



Lawrence National Centre
for Policy and Management

A photograph of an apple processing factory. In the foreground, a large metal tray is filled with a thick layer of bright red apples. In the background, a large industrial machine with a funnel-shaped hopper is visible, likely used for sorting or processing the apples. The factory floor is made of concrete, and there are various pipes and structures visible in the distance.

THE FUTURE OF CANADIAN MANUFACTURING: LEARNING FROM LEADING FIRMS

Canadian Food
Manufacturing

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CANADIAN FOOD MANUFACTURING

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When it comes to food, Canada has significant advantages in land, water and people to produce food, but also in proximity to major markets in both Canada and the United States. However, recent years have been challenging for Canada's food manufacturing industry. The rising Canadian dollar reduced competitiveness against foreign competitors. Higher commodity prices, especially for grains, drove up input costs, while the recession and increased competition among food retailers limited the ability of food manufacturers to pass these higher costs on to their customers.

In spite of these difficulties, the story for Canada's food manufacturing industry differs from that of other manufacturing industries. While other industries struggle to return to pre-financial-crisis levels for revenue and employment, both measures were above pre-recession levels in the food manufacturing industry by 2011.

However, the more competitive environment is changing the industry and causing food companies to refocus and, in some cases, restructure their operations. In this study, we examine the food manufacturing industry through three different lenses.

1. *Industry overview:* Using data from Statistics Canada's CANSIM databases, we compare food manufacturing data with information from the other four largest manufacturing industries.
2. *Structural change:* We review how the structure of the industry has changed, examining the closings, openings and investments.
3. *Individual firm:* The final lens is an individual firm perspective, analyzing the experiences of three firms through recent turbulent times.

INDUSTRY OVERVIEW

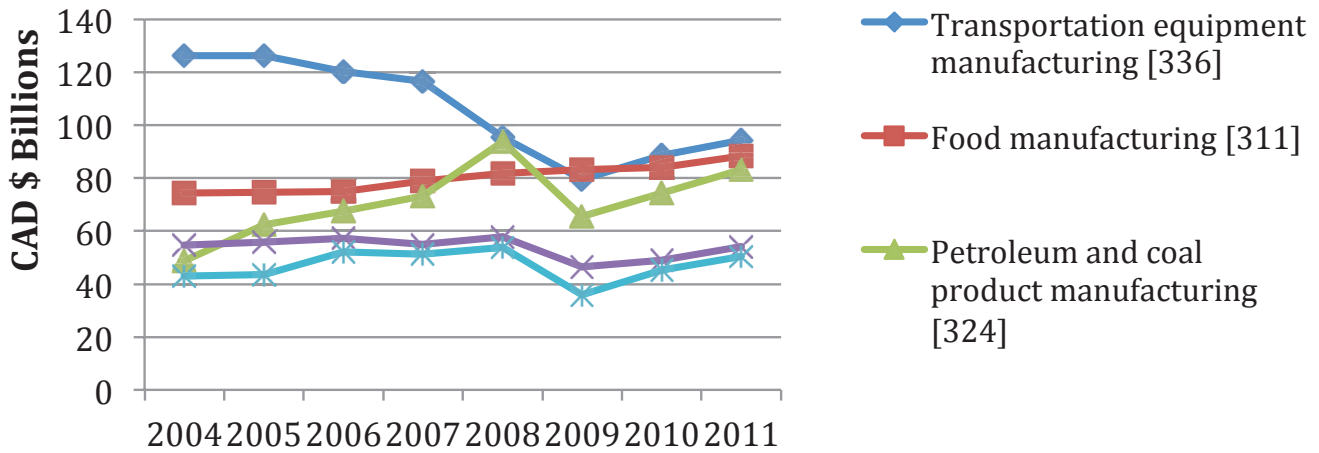
STEADY REVENUE GROWTH

Food manufacturing is big business in Canada, employing more than 236,000 people and with annual revenue of over \$88.3 billion in 2011. As noted, the industry was the exception among the five largest manufacturing industries during the 2008/2009 recession (Figure 1).¹ Compare the transportation equipment industry (which includes auto), which saw revenue plummet by more than one-third from

earlier peaks, to food manufacturing, which saw revenue increase and surpass transportation for that one devastating year.

Growth in the food manufacturing industry has been characterized as unexciting but steady; however, in 2009, being 'unexciting' was actually something to get excited about. The other distinguishing feature of food manufacturing is its extremely low variability compared to other industries.

