CAPI
THE CANADIAN AGRI-FOOD POLICY INSTITUTE

PROCESSED FOOD SECTOR RESEARCH PROGRAM

PROJECT 1B:

WHAT'S HAPPENING IN PROCESSED FOOD

Understanding Competitiveness in Selected Industries

March 2014

About the CAPI Processed Food Research Program

Food and beverage processing is one of the country's largest manufacturing sectors and an essential channel for Canadian agricultural products. Companies are succeeding yet the sector has been facing challenges, including record trade deficits in secondary processing. Working closely with a variety of partners, CAPI's research is focused on better understanding the issues and opportunities facing this sector and their implications for policy and strategy, and to generate a dialogue on ways to support the sector's future growth and competitiveness.

Project 1b: *What's Happening in Processed Food – Understanding Competitiveness in Selected Industries*: CAPI has posted on its website the trade balance data (the degree to which it is in a deficit or surplus and the trendline) on some 140 sub-sectors. This report provides an interpretation of what is happening across several sub-sectors and develops some implications of the findings.

PHASE 1
Diagnosis

1a. Diagnosing the trade deficit
1b. Reasons for the trade deficit
2. Explaining the trade deficit
3a. Food manufacturing performance
3b. Plant openings, closings & investments

PHASE 2
Inspiring practices

4a. Case studies on company success
4b. Cross-case study analysis
5. Consumers and markets
6. Innovation insights

PHASE 3
Competitive advantage

7. Conclusions
8. Implications for policy & strategy
9. Dialogues on outcomes

All completed projects, along with supporting material and data, can be found online at **www.capi-icpa.ca**.

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Canada

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Introduction

Each company has its own unique story about how it competes. But how can companies – and policy-makers – gauge the overall competitive performance of the Canadian processing sector and its many subsectors over time?

One point of reference is to examine the trade balance.

A historical view of exports and imports at a granular level reveals key trends (in this case over a 20-year timeframe). CAPI has gathered some 140 trade balance categories across almost every major part of Canada's secondary processing sector.[1]

Purpose of this work

Trade data have their limitations. The data cannot reveal the amount of overall processing shipments for each category and value of the domestic market or consumption. However, trade balance data is a surrogate measure of competitiveness – and the trade balance situation has been generally deteriorating. A dialogue is needed about the changing marketplace and the economic and policy environment in which companies compete.

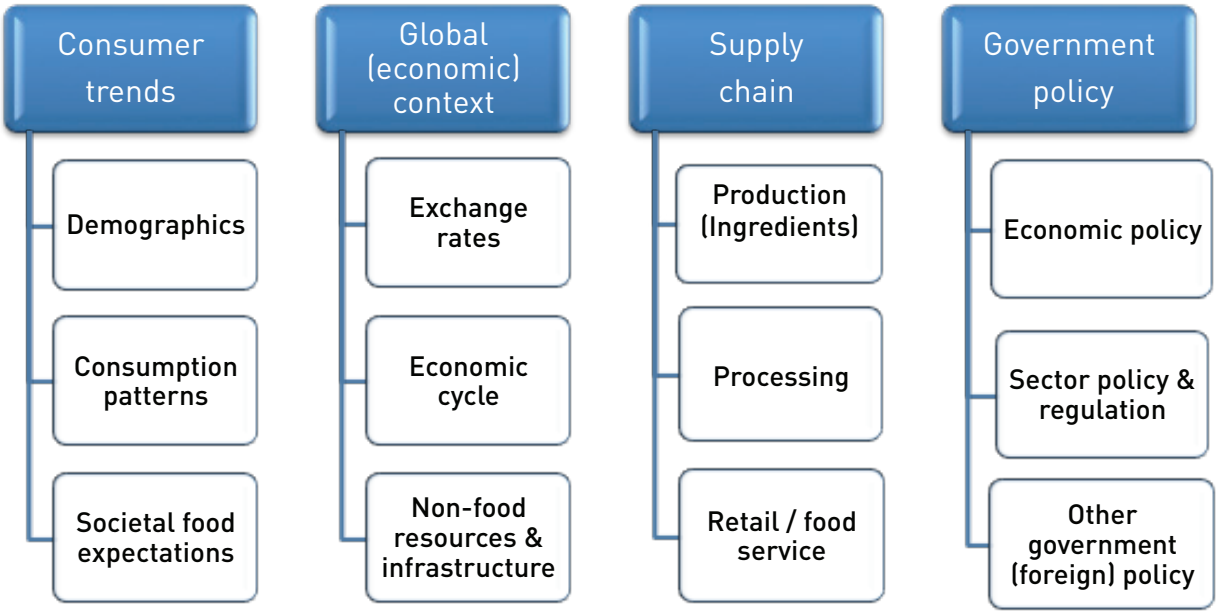

Figure 1: Drivers of Change

How is this useful?

A tool is introduced to help sectors, companies and governments to identify, link and assess issues that determine competitiveness. Many factors or "drivers of change" need to be considered (see Figure 1). Examples are provided in this report across several sectors. This assessment tool is the basis to help create a dialogue on "what is going on." Diagnosing issues across the food system is the basis for creating strategic change and better articulating policy recommendations. What is holding companies back or enabling competitiveness?

Broad observations

Many factors determine trade performance. To help generate such discussions, this report presents illustrations about the state of affairs of several food/beverage categories. They do not provide complete pictures but they are a starting point to flag key issues and drivers of change. We invite your comments on what is happening.

It is clear from the presented HS stories that being competitive requires being good at addressing multiple factors at once across all four drivers. The "drivers of success" diagram can, therefore, actually be portrayed as a "formula of success":

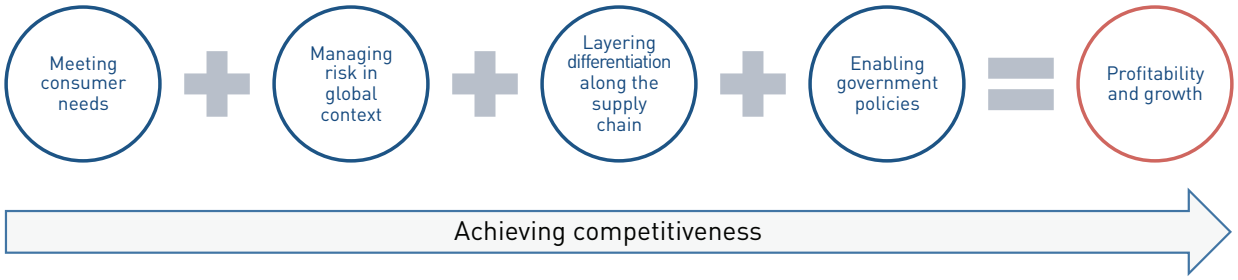

Figure 2: Formula of Success

The overall assessment of these illustrations across several HS chapters suggests the following:

1. The trade balance situation for any sector prompts several questions about "what does it take to achieve competitiveness?" There may be other relevant questions beyond the following but the profile of the HS categories in this work touch on many of these:
   a) How can Canada profitably manufacture higher-value foods?
   b) How can we truly differentiate ourselves from competitors?
   c) Why can't we better translate our ingredient production/commodity inputs into higher-value food products?
   d) How can manufacturers achieve appropriate scale?
   e) What stands in the way or can enable investment and growth?

2. There seems to be a "formula of success," starting with having the right value proposition for the consumer. This is ever-changing as consumer food needs and expectations evolve and vary by market.

3. A short list of high-profile factors is often identified as the reason for certain competitiveness challenges, such as regulatory issues, the appreciation of the currency (in the case of the 2000s), or costs of inputs. These factors play out differently across the HS categories. Some of these factors can't be "controlled" such as exchange rates and commodity price fluctuations. Other economy-wide factors are also relevant, such as availability of labour and access to transportation infrastructure, and shape the environment in which companies operate. The analysis of HS categories shows that many factors enable and hinder competitiveness.

4. Differentiation is essential to create a comparative advantage. Companies seek to achieve this in many ways in order to make their product more appealing to customers and consumers.[2] Securing multiple points of differentiation makes the strategy more robust, such as in the ingredient supply, investment in technology, in partnerships and in the final food product, among other possibilities. A "commodity mindset" undermines the ability to differentiate.

5. For Canadian processors, "differentiation" is a means to offset the scale advantage held by many foreign competitors. If companies do seek scale advantage, then relevant differentiation enables companies to reach it. Access to the US market (more recently through the North American Free Trade Agreement) was designed in part to give Canadian companies access to scale. But a number of companies retrenched to the US to serve Canada. Trade access is vital but it needs to be followed by having a value proposition that seeks differentiation, too. As shown in the review of certain HS categories, Canadian companies are successful when this occurs.

6. As companies consider how they make their strategic and investment decisions, the "open for business" climate and the influence of government policy and regulations plays a key role, too.

7. Combined, these factors (among others) are portrayed in the following analysis and reaffirm the observation that competitiveness is achieved by addressing each driver of change as part of a systems-wide response.

This is the dialogue that needs to occur.

Context for this work

This report is part of a broader research program on the state and prospects of Canada's food processing sector; please refer to our website for more information: www.capi-icpa.ca. In previous work, CAPI has elaborated upon how systems thinking can bring perspectives to issues and spark dialogues on the strategic and policy choices facing the agri-food sector.[3]

What's covered in this report?

1. Is a negative trade deficit "just normal" and why the concern?
2. Competitiveness "stress" and "success"
3. Selecting illustrations to profile – by HS chapter
4. Overview of HS illustrations:

   Chapter 16 – Sausages/Processed Meat
   Chapter 18 – Cocoa
   Chapter 19 – Bread
   Chapter 20 – Vegetables, Fruits and Nuts
   Chapter 21 – Sauces and Condiments
   Chapter 22 – Beer and Wine
5. Concluding comments: What can be done to improve our competitiveness?
6. Appendix – Top 20 trade balance declines and improvements

1. Is a negative trade deficit "just normal" and why the concern?

Canada has had consecutive trade deficits in processed food (which includes beverages) since 1991. The combined food and beverages trade deficit (at nearly $5.7 billion deemed in scope for purposes of this discussion[4]) is illustrated below.

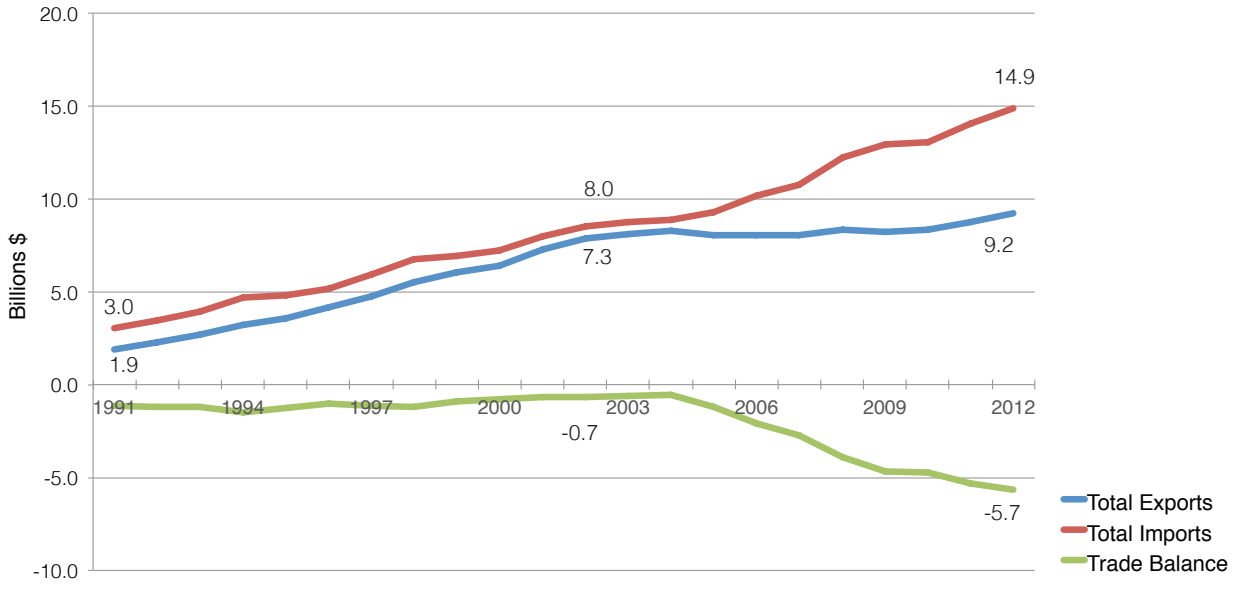

Figure 3: Food and Beverages Trade Deficit, In Scope

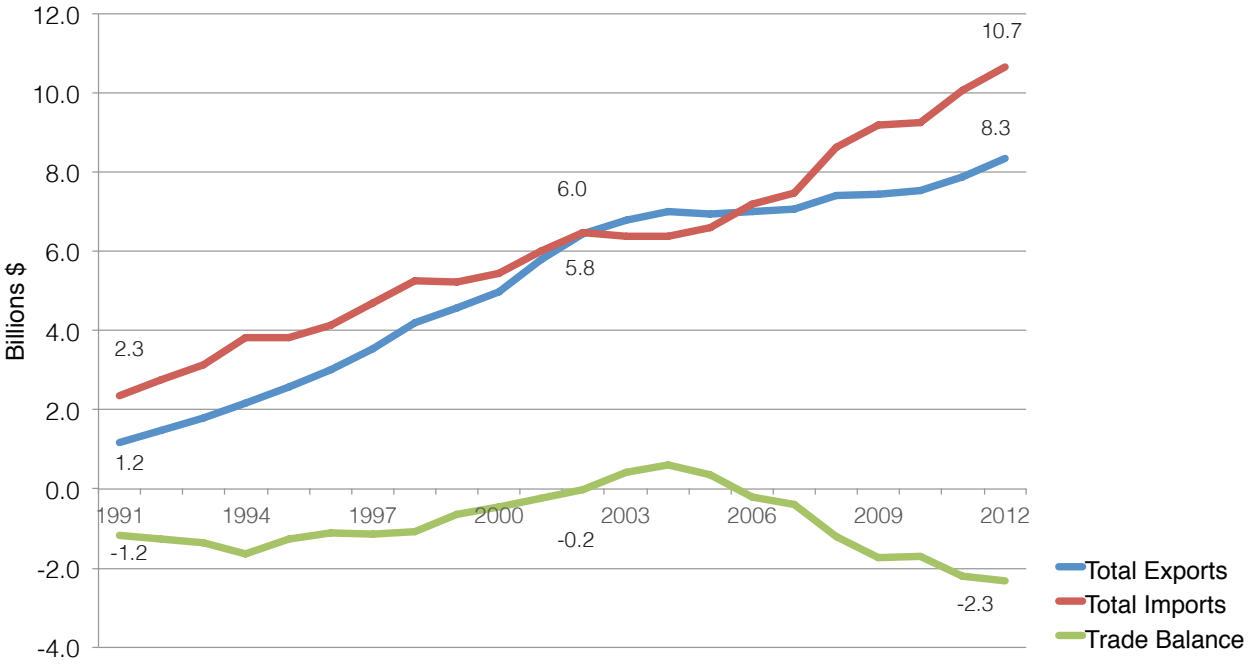

Figure 4: Food Products Trade Deficit

Until 2000, the deficit hovered around negative $1 billion. Some major categories have long experienced deficits. Is a trade deficit just to be accepted norm for the country?

