NOVA SCOTIA

STATE OF TRADE 2012

Economic and Rural Development and Tourism

NOVA SCOTIA

About This Document

For Nova Scotia, trade with sister provinces and with partners near and far around the world is critical to the strength of the economy, the vitality of business, and the prosperity of the population.

Globalization of economic activity means that products are increasingly "made in the world," with inputs of components and services sourced through webs of globally distributed suppliers. Globalization thus brings a challenge of localization: to secure for Nova Scotia a place in this production web, to generate jobs for the workforce, and to pay for imported goods and services.

As Canada's gateway to the North Atlantic economy, Nova Scotia is positioned at the crossroads between the world's wealthiest and most advanced economies. By the same token, it is also particularly exposed to the turbulence that has gripped this part of the world in recent years.

Awareness of Nova Scotia's place in the global economy, and a deeper understanding of the opportunities and challenges that trade brings, are increasingly important for the formulation of government policy and business strategies. This document – Nova Scotia's first *State of Trade* report – is intended to bring these issues into focus.

Sections 1 and 2 outline the economic context for Nova Scotia's economy in 2012 and over the preceding decade. They review the progress of the global economy in its recovery from the 2008–2009 financial and economic crisis and examine Canada's economic and trade performance.

Sections 3 and 4 outline Nova Scotia's overall economic performance in 2012, against the background of the preceding decade, and highlight the contribution of trade to that performance. These sections also highlight global trends in international trade, the continuing shift toward emerging markets, and ongoing international trade negotiations. Section 5 has concluding remarks on Nova Scotia's trade performance in the context of recent developments in the world. It also identifies opportunities for Nova Scotia to improve its position in international trade.

The report also contains a Special Feature: "Nova Scotia's Integration into the Global Economy," which examines Nova Scotia's participation in global value chains and estimates the proportion of exports produced in the province and the number of jobs sustained by exports. The data in the document is current as of June-July 2013.

The assistance of Ciuriak Consulting Inc. and JE Simpson Consulting Ltd in the development of this report is gratefully acknowledged. Comments are welcome; they may be directed to Dmitry Lysenko at lysenkdu@gov.ns.ca.

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Introduction

This report assesses Nova Scotia's overall international commercial performance over the past year and outlines key trends and developments in our trade with foreign counties as well as Canadian provinces and territories.

Trade is vital to ensuring the growth of Nova Scotia's economy. It creates employment. It challenges industries and firms to compete internationally. It drives innovation. It brings investment to Nova Scotia from all over the world. It also increases the client base of industries, allowing them to grow to reach economies of scale and to bring home more revenues.

While the future of the international economic and financial recovery continues to be uncertain, the risks to those economies unprepared to face a changed field of play will be high. Nova Scotia is ideally placed to take advantage of the opportunities created by technological revolutions that have enabled the production of goods drawing on goods and services inputs from around the world: we are positioned close to large North American markets, and we provide an early port of call for European and Asian shipping lines. However, the province faces long-term challenges, such as a declining workforce due to waves of retirements, which could be addressed by increasing productivity, enhancing educational opportunities, and continuing to invest in our industrial potential. Trade is a key part of meeting these objectives, since it works to increase productivity and drives demand for skills and innovation.

Our internationally and interprovincially traded sectors include hundreds of firms – 897 firms export goods to other countries, and many others export services – producing $16 billion worth of exports annually. With new programs to increase our competitiveness and access to world markets, we are poised to grow our economy to ensure that it continues to provide valuable and meaningful work for generations to come and to attract business from across the globe.

Nova Scotia's inaugural *State of Trade* report demonstrates this province's ability to compete in interprovincial and international trade. The reported successes reflect the capability of Nova Scotian companies, the skills of their workers, and the quality of the products and services they offer to customers at home, in Canada, and abroad. At the same time, the report shows that we can do better and need to do better to face the competitive challenges ahead.

In recent years, Nova Scotia's trade deficit has widened because of supply disruptions in key export products, flat prices for Nova Scotia's traditional resource-based products, and weak demand in the United States, Nova Scotia's largest export customer. Yet the global reach of Nova Scotian exporters is reflected in the fact that China has become our second largest (on a country basis) and rapidly growing export destination.

The province offers a range of services and programs designed to help Nova Scotian businesses increase their competeviness, grow globally, and find new business opportunities abroad. Related initiatives include advocating for Nova Scotian interests on the national trade agenda and focusing resources on strategic markets and sectors.

It will take ongoing collaboration with businesses, investors, and Nova Scotians to push this province to the forefront of global trade and to create a strong, competitive, and innovative economy for the future.

Nova Scotia's State of Trade 2012 — Highlights

- The global recovery from recession slowed in 2012. World real GDP increased by 3.2 per cent, down from 4 per cent in 2011. The United States, Nova Scotia's key international trading partner, grew by 2.2 per cent, while the European Union (EU) slid back into recession. Developing countries grew at a relatively high pace (5.1 per cent), led by China (7.8 per cent). The slowdown in global GDP growth resulted in a sharp decline in growth in world trade. Global export growth slowed to only 2.6 per cent in volume terms, down from 5.9 per cent in 2011.

- Canadian growth also slowed but remained strong relative to other advanced countries. Real GDP increased by 1.7 per cent in 2012, down from 2.5 per cent in 2011. Canada's current account deficit increased as import growth exceeded export growth. The high valuation of the Canadian dollar likely played a role, making imports cheaper and creating headwinds for exports.

- Nova Scotia faced a challenging year in 2012. The province's real GDP grew marginally in 2012, registering 0.2 per cent growth, based on preliminary estimates by industry. This represented a slowdown from 0.5 per cent in 2011, but it was a comparatively strong outcome given declines in neighbouring provinces and limited growth in New England.

- Nova Scotia's merchandise exports fell by 14.3 per cent in 2012. This was the weakest performance among Canadian provinces and territories, and at considerable variance with the 1.5 per cent increase in merchandise exports for Canada overall. This reflected sharp declines in two key product groups: paper and paperboard exports fell by 73.5 per cent, and energy exports fell by 78.9 per cent. Excluding these two product groups, exports increased by 1.7 per cent. Indeed, rubber, fish and seafood, transportation equipment, machinery and mechanical appliances, and chemical and plastic goods experienced high growth rates.

- The rate of growth of Nova Scotia's merchandise exports to developed economies was different compared to exports to developing economies, reflecting differences in the economic growth rates in these groups of countries. Exports to developed economies decreased by 16.6 per cent. In contrast, exports to developing countries increased by 3.3 per cent, Asia being the fastest-growing destination for Nova Scotian products.

- The most recent comprehensive picture of Nova Scotia's trade performance at the aggregate level for goods and services, including with other provinces, is for 2011. The total value of all goods and services exported from Nova Scotia approached $16 billion in 2011. The province's international export mix in 2011 was dominated by goods, at 80 per cent (20 per cent services). In contrast, the value of Nova Scotian services exported to other provinces exceeded that of goods by a small margin. With imports outpacing exports, Nova Scotia's trade deficit widened over the previous year by $1.6 billion to reach almost $10 billion, or 27 per cent of GDP.

- Overall, during the period 2002 – 2012, Nova Scotia experienced a decline of its trade performance, in contrast to the global trend of international trade growth. This is reflected in a decrease in exports of goods as a share of GDP and a widening trade deficit in both international and interprovincial trade. Exports of fish and seafood, energy, and forestry products declined. The gap was not fully met by growth of other products. From a market perspective, Nova Scotian exports of merchandise to its traditional partner, the United States, declined and were not offset by increased exports to other markets.

- Nova Scotia is deeply integrated in the world economy. Nova Scotian firms rely heavily on imported inputs to produce exports. Only 57 per cent of the value of Nova Scotian exports is produced in Nova Scotia. The remaining 43 per cent of export value is from imported content.

- Trade is vital for economic development of Nova Scotia. Exports generate 28 per cent of Nova Scotia's GDP and 27 per cent of all jobs.

1. The Global Economy in 2012 — Recovery under Uncertainty

Nova Scotia's economy faced a challenging economic context in 2012. Worldwide, the recovery from the recession of 2008–2009 continued, but at a slower pace. Confidence was undermined by the fiscal problems within the European Union and the United States, threatening the stability of the euro and the US fiscal stimulus program respectively.

1.1. Global Economic Growth

World real GDP increased by 3.2 per cent, down from the 4 to 5 per cent range in the first two years of the recovery. In 2012, growth was led by developing countries and emerging markets, which grew by 5.1 per cent, with China (7.8 per cent) in the vanguard. Growth in the advanced economies slowed to a crawl (1.2 per cent), reflecting the slide of the Eurozone into recession (−0.6 per cent growth), an outcome that weighed down and contributed to the tepid performance of the United States (2.2 per cent growth), Japan (2.0 per cent), Canada (1.7 per cent), and the United Kingdom (0.2 per cent).

There were, however, some positive developments in 2012. Europe pulled back from the brink of a euro crisis, while US policymakers reached an agreement that avoided the so-called "fiscal cliff" of increased taxes and spending cuts in the face of a halting recovery. Financial markets rallied in the second half of 2012, and business confidence started to rebound late in the year, including in Europe. Elsewhere, with inflation subdued in the industrialized countries and moderate in emerging markets, governments were able to take policy action to counter the growth risks: Japan responded to its unexpectedly sharp slowdown in the second half of 2012 with decisive stimulative measures, the United Kingdom expanded its quantitative easing to support growth, and policy easing in key emerging market economies supported domestic demand. Further, the reduction in inventories in 2012 improves the short-term outlook because it will work to generate stronger growth in production than in consumption in the near future.

1.2. Developments in the Major Economies

Problems in the major economies were key contributing factors to the global slowdown in 2012. At the same time, the year witnessed a modest reversal of trends providing some basis for improved performance in 2013 and beyond.

United States[1]

Developments in the United States were of particular relevance to Nova Scotia because of its continued importance as the province's principal trading partner. In 2012, the US economy continued its halting recovery. Growth was supported by sustained monetary stimulus, including record-low interest rates and quantitative easing, but was held back by fiscal drag associated with continued fiscal consolidation. Business confidence remained fragile, plunging in mid-year while the "fiscal cliff" was front-page news. Job growth continued to be tepid, in part due to job cuts in the public sector, mainly by cash-strapped state governments. The economy was also hit by major weather-related shocks, including an intense drought affecting the agricultural states and Hurricane Sandy, which hammered the eastern seaboard, closing down Wall Street for two days.

However, the US housing market regained considerable traction in 2012, with residential fixed investment growing by 13 per cent, average home price increasing by 5 per cent, and the number of permits issued to builders rising by 31 per cent over 2011. Moreover, industrial production performed far better than the GDP figures might suggest: the real value added of manufacturing rose 6.2 per cent, after increasing only 2.5 per cent in 2011, while the real value added of durable-goods manufacturing increased by 9.1 per cent.

[1] *Data sources:* Bank of Canada; US Department of Commerce, Bureau of Economic Analysis, "Advance GDP by Industry Statistics for 2012" (released April 25, 2013); US Department of Housing and Urban Development, Bureau of Labor Statistics.

The European Union[2]

Notwithstanding its ongoing economic challenges, the EU continued to contribute close to 20 per cent of world economic output in 2012 and remained the world's largest trading bloc. It was also the focus of active negotiations throughout the year for the Comprehensive Economic and Trade Agreement (CETA).

The EU experienced numerous difficulties in 2012. Real GDP decreased by 0.2 per cent in the EU and by 0.6 per cent in the euro area. Measures to repair public and private balance sheets held back investment and consumption. By the end of 2012, private consumption and investment had both fallen for five consecutive quarters. These developments contributed to an increase in unemployment, which reached 11 per cent.

Differentials in economic performance among EU member states remained large, with no member state immune to the year's declines. While Germany's real GDP increased by 0.9 per cent, economic activity in Italy and Netherlands declined, and France's economic growth was essentially flat.

On the positive side, the policy actions to avert a euro crisis resulted in diminishing credit risks. Moreover, business confidence started to turn up late in 2012.

China[3]

China continued to power ahead in 2012, although at a slower pace (7.8 per cent in real terms) than the double-digit growth it recorded in the preceding decade. However, reflecting the appreciation of the yuan against the US dollar (by 2.4 per cent in 2012), China's GDP in US dollar terms rose by over 14.3 per cent in 2012. China's GDP reached US$8.4 trillion, ranking only after the EU (US$16.6 trillion) and the United States (US$15.7 trillion).

In terms of the gross value of trade flows, China also solidified its position as one of the world's leading trading nations in 2012. With exports of US$2.2 trillion and imports of US$1.9 trillion, it almost reached the respective levels of trade by the United States, despite possessing an economy half the size. Total Chinese exports in 2012 rose by 8.9 per cent, measured in US dollar terms, and imports by 7.0 per cent, contributing to an increase in the country's trade surplus to US$232 billion from US$182 billion in 2011. The United States became China's top export destination in 2012, replacing the EU.

China's trade flows are inflated by processing trade whereby it imports components for final assembly and subsequent export, often with comparatively little value added. Its overall share of global trade on a value-added basis is thus substantially smaller and in this regard still trails the world leaders, the United States and the EU. Nonetheless, China is rising rapidly and, given policy measures to rebalance growth toward greater reliance on domestic demand, including continued infrastructure investment, it represents an important source of global demand and an influence on the prices of globally traded commodities.

While China weathered the global slowdown of 2012 in relatively good shape, it too experienced a deceleration given its exposure to foreign demand. However, as in the case of the United States and Europe, China ended the year on an uptick with fourth quarter growth strengthening, supporting prospects in Asia more generally.

[2] *Data sources:* European Commission, Directorate-General for Economic and Financial Affairs (2013*), European Economic Forecast – Spring 2013*, European Economy (series), 2/2013*;* International Monetary Fund (2013), *World Economic Outlook* (database), April 2013.
[3] *Data sources:* International Monetary Fund (2013), *World Economic Outlook (database)*, April 2013*;* World Bank, *World Development Indicators* (database); Global Trade Information Services, Inc., *Global Trade Atlas* (database); Organisation for Economic Co-operation and Development–World Trade Organization, *Trade in Value-Added* (database); Federal Reserve Board.

TABLE 1.1 : REAL GDP GROWTH RATE, BY REGION AND SELECTED COUNTRIES (%)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
World	2.9	3.7	5.0	4.6	5.3	5.4	2.8	-0.6	5.2	4.0	3.2
Advanced economies	1.7	2.0	3.1	2.6	3.0	2.8	0.1	-3.5	3.0	1.6	1.2
Canada	2.8	1.9	3.1	3.2	2.6	2.0	1.2	-2.7	3.4	2.5	1.7
Euro area	0.9	0.7	2.2	1.7	3.2	3.0	0.4	-4.4	2.0	1.4	-0.6
France	0.9	0.9	2.5	1.8	2.5	2.3	-0.1	-3.1	1.7	1.7	0.0
Germany	0.0	-0.4	0.7	0.8	3.9	3.4	0.8	-5.1	4.0	3.1	0.9
Italy	0.5	0.0	1.7	0.9	2.2	1.7	-1.2	-5.5	1.7	0.4	-2.4
Netherlands	0.1	0.3	2.2	2.0	3.4	3.9	1.8	-3.7	1.6	1.0	-0.9
United Kingdom	2.4	3.8	2.9	2.8	2.6	3.6	-1.0	-4.0	1.8	0.9	0.2
Japan	0.3	1.7	2.4	1.3	1.7	2.2	-1.0	-5.5	4.7	-0.6	2.0
United States	1.8	2.5	3.5	3.1	2.7	1.9	-0.3	-3.1	2.4	1.8	2.2
Emerging market and developing economies	4.7	6.3	7.7	7.3	8.3	8.8	6.1	2.7	7.6	6.4	5.1
Central and eastern Europe	4.3	4.8	7.3	5.9	6.4	5.4	3.1	-3.6	4.6	5.2	1.6
Commonwealth of Independent States	5.2	7.7	8.1	6.7	8.8	8.9	5.3	-6.4	4.9	4.8	3.4
Russia	4.7	7.3	7.2	6.4	8.2	8.5	5.2	-7.8	4.5	4.3	3.4
Developing Asia	7.0	8.3	8.6	9.5	10.4	11.6	7.9	6.9	10.0	8.1	6.6
China	9.1	10.0	10.1	11.3	12.7	14.2	9.6	9.2	10.4	9.3	7.8
India	4.6	6.9	7.7	9.1	9.4	10.1	6.2	5.0	11.2	7.7	4.0
Latin America and the Caribbean	0.4	2.1	6.0	4.7	5.7	5.8	4.2	-1.5	6.1	4.6	3.0
Brazil	2.7	1.1	5.7	3.2	4.0	6.1	5.2	-0.3	7.5	2.7	0.9
Mexico	0.1	1.4	4.0	3.2	5.1	3.2	1.2	-6.0	5.3	3.9	3.9
Middle East, North Africa, Afghanistan, and Pakistan	3.8	7.2	8.0	6.1	6.7	6.3	5.0	2.9	5.3	3.9	4.7
Sub-Saharan Africa	7.1	4.8	7.0	6.2	6.4	7.0	5.6	2.7	5.4	5.3	4.8
South Africa	3.7	2.9	4.6	5.3	5.6	5.5	3.6	-1.5	3.1	3.5	2.5

Source: International Monetary Fund, *World Economic Outlook* (database), April 2013, and Statistics Canada for most recent Canadian data.