FIGURE 1 – TOTAL REVENUE IN THE TOP 5 CANADIAN MANUFACTURING INDUSTRIES 2004-2011



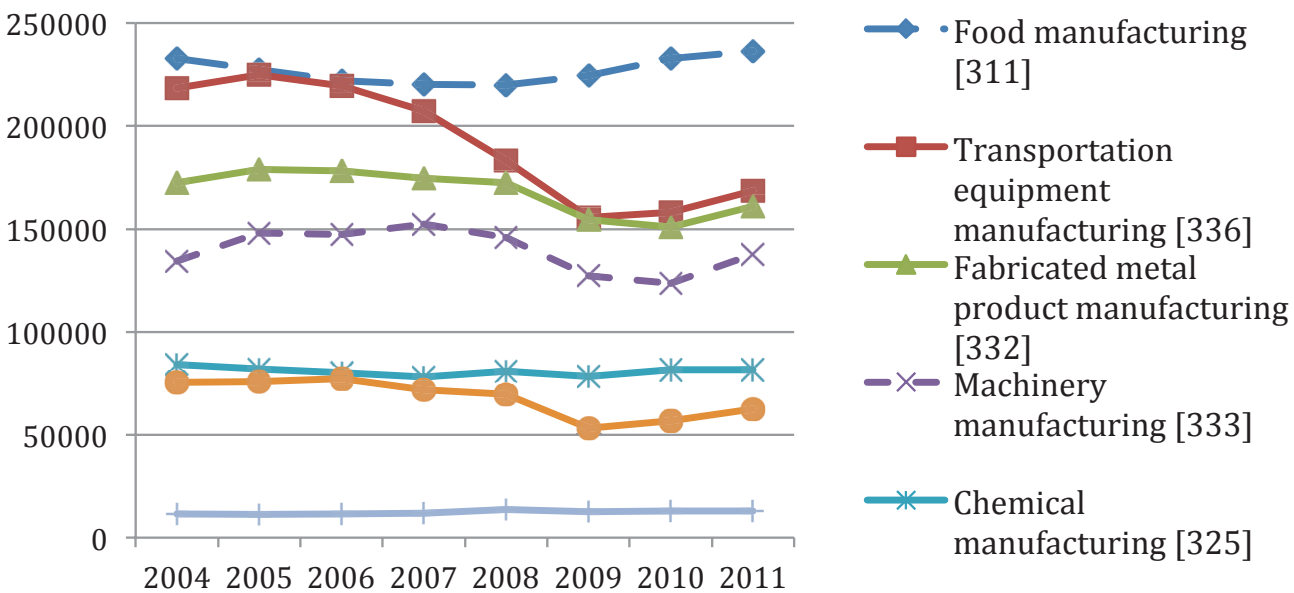
1. Statistics Canada CanSim database from 2004 to 2011 in "The performance of Canada's food manufacturing industry" 2014 by David Sparling and Erin Cheney at http://www.capi-icpa.ca/pdfs/2014/CAPI-PFRP_P3a.pdf

THE TOP MANUFACTURING EMPLOYER IN CANADA

It is surprising to many that food manufacturing has been the largest manufacturing employer in Canada for years (Figure 2).² Furthermore, the industry has displayed remarkable resilience, shedding jobs in the mid-2000s due to the higher Canadian dollar and the

recession, but then recovering from 2009 onward. Only petroleum and coal, and machinery manufacturing showed moderate employment gains during the same period. Transportation equipment manufacturing experienced the largest decline over the period, losing close to one-quarter of industry jobs.

FIGURE 2 – EMPLOYMENT IN MAJOR CANADIAN MANUFACTURING INDUSTRIES 2004-2011



THE NATURE OF EMPLOYMENT IS SHIFTING

The nature of employment in food manufacturing is shifting from direct manufacturing to indirect jobs. Between 2004 and 2011, the industry shed 5,281 manufacturing jobs but gained 8,783 non-manufacturing jobs, for a net gain of over 3,500 jobs.

The percentage of direct labour in the industry dropped from 81.4 per cent in 2004, to 77.9 per cent in 2011. This change is consistent with the move toward greater automation aimed at reducing labour costs in food manufacturing.

