



BRIEF:

A Different Future for Agriculture – Six Years that Changed Agriculture 2005- 2010

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Agriculture



Bio-Economy



Research



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Food

The Issue

Canadian agriculture is at a pivotal juncture. The global agriculture and food system has changed dramatically, farmers are doing better and the future for the industry looks promising. Canada is currently in the process of developing the next five-year agricultural policy framework, Growing Forward 2. In the past, agricultural policy has been focused on a single issue, farm income. Drawing from the detailed analysis in our paper, [Six Years that Changed Agriculture¹](#), this brief examines the changes in the industry from 2005 to 2010, and their financial impact on Canadian farms. We ask the question: Given the changes in both the industry and Canadian farm finances, should agricultural policy look different than it has in the past? The answer is an unequivocal yes. It's time for a change in direction and a policy framework that invests in future opportunities, while still helping reduce some of the inherent risks in the industry.

The Changes

Between 2005 and 2010 a quantum shift occurred in the global agri-food system and the future for Canadian agriculture was rewritten. Many factors contributed to the shift; the need to feed 9 billion by 2050, the accelerated growth and changing consumption in Asian economies, and the expansion of biofuel production. Demand for grains exploded, glutted grain markets tightened and prices rose rapidly. These revived a struggling agricultural industry, and not just for the short term. On the downside, agricultural input costs rose and greater volatility became the new norm. A global economic crisis and rising Canadian dollar also shook parts of the industry. Table 1 summarizes some of the relevant changes over the period.

Table 1. Key Economic Variables **2005 vs. 2010²**

| | 2005 | 2010 | % Change |
|--|--------|--------|----------|
| Canadian \$ (in \$U.S.) ^a | 0.83 | 0.97 | 16.9% |
| Average price of oil (\$U.S./barrel) ^b | 50.28 | 74.71 | 48.6% |
| Average price of wheat (\$U.S./bu.) ^c | 3.36 | 5.12 | 52.4% |
| Average value of farm land (Canada) (\$/acre) ^d | 1,107 | 1,526 | 37.9% |
| Total exports – agriculture and food (\$ mil.) ^e | 29,797 | 38,512 | 29.3% |
| Total business risk management (BRM) payments to farmers (income support) (\$ mil.) ^f | 1,995 | 1,708 | -14.4% |
| Total non-BRM program investment in research, innovation and new market development (\$ mil.) ^g | 299 | 284 | -5.0% |

¹ <http://sites.ivey.ca/agri-food/files/2012/09/Sparling-Uzea-Six-years-that-changed-agriculture-final.pdf>

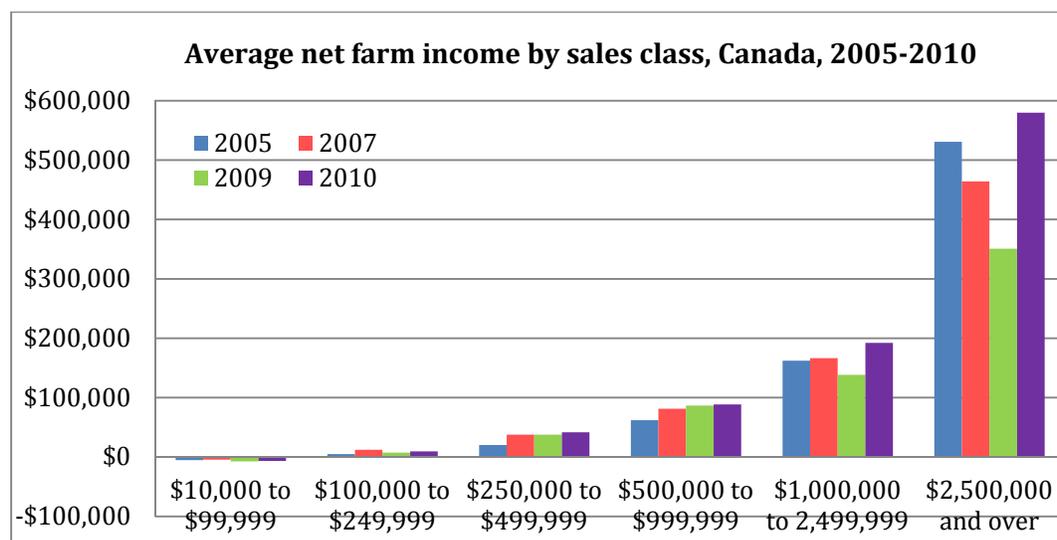
² Source: a – AAFC, Medium Term Outlook for Canadian Agriculture, 2011 and 2012; b – U.S. Energy Information Administration, Monthly Energy Review, Table 9.1: Crude Oil Price Summary, c – USDA, National Agricultural Statistics Service; d – Statistics Canada, Table 002-0003: Value per acre of farm land and buildings; e – Statistics Canada, Canadian International Merchandise Trade Database; f, g – AAFC, Farm Income, Financial Conditions and Government Assistance Data Book 2012 and 2007, Table C.2: Government Expenditures in Support of the Agri-Food Sector.