The main issue is the trend and its implications. The processed food sector has experienced a significant decline in its trade balance since around 2004. By just looking at "food products" only (and removing "beverages" – see Figure 4), Canada actually recorded a handful of surpluses in food products peaking at just over $600 million in 2004. Since then, Canada has faced a sustained decline and recorded a trade deficit of over $2.3 billion in 2012. This drop of nearly $3 billion in the trade balance over eight years should raise questions about our competitiveness and the implications for the agri-food sector (including producers who supply the ingredients used by processors).

2. Competitiveness "stress" and "success"

A rapid or steep rise in the deficit can signal competitive stress (i.e., rising imports and flat or falling exports). We looked at the change in the deficit across the processed food sector from 2004 to 2012 as this seems to be the period of change when many categories experienced rising deficits or greater volatility in their trade balance situation. For example, the processed meat situation (Chapter 16) records a total deficit of nearly $500 million.

Conversely, trade performance can flag success as measured by export growth. The bakery story (Chapter 19) shows that Canada has a recent and relatively small deficit of $85 million. The real story is the breadth of this trade. Canada's exports exceed $2.6 billion and imports are nearly $2.7 billion. This is a major contributor to Canada's agri-food economy and any material shifts in exports or imports can have a big impact. Understanding what is driving them will help portray issues we may need to confront.

Understanding domestic market performance is required to fully comment on the competitiveness state of affairs. For instance, Canadian wine producers do not have the capacity (grape acreage and wine production) to meet the domestic demand for wine, thus making imports essential. Wine imports are consistently rising but the trade data do not reveal the very significant positive growth in the quality and demand for Canadian-produced wine consumed at home. The issue here is not to "replace imports" but the vignette on this sector reveals its unique dynamics and a number of key issues that shape its competitiveness prospects. The wine example is addressed further below.

These illustrations present an opportunity to discuss an industry's competitiveness.

3. Selecting illustrations by HS chapter

CAPI has selected a handful of HS categories to profile (see diagram, below). The HS categories profiled here represent approximately $4.2 billion in exports and $6.1 billion in imports in 2012. (Chapter names have been abbreviated in this diagram.)

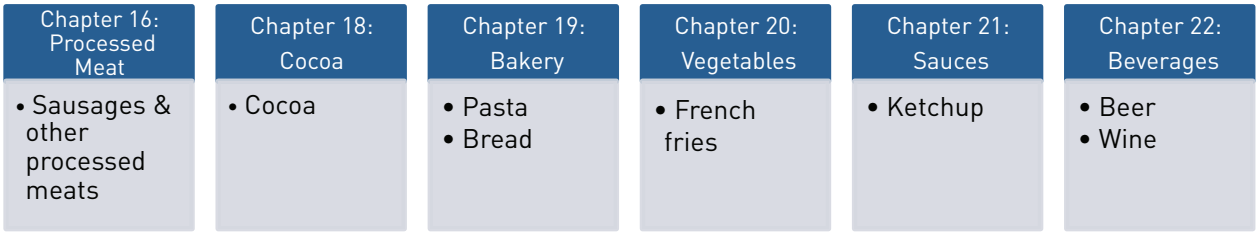

Figure 5: Selected HS Categories

Why these were selected?

The illustrations below all experienced a significant decrease in the trade balance over the 2004 to 2012 period. Combined, the trade balance of the selected categories fell by $2.2 billion over that period (see Table 1 on individual HS categories, below).

The top 20 increases in the trade deficit at the six-digit level over the 2004-2012 period are shown in the Appendix. While most categories showed a decline in the trade balance, some showed improvement. The top 20 improvements in trade balance at the six-digit level are also shown in the appendix.

Our selection is primarily based on the magnitude of the change in the trade balance over this period. Other factors used in the selection process were the availability of product experts and the breadth of the product group.

Table 1: Trade Deficit of Selected Categories.

HS Category	Trade Status 2004	Trade Status 2012	Change
HS 1601 Sausages	-$10	-$125	-$115
HS 1602 Other Processed Meat	-$55	-$374	-$319
HS 1806 Chocolate	$372	$163	-$209
HS 1902 Pasta	-$77	-$228	-$151
HS 1905 Breads	$441	$334	-$98
HS 200410 Frozen Potatoes	$856	$773	-$83
HS 210320 Ketchup	-$33	-$116	-$83
HS 2203 Beer	-$54	-$400	-$346
HS 2204 Wine	-$1,160	-$1,929	-$769

Elaboration on Categories Selection:

HS 16: HS 1601 has only one six-digit category, HS 160100, and that appears in the list of the top changes in the trade deficit.

HS 1602 has nine six-digit categories. Prepared beef (HS 160250), prepared pork (HS 160249) and ham (HS 160241) account for 49% of exports and 65% of imports of HS 1602 and all are on the list of the top trade balance changes.

HS 17: This chapter contains various sugar ingredients and is not addressed here.

HS 18: HS 1806, chocolate, contains five six-digit categories. All experienced a decrease in the trade surplus from 2008 to 2012. HS 180631 had the largest decline in trade surplus and is on the list of the top trade balance changes. It is worth noting that there has been a marked improvement from 2010 through 2012.

HS 19: The trade balance for HS 1902, pasta, fell by $151 million from 2004 to 2012. Import tariffs are defined by a 10-digit HS category. For pasta, there are over 60 import categories. Such categories includes many types of pasta (frozen, stuffed or not, with or without meat, pasta containing eggs, and dried pasta, and some categories include couscous). The trade balance for HS 190230, the largest, representing 48% of pasta imports fell by $100 million; this category is about "other pasta" and "with or without meat." With a consistent trade deficit, HS 190219 is dried pasta using durum semolina pasta, which has four Canadian manufacturers and thus the reason for selecting this category to profile.

The trade balance for HS 1905, breads, with six categories at the six-digit level with trade balances in 2012, is interesting because it has components that have experienced either a large increase in trade balance or a large drop in the trade balance. HS 190590, bread, experienced a drop of almost $300 million from 2004 to 2012. HS 190532, waffles and wafers, on the other hand, saw its trade balance improve by $157 million. Both of these categories are on the lists of the largest changes in trade balances.

HS 20: Frozen potatoes, HS 200410, had the largest trade surplus of all the six-digit categories in 2012 at $773 million. However, it experienced a decline in its trade balance of $83 million from 2004 to 2012 and is on the list of significant trade balance declines.

HS 21: Ketchup, HS 210320, had a decline in its trade balance of $83 million from 2004 to 2012. Food preparations, HS 210690, experienced the second largest drop in trade balance ($383 million), but it is too broad and nebulous a product group to examine in detail. Chapter 21 reports on a variety of sauces, condiments and preparations.

HS 22: Beer, HS 2203, has only one category at the six-digit level. HS 220300 experienced a $346 million drop in its trade balance from 2004 to 2012. Wine, HS 2204, consists of four categories at the six-digit level. All of these products experienced a decrease in their trade balance between 2004 and 2012. HS 220421 accounted for 89% of the drop in the trade balance and is at the top of the list of largest declines in the trade balance.

HS 23: Pet food is not addressed here.

A tool to assess issues and drivers of change

Each sector (and company) faces different pressures and opportunities. The following chart presents a tool to help identify, link and assess what is affecting the sector under four broad "drivers of change." Competitiveness, risks, opportunities and the trade balance can be better understood by identifying the myriad issues facing them. Often, commentators select certain events to explain change. The change in the exchange rate (addressed further below) or regulatory challenges are frequently identified as the reasons for sector challenges. But a sector's prospects are shaped by many factors – some evident and others less so. This assessment tool is the basis to help create a dialogue on "what is going on" and it is used in this report to examine several sectors. Diagnosing the competitiveness situation is the basis to create strategic change and to better articulate policy recommendations.

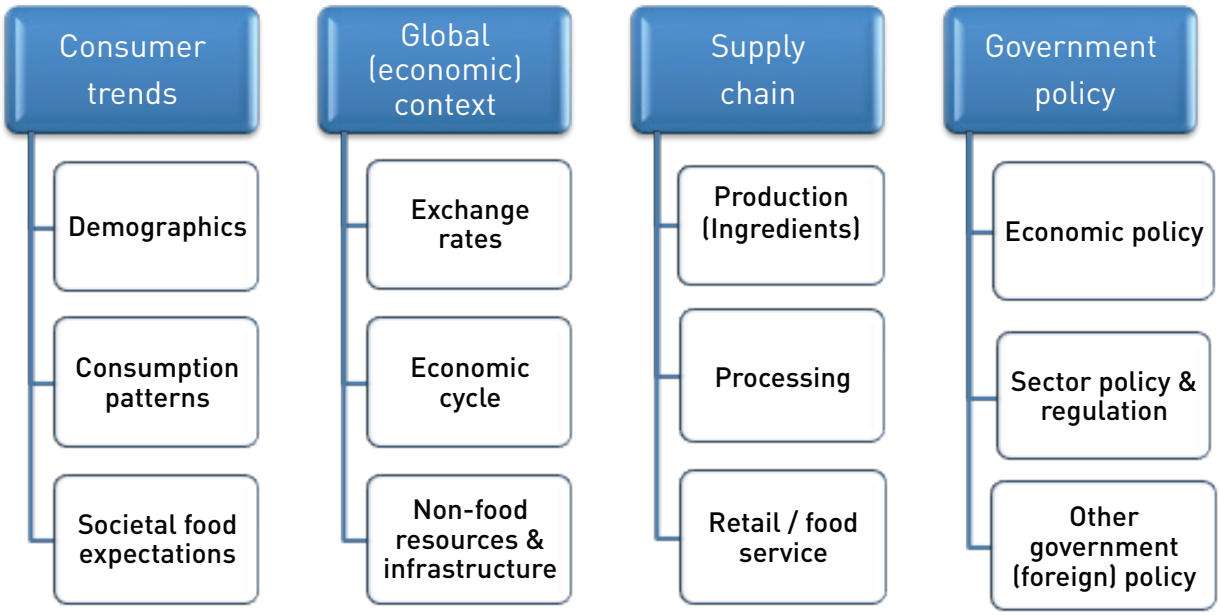

Figure 6: A Tool to Assess "Drivers of Change"

Explanation: The items should be self-explanatory but some context is provided:

- Consumer trends: Consumer tastes and preferences are changing for many reasons; demographics (age, disposable income, ethnicity, etc.) drive change. "Societal food expectations" refers to how companies are responding to ever-increasing consumer concerns about the food they eat and where and how it is produced (e.g., health, ethics and sustainability).
- Global (economic) context: The economic cycle and exchange rates determine how companies operate. "Non-food resources and infrastructure" is about the availability and cost of non-food items, such as the cost of energy and availability and cost of labour, and the infrastructure in place to enable companies to operate, such as transportation.
- Supply chain: Speaks to how food processors go to market, source ingredients, create market advantage and work with (or without) players from production to retail. Each segment in the supply chain can enable or hinder company success. Others across the food system can play a role, such as financial institutions.

- ☐ Government policy: includes the actions and policies of all levels of government that influence the business environment in which companies operate. This includes government programs and incentives to attract investment, here and abroad. Changes in Canada's access to foreign markets have implications: new markets and new competition.

Example of examining one issue: "Blame the Canadian dollar?"

This chart acknowledges that there are indeed many drivers of change (issues) facing the sector. Often, the rising Canadian dollar is regarded as the main reason for the change in trade deficit. While there is a correlation between the steep rise in the deficit after 2004 and the appreciation of the currency against the US dollar, the exchange rate is not the prevailing or only reason for the trade deficit. This matter is addressed in another CAPI report as part of this research (i.e., Project 2).[5]

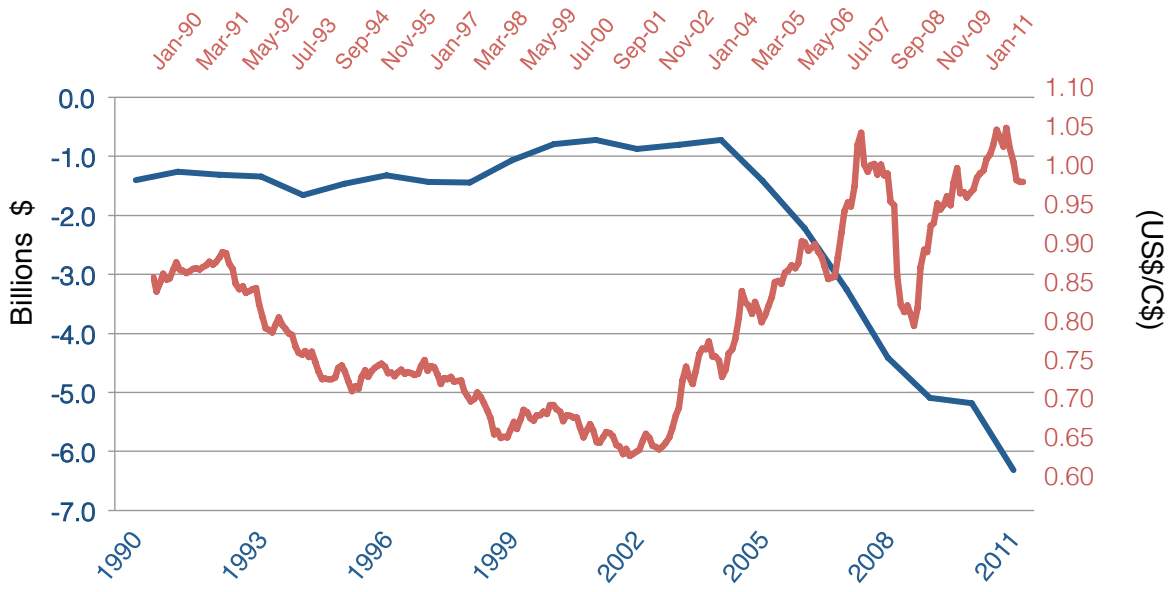

Figure 7: Canada's Trade Balance (blue) and Canada-US Exchange Rate (red).

Beginning in 2002, the Canadian dollar began to appreciate vis-à-vis the U.S. dollar, which triggered the decline of the trade balance in 2004. (see Figure 4: Trade Performance: Food Products). Moreover, while Canada's trade deficit rose dramatically in 2004 with NAFTA countries, Canada's trade deficit with all other countries had been steadily rising since 1995.[6] There should be no question that the currency value is an issue for manufacturers, but determining its precise link to explain the trade balance at a category level is difficult. For instance, during the period from 2004 to 2012, the processed meat sector (HS 1601 and 1602) recorded a drop of 31% in the trade balance whereas the bakery sector (HS 1905) recorded a drop of 4% during the same period. The point is that a more complete analysis is required to ascertain the link between trade balance impacts and currency trends.

The "drivers of change" diagram can be used to acknowledge that many issues are at play, including the currency issue. Each sector requires a unique diagnosis as to what is shaping its respective competitive situation. Sweeping generalizations can only go so far.

4. HS illustrations

The following illustrations portray a preliminary explanation for what is happening among several processed foods and are organized around the four drivers of change that helps to explain export and import flows: consumer shifts, global or economic change, supply chain developments and government policy.[7] We invite stakeholder input to refine these commentaries.