2. Statistics Canada CanSim database from 2004 to 2011 in "The performance of Canada's food manufacturing industry" 2014 by David Sparling and Erin Cheney at http://www.capi-icpa.ca/pdfs/2014/CAPI-PFRP_P3a.pdf

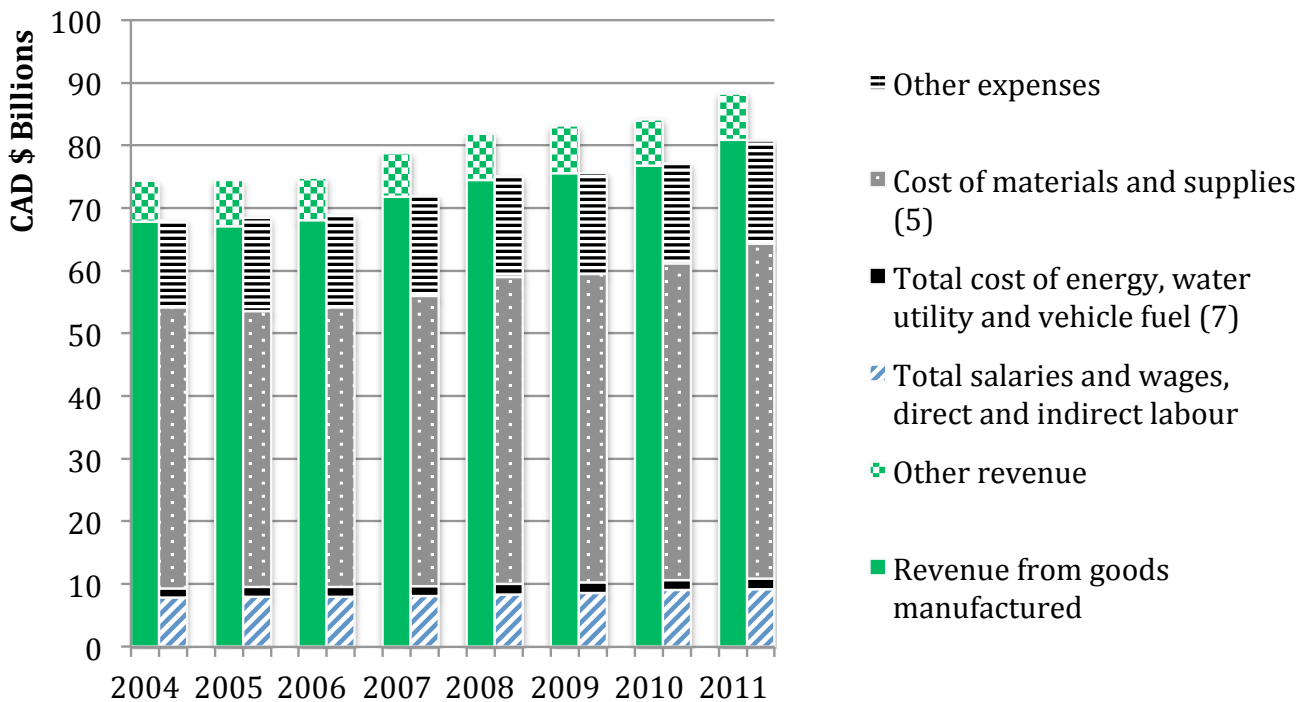
MARGINS REMAIN TIGHT

Although the industry has shown remarkable resilience, it is under significant margin pressure as input costs continue to rise while retail competition makes it difficult to pass on higher prices to customers. The cost of materials continues to account for roughly two-thirds of total expenses (Figure 3).³

STRUCTURAL CHANGE IN FOOD MANUFACTURING IN CANADA

Like many other industries in the Canadian economy, food manufacturing is dominated numerically by small companies. Firms with fewer than 50 employees make up 84 per cent of company numbers but just 17 per cent of revenue (Figure 4).⁴

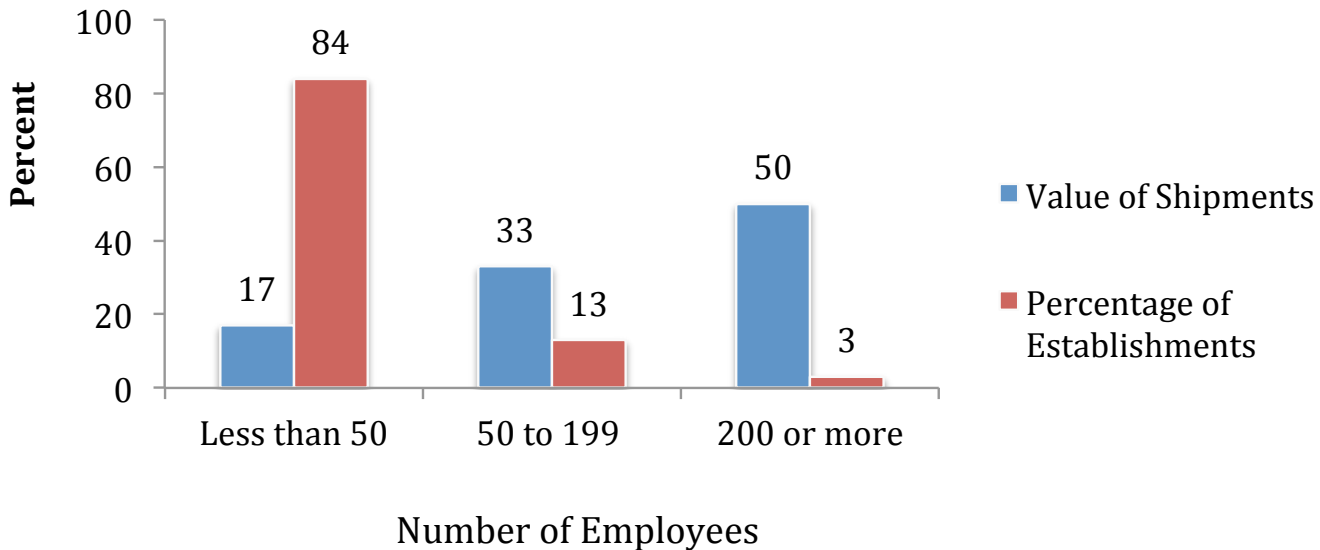
FIGURE 3 – BREAKDOWN OF FOOD MANUFACTURING REVENUES AND EXPENSES^A (NOMINAL VALUES)



