated in practice, followed with some analysis of the effects on domestic and world markets.

A common classification of domestic products would be into five pools: fluid, soft products, cheese, evaporated milk, and butter/powder. There could be an export pool for each category. But the effect on world markets, particularly to determine if an export subsidy is involved, hinges on the following: do these export revenues get added into the regular domestic pool or do they go

into a specific export pool, given that export prices are usually lower.5 If it is the former, there will be greater production and more exports than in the latter case, due to the price difference. In fact, if the world price is low enough (i.e., below domestic marginal cost), a purely export price pool would generate *no* production for export, in contrast to the situation where export revenues are added to a domestic price pool.

To examine the different export situations we review Class 5, the so-called Special Class, and its five subdivisions:

Class 5(a)	Milk for cheese for use in further processing
Class 5(b)	Milk for non-cheese products for use in further processing
Class 5(c)	Milk for use in confectionery products
Class 5(d)	Planned Exports to Traditional Markets
Class 5(e)	Surplus removal through exports.

(a) The first three subdivisions, (a)-(c), are all concerned with making available at competitive prices milk ingredients to further processors (e.g., frozen pizza makers) who must face import competition or are exporting, in either case having to compete with U.S. product that is produced with usually lower-priced U.S. raw milk. Tariffs on these products have been removed under preferential trade agreements. Prices in this pool are roughly U.S. level prices, and although there is no limit on the size of this category, only about 1.1 million HL. of milk (1/4 of the total milk in this category) was expected to be exported through this category in 1997/98. Another 3.1 M hl. was sold into the domestic market to meet competition with imports. There appears to be little growth in this category, unlike the 5d and 5e categories. Milk in this category comes from national MSQ and the returns here are pooled along with the other within-quota industrial milk production from the domestic market.

(b) The class 5d pool is for "traditional" export sales. This includes two different types of exports: (a) sales to certain high value markets that are traditionally made available to Canadian exporters (e.g., aged cheddar to the U.K., cheese to the U.S. under Canada-specific tariff quotas), and (b) "planned" exports sold historically to state trading importers (e.g., cheese to Mexico, evaporated milk to Libya, skim milk powder and whole milk powder to Algeria, and skim milk powder, whole milk powder, and evaporated milk to Cuba). Milk to this category comes from within national MSQ and involves prices that are comparable to domestic levels on the first group and lower prices on the second. The returns are pooled as for the 5 (a)-(c) group and blended in with within-quota domestic sales. In 1997, these traditional export sales were limited to 1.2 M hl. and were undertaken through permitted private exporters as well as the CDC (to the traditional state trading importers such as Libya, Cuba, Mexico, and Algeria).

5 The current situation in Canada is somewhat different for exports to the U.S. following the currency depreciation of the last year. Since July 1998, U.S. prices for butterfat are higher than Canadian classes 2-4, making some class 5 prices potentially higher than classes 2-4.

(c) The last group of export sales are surplus removal operations through class 5(e). Sales here are covered by a standardized procedure set forth by the CDC to ensure that there is no domestic or planned export market for that milk, and then to find the highest value for that milk under the unplanned circumstances of most surplus removal sales. There are three types of milk that are handled as 5(e), over-quota production of individual farmers, "sleeve" or buffer production that is not sold domestically and must be exported, and sales of the "structural" surplus of skim milk powder.

However, these sales are not pooled the same way. The first type, over-quota production, is pooled separately and paid to producers accordingly, a true export-only pool. Also, producers are notified of the world price levels on their monthly paycheck, so they are well-informed of the world prices they receive for overquota production. Further, as noted above, the export prices in this pool are lower than other export prices received because of the short term nature of planning for products and sales with overquota production. As earlier indicated, this category has seen substantial growth in the last 3 years. However, the sleeve production and surplus skim milk powder that is exported go into the regular domestic MSQ pool like the cases of classes 5(a-d). It turns out in 1996/97 that no sleeve production was exported (the total sleeve was 1.2 % of domestic industrial production, or about 0.5M hl.).

In sum, it appears that all revenues from the class 5 products except 5(e) over-quota production go into the regular domestic pool, although the details are calculated separately. The other exception is the Optional Export Program. Another way to describe this is that there are two types of export decisions being made, collective and individual. Collective export decisions are to traditional markets and through the special ingredients arrangements, the milk for which is sourced from within national MSQ and is pooled there too. Individual export decisions are made at prices that are below the domestic price, milk is from over-quota production and the OEP, and the milk is pooled separately.