1.3. Global Trade

The slowdown in global growth in 2012 resulted in an even sharper deceleration in growth in the volume and value of trade. According to the World Trade Organization, after a strong rebound in 2010-2011, global growth in goods exports slowed to only 2.4 per cent in volume terms and to a minimal advance when measured in current US dollars.

Results by country and region were mixed, although few regions managed to escape a deceleration of trade growth in 2012. The major developed economies struggled to sustain levels of trade in a challenging economic environment, and the trade dynamic was dampened to varying degrees in the largest developing economies, including China, India, and Brazil. Only sub-Saharan Africa and the Middle East experienced a pick-up in export growth over 2011. In this environment, Canada's exports and imports of goods and services also grew more slowly in 2012 in comparison with 2011 results.

The slower growth in goods trade in nominal versus real terms in 2012 (as mentioned earlier) was largely due to the decline of non-fuel commodity prices: the International Monetary Fund's (IMF) index of non-fuel commodity prices fell by 9.9 per cent in 2012 after an advance of 17.9 per cent in 2011. Despite the decline, non-fuel commodity prices remained on balance substantially higher in 2012 than their low points during the global economic crisis. Meanwhile, fuel prices, as measured by the IMF's fuel price index, rose by 1 per cent in 2012, holding onto their recent highs attained by steep increases in each of 2010 and 2011.

Price trends of energy commodities varied by type and by region. In North America, the price of oil remained high in 2012, while the price of natural gas declined by 31 per cent. Thus the recently observed movement of oil and gas prices in different directions continued in 2012.

FIGURE 1.1: WORLD EXPORT OF GOODS AND SERVICES, 2002–2012

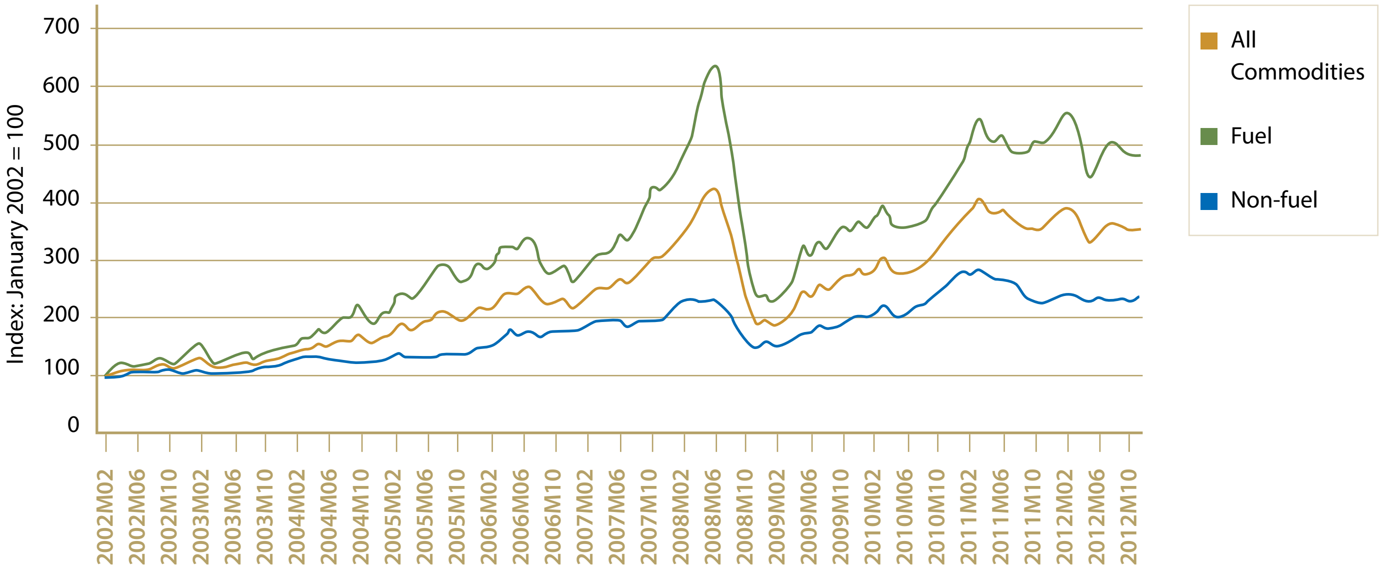
Source: World Trade Organization.

TABLE 1.2: CHANGE IN VOLUME OF GOODS AND SERVICES EXPORTED AND IMPORTED (%)

	Exports		Imports	
	2011	2012	2011	2012
World	5.9	2.6	6.0	2.4
Advanced economies	5.6	1.9	4.7	1.0
Canada	4.6	1.6	5.8	2.9
Euro area	6.3	2.5	4.1	-1.1
France	5.3	2.5	4.9	-0.3
Germany	7.8	3.7	7.4	1.8
Italy	5.9	2.3	0.5	-7.7
Netherlands	4.2	3.3	4.1	3.0
United Kingdom	4.6	-0.3	0.5	2.0
Japan	-0.4	-0.3	5.9	5.3
United States	6.7	3.4	4.8	2.4
Emerging market and developing economies	6.4	3.7	8.6	4.9
Central and eastern Europe	8.2	4.7	8.4	-0.2
CIS	7.2	3.5	17.0	7.0
Russia	3.8	3.1	17.2	5.4
Developing Asia	8.2	4.3	9.0	5.7
China	8.8	5.4	9.5	6.7
India	12.6	0.9	9.7	2.7
Latin America and the Caribbean	6.1	1.7	10.2	2.6
Brazil	2.9	-0.3	8.9	-2.3
Mexico	7.5	3.0	7.1	3.1
Middle East, North Africa, Afghanistan, and Pakistan	1.3	3.2	0.4	6.9
Sub-Saharan Africa	4.2	4.4	9.4	7.0
South Africa	5.9	0.1	9.7	6.3

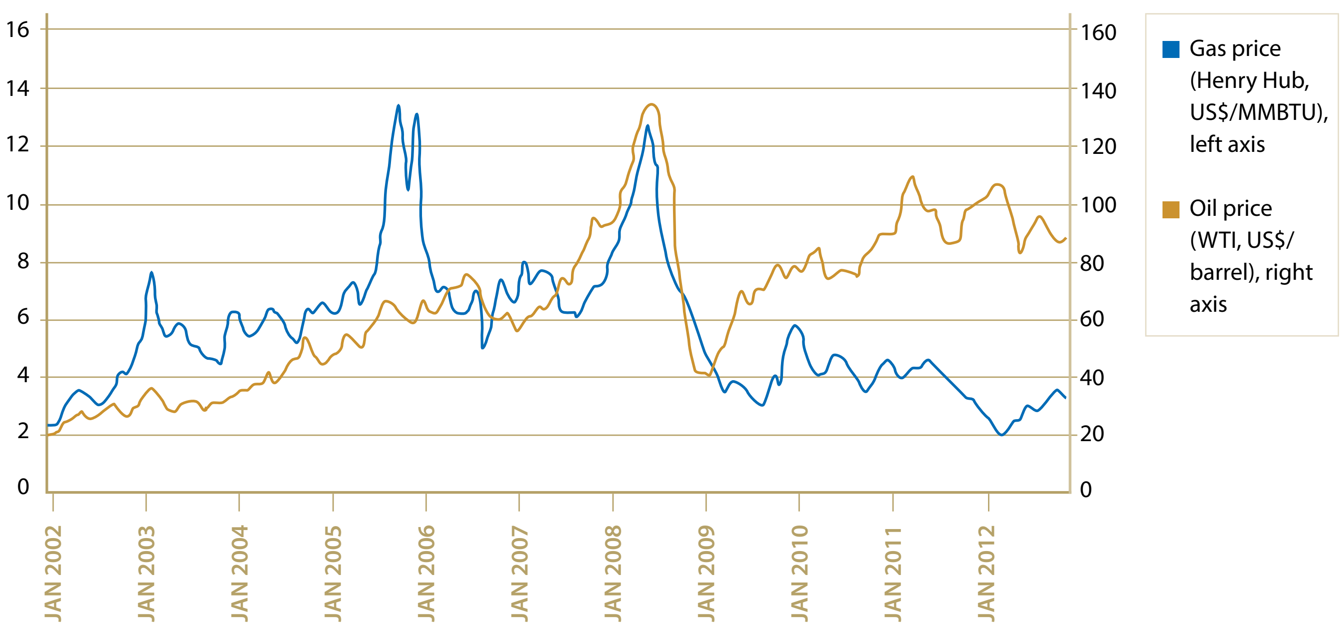
Source: International Monetary Fund, *World Economic Outlook* (database), April 2013.

FIGURE 1.2: PRICE INDEXES FOR GLOBAL FUEL, NON-FUEL, AND ALL COMMODITIES, 2002–2012



Source: International Monetary Fund, Commodity Price Indexes, US-dollar based.

FIGURE 1.3: OIL AND NATURAL GAS PRICES, NORTH AMERICA, 2002–2012



Source: U.S. Energy Information Administration.

2. Canada's Economic and Trade Performance in 2012

2.1. Canada's Economy in 2012

Despite facing strong headwinds in 2012, the Canadian economy grew by 1.7 per cent. Headline inflation eased marginally, unemployment edged down, and Canada made progress on fiscal consolidation.

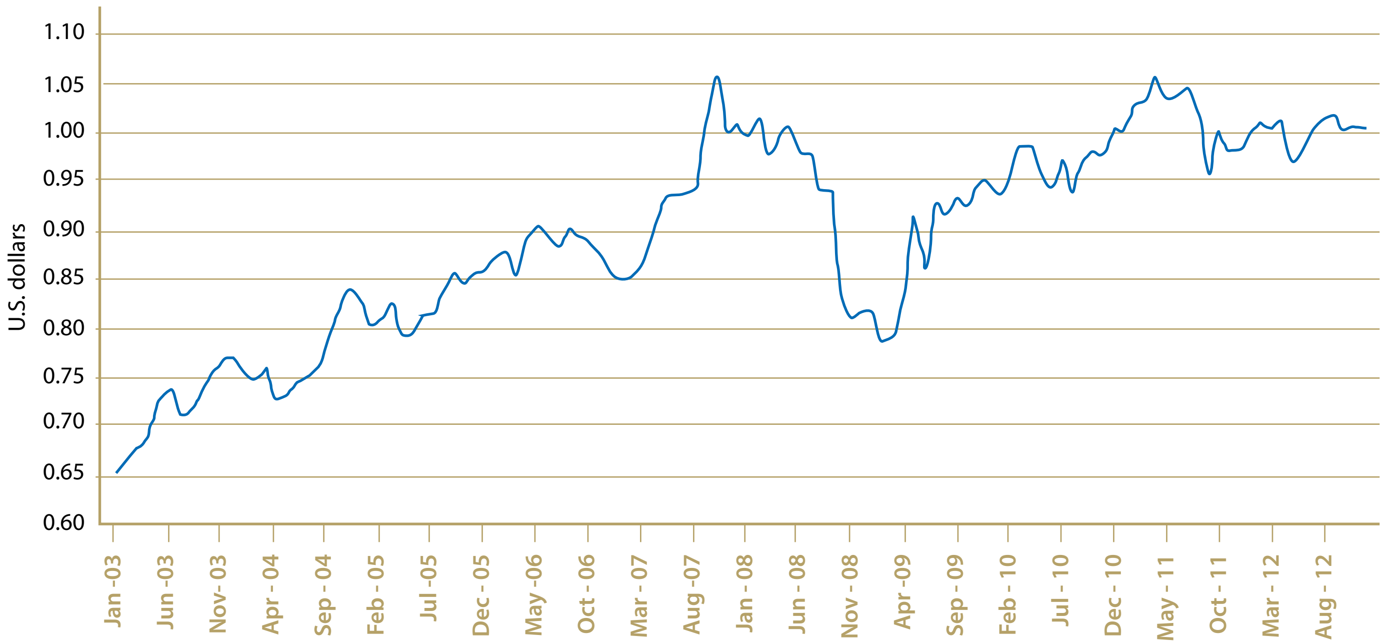
Contributions to growth were uneven: household consumption slowed, although housing starts increased, residential construction picked up strongly, and motor vehicle sales picked up. Government investment experienced a marginal advance in 2012, while business investment growth decreased.

Canada's current account deficit widened to $62.2 billion, as import growth was three times higher than export growth. To some extent, this reflected the high valuation of the Canadian dollar. Figure 2.1 tracks the dramatic strengthening of the Canadian dollar over the past decade, a trend it also exhibited against a range of other currencies, including the euro, the British pound, and the Mexican peso.

Yet while the dollar was a factor, geography may have mattered more. For example, Australia, whose economy is highly comparable to Canada's in terms of economic structure and other characteristics, grew by 3.6 per cent in 2012, twice as fast as Canada's, despite the high value of the Australian dollar. This reflected in good measure the fact that Australia is located closer to more dynamic Asian markets.

Canada's extractive industries benefited from high prices, and to a lesser extent, so did agriculture. However, prices in forestry and fishing continued a decade-long flat trend. Divergent commodity price trends factored heavily into the differences in economic performance across Canada's regions.

FIGURE 2.1: CANADA-US EXCHANGE RATE, 2003–2012



Source: Statistics Canada (note: US dollar closing spot rate, monthly average).

2.2. Provincial Economic Performance in 2012

On a provincial basis, Canada's economic performance was highly uneven in 2012, continuing the pattern of the present recovery. The western provinces set the pace in 2012, buoyed by favourable global commodity price trends. Newfoundland and Labrador's decline in real GDP in 2012 was driven by a sharp decline in oil production, as opposed to more general factors. These same factors have had strong knock-on effects through internal migration and its impact on housing construction and consumer demand. Ontario, Quebec, and the Atlantic provinces have grown more slowly.

To some extent, however, the uneven pace of recovery is related to the depth of the recession: overall, growth in Canada during the recovery has been led by the western provinces, which, along with Newfoundland and Labrador, had experienced the deepest decline during the recession. Nova Scotia, which had one of the shallowest declines, has had, by the same token, one of the less buoyant recoveries, as shown in Figure 2.3.

While developments in the resource sector dominated provincial-level outcomes in 2012, there were also divergent trends in manufacturing across Canada's regions. A number of provinces achieved growth in manufacturing output, while others experienced a decline, again reflecting differences in industrial specialization: Ontario's auto sector rebound drove manufacturing to a 2.4 per cent overall gain, while Quebec's manufacturing sector was weighed down by a weak aerospace sector and a decline in food manufacturing.