A. Other revenue refers to non-manufacturing activity and was obtained by subtracting manufacturing revenues from total revenues. This residual amount is usually composed of the following:
 Revenues from the sale of goods purchased for resale in the same condition
 Revenues from the lease or rental of property, machinery or equipment
 Revenues from the operation of cafeterias, laboratories and the like
 Revenues from other services rendered
 Source: <https://www.ic.gc.ca/app/scr/sbms/sbb/cis/performance.html?code=311&lang=eng#per5>

3. Statistics Canada CanSim database from 2004 to 2011 in "The performance of Canada's food manufacturing industry" 2014 by David Sparling and Erin Cheney at http://www.capi-icpa.ca/pdfs/2014/CAP-PPRP_P3a.pdf
 4. AAFC, An overview of the Canadian agriculture and agri-food system, 2012.

FIGURE 4 – THE STRUCTURE OF THE CANADIAN FOOD MANUFACTURING INDUSTRY

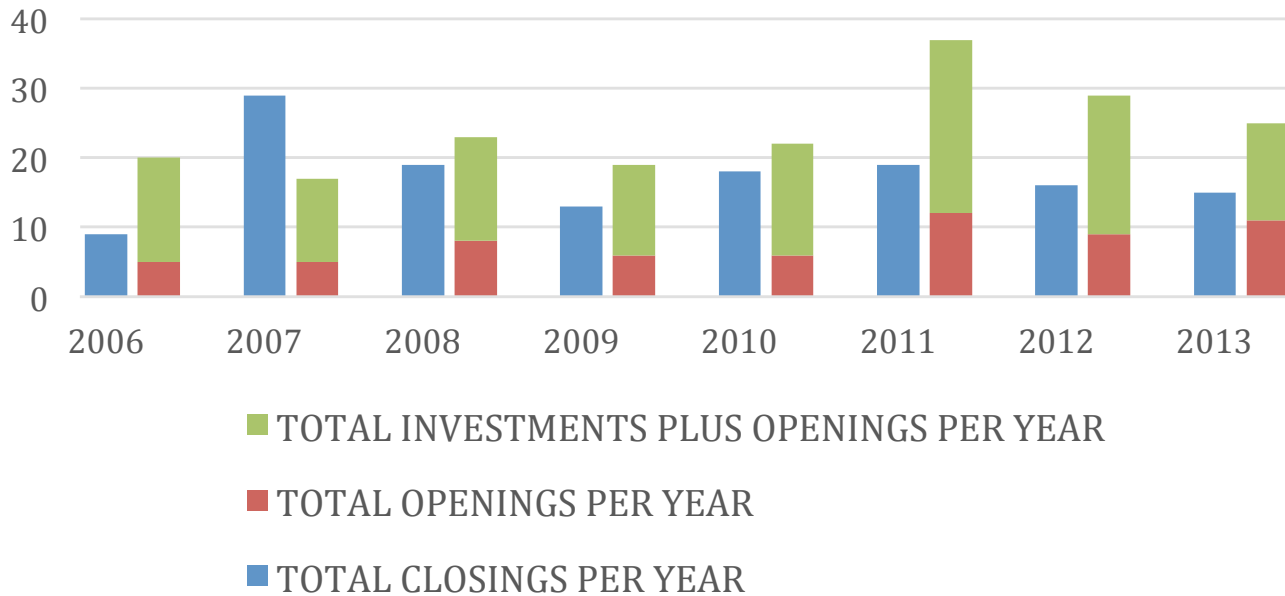


The number of small- and medium-sized companies is not surprising. The opportunity to create innovative new food products has resulted in a continuous stream of small food companies starting up. However, the structure of Canada's food manufacturing industry is changing as competition in the global food industry intensifies. There have been many high-profile closings of food manufacturing plants across the country — but there have also been openings and major investments as well. In our study of plant openings/investments and closings we have observed an industry in which many organizations are restructuring to compete.

