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## **RURAL CHANGE**

The Challenge for Agricultural Economists

PROCEEDINGS

SEVENTEENTH INTERNATIONAL CONFERENCE OF AGRICULTURAL ECONOMISTS

> Held at Banff, Canada 3rd – 12th SEPTEMBER 1979

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INTERNATIONAL ASSOCIATION OF AGRICULTURAL ECONOMISTS INSTITUTE OF AGRICULTURAL ECONOMICS OXFORD

1981

### Gower

#### **YVON PROULX\***

#### Marketing Boards in Canada: Role, Impacts and Some Elements of Performance

There have been marketing boards in Canada since 1929. Such boards exist in all ten provinces. They have developed very rapidly over the last twenty years to the extent that their number increased from 66 to 105 and the share of farm cash receipts marketed through them has risen from 13 to 60 per cent (*Agriculture Canada*). Marketing boards regulate the production and/or marketing of almost all the major Canadian agricultural products, the main exception being beef cattle.

Despite these developments marketing boards are criticized by some farmers who dislike the constraints which are imposed on their freedom and are sometimes questioned by analysts who are concerned with some negative impacts which they appear to have (Forbes, Menzies) or lack of expected positive impacts (Loyns, Martin and Warley). This has not prevented the Canadian government, very recently, from providing the necessary approval for the implementation of a national chicken broiler marketing board, a board comparable in extent of power to those who are the centre of the "mounting wave of disaffection" noted by Martin and Warley.

Since there are probably few other countries in which the marketing of farm products is so extensively controlled by such type of mandatory agencies we believed that it might be useful, after a brief descriptive review of what these boards are, to attempt to summarize the impacts which have been identified thus far and to discuss briefly some elements of performance that may be pointed out at the present time. These are the three specific questions which I want to cover in this paper. I will obviously draw upon the studies already mentioned plus one which I conducted at Laval University with one colleague but which has not been published in English thus far (Proulx and St-Louis).

<sup>\*</sup> The author is grateful to Dr R. St-Louis for his comments and to Dr W. Anderson for his assistance in editing this paper.

#### WHAT ARE MARKETING BOARDS?

Agriculture Canada in its annual marketing board statistics defines a marketing board as "a compulsory horizontal marketing organization for primary and processed natural products operating under government delegated authority. The compulsory features means that all farms producing a given product in a specified region are compelled by law to adhere to the regulations of a marketing plan. The horizontal aspect means that marketing boards control the output of all farms participating in the particular marketing boards scheme and that they aggregate the supply from all the farms up to a chosen or permitted level. Government authority through legislation is essential to achieve the required compulsion. The power of the boards utilizing this authority is generally wide enough to affect the form, time and place of sales and directly or indirectly, the prices" (Hiscocks).

These powers or functions of marketing boards are summarized in the same sources as follows: negotiating prices, designating specific sales agents, establishing marketing quotas, setting transportation allowances or other matters related to the marketing of specific agricultural commodities. To perform their functions, some marketing boards may collect levies from persons producing or marketing a product. The levies may be used for various purposes including equalization of returns to producers.

The description given above certainly gives a very good idea of what, in general, marketing boards are. It is important however to note that marketing boards are not all alike. They differ greatly among themselves on several fronts. Most marketing boards are provincial boards operating under provincial legislation, at least for those products which are produced and sold within the province. Federal legislation, the Agricultural Products Marketing Act, 1949, allows a provincial board to have its powers extended to include the regulation of interprovincial and export trade.

Beyond the provincial boards just mentioned there are five boards established under federal legislation: The Canadian Wheat Board which regulates or sells directly most of the grain produced in the Prairie Provinces, the Canadian Dairy Commission and three poultry boards which in conjunction with the provincial boards for these products operate national marketing plans for industrial milk, eggs, turkeys and chicken broilers.

Marketing boards differ also by the degree of producer control which is being exercised in their management. The Canadian Wheat Board and the Canadian Dairy Commission are controlled by government appointed officers. The national poultry boards are producer controlled agencies, as are most of the provincial boards.

Finally it may be useful to note that by grouping the categories of powers which are mostly exercised, Loyns has classified marketing boards into three main types. In order of increasing regulatory control, these are:

- 1 Negotiating agencies: mostly negotiate producer prices and other terms of sale (most fruit and vegetable boards).
- 2 Central selling agencies: sell on behalf of producers (some fruit and hog boards, Canadian Wheat Board).
- 3 Price and volume regulatory agencies: supply management and price setting (milk and poultry boards).