What has changed for Canadian Farms?

Income and net worth - The financial situation for Canadian farmers improved dramatically³. Sales were up by 41%, net income rose 126% and the average net worth of a Canadian farm rose by \$486,000, an increase of 47%. Net worth increases ranged from \$190,000 for farms selling less than \$100,000 per year to over \$1.9 million for farms selling over \$2.5 million per year.

| Number of farms | Aggregate values for all Canadian farms | | | | Average per farm | |
|----------------------------|---|----------------------|------------------------|----------------------|--------------------|-----------------------------|
| | 2005 (\$ billion) | 2010 (\$ billion) | Change (\$ billion) | Percentage change | Average in 2010 | Average change 2005-2010 |
| | 147,700 | 147,745 | | | | |
| Sales | \$32.50 | \$45.94 | \$13.44 | 41.4% | \$219,979 | \$90,895 |
| Net income | \$2.11 | \$4.77 | \$2.66 | 126.4% | \$14,251 | \$18,016 |
| Government payments | \$2.80 | \$2.54 | (\$0.26) | -9.3% | \$18,957 | (\$1,774) |
| Assets | \$189.55 | \$275.54 | \$85.98 | 45.4% | \$1,282,976 | \$581,576 |
| Net worth | \$153.01 | \$224.84 | \$71.83 | 46.9% | \$1,035,622 | \$485,871 |

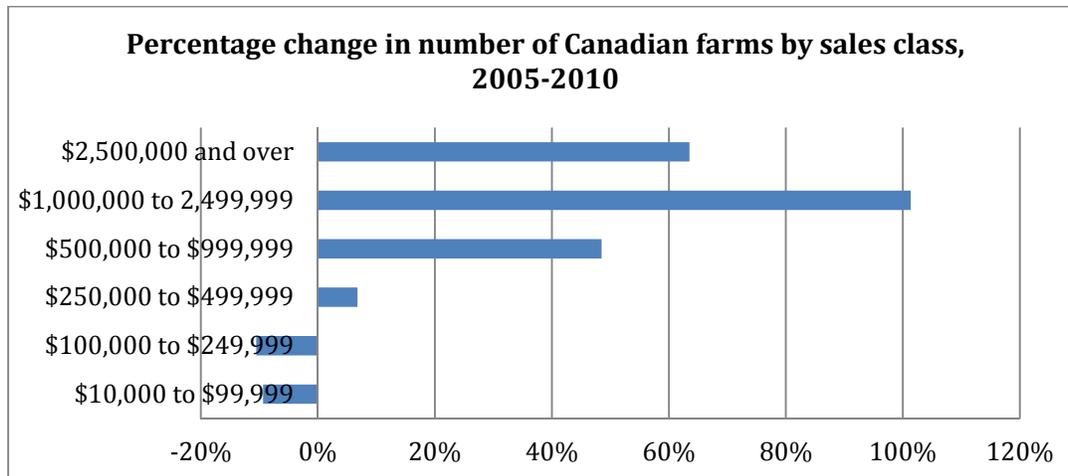
Incomes recovered, particularly for the largest farms, those selling more than \$2.5 million per year. Mid-sized farms selling between \$250,000 and \$1 million per year showed slow income growth through the entire period.



Source: Statistics Canada, Farm Financial Survey 2005 and 2010

Industry structure continued to shift toward larger farms - Economies of scale and higher prices for products continued to induce a shift toward larger farms, when categorized by farm sales. Interestingly, the total number of farms remained virtually unchanged over the period, possibly because higher prices induced some to get back into farming and moved some very small farms (sales of less than \$10,000) into the lowest recorded sales category. However, we note that the 2011 census observed the total number of farms falling by 10.3%.

³ The impact on the structure and performance of Canadian agriculture is examined using data from the Statistics Canada's Farm Financial Surveys for the years 2005, 2007, 2009, and 2010.



Source: Statistics Canada, Farm Financial Survey 2005 and 2010

Painful adjustments in the meat sectors - The export oriented hog and beef sectors were hit with a double whammy of a higher Canadian dollar and rising feed costs. These sectors made significant and painful adjustments and were finally starting to return to profitability by 2010.

What hasn't change?

The impact of economies of scale – Size matters when it comes to farm income, as shown below. Net income, return on assets and return on equity all increase with size. In 2010, almost ¼ of Canadian farm sales came from the 2,085 farms (1.4% of the population) with annual revenue over \$2.5 million. Collectively they sold more than 4 times as much as the 68,200 farms (46% of the population) with annual sales less than \$100,000. And they did it using 55% of the assets. In 2010, the smallest farms used \$20.05 in assets to produce \$1 of sales; the largest farms needed only \$2.72 in assets to produce \$1 in sales. Since the farms selling more than \$2.5 million annually invested more than \$586,195 per year in their businesses compared to \$7,863 for farms selling less than \$100,000 per year the differences in impact and importance will continue to grow.