After a spike in closings in 2007, the numbers of openings and closings have been drawing closer together. However, these major events are just part of the story. A number of companies are reorganizing food manufacturing to be more cost competitive. This means larger plants, longer product runs and more technology. In some cases, the investments needed to accomplish this reorganization occur in new plants, but often the investments are in major renovations of existing plants and reorganization of production and product lines to allow greater specialization in facilities. When we consider investments as well as openings and closings we see a different picture (Figure 5)⁵.

5. The Changing Face of Food Manufacturing in Canada" 2014, by David Sparling and Sydney LeGrow at http://www.capi-icpa.ca/pdfs/2014/CAP-IFRP_P3b.pdf

FIGURE 5 – PLANT OPENINGS, INVESTMENTS AND CLOSINGS ACROSS CANADA 2006-2013

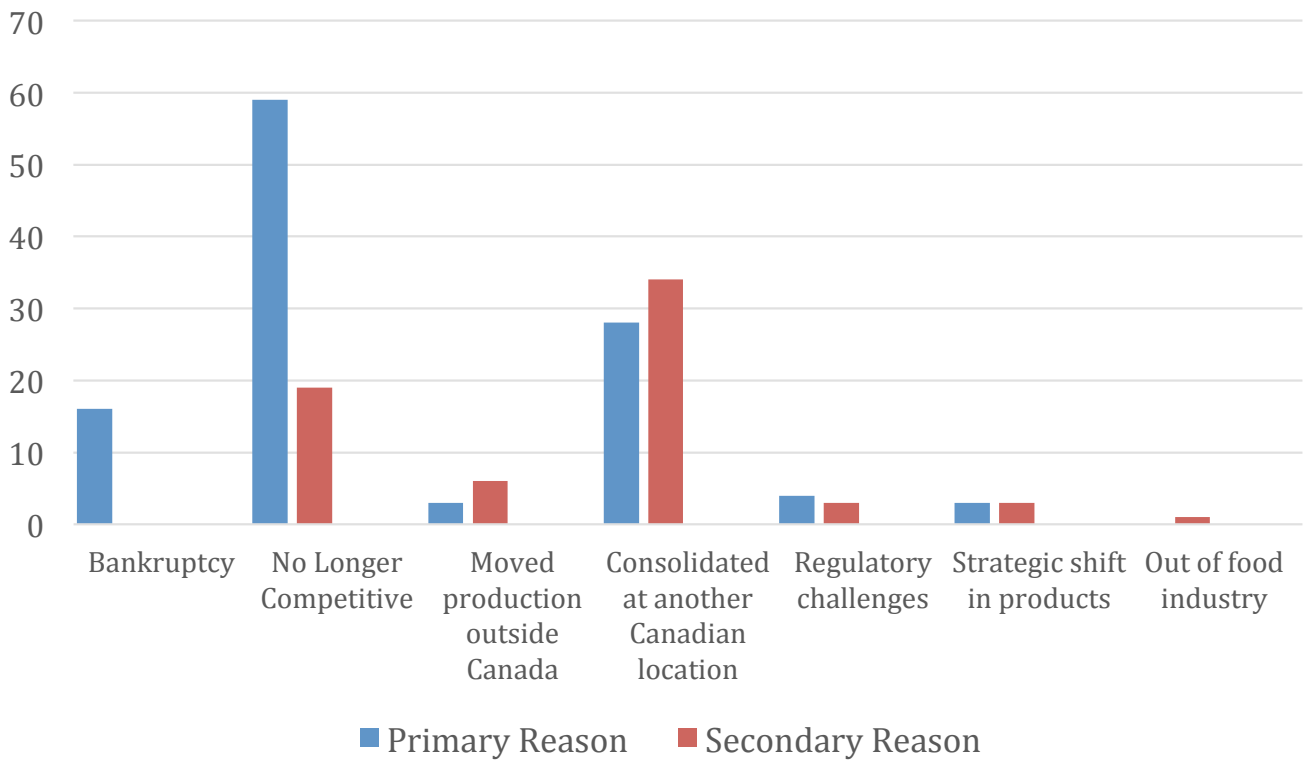


CLOSURES AND MULTI-PLANT COMPANIES

Closures tended to be in multi-plant organizations, and were generally associated with companies reorganizing their production to increase manufacturing focus and reduce costs. Of the 141 plant closures we examined in our study, 126 were in multi-plant organizations; only 15 were single plants. The primary reasons given for plant closures were that they were no longer competitive and that production was being consolidated in other facilities (Figure 6).⁶

