



Making Sense Out of a Stale Debate: Milk Supply Management in Canada

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1. Introduction

Recently, several articles have appeared that are highly critical of milk supply management. The tone of these criticisms is generally the same – supply management is portrayed as a massive entitlement to dairy farmers that facilitates an inefficient production system, at great cost to Canadian consumers, leading to the conclusion that supply management should be discontinued – the sooner, the better.

After you get past the rhetoric, most of the base information presented in these articles is essentially correct. However, the difficulty is that the arguments are simplistic and lack critical context, and, as a consequence, contribute little in moving any discussion forward. For their part, supply management agencies have, in turn, issued defensive and similarly simplistic rebuttals to critics. Thus, discussions on supply management have been mired in a static debate that is unlikely to further the interests of any of the parties involved or allow this critical element of Canadian agriculture to evolve. It is unfortunate that in such an important discussion, the dialogue has been allowed to become so heavily weighted toward clashing ideologies, at the expense of pragmatic solutions that would encourage an innovative sector.

The purpose of this paper is to provide background, and briefly review the recent contributions to the debate on milk supply management. The paper concludes with concepts and principles that might more progressively advance discussions on supply management.

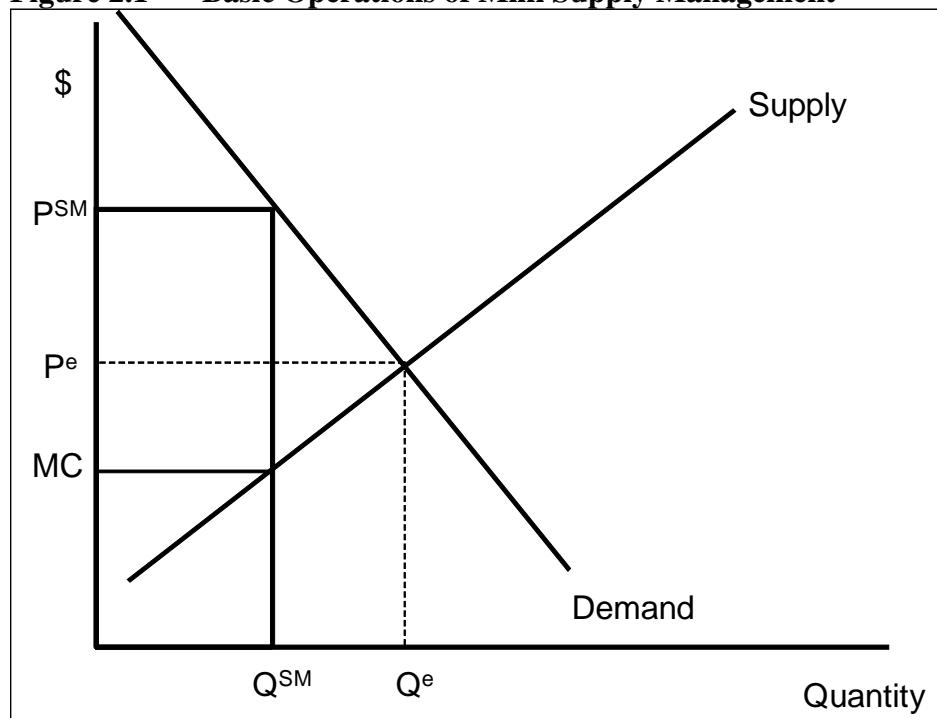
2. Milk Supply Management: Overview and Public Debate

Supply management in Canada originated in the Ontario dairy industry in the mid-1960's. The dairy industry in Canada in the 1950's and 60's was highly fragmented across space and market type; prices received for milk differed sharply across local markets and across regions (Biggs, Scullion). In this environment, producers had difficulty understanding the size of their markets, and processors could effectively exert market power over producers (Mestern). It was in this context that the Ontario Milk Marketing Board was created in 1965. This was followed by similar developments in other provinces, and nationally under the Canadian Dairy Commission (CDC) in 1967.

The institutional framework of provincial marketing boards and the CDC constitutes the basic elements of milk supply management, which provide for the establishment of production quotas, administered pricing, milk classification and end-use pricing, and price pooling. Provincial milk marketing boards perform the producer settlement function, take ownership of milk in transit, operate revenue pooling schemes (on an interprovincial-regional basis), manage milk quality programs and milk transportation logistics, administer production quotas, and manage milk allocations to processors with plant supply quotas. The activities of provincial marketing boards are overseen by provincial government bodies that monitor regulated marketing. Administered milk pricing is based on surveyed cost of production, among other considerations such as demand response and milk utilization, and is implemented through provincial marketing boards, in coordination with the CDC using support prices for butter and skim milk powder. The integrity of the domestic marketing system is protected from imports by the federal government through tariffs and tariff-rate quotas for dairy products.

Figure 2.1 presents a basic illustration of how supply management is implemented, and what the anticipated effects are. In a free market, the market price is determined where supply intersects demand; this occurs at quantity Q^e and price P^e . Under a supply management scheme, a marketing board establishes a target price, P^{SM} , based on a cost of production estimate and/or other criteria. In order to implement this pricing structure, the marketing board implements a production/marketing quota of Q^{SM} . This creates a situation in which producers sell quantity Q^{SM} at a price P^{SM} , so compared to the initial situation, less product is sold at a higher price. At the volume Q^{SM} producers' incremental costs are summarized by the supply curve, given by MC in the diagram. The difference between incremental revenue P^{SM} and incremental cost MC becomes capitalized into quota values.

