Marketing Boards and Concentration along Value chains in Canada

Competition along the food chain
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The typical supply chain gives rise to many strategic interactions that must be accounted for in policy design



Food marketing in Canada :

- Food distributors/retailers « squeeze » processors;
- Food processors « squeeze » producers;
- Farm input suppliers « squeeze » producers;
- Producers « squeeze » the federal and provincial governments for money and powers;
- Vertical integration and marketing boards have emerged as natural outcomes.

Food retail is a big business in Canada

Sector	Sales in $1000	%
Motor Vehicle and Parts Dealers	$100,005,680	21.9
Furniture and Home Furnishing Stores	$15,027,138	3.3
Electronics and Appliance Stores	$14,983,443	3.3
Building Material and Garden Equipment and Supplies Dealers	$27,038,063	5.9
Food and Beverage Stores	**$104,134,083**	**22.8**
Health and Personal Care Stores	$32,847,751	7.2
Gasoline Stations	$57,682,168	12.6
Clothing and Clothing Accessories Stores	$26,049,959	5.7
Sporting Goods, Hobby, Book and Music Stores	$11,153,804	2.4
General Merchandise Stores	$57,785,413	12.6
Miscellaneous Store Retailers	$10,695,657	2.3

Source: Statistics Canada CANSIM data, Table 080-0022

The six largest retailers in Canada sell food (2011)

Rank	Retailer	Revenue ($mil.)	% of total retail sales	Empl.	Sector	Nationality
1.	Weston Group	31,705	10.61	137,163	Food	Canadian
2.	Wal-Mart Inc.	23,551	7.89	90,000	Department Store	American
3.	Empire Company Ltd.	16,055	5.37	97,997	Food	Canadian
4.	Costco Canada Inc.	13, 867	4.65	21,764	Department Store	American
5.	Metro Inc.	11,431	3.82	65,000	Food	Canadian
6.	Shoppers Drug Mart Inc.	10,459	3.5	52,714	Pharmacy	Canadian
7.	Canadian Tire Corp. Ltd	8,437	2.83	73,199	Department Store	Canadian
8.	Rona Inc.	6,800	2.28	30,221	Hardware	Canadian
9.	Safeway Inc.	6,707	2.24	22,684	Food	American
10.	The Home Depot Inc.	6,426	2.15	26,621	Hardware	American

Source: Daniel and Hernadez (2012)

Food retail in Canada is highly concentrated, but will the entry of US retailers have a competitive effect?

Retailer	Share of food retail industry revenue in Canada			Global rank
	2008	2009	2010	2010
Loblaw	24.8	24.0	23.9	39
Sobeys	13.7	13.6	13.4	54
Metro	9.6	9.7	9.5	86
Safeway	6.7	6.3	6.2	24
Wal-Mart	4.3	6	6.7	1
Couche-tard	1.8	2	2.1	43

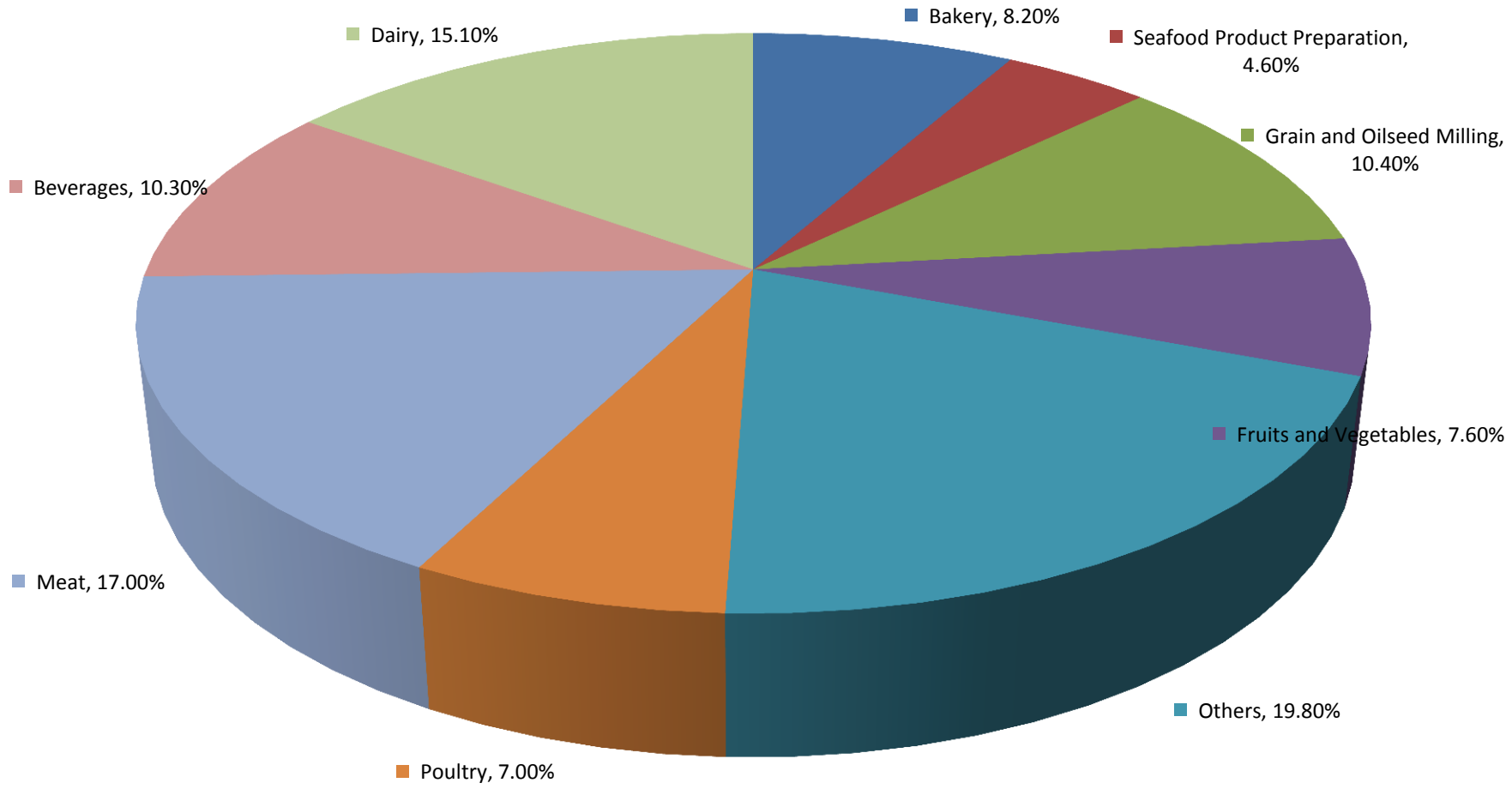
Source: Nakamura et al. (2012) and Deloitte, Global Powers of Retailing 2012.