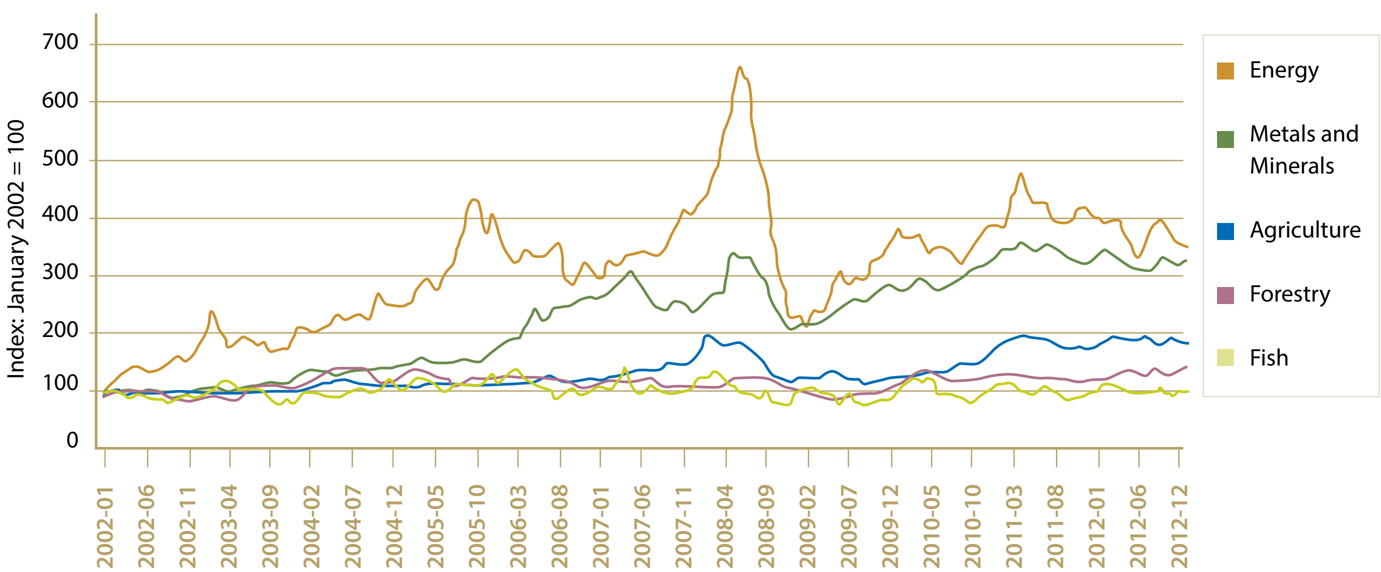
Provincial-level GDP trends were also affected by differing degrees of growth in public sector expenditures as provincial governments grappled with fiscal consolidation.

2.3. Provincial International Export Performance in 2012

The value of Canada's overall international merchandise exports increased by 1.5 per cent in 2012, led by a 15.3 per cent increase in transportation equipment and a 7.8 per cent rise in agriculture. The paper and paperboard product group had the largest decline, down 13.3 per cent, while significant declines were also suffered by the minerals and metals sector (down 8.6 per cent) and by the chemicals and plastics sector (down 5.6 per cent).

The number of provinces and territories recording lower international merchandise exports in 2012 slightly outnumbered those with gains, unlike 2011, when exports increased for every Canadian province and territory (Table 2.2).

FIGURE 2.2: SELECTED MONTHLY COMMODITY PRICE INDEXES, BANK OF CANADA, 2002–2012



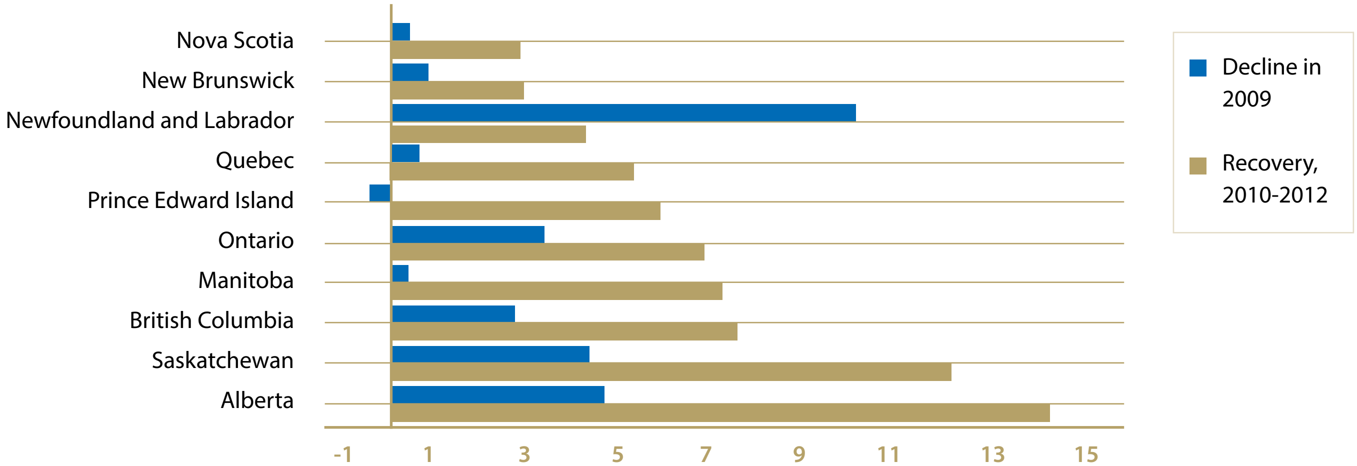
Source: Bank of Canada, Commodity Price Index.

TABLE 2.1: CANADIAN REAL GROWTH, BY PROVINCE AND TERRITORY, 2008-2012

	2008	2009	2010	2011	2012 (Preliminary)
Alberta	1.6	-4.4	4.0	5.1	3.9
British Columbia	1.1	-2.5	3.2	2.8	1.7
Manitoba	4.0	-0.4	2.5	2.0	2.7
New Brunswick	0.9	-0.6	3.1	0.0	-0.6
Newfoundland and Labrador	-1.0	-10.3	6.3	3.0	-4.8
Northwest Territories	-9.0	-15.0	2.0	-5.1	1.9
Nova Scotia	2.5	-0.3	1.9	0.5	0.2
Nunavut	11.9	-7.3	16.6	4.6	4.3
Ontario	-0.2	-3.5	3.2	1.8	1.4
Prince Edward Island	0.9	0.3	2.6	1.6	1.2
Quebec	*1.4*	*-0.5*	*2.5*	*1.9*	*1.0*
Saskatchewan	*5.4*	*-4.0*	*4.4*	*4.9*	*2.2*
Yukon	*8.9*	*7.6*	*5.6*	*6.5*	*3.4*

Source: 2008–2011 data: Statistics Canada, CANSIM table 3840038; 2012 data: Statistics Canada, CANSIM table 3790030.

FIGURE 2.3: RECESSION AND RECOVERY, BY PROVINCE



Source: Statistics Canada, Provincial Gross Domestic Product (GDP) by Industry (note: Prince Edward Island expanded marginally in 2009; hence the "negative decline" in the chart).

TABLE 2.2: INTERNATIONAL MERCHANDISE EXPORTS, BY PROVINCE AND TERRITORY, 2012

Region	2012 Export ($ millions)	Share (%)	Change over 2011 (%)
Canada	454,377	100.0	1.5
Ontario	186,984	41.2	3.2
Alberta	95,406	21.0	1.8
Quebec	63,570	14.0	-0.1
Saskatchewan	32,570	7.2	10.1
British Columbia	31,745	7.0	-4.3
New Brunswick	14,774	3.3	-0.3
Newfoundland Labrador	11,309	2.5	-6.8
Manitoba	11,266	2.5	-4.5
Nova Scotia	3,822	0.8	-14.3
Northwest Territories	1,832	0.4	-12.2
Prince Edward Island	871	0.2	15.4
Yukon	216	0.1	42.7
Nunavut	15	0.0	82.8

Source: Global Trade Atlas.

3. Nova Scotia's Economic and Trade Performance Update

3.1. Nova Scotia's Economy: Overview

While Nova Scotia's economy produces a solid standard of living as measured in personal disposable income per capita, the economy's performance has lagged in many respects. For example, although Nova Scotia accounts for about 2.7 per cent of Canada's population, it accounts for only about 2.1 per cent of its GDP. Its share of population employed is also below the Canadian average. Notwithstanding Nova Scotia's proximity to the US Eastern Seaboard and its gateway role to European markets, its international export share of GDP is one of the lowest among the Canadian provinces.

3.2. Nova Scotia's Recent Economic Performance

The Nova Scotian economy advanced in 2012, registering 0.2 per cent growth based on preliminary estimates for real GDP by industry. This represented a slowdown from 0.5 per cent in 2011, nonetheless a comparatively strong outcome given outright declines in neighbouring provinces as well as slow growth in New England, which advanced by only 1.2 per cent in 2012, trailing the US average.[4]

The main source of strength for the Nova Scotian economy came from the services sector, where growth was led by wholesale trade (3.4 per cent) and real estate (3.0 per cent). Construction was flat in 2012.

By contrast, there was a broad decline across goods-producing industries, the extractive industries declining by 18.5 per cent (as Sable Offshore natural gas production fell steeply), manufacturing by 3.1 per cent. Output of forestry sharply decreased, but agriculture edged up. Overall, the goods-producing sector declined by 4.2 per cent while the service-producing sector expanded by 1.2 per cent.

Employment grew marginally by 3,000 jobs, but this was insufficient to prevent a 0.2 per cent rise in the province's unemployment rate, as labour force growth outpaced employment growth.

Retail sales expanded by 1.0 per cent, consolidating strong gains in the previous two years. Housing starts, by contrast, fell off by 122 units, although they remained substantially higher than levels registered over the period 2008–2010.

Overall, the provincial economy managed to remain stable in 2012 against the background of a troubled global setting, slow growth in the Canadian economy, and still slower growth in Nova Scotia's immediate neighbourhood, including the rest of Atlantic Canada and New England.

The GDP figures do not, however, reflect the adverse movements of terms of trade on Nova Scotia's income. This issue is highlighted in the following box (Nova Scotia: Implications of Terms of Trade Shifts).

Looking ahead, the Nova Scotia Department of Finance projects that Nova Scotia's GDP will grow by 1.3 per cent in real terms in 2013 and 1.5 per cent in 2014. Major projects such as Deep Panuke and the National Shipbuilding Procurement Strategy (NSPS) are expected to provide support for the economy over the medium term.

[4]Bureau of Economic Analysis, GDP by State, 6 June 2013.

TABLE 3.1: MAJOR ECONOMIC INDICATORS, NOVA SCOTIA AND OTHER PROVINCES

	NL	PEI	NS	NB	Que	Ont	Man	Sask	Alta	BC
Population (thousands, 2012)	513	146	949	756	8,055	13,506	1,267	1,080	3,874	4,623
GDP 2011 ($ billions)	33.6	5.4	37.0	32.2	345.8	654.6	55.9	74.7	295.3	217.7
GDP per capita, 2011	65,557	36,741	39,027	42,604	43,350	48,971	44,655	70,654	78,155	47,579
Share of Canadian GDP 2011 (%)	1.9	0.3	2.1	1.8	19.6	37.1	3.2	4.2	16.8	12.4
Personal disposable income per capita, 2011 ($)	28,181	23,879	26,256	26,277	25,646	28,660	26,201	31,223	37,894	28,375
Employment/ Population Ratio, 2012 (%)	53.9	60.4	58.4	56.6	60.0	61.3	65.4	66.2	70.0	60.6
Manufacturing share of GDP, 2012 (%)	4.7	8.9	7.8	11.0	13.7	12.9	10.0	7.0	7.5	6.8
International exports share of GDP, 2011 (%)	39.9	18.5	20.9	47.4	25.7	32.8	28.0	44.0	33.1	22.7
Interprovincial exports share of GDP, 2011 (%)	23.8	25.6	21.9	35.7	20.4	18.3	30.2	26.2	23.9	16.5

Source: Statistics Canada and author's calculations.

TABLE 3.2: NOVA SCOTIA, MAIN ECONOMIC INDICATORS, 2008-2012

	2008	2009	2010	2011	2012
Real GDP growth (% change)	2.5	-0.3	1.9	0.5	0.2
Consumer prices (% change)	3.0	-0.2	2.2	3.8	2.0
Employment (thousands)	452	451	453	453	456
% change	0.9	-0.1	0.2	0.1	0.6
Unemployment rate (%)	7.7	9.2	9.3	8.8	9.0
Retail sales ($ millions)	12,121	12,141	12,692	13,146	13,274
% change	4.1	0.2	4.5	3.6	1.0
Housing starts (units)	3,982	3,438	4,309	4,644	4,522
% change	-16.2	-13.7	25.3	7.8	-2.6

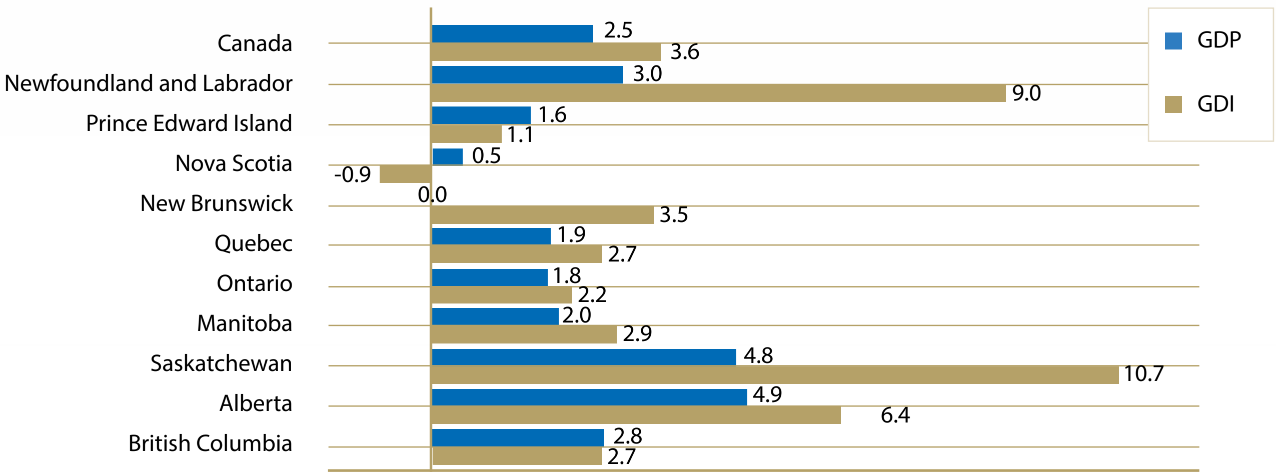
Source: Statistics Canada.

Nova Scotia: Implications of Terms of Trade Shifts

A change in real GDP shows income generated by production. However, production is not the only determinant of income in an open economy. The rate at which exports are traded against imports also affects income. Real GDP does not capture this effect. Real Gross Domestic Income (GDI) addresses this shortcoming and can be treated as a measure of total income: income that is generated by production and income that results from changes in the price of exports, relative to the price of imports (terms of trade).

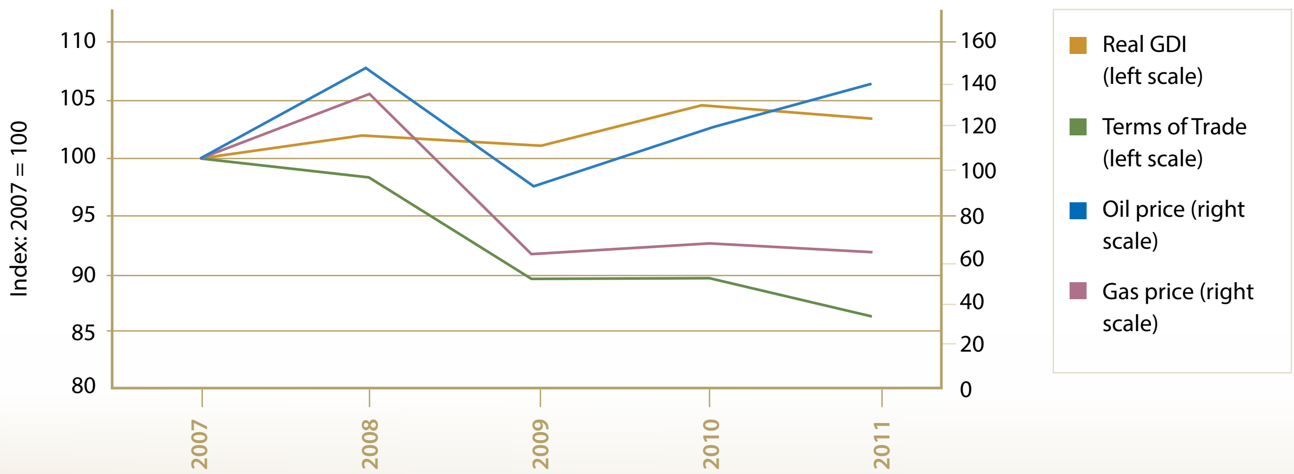
In 2011, Nova Scotia's real GDP increased by 0.5 per cent. However, taking into account changes in the terms of trade, Nova Scotia's income (as measured by real GDI) decreased by 0.9 per cent (Figure B1). Nova Scotia was the only province that showed a negative change in income in 2011. This reflects the specifics of Nova Scotian export and import composition. In 2011, the price of Nova Scotian exports relative to its imports (terms of trade) decreased by 3.6 per cent, which reduced Nova Scotia's income. This is partially explained by reductions in the price of natural gas, which is a key export product (Figure B2).