Figure 2.1 Basic Operations of Milk Supply Management



Figures 2.2 and 2.3 put these conceptual observations into context. Figure 2.2 plots eastern Canadian pool milk prices relative to prices in the US Midwest and US Northeast, at relatively comparable milk tests. The figure suggests that Canadian farm prices for milk have been more stable and higher than US prices; this is anticipated from Figure 2.1 in comparing Canadian supply managed milk pricing vs. the US as a benchmark with a freer market orientation. It is also consistent with the basic observations contained in Dairy Farmers of Ontario (2010).

Figure 2.3 plots Ontario milk production quota values. Quota values in Ontario increased significantly over the past decade and are currently \$25,000/kg of butterfat – which is approximately the quota required for the production of one dairy cow. Fluid milk is controlled by quotas managed by provincial marketing boards, while milk used to manufacture dairy products (Market Sharing Quota (MSQ)) is managed by the CDC. In most provinces, fluid quota and MSQ are rolled into a single production quota, held by producers. In lieu of competition for

the milk supply, plant supply quotas allocate fluid milk and milk used in manufacturing to a small number of large processors.

Figure 2.4 presents the number of dairy farms in Canada. The dairy farm segment has been subject of extensive consolidation; today there are just under 13,000 dairy farms in Canada, down from almost 30,000 in 1993. Canadian farm cash receipts in 2009 were just under \$5.5 billion – 14% of total farm cash receipts in Canada. Figure 2.5 presents the provincial distribution of dairy farm cash receipts in 2009. The figure shows that Quebec had the largest share, closely followed by Ontario; Ontario and Quebec combined had almost 70% of Canadian dairy farm cash receipts.

Figures 2.6 and 2.7 present a broad overview of dairy markets. At an aggregate level, dairy markets are mature. Figure 2.6 shows that the demand for bottled milk is essentially flat. Figure 2.7 shows that the market for milk used to manufacture dairy products (measured in kilograms of butterfat (BF) is also stagnant, and has not kept up with population growth. It should also be acknowledged that there are important countertrends to this general observation in Figure 2.7 in specific product categories (more on this later).