How Canadians retailers are dealing with the pressure from US retailers:
2013 Loblaw bought Shoppers Drugmart (#93 global retailer);
2013 Target (#11 global retailer) made its entry in Canada with its food supplied by Sobeys;
2013 Sobeys bought Safeway Canada

Food and Beverage Processing in Canada:
concentrated in several ways

- Largest manufacturing industry in Canada in terms of value of production and employment;
- There are 6200 food and bev. processing firms, 90% of which have less than 100 employees;
- Top 50 (4) food proc. (beverage) firms account for 60% (63%) of value of all food (bev.) shipments;
- Canadian products were exported to 190 countries in 2011, but the bulk went to the U.S. (67%), China (7%), Japan (7%), Russia (2%), South Korea (2%) and Mexico (2%);
- Proc. firms located in Ontario and Quebec had 63% of sales;

Relative Size of Food and Beverage Processing Sectors in Canada (2012)



A few Canadian « giants » among top North American food processors

Processor	Sector	Rank	Food Sales in 2012 ($mil.)
Saputo	Dairy	21	6600
Maple Leaf foods	Meats,bakery	25	4865
Agropur	Dairy	34	3640
McCain foods	Vegetables	39	2500
Olymel (Coop Fédérée)	Meats	?	+2100
Molson-Coors (Canada only)	Beverage	48	2037
Weston foods	Bakery	58	1765
Parmalat Canada	Dairy	59	1718
Cott corp.	Beverages	60	1707
Canada Bread	Bakery	67	1567

Market concentration is rising in global agricultural input industries

	Year	Four-firm concentration ratio	Eight-firm concentration ratio
		Share of global market (percent)	
Crop seed and biotechnology			
	1994	21.1	29.0
	2000	32.5	43.1
	2009	53.9	63.4
Agricultural chemicals			
	1994	28.5	50.1
	2000	41.0	62.6
	2009	53.0	74.8
Farm machinery			
	1994	28.1	40.9
	2000	32.8	44.7
	2009	50.1	61.4
Animal health			
	1994	32.4	57.4
	2000	41.8	67.4
	2009	50.6	72.0
Animal genetics			
	1994	na	na
	2000	na	na
	2006/07	55.9	72.8

na = data not available.
The concentration ratio measures the share of global market sales earned by the largest four or eight companies in the sector.
Source: USDA, Economic Research Service estimates from Fuglie et al. (2011).

Fewer, larger farms… like everywhere else

	Population in 2013	Number of farms in 2011	% change 2006-2011	Average land base (acres)	% change 2006-2011
Canada	**35141542**	**205,730**	**-10.3**	**778**	**6.9**
Newfoundland and Labrador	513568	510	-8.6	152	-5.0
Prince Edward Island	145763	1,495	-12.1	398	9.0
Nova Scotia	945015	3,905	2.9	261	-0.4
New Brunswick	754039	2,611	-5.9	359	2.0
Quebec	8099095	29,437	-4.0	280	0.4
Ontario	13583710	51,950	-9.2	244	4.7
Manitoba	1277331	15,877	-16.7	1,135	13.4
Saskatchewan	1093880	36,952	-16.6	1,668	15.1
Alberta	3965339	43,234	-12.5	1,168	10.7
British Columbia	4650004	19,759	-0.4	327	-7.4