FIGURE B1: GROWTH OF REAL GDP AND GDI BY PROVINCE, 2011



Source: Nova Scotia Department of Finance, Statistics Canada, U.S. Energy Information Administration.

FIGURE B2: NOVA SCOTIA TERMS OF TRADE AND COMMODITY PRICES



Source: Nova Scotia Department of Finance; Statistics Canada; US Energy Information Administration.

3.3. Nova Scotia's Recent Trade Performance

Nova Scotia's international merchandise exports fell by 14.3 per cent in 2012, the weakest performance among all Canadian provinces and territories, and at considerable variance with the 1.5 per cent increase for Canada overall.

Goods comprise approximately 80 per cent of Nova Scotia's international exports. An analysis of merchandise exports therefore provides an assessment of the most significant component of the province's international export performance.

Nova Scotia's International Goods Exports by Product

The slump in international exports in 2012 reflected significant declines in two key product groups: paper and paperboard exports fell by 73.5 per cent to just over $120 million, while energy exports fell by 78.9 per cent to $97 million because of reduced production from the Sable Offshore Energy Project (SOEP) and a slump in natural gas prices.

There were a number of bright spots in export performance in 2012. Exports of rubber products (including tires) were up by 2.1 per cent, and fish and seafood exports increased by 4.3 per cent. These two major product groups together accounted for half of all of Nova Scotia's merchandise exports. In addition, substantial gains were registered in chemicals and plastics (9.9 per cent) and in machinery and mechanical appliances (12.2 per cent). Excluding paper and paperboard and energy, export increased by 1.7 per cent.

Rubber Products

Exports of rubber products were up 2.1 per cent in 2012, reaching a value in excess of $1 billion and ranking for the fourth year in a row as Nova Scotia's principal merchandise export. The rubber products group represented 27.5 per cent of the province's exports in 2012, up from 14.7 per cent a decade earlier. For the most part, the exports consist of tires (94 per cent) to markets in the United States.

However, these results fell short of the scale of gains recorded by the rebounding US auto industry, possibly because the focus of Nova Scotia's tire production is on replacement and commercial vehicle tires.

TABLE 3.3: INTERNATIONAL MERCHANDISE EXPORTS, 2012

Product group	HS code	2012 Exports ($ millions)	Change over 2011 (%)	Share (%)
Rubber	40	1,052	2.1	27.5
(of which tires)	4011	985	0.8	25.8
Fish and seafood	3	873	4.3	22.8
Agriculture	1, 2, 4-24	268	-5.8	7.0
Wood and pulp	44-47	265	0.2	6.9
Chemicals and plastics	28-39	262	9.9	6.9
Minerals and metals	25, 26, 68-83	209	-5.1	5.5
Machinery and mechanical appliances	84	169	12.2	4.4
Paper and paperboard	48	120	-73.5	3.2
Electrical and electronic machinery	85	110	-0.4	2.9
Textiles, clothing and leather	41-43, 50-65	101	-3.1	2.7
Energy	27	97	-78.9	2.5
Transportation equipment	86-89	95	9.8	2.5
Instruments and apparatus	90	60	-8.6	1.6
Other products	49, 66, 67, 91-99	140	-8.7	3.7
Total	**1-99**	**3,822**	**-14.3**	**100.0**

Source: Global Trade Atlas.

Fish and Seafood[5]

The fish and seafood product group recorded an export value of $873 million in 2012, an increase of 4.3 per cent over 2011. This represented 22.8 per cent of total provincial exports. This was similar to its performance in 2002, after which the sector experienced years of depressed export performance before beginning to rebound in 2011.

The key products within this group are live lobsters and frozen crabs. Live lobsters accounted for 85 per cent of total lobster exports and 35 per cent of total sector exports. Frozen crabs added another 15 per cent of total export value. These two products represent about half of all fish and seafood exports. Other significant exports included unprepared scallops (11 per cent of total sector exports), frozen cold-water shrimps and prawns (9 per cent), and frozen lobster (6 per cent).

There was considerable variance in the export growth rates of Nova Scotia's most important fish and seafood products in 2012. For example, Nova Scotia exported 23 tonnes of live lobsters, 2 per cent less than in 2011. They were worth $307 million, only 0.1 per cent less than in 2011. The value of frozen crabs grew by 13 per cent, an increase in quantity of 39 per cent over 2011. Nova Scotian exports of fresh scallops decreased in value by 7 per cent in 2012.

In 2012, the United States remained the major market destination for the province's fish and seafood exports, but its market share decreased to 58 per cent, down from 62 per cent in 2011. In contrast, China's share almost doubled in 2012, from 5 per cent to 9 per cent.

Agriculture

Agricultural product exports in 2012 totalled $268 million, down 5.8 per cent from 2011. Notwithstanding the decline, agricultural products became the third largest export for Nova Scotia in 2012, behind rubber products and fish and seafood.

Wild blueberries accounted for about $97 million, or 36 per cent of agricultural product exports, followed by fish fats and oils, principally Omega-3 fish oil and powder, at about $20 million, or 7.5 per cent of agricultural exports. This product is a relatively new export product for Nova Scotia and has grown its share of agricultural exports from near zero in 2002.

Exports of both of these leading products decreased substantially in 2012, with blueberries down 22 per cent in quantity and 16 per cent in value compared to 2011, and fish fats and oil down 34 per cent in value. Given that about 60 per cent of fish fats and oil go to the Netherlands, the recession in the EU likely contributed to this outcome. These sharp declines were partially offset by increases in exports of other products, including increases of 55 per cent in food preparations and 36 per cent in animal feed preparations; each of these latter product groups account for about 4 per cent of the total sector exports.

Nova Scotia's agricultural exports to the United States grew by 9 per cent to$146 million in 2012. The United States accounted for 54 per cent of Nova Scotia's agricultural exports, followed by Germany (9 per cent), the Netherlands (8 per cent), and Japan (6 per cent).

Wood and Pulp

Exports of wood and pulp totalled $265 million and were essentially unchanged over 2011. In 2012, exports from this product group represented the fourth most important export for Nova Scotia (6.9 per cent).

Wood and pulp experienced substantial changes over the last decade. Since 2002, exports have fallen by half, following a series of mill closures. The structure of the product group has changed as well. In 2002, wood pulp accounted for 39 per cent of exports, while wood and articles of wood accounted for 61 per cent. In 2012, wood pulp represented 64 per cent of exports, and wood and articles of wood just 35 per cent.

In 2012, despite lower wood pulp prices, export of pulp increased in value by 4 per cent, and was higher than pre-recession 2008 levels. At the same time, exports of wood and articles of wood decreased by 6 per cent and were 30 per cent lower than in 2008. Exports of wood and articles of wood consist primarily of sawn lumber (59 per cent), non-coniferous wood in chips (22 per cent), and fibreboard (8 per cent). Exports of these products experienced sharply divergent trends in 2012: sawn lumber decreased by 8 per cent, wood in chips increased by 80 per cent, and fibreboard decreased by 37 per cent.

[5] The fish and seafood category includes raw or minimally processed fish and seafood, while the agriculture category includes prepared fish and seafood products among other food preparations.

The major export destination of wood and pulp is the United States (60 per cent of total exports). However, exports to this market in 2012 were 7 per cent lower than in 2011. The second largest market (8 per cent of total exports) was France, but it also experienced a substantial drop, of 27 per cent. Exports to the United Kingdom (6 per cent) also decreased by 18 per cent. Two emerging markets have increased in importance: exports to Turkey increased by 59 per cent and constituted 7 per cent of total exports, up from 4 per cent in 2011, while exports to China increased by 205 per cent to also constitute 7 per cent of total exports, up from 2 per cent in 2011.

Chemicals and Plastics

Exports of chemicals and plastics, the province's fifth most important export product group (7 per cent of total exports), totalled $262 million in 2012. This represented a 9.9 per cent increase over 2011. In contrast to other product groups, this group of products has grown strongly over the last decade, by 6 per cent since 2002. In particular, exports of miscellaneous chemical products increased from $3 million to $46 million over the period, while exports of plastics increased from $117 million to $161 million.

In 2012, exports of most of the top products within this group experienced positive change over 2011 and outperformed their pre-recession levels. Plastics increased by 5 per cent and reached $161 million, miscellaneous chemical products increased by 23 per cent to stand at $46 million. Exports of fertilizers were $24 million, 31 per cent higher than in 2011. On the other hand, a number of products experienced negative changes. In particular, exports of pharmaceutical products decreased by 12 per cent, down to $7 million, 40 per cent lower than in 2008.

At 85 per cent, exports of plastics and chemicals are more heavily concentrated in the US market than most of Nova Scotia's export categories. Exports to the United States increased by 11 per cent over 2011. The second largest market is Japan, accounting for just 1 per cent of total exports.

Paper and Paperboard

Exports of paper and paperboard contributed $120 million to Nova Scotia's international exports in 2012, a 73.5 per cent decline from 2011. As a result, the share of paper and paperboard in the province's overall export dropped considerably, from 10 per cent in 2011 to only 3 per cent in 2012.

One of the key products within this product group is newsprint, which accounted for 56 per cent of exports in 2012 and 51 per cent in 2011. Exports of almost every product within this group decreased in 2012 with exports of newsprint falling by 71 per cent.

The US share of exports was 60 per cent in 2011 and 40 per cent in 2012.The second largest 2012 importer of Nova Scotian paper and paperboard was India. Its share was 9 per cent in 2011 and 18 per cent in 2012. Hong Kong and Turkey were the third and the fourth largest destinations, accounting for about 6 per cent of total exports each, while Israel was the fifth largest destination, accounting for 5 per cent of total exports. Only in the case of Turkey was there a growth in exports in 2012, an increase of 227 per cent, from $2 million to $7 million.

The decline of exports in this sector in 2012 continued a long-term trend. Between 2001 and 2011, exports of paper and paperboard decreased by 29 per cent, from $640 million in 2001 to $455 million in 2011. Mill closures were a factor: the closure of the Bowater Mersey mill in Liverpool (June 2012) and the shutdown of both paper machines at the Port Hawkesbury NewPage facility (September 2011). The latter, which has a more international market focus, was particularly important. With the October 2012 restart of supercalendered paper manufacturing by Port Hawkesbury Paper, significant export gains are to be expected in this commodity group. The December 2012 closure of the Minas Basin mill will offset these gains to some extent, though.

Energy

In 2012, energy exports experienced the largest decline among all product groups, at 78.9 per cent. Exports decreased from $459 million to $97 million, representing just 2.5 per cent of total exports. Over the last decade this sector has experienced significant fluctuations. In 2003, exports rose to $1.3 billion, remained flat between 2003 and 2007, experienced a sharp increase in 2008 up to $1.6 billion, and have been declining since. The decline has been significant: exports decreased by 71 per cent between 2008 and 2011. These fluctuations reflect changes in production capacity as well as high variations in prices, as discussed in section 1.3 of this report.

The key products in this sector are natural gas and petroleum oils and products.[6] In 2012, gas exports were $39 million, down from $242 million in 2011. The share of natural gas also decreased, from 53 per cent in 2011 to 40 per cent in 2012. In

[6] Petroleum oils and products are classified as HS 2710 and HS 2709.

part, the decline in 2012 resulted from reduced production at the Sable Offshore natural gas project. Petroleum oils and products produced at Imperial Oil's Dartmouth refinery were down from $186 million in 2011 (41 per cent of energy exports) to $44 million in 2012 (45 per cent of energy exports).

Forecast increases in natural gas prices,[7] expected production at Deep Panuke, and increased production at Sable are all expected to boost energy exports in 2013. However, the closure of the Imperial Oil refinery in Dartmouth will have a negative impact on energy exports in the long run.

Other product groups

Export of minerals and metals decreased by 5.1 per cent in 2012.The value of sales was $209 million, down from $220 million in 2011. Overall, this product group has declined over the last decade by 37 per cent. The top exports are articles of iron or steel. Their exports increased by 6 per cent in 2011 and constituted a 36 per cent share of total exports of the minerals and metals group. Other top products within this group are low value-added products such as copper and ferrous waste and scrap (25 per cent of minerals and metals export) and raw resources such as pebbles, gravel and gypsum. The United States is the destination for 60 per cent of minerals and metals exports. The second largest destination is China (16 per cent), followed by India (7 per cent).

Exports of instruments and apparatus totalled $60 million in 2012, down 8.6 per cent from 2011. The key products were surveying, hydrographic, oceanographic, hydrological, meteorological, and geophysical instruments (44 per cent of exports) and navigational instruments (26 per cent). Despite its small size, this sector is very important. It produces high-value-added products and services, creates high-skilled, high-wage jobs, invests in R&D, and drives productivity growth and innovation. Over the decade this product group has grown by 19 per cent. A significant proportion of exports are from companies in the ocean technology sector, and recent analysis shows that this sector has a significant potential to expand.[8] The key destination of exports is the United States (57 per cent), followed by the United Kingdom (9 per cent) and Australia (5 per cent).

Exports of machinery and mechanical appliances increased by 12.2 per cent in 2012 to reach $169 million. That was the largest growth rate among the product groups. Unlike other product groups, exports of machinery and mechanical appliances grew over the last decade by 41 per cent.

International shipments of electrical and electronic products remained flat at $110 million in 2012. The top products in this sector include transmission apparatus for radio-broadcasting or television ($19 million), electrical apparatus for line telephony or line telegraphy ($19 million), and electric storage batteries ($16 million). This product group has grown by almost 50 per cent since 2002.

Exports of transportation equipment increased by 9.8 per cent to reach $95 million. This sector is dominated by aircraft parts (49 per cent) and parts for motor vehicles (29 per cent).

Exports of textiles, clothing, and leather, a group dominated by textile products, decreased by 3.1 per cent to $101 million.

Exports of other goods were valued at $140 million, a decrease of 8.7 per cent from 2011.

Nova Scotia's International Goods Exports by Destination

The rate of growth of Nova Scotian exports to developed and developing economies varied substantially in 2012. Exports to developed economies decreased by 17 per cent. Although this group still receives the bulk of Nova Scotian exports, its share has decreased from 93 per cent in 2002 to 85 per cent in 2012. Nova Scotian exports declined in the US market by 16 per cent in 2012, mainly due to reduced sales of natural gas, which experienced the largest drop among product groups exported by Nova Scotia. In addition, paper and paperboard exports to this market decreased by 82 per cent, and fish and crustacean exports decreased by 2 per cent. Despite this, the United States remains a key destination for Nova Scotia, accounting for 72 per cent of Nova Scotia's total international goods exports.

In some categories, exports to the United States increased. Tire sales increased by 1 per cent, and chemicals and plastics exports grew by 11 per cent, to $224 million (8 per cent of total exports). In addition, electrical and electronic machinery and equipment exports grew by 6 per cent, to $81 million (3 per cent), and machinery and mechanical appliances by 13 per cent, to $74 million (3 per cent).

[7] US Energy Information Administration, Annual Energy Outlook 2012, with Projections to 2035.
[8] Nova Scotia, *Defined by the Sea: Nova Scotia's Oceans Technology Sector Present and Future*.
The report is available at http://www.novascotia.ca/econ/sectors/docs/Defined_by_the_sea-NS_Oceans_Technology_Sector.pdf.

With continued recession and reduced demand in the EU, Nova Scotian exports to this region decreased by 20 per cent. The top exports were fish and crustaceans, wood pulp, and wild blueberries, but these product groups experienced large declines in 2012. In particular, exports of fish and crustaceans decreased by 5 per cent. However, they still accounted for the largest share of exports to this market (31 per cent). Exports of wild blueberries decreased by 24 per cent to $43 million dollars, representing 11 per cent of total exports to the EU. Shipments of wood pulp to this market fell by 10 per cent, to 39 million. Exports of electrical and electronic machinery and equipment, as well as machinery and mechanical appliances, decreased, in contrast to the growth in sales of these product groups to the US market. However, sales of aircraft parts were up by 24 per cent to $12 million (3 per cent of total exports to the EU).