"What's happening to Processed Meats?" – Chapter 16

A preliminary illustration of HS 1601 & 1602.

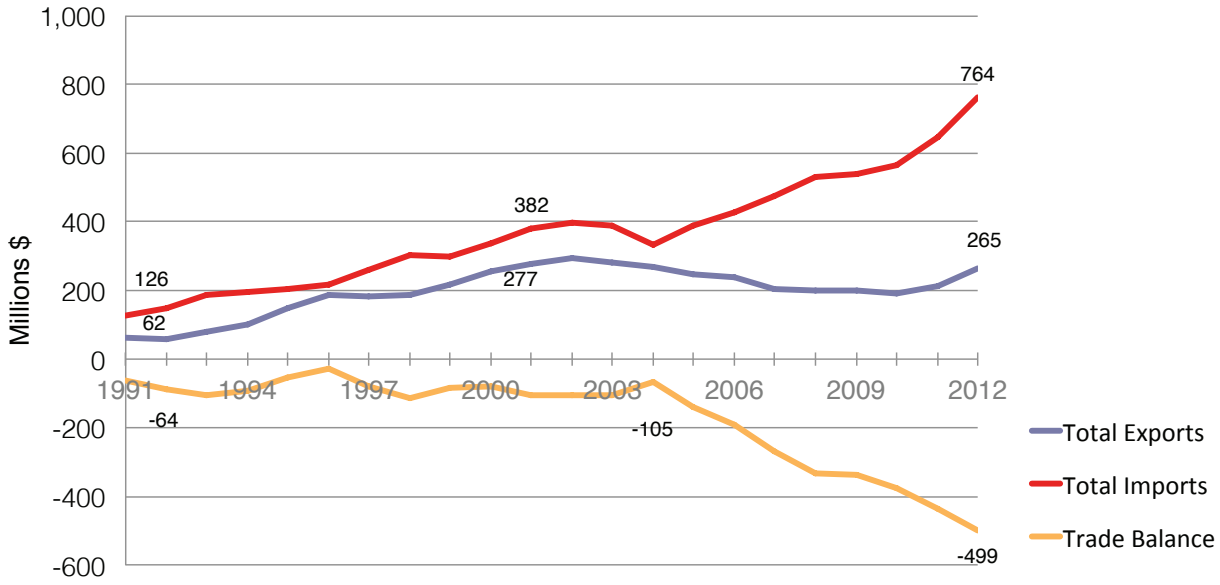

Figure 8: HS 1601 and 1602 (Processed Meat) Trade Balance.

Observations

- ☐ Chapter 16 represents processed meat from animals and poultry. (Note that fish and seafood data are recorded under Chapter 16 but have been removed from CAPI's analysis.[8])
- ☐ The two categories are HS 1601, which includes sausages made from pork, beef, chicken and turkey, and the larger HS 1602 section, which includes prepared and preserved meat and meat offal.

HS 1601, 1602:

- ☐ HS 1601 and 1602 record a total trade deficit of nearly $500 million, and rising. HS 1601 represents approximately 25% of this total.

- From 1991 to 2001, exports grew at an average annual rate of 16% compared with imports at 12%.
- From 2002 to 2012, import growth fell to an average annual rate of 7% while exports contracted slightly.
- The United States is, by far, the largest trading partner for this category. Exports to the US represent 77% of total exports in 2012.
- The trade balance with the US was at a negative $510 million in 2012 with imports of $714 million and exports of $204 million.

Context for considering HS 1601/1602

Status of processed meat: $499 million trade deficit

Consumers

- As a generalization, an aging population is eating less meat; beef consumption in Canada is declining at 1% a year. Specific data on processed meat consumption is required to glean insights into the marketplace for sausages but it is well known that the category has suffered since the listeria issues and continuous health warnings. Only recently with the launch of products without chemical additives and preservatives has the category begun to respond positively in Canada.

Global (economic) context

- The value of the Canadian dollar vis-à-vis the US dollar makes US imports more attractive.
- This is a low-cost protein. The economic environment prompts the move to chicken and turkey wieners.

Market responses across the supply chain

- To meet the needs of price-conscious consumers, certain American sausage producers blend ingredients to achieve lower-cost products. As well, with a focus on price, this tends to dampen the market's incentive to develop a broader array of differentiated products.
- Little or no differentiation with US pork raw materials facilitates imports, although recent developments may be trying to address this; to win market share, Canadian companies respond to changing consumer expectations by introducing fewer preservatives in meats and emphasizing natural ingredients. Another means to differentiate is using flavours and spices that are particularly attractive to aging population segments.
- Canadian food service brokers/companies and grocery stores source processed meat from abroad. Imports by the largest players are significant as the 10 largest such companies hold nearly 80% of total processed meat imports.[9] This is likely having a negative impact on the primary production sector as non-Canadian ingredients are used.
- Rising imports affect Canadian processors' market shares and reduce the use of ham, belly and shoulder for processing in Canada. Lower Canadian plant capacity utilization leads to significant consolidation of Canadian processors. As well, import penetration prompts processors to seek out export markets at a lower return to primary processors and producers. Overall, the lack of volume contributes to driving pork and processed meats prices downward.

- Restaurants and food services drive up demand for pre-cooked bacon (to avoid frying on site) and such ready-to-eat demand is satisfied by US imports. (Note: "bacon" is not recorded in HS 16 as it is a primary processed product but is referenced here to reveal the shift taking place in the retail market.)
- How the growing interest in longer shelf-life products (pre-cooked bacon) further changes the packaged meat business is uncertain. Processor and retailer interest in technologies to capture flavour and quality is a driver to meet the growing market need for such longer-life products. Significant developments are underway to extend shelf life on chilled processed meat products and enhance food safety.
- Failure to identify the origin of Canadian vs. US pork at retail (an issue for all pork cuts and products) challenges the ability to profile "Canadian" with consumers.

Government policy & regulation

- Exporting Canadian products is made challenging by ramped-up US enforcement practices of inspecting more shipments for listeria. This becomes a de facto non-tariff barrier. The "thickening US border" is not reciprocated by Canada. Handicapping exports to the US makes it riskier to invest in scale facilities needed to be cost competitive with the US.
- During a tough economic period, American efforts to promote their exports results in "on-shoring," efforts to bring home manufacturing jobs at the behest of the federal administration. This is part of a broader trend of retrenchment (to the US) enabled by NAFTA, whereby the Canadian market becomes easily served from US-based operations.

"What's happening to Cocoa?" – Chapter: HS 18

A preliminary illustration of HS 1806.

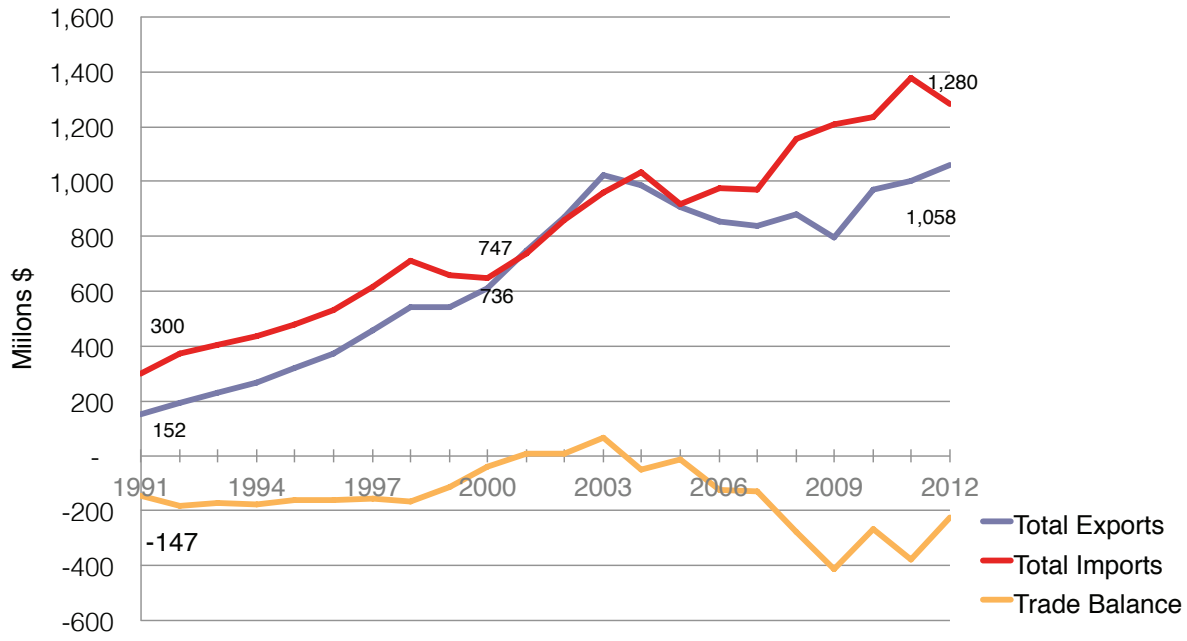

Figure 9: Chapter 18 (Cocoa and Cocoa Preparations) Trade Balance

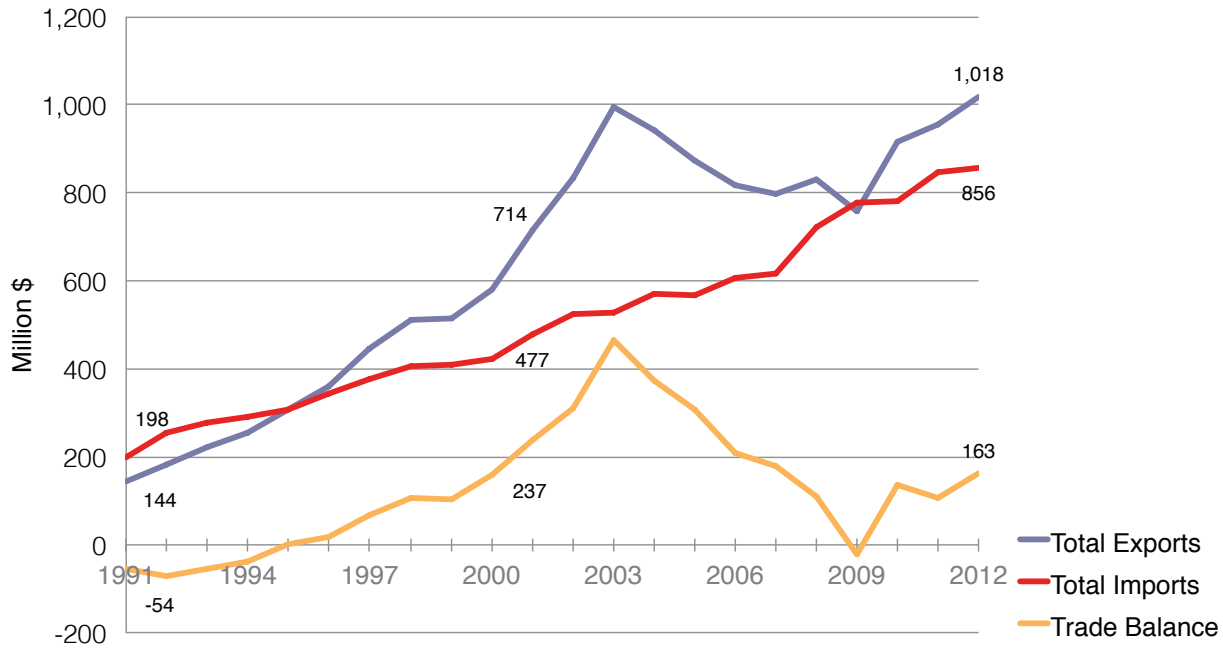

Figure 10: HS 1806 (Chocolate and Other Food Preparations Containing Cocoa) Trade Balance

Observations

- Not surprisingly, Canada has a trade deficit of $222 million in cocoa, as Canada must import this ingredient.
- In 2012, Chapter 18 exports represented 11% of total food and beverage exports. Imports represented 9% of total food and beverage imports. Exports grew much more rapidly from 1991 to 2001 (17%) compared to 2002 to 2012 (2%). This pattern also occurred in imports with imports growing by 9% during the early years and 4% during the later years.

HS 1806

- What may be surprising is that Canada has a significant trade surplus in HS 1806 "Chocolate and Other Food Preparations Containing Cocoa" of $163 million. HS 1806 is the largest group in Chapter 18 with its exports representing 96% of Chapter 18 exports. Although HS 1806 had a $163 million trade surplus in 2012, this is significantly below its largest surplus of $465 million in 2003.
- There are two main categories of chocolate: industrial chocolate (>2 kg, HS 180620) and consumer-application chocolate (<2 kg, HS 180631)

Context for considering HS 1806:

Status of chocolate: $163 million trade surplus

Consumers

- ☐ Consumer interest in premium chocolate is growing. Western consumers are seeking out artisanal chocolate and new flavours, such as Wasabi-flavoured chocolate. Health is also a driver of sales as dark chocolate has received increasing attention for its attributes, such as its antioxidant properties.
- ☐ Emerging country growth (BRIC countries) is significant as these four countries account for some 55% of the global confectionary retail growth (2001).[10] During the recession, there had been a shift away from premium items, but as the economy has continued to recover, sales of premium items have taken the lead again.
- ☐ Fair-trade certified chocolate is another growing segment of the market as is sustainability of cocoa plantations/ingredient sourcing. Social, ethical and environmental considerations drive premium pricing.
- ☐ Consumers are also value-driven. The recent recession impacted premium chocolate sales globally.
- ☐ Each market has demographic differences. Mexico, given its younger population, is a driver for increased confectionary opportunities. Britain is seeing increased pressure on manufacturers to address health and obesity, which is shaping packaging and portion controls. And in China, the historical concern for lactose sensitivity, which slowed penetration is now disappearing and the premium market is growing.

Global (economic) context

- ☐ The lower-valued Canadian dollar and availability of sugar at world prices (not available to American firms in the US due to a protectionist sugar policy) likely makes Canada a comparatively attractive market to invest in.
- ☐ However, lower-cost labour in Mexico is attractive to firms that have left Canada despite the added costs in that developing country (i.e., transportation and higher refrigeration costs). For instance, Hershey, which closed its plant in Smiths Falls, Ont., also closed its operation in Pennsylvania to move chocolate production to Mexico.
- ☐ Ferrero's decision to invest in Ontario in the mid-2000s is largely based on the inviting business/operating climate, including having access to a local labour force and quality of life considerations in Canada.[11] Access to good transportation links is also important. The steps taken by the municipality, Brantford to facilitate the investment are also important, including land availability.

Market responses across the supply chain

- ☐ The sudden fall in the trade balance from about 1999 to 2009 is likely attributed to the closure of a large chocolate processing operation with several plants in three provinces (Hershey).
- ☐ Dairy used in chocolate is a key ingredient. Ontario dairy farmers supplied nearly 50 million litres of milk annually to Hershey's Smith Falls plant.[12]

- New investments, however, have likely contributed to the rise of exports, such as Ferrero's nearly half-a-billion investment in Canada. This plant has the export mandate to serve the US and Mexico as well as the domestic market. Ferrero is the fourth-largest confectionary global manufacturer.