On average, off-farm income exceeded on farm net income for the two smallest income classes, which make up almost 70% of the farm population. Although there are many exceptions, profitability continues to challenge smaller farms.

Average performance and value/farm by sales class, 2010

| Sales class | 2010 | | | | | | |
|-------------------|-----------------|---------------|--------------------|-----------------------------|--|----------------|-------------------|
| | Number of farms | Average sales | Average net income | Average government payments | Average off-farm income (wages & pensions) | Average assets | Average net worth |
| \$10,000-99,999 | 68,200 | \$38,893 | -\$6,633 | \$3,291 | \$48,383 | \$779,801 | \$709,129 |
| \$100,000-249,999 | 32,620 | \$149,454 | \$9,559 | \$11,854 | \$32,352 | \$1,448,202 | \$1,265,431 |
| \$250,000-499,999 | 22,250 | \$328,144 | \$41,583 | \$23,468 | \$25,941 | 2,145,917 | \$1,754,740 |
| \$500,000-999,999 | 15,140 | \$649,275 | \$88,628 | \$39,506 | \$23,742 | \$3,557,161 | \$2,789,411 |

| | | | | | | | |
|-------------------------|-------|-------------|-----------|-----------|----------|--------------|--------------|
| \$1,000,000 | 7,450 | \$1,406,662 | \$192,251 | \$61,674 | \$20,634 | \$5,920,716 | \$4,368,978 |
| -2,499,999 | | | | | | | |
| \$2,500,000 and over | 2,085 | \$5,180,515 | \$579,930 | \$167,198 | \$30,943 | \$14,101,584 | \$10,251,817 |

Source: Statistics Canada, Farm Financial Survey 2010

Attitudes toward farm income support – In spite of an improved financial situation and outlook for agriculture, there seems to be little willingness at the farm organization level to support a shift from income support to investing for the future.

Where are we now?

The trends highlighted above have continued. According to Farm Credit Canada farmland values rose another 17% in 2011 and the first half of 2012. Wheat prices today are up roughly 85% with other grains showing similar changes, driven by the drought in the U.S. Costs have risen too, with oil up 30%. Although grain prices will likely moderate, long term projections remain bullish. The return to profitability for most sectors provides an opportunity to shift expenditures away from farm income toward ensuring the future profitability of the agriculture in Canada.

Agricultural policy and programs today look largely as they did in 2005 and in 2000 – focused on supplementing farm income through Business Risk Management programs. Altogether, direct support payments to farmers totaled almost \$2.5 billion in 2011 compared to just over \$275 million for research and market development. Unfortunately, income support will not make Canada more productive, nor will it open new and profitable markets around the world. It is impossible to support the view that the future of the industry is best assured by continuing to spend the major portion of program payments on farm income support, particularly when farm incomes and net worth continue to rise.

Leaders in government and industry are in the process of developing the Growing Forward 2 framework. With 2012 shaping up to be one of the best years on record, now is the time to change direction and invest in the future rather than the past. The issues facing the future of the industry are bigger than farm income – productivity, sustainability, health, new markets and human capital are issues along the entire food and bioeconomy value chains.

Making the shift

Where can that shift start? Farmers understand and like the heavily subsidized crop insurance programs. When a crop fails, the payouts are clear and quick. Disaster recovery programs are also popular, providing support after floods or droughts. Income stabilization programs are much more complicated and slower to pay and are much less popular but seem to provide some benefit if margins fall. Changes could begin with the AgriStability program or by increasing farm share of the cost of insurance from the current level of 40% to 50% or more.

Another opportunity might be the AgrilInvest program. It allows farmers to deposit 1.5% of sales into an AgrilInvest account, up to a maximum of \$22,500 per year. The government matches farmer contributions and farmers may withdraw money whenever they choose, paying tax on the government portion. It's supposed to be the first line of risk management against small income changes. That sounds reasonable, except that when commodity prices rise, farm sales rise and farmers can put more into their AgrilInvest accounts. So unlike other programs, the government makes larger AgrilInvest payments as farm incomes rise. In 2011, AgrilInvest payments by government totaled \$425 million, \$96.5 million more than in 2010. That's almost 10 times more than is invested in market development programs. This year it could top half a billion dollars because farmers could have their best year ever. Is this really the best way to spend program dollars? An RRSP-like model where farmers can deposit money into an account tax free to be withdrawn and taxed later makes perfect sense. Having the government mindlessly match payments regardless of how well a farm is doing and increasing total payments as prices and incomes rise doesn't. Simply changing this program would free up a lot of cash that could be invested in any number of areas within the entire agriculture, food and bioeconomy industry.