Figure 2.2 Eastern Canadian vs. US Reference Milk Price

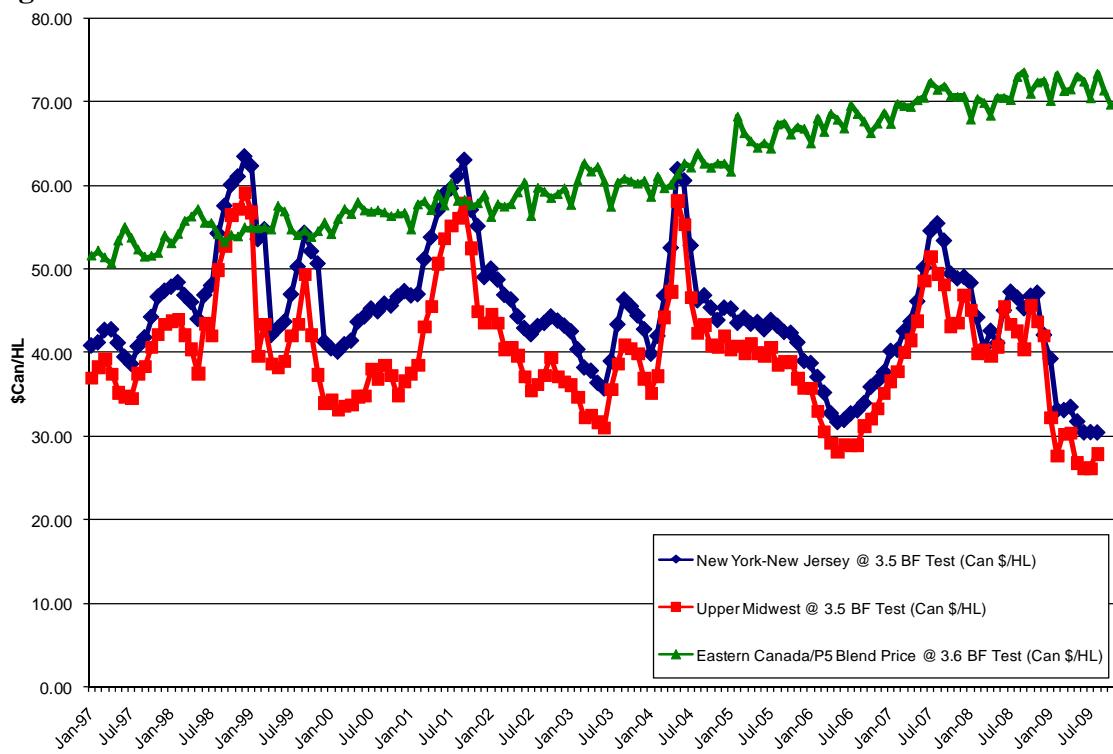


Figure 2.3 Ontario Milk Quota Values

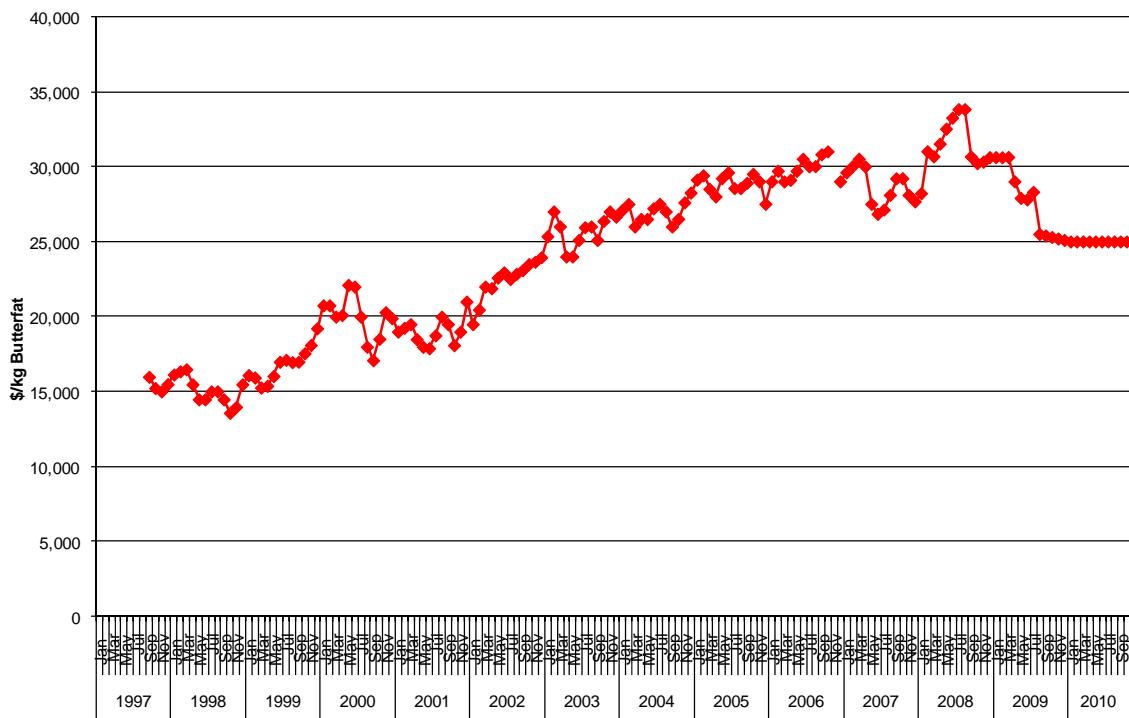