Government policy & regulation

- Canadian food manufacturers benefit from lower sugar prices than what is available to Americans. US sugar policy keeps sugar prices high in that country to shield its domestic producers. Being able to access sugar at world prices enables Canadian food manufacturers to get a distinct pricing advantage for this key cost item. Changes here could have future negative implications on costs for Canadian industry.
- Municipal efforts to attract/facilitate investment are important to investors/companies.

"What's happening to Bakery?" – Chapter: HS 19

A preliminary illustration of HS 1902 & 1905.

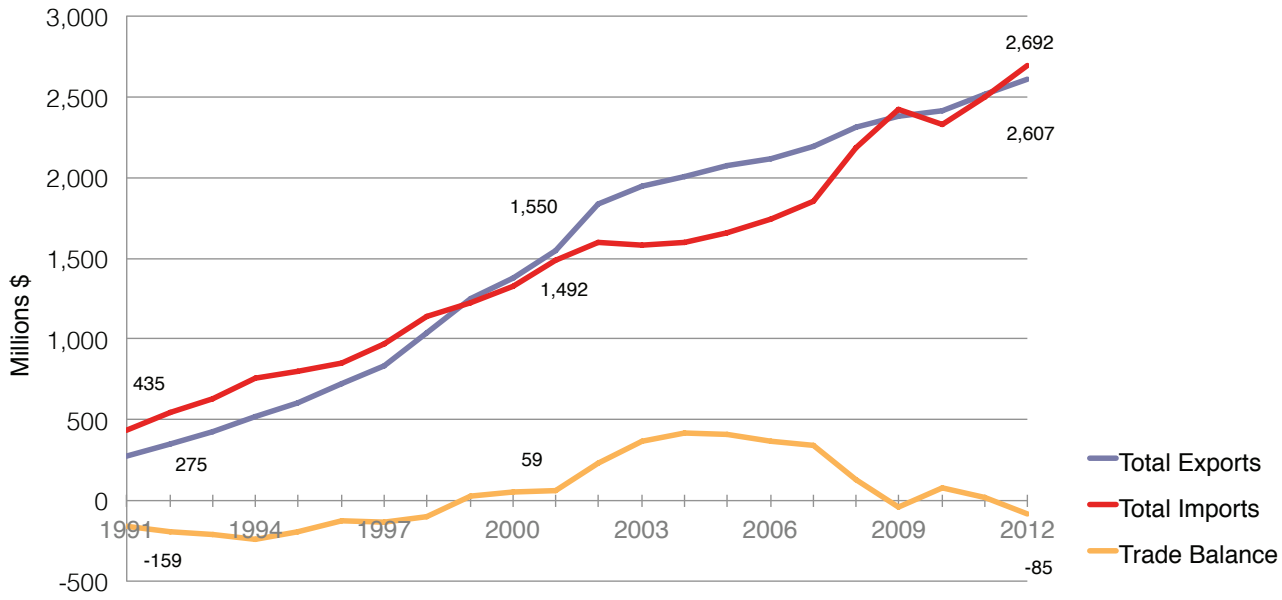

Figure 11: Chapter 19 (Cereal, Flour and Pasta) Trade Balance

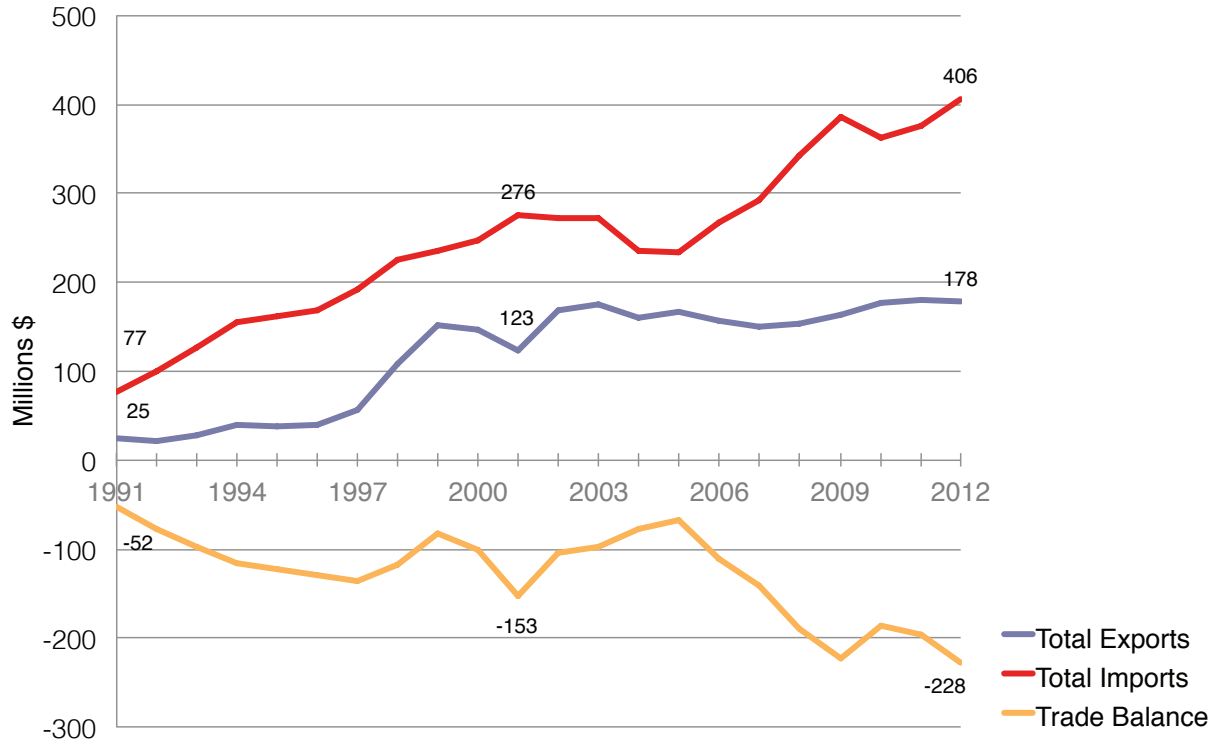

Figure 12: HS 1902 (Pasta) Trade Balance

Figure 13: HS 190219 (Uncooked Pasta Not Containing Eggs, Not Stuffed or Otherwise Prepared) Trade Balance

Observations

- Chapter 19 represents "bakery" and includes both exports ($2.6 billion) and imports ($2.7 billion) as at 2012. It includes breads, pastry, pasta, cereals, biscuits, waffles and so on. With exports and imports of this size, this is an enormously important category. Canadian exports have grown both to the US and the rest of the world, though not as fast as imports from the US and particularly from the rest of the world. If pasta is removed from the category the deficit becomes a $100 million surplus.
- Chapter 19 registers a relatively small trade deficit of $85 million and has hovered in a surplus/deficit situation over the past 20 years. While enjoying a trade surplus for several years in a row in the 2000s, the sector has recently entered deficit territory.
- Chapter 19 represents 28% of the entire processed food (including food products and beverages) exports and 18% of total imports.

HS 1902

- HS 1902 covers a wide range of products including stuffed pasta, cooked pasta, spaghetti, noodles, ravioli, and couscous. It currently has a trade deficit of $228 million. There is a significant amount of economic activity from imports of $406 million and exports of $178 million. Canadian exports have slowed significantly. From 1991 to 2001, exports grew at an average annual rate of 17%. However, after 2001 exports grew by less than 1% annually. Import growth also slowed, although not to such a large extent. Imports grew by 14% annually over the early period and by only 4% over the later period.
- Dried pasta (as found in HS 190219) represents a sizeable share of the total volumes and values of HS 1902. This six-digit category has had a consistent deficit since 1991 (currently at $33 million in 2012) based on imports of $147 million and exports of $114 million.

Context for considering HS 1902:

Status of pasta: $228 million trade deficit

Consumers

- In response to consumer expectations, most manufacturers signal that their pasta is "Italian" in some fashion.
- Health issues are driving change. The gluten-free (and "wheat belly") phenomenon and growing focus on obesity presents challenges for many food segments (particularly the bakery segment but cereals and pasta are swept up in this too).

Global (economic) context

- The appreciation of the Canadian dollar is a major cost factor for manufacturers (as an exporter of the final product and importer of the necessary equipment). The specific pasta making equipment in the plants is sourced primarily but not exclusively from Europe but other equipment/technology (computers, conveyors, etc.) is sourced in North America.
- Scale is a key factor since the cost equation is essentially the same for all manufacturers: the cost of wheat (noted below), hydro and other energy sources, EU-sourced machinery, water and transportation costs. Labour and packaging costs are also significant.

Market responses across the supply chain

- A key challenge is growing demand when, as a product, dried pasta is "essentially" the same. The US and Canadian markets are not growing or are doing so marginally, not unlike other commodity/ traditional foods.
- Innovation focuses on meeting the nutrition expectations of consumers. Whole wheat pasta has created a successful new category distinguishing it from the traditional white pasta. Fortifying pasta is another way to innovate, such as enhancing the protein and fibre content of pasta by adding pulses to pasta. Opportunities for such attributes will also vary by population segments within Canada and in global markets. Growing "Canadian" exports may depend on the ability to tap into this increasingly health-conscious consumer in distinct markets.
- Dried pasta depends on an internationally traded commodity that is common to every pasta manufacturer, durum wheat. The manufacturing process is largely the same for all and the primary equipment used to process wheat is sourced from the EU. Traditionally, the only ways to differentiate has been on branding and price (an outcome of the economics of the manufacturing plant). There are major challenges here for Canadian firms. It is no wonder that pasta imports are attractive to consumers. Italy is the number 2 supplier to Canada. But the largest supplier of dried pasta to Canada is the US.
- The other factor at play for these leading exporting countries is economics. As with many food categories, the pasta business is best understood within a North American context. With scale, US pasta suppliers can easily supply Canada (branded as "Italian") and be very price competitive. Given transportation costs, manufacturers tend to locate close to larger population centres. Canada's major pasta manufacturers are located in Ontario and Quebec. The logistical disadvantage associated with shipping finished product versus bulk grain appears to offset any advantage Canada may have in being a major producer of the key pasta ingredient, durum wheat. For this sector, it has been more economical to ship wheat from the Prairies than for pasta manufacturers to locate there. (But historical factors have played a role, too. Canada's pasta manufacturers have historic roots with the Italian entrepreneurs who settled in or around Montreal and Toronto.) In the effort to improve scale, the US pasta industry underwent significant consolidation over the decade of 2000-2010. For Canada's pasta manufacturers, this suggests that manufacturing efficiency and costs of doing business will continue to be critical factors. With greater scale, US firms seem to be positioning themselves for greater export growth.

Government policy & regulation

- Issues regarding labelling or other regulatory factors would be similar to those experienced among most other food products.

HS 1905

- CAPI has selected HS 1905 because of the contribution this one category makes to the overall category. It is the largest category representing 62% of exports and 48% of imports of chapter HS 19 and includes "bread, pastry, cakes, biscuits and other bakers' wares."
- This sub-sector is also in a trade surplus at $344 million ($1.6 billion in exports and $1.3 billion in imports), although it has not always been in surplus.

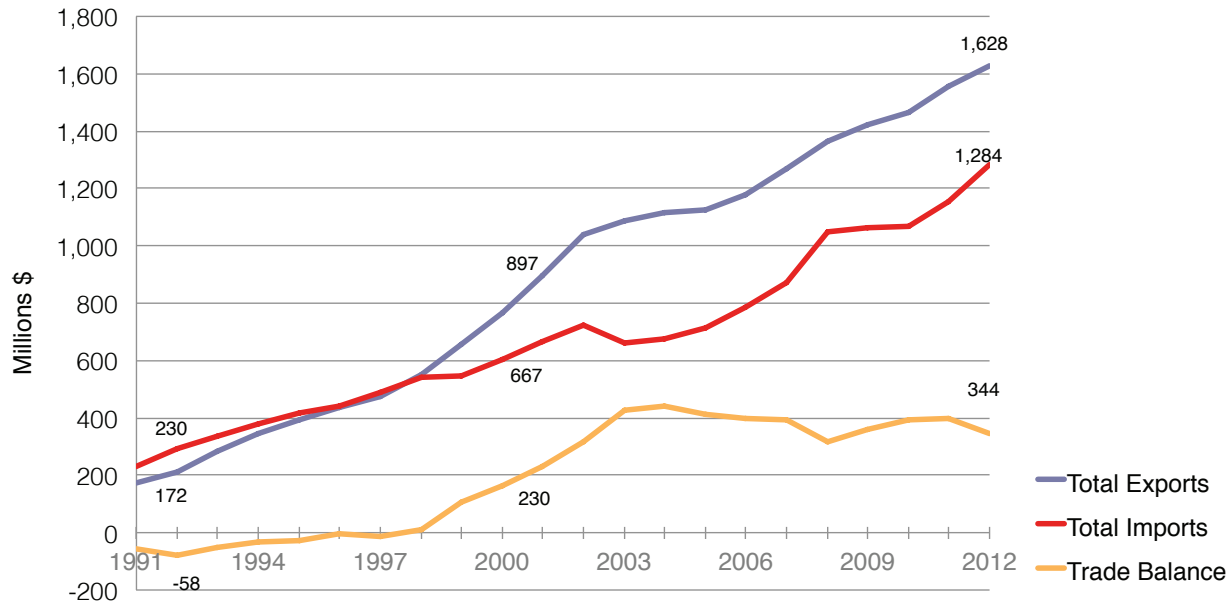

Figure 14: HS 1905 (Bread, Pastry, Cakes, Biscuits and Other Bakers' Wares) Trade Balance

- ☐ The trend reveals that the trade balance has been relatively constant since about 2003.
- ☐ Since 2002, growth in exports (5%) has been largely matched by growth in imports (6%). However, over the earlier period of 1991 to 2001 exports grew much more rapidly (18%) than imports (11%).
- ☐ This one category is made up of several six-level segments – and each has its own story to tell:
  - Crispbread: $4 million deficit. This is the smallest segment with exports of $7 million (which has grown sharply of late) and imports of $11 million.
  - Gingerbread: $29 million surplus
  - Sweet biscuits: $182 million surplus
  - Waffles and wafers: $241 million surplus
  - Toasted products: $18 million deficit
  - Bakers' ware, communion wafers, other products: $87 million deficit. This is the largest category, with exports totaling over $860 million and imports of nearly $950 million.

Context for considering HS 1905:

Status of bread & pastry: $344 million trade surplus

Consumers

- ☐ Canada's changing ethnic make-up influences product availability. The growing preference for a broad variety of breads expands, such as bagels, pitas and naan breads, as consumers seek out new eating experiences. In part, this contributes to consumer interest in premium/artisanal food products (not unique to bakery).

- Consumer interest in healthier foods creates product innovation opportunities, such as the use of "ancient" and "heritage" grains across many food categories (cereals, breads, granola bars, etc).
- Diet preferences create challenges and opportunities for the bread sector, particularly the significant adoption of gluten-free diets, which puts downward pressures on breads and pastas. The trend is driven by the desire by consumers to seek out healthy food options even though only a subset of these consumers is actually gluten-intolerant.