For the purpose of looking at the impacts of marketing boards to which I will now turn, I will group together the two first categories above and designate them as marketing boards who do not exercise supply management functions as opposed to boards who do.

#### IMPACTS OF MARKETING BOARDS

According to G. Hiscocks, marketing boards have been implemented to improve the bargaining power of producers and more specifically to achieve the following objectives:

- 1 to maintain or increase producers' income for a given product,
- 2 to stabilize producers' income,
- 3 to normalize the conditions of sale of a product (improve equity in producers' access and treatment in markets).

He adds that increasing income is by far the most important of these objectives and is generally expressed in terms of an increase in the unit price received by producers.

Given these objectives and my belief that supply management is a much more powerful device than bargaining I have chosen to organize this discussion of the hypothesized impacts of marketing boards in the following way.

#### 1 MARKETING BOARDS WITHOUT SUPPLY MANAGEMENT

#### Impact on farm price level

Marketing boards which do not have as a target the adjustment of the volume of production in light of demand conditions but rather the promotion of a better balance of forces in negotiations on prices and other selling conditions should normally allow those who, without the board, would be in a weak bargaining position to obtain a better price. Such a price increase may also be the result of some other changes accompanying the implementation of a marketing board: decreases in marketing and transportation expenses associated with the rationalization of the marketing process, improvement and the timing of sales, improvement and/or standardization of product quality and a better approach to serve all the segments of given markets.

Support for this hypothesis has been found by Proulx and St-Louis in a comparison of producer prices of fruits and vegetables for which there

have been marketing boards in operation in Ontario and British Columbia for quite a while with producer prices of the comparable relevant sectors in Quebec where there are no marketing boards.

This comparison was made by calculating the least-squares regression trend line of the farm prices of these products in these three provinces for the past twenty years. The rates of growth of the price obtained from this calculation showed that for the majority of the seven vegetable sectors retained for comparison, the price increased less rapidly in Quebec than in Ontario and British Columbia (Table 1).

The apple market was the only fruit market which could be studied on the same basis. Marketing boards were set up in 1969 in Ontario and 1972 in New Brunswick. The price in Ontario has increased much faster after its marketing board was implemented. It rose faster than in Quebec in both periods. In New Brunswick the price was declining before 1972 but started to rise and at a faster rate than in Quebec after the New Brunswick marketing board was implemented.

#### Impact on volume of production

To the extent that marketing boards allow producer prices to be increased, they should stimulate the development of production. A better farm price should encourage new producers to enter into production, should dissuade others from leaving and should encourage all those already in production to produce more. The same effect no doubt results from increased confidence and reduced uncertainty for all producers following the implementation of a compulsory marketing arrangement guaranteeing equal and fair access to the market.

	Percentage rate of growth			
A – Vegetables Period 1958–76	Quebec	Ontario	British Columbia	
Beets	3.03	3.78	8.52	
Carrots	2.01	3.15	4.57	
Celery	2.47	5.39	5.79	
Onions	3.41	7.76	4.72	
Cucumbers	2.86	5.10	6.02	
Lettuce	4.32	5.52	4.07	
Fresh Corn	2.15	2.23	2.18	
B – Apples	Quebec	Ontario	New Brunswick	
195868	3.88	6.01		
1969-76	11.80	16.87		
1958-71	1.35		-0.08	
1972-76	0.05		3.87	

TABLE 1 Geometric rate of growth of the price of some fruits andvegetables, Quebec, Ontario, British Columbia and New Brunswick,1958–78

This hypothesis was examined by looking at the evolution of the share of the Canadian market occupied by provinces in which there are marketing boards, as compared to Quebec where there was no marketing board for fruits and vegetables over the period 1958–76. The results showed that in five of the seven cases considered a province with a marketing board (Ontario or British Columbia) had increased its share. In hog production on the other hand the reverse was observed. The production increased more rapidly in Quebec where there was no marketing board. From that we can only conclude that there are many factors affecting the change over time of an industry output, of which the existence of marketing boards without supply management is one.

