

Options for Supply Management in Canada Under Trade Liberalization

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Introduction

- Supply-managed (SM) sector in Canada includes dairy and poultry production
 - Accounts for 20 percent (C\$7 billion) of farm cash receipts (2004), stable share since early 1970s
- Policy regime generally similar across four main commodities (milk, eggs, broilers, turkeys):
 - Prices determined by cost of production formula
 - Production limited to domestic market consumption
 - Border measures used to keep out less expensive imports
 - TRQs replaced import quotas in Uruguay Round; over-quota tariffs of 155-299 percent (prohibitive)

Trade Policy Issues

- Doha Development Agenda (DDA) negotiations:
 - some implications for Canada's (SM) sector but necessary changes likely small
- Important question facing industry, government in our view:
 - Should SM system be realigned only to deal with new DDA rules, or should more fundamental changes be undertaken to position industry better for post-DDA world, beyond 2021?
 - If no action taken before 2021, risk of significant over-quota tariff cuts and sharp price drops after that time
 - Now have possible 15 year window of adjustment

Focus of Paper

- In this paper we primarily point out some options to leave industry better positioned to compete in 2021 and beyond
- Central issue: whether and how governments should offer adjustment assistance?
 - We discuss different types of assistance, highlighting strengths and weaknesses
 - Lessons from previous adjustment programs
 - We are not proponents of any one approach; we want to identify options and program design characteristics that are important

Background Data

- Adjustments to future trade policies made more difficult by currently high quota values
 - 1981 Quota value: \$4.4 B (3.5% of non-quota assets)
 - 2004 Quota value: \$24.8 B (12.2% of non-quota assets); Ave. Ontario farm, 100 cows: \$2.5 M in quota
 - Annual growth rates:
 - 1981-1995: 6.4% (nominal)
 - 1995-2004: 10.0% nominal/8.1% real
 - Quota values have increased by 136 percent 1995-04
 - This adds to 52% increase from 90-95, or 81% from 85-95
 - Annual profits (rental rates) could not have grown this quickly
- Equity levels grew particularly fast for large farms, sales > \$500,000
- But debt levels grew even faster, more than doubling 1995-2002
 - In 2002 for these larger farms, debt/non-quota equity > 1 for Alberta, Ontario, Quebec (1.1, 1.1, 1.2, respectively)

Quota Price Model to Inform Options

- PV models well established in literature
 - Need minimum degree of complexity, including institutional issues, for proper application
- Key variables, all based on expectations:
 - Net returns from holding quota (e.g., producing product, future govt payments?) (R)
 - Future quota capital gains, or increases in R (g)
 - Interest rates (r)
 - Default (policy) risk (d)

$$PV (=P_Q) = R (1-d)/(r+d-g)$$

Causes of Quota Price Growth

- Some real factors at work; fall in interest rates and costs
- Two plausible factors increasing quota capital value faster than the rental price (or R value)
 - Reduction in default risk, perception that quota regime less subject to change post-URA (smaller “d” in quota price model)
 - Expectation that, if there is change in quota regime, government will make compensatory payments to quota holders (part of R)
- For both situations, quota values would grow faster than actual annual profitability of production
- If quota prices incorporate an expectation of future govt payments, steps to arrange/discuss such payments will increase their expectation, raising quota prices further
 - Analogous to using quota values as component factor in milk/egg price formulae, prompting unstable cycle of increasing prices; can be dynamically explosive

DDA Proposals

- Export competition:
 - Elimination of export subsidies would require elimination of butter, skim milk powder, and cheese exports
 - This accounts for 2-3% of Canada's domestic consumption
- Domestic support
 - Some cuts likely due to product-specific AMS limits
 - May constrain CoP-based open-ended pricing used in milk; prices may need to be negotiated with processors, as in poultry
- Market Access
 - Minimum access commitments likely to be specified as percent of recent consumption. Current levels: butter 3.7%; cheese 5.5%; other dairy products range from 0.2% (ice cream, yogurt) to >20% (buttermilk powder). Percentages higher in eggs, broilers, due to use of supplemental import permits

DDA Proposals: sensitive commodities

- Market Access, cont.: Tariff cutting:
 - *Special and sensitive products* facing lower tariff cuts; Canada likely to specify its supply managed commodities as “sensitive”
 - Likely subject to a maximum proportion of tariff lines
 - 1% (US proposal) vs. 8% (EU proposal)
 - Canada’s supply managed commodities covered by at least 5% of total ag tariff lines
 - If mid-way compromise between US and EU, Canada may be able to specify most of its overquota tariff lines as sensitive

DDA Proposals: Over-TRQ tariffs, TRQs

- Over-TRQ tariffs to be cut somewhat, TRQs to be increased, subject to some trade-off between the two
- Water in tariffs?
 - Given over-TRQ tariffs in 200-300 percent range, must be much water in tariffs
 - Estimates: 50-70 percent cut in chicken tariffs, 100 percent cut in egg tariffs, would still keep out most imports
 - Dairy products: 50 percent to keep out (US) raw milk, higher tariffs to keep out non-US milk products (more work needed)
- If 30-50% tariff cuts assumed to give import protection for most commodities, SM industries will face TRQ increases of 50-70 percent, with specified minima of 5-7% of domestic consumption
- Add to-be-prohibited export subsidies, forcing dairy exports to zero. Result: Dairy TRQ increase of 5-10% of domestic consumption (equiv. decr in production quota)