The reduction in Nova Scotian exports to Japan (3 per cent lower in 2012) also largely resulted from reduced exports of fish and crustaceans and wild blueberries. At the same time, there was an increase in exports of machinery, which reached $6 million, an 8 per cent share of exports to this market.

In contrast to developed markets, exports to developing countries increased by 3 per cent. Although Nova Scotian exports to these markets are still relatively small, accounting for only 14 per cent of total goods exports, their share has almost doubled over the last decade. The growth of exports to developing countries has been led by exports to the countries in Asia that were the major destination among the developing regions. Since 2002, the share of exports to the developing countries in Asia increased by 7 percentage points; exports to this region now stand at 10 per cent of total Nova Scotian exports in 2012.

The largest market in Asia is China. Although it was Nova Scotia's second-largest market (on a country basis), China accounted for just 4 per cent of total exports in 2012. A 31 per cent increase in exports to China in 2012 came mainly from a 90 per cent increase in fish and crustacean exports. Overall, exports to China are not high in value added. Besides fish and crustaceans, the top products were woodpulp (8 per cent), copper and aluminum waste and scrap (12 and 7 per cent, respectively).

India is another large Asian market; however, it represents just 1 per cent of Nova Scotian exports. Newsprint is the top product, accounting for 42 per cent of total exports to India. A decline in newsprint exports by 47 per cent to $21 million was the main factor behind the 11 per cent decrease in total exports to India in 2012. Exports of machinery and mechanical appliances helped to offset the weakness in newsprint exports, growing to $10 million in 2012, or 20 per cent of total exports, from a negligible base in 2011. Ferrous waste and scrap is another top export category; it accounted for 27 per cent of Nova Scotia's total exports to India in 2012.

Exports to the newly industrialized economies (NIEs) increased by 8 per cent. Exports of fish and crustaceans, the major product group exported to this market, increased by 38 per cent and represented almost 50 per cent of exports. Similar to exports to India, another important product group is machinery and mechanical appliances; sales in this product group to the NIEs increased by 28 per cent and accounted for 11 per cent of total exports. Another top product is woodpulp; exports in this category increased by more than 300 per cent and accounted for 7 per cent of total exports to these countries.

Exports to other developing regions were relatively small: exports to developing countries in each of Africa, Central America, South America, and the Caribbean region represented about 1 per cent of international exports or less.

TABLE 3.4: INTERNATIONAL MERCHANDISE EXPORTS OF NOVA SCOTIA, BY MARKET

	2012 ($ millions)	Change from 2011 (%)	Share in total export, 2012 (%)	Share in total export, 2002 (%)	Change in share, 2002 to 2012, (percentage points)[a]
World	3,822	-14.3	100.0	100.0	0.0
Developed economies	3,261	-16.6	85.3	93.1	-7.7
European Union	377	-19.8	9.9	6.6	3.3
Western EU[b]	309	-14.2	8.1	4.3	3.8
Japan	75	-3.3	2.0	4.1	-2.1
United States	2,734	-16.3	71.6	81.5	-9.9
Eastern Seaboard	1,013	-31.6	26.5	46.5	-20.0
Southeast	656	-7.5	17.2	16.8	0.3
Industrial Heartland	578	-11.1	15.1	7.1	8.1
Midwest	254	19.7	6.6	4.2	2.4
West	207	11.4	5.4	5.3	0.1
Developing countries	524	3.3	13.7	6.8	6.9
Developing Africa	17	-9.3	0.4	0.1	0.4
Developing America	115	-20.1	3.0	3.5	-0.5
Caribbean	39	*3.4*	*1.0*	*1.0*	*0.0*
Central America	41	-11.3	1.1	1.1	0.0
South America	35	-41.7	0.9	1.5	-0.5
Mexico	32	6.0	0.8	0.9	-0.1
Brazil	10	-62.1	0.3	0.9	-0.7
Developing Asia	392	13.8	10.3	3.3	7.0
China	151	31.4	3.9	1.1	2.9
India	50	-11.2	1.3	0.1	1.2
Newly industrialized economies[c]	134	8.0	3.5	1.8	1.7
Developing Oceania	1	7.9	0.0	0.0	0.0
Transition economies	36	-11.9	0.9	0.1	0.8
CIS	36	-11.4	0.9	0.1	0.8
Russia	31	-11.8	0.8	0.1	0.7

Source: Global Trade Atlas.

[a] Some of these numbers do not equal exactly the difference between the third and the forth columns because of rounding.

[b] Western EU includes Belgium, France, Germany, Ireland, Luxembourg, Netherlands, United Kingdom.

[c] The newly industrialized economies include Hong Kong, Indonesia, South Korea, Malaysia, Philippines, Singapore, Taiwan, Thailand.

Nova Scotia's International Goods Imports and Interprovincial Goods Trade

While merchandise export data are available on a relatively timely basis, the most recent detailed data on international goods imports, as well as interprovincial goods exports and imports are only available for 2009. This section provides a more comprehensive picture of Nova Scotia's goods trade using these data.

In 2009, which was the height of the recession, total Nova Scotian goods trade activity, including international and interprovincial imports and exports totalled $20 billion. Goods exports fell significantly short of imports in both cases, resulting in negative goods balances of $3.7 billion in international trade (Table 3.5) and $1.8 billion in interprovincial trade (Table 3.6).

On the international trade side, reflecting its comparative advantage in trade, Nova Scotia is a net exporter of fishery, agricultural, and forestry products and a net importer of metals and minerals, chemicals, energy, and most manufactured goods, with the exception of rubber products. In the last category, Nova Scotia is a significant exporter from the Michelin tire plants.

Because of the significant trade imbalance, the 2009 pattern of surpluses and deficits by product category does not necessarily describe Nova Scotia's comparative advantages. That is, under balanced macroeconomic conditions, some of the trade categories that were in deficit in 2009 might swing into surplus. That being said, the deficits in most areas were sufficiently large that even with very significant export gains, Nova Scotia would continue to show comparative disadvantage in those areas.

Turning to trade in provincial goods, Nova Scotia also ran a significant deficit with other provinces, although the deficit in interprovincial trade was proportionately smaller than that in international goods trade.

Nova Scotia has an interprovincial trade surplus in fishery and forest products, a deficit in agricultural products (significant at $634 million), and a surplus in textiles and clothing. Nova Scotia also has a significant interprovincial trade surplus in rubber products.

In terms of provincial destination, a total of 48 per cent of Nova Scotian agricultural product shipments went to Ontario and Quebec. However, the value of exports to Ontario was twice that of those to Quebec. The other Atlantic provinces received an additional 35 per cent of Nova Scotian exports, with just over 20 per cent of shipments going to New Brunswick and just under 10 per cent destined for Newfoundland and Labrador. Ontario and Quebec were the main sources of agricultural products in Nova Scotia's interprovincial trade, supplying a combined 57 per cent of Nova Scotia's total interprovincial imports in this category, followed by New Brunswick (12 per cent) and Alberta (10 per cent).

Nova Scotian exports of chemical products were widely distributed across the county. Newfoundland and Labrador received the greatest share at 21 per cent. Ontario supplied 56 per cent of imports, followed by Quebec (28 per cent) and Alberta (7 per cent).

Interprovincial trade in electrical equipment, computers, and electronics was concentrated in Ontario and Quebec, with Ontario's shares of exports and imports being slightly in excess of 50 per cent, and Quebec accounting for 31 per cent of Nova Scotian exports and 41 per cent of Nova Scotian imports.

Interprovincial trade in energy largely reflects shipments of mineral fuels and refinery outputs. Ontario, New Brunswick, and Quebec each shared slightly in excess of 20 per cent of Nova Scotian exports. Over half of Nova Scotian imports came from Newfoundland and Labrador, and about one quarter from New Brunswick.

Almost 40 per cent of Nova Scotia's unprocessed fish and seafood exports went to New Brunswick, with Ontario the next largest market at 23 per cent. Newfoundland and Labrador accepted 17 per cent, with a slightly lesser value going to Quebec. The majority of Nova Scotian imports in this category, 55 per cent, came from Newfoundland and Labrador, and 22 per cent came from New Brunswick. Overall imports were only $85 million. All other provinces and territories had relatively little importance to Nova Scotia's trade in this product group, either as markets or as suppliers.

Ontario dominated the machinery product category, with over 55 per cent of both imports and exports. New Brunswick was the next most important export market, but with just a 12 per cent share. Quebec supplied a further 19 per cent of imports.

Nova Scotia exports minerals and metals products across Canada. Quebec was the most significant destination, at 23 per cent of the total. Ontario and the three other Atlantic provinces each received between 10 and 20 per cent of exports. Almost half of Nova Scotian imports were sourced from Ontario, and just over one quarter from Quebec.

Nova Scotia's plastics and rubber product exports went principally to Ontario (34 per cent) and Quebec (21 per cent). Other provinces were markets for 10 per cent or less of Nova Scotia's interprovincial exports in this product group. Likewise, 45 per cent of imports came from Ontario and 18 per cent from Quebec, but with another 21 per cent secured from New Brunswick sources.

Ontario, with a 43 per cent share, was the largest interprovincial market for Nova Scotia's textiles, clothing, and leather exports. Quebec and Ontario dominated supply of imports, with combined shipments approaching 90 per cent of total imports.

Trade in transportation equipment with Ontario and Quebec overshadowed trade in this category with all other provinces. About 43 per cent of Nova Scotian exports went to Quebec, 27 per cent to Ontario. Also, approximately 90 per cent, or about $400 million, of Nova Scotian imports came from Ontario and Quebec, in almost equal proportion.

Approximately 44 per cent of Nova Scotia's wood, pulp, and paper exports went to Quebec, an additional 22 per cent to Ontario, and 16 per cent to New Brunswick. Quebec and New Brunswick each supplied one-third of Nova Scotian imports, and Ontario 14 per cent.

TABLE 3.5: INTERNATIONAL TRADE IN GOODS: EXPORTS, IMPORTS, AND TRADE BALANCES, 2009

	International Exports		International Imports		Balance
Products	**($ millions)**	**Share (%)**	**($ millions)**	**Share (%)**	**($ millions)**
Plastic and rubber	720.1	17.5	120.0	1.5	600.1
Wood, pulp and paper	416.5	10.1	149.2	1.9	267.3
Fish and seafood[a]	257.5	6.2	4.5	0.1	253.0
Agriculture	680.3	16.5	586.2	7.5	94.1
Utilities	1.6	0.0	0.2	0.0	1.4
Textile, clothing, leather	84.8	2.1	475.9	6.1	-391.1
Minerals and metals and products thereof	143.2	3.5	555.7	7.1	-412.5
Machinery	122.1	3.0	597.2	7.7	-475.1
Energy (except electricity)	1000.5	24.3	1,649.8	21.2	-649.3
Electrical equipment, computer and electronics	135.6	3.3	925.8	11.9	-790.2
Chemical products	169.9	4.1	974.2	12.5	-804.3
Transportation equipment and parts	338.6	8.2	1,367.9	17.6	-1,029.3
Other	48.8	1.2	443.1	5.7	-394.3
Total	**4,123.1**	**100.0**	**7,787.5**	**100.0**	**-3,664.4**

Source: Statistics Canada and author's calculations.

Note: Products do not sum exactly to the total because of aggregation.

[a] This category includes raw or minimally processed fish and seafood while agriculture category includes prepared fish and seafood products among other food preparations.

TABLE 3.6: INTERPROVINCIAL TRADE IN GOODS: EXPORTS, IMPORTS, AND TRADE BALANCES, 2009

	Interprovincial Exports		Interprovincial Imports		Balance
Products	($ millions)	Share (%)	($ millions)	Share (%)	($ millions)
Fish and seafood[a]	196.6	5.9	85.2	1.7	111.4
Plastic and rubber	271.9	8.2	191.6	3.7	80.3
Textile, clothing, leather	103.4	3.1	55.7	1.1	47.7
Wood, pulp and paper	536.1	16.1	525.6	10.3	10.5
Utilities	0.6	0.0	15.7	0.3	-15.1
Electrical equipment, computer and electronics	89.6	2.7	129.2	2.5	-39.6
Machinery	40.0	1.2	167.6	3.3	-127.6
Energy (except electricity)	796.9	24.0	995.4	19.4	-198.5
Chemical products	100.6	3.0	311.8	6.1	-211.2
Minerals and metals and products thereof	266.1	8.0	507.2	9.9	-241.1
Transportation equipment and parts	86.1	2.6	443.6	8.7	-357.5
Agriculture	763.9	23.0	1,398.0	27.3	-634.1
Other	58.3	1.8	227.8	4.4	-169.5
Total	**3,326.9**	**100.0**	**5,123.0**	**100.0**	**-1,796.1**

Source: Statistics Canada and author's calculations.

[a] This category includes raw or minimally processed fish and seafood while agriculture category includes prepared fish and seafood products among other food preparations.

TABLE 3.7: INTERPROVINCIAL TRADE: IMPORTS AND EXPORTS OF GOODS, BY MARKET, 2009

	Goods Export		Goods Import		Balance
Region	($ millions)	Share (%)	($ millions)	Share (%)	($ millions)
PE	127.9	3.8	94.6	1.8	33.3
NT	26.5	0.8	0.1	0.0	26.4
NU	20.2	0.6	0.1	0.0	20.1
SK	79.1	2.4	67.8	1.3	11.3
YT	3.2	0.1	0.0	0.0	3.2
BC	189.1	5.7	195.1	3.8	-6.0
MB	74.6	2.2	123.7	2.4	-49.1
AB	188.2	5.7	313.9	6.1	-125.7
NB	607.8	18.3	828.9	16.2	-221.1
NL	366.0	11.0	656.6	12.8	-290.6
QC	778.3	23.4	1,192.1	23.3	-413.8
ON	866.0	26.0	1,650.0	32.2	-784.0
Other	48.8	1.2	443.1	5.7	-394.3
Total	**3,326.9**	**100.0**	**5,123.0**	**100.0**	**-1,796.1**

Source: Statistics Canada and author's calculations.

Nova Scotia's International and Interprovincial Services Trade

Consistent with Nova Scotia's gateway role, it has a clearly defined international comparative advantage in services, with particularly large surpluses in wholesale and retail trade and transportation. Other areas where Nova Scotia reveals international trade advantages include business support, waste management, and accommodation and food services (the last may reflect a positive performance on tourism). In certain other areas where Nova Scotia has a deficit, it also has a significant base on which to build — for example, in information, cultural and recreational services, professional services, and finance, insurance, and real estate.

The picture in interprovincial trade is sharply different. The main areas of Nova Scotia's comparative advantage in international trade — wholesale and retail trade and transportation — have large deficits in interprovincial trade. This apparent contradiction may be explained by the fact that Nova Scotia is an international gateway. This suggests that a surplus in international wholesale and transportation services and a deficit in interprovincial services are two sides of the same coin. Simply put, goods produced in other provinces are bought by Nova Scotian wholesalers and subsequently exported internationally. Payments for delivery of those goods to Nova Scotia result in interprovincial imports in the transportation services sector. When Nova Scotian wholesalers export those same goods through Nova Scotia's ports, they contribute to the growth of internationally traded transportation services. The margins that wholesalers earn from international sales of Canadian goods show up as export receipts. In 2009, these wholesale sector exports amounted to $400 million, or 21 per cent of Nova Scotia's international services exports.

The interprovincial deficit in the wholesale sector is consistent with the fact that, overall, Nova Scotia buys more goods than it sells to other provinces. As many of those goods are shipped from wholesalers located in other provinces, payments to those wholesalers result in wholesale sector imports to Nova Scotia.

As in the case of international services, Nova Scotia has a considerable export base on which to build, in a range of services areas such as information, cultural and recreational services, and professional services.

In terms of interprovincial trade balances, Nova Scotia has a positive balance in the Maritimes and with Saskatchewan and Manitoba, but large deficits with Quebec, Ontario, Alberta, and British Columbia.