Global (economic) context

- Bakery historically has been a fresh-products business meaning production and sales were local. With improved shelf life on fresh products, distribution was extended to the regional level and in the last decade of the twentieth century frozen bakery products allowed portions of the industry to become continental and eventually global. This technology change occurred simultaneously with several positive economic tail winds: (1) rapidly rising incomes and interest in bakery products from emerging markets; (2) faster transit times and lower cost of door to door delivery anywhere in the world; (3) drive to lower cost at retail and food service; (4) duty-free access to the US and Mexico coupled with no significant non-tariff barriers at the US border; and (5) a weak Canadian dollar up until the last few years.

Market responses across the supply chain

- Bakeries in Canada benefit from flour produced from comparatively more consistent wheat (hard red spring wheat) than what is historically available in the US. This enables Canadian products to be innovative. Ensuring access to consistent wheat quality is important. However, the gluten strength of wheat used in flour for bread is declining[13] and this is putting new pressure on the profitability of the bread business. The influence of ethnic foods is a major market driver and facilitates the growth in bakery products, such as from the popularity of flat breads (e.g., pitas) as niche products become mainstream. This shift also presents opportunities (and rapid growth) for smaller bakeries specializing in a wide range of ethnic products.
- Consumer interest in gluten-free results in the introduction of new products and innovation across many food categories to meet demand. This "trend" appears to have entered mainstream products.
- Canada is a leader in the bread and biscuit industry, with both its major bakeries growing through significant industry consolidation, leading technology-adoption and investing abroad. One such company (Maple Leaf Foods) was a North American pioneer in the growing par bake business (as captured in the chart HS 190590) in the US and achieving a dominant market share in bagels in the UK's adoption of the latest industrial baking technologies sets an industry standard allowing artisanal bakery lines to be highly mechanized while ensuring high quality. Adopting leading technologies enables market leadership – a standard to be beat by competitors.
- Retailers respond to the consumer opportunity by offering various types of breads. Larger retail chains also drive change by utilizing par-baked bread. They seek to remove baking from the back of the store to reduce costs and complexity and offer greater variety to consumers.
- The major opportunities seem to be in bringing high quality frozen bakery products, specialty cereals, biscuits and crackers to all export markets and in replacing some of the ethnic, grain based products on the rise here. Important new demand is appearing in Mexico and Asia as both markets add wheat based products to their traditional corn and rice based respective diets.

Government policy & regulation

- Canadian food manufacturers benefit from lower sugar prices than what is available to Americans for sale into NAFTA. (See relevant comment in the profile on HS 1806.)

"What's happening to Vegetables, Fruits, Nuts, etc?" – Chapter: HS 20

A preliminary illustration of HS 200410.

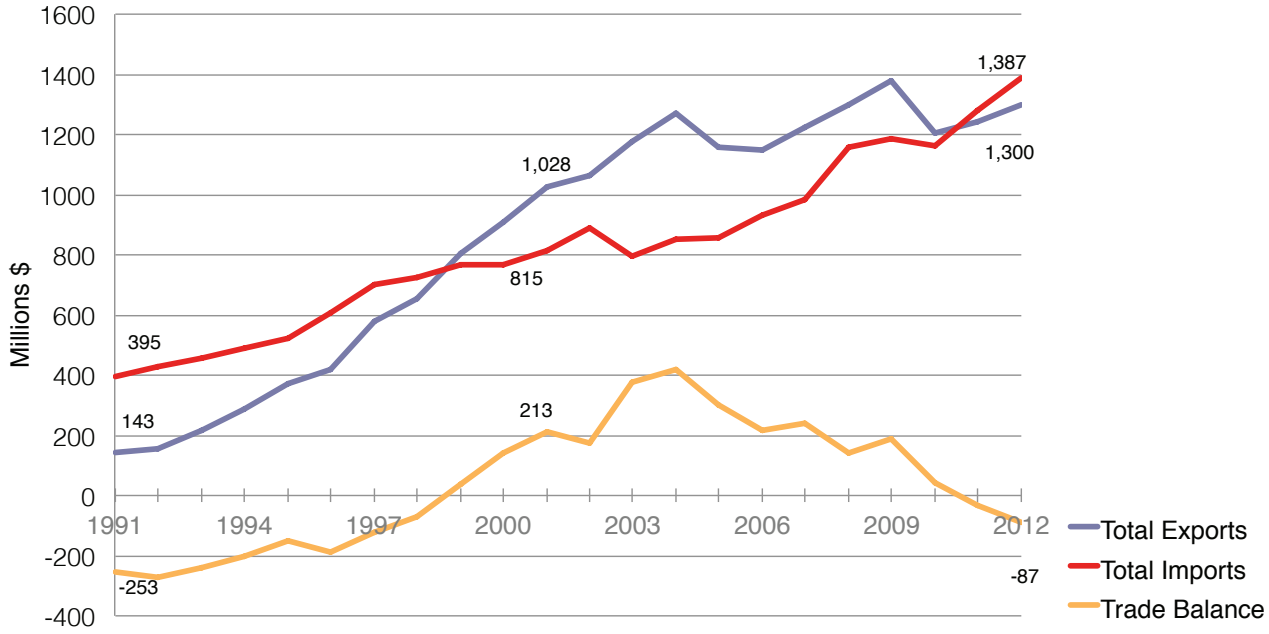

Figure 15: Chapter 20 (Preparations of Vegetables, Fruits, Nuts and Other Parts of Plants) Trade Balance

Observations

- Chapter 20 includes the preparation of vegetables, fruit and nuts, for a combined large category with $1.3 billion in exports and $1.4 billion in imports.
- All HS 20 sub-categories at the four-digit level are in deficit except HS 2004 frozen potatoes and vegetables, which has a trade surplus of $736 million.

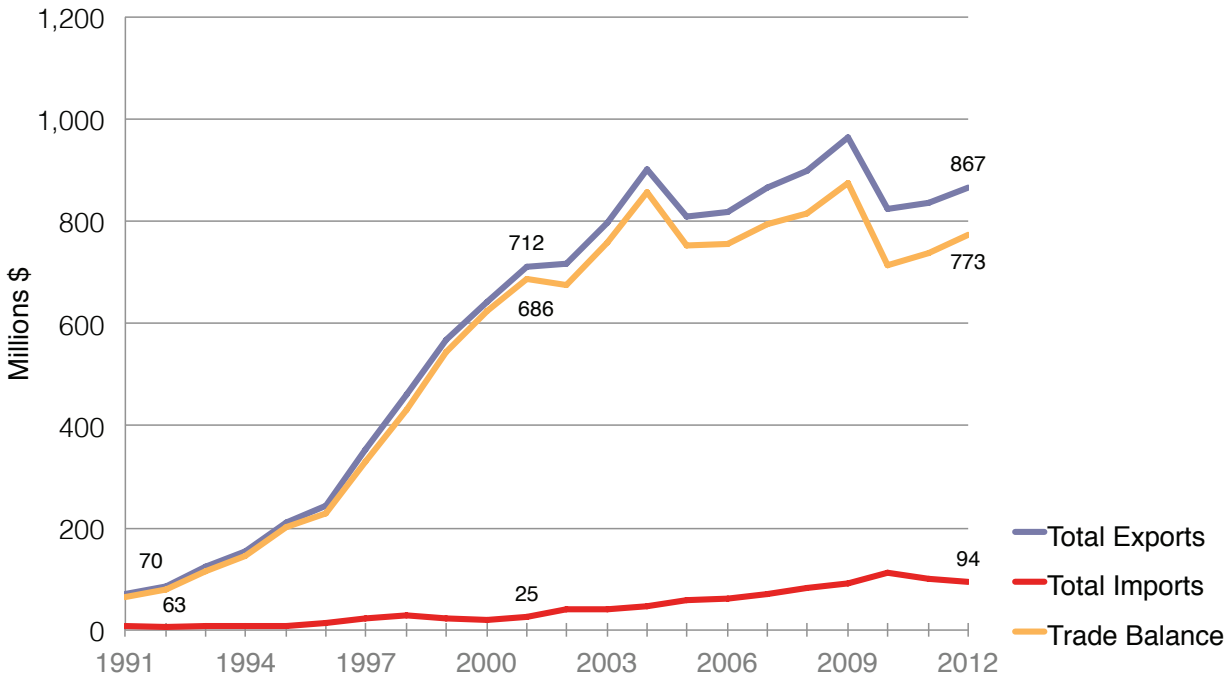

Figure 16: HS 200410 (Potatoes, Frozen-Prepared/Preserved Without Vinegar/Acetic Acid) Trade Balance

HS 200410

- Driven by exports, this category (frozen potatoes) had a trade surplus of $773 million in 2012. Exports of frozen potatoes represent two thirds of all Chapter 20 exports.
- Growth in the export of frozen potatoes is slowing. While exports increased at an average annual rate of 26% from 1991 to 2001, since 2002 exports have only grown by 2% annually. In the latter period, imports grew at an average annual rate of 9%.

Context for considering HS 200410

Status of frozen potatoes: $773 million trade surplus

Consumers

- International demand for French fries as part of worldwide diet change provided the opportunity for Canadian based processors to achieve global scale as French fry demand rose through the second half of the 20th century.

- The French fry's health image is an issue. Despite the nutritional value of potatoes (e.g., potatoes have more potassium than bananas), consumers generally hold a negative perception about the potato's nutritional benefits and the association with frying fats. Both fresh and frozen (French) fry potatoes show a decline in consumption as health-conscious consumers have limited the growth potential of French fries in the domestic market. (Promoting the nutritional benefits of potatoes may be (today) slowly changing consumer perceptions and helping to drive up consumer demand of potatoes, notably in the US.[14]) Innovation around health is now the marketing focus of the category with progress being made to measurably change both the reality and perception of fries as high fat food. Another factor determining the more recent decline in consumer demand is the changing nature of how consumers prepare meals and preference for less processed foods generally.[15]

Global (economic) context

- The spike in demand that developed in Asia and Latin America in the 1980s/1990s was so dramatic that McCain Foods (the largest French fry producer in the world) began opening plants as near as possible to key markets (and today operates 80 plants worldwide including plants in India and China). Land, transportation and refrigeration costs in both countries is much more expensive than North America and access to water is becoming increasingly problematic but high duties and tariffs shield the uncompetitive production cost in many emerging markets which handicaps the ability of Canadian-based processing to fully benefit from emerging market growth. Moreover, plants in additional originating countries are brought on stream to spread crop risk and service emerging markets closer by (e.g., Australian plants now heavily service Oceania and South East Asia while the Argentine plant services Mercosur countries where it has a significant duty advantage.) Canada's traditional exports to the US, Japan and the Caribbean all face serious headwinds with the strengthening Canadian dollar, particularly as French fry consumption flattens at the same time in Japan and slows in the US and Caribbean.

Market responses across the supply chain

- Canada has an ideal climate for high dry-matter, low-disease-risk potato production. Frozen potatoes are remarkably strong as potatoes do not transport well and require cold conditions to preserve quality as well as major capital investment in sophisticated storage for processing throughout the year.
- This production advantage combined with an international market strategy for French fries creates a major growth opportunity for Canadian potatoes. Exports accelerate particularly over the 1990s. Relying on domestic producers, one large processor exports two thirds of the potatoes it sources from Canada to manufacture French fries.[16] (Processing is a critical channel to market for primary producers since processed potatoes account for nearly 50% of total potato consumption.)
- French fry demand (and market growth) is driven by innovation — the basis of Canada's and McCain's success. This company started making frozen French fries over 50 years ago and provided a consumer meal experience: "[McCain] gave people the opportunity to enjoy a restaurant experience prepared in their own homes."[17] McCain is convinced it could market healthy foods that consumers would appreciate. McCain (UK) develops an oven-made French fry from two ingredients: potatoes and sunflower oil. The company markets this product, and educated consumers about where the product came from (traceability and sustainability) and was successful.

- With an excellent production base, one Canadian company builds scale plants across Canada and later abroad to control approximately a third of the world's market share. Another company expands from its Maritime base to process frozen potato products in Alberta. ConAgra Foods, the other large international frozen potato company, builds a scale processing plant Canada. Expanding potato production (new acreage) in the west represents a fundamental shift in the structure of the potato industry (to satisfy the demand for processed potatoes) and is facilitated by the availability of suitable land, availability of water and the investment was made in machinery and storage facilities; moreover, the west gives processors more competitive access to the western US markets[18] and Asia.
- This significant capital invested throughout the value chain allows Canada to take full advantage of emerging market opportunities, despite declining per capita consumption in Canada and the US. Nevertheless, some 79% of total French fry exports go to the US.[19]

Government policy & regulation

- Canadian agricultural exports continue to face foreign tariffs (such as to the EU) where tariffs average nearly 14% and potato goods (such as French fries and potato flakes) face a 17.6% tariff. (However, under CETA, these tariffs will be eliminated.) Tariff sensitivity makes FTAs with Japan and other emerging Asian markets particularly important.
- Provincial potato marketing boards set prices for potatoes on an annual basis. Boards also promote potatoes to help drive up consumer interest and consumption.

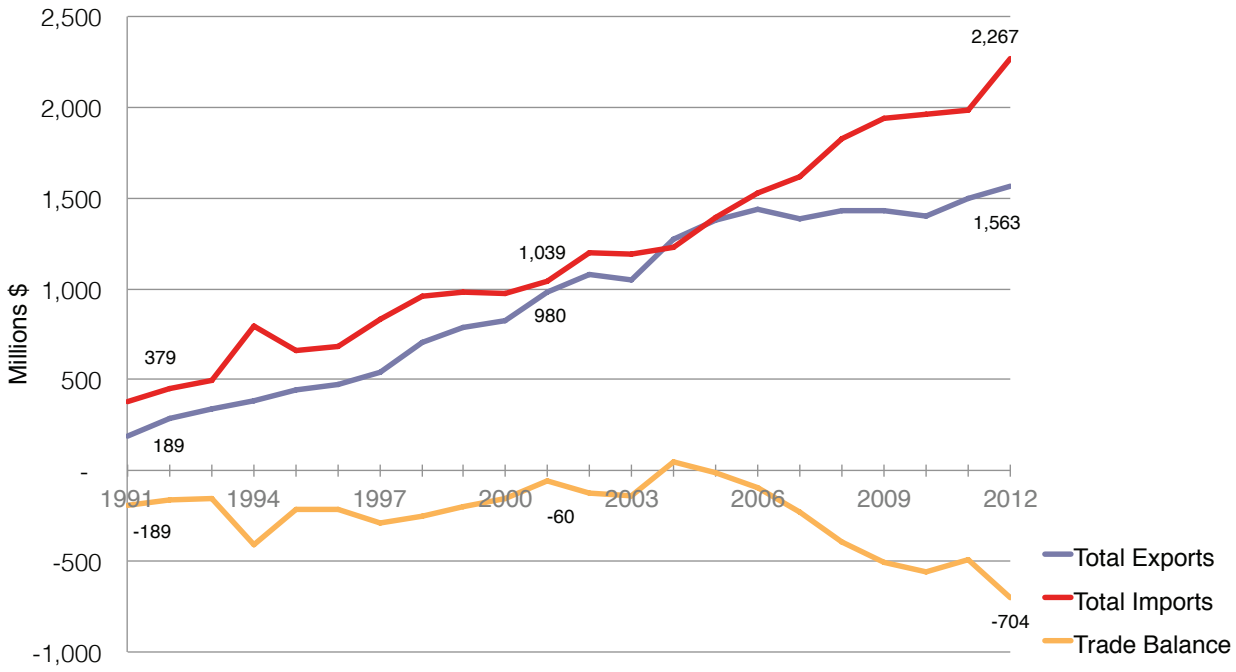

Figure 17: Chapter 21 (Miscellaneous Edible Preparations) Trade Balance

"What's happening to Sauces, Condiments, etc.?" – Chapter: HS 21

A preliminary illustration of HS 210320.