Figure 2.4 Farms With Shipments of Milk or Cream

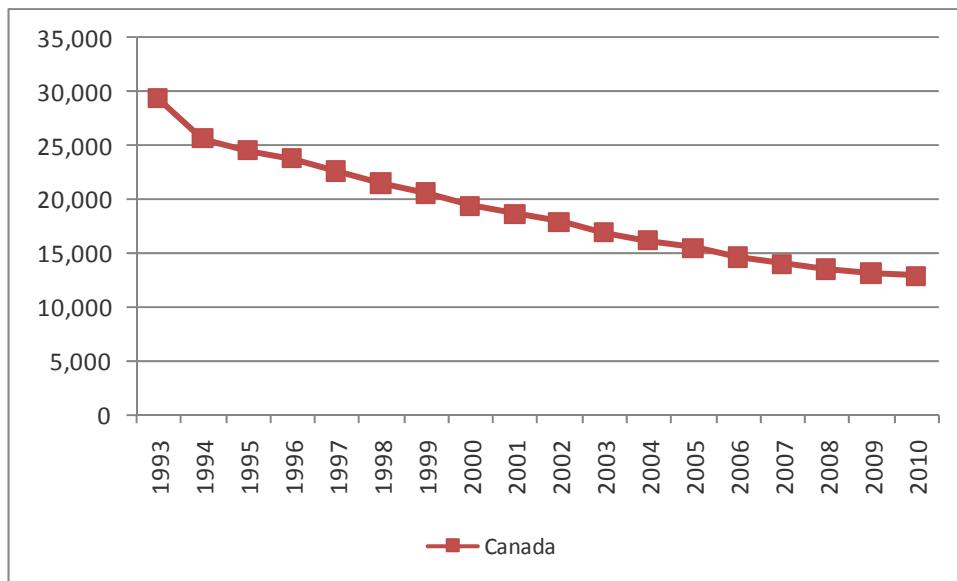
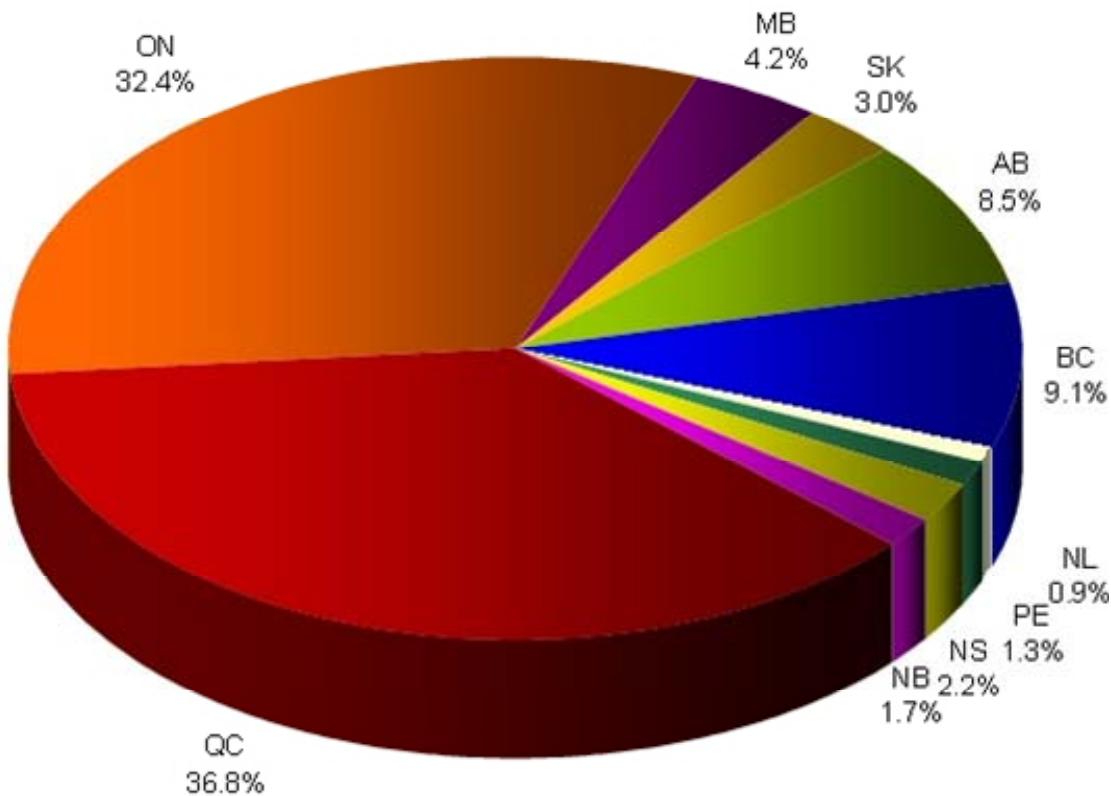
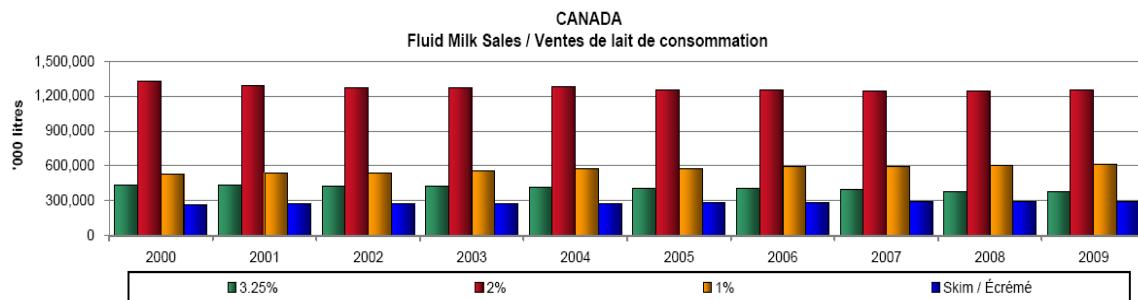
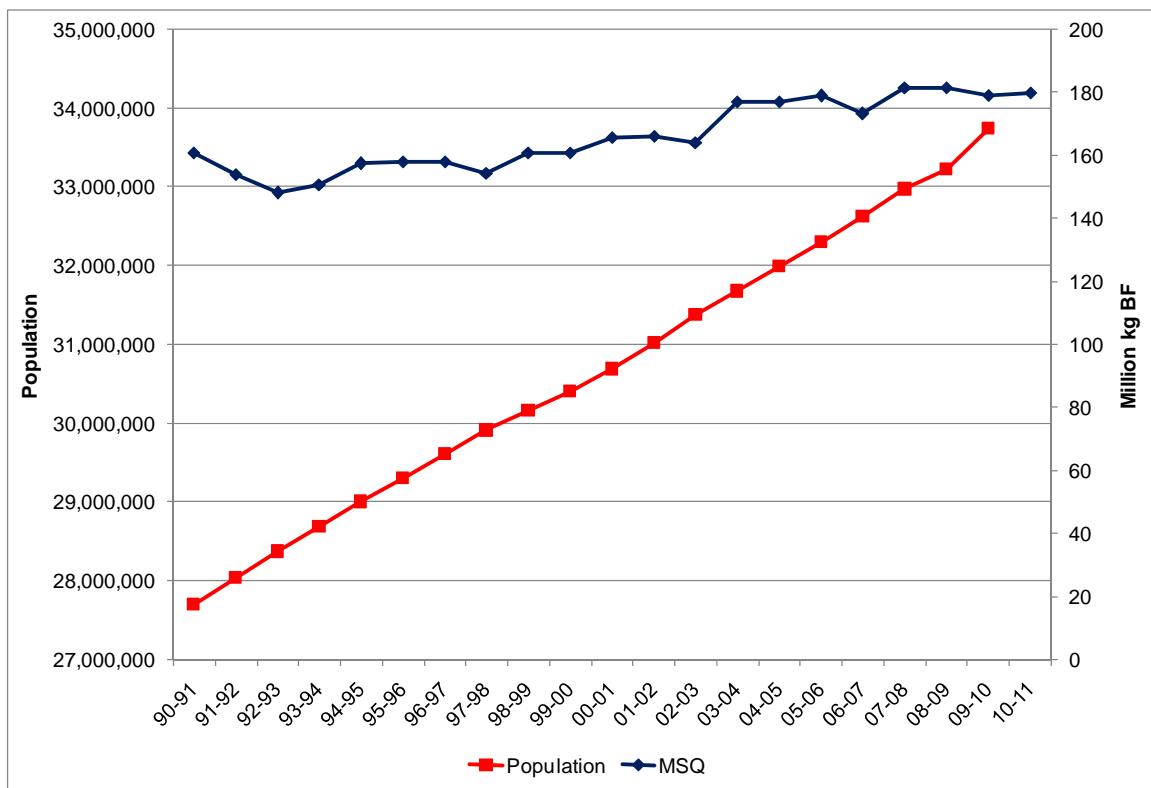