TABLE 3.8: INTERNATIONAL SERVICES TRADE: EXPORTS, IMPORTS, AND TRADE BALANCES, 2009

	Interprovincial Exports of Services		Interprovincial Imports of Services		Trade Balance
	($ millions)	Share (%)	($ millions)	Share (%)	($ millions)
Total	1859.8	100.0	1416.3	100.0	443.5
Wholesale and retail	397.9	21.4	33.6	2.4	364.3
Transportation	516.1	27.8	222.0	15.7	294.1
Business support and waste management	188.8	10.2	114.9	8.1	73.9
Accommodation and food services	217.1	11.7	203.3	14.4	13.8
Intellectual property	40.0	2.2	40.9	2.9	-0.9
Telecommunications	27.9	1.5	30.2	2.1	-2.3
Health and social assistance[a]	9.4	0.5	14.8	1.0	-5.4
Education services[b]	27.8	1.5	46.5	3.3	-18.7
Information, cultural, recreation	111.1	6.0	140.0	9.9	-28.9
Professional services	116.5	6.3	150.3	10.6	-33.8
Finance, insurance and real estate	198.5	10.7	274.4	19.4	-75.9
Other	12.0	0.6	174.6	12.3	-162.6
Total	**1859.8**	**100.0**	**1416.3**	**100.0**	**443.5**

Source: Statistics Canada and author's calculations.

Note: Products do not sum exactly to the total because of aggregation.

[a] Health services provided by government sector and non-profit institutions are not included in this category.

[b] Education services provided by government sector and non-profit institutions are not included in this category.

TABLE 3.9: INTERPROVINCIAL SERVICES TRADE: EXPORTS, IMPORTS, AND TRADE BALANCES, 2009

	Interprovincial Exports of Services		Interprovincial Imports of Services		Trade Balance
	($ millions)	Share (%)	($ millions)	Share (%)	($ millions)
Accommodation and food services	411.7	10.8	310.8	4.5	100.9
Education services	101.1	2.6	53.2	0.8	47.9
Health and social assistance	73.8	1.9	33.9	0.5	39.9
Information, cultural, recreation	327.2	8.6	352.3	5.1	-25.1
Intellectual property	46.3	1.2	77.3	1.1	-31.0
Telecommunications	183.8	4.8	256.9	3.7	-73.1
Professional services	324.2	8.5	404.4	5.8	-80.2
Business support and waste management	325.9	8.5	601.3	8.6	-275.4
Transportation	786.4	20.6	1,238.5	17.8	-452.1
Finance, insurance and real estate	644.8	16.9	1,215.9	17.5	-571.1
Wholesale and retail	496.8	13.0	1,768.7	25.4	-1,271.9
Other	113.6	3.0	714.1	10.3	-600.5
Total	**3,818.9**	**100.0**	**6,963.4**	**100.0**	**-3,144.5**

Source: Statistics Canada and author's calculations.

Notes: 1) Products do not sum exactly to the total because of aggregation. 2) See notes to table 3.8 on health services and education sectors.

TABLE 3.10: INTERPROVINCIAL TRADE IN SERVICES: EXPORTS AND IMPORTS BY MARKET, 2009

	Exports of Services		Imports of Services		Balance
Region	($ millions)	Share (%)	$($ millions)	Share (%)	($ millions)
NL	395.3	10.4	228.0	3.3	167.3
PE	238.3	6.2	162.4	2.3	75.9
SK	81.3	2.1	36.7	0.5	44.6
MB	106.5	2.8	65.2	0.9	41.3
YT	9.6	0.3	3.9	0.1	5.7
NU	10.0	0.3	8.6	0.1	1.4
NT	6.5	0.2	8.8	0.1	-2.3
NB	659.9	17.3	769.6	11.1	-109.7
BC	192.8	5.0	393.7	5.7	-200.9
AB	264.7	6.9	596.3	8.6	-331.6
QC	623.9	16.3	1,200.5	17.2	-576.6
ON	1,230.2	32.2	3,489.5	50.1	-2,259.3
Total	**3,818.9**	**100.0**	**6,963.4**	**100.0**	**-3,144.5**

Source: Statistics Canada and author's calculations.

3.4 Nova Scotia's International and Interprovincial Balance of Trade in 2011

A more comprehensive picture of Nova Scotia's trade performance at the aggregate level for goods and services, including interprovincial trade, is available for the period through 2011.

Aggregate Exports

The total value of all goods and services exported from Nova Scotia approached $16 billion in 2011, an increase of 6 per cent over 2010. This was divided almost equally between exports to other countries and exports to other provinces. However, the growth rate of international exports was larger, at 7.5 per cent, than for interprovincial exports, at 4.6 per cent.

The province's international export mix in 2011 was dominated by goods, at approximately 80 per cent, 20 per cent for services. In contrast, the value of Nova Scotian services exported to other provinces exceeded that of goods by a small margin.

Both international and interprovincial goods exports from Nova Scotia declined considerably following the 2008-2009 economic crisis and remained below pre-recession levels in 2011 (Figure 3.1). Nova Scotian exports of services to other provinces, however, have continued to grow since 2009.

Aggregate Imports

Nova Scotian imports grew at a considerably faster rate than its exports in 2011. Both domestic and international imports increased in value by a combined total of 10.5 per cent. The only decline was a 1.9 per cent reduction in services imported from other countries.

The value of Nova Scotia's international goods imports dropped during the recession, but unlike international goods exports, they exceeded pre-recession levels by 2011 (Figure 3.1) and grew a further 15.6 per cent over the year.

Trade Balance

With imports outpacing exports, Nova Scotia's trade deficit widened by $1.6 billion, or by 3.8 percentage points as a share of GDP, to reach almost $10 billion, or 27 per cent of GDP in 2011 (Table 3.12).

The main components of the overall deficit were negative trade balances in international goods trade of $4.5 billion, in interprovincial trade in services of $3.5 billion, and in interprovincial goods trade of $2.2 billion. International trade in services showed a modest surplus of $192 million.

TABLE 3.11: INTERNATIONAL AND INTERPROVINCIAL TRADE IN 2011

	Amount ($ millions, current)	Growth over 2010 (%)	Share of GDP (%)	Change in GDP Share from 2010 (percentage points)
Exports of goods and services	**15,836**	**6.0**	**42.8**	**1.7**
Exports to other countries	7,732	7.5	20.9	1.1
Goods	6,210	9.0	16.8	1.1
Services	1,522	1.9	4.1	0.0
Exports to other provinces	8,104	4.6	21.9	0.6
Goods	3,778	6.5	10.2	0.5
Services	4,326	3.0	11.7	0.1
Imports of goods and services	**25,820**	**10.5**	**69.8**	**5.5**
Imports from other countries	12,025	13.4	32.5	3.3
Goods	10,695	15.6	28.9	3.4
Services	1,330	-1.9	3.6	-0.1
Imports from other provinces	13,795	8.1	37.3	2.2
Goods	5,985	8.1	16.2	0.9
Services	7,810	8.1	21.1	1.2

Source: Statistics Canada and author's calculations.

The deterioration of Nova Scotia's trade balance in 2011 was caused mainly by a widening of the balance related to international trade in goods, but widening deficits on interprovincial trade in both goods and services also contributed. Only the balance in international trade in services improved, by $54 million.

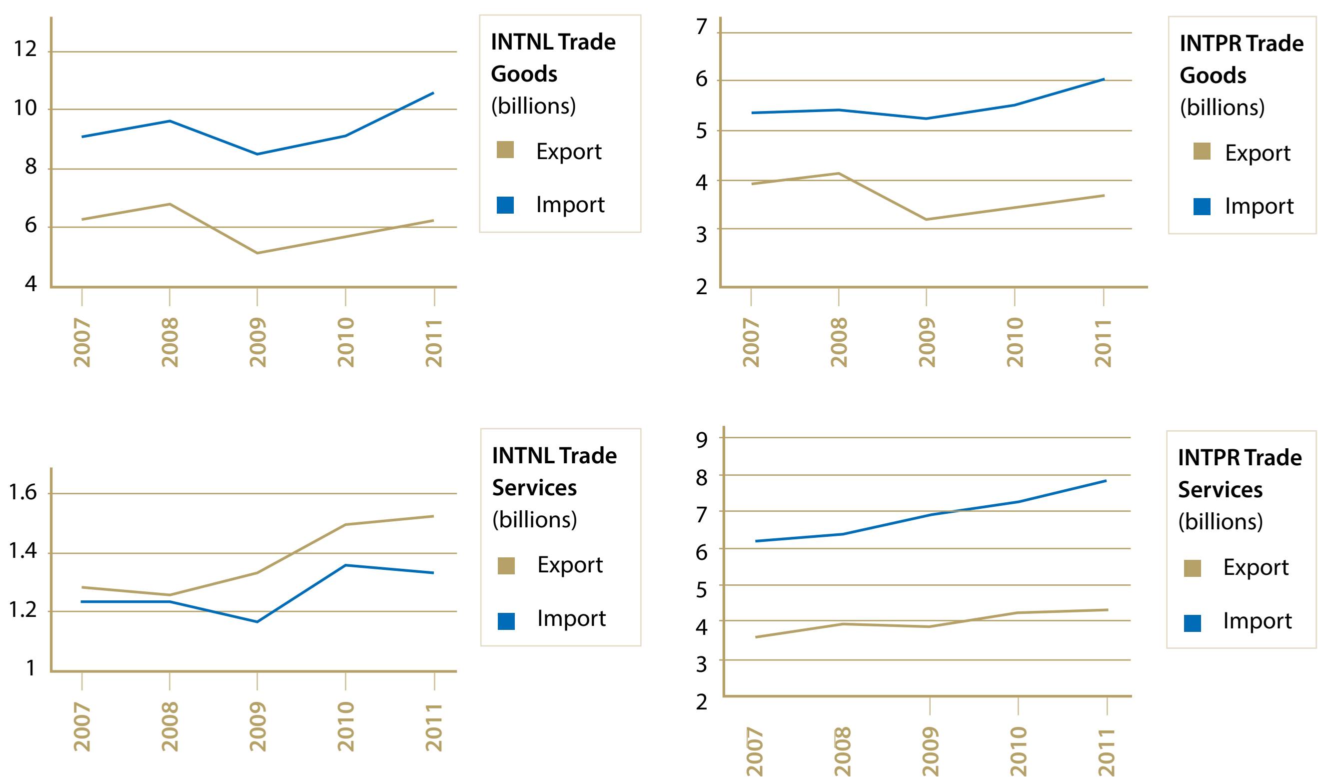
Overall, the value of imports was 63 per cent greater than the value of exports in 2011.

TABLE 3.12: TRADE BALANCE ON INTERNATIONAL AND INTERPROVINCIAL TRADE IN GOODS AND SERVICES

	2010		2011		Change, 2011 over 2010
	Amount ($ millions)	Share of GDP (%)	Amount ($ millions)	Share of GDP (%)	Amount ($ millions)
Goods and services: international trade	-3,418	-9.4%	-4,293	-11.6%	-875
Goods and services: interprovincial trade	-5,015	-13.8%	-5,691	-15.4%	-676
Goods: international trade	-3,556	-9.8%	-4,485	-12.1%	-929
Goods: interprovincial trade	-1,989	-5.5%	-2,207	-6.0%	-218
Services: international trade	138	0.4%	192	0.5%	54
Services: interprovincial trade	-3,026	-8.3%	-3,484	-9.4%	-458
Total goods and services	**-8,433**	**-23.2%**	**-9,984**	**-27.0%**	**-1,551**

Source: Statistics Canada.

FIGURE 3.1: CHANGES IN NOVA SCOTIAN EXPORTS AND IMPORTS



Source: Statistics Canada.

3.5. Nova Scotia's International and Interprovincial Trade: Longer-Term Trends

In terms of longer-term trends, Nova Scotia has experienced a decline in goods exports. This is evident in a 10-year comparison. Goods exports as a share of GDP decreased from 37 per cent in 2002 to 27 per cent in 2011, and the goods trade deficit widened from $3.2 billion in 2002 to $6.7 billion in 2011. In contrast, exports of services as a share of GDP have increased moderately. In particular, exports of services to other provinces experienced significant growth, from $2.3 billion in 2002 to $4.3 billion in 2011, representing 12 per cent of GDP. At the same time, the services trade deficit also widened (from $1.7 billion in 2002 to $3.3 billion in 2011).

Export Trends by Product Group

The main factor behind the decline in Nova Scotia's export performance has been a steep decline in international exports of four product groups that were mainstays for the province, accounting for 60 per cent of its international exports in 2002: fish and seafood, energy, paper and paperboard, and wood and pulp. International exports of these four commodity groups fell in dollar value from $3.1 billion to $1.4 billion over the 2002–2012 period.

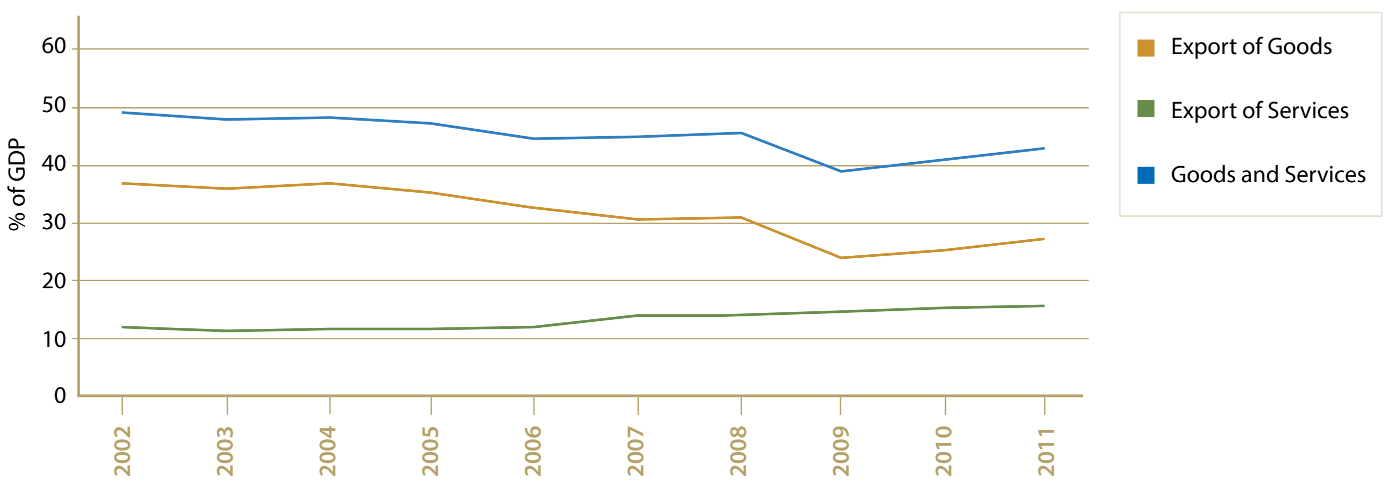
In the meantime, other significant product groups performed poorly, providing no significant offsets to the declines in the main groups.

Only one product group, rubber products (mainly automotive tires), expanded significantly in value terms.

The steepest declines — in the energy and paper and paperboard sectors — were exacerbated in recent years by specific setbacks, namely a sharp reduction in production of natural gas from the Sable Offshore facility and mill closures in the paper and paperboard sector.

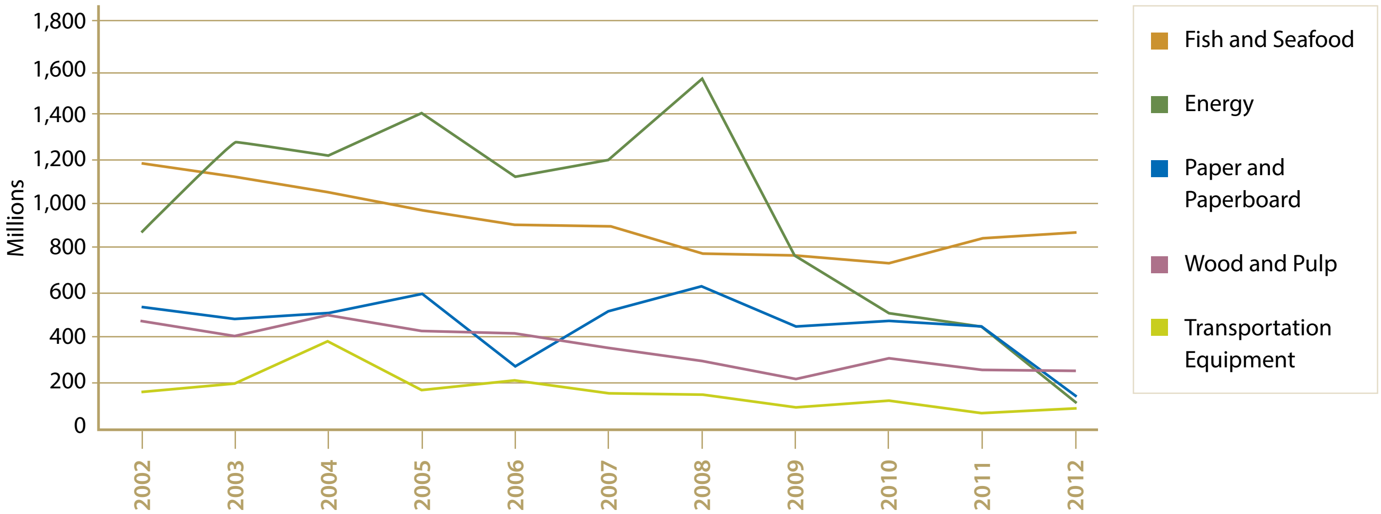
The declines in fish and seafood and wood and pulp — two of Nova Scotia's traditional export mainstays — have also been weakened by a number of factors. These were the two commodity areas that did not benefit from price increases during the recent period of generally buoyant commodity prices. In the case of the forestry sector, demand factors exacerbated the problems, particularly the steep downturn in the US housing sector.