#### Impact on consumer prices

Since the operation of a marketing board without supply management does not, by itself, imply any increase in the degree of protection of domestic production, and since the level of production is expected to rise it can hardly be expected that the consumer price may be greatly affected by such a board. In fact, after a marketing board is established, the consumer price should have the same relationship to the price of the principal foreign supplier of this product as it had prior to the existence of the board.

I did not analyse data in order to test this hypothesis. Instead I relied on the findings of economists who studied the question of the consumers' interest in marketing boards for the Canadian Consumer Council (Forbes). In the case of hogs, the study indicated that marketing boards seem to produce a slight rise in farm price levels, but one which is not large enough to be perceived at the consumer level.

Likewise in the case of fruits and vegetables the report concluded that marketing boards have little or no effect on consumer interests except in one specific case, grape processing in Ontario and British Columbia. The report also concluded that tariffs rather than marketing boards harmed consumer interests. However no precise indication was given of the effect that tariff protection would have been raised because of the implementation of a marketing board.

#### 2 MARKETING BOARDS WITH SUPPLY MANAGEMENT

The analysis carried out thus far tends to show that marketing boards without supply management powers, by reorganizing the bargaining relationships between producers and processors of farm products, allow producers to capture a larger share of the dollar spent by the consumer (higher farm price without comparable absolute consumer price increases). These gains realized by producers can only be rather limited. The manoeuvring room as regards prices afforded by increased bargaining power is definitely limited.

One means of raising prices to a much greater extent, when the protec-

tion of domestic production is adequate (high tariffs or quantitative import restriction) or can be increased, is to regulate production or marketing so as to reduce the total quantity of a product to be placed on the market. This is the power which has been demanded and obtained by producers who have succeeded in establishing marketing boards with supply management. Let us now look at the impacts of these boards that have been observed thus far.

#### Impacts on producer and consumer price levels

Supply management is practised in Canada in dairy and poultry production. I will not report any empirical research work with respect to dairy product prices because, in this case, production as well as prices are fully administered by the federal government through its price support and surplus removal programme. The objective of raising (and stabilizing) prices is assumed to be obtained almost by definition.

The price impact is examined mostly for eggs and turkeys, for which there are national marketing agencies operating quota systems since 1972 and 1973. Moreover protection of domestic production is obtained through import quotas. They are really "pure" cases in which it is possible for supply management to show its capability to significantly affect prices. A price impact is also expected for broiler production although there was no national marketing board before 1978, but only provincial boards with an informal agreement since 1972 between Ontario and Quebec to share the market and manage supply on that basis.

The authors who have examined the impact of marketing boards on poultry product prices are unanimous in reporting a very significant impact. Forbes has pointed out that the consumer interest is not being served as well as it could be by the poultry industry in Canada. He argues that prices are much higher than they need to be and that they are capitalized into poultry quotas under marketing board control. Menzies has noted that prior to the early 1970s producer prices for broilers were within 5 to 8 cents of US prices. Since 1973 Canadian prices have been 10 to 12 cents per pound over those of US producers. Thus the spread has doubled. A similar situation has developed for turkey producer prices. Finally since 1973 the egg producer price spread between Canada and the US increased from 0 to around 15 cents per dozen.

The data which I gathered suggest that, after the very important price rise of the 1972–73 period in both countries, the Canadian poultry boards succeeded in maintaining the higher prices dictated by the production cost formulae (high grain prices) while the US price got back close to its level prior to the grain crisis.

#### Impact on price stability

The price stabilization impact of marketing boards has been questioned by Loyns and Martin and Warley. They suggest that this impact is probably less important than advocates of marketing boards tend to suggest.

I believe however that Loyns in his study has gathered data prior to the

period in which this stabilization impact really occurred (his empirical analysis) covered data up to 1975 and the national supply management schemes were then too recently implemented). Martin and Warley, in my opinion, were looking for more stabilization impact than marketing boards can provide. As I suggested previously, a stabilization impact should be expected only in the cases of boards with supply management. Even in this case production has to be isolated from foreign source of supply or foreign source of instability. Beyond industrial milk, which is disregarded here, this is the case only for the poultry boards. The results reported by Martin and Warley in these cases effectively supply evidence for significant price stabilization impacts particularly at the farm level. Similar results were obtained by Proulx and St-Louis.