Figure 2.5 Provincial Shares of Dairy Farm Cash Receipts, 2009



Source: AAFC

Figure 2.6 Fluid Milk Volume Sales in Canada**Figure 2.7 Market Sharing Quota vs. Population**

2.1 Recent Contributions in the Supply Management Discussion

In recent weeks, editorials have appeared in the *Globe and Mail* (Bond; and MacLaren) and the *National Post* (Fleischmann and D'Cruz) that are highly critical of milk supply management. These are in addition to economic studies undertaken by the CD Howe Institute (Robson and Busby, 2010) and the Conference Board (Goldfarb, 2009). Milk supply management organizations have limited their responses to the economic studies and have mostly ignored newspaper editorials, but their basic arguments are summarized below.

2.2 Arguments of the Supply Management Critics

Bond likens milk supply management to an exclusive tax that dairy farmers impose on Canadian consumers, creating a wealth transfer of \$2.4 billion per year. This comes in the form of increased prices for dairy products; Bond cites increased prices of whole milk of 60¢/litre and 94¢/lb of butter. These are maintained by very high tariffs of 200-300% that Canada is committed to maintaining, which has hamstrung our trade negotiators. Bond concludes that Canadians “should demand this rip-off stop”.

MacLaren picks up many of the same themes – supply management causes Canadian consumers to pay too much for dairy products, it is hypocritical to our otherwise free-trade position, and this isolates our trade negotiators. MacLaren also argues that supply management is in place explicitly for the purposes of import protection for a dairy industry that is not internationally competitive, and that as a consequence innovation has lagged. MacLaren concludes that we should overcome the special interests entrusted to protect supply management and begin phasing it out.

Fleischmann and D’Cruz adopt the above arguments, and add that milk supply management is complex by design so that the broader public can’t understand its true workings (including an alleged conflict of interest in its administration), and that it is a regressive tax on the poor. They estimate the value of the entrenched interest in maintaining supply management as the aggregate market value of milk quota at \$33 billion.

A Conference Board study by Goldfarb traces the evolution of milk supply management from the period of market fragmentation and problems with market power in the 1960’s, through to the key elements of its operation today – price setting, production setting, and import control. In summarizing the impacts of milk supply management, Goldfarb finds that supply management:

- stabilizes milk and dairy product prices
- increases producer incomes at consumer expense
- entrenches the status quo in dairy marketing
- decreases Canadian dairy exports
- reduces new market opportunities

Robson and Busby make many of the same observations as Goldfarb in their study. They go further than others in proposing a solution – rather than unilaterally abandoning supply management, they suggest it should be phased out by committing to market growth. They conclude that supply management should be reformed by mandating increases in milk quota which would be auctioned off over a 20 year adjustment period. The notion is that additional quota entering the system would increase the domestic market, decrease prices, and reduce the need for protection.

2.3 Response of Supply Management Organizations

For its part, the dairy industry response has typically been that freer markets have proven to be failures; supply management is argued to be a superior system, and the opponents of supply management (and proponents of free markets) just have not been enlightened yet. This point is

made clearly in the Dairy Farmers of Canada (2009) response to Goldfarb, and more generally with regard to international trade negotiations by LaForge. LaForge goes further to suggest that the Canadian dairy industry is too big to fail, and that absent the import controls that facilitate supply management, it would fail. Dairy Farmers of Ontario (2010) emphasizes that farm milk prices in Canada are higher than the US, but retail prices are not, and that this is accomplished without government subsidies.

2.4 Perspectives on the Supply Management Debate

The history of discussions on supply management has been one in which one side attempts to counter and refute the points raised by the other side, without any clearer direction. For example, the critics argue that milk supply management has increased the prices of dairy products to Canadian consumers; the dairy industry responds by conducting a survey of a dairy product basket in specific US markets versus Canadian markets, and finds that Canadian dairy products are not more expensive those in the US (see for example, Dairy Farmers of Ontario, 2010). This skirmish then extends into whether the right data are used in the dairy farmers' comparison, how milk price transmission really works in the Canadian vs. US dairy industries, etc. Ultimately, this becomes a distraction, and the discussion gets mired in arguments over the arcane detail.