Pooling low valued export sales with higher valued domestic sales, as is the case for Class 5 (a) through (d) milk, means that there is an implicit transfer going on through the pooling process. Producers are getting less for their domestic market milk with this pooling by the presence of the export milk bringing down the average price. On the other side, producers are getting more for their export milk than without this pooling, because inclusion of the domestic milk is bringing up the average price. This higher price for export milk encourages its production, moving producers up their supply curve. As a result there is an implicit subsidy going on even through no direct cash transfer is taking place.

Given that production underlying class 5 (a)-(d) exports is being paid an average pool price across all sales categories including some exports, and domestic prices exceed average export prices, these exports are being subsidized. The result is that, whether this arrangement meets the legal tests

applied for such a subsidy, Canada is exporting more milk products in those categories than would be the case without such price pooling. Because there is no loss on domestic market sales to offset the gain from more exports (due to the domestic milk price being above the cost of producing the milk), overall domestic production is increased by this pooling, and the domestic industry is likely to gain from the process. The effects in the world market are probably quite small. Canada is a small player in world milk product markets that it is unlikely there is any market price effect, and the quantities of exports in these categories also seem relatively small at present.

This subsidy effect can be illustrated in the following diagram, which shows the demand curve facing the Canadian industry and individual producers. It is assumed that Canada is a price taker so our production decisions have no effect on the prices received. There is a pool price for classes 1-4, there is another average price, usually lower, for exported class 5 (a-d) milk, and there is the lower still world price for class 5e and any OEP milk. How much production occurs depends on the level of milk production costs. It may be that class 1-4 is profitable but exported 5a-d milk is not. Production would be only Q1. But with the pooling of the 5a-d milk with 1-4 milk, there is an average price between the average 1-4 milk and the 5a-d milk, and that average price would make the 5a-d quantities worth producing. Production in this situation would be Q2, which is greater than Q1. The pooling produced this extra production, having the same effect as a direct subsidy. This is illustrated in Figure 1.

F. Trade Disputes

There have been several trade disputes involving Canadian dairy policy in the 1990s, all brought by the U.S. against Canada. The first two were focussed on policy decisions or implementation measures regarding Canadian dairy policy in general, and were not unique to STEs. The first was the ice cream/yogurt case which was a dispute about whether Canada could add new products to its Import Control List, ice cream and yogurt, and thereby unilaterally impose import quotas for those two items under the provisions of GATT Art. XI:2(c). Canada took this action in early 1988 just before the implementation of the Canada-U.S. Free Trade Agreement, in anticipation of a loss of market shares with the FTA reductions in the existing source of protection, import tariffs. The ruling was against Canada in that these products were judged not to meet the requirements of Art.XI:2(c) to be “like products” to raw milk. This judgement was not acted upon, awaiting the results of the Uruguay Round where it was anticipated there would be some changes in Article XI that would be relevant. In fact the URA made this case largely unimportant. Dairy product import quotas were to be tariffied and the question of properly imposing quotas became irrelevant.

The second dispute was over the Uruguay Round over-TRQ tariffs that Canada had committed to as part of the Agreement on Agriculture, and whether these tariffs were subject to NAFTA

commitments to lower all tariffs to zero in 10 years. This would be a much more rapid tariff reduction than would be occurring from the URA, where such tariffs were to decline over 6 years by at least 15 percent. The question was whether tariffs agreed to later than the NAFTA signing would be bound by NAFTA provisions. The judgement was that the URA had precedence over the NAFTA in this regard, so the tariff reduction schedule under the URA would hold.

The third dispute has two questions. The first one, brought by the U.S. and New Zealand, was concerned with State Trading activities undertaken in Canada and specifically whether the Special Class (5) pooling arrangements constitute an export subsidy. The allegation was that export subsidies are generated when milk for use in export products is sold in Canada at lower prices than would be obtained if the dairy products were sold on the domestic market. The second question, brought by the U.S., is whether the URA arrangements for Canada's TRQ for fluid milk are meaningful, or whether this TRQ should be opened up to commercial and bulk shipments.