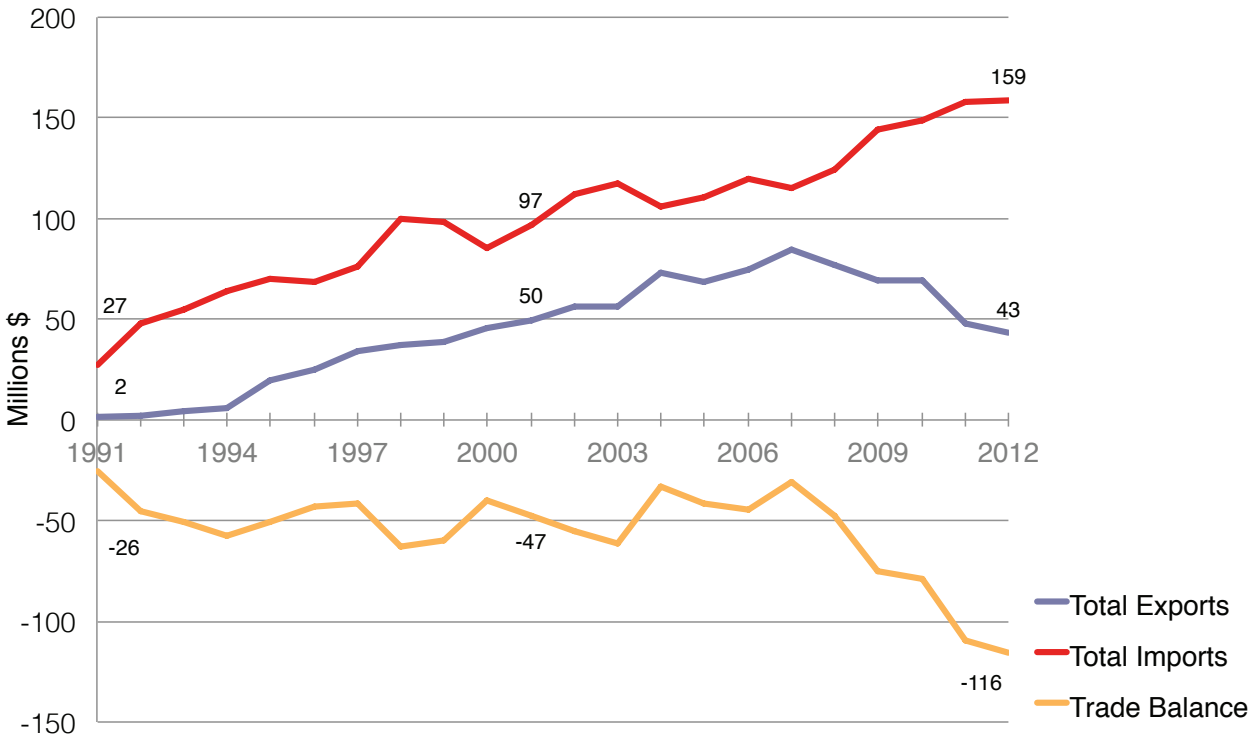

Figure 18: HS 210320 (Tomato Ketchup and Other Tomato Sauces) Trade Balance

Observations

- Chapter 21 contains miscellaneous edible preparations, such as coffee and tea extracts, yeasts, baking powders, sauces, condiments, prepared mustard, soups, ice cream and protein concentrates, etc.
- Imports are expanding much faster than exports, causing the trade deficit in HS 21 to rise by $300 million in the last 5 years. Imports represent $2.3 billion an exports are $1.6 billion.
- Some of the increased imports have come in HS 2103 sauces and condiments, notably tomato ketchup and tomato sauces, as portrayed below.

HS 210320

- The tomato ketchup and tomato sauces category has witnessed rising imports and falling exports resulting in a trade deficit of $116 million.

Context for considering HS 2103

Status of tomato ketchup: $116 million trade deficit

Consumers

- ☐ A growing consumer preference for glass jars over canned tomato sauce left a key Canadian company and others in Canada without this packing technology and exposure to rising imports.
- ☐ While Canadians are big consumers of ketchup, in the late 1990s salsa competes with ketchup; US consumers start to buy more salsa than ketchup. Advertising is used to promote the health/cancer fighting benefits of tomatoes (lycopene). However, tomato paste is treated by existing manufacturers largely as a commodity, which limits the ability to differentiate this product.

Global (economic) context

- ☐ Rising hydro costs in Ontario have been significant; one processor records a tripling of its hydro cost.

Market responses across the supply chain

- ☐ One major and well-known US company occupies a significant market share in ketchup. It sources a considerable volume of tomatoes for its Canadian plant in Leamington, Ont., from the Canadian market. That company (Heinz) has recently announced the closure of this plant (November 2013).
- ☐ Production of tomatoes can be subject to the vagaries of weather (as with any crop), which can reduce yield thus prompting processors to source tomatoes from the US (California). On those occasions, and for other lower-cost reasons, imports increase. Many tomato sauces require blended sourcing to meet production requirements so sourcing product from outside Canada is habitual.
- ☐ Tomato pricing is governed by a marketing board, which creates a cost differential in favour of US-sourced tomatoes.
- ☐ The largest processor in its category lost the export mandate for a major private label product line to its US-based parent, which chooses to fill line capacity in the US. This alone represents much of the export decline.
- ☐ Canadian processor investment in new manufacturing technology is essential to help manage costs because, as tomato paste/sauces are largely commodity in nature, remaining competitiveness is largely based on cost-reduction with limited scope for new products to generate new revenues.

Government policy & regulation

- ☐ Environmental requirements, such as dealing with residual output from the manufacturing process, become increasingly costly.
- ☐ American processors do not have marketing boards to negotiate prices, unlike in Canada. Marketing boards do not generally have product or market development mandates and, therefore, have less incentive from the production side to be more competitive or to differentiate their offering.
- ☐ Harmonized container size regulations with the US would have eliminated a key point of differentiation with the US.

- "Product of Canada," which requires 98% Canadian product, often does not work for tomato sauces because of the frequent need to blend ingredients, such as from the US. One manufacturer foregoes referencing its Canadian sourcing altogether for this reason yet this company supplies most of its product to the domestic market.

"What's happening to Beer & Wine?" – Chapter: HS 22

A preliminary illustration of HS 2203 & 2204.

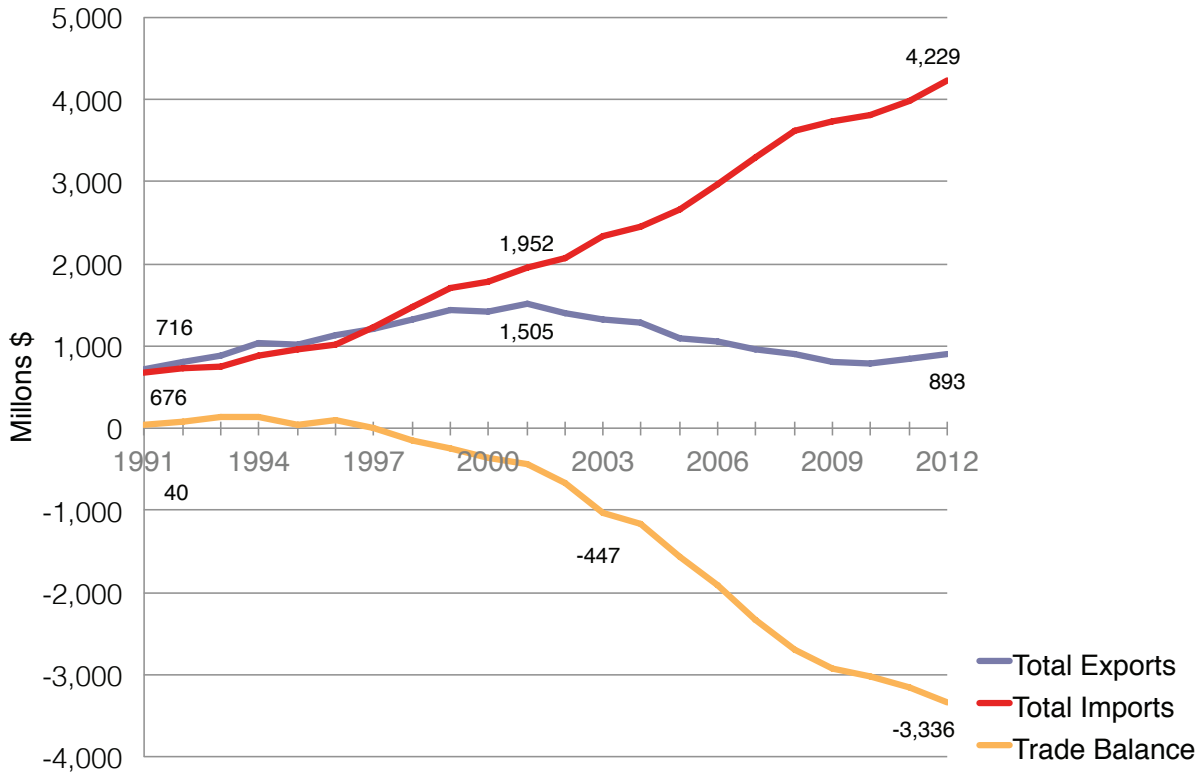

Figure 19: Chapter 22 (Beverages, Spirits and Vinegar) Trade Balance

Observations

- Chapter HS 22 includes all beverages, spirits and vinegar. This is the largest category in secondary processing and the chapter has a negative trade balance of some $3.3 billion. (CAPI took ethanol out of scope for its analysis.)
- Overall, the in scope total exports are nearly $900 million and total imports are over $4.2 billion. Its largest item by far is wine followed by beer.

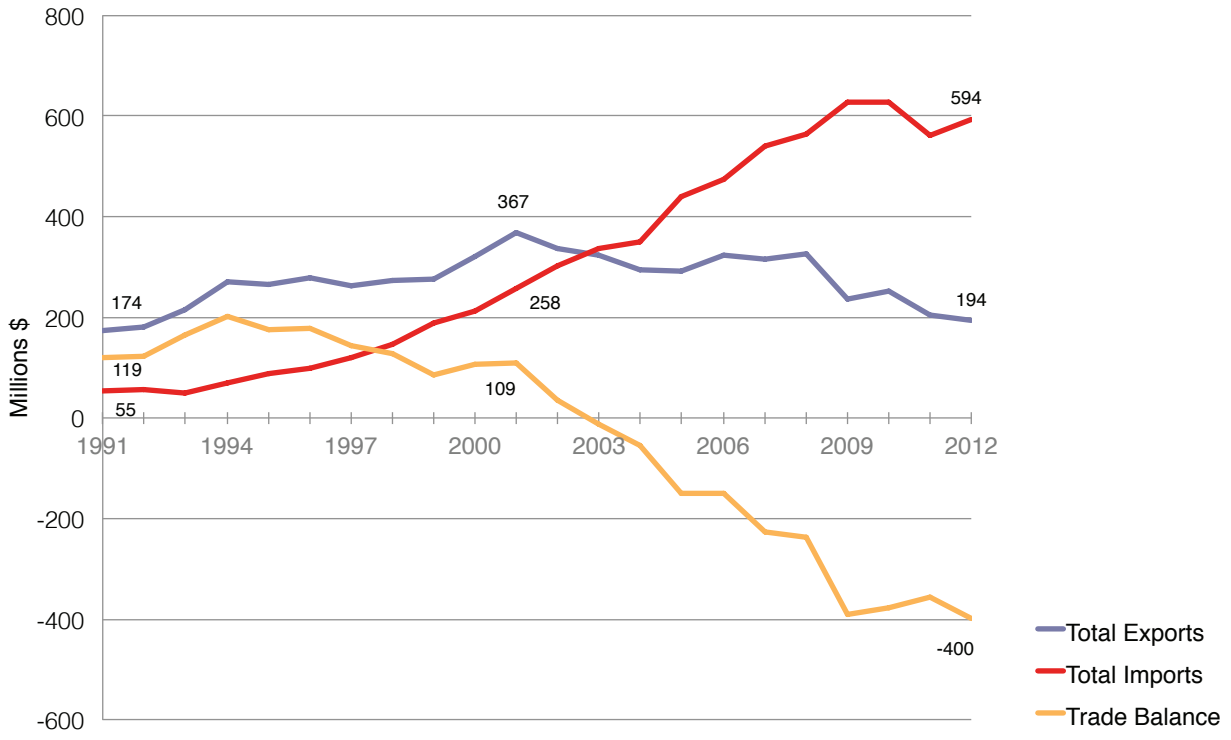

Figure 20: HS 220300 (Beer Made from Malt) Trade Balance

Chapter 2203: Beer

- Canada has had a declining trade balance in beer since 1994 and a sustained trade deficit in beer since around 2003. The current trade deficit sits at $400 million.
- Imports have risen steadily since the early 1990s to nearly $600 million. Exports have eased downward to nearly $200 million after peaking in 2001.
- Canadian exports of beer have contracted at an average annual rate of over 5% since 2002, while imports have risen by 7% annually.
- Canada continues to have a positive trade balance with the US, with exports valued at $59 million (2010).

Context for considering HS 2203[9]

Status of beer: $400 million trade deficit

Consumers

- Domestic beer production in real terms (constant dollars) has declined on average by 1% a year over the last 20 years. Aging demographics has contributed to lower beer consumption (the highest beer consumption occurred in the early 1980s when baby boomers were in their peak consumption period). These same baby boomers are gravitating toward premium products imported from EU and elsewhere; 60% of imported beer is from the EU.

- On a per-capita basis, beer sales amounted to 80.3 litres per person in 2012, down from 84.9 litres in 2002. In contrast, during the same period, beer sales, in terms of dollar value, increased by almost $30 to $317 per person.[21] While consumers are shifting to wine, the rise of micro- or craft breweries has increased the number of domestic firms, reflecting a strong consumer demand in local, specialty (including organic) and premium beer – with some registering impressive year over year double-digit growth.[22] Two consumer market trends are evident: this higher-end market and more price-conscious consumer choices (see below).

Global (economic) context

- The recent recession (2008) saw consumers moving to discount domestic beer and away from more expensive imported product while the appreciation of the Canadian dollar and recession helped to soften demand for Canadian beer exports.
- Energy and water costs are critical inputs. Rising costs could offset productivity gains in the future.
- 99% of beer exports are to the US. Global beer multinationals don't export from Canada (i.e., Inbev has plants in the EU, Latin America and Asia).
- Transportation costs relative to the price of beer make it worthwhile to export premium brands.