6. The Changing Face of Food Manufacturing in Canada” 2014, by David Sparling and Sydney LeGrow at http://www.capi-icpa.ca/pdfs/2014/CAPI-PFRP_P3b.pdf

FIGURE 6 – REASONS GIVEN FOR PLANT CLOSURES IN CANADA 2006-2013



CASE STUDIES

CASE STUDIES⁷

The findings in the first two studies highlight several factors of the Canadian food manufacturing industry:

- The industry is an important part of the Canadian economy — one that showed remarkable resilience through the last recession.
- The industry is also being squeezed from many directions and margins are tight.
- Companies are restructuring — in many cases consolidating manufacturing in fewer, larger plants. Companies are also investing in upgrading facilities and in new plants.

The case studies were designed to go beyond the statistical and structural analysis to get at how Canadian food manufacturing firms are perceiving and responding to the changes in their operating environment, and the strategies being used to compete in today's global food industry.

Three leading Canadian companies were studied: Maple Leaf (meat and bread products), Richardson International (grains and oils) and Saputo (dairy and cheese). Each is a Canadian company and a leader in its sector. Interviews with senior management personnel provided several insights into the challenges of being globally competitive and the strategies these companies use to accomplish this.

7. "Lawrence Centre (2013). Future of Manufacturing case study interviews. Maple Leaf Food Inc. conducted on August 7th 2013 Richardson International conducted on October 11th 2013 and Saputo Inc. conducted on August 16th 2013.

KEY OBSERVATIONS AND INSIGHTS

COMPETITION IS GLOBAL AND CANADIAN COMPANIES MUST COMPETE

The leaders of all three companies were very clear that their companies' success depends on being globally, not nationally, competitive. However, what that meant varied by the company's industry, environment and situation and was also affected by Canadian agriculture and food policy.

Maple Leaf

Maple Leaf was focused on reaching a globally competitive scale and level of technology to ensure the safety and quality of its products, but also to drive costs out of its products. Trade was important for Maple Leaf for its higher-end meat product offerings but also for many of the by-products that are not typically consumed in North America.

Richardson International

Recent acquisitions and new facilities have dramatically increased Richardson's food manufacturing footprint, both in Canada and the United States. The company has also moved Richardson's strategic focus further down the food chain. Richardson operates both Canadian and U.S. facilities and has invested heavily in facilities for processing grains into edible oils for national and international markets. Richardson's strategy has been affected by the recent end of the Canadian Wheat Board monopoly, which has allowed it to connect directly with potential customers.

Saputo

Saputo's strategy is first and foremost to be a significant player in the global dairy industry. Its manufacturing strategy has been partially shaped by Canadian dairy policy, which restricts the amount of milk produced in Canada, as well as both imports and exports in Canada. That meant that Saputo could not complete its strategy to be a global leader in dairy and cheese from a Canadian base. Consequently,

the company's domestic strategy has been to grow within Canada through acquisition but the international strategy has, of necessity, been to grow through international acquisitions.

MANUFACTURING IS A STRATEGIC IMPERATIVE

Manufacturing is an essential underpinning to global competitiveness and so manufacturing efficiency is viewed as a competitive priority in all three companies. All three identified common elements to manufacturing efficiency and effectiveness.

Scale

All companies viewed scale as essential. They have all been reorganizing their respective production bases and consolidating production and distribution facilities. Both Maple Leaf and Richardson recently constructed new manufacturing facilities in Canada and have invested heavily in the latest technology and systems for those facilities.

New Technologies, Automation and Robotics

All three firms have been investing significantly in new technologies, and automating their processes. Robotics are being tested and/or implemented, particularly in packaging functions in Maple Leaf and Saputo. Progress is somewhat limited by available capital and by equipment limitations. For many applications, optimal automation/robotics systems are not fully optimized.

Systems Integration

The ability to connect all of the parts and activities of a company is important to manufacturing and distribution efficiency and to meeting customer needs in an accurate and timely fashion. Saputo and Richardson were doing this by continually upgrading their internal systems, while Maple Leaf is currently engaged in a massive, company-wide systems, applications and products (SAP) implementation.

Distribution and Supply Chain

The companies were not only reorganizing their internal operations, but also restructuring their supply chains and distribution facilities, consolidating distribution and investing in new material-handling systems.