Issues in this dispute

There would seem to be a number of different and contentious issues underlying the current dispute concerning export subsidies. First, there is the question of the nature of the Canadian dairy regime and whether it is set by government or a government agency or whether it is a private operation. There are fuzzy lines between the private and government sector in Canada's state trading regime in dairy. The decision-making apparatus at this stage is being portrayed by Canada as being private and therefore unable to generate any subsidy payment, even though there is indirect federal government representation through the CDC and more active provincial government representation. What features are necessary for this to be a private or commercial operation? How important is it that the whole process is government sanctioned and mandated? If the government sanctioned a private cartel to run the industry solely on its own, would it be subject to the current claims? The issue raises the fundamental question of what is an STE and what constitutes government involvement.

A second issue is the definition of an export subsidy. This pooling case is being disputed because it involves no financial contribution by government or any public body, and no direct transfer of funds or any like arrangement to the presumed beneficiaries. Yet the economics are clear that an indirect subsidy can be conferred by pooling arrangements. Also, the *results* of the current regime are equivalent to the provision of an export subsidy.

A third issue is more implied and that is the difficulties in assessing such a case when the institutional details are complex and very hard to extract. Even when the details are presented, they appear unclear and sometimes contradictory. And in other aspects, the facts are not at all clear or easy to obtain. This appears to be characteristic of the involvement of state trading institutions. They are inherently more complex than normal government policies and a great deal more data, legal and institutional detail, are required to understand their economics and determine their effects.

We can make several observations about these trade disputes concerning Canada's dairy industry. First it is notable that there has been a steady stream of such disputes since the FTA has been signed. Related to this is the clear evidence that the Canadian regime is highly contentious to the U.S. Second, not all issues raised have been singularly STE issues, but these institutions play such a significant role in the dairy regime and there are trade implications in much of what they do. It is also fair to say that Canada in general has taken an aggressive stand in defence of its commitments, limiting imports wherever possible, using prohibitive over-quota tariffs, using pooling mechanisms to create export options and increase production levels. Whether Canada is being more protectionist than the practices in other countries would be disputed. On the other hand, TRQs in Canada have been administered apparently cleanly and without incident.

G. Concluding Comments and Future Implications

As general comments, this case study shows that the dairy trade continues to be contentious, restricted and manipulated. Liberalization efforts here appear to be modest although it is not true that there has been little change in Canadian dairy policy. Rather, quite dramatic changes have taken place in the Canadian dairy industry in the last 5 years. STEs are in the middle of Canada's dairy regime, but the definitions of these STEs are still unclear. Hence the applicability of STE disciplines remains uncertain.

Most of the STE activity here has been on the export side. The extent of pooling has ballooned in Canada in the last 3 years. Although the letter of the WTO law may be being followed in Canada's pooling arrangements, in part of the export regime there are clear, albeit implicit, export subsidies involved. It would seem that the pooling issue is one which must be included in the new trade negotiation round. Further, negotiators should be prepared to consider a variety of existing pooling regimes. There is not much STE activity on the import side now, probably because the tariffs are prohibitive. Once these tariffs become binding, one could expect STE activity here to increase.

Lessons from Canadian Experience with Dairy STEs

First, STEs must be better defined so we can know where they are and what constitutes an STE. The scene is very confused now as a review of the current export subsidy case submissions show. Of particular importance in the Canadian case is the distinction between government and private sector, and why this is important. Surely, if an STE is mandated by government or its agencies to do something, whether the following regime is privately run or government run makes little difference—it is still an STE.

Second, the definition of subsidies must be clarified to deal with the case of price pooling. Export subsidies can be implicit as well as explicit, and the pooling experience shows the subsidy need

not involve a cash payment or anything like it coming from a government. This is not to say that pooling should be illegal. But they must be set up so that you have enough pools so that farmers receive and see the marginal price when they export. A pool that pays a farmer more for his exports than those exports receive is generating an export subsidy. Partly this is the issue of transparency in trade policy.

Third, STEs can be seen in this case to be inordinately complex and full of institutional detail. Any STE disciplines must come to grips with this fact. Just getting the accurate information about how the Canadian pools operate is a challenge, and learning about additional complications and details is another required step, much more so than with traditional government policies.

Finally, on a smaller point, the Canadian experience with TRQs in the dairy industry has not revealed the kind of problems raised in other jurisdictions. Their administration appears to be relatively problem free, the TRQs are being handled in ways that are fairly efficient, and they are being filled. Part of the success of the latter is that this administration is at arm's length from the industry affected, and the holders of the TRQs are private parties and similarly independent of the protected industry.