Market responses across the supply chain

- Canadian brewers use approximately 30% of the malting barley produced in Canada. Ingredient quality becomes more "visible" to the consumer as micro brewers emphasize source and quality; it is a challenge to source locally grown ingredients. Beer is best when it is fresh so there is an inherent advantage in local product, small batches and good stock turnover. There is growth in micro breweries but this segment of the industry is small.
- Following the removal of import duties on all foreign beer in January 2000, the market share of the Canadian market held by foreign brands has increased significantly. The three largest breweries are now foreign-owned: Labatt by Anheuser-Busch InBev (Belgium) since 1995; Molson by Molson Coors (USA), merged in 2005; and Sleeman by Sapporo International (Japan) since 2006.
- Since transportation is extremely expensive, American breweries found that license agreements were the most economical and efficient way to get their products into Canada. The high quality and availability of Canadian malting barley contributed to the ability of Canadian-based breweries to secure licensing agreements with US and other breweries to produce their brands in Canada. This has been a key factor in maintaining brewery capacity (beer production) and high-paying jobs in Canada over the past decade when domestic beer consumption has been flat.
- The four largest firms accounted for 90% of production value; the eight largest accounted for 94% (latest year data available: Statscan, 2009).
- Export intensity has declined from a high of 10% in 2001 to a low of 4% in 2012.
- Based on Statistics Canada sales of alcoholic beverages of liquor authorities, wineries and breweries, by volume and value,[23] beer consumption in Canada is still very much domestic-oriented; however, imports are gaining ground from 3% of sales volumes in the early 1990s to 14% in the last three years. This is consistent with the import penetration data.

- Based on the above, and given the domestic orientation of the beer industry, the trade figures portray a more negative situation than the overall industry situation. Although imports are rising, some 85% of beer is produced in Canada. In Ontario, the Beer Store is a major outlet for beer sales; it charges micro brewers significant fees to distribute their brands; micro brewers also sell their beer through LCBO.
- Productivity change was vital for breweries to cope with this far more competitive marketplace (due to market liberalization). From 1999 to 2009, employment decreased 20.3% to just over 8,300 people. During the same period, output per production worker increased nearly 45% from $386,000 to $558,000.

Government policy & regulation

- The removal of import taxes (2002) appears to be a major catalyst for the increase in beer imports. Excise tax relief was also put into place to assist craft breweries.
- Beer (and alcohol in general) is highly regulated but trade liberalization created significant changes. The Agreement on Internal Trade within Canada (1994) resulted in a major restructuring and consolidation of production and scale, although inter-provincial barriers remain.
- The signing of the Canada-US Free Trade Agreement did not result in the anticipated onslaught of larger US breweries exporting from across the border. Canadian brewers signed license agreements with US brewers and, to a lesser extent, with overseas brewers to produce and market leading foreign brands in Canada using domestic ingredients and maintaining jobs in this country.

Chapter 2204: Wine

- It should be no surprise that Canada is a net importer of wine. Wine imports have been steadily rising for a total of nearly $2 billion. HS 2204 is comprised of four different categories of wine with the largest category being wine in less than 2-litre containers (HS 220421) which had a $1.7 billion deficit in 2012. Adding in the other three types of wine results in a deficit of over $1.9 billion.
- While the volume is small, exports of wine have grown at an average rate of nearly 12% since 2002 while imports have grown by some 7%. However, even though exports are growing faster, exports are dwarfed by imports.

Context for considering HS 2204:

Status of wine: $1.7 billion trade deficit

Consumers

- Wine consumption is generally increasing and discerning consumers are turning to premium wines worldwide, especially red wine (which reflects demographic changes, age and income) as well as consumers seeking out new taste experiences.
- The share of imported red wine in 2012 was unchanged compared with 2011 at 76% of all red wines sold in Canada. The market share of imported white wine was smaller at 63%.

- On a per-capita basis, wine sales amounted to 16.9 litres or $225 per person in 2012, an increase of 4.3 litres per person from 2002.[24]
- While Canada's ice wine has enjoyed international success, about half of Canada's wine exports now consist of table wines and primarily to Asia and the US.
- In Canada, wine-tasting tourism drives consumers to fulfill that desire for new wine/food experiences.

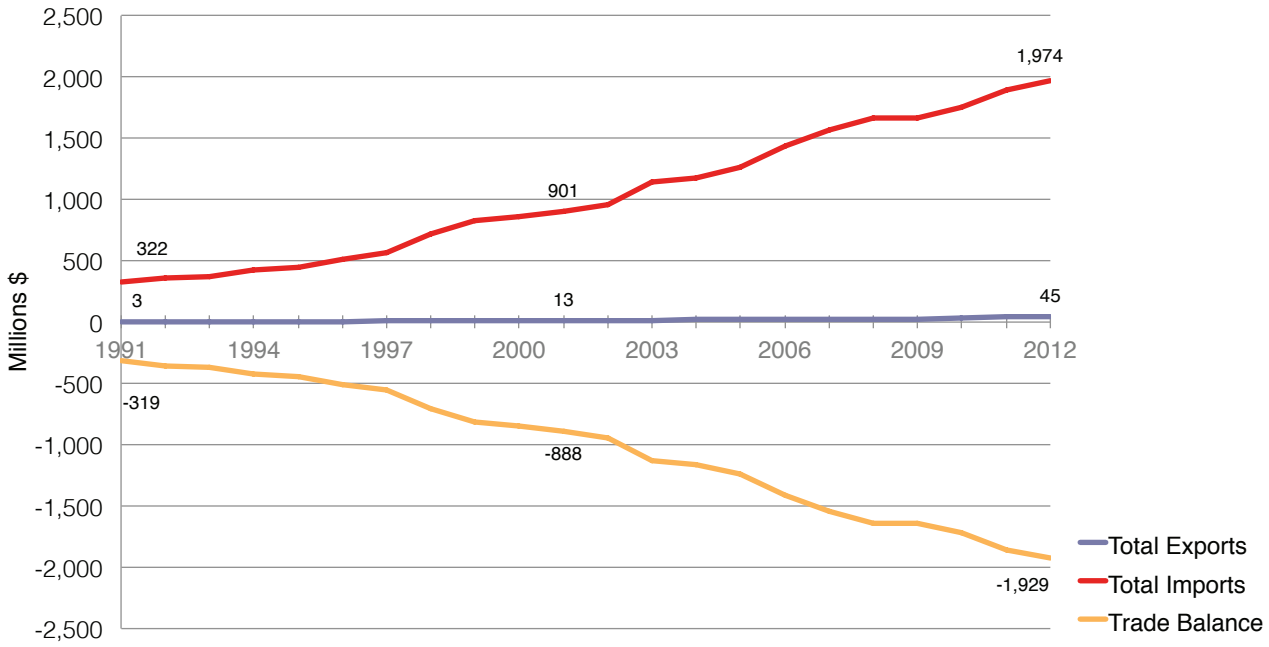

Figure 22: HS 2204 (Grape Wines (Non-Aromatic) and Grape Must) Trade Balance

Global (economic) context

- The appreciation of the Canadian dollar in the mid- to late 2000s negatively affected Canadian wine exports to the US and had an impact on US visitors to Canadian wineries (wine tourism).
- In terms of volume, Ice wine makes up a small portion of Canadian wine exports. It provides 45% of Canada's wine export revenue while only accounting for 1.2% of Canada's wine export volume (2012).
- Excess supply of wine in global market drives prices down and increases competition with other wines.

Market responses across the supply chain

- Wine consumption is growing in Canada but the capacity to satisfy Canada's domestic market cannot be met exclusively by Canadian production, despite the growth in production in several provinces. In Ontario, alone, domestic wine producers supply about a third of the market (in value) and is keeping a proportional share of the growing domestic market. This increased to roughly 70% by 2001, a ratio roughly maintained since then. However, this does not reflect the wine imported for blending in Canada, and then sold as Canadian wines. The apparent import penetration ratio suggests that the import ratio has grown from 58% in the early 1990s to 73% in 2012.

- In real terms (constant dollars) the Canadian wine industry production has remained fairly flat over the last decade. 30% of wines sold in Canada are domestically produced, but it includes blended wines. While this is not revealed in the trade balance data, the continuing rise and success of wine imports forms a backdrop to consider certain issues facing Canadian vintners.
- About one quarter of domestic wines are 100% Canadian wine made from 100% Canadian grapes (Vintners Quality Alliance Ontario and BC mainly). Canadian wineries emphasize the experience of "local" and "quality/premium" to drive business to domestic wine, including this VQA designation.
- The largest four firms accounted for 73% of production value (2009 is the latest year Statscan data is available); eight firms make up some 78% of production.
- The cultivated area for grapes has grown by 17% in the last 10 years in Canada, from 10,564 hectares in 2002 to 12,334 hectares in 2012. (This includes both table grapes and wine grapes, but consists mainly in wine grapes).
- Canada is a small-scale wine producer relative to global wine producers. Canada has some 17,000 acres of grapes compared, for example, with France with three million acres and California with some 900,000 acres. Given the small size of Canada's wine sector, relatively limited exports and historic sourcing of wine imports to meet Canada's domestic market, the trade deficit in wine should be of no surprise and may not appear to be immediately "relevant". (Wine exports accounted for less than 2.5% of production in 2006.[25]) However, domestic producers are subject to constraints not shared by competitors who export to Ontario. Notably, Ontario's producers have a regulated market for their primary input, a marketing board for grapes while British Columbia's grape market is not regulated. Cost competitiveness is an issue when compared with the scale of global competitors; pressures to reduce bulk wine prices continue for many wine production countries,[26] which suggests that Canada's comparative cost-competitiveness is relevant notwithstanding the size of Canada's wine sector.
- Many wineries are vertically integrated (production and processing) and a number have affiliated restaurants to cater to the wine tourism market. This designation underscores the importance of defining and labeling the consumer "value proposition."
- Due to small volumes of production, liquor boards are reluctant to stock Canadian wines that may run out of stock – Canadian wines can be hard to source due to lack of availability in liquor boards and restaurants.
- Price/volume issue: small Canadian wineries with small volumes need to charge high prices to cover their costs (especially in BC where land prices are high).

Government policy & regulation

- Marketing boards regulate grape prices and distribution is regulated in Ontario (through the LCBO) which dominates retail distribution, although there are some off-site wine stores permitted to sell wine. Quebec's wine retailers include depanneurs and grocery stores but placement in those retail locations is allowed only for wine that is bottled in Quebec. This contributes to the trend of importing wine in bulk. Wine (and other alcoholic beverages) is heavily taxed.

- In response to the Canada-US free trade agreement, the sector made dramatic changes to be more competitive; inferior grapes were pulled out of production and new grape varieties were planted. Quality increased as did the value of wine but market share declined.
- New rules (June 2012) remove the federal barrier prohibiting individuals from moving wine from one province to another when it is for personal use.
- Excise taxes on domestic products are equal to the import duties of foreign products. Canadian wines made with 100% Canadian agricultural product have enjoyed an excise exemption since 2006.
- Bulk wine, imported principally for blending and bottling, amounted to approximately 92.7 million litres in 2011. In British Columbia, the average content of British Columbia grapes in blended wine (known as International Canadian Blends) wines is 11%, whereas in Ontario, a minimum of 25% Ontario grape content is required by regulation in ICB wines.

5. Concluding comments: What can be done to improve our competitiveness?

This report reviewed selected HS illustrations as a basis to profile the factors that can shape a sector's competitiveness prospects. The report organized these factors under four broad drivers of change (introduced in section 3 and reproduced below): consumer trends, the global (economic) context, and the supply chain and government policy.

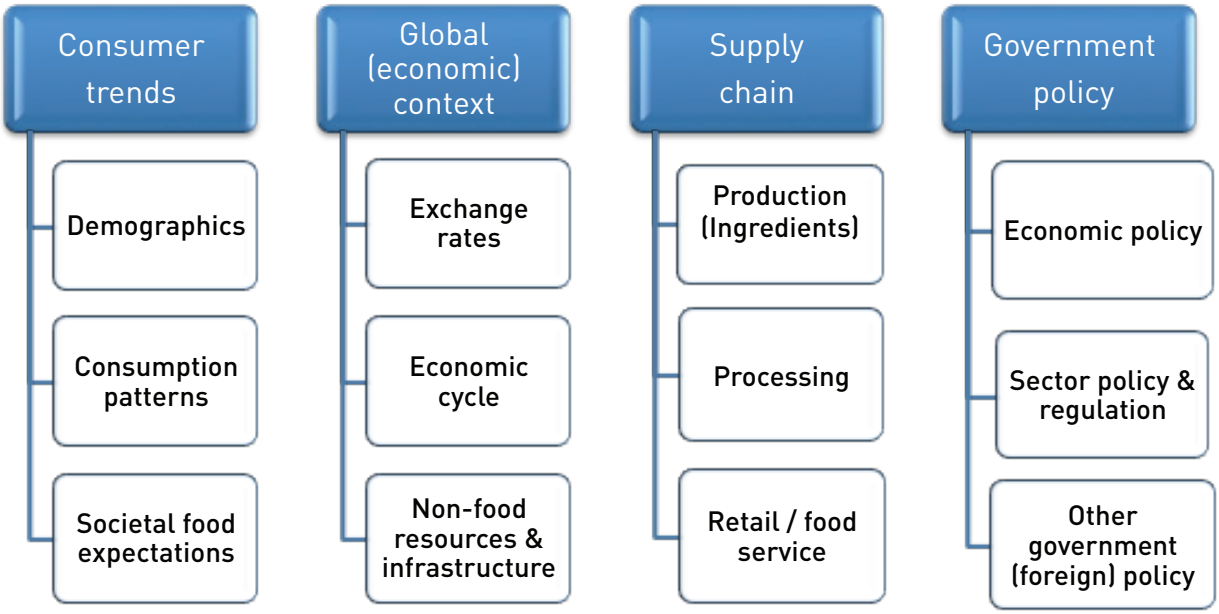

Figure 23: Drivers of Change

Among many possible questions to raise, the HS stories elevate several common questions across the sectors:

a. How can Canada profitably manufacture higher-value foods?

b. How can we truly differentiate ourselves from competitors?

c. Why can't we better translate our ingredient production/commodity inputs into higher value food products?

d. How can manufacturers achieve appropriate scale?

e. What stands in the way or can enable investment and growth?

It is clear from the presented HS stories that being competitive requires being really good at addressing multiple factors at once across all four drivers. The "drivers of success" diagram can, therefore, actually be portrayed as a "formula of success":

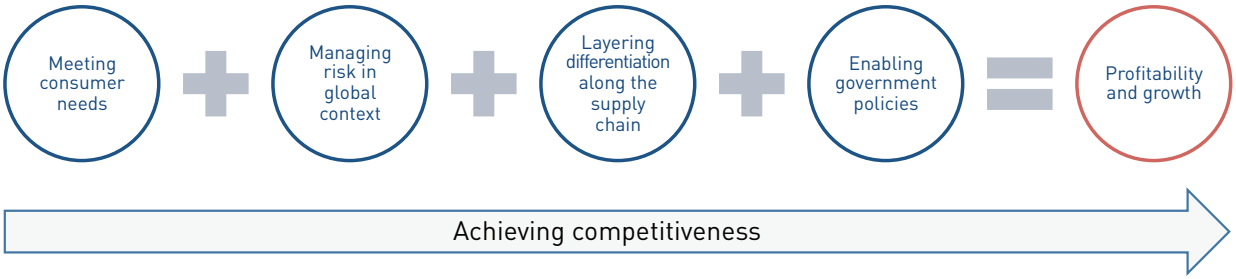

Figure 24: Formula of Success

As revealed in the HS illustrations, how companies/sectors effectively manage and respond to the interplay of these drivers can shape their competitiveness. The following offers a preliminary assessment as a basis for dialogue:

A commentary on strategy and success

The overall assessment of these illustrations across several HS chapters suggests that, for Canadian processors, "differentiation" is a means to offset the scale advantage held by many foreign competitors. If companies do seek scale advantage, then relevant differentiation enables companies to reach it. But simply having "access to scale," such as through trade agreements (notably through NAFTA), does not appear to be a sufficient pathway for growth. Determining the relevant point of differentiation, then, is a critical step in formulating a growth strategy. The robustness of such a strategy also seems to depend on securing multiple points of differentiation, such as in the ingredient supply, investment in technology, in partnerships and in the final food product, among other possibilities all across the four drivers of change. This is the dialogue that must occur.