#### Impact on industry output

Supply management should normally reduce the industry output, maybe not in absolute terms but at least as compared to what it would have been in the absence of the marketing board. Otherwise there would be no need for supply management.

To provide some support for this hypothesis we compared egg and turkey production before and after 1972 and 1973 in Canada and the United States. Egg production in Canada started to decline after 1972. But a similar trend was observed in the US. In the case of turkeys on the contrary, production declined in Canada after 1973 while it increased in the US. Also in support of the hypothesis we observed that from 1965 to 1971 the province of Quebec (no marketing board in that period) was rapidly increasing its share of the Canadian broiler market, while that of Ontario, where a quota was functioning, was declining. A quota system was set up in Quebec in 1971 and after that the respective share of the two provinces stabilized.

#### Impacts on farm productivity

The most direct impacts that marketing boards have are probably those on prices and production which have been discussed thus far. There are certainly other impacts like on farm productivity which, to my knowledge, have not yet been studied. This is certainly an important research need because the long run competitive position of the agricultural sectors regulated by boards depends on productivity changes that may be induced by the most direct and immediate impacts they have on prices.

On this point we are almost limited to speculation about the direction in which it will work. One may argue that the higher farm prices that marketing boards provide will give farmers an incentive and the financial means to carry out modernization investments which will in turn reduce costs. Conversely, one may suggest that farmers will rely on their market power to avoid seeking ways to reduce cost. In other words the loosening of the "cost price squeeze" will slow down productivity efforts and gains. A corollary of that would be to say that high prices protect inefficient producers who will then remain in production. In opposition someone else may argue that high quota values will lead to concentration of production within the hands of the most efficient producers.

These are empirical questions on which observations will have to be made. The only observation I have made on this point thus far is related to dairy production. Historically the average farm price of milk has been higher in British Columbia than elsewhere in Canada and particularly in Quebec where there is much lower proportion of milk produced for fluid consumption (higher prices). Average milk productivity per cow is much higher in British Columbia than elsewhere in Canada and particularly than in Quebec. This, at least, does not suggest that high prices lead to poor productivity.

#### SOME PERFORMANCE ELEMENTS

The discussion thus far has indicated that marketing boards without supply management by improving the bargaining position of farmers and their access to markets have had the impact of increasing farm price without important negative impacts on consumers. Marketing boards with supply management powers have had the impact of raising farm as well as consumer price levels and of improving price stability especially at the farm level. Except for the impact on consumer prices these results are. as we have seen, exactly what was intended by governments when they adopted the legislation allowing these boards to be created. The legislators were very probably aware that the desired results (significant improvement of farmer's position) could not be attained without consumer price rises, and they accepted that choice as being appropriate. Thus we can, very probably, say that marketing boards are reaching their primary objective, an objective which happens to be the major purpose of public policies with respect to agriculture over the last fifty years in most developed countries. I believe this is an extremely positive performance element. It is extremely positive for another reason: the objective is reached mostly under producer initiative rather than direct government intervention. Producers highly value this opportunity to take care of themselves by themselves, even though the powers they have are not absolute, the government remaining always in a position to remove the import controls without which the most important power cannot be exercised. When import controls are removed, North American market conditions prevail.

The next questions are: to what extent does the reaching of this objective conflict with other important objectives of Canadian farm and food policy and are there ways to avoid these conflicts? A great deal more analytical work is needed before one can supply answers to these questions. The impacts on farm productivity and costs, marketing efficiency, the margins of processors of farm products<sup>1</sup> and the cost of running these boards have to be measured carefully. From these impacts depends the long run capacity of our farming sector to provide the consumer with an

adequate supply of food at "reasonable" prices, an obviously important other objective of farm and food policy.

I will limit my discussion of that point here to what I believe is the most important criticism which is addressed to marketing boards: the fact that part of the supply management benefits are capitalized into quota values. It is alleged that the cost of possession of these quotas will eventually be included in the production cost formulas and since it does not correspond to any productive resource it has no *raison d'être*. It imposes an unnecessary burden on the consumer and the competitive position of the farm sector thus regulated deteriorates.