Rather than attempt to validate or refute each of the arguments advanced by the opposing sides, the following observations are evident:

Factually Correct Arguments, but Practically Irrelevant

The criticisms levied in the newspaper editorials are largely accurate, but are either misplaced or irrelevant. Noting the costs and disadvantages of supply management will not convince the dairy industry to give it up; rather, it emboldens the dairy industry's commitment to defending it. There is no "burning platform" to force government action on the issue. As the Dairy Farmers of Canada (2009) notes, in the main, these are not new arguments. The notable exception is Robson and Busby, with their ideas on liberalizing dairy markets by mandating dairy market growth, which deserve further attention.

There are Points of Agreement

There are several points on which the critics and defenders of supply management actually agree. For example, both seem to agree that dairy farmers in Canada get higher milk prices than dairy farmers in the US as a result of supply management than they would otherwise. Both also appear to agree that milk prices in Canada are more stable than in the US.

Arguments Based on Speculation

Both sides make bold claims extending from points they agree upon, but that ultimately rely heavily on speculation. For example, Bond argues that whole milk is 60¢/litre more expensive, and butter 94¢/lb more expensive due to supply management. Are these representative retail price differentials, all the time, in all regions? Can this solely be attributed to supply

management? Conversely, claims like that made in Dairy Farmers of Ontario 2010 and the dairy product basket price survey conducted by the Dairy Farmers of Canada have long been a source of controversy in the Canadian food industry – are its chosen locations representative? Does it factor in differences in retail cultures in price mark ups? It does seem odd that farm milk prices in Canada are much higher than in the US, yet retail prices are the same or lower in Canada. Are Canadian processors more efficient than those in the US, or do they take a lower margin?

Consumer Outrage, Exaggerated

The critics seem surprised that the Canadian public has not emerged en masse to protest the “rip-off” on dairy products they attribute to supply management. This is naïve. Dairy products are a subset of the food and beverage category. According to Statistics Canada, food expenditures are approximately 10% of household income; other expenses (like taxes) are more significant (approximately 20%). So the reality is that dairy products are a small proportion of the typical household budget, and it is unlikely that individual consumers will find it worth their while to take time and effort to protest small changes in dairy prices. For example, in the Canadian Consumer Price Index, food consumed at home has historically had a weight of around 12%; within the food consumed at home category, dairy typically has a weight of about 2%. Thus, within the overall CPI as a representation of household expenditures, total dairy products have a weight of just less than 2%.

To put the implications into context, suppose that, across the board, Canadian dairy products were actually 50% more expensive than in the US, and that this differential could be solely attributed to supply management. That would mean that, for a typical consumer, supply management accounts for 50% inflation in an expenditure category that (with the assumed inflation) is less than 2% in significance. The critics assume that the rip-off that increases the dairy product weight to almost 2% from somewhere just above 1% should motivate a public backlash.

Understanding the Fundamental Purpose of Supply Management

With the notable exception of Goldfarb, critics have treated supply management as conceived as an entitlement to protection; MacLaren is explicit on this. This is not consistent with the historical evolution of supply management, which was very much driven by problems of chronic low returns, barriers to market access, and market power faced by dairy farmers. Protection of an inefficient domestic industry from imports was never the purpose or intent of supply management. This must be acknowledged in understanding the problems that the supply management system was set up to solve.

3. Observations and Conclusions

Why engage in this bombastic debate? Fundamentally, the purpose of this dialogue on supply management is unstated. Is it convened to solve a problem, and if so what problem? Or, conversely, is its intent to maintain the currency of an old ideological disagreement regarding economic approaches to marketing that one side or the other perceives as incorrect and/or costly?

This question is rarely asked, but by default seems to have devolved to the latter. In fact, an understanding of purpose is critical in getting the discussion to go somewhere.

The supply management critics seem to assume that the only way, or the best way, to resolve the challenges of milk supply management is to eliminate marketing boards and the supply management system they implement. This is counterproductive, for the following reasons:

- The critics of supply management confuse ends and means. If the end contemplated is a more liberal, innovative, and trade-friendly dairy industry, then one means to attain might be to smash the milk marketing boards and supply management. But there are a whole range of other means that involve engaging the dairy industry in a dialogue that creates an environment in which milk supply management feels secure and can evolve toward a more liberal, innovative, and trade-friendly marketing system.
- The tack assumed by supply management critics immediately puts supply management organizations on the defensive. Facing an attack on their very existence, supply management organizations hunker down rather than expose their flanks. But, this is precisely the opposite of the presumed intent of discussion, which is to explore alternatives that can liberalize dairy marketing.
- The opponents of supply management assume that there would be no downside to eliminating supply management, which is incorrect. As pointed out by some authors, stable pricing is a significant benefit of supply management. Dairy farmers and their financiers also have significant financial interests in quota equity; elimination of supply management, particularly if done suddenly, would create significant injury to them. The resulting benefits perceived by consumers of less expensive dairy products are likely to pale in comparison.
- For its part, milk supply management organizations' responses to the prospect of liberalized trade have been parochial, to say the least. Their approach has been to retreat from the process, or to interrupt Canadian participation in it. This ignores a range of alternative responses, particularly that of reducing prices to meet import competition, at least in certain markets.
- There must surely be a latent opportunity for a constructive dialogue on milk supply management. Regardless of whether it is part of the public discussion, supply management organizations must feel the burden of having to fastidiously defend the status quo. The prospect of a more liberal approach that looks forward to growth and possibilities, without the fear of imminent attack from critics, is likely to be invigorating for milk marketing boards and the dairy industry.