Skilled Labour

Greater automation, robotics and new systems all mean that the demands on the labour force will change. All three companies expressed concern over where they would source the necessary skilled labour.

For each of the companies, achieving global competitiveness is an ongoing process. All three are investing considerable resources and time in upgrading and reorganizing their manufacturing, but none were close to being done. It is evident from the openings and closings study that this is an industry-wide phenomenon.

GROWTH THROUGH TARGETED ACQUISITIONS

Becoming a global player means achieving scale and reach quickly. All three firms used acquisitions to scale up, expand product lines and enter new markets. Each looked for synergies with existing product lines and brands, as well as with manufacturing capabilities. Maple Leaf has used acquisitions to build its business and its brands, with over 25 acquisitions since McCain Capital and the Ontario Teachers' Pension Plan purchased the company in 1995. The company has also completed 10 divestitures and built six new plants (Figure 7).⁸

Richardson was a successful grain-trading and export company that used an acquisition to expand into food oil processing in the United States, increasing its product range and expanding manufacturing capabilities beyond Canada. This fit with the company's strategy of moving into products closer to the customer and capturing more value from the grains and oilseeds that it trades and distributes.

Saputo has grown continuously through an aggressive expansion through acquisition strategy in Canada, the United States, Argentina and the European Union.

The company looks for acquisitions that complement existing product lines and where operations can be improved using Saputo's expertise. It also looks for acquisitions that can take advantage of the domestic market in the country where the acquisition is located, as well as those that will provide a platform for export. Acquisitions do not always succeed; Saputo ended up selling its acquisitions in Wales and Germany when it was not able to scale them up enough to be competitive.

FIGURE 7 – TRANSFORMATION OF MAPLE LEAF FOODS

DID YOU KNOW?

Since the company was acquired in April 1995 by the G. Wallace F. McCain family and Ontario Teachers' Pension Plan Board, Maple Leaf Foods Inc. has

- Completed 10 divestitures realizing aggregate net proceeds of over \$130 million;
- Acquired 25 businesses for an aggregate investment of over \$500 million;
- Completed the \$262 million amalgamation of Canada Bread and Maple Leaf Bakeries;
- Invested over \$900 million in capital assets, including six new plants; and
- Raised the proportion of its assets located outside Canada to 17% in 2002 from 4% in 1995.

MAJOR ACQUISITIONS 1995 TO 2003

- 1996** Fresh pork and prepared meats operations of Winnipeg-based Burns Meats (sales \$600 million)
- 1999** Winnipeg-based Landmark Feeds & Elite Swine (purchase price approximately \$150 million)
- 2001** Montreal-based Multi-Marques, a leading Quebec bakery via Canada Bread (sales \$300 million)
- 2001** Schneider Corporation's two fresh pork plants in Winnipeg (sales \$300 million)
- 2002** Moncton-based Hub Meat Packers, including Larsen Packers (sales \$270 million)
- 2003** Schneider Corporation, purchase price approximately \$515 million (sales \$1.24 billion)

8. Food in Canada (2013). Excerpt from, The Transformation of Maple Leaf Foods under energetic innovative leadership. Written by Doug Burn. Available at: <http://www.bizlink.com/foodfiles/PDFs/jan-feb/janfeb-processoroftheyear.pdf>.

CONCLUSIONS

SEVERAL CONCLUSIONS MAY BE DRAWN FROM OUR RESEARCH

CANADA'S FOOD INDUSTRY IS AN IMPORTANT ECONOMIC FORCE

Our statistical analysis shows that Canada's food manufacturing industry is an important part of the economy, the largest manufacturing industry by employment and second in terms of revenue. It is an industry that shows relatively slow but consistent growth and is remarkably resilient.

GLOBAL COMPETITIVENESS IS CRITICAL

The food industry is global and continually becoming more so. Large companies that are not globally competitive will not survive. Canada's limited market size also means that future growth for the industry must come from exports. The focus for the large Canadian food manufacturing companies studied is on global markets and building globally competitive businesses. They are refocusing and restructuring their operations, closing older, less efficient plants, shedding excess capacity and focusing on improving manufacturing competitiveness. Leading food manufacturing companies are investing — in new products, new systems and technologies, and in reorganizing their manufacturing footprint and supply chains.

CANADIAN FOOD MANUFACTURING COMPANIES ARE UNDER PRESSURE FROM SEVERAL DIRECTIONS

In addition to tougher global competition and higher commodity prices, Canadian manufacturers are challenged by a higher Canadian dollar and difficulty in passing on higher costs to a retail sector that is more concentrated and facing its own intense competitive pressure. Margins are tight across the sector.