Conceptual Framework

- Standard model of SM illustrated in paper
- Key results
 1. If only water in the tariff eliminated, producer prices, quota levels, values and net incomes not affected
 2. If tariff declines exceed water in tariff, producer net incomes and quota rents eroded by unequivocal reductions in output prices
 - Some increase in product consumption will partially offset the net income decline by allowing increased quota levels
 3. If TRQs increase, domestic quota levels fall, even with optimal (monopoly) pricing
 - With optimal pricing change (lower) quota levels fall by less
 - In either case, producers are worse off by some combination of falling prices and quota levels

Options for Adjustment Assistance

- Considering more significant change, whether following current or future WTO round
- Pros, Cons for adjustment assistance

Five Basic Cases considered

1. Assistance based on book value/historical quota cost
2. Australian dairy reform
3. Two-quota option
4. US tobacco and peanuts
5. Full quota buyout

Pros and Cons for Assistance

- Some arguments can be made against assistance
 - Quota values >doubled since 1995, almost tripled since 1990 (even in real terms)
 - Risks inherent in quota purchase that regime may change, well understood, already anticipated and built in to quota price
- Also argument that role exists for government to encourage adjustment to lower farm prices
- Precedents for adjustment assistance of various kinds, both within and outside Canada

Precedents Within Canada

- WGTA/Crow freight rate removal, \$1.6 B, 1996
- Transition assistance to grape growers in Ontario and BC when CUSTA signed
 - Payments to replant to modern (higher quality) wine grape varieties (\$8000/acre)
- Tobacco in Canada (Ontario):
 - Payments (\$88 million) to retire basic production quota permanently; affected ~1000 producers
 - This was *domestic* policy reform, not trade policy change

Precedents Outside Canada

- EU Sugar Reform
 - Shift away from sugar production quotas and to lower domestic sugar prices (-36% over 4 years; prices down almost to world price)
 - Direct decoupled payments replacing 64% of income lost (“cash-out”)
 - Sell back sugar production quotas to EU at given schedule of prices; price declines after two years
 - This aid to adapt to new price environment *or* to exit industry
- Australian Milk Reform, June 2000
- US Peanut Reform, 2003-2004
- US Tobacco Reform, Oct 2005

1. Assistance paid on book value

- From the family of options to pay adjustment assistance based on quota (capital) value
- This option based not on current market value but on historical or book value, which is lower
 - Book value typically defined as original purchase value less depreciation, but here taken as original purchase value only
- Rationale/argument based on specific fairness notion
 - Person who bought quota years ago, or was given it, has received many years of benefits and “needs” less assistance
 - Recent purchaser may still have debt to service and hence “needs” assistance more
- Additional advantage:
 - Likely to be considerably less expensive form of assistance
 - Possibly feasible by using farmer’s income tax records
- Difficulty:
 - Perceived inequity of not providing payments for capital gains

2. Australian Dairy Model

- Full and immediate reform after 9 months notice
- Rapid and significant decline in fluid milk prices plus some subsidy removal
- Assistance based on lost income from reforms
 - 3 yrs worth, not full PV of loss
- Focus specifically on encouraging farm adjustments, not equity-based income support
- Known schedule of payments
- No need to remain in industry to receive payments
- Financed by consumers via increased milk prices for 10 yrs, no contribution from government (consumers were beneficiaries but half consumer benefits postponed 10 yrs)

Applying Australian Model to Canada

- Administratively feasible via well developed milk revenue pooling arrangements
- In Canada, losses would occur on all dairy products, not just fluid milk
- Involve lower payments than would occur with full quota buyout (3 years rental value, not PV)
- Could allow for government financing as well as consumer via contributions to price pool
- Flexibility in this approach, in terms of size of payments and incidence of payment burden

3. Two-Quota Option

- Designed to ease the difficulty of making substantial adjustments to product price declines well before policy change
- Introduce new quota: ties production covered by this quota to lower product prices
 - E.g., Lower price may be world price + 30% tariff (e.g., 45c vs current 65c per litre)
- *Trade-in scheme*: farmer sells old quota to govt and buys new quota; use farmers' offers to sell, bids to buy
- *Voluntary*: farmers who are unable or do not want to produce at lower prices, don't have to participate
- *Feasible*: one price to consumers via pooling of returns from differently priced (old and new quota) milk

Two-Quota Option, cont

- Government-related Issues:
 - *Incremental*: Govt may buy quota covering whatever proportion of output it wishes
 - aggregate trade-in volume dependent on government budget and planned adjustment period
 - *Some Flexibility*: allows cost to be spread out over as lengthy a time period as budget and trade agreements permit
 - *Expensive*: virtually full quota buyout from buying high priced old quota; (small) offset from sales of new quota
 - Offsetting factor: A tax on all sales of old quota could be used to lower further the cost of this scheme

Would new quota be in demand?