3.1 Some Concepts to Carry the Discussion Forward

If there is a commitment to advancing the dialogue on supply management, the mutual recognition of some basic stylized facts bracketing the discussion is useful:

1. There will be milk marketing boards so long as producers want milk marketing boards.

The idea that government will unilaterally lead a process to remove marketing boards is not practical. Whether dairy farmers have marketing boards organized to market on their behalf is of little significance to the broad populace of Canadians, but of great significance to dairy farmers. Thus, the politics of an initiative to remove marketing boards will not pencil out, unless dairy farmers suddenly turn against them. Moreover, at both provincial and federal levels there is a complex of legislation and regulatory provisions that allows for farmers to market collectively if they wish. There is typically a much clearer process to create a marketing board than to disband one.

2. There will be supply management as long as the producers want supply management

Similar to the above, the political calculus of unilaterally dismantling the supply management system does not add up. It is of huge significance to dairy farmers and, in principle, of little significance to the Canadian population. Recalling that the initial purpose of supply management was to discipline markets in terms of market access and market power, supply management is likely to remain in place, as it is unclear that the latent market access and market power concerns of the past are gone. Thus, supply management is likely to remain unless a groundswell of producers request that it be removed.

3. In the event of an imminent multinational trade agreement, Canada will be a signatory

Supply management organizations have lobbied heavily for Canada to sit out international trade negotiations (such as the Trans-Pacific Partnership), or to guarantee no movement on the tariffs and tariff-rate quotas that protect supply-managed products in WTO-Doha negotiations. However, the reality is that the broader Canadian interest overwhelmingly favors liberalized trade, so Canada will ultimately be a signatory to an eventual agreement. Even without factoring in Canada's trade interest in manufacturing, services, natural resources, intellectual property, etc., with almost 80% of Canadian farm cash receipts coming from products that are not supply managed and thus interested in liberalized trade, the ultimate Canadian interest is clear – in favour of liberalized international trade.

4. Dairy markets are evolving faster than supply management has

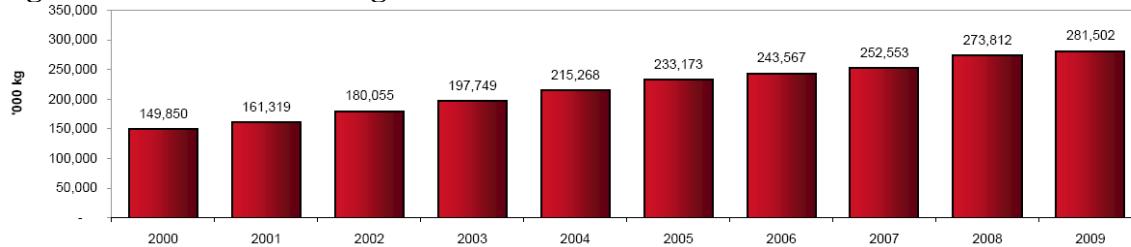
Within a mature aggregate milk volume, certain consumer dairy products are rapidly expanding and segmenting into a mix of products, in terms of categories, brands and new product substitutes that never previously existed; others are in decline. For example, consider the yogurt category. In a relatively short period of time the volume, range in product offerings (e.g. range of fat levels, stirred vs. still, cultured, etc.) and competing manufacturer and store brands have increased dramatically. Figure 3.1 presents the volume growth in the overall yogurt category. The figure shows that Canadian yogurt production

has almost doubled since 2000. Figure 3.2 provides some indication of the fragmentation of the Canadian yogurt category, as of 2005. It envisions 5 sub-categories within yogurt, without reference to brands. The expectation is that the yogurt market has only further fragmented since then – for example with the advent of milk protein concentrates and their extensive use in yogurt manufacturing. The observation is that the yogurt market is rapidly growing and highly diverse.