A "commodity mindset," which is understandably shaped by our abundance of raw material, vastness of the land and smallness of local market, undermines the ability to differentiate. Some factors can't be controlled, such as exchange rates and commodity price fluctuations. As companies consider how they make their strategic and investment decisions, the "open for business" climate in Canada (across all levels of government) plays a role, too. A commentary on these points is made below.

"Scale resilience"

A commonly held assumption is that the Canada-US Free Trade Agreement, and subsequently NAFTA, was to give Canadian firms "access to scale" to compete from Canada – the ability to give Canadian firms a pathway for growth and competitiveness. However, it appears that one result was that many multinationals pulled out of Canada and relocated to the US, where scale and capacity already existed.[10] In many cases, what stayed in Canada were essentially sales/marketing and distribution facilities (which in some cases actually expanded). What also stayed in Canada were certain production facilities that were unique to Canada. That is, those companies stayed that generally had an export footprint by relying on specialized production assets, packaging equipment and specialized or highly competitive raw material ingredients. For the most part, the reason to stay in Canada and serve the Canadian marketplace was much reduced.

"Differentiation"

Building for scale requires having the right value proposition or differentiation-focus. Canadian food/beverage companies have been successful in the US and globally when they deliver better products often with remarkable value propositions. Many of these successes lead back to new product developments, productivity changes and investments in cutting-edge technologies that result in specifically meeting supply chain customer and, ultimately, consumer needs. Canada's baking and frozen potato industries exhibit many of these characteristics. Differentiation must be relevant to the consumer. Consumers want variety – this came through repeatedly in the above illustrations as a key driver.

We are also noting that the more this differentiation is connected to primary production, the better. It simply makes it hard for competitors elsewhere to copy. Canada's land, water and winter advantage allows for (in some cases) higher quality and lower input production. For example, we produce some of the best French fries in the world with excellent dry-matter content/low-residue potatoes.

Achieving differentiation can be challenging when the supply chain is largely geared to deliver a commodity product, although this may be changing and varies by segment. Meaningful partnerships among processors and producers are required so we can better use our strategic advantage on raw materials and ingredients as relevant differentiators in winning new market opportunities in processed food. (This may also allow smaller players to scale up.) Of course, many food products can be made using least-cost raw materials and can differentiate on price. But that has proved increasingly challenging. A key question here is how can key Canadian raw materials be sourced at least at a cost equivalent to what is available to our US processed food competitors?

"Open for business climate"

Getting the "open for business" climate right is a priority. This is often characterized by having the right tax structure in place, manageable regulatory burdens, competitive labour costs, access to good transportation, welcoming municipalities (which can include incentives to build/expand plants), competitively-priced inputs, both food-related and non-food (such as hydro), among other factors.[28] But despite having a favourable tax environment, and implementing other strategies to improve the business climate, Canada witnessed rising processed food imports and manufacturing plant closures. The cost differential vis-à-vis American manufacturing firms can create a cumulative burden on processors operating in Canada.[29]

Many multinational food companies operating in Canada have US head offices. Investment decisions are often made south of the border. Other than serving the small Canadian market, the ability to attract capital from the corporate parent (and compete for that capital within the corporate family) and invest in Canada is challenging unless there is a compelling business case to do so. The closure of the Heinz ketchup plant reveals the consequences of losing the "operational mandate" to a sister company outside the country.

Yet, the appeal to locate or expand in Canada is apparent, as the chocolate example portrays. While sugar pricing was a factor, Ferrero was attracted to Canada because of the attractiveness of the quality of life and a high-quality labour force. A greater understanding of how Canada's uniqueness can be shaped by factors that we have not fully explored is important. Other CAPI work will help advance this somewhat (i.e., our project relating to company case studies). Canada's demographic mix (and notably our rapidly expanding Asian population) is a factor that we have not fully appreciated in terms of helping Canada export. Other points need to be considered.

It is apparent that, in addition to getting the business climate right (the economic/cost side), we also need to include the importance and quality of ingredient supply and how ingredients – and the processed product – are evolving to meet the needs of a changing consumer and marketplace (the revenue side). We see the latter being driven by differentiation.

What now?

The trade balance situation facing each category should be a catalyst to prompt stakeholders to question what is happening in key food/beverage categories. There are many "drivers of change" that, in our view, determine the competitiveness of the sector. This work presents a framework for holding such dialogues.

6. Appendix

Many of the products examined experienced a decline in their trade balance from 2004 to 2012. The top 20 negative changes in the trade deficit over this period are shown below.

Top 20 Trade Balance Declines	2004	2012	Change
		$ millions	
HS 220421 - GRAPE WINES - OTHER THAN SPARKLING (INCLUDING FORTIFIED) - 2 LITRES OR LESS	-1,023	-1,718	-695
HS 210690 - FOOD PREPARATIONS NES (INCLUDING FLAVOURING POWDERS, SWEETS, GUMS AND THE LIKE)	-33	-416	-383
HS 220300 - BEER MADE FROM MALT	-54	-400	-346
HS 190590 - BAKERS' WARE, COMMUNION WAFERS, EMPTY CACHETS FOR PHARMACEUTICAL USE AND SIMILAR PRODUCTS	209	-87	-296
HS 220210 - WATERS (INCLUDING MINERAL AND AERATED) - CONTAINING SUGAR, OR OTHERWISE SWEETENED	56	-208	-263
HS 220830 - WHISKIES	333	116	-216
HS 220290 - NON-ALCOHOLIC BEVERAGES NES (EXCLUDING FRUIT OR VEGETABLE JUICES)	-125	-326	-201
HS 220110 - MINERAL AND AERATED WATERS - WITHOUT SUGAR, SWEETENING OR FLAVOURING	122	-72	-194
HS 160100 - SAUSAGES AND SIMILAR PRODUCTS OF MEAT, MEAT OFFAL OR BLOOD; FOOD PREPARATIONS OF THESE PRODUCTS	-52	-169	-116
HS 160250 - BOVINE MEAT AND MEAT OFFAL (EXCLUDING LIVERS) NES - PREPARED OR PRESERVED	-10	-125	-115
HS 180631 - CHOCOLATE/COCOA PREPARATIONS (<2KG) - FILLED BLOCKS	157	42	-115
HS 190230 - OTHER PASTA NES (WITH OR WITHOUT MEAT)	-72	-182	-110
HS 210111 - COFFEE EXTRACTS, ESSENCES AND CONCENTRATES	-1	-104	-102
HS 160249 - SWINE MEAT AND MEAT OFFAL EXCLUDING LIVERS) NES (INCLUDING MIXTURES) - PREPARED OR PRESERVED	-38	-124	-86
HS 230990 - ANIMAL FEED PREPARATIONS NES (INCL SUPPLEMENTED WITH ANTIBIOTICS AND/ VITAMINS)	37	-47	-84
HS 200410 - POTATOES, FROZEN - PREPARED/PRESERVED WITHOUT VINEGAR/ACETIC ACID	856	773	-83
HS 210320 - TOMATO KETCHUP AND OTHER TOMATO SAUCES	-33	-116	-83
HS 160241 - HAMS AND CUTS THEREOF OF SWINE - PREPARED OR PRESERVED	90	13	-78
HS 210390 - SAUCES AND PREPARATIONS NES AND MIXED CONDIMENTS OR SEASONINGS	-33	-109	-76
HS 190190 - OTHER FOOD PREPARATIONS OF FLOUR, MEAL, STARCH, MILK AND MALT EXTRACTS (EXCL COCOA)	46	-27	-73

Some products at the six-digit level experienced an improvement in their trade balance over the 2004 to 2012 period. These are shown below. Waffles and wafers (HS 190532) experienced the largest growth in its trade balance, $157 million, followed by maple sugar and maple syrup (HS 170220) at $92 million.

Top 20 Trade Balance Improvements	2004	2012	Change
		$ millions	
HS 190532 - WAFFLES AND WAFERS	84	241	157
HS 170220 - MAPLE SUGAR AND MAPLE SYRUP	149	241	92
HS 180100 - COCOA BEANS, WHOLE OR BROKEN, RAW OR ROASTED	-201	-153	48
HS 220870 - LIQUEURS AND CORDIALS	-110	-70	39
HS 180400 - COCOA BUTTER, FAT AND OIL	-114	-93	22
HS 210420 - HOMOGENIZED COMPOSITE FOOD PREPARATIONS PUT UP FOR RETAIL SALE	-1	21	21
HS 190520 - GINGERBREAD AND THE LIKE	10	29	19
HS 170199 - REFINED SUGAR NES	-5	14	19
HS 190531 - SWEET BISCUITS	165	182	17
HS 180310 - COCOA PASTE, NOT DEFATTED	-47	-31	16
HS 210210 - ACTIVE YEASTS	54	69	16
HS 170240 - GLUCOSE AND GLUCOSE SYRUP (20-50% FRUCTOSE)	22	30	8
HS 220190 - WATERS NES - WITHOUT SUGAR, SWEETENING OR FLAVOURING	10	16	7
HS 190510 - CRISPBREAD	-11	-4	6
HS 200710 - HOMOGENIZED PREPARATIONS OF FRUIT - WHETHER OR NOT SUGARED OR SWEETENED	-2	3	5
HS 200290 - TOMATOES NES - PREPARED/PRESERVED WITHOUT VINEGAR/ ACETIC ACID	-50	-45	5
HS 200510 - HOMOGENIZED VEGETABLES - PREPARED/PRESERVED WITHOUT VINEGAR/ACETIC ACID, NOT FROZEN	-2	3	5
HS 200950 - TOMATO JUICE - WHETHER OR NOT SUGARED/SWEETENED	0	4	4
HS 200390 - OTHER MUSHROOMS NES - PREPARED/PRESERVED WITHOUT VINEGAR/ACETIC ACID	-6	-2	4
HS 210500 - ICE CREAM AND OTHER EDIBLE ICE, WHETHER OR NOT CONTAINING COCOA	36	40	4

Endnotes

1. The HS coding system is an international standard designed to assign tariffs to traded products and reveal import-export activity. Every HS category presents a consolidated view of its imports and exports. Some 140 HS categories (each with its own respective code) are reproduced by CAPI with acknowledgement to Statistics Canada. CAPI outlines its approach and methodology for reviewing the HS data is a document made available on its website: http://www.capi-icpa.ca/news/2013/seek-views_131010.html. CAPI does not provide 8-digit level analysis of the HS codes.
2. The importance of "differentiation" is addressed in another CAPI project in this series: Project 4: Case Studies.
3. See for example: *Canada's Agri-Food Destination* (2011) and *Canada's Beef Food System* (2012) on CAPI's website.
4. The total trade deficit in 2012 was nearly $6.5 billion. It now registers over -$6.8 billion. However, this report remains based on the 2012 data. For this work, some items were deemed out of scope for the CAPI analysis, such as fish and seafood and canola cake; tobacco is also excluded. An overview of the processed food trade deficit and the methodology used to portray it is outlined in a separate report published by CAPI in October 2013, available at http://www.capi-icpa.ca/news/2013/seek-views_131010.html.
5. Refer to *Drivers of Canadian Food Processing Competitiveness – Macro Factors and Micro Decisions*, GMC, 2013 (Project 2 of the CAPI research program).
6. See *The State and Prospects of Canada's Processed Food Sector: Trade Balance*, November 2012, CAPI website: http://www.capi-icpa.ca/pdfs/2012/CAPI_Processed-Food_Nov2012.pdf
7. Unless otherwise noted, content for these illustrations largely comes from CAPI interviews with industry stakeholders and sector analysts.
8. Refer to CAPI's explanation of the methodology used to examine the HS data: http://www.capi-icpa.ca/proc-food/project1/CAPI_Processed_Food_Project1.pdf
9. *Canadian Importers Database*, Industry Canada, 2011.
10. *The chocolate of tomorrow. What today's market can tell us about the future*, KPMG, June 2012; accessed December 19, 2013. The consumer section draws from this report.
11. Ferrero Canada is profiled as a case study for the CAPI research program, published in a separate document.
12. Chocolate plant closing hurts farmers: The closing of the Hershey chocolate factory in Smiths Falls will mean a major reduction in Ontario's milk quota and a resulting loss of millions of dollars in revenue, according to the Dairy Farmers of Ontario, *Ottawa Citizen*, March 7, 2007.
13. See *Researching The Gluten Decline Of Canadian Wheat*, Kelvin Hoeppner, June 4, 2013, http://www.discoverairdrie.com/index.php?option=com_content&task=view&id=4997&Itemid=149
14. U.S. potato consumption up, *FCC Express*, January 25, 2013.
15. *Selling Potatoes*, Mark Halsall, Spud Smart, accessed Nov.2/13.
16. *Leaders Summit on Food for a Healthy and Prosperous Future*, CAPI Proceedings Report, June 2010, and forum discussions by Karen Basian, Vice-President, Strategy, Mergers and Acquisitions, and Innovation, McCain Foods.
17. Darryl Rowe, President, McCain Foods Canada, in *Selling Potatoes,* Mark Halsall, Spud Smart, accessed Nov.2/13.
18. Potatoes: changing production, changing consumption, Vista on the Agri-Food Industry and the Farm Community, Statistics Canada, June 2005.
19. U.S. potato consumption up, *FCC Express*, January 25, 2013.
20. *The Canadian Brewery Industry*, Agriculture and Agri-Food Canada; accessed July 14, 2013. This profile was used to make a variety of points in this illustration.
21. *Control and Sale of Alcoholic Beverages*, for the year ending March 31, 2012. Statistics Canada. http://www.statcan.gc.ca/daily-quotidien/130411/dq130411a-eng.pdf
22. CAPI discussions with micro-breweries.
23. CANSIM Table 183-0015.
24. *Control and Sale of Alcoholic Beverages, for the year ending March 31, 2012, Statistics Canada. http://www.statcan.gc.ca/daily-quotidien/130411/dq130411a*-eng.pdf
25. *The Canadian Wine Industry,* Agriculture & Agri-Food Canada; accessed June 21, 2012. This profile was used to make a variety of points in this illustration.
26. Rabobank Report: *Global Wine Industry* Q3 2013, October 17, 2013.
27. See Project 3 in this series by the Ivey School of Business on changes in performance of the sector.
28. For a broader review of issues explaining the trade deficit, see CAPI's Project 2 report by the George Morris Centre, *Drivers of Canadian Food Processing Competitiveness – Macro Factors and Micro Decisions*, 2013.
29. These latter issues are addressed in other CAPI reports as part of this research program.

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