- Producer-related Issue:
- Opportunity to leave behind risks of current policy with ad hoc quota cutbacks and uncertain future price declines
- Advantage of locking in current high prices of quota which many farmers think are unsustainable
- Allows chance to get out equity from old quota assets yet still stay in farming
- Can be done incrementally or not at all
- Could be attractive to entering farmers who cannot afford current high cost of quota but who can produce at lower price

4.a. US Tobacco Program Buyout

- Clean and complete buyout; no more government payments, no growing restrictions
 - After reform, tobacco prices expected to fall by 25-30%
- Payments made both to quota holders (not necessarily farmers) and tobacco growers (including renters who did not own quota)
 - Quota owner simply had to own quota when program initially enacted
 - Tobacco growers: grew tobacco in any of three prior years
- Payments spread out over 10 years for both groups
- Program cost: \$9.6B (cf. \$2B sales in previous years)
 - Equiv to 15-20 years of quota rental payments, but significant decline in quota allocations over past years, so better than that
- Financed by tax on tobacco product manufacturers and importers (consumers), not taxpayers

4.b. US Peanut Program Buyout

- Not clean and complete buyout; Substitutes government payments for removal of quota (and location) restrictions
 - After reform, *net* returns expected to be similar for many farms
- Payments made to quota holders only (not necessarily growing)
 - Peanut growers get various government program payments and do not need to lease quota)
 - Quota owner had to own quota when program enacted
 - Payments spread out over 5 years
- Buyout amount: Equivalent to 24 years of quota rental payments, but significant decline in quota allocations over past years, so better than that

4. Full Quota Buyout

- Easy to do administratively
- Obviously attractive to producers
- Downside: Very costly to government: C\$25 B
 - Compare to WGTA buyout to all wheat farmers of less than C\$2 B total
- Not feasible budget-wise(?) if only introduced in response to final trade agreement (if trade agreement involves typical phase in period of only five years)
- Can buyout be stretched out in time?
 - Cost could be spread out if payment scheme introduced well in advance of trade agreement
 - Spreading of costs in advance via two-quota model

How to base assistance amount?

- Many arguments for assistance in reform of quota-based policies based in some way on quota *capital* values
 - But buyout costs raise question, should this approach be followed?
- Some suggest Canada's quota values inflated
 - Do they illustrate an asset bubble?
 - What do these values reflect?
- Some assistance programs focus instead on annual profitability that will be foregone, payments for x years foregone profits
- To address these issues, we look more closely at quota price patterns

Quota Price History

- Aggregate quota values in Canada across the four commodities, in real terms (inflation netted out)
 - These data look *only* at capital gains; they ignore annual returns or benefits from producing the commodity (“dividends” not incld)
 - Past 4 years 2000-2004: 8%/yr
 - Past 9 years 1995-2004: 10%/yr
 - Past 14 years 1990-2004: 9.6%/yr
 - Past 23 years 1981-2004: 7.8%/yr
- Extraordinarily high rate of increase relative to other investments
 - Unquestionably faster growth than rental return on quota, annual profits on producing milk
 - Difference between milk prices and costs not likely more than 2%/yr
 - Remarkably sustained: at least 23 years!
 - Very difficult to call this a bubble

NAFTA Market Integration: Implications

- From DDA, there will likely be some increased imports into Canada, but only via the restrictions of existing TRQs
 - No likely effect on market prices or any real market integration
- With more serious reforms such as those that would lower domestic prices:
 - Degree of increased imports uncertain
 - Depends on domestic pricing policy within Canada and industry competitiveness within Canada (position of domestic supply curve)
 - Possible that Canadian industry has low enough costs so that market integration could occur with small import levels
 - Clearly depends heavily on exchange rate
 - Cannot predict more than this

Conclusions 1

- Short run issues surround DDA where required changes likely to be relatively minor
 - Increased TRQs will lead to reduction in domestic quota levels
- For long run, if adjustment assistance offered, many options for designing scheme, with guidance from cases examined above
- Variables to consider are:
 - Size of assistance payments
 - Basis of payment: quota capital value vs annual returns/rental
 - Time pattern of payments (how spread out over time)
 - Incidence of financing costs between government and consumers
 - Voluntary schemes vs. across the board payments to all

Conclusions 2

- Same payment level to all producers vs. differential assistance based on some criteria (e.g., historical quota price vs current market value)
- Introduction of new quota types
- Administrative ease
- We would recommend special attention to three issues
 - Focus program on adjustment of industry/farms to lower prices
 - Options exist to choose a distribution of financing costs across taxpayers, consumers, or both
 - Base payments based on fixed number of annual or rental values, not on capital values
 - Particularly critical, given currently “inflated” level of quota values, especially to extent these values have expected government buyouts or other payment expectations built in to current price

Lessons: other schemes, quota p

- Recipients would have to stay farming