Marketing boards and market efficiency

- A marketing board is 'a compulsory horizontal marketing organization for primary and processed natural products operating under government delegated authority.‘ (C. Green, 1983);
- The perishable nature of ag products and lags between production and marketing decisions make supply highly inelastic in the short run. With the high degree of concentration in processing, farmers are vulnerable to hold-ups;
- Marketing boards go back to the early 1900s. Their development follows that of cooperatives. The creation of United Grain Growers paved the way to the creation of the Board of Grain Supervisors in 1917 which became the first Canadian Wheat Board in 1919;
- The number of marketing boards increased dramaticallly in the 1960s.There are now over 80 ag marketing boards.

Federal and provincial jurisdictions and market efficiency

- The Agricultural Products Marketing Act of 1949 allows the federal government to authorize marketing boards created by provincial laws to regulate interprovincial trade and exports;
- With the rapid decline in the number of farms and processors, provincial marketing boards are increasingly confronted to « small numbers » problems (ex. auctions for production quotas in eggs and turkey produtions; performance of marketing mechanisms);
- Domestic support varies across commodities, but also across provinces for a given commodity;
- Provincial borders induce regulatory distortions (ex. overbase quota sharing, local food definition…);
- Supply-managed sectors vs trade-oriented sectors

Marketing Board #1: The *Fédération des Producteurs de Porcs du Québec* (FPPQ)

This marketing board was created in the 1980s. Its challenge is to find the best mechanism (or combination of marketing mechanisms) to market hogs given that :

1) There are few buyers in the province, one of which buys 55-60% of all hogs;

2) Hogs are delivered to plants 6 days/week, but take months to produce;

3) Buyers export 70% of their pork production;

4) Other provinces export mainly piglets and live hogs to the US, but export surges have prompted anti-dumping and countervailing actions and …. COOL;

5) The US hog price and the exchange rate are volatile;

6) A subsizidized revenue-insurance program guarantees a minimum hog price;

7) Processor and producers want returns for improved genetics and differentiated hogs.

	Shares of hog supply allocated to different marketing mechanisms		
Period	Pre-attributed supplies (US price-discount)	Daily Electronic Auction (Dutch 1989:3-1995:6, Dutch-English after 1995:7)	Monthly Contract Auction
1989:3 - 1993:12	0%	100%	0%
1994:1 - 1994:9	80%	20%	0%
1994:10-1995:12	90%	10%	0%
1996:1 - 1997:8	72%	28%	0%
1997:9 - 1999:8	76%	24%	0%
1999:9 - 2000 :3	72%	28%	0%
2000:4 - 2000:12	60%	25%	15%
2001:1 - 2003:12	55%	25%	20%
2004:1 - 2006:9	50%	25%	25%
2006:10 - 2007:4	100%	0%	0%
2007:5 - 2009:1	50%	25%	25%
2009:2-	Pre-attribution with packer-owned hogs, premia for specialty hogs		

-Larue, Gervais and Lapan (2004) « **Low-price low-capacity traps** »:

- A buyer does not have any incentive to bid up the price above the next best alternative of the sellers when the latter are ready to market their products. When planning production, the sellers anticipate the behavior of the buyer and the sellers and the buyer are in a low-price low-capacity trap;
- If the trap is bad enough, the buyer will commit to a price incentive ;
- The price incentive offered by the buyer is not sufficient to achieve an efficient outcome and a « coupled » government intervention is actually required;
- The buyer has an incentive to commit before the government does.
- Processors made important concessions to prevent the trap and government support has been generous. Still, the marketing board must deal with the interests of integrated and non-integrated producers and large versus small producers.

Marketing board #2: Chicken Farmers of Canada

- In supply-managed sectors, retailers, processors, farmers, farm input/service suppliers (including banks) all squeeze consumers;
- Institutionalized multiple marginalization (there are even max. and min. retail prices in some provinces);
- Challenge: Split the rents so as to keep all of the groups happy;
- Unlike the hog/pork chain, prices and profits are stable;
- Problem: the domestic market does not grow as fast as it used and there is more pressure on processors to source out-of-province;
- Trade liberalization may have perverse effects (Pouliot and Larue, 2012). The quota part of the TRQ is as a fraction of the domestic market. A higher fraction of imports may actually induce a strong enough contraction in supply to give rise to price **increases** along the supply chain;
- Bargaining weights obtained from simulations for the chicken industry in Canada confirm that retailers dominate processors who dominate farmers.

Parting Thoughts

- In most countries, the most powerful agents along the chains are the distributors/retailers, followed by processors. Trade liberalization give retailers more sourcing options, but does not prevent them from « buying too little » from domestic and foreign suppliers;
- Supply management has institutionalized multiple marginalization, but removing SM is not sufficient for market efficiency;
- Design of domestic and trade policies must take into account concentration in retail and processing activities;
- Marketing boards' jurisdiction defined by provincial borders limit market efficiency.