Even if, at present, the cost of owning the quota does not enter directly into calculation of the cost of production, I do not question that this will eventually occur, when most of these production rights will have changed hands. I first note that the capitalization of the benefits of higher product prices into quota values does not seem to me a more important problem than capitalization into land values under other forms of marketing arrangements. But my basic question is: how heavy is the burden for the consumers? Table 2 reports data and calculations made to provide an indication of the importance of this burden. The first line shows the approximate value of production quotas in Quebec by mid-1978 for all the products under supply management.

The second line transforms this value into a cost of owing the quota per unit of production. This cost is then expressed as a percentage of the prices received by the producer and paid by the consumer. It is clear that the cost of owning the quota is fairly high when expressed as a percentage of the farm price. Since this farm price of agricultural products has become a relatively small component in the retail price of food, at least for certain products, this cost represents a much lower percentage of the consumer price. This lead us to the view that the problem of the value of quotas is not a very serious one for the consumer. To bring out this point, we have calculated that the cost of quota ownership for the products in question, assuming this cost is completely passed on to the consumer and taking into account per caput consumption, means an annual addition per-consumer expenditure of \$7.82. Elimination of this cost would affect the proportion of disposable income which the average consumer spends on food by less than 1 per cent.

Therefore, it seems to me that this aspect of the problem is less important than it is sometimes suggested. It could become more important if quota values began to increase in a really dramatic way.

The other aspect of this question of quota values is the impact on the competitive position of the farm sector under supply management. Assuming that supply management has no positive farm productivity impact and the total cost of owning the quota is transferred to the price of the product it is obvious that the competitiveness of the industry is importantly affected. A firm willing to export a product on a highly competitive market will be seriously harmed by price rises of between 1.8 and 3.7 cents. There seems then to be a danger that supply management

condemns Canada to produce only for its own market. This may be a problem less important than it looks however since supply management is generally practised only in production oriented towards domestic consumption. I do not see, in any case, what is the incentive to practise supply management of a product produced for export unless under agreement with other exporting countries.

#### CONCLUDING REMARKS

This paper tends to suggest that marketing boards in Canada have had thus far extremely positive impacts in providing farmers with an efficient means of obtaining, on the market, the "adequate" return to their labour and capital that has been the major objective of farm policies over decades. It would be surprising if this could have been achieved without some less desirable effects. One of these is the problem of quota values which almost necessarily accompanies supply management practices.

I have argued that this problem may be less severe than other people argue. It does not mean that I am not concerned by the fact that quota values seem to be continuously rising and might reach levels at which they will be more damaging. For me this is an indication that supply management agencies may have difficulty in assessing correctly at what level the price of the products should be set in order to allow efficient producers to be "adequately" remunerated for their resources. This is the very difficult

Fresh milk	Industrial milk	Eggs	Broilers	Turkeys
	Q	uota value		
\$10.00/100#	\$7.50/100#	\$7.00/ hen	\$4.00/ sq.ft.	\$2.50 sq.ft.
	Per-unit	cost of ownership		
2.5c/ quart	75c/cwt.	3.7c/doz.	2.5c/#	1.8c/#
	Ownership cos	st: as a % of farm p	orice	
7.5%	6.6%	5.6%	7.1%	3.8%
	Ownership cost:	as a % of consume	r price	
4.4%		4.0%	2.7%	1.8%
	Annual co	ost to the consumer		
\$2.05	\$4.19	\$0.68	\$0.73	\$0.17

TABLE 2Current value of production quotas and importance of quota<br/>ownership costs in comparisons to prices at producer and consumer levels,<br/>Quebec 1978

question which they have to answer when they determined the total quantity that will clear the market at this "desired" price.

I will suggest, in conclusion, that we use quota values and their evolution as an indicator of whether the price at which the product should be sold has been correctly assessed. If the price of the product is too high, as may be the case in some products right now, there would usually be a great many current or potential producers who seek to purchase quotas relative to the number of quota owners willing to sell – thus a tendency for the quota value to rise.

My suggestion is to introduce in the production cost formulae used to determine the level of the desired price a correction factor intended to take into account the evolution of quota values. When quota values are rising the formula would suggest a correction down of the desired product prices. I have no more details to provide on that point but I think it might be useful to look in this direction rather than to turn to administratively determined market sharing quotas or to the disruption of marketing boards.

#### NOTE

<sup>1</sup> On this point I can only report the conflicting views of Menzies who suggests that processors' margins have increased and that of Funk and Rice who suggest that they have decreased.

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