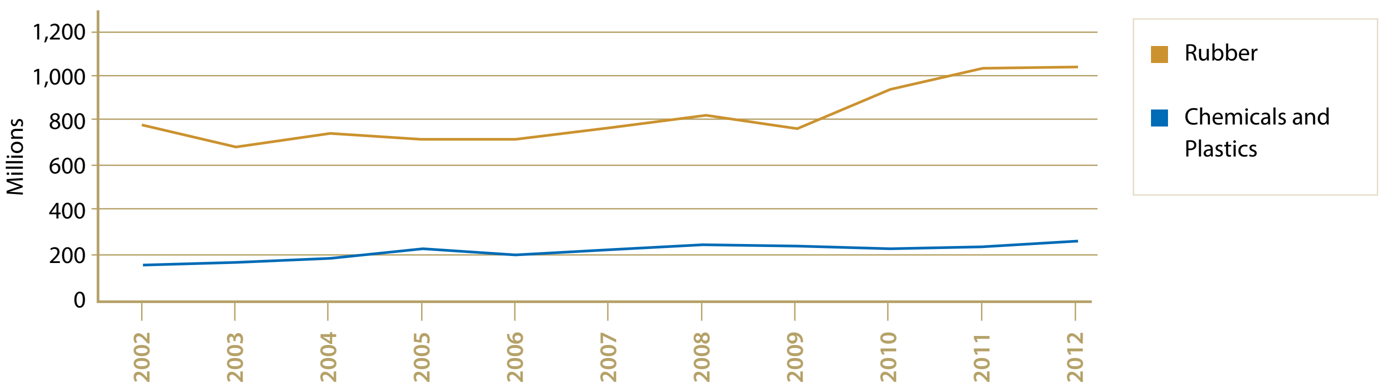
FIGURE 3.2 NOVA SCOTIAN EXPORTS RELATIVE TO GDP, 2002-2011

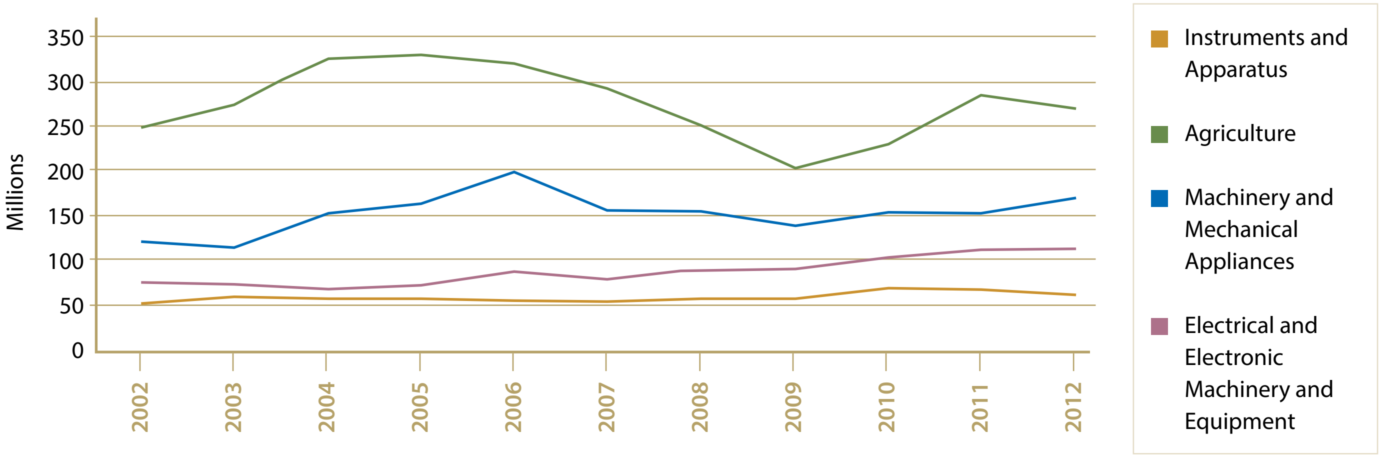


Source: Statistics Canada, CANSIM 3840038 and 3840002. (Note: Data over 2002–2006 period and data over 2007–2011 period may not be compatible because the latter period reflects the 2012 revision of Canadian System of National Accounts. However, it is expected that the trends captured by the data are correct.)

FIGURE 3.3 VALUE OF NOVA SCOTIAN EXPORTS: DECLINING, RISING, AND FLAT SECTORS







Source: Global Trade Atlas.

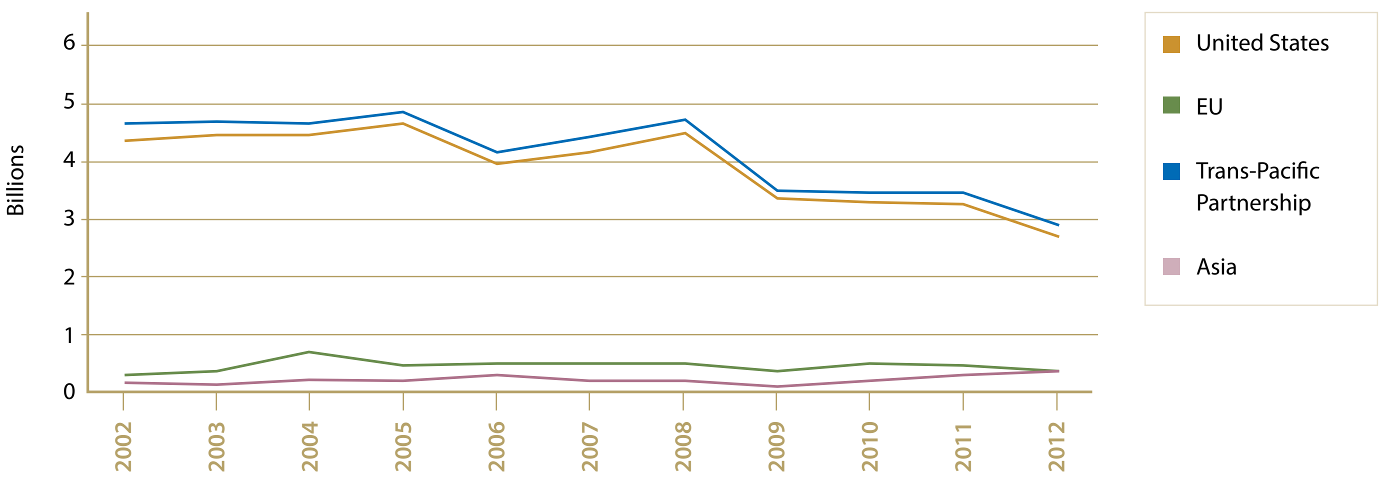
Export Trends by Destination

Looking at trends in export destinations, there is a similar picture, namely that the main export market (the United States) has seen a decline, there has been limited growth in other markets, and the main bright spot in the export picture — exports to China — has not had sufficient scale to compensate. The Trans-Pacific Partnership, which is discussed in the next section, is dominated by the United States, and trade with this group of countries was therefore on a decline as well.

Outlook for Goods Exports

The expected turnaround in the province's natural gas production, coupled with improved demand from the rebounding US auto and housing sectors, provides the basis for a significantly better performance in 2013. Notable supply-side developments in 2013 include a return to full production at Sable Offshore at some point in 2013, the coming natural gas production at Deep Panuke, expansion by the province's largest supplier of tires, and a full year's worth of production at the Port Hawkesbury Paper mill. These factors, along with continued robust demand from China for fisheries products and firmer natural gas prices[9] will also help support a rebound in export values.

FIGURE 3.4: NOVA SCOTIA'S INTERNATIONAL MERCHANDISE EXPORTS, 2002–2012



Source: Global Trade Atlas.

[9] As projected by the US Department of Energy Information, *Short-term Energy Outlook*, 11 June 2013.

4. Factors Shaping the Trading Environment for Nova Scotia

4.1. Major Trends and Structural Changes in the Global Economy

Economic trends in 2012 emphasized three major factors reshaping the global economy: the growing role of traded goods and services — and of intermediate goods and services in particular – in global production; the rise of emerging markets; and the growing momentum of regional preferential trade agreements.

The Growing Role of Trade

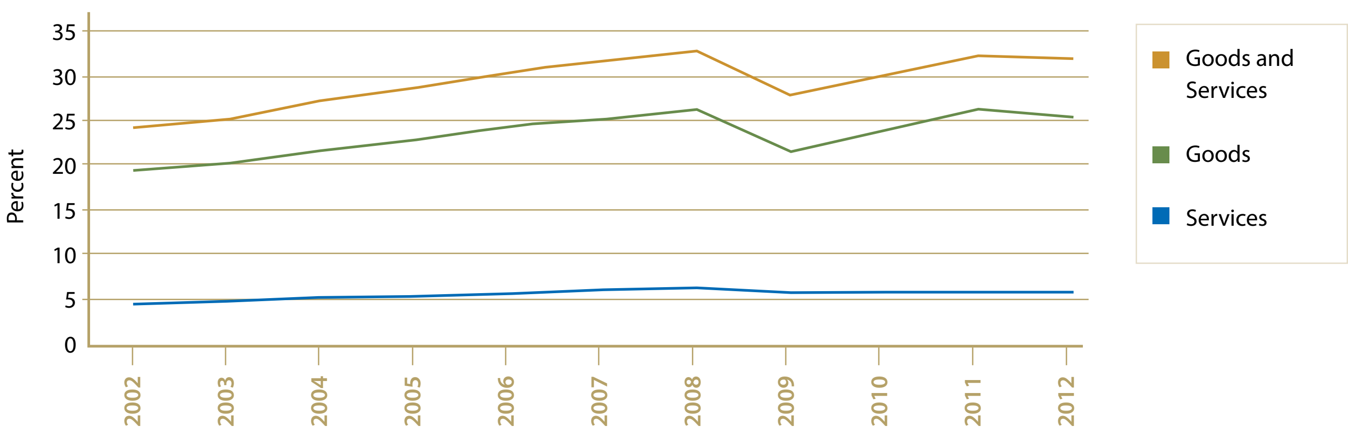
The recent sharp slowdown in global trade again emphasized the cascading effect on the level of trade flows of global value chains, a trend that was powerfully illustrated by the disproportionately large decline in trade during the global recession of 2009. Global value chains spread the production of goods and delivery of services across many locations in the world and imply that intermediate goods and services now account for the large share of trade across the borders. Consequently, a slowdown in foreign demand for final traded goods and services also reduces the demand for imported intermediates in many countries.

By the same token, trade grows disproportionately quickly in upswings and continues to trend upward when expressed as a share of global GDP. Thus, over the period 2002–2012, export of goods and services expanded from 24 per cent of global GDP to a peak of 33 per cent in 2008, sliding back to 32 per cent in 2012.

Meanwhile, the sustained high growth of emerging markets over the past decade has led to a dramatic shift in world distribution of economic activity. In 2002, the developing economies accounted for 20 per cent of global GDP; by 2012, their share had increased to 38 per cent, and the IMF forecasts it will reach 44 per cent by 2018 (Figure 4.2).

Along with a growing share of global production, emerging markets and developing economies have sharply increased their share of global trade. In 2002, they accounted for about 25 per cent of global exports; by 2012, this share had expanded to 39 per cent.[10] Moreover, the trade between developing countries, so called "South-South" trade, has escalated. The United Nations estimated that the global share of South-South merchandise exports increased from 13 per cent in 2001 to almost 25 per cent in 2011.[11] Furthermore, there has been a

FIGURE 4.1: GLOBAL EXPORT SHARE OF GLOBAL GDP, 2002–2012



Source: International Monetary Fund, World Economic Outlook, April 2013; World Trade Organization.

[10] Calculated using International Monetary Fund (April 2013), World Economic Outlook database.

[11] United Nations Conference on Trade and Development (July 2013), South-South Trade Monitor, No. 2, [online] http://unctad.org/en/pages/newsdetails.aspx?OriginalVersionID=572.

shift toward higher-skill, higher-technology manufactured products in South-South exports. Asia is the major region of South-South trade, accounting for 77 per cent of South-South exports in 2011.

Firms in advanced countries now face a challenge to integrate with the global value chains driving South-South trade. Accordingly, while the North Atlantic region still accounts for the largest share of global economic activity and trade, growth opportunities for Nova Scotia are now concentrated in more-far-flung markets.

The Rise of the BRICS

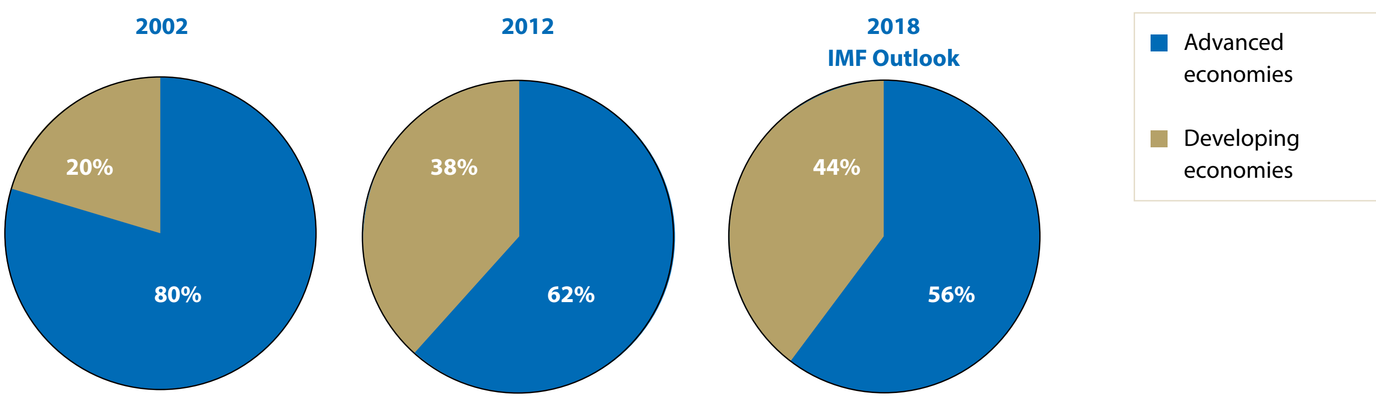
Within the world's emerging markets, the role of the BRICS (Brazil, Russia, India, China, and South Africa) continues to expand. The BRICS produced 20 per cent of world output in 2012, substantially up from 9 per cent in 2002.[12] The BRICS phenomenon is more than simply a story of economic growth. Whereas a previous wave of successful developing economies comprised smaller island or island-like economies (Hong Kong, Singapore, Taiwan and Korea — which were at the time referred to as the Newly Industrialized Economies, or NIEs), the BRICS are large-population, continental economies with the potential to generate far greater demand for industrialized country products and, by the same token, generate far greater adjustment pressures as they integrate with the global economy.

Moreover, the BRICS are also exerting significant influence on global economic policy. In March 2013, the BRICS hosted their fifth summit in Durban, South Africa. This summit resulted in an agreement to set up a New Development Bank that could finance infrastructure projects in developing economies, a currency fund to manage liquidity pressures, a BRICS Think Tanks Council for policy development, and a BRICS Business Council for business networking.

BRICS engagement in South-South co-operation goes well beyond the political/institutional level: large-scale direct engagement in economic projects in other developing economies inevitably generates commercial opportunities for the BRICS economies themselves.[13]

In short, the world is changing. The rules of international commerce are being rewritten. For Nova Scotia, this creates some challenges — but also a world of opportunity.