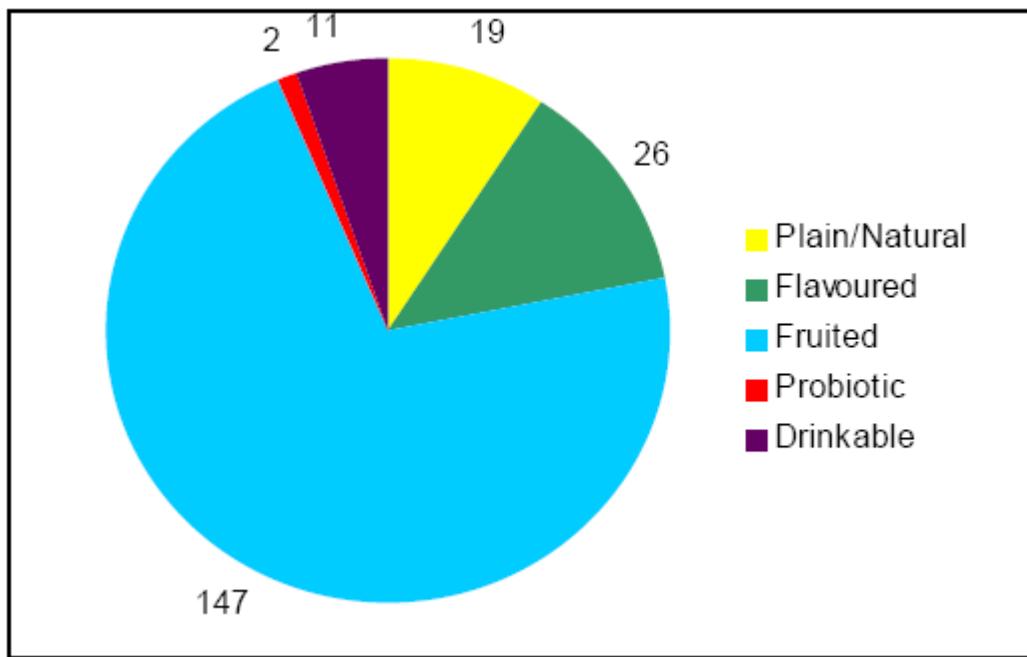
Supply management was not devised to market farmers' milk in this environment. The classified, end-use pricing structure it employs was developed to price milk for use in commodity, largely undifferentiated dairy products with essentially standard yields from milk. Thus, the price discrimination scheme embodied in pricing classes effectively returned a portion of end product value to the producers' revenue pool. However, with such diversity in some dairy product categories (such as yogurt), new dairy products (like milk protein isolates) and close substitutes (such as soy milk), effective price discrimination for producers is impossible. In retaining end-use classes, some processors are likely advantaged and others disadvantaged. For example, there are now more than 400 varieties of cheese, but only 2 pricing classes that apply to cheese. In consideration of these issues, supply management has evolved some new end-use pricing classes and some specialty programs. But it is not clear that these are effectual, and the regulated system struggles to keep up with the diversity and rapid evolution of dairy markets.

The implications of this are as follows. If the reality is that we will have marketing boards and supply management, then the practical problem is how to improve the workings and faults of the system, not simply how to build a better case to eliminate the system. This puts the responsibility on the critics to deal with the relevant questions of how to make supply management more market-oriented and flexible, and better prepare it for reductions in trade protection under new trade agreements. This differs from the simplistic analysis that is the subject of much of the current dialogue.

Figure 3.1 Canadian Yogurt Production



Source: Canadian Dairy Information Centre
http://www.dairyinfo.gc.ca/pdf/processing_sector.pdf

Figure 3.2 Canadian Retail Sales of Yogurt, 2005 (Thousands Tonnes)

Source: AAFC, 2006

If it is correct that Canada will be a part of an eventual trade deal, if it occurs, by taking such an aggressive stance not to negotiate, the dairy industry needs to realize that it is actually putting itself in a precarious position. By sharply limiting Canadian trade negotiators in multilateral talks, they prevent the negotiators from securing a better arrangement (protection) for the dairy industry. They also threaten any balance in the notion of Canada's "balanced trade position" in agriculture between supply-managed products and freer market-oriented products.

As it stands, if trade agreements are reached, Canada's ability to participate will have been limited by supply management's strong stance, Canada will sign a deal they had little role in crafting, and the result in terms of whatever protection remains for supply management will simply have to be accepted. By taking a more liberal, engaged stance, the dairy industry could have more input into the ultimate provisions enabling supply management. The current dairy industry approach implicitly assumes that the dairy and poultry industries have sufficient political clout to prevent Canada from entering trade agreements, or simply that there will be no major trade agreements concluded for other reasons.

Finally, those close to milk supply management know that there are daunting challenges in its operations: serving a much more diverse domestic market, obtaining growth in the broad market, asset valuation and financial returns, and competing with new substitute products. Focus is required to engage these issues. Ongoing public debate regarding the merits and existence of supply management is both a distraction to this, and an excuse for inaction.

3.2 Conclusion

Wallace Stanley Sayre is credited with observing that “academic politics are the most vicious and bitter, because the stakes are so low”. What is now called “Sayre’s Law” is defined by Wikipedia thus: “In any dispute, the intensity of feeling is inversely proportional to the value of the stakes at issue”.

The visceral nature of the public discourse and politics of supply management would lead one to think that it is of academic significance. This is not the case. Given the quota asset values and farm cash receipts, the dairy industry and milk supply management are indeed very significant. Moreover, with the leading share of dairy industry receipts in Quebec, milk supply management is significant in economic and Canadian regional political terms.

The economic and political significance of what is at stake, combined with challenges and implications of managing a regulated system – both in a diverse dairy product market, and in international trade discussions – make it a critical issue in Canadian agriculture. It deserves to be engaged with a more mature discussion, appropriate to its significance. The dialogue could be greatly improved by toning down the emotion and economic ideology, recognizing the supply management system’s benefits and faults, and getting to work on a more pragmatic discussion of how milk supply management can be improved and allowed to evolve.

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