THE INDUSTRY IS RESTRUCTURING AND REINVESTING TO COMPETE

Our analysis of structural change in the industry reveals that many industry players are reacting by consolidating production and investing in new technologies, better facilities and new systems to compete more effectively. However, resources to complete major upgrades are a challenge for many firms. The food industry is rarely viewed as an exciting investment opportunity.

THE NEED TO ATTRACT PEOPLE TO THE INDUSTRY

Executives in all three companies expressed concern over the ability of the industry to attract future employees, particularly those with higher levels of skills. All felt that this was an industry-wide issue.

IMPLICATIONS FOR POLICY

If an important objective is to increase exports, or at least improve Canada's trade balance, there are a number of implications for policy.

TRADE DEALS MATTER

Securing access to global markets under fair terms is an important success factor for Canada's food manufacturing industry. The new deal with the European Union and the Trans Pacific Trade Agreement under negotiation are important to Canadian companies.

TAX RATES

Canadian corporate tax rates are viewed as attractive by most executives and are an advantage for Canada. Maintaining attractive rates will be important to attracting and retaining food manufacturing companies in Canada.

CANADA NEEDS A SUPPORTIVE REGULATORY SYSTEM THAT:

- Protects consumers and ensures food safety — protecting Canadians but also Canada’s brand and reputation for quality and safety.
- Is consistent and coordinated with major trading partners.
- Allows innovation to flourish — ensuring that innovations are safe but not unnecessarily delayed or inhibited.
- Responds in a timely manner to new technologies and/or changing environments.

SUPPORT INNOVATION

Policy can play a role in encouraging innovation through programs like SR&ED, by helping companies invest in new products and technologies. Other programs can help firms source new technology or assist in accessing global markets. Governments at every level can make a difference, creating a level playing field in areas like tax, regulatory and municipal planning, by acting in corporate timeframes, and by creating an environment where companies can invest in their companies and their people.

REGIONAL STRATEGIES CAN MAKE A DIFFERENCE

In our discussions with a number of senior executives it was apparent that the ways in which towns and cities approach and manage their relationships with food companies can have a significant impact on companies’ investment or disinvestment decisions. Successful approaches, particularly to new location decisions, include taking a ‘one-stop shop’ approach to dealing with all of the areas and issues needed to build or expand a plant, responding and acting in a timely fashion, and working closely with the company to understand their needs and then helping to develop solutions. This can include anything from helping to secure land to obtaining necessary approvals.

PROGRAMS THAT HELP COMPANIES FILL EMPLOYEE NEEDS WILL BE IMPORTANT

Currently, the industry makes use of temporary worker programs, particularly in Western Canada. However, strategies for meeting long-term needs must include greater emphasis on technical training and retraining. Training and apprenticeship programs and support can be an important part of an industry workforce strategy.

ABOUT THE AUTHORS



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David Sparling is Professor of Operations Management and the Chair in Agri-Food Innovation at the Ivey Business School. Previously, he was Associate Dean at the College of Management and Economics,

University of Guelph and Executive Director of the Institute of Agri-Food Policy Innovation. He was also Senior Associate at the University of Melbourne.

He has been president of a farming company, an agri-business insurance company and a biotechnology start-up. He is actively involved in shaping food industry strategy and government policy in the areas of innovation and competitiveness.



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Erin Cheney is a Research Associate for the Chair in Agri-Food Innovation. Erin has an MBA in Agribusiness from the University of Guelph. Her research interests include the bioeconomy — particularly

bio-based chemical and material value chains; and strategy and innovation for policy advancement in Canadian agriculture.



SYDNEY LEGROW
RESEARCH ASSISTANT, IVEY BUSINESS SCHOOL

Sydney is a former Research Assistant with the centre for Agri-Food Innovation at Ivey, as well as an HBA 2014 graduate. As Research Assistant, she worked on a number of studies relevant to the public and

private sectors, which provided insight into the state of the Canadian food manufacturing industry. Sydney currently serves as Risk Analyst with Marsh Canada in Toronto. She aims to focus on insurance products for the food and CPG group.

ABOUT THE LAWRENCE CENTRE

The Lawrence National Centre for Policy and Management aims to bridge the gap between business strategy and government policy by providing a forum for business and government to discuss policy development and implementation.

As a policy and management centre within a world-class business school, the Lawrence Centre is uniquely positioned to explore the areas of public policy that have the greatest impact on business. The Lawrence Centre educates future business leaders in public policy and government leaders in business strategy and conducts leading-edge research on major issues that involve business-government coordination.

The Centre was established in 2001 with a generous gift from Canadian businessman, Jack Lawrence, HBA '56, who was a strong proponent of business playing an active role in Canadian public policy.

PROJECT PARTNERS