FIGURE 4.2: DEVELOPING ECONOMIES SHARE OF GLOBAL GDP



Source: International Monetary Fund, *World Economic Outlook* (database), April 2013.

[12] Calculated using the data from United Nations Conference on Trade and Development, *UNCTADstat* database.

[13] A good example is Ethiopia's railway expansion program. There, the EXIM Bank of China is financing a railroad from Addis Ababa, Ethiopia, to Djibouti, and the further 100 km link from the Djibouti border to the Port of Dorrale, with a loan of over US$2 billion. The rolling stock will be provided by a Chinese manufacturer, Norinco. Meanwhile, the Brazilian Development Bank has signed an agreement to provide over US$1 billion for a 439 km railroad line connecting the Ethiopian cities of Jimma and Addis Ababa. Additionally, India is said to be contributing $300 million to build a railway from Asayita to Tajura, part of Ethiopia's national railway network. See "Financing Ethiopia's Grand Railway," Ethiopia, Railways Africa, June 5, 2013; Zeryhun Kassa, "China offers over US$2 billion loan for Addis Ababa–Djibouti railway," Ethiopian Radio and Television Agency (ERTAgov.com), May 22, 2013; and "Loan Agreement Signed," Ethiopian Railways Corporation, May 24, 2013.

4.2. Developments in the Regulatory Framework for Trade

Trade and investment take place within a complex framework of rules and regulations established at multilateral, regional, bilateral, and national levels.

At the multilateral level, the Doha Round of negotiations under the auspices of the World Trade Organization (WTO) has stalled, following a series of failed Ministerial Conferences and suspensions/resumptions of talks. The level of ambition has been steadily scaled back in the face of unresolved differences between developed and developing countries over the actual meaning of the terms agreed to at the launch of the Round in November 2001 at the WTO's Fourth Ministerial Conference in Doha, Qatar. The negotiating groups have made much progress in shaping a possible deal, but an overarching agreement has proved elusive.

As progress on the Doha Round stalled, trade-negotiating energy shifted to regional trade agreements (RTAs), resulting in a proliferation of new negotiations. The WTO reports that as of January 10, 2013, it had received some 546 notifications of RTAs (counting goods, services, and accessions separately), of which 354 were in force.

RTAs expand the potential for trade by eliminating bilateral border barriers and addressing various behind-the-border factors that limit the ability of trading firms to compete in foreign markets. At the same time, the preferential nature of RTAs also introduces discrimination into the multilateral system and potential for increased obstacles in a world of overlapping rules.

Canada has recently concluded a series of negotiations and now has in-force agreements with thirteen partners: Chile, Colombia, Costa Rica, Jordan, Israel, Panama, Peru, the four members of the European Free Trade Association (EFTA), and the United States and Mexico through NAFTA. Canada has an agreement in principle with the European Union and open negotiations at various stages of progress with the following partners: the Caribbean Community (CARICOM), Honduras, India, Japan, Korea, Morocco, the Trans-Pacific Partnership, and Ukraine. Canada also has initiatives underway to modernize the FTAs with Costa Rica and Israel and has held exploratory discussions about an FTA with Turkey. Several other Canadian negotiations have stalled, among them those with the Andean Community, Central America Four, Dominican Republic, Singapore, and the Free Trade Area of the Americas (FTAA).

As well, within the Canadian economy itself, there is renewed focus on facilitating inter-provincial trade, perhaps through the Agreement on Internal Trade (AIT), which entered into force in 1995. The AIT addresses barriers to interprovincial trade, investment, and labour mobility, such as qualifications in regulated occupations and transparency in government procurement.

The following paragraphs describe the major negotiations now underway that have a potential to affect Nova Scotia's trade opportunities and competition in its domestic market.

The Agreement on Internal Trade (AIT)

The AIT consists of 18 chapters, including General Rules, Procurement, Investment, Labour Mobility, Consumer-Related Measures and Standards, Agriculture and Food Goods, Alcoholic Beverages, Natural Resources Processing, Communications, Transportation, Environmental Protection, and Dispute Resolution Procedures. Recent developments include enhancements to the Dispute Settlement Mechanism and negotiations for accession by Nunavut.

Softwood Lumber Agreement (SLA)

The current SLA between Canada and the United States, signed in 2006, was due to expire in October 2013. However, an extension provision in the SLA allows for both parties to extend the agreement for two years. Canadian Minister Ed Fast and US Trade Representative Ron Kirk signed the extension in January 2012. The SLA will now conclude in October 2015.

In the current agreement, export charges on all softwood lumber apply to the provinces of Alberta, British Columbia, Saskatchewan, Manitoba, Ontario, and Quebec. The Atlantic provinces are subject to charges only on exports that exceed pre-determined levels of export. The territories are exempt from all charges.

Canada–European Union Comprehensive Economic and Trade Agreement (CETA)

Negotiations between Canada and the EU began in May 2009 with an agreement in principle reached in October 2013. CETA is Canada's most ambitious trade initiative, and if completed, will be the most comprehensive trade agreement ever reached.

The EU market consists of 28 countries with a combined population of over 500 million people and a 2012 GDP of about US$17 trillion. CETA is likely to affect Nova Scotia in such areas as services, investment, and government procurement. It is also likely to have a substantial impact on a number of sectors — such as fisheries, wood and wood products, and agriculture – that currently face high tariffs. In the services sector, current EU trade barriers on Canadian services include citizenship or residency requirements, lack of temporary entry rules, and ownership and investment restrictions.

Trans-Pacific Partnership (TPP) Free Trade Agreement

Canada joined the TPP negotiations, along with Mexico, on October 8, 2012, and participated in the fifteenth round of TPP talks in Auckland, New Zealand, in December 2012, as well as four more since. The TPP membership currently consists of 12 countries: Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States, and Vietnam. Together, these countries have a combined population of over 800 million people and a combined 2012 GDP of US$27.5 trillion.

Canada-Japan Economic Partnership Agreement (EPA)

In March 2012, Prime Minister Harper and Prime Minister Noda announced the launch of this trade initiative. The first round of negotiations was held in Tokyo in November 2012. The Joint Study report regarding a possible Canada-Japan economic partnership agreement suggests that it could lead to gains of up to US$3.8 billion in Canada's GDP. This negotiation is still at an early stage.

Canada-Korea Free Trade Agreement

Free trade negotiations started between Canada and South Korea in July 2005, but stalled in 2008 over an impasse on a small number of issues. The talks restarted in January 2012. South Korea has a GDP of over US$1 trillion and has maintained high growth, making it an important market for Canada. In 2012, Canada exported CAN$3.7 billion worth of merchandise to South Korea, importing CAN$6.4 billion in return. Securing a deal is very important for Canada's agri-food exporters, especially beef and pork producers, who are losing ground to US and European competitors, which already have FTAs with South Korea. Progress, however, has been difficult; several stumbling blocks include, in particular, the automotive industry.

Canada-India Comprehensive Economic Partnership Agreement (CEPA)

The negotiations for the Canada-India CEPA were launched in November 2010. The Canada-India Joint Study Group Report revealed that CEPA could mean US$6 billion in additional income for Canada. In 2012, Canadian exports to India amounted to CAN$2.3 billion, with imports at CAN$2.9 billion. India is not at present a major market for Nova Scotia; indeed, India accounted for only 1.3 per cent of Nova Scotia's merchandise exports. However, deeper economic co-operation with India can open up important opportunities for Nova Scotia.

Trans-Atlantic Trade and Investment Partnership (TTIP)

The recently launched TTIP negotiations between the European Union and the United States have potential implications for Nova Scotia, as an agreement could erode the competitive position in both markets for Nova Scotian exporters. In addition to tariff reductions, the TTIP is expected to focus on differences in technical regulations, standards, and certification, as well as on opening up services and public procurement markets.

5. Conclusion: Nova Scotia in a Changing World

Nova Scotia faced a challenging 2012 with a slow recovery from the recession. Looking ahead, Nova Scotia's challenge is to build on new global trade opportunities. International trade has grown substantially right across the globe, driven to a large extent by the emergence of global value chains. Global value chains spread the production of goods and delivery of services across many locations in the world. Economic development agencies across North America work to attract high-value-added activities to their regions because the firms that undertake such activities require skilled workers and create good jobs.

Global trade patterns have also been changing. Emerging large markets such as the BRICS are attracting greater shares of global trade flows. Overall, the share of world GDP and trade flows of developing countries has sharply increased over the last decade and is forecast by the IMF to increase further. Trade between the developing counties — so-called South-South trade — is growing rapidly and represents a larger share of world trade. Firms in developing countries are organizing complex supply chains, and it is a challenge for firms from advanced countries to integrate with those chains and participate in this aspect of global economic growth.

Trade is vital for Nova Scotia because it is a small province; its internal market is too small to support efficient production. Increased trade brings a number of benefits to Nova Scotia. It enables firms to exploit economies of scale, become more productive, and reduce costs. It stimulates innovation and investment. It creates jobs, increases incomes, and imposes downward pressures on prices. Both international and interprovincial trade are important in this respect. Because of Nova Scotia's small size, the province's exports are substantially made up of imports (as discussed in the Special Feature of this report). Therefore, imports are vitally important for Nova Scotia to be able to produce exports.

Where is Nova Scotia positioned in this changing world? This report shows some areas for concern, but at the same time there are a number of bright spots in Nova Scotia's performance.

Overall, the trends of the past decade suggest that Nova Scotia has not fully participated in international trade. Nova Scotia's export of goods and services experienced only moderate growth over the last decade. This growth was slower than the growth of production in the province, and therefore the share of exports relative to GDP decreased. This is opposite to the global trade experience. The number of merchandise exporters also fell in Nova Scotia over the last decade, as outlined in the Special Feature (following this section). Furthermore, the fact that imports are much larger than exports raises issues around financing the purchase of imported products.

Nova Scotia's key market is the United States, but declines in exports to this market have not been completely offset by exports to other markets. As the United States recovers from its economic crisis, exports to this market will increase. However, Nova Scotia should also aim to diversify its trade destinations. Rapidly growing developing countries open up new opportunities for Nova Scotia. Provincial exports to Asia have increased twofold over the last decade, and that market now represents 10 per cent of trade. Many countries in Asia, as well as the BRICS, offer significant potential for our exporters.

The role of Nova Scotian firms in global value chains is important. High-value-added tasks undertaken by Nova Scotian firms result in higher income (wages and profits). Performance of high-value-added tasks requires ongoing investments in skilled workers, innovation, new technologies, certification, marketing, and other activities.

This report shows that many of the top products exported by Nova Scotia are low-value-added products, for example, live lobsters, wild blueberries, and wood pulp. At the same time, traditional exports such as paper and paperboard, wood and pulp, fish and seafood have declined. Export of natural gas largely depends on the world price for this commodity and is exposed to significant variations.

In this context, it is important that Nova Scotia was able to increase its exports of new, high-value-added goods and services. Ocean technologies and shipbuilding are examples of Nova Scotian manufacturing success. Another encouraging development is the significant increase in interprovincial trade in services, which has grown by 20 per cent in the four year period 2007–2011, which included the global crisis. Being a gateway, Nova Scotia will also benefit from greater flows of goods across borders.

Higher value goods and services that meet the demands of new markets and increased global value chain participation are key trade strategies that can contribute to increased prosperity for the province. Further trade liberalization implemented by Canada will challenge Nova Scotian firms to overcome the difficulties associated with entering international markets.

Special Feature: Nova Scotia's Integration into the Global Economy

Traditionally, trade was thought of in terms of exchange between countries. Little attention was paid to the firms that actually conducted trade. That has changed: the focus of trade analysis is now squarely on firms and the impact on their performance of engaging in international trade – whether as exporters, as importers of intermediate inputs, or as suppliers that feed into global value chains.

A number of facts have been established about firms that trade as well as about firms that go beyond trade to establish a commercial presence abroad – the multinational enterprises (MNEs).

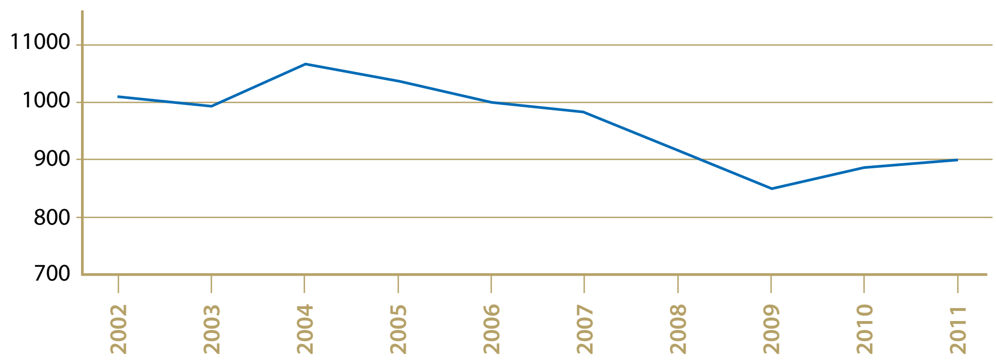
First, firms that engage in international commerce tend to be substantially larger, more productive, more innovative, and pay higher wages. This reflects the fact that engaging in trade requires firms to incur a range of fixed costs to carve out markets abroad, costs that only the more successful firms can afford. However, it also reflects the fact that firms that successfully enter export markets tend to grow faster. Moreover, the decision to export appears to be important, as many firms gear up for export market entry by undertaking productivity-enhancing investments, including in some cases changing to production processes geared to larger markets.

Economic evidence also demonstrates that there is knowledge spillover from firms that enter global markets to other firms located in their home base. Accordingly, firms engaged in international commerce form an important link through which technology and techniques developed elsewhere in the world flow through to local markets. Below, we look more closely at Nova Scotia's agents of trade – our exporting and importing firms – and their role in global value chains.

SF1: Nova Scotia Merchandise Exporters: an Overview

In 2011, there were 897 merchandise exporting establishments in Nova Scotia. This was a net increase from 887 in 2010, but still well below pre-recession levels and indeed below 2004 levels, when the number of exporters peaked at 1,066 (Figure SF1).The trend in the number of exporters is similar to the decline in Nova Scotia's international exports of goods discussed in section 3.5. A declining number of exporting establishments is worrying for its possible hindrance of Nova Scotia's ongoing ability to produce the exportable goods that help pay our way in the world.

FIGURE SF1: NUMBER OF MERCHANDISE EXPORTERS IN NOVA SCOTIA



Source: Statistics Canada.

Nova Scotia Merchandise Exporters, by Size and Sector of Firm

Of Nova Scotia's 897 merchandise exporters in 2011, 54 per cent were in the service sector, 31 per cent were manufacturers, 10 per cent were engaged in agriculture, and 3 per cent were in utilities/construction. Over half of the province's exporters in 2011 had fewer than 25 employees, but collectively, these smaller firms contributed less than 14 per cent to overall international merchandise exports (Table SF1).

The Nova Scotian manufacturing sector was dominated by larger exporters. Firms with 25 or more employees captured a commanding share of exports in a broad range of manufacturing industries. Smaller exporters were more numerous in the agriculture, fishing, and service sectors. In crop production, smaller exporters constituted over 60 per cent of all exporters and accounted for 60 per cent of exports. A similar pattern was evident in fishing, hunting, and trapping sector. Smaller exporters similarly outnumbered larger firms across all service industries, in many of which they also contributed a significant share of exports.

The largest group of exporters within the goods-producing sectors (NAICS 11–33) was in food manufacturing, including processed fish, seafood, and agricultural products. Overall, Nova Scotia's wholesale trade sector had the largest number of exporting establishments in 2011. This likely reflected the distribution channel preferences of many local and out-of-province firms in shipping merchandise to international markets.

Nova Scotia's Merchandise Exporters, by Export Value and Sector

Considering export values (Table SF2), 207, or 23 per cent of Nova Scotia's exporting establishments, had international merchandise exports in excess of $1 million in 2011.

Nova Scotia's Merchandise Exporters, by Destination of Export

The distribution of international markets for Nova Scotian exporters is heavily influenced by geographic proximity of markets and the cost and accessibility of transportation links.

The United States offered a market for over 70 per cent of exporting establishments in 2011, with more than half shipping to states along the US Eastern Seaboard. Just over 20 per cent of Nova Scotian exporters supplied markets further down the Atlantic coast in the southeast, and a similar number exported to states in the central industrial heartland. Slightly fewer numbers of exporters shipped goods to the US Midwest and to the west coast.

Europe was a market for 29 per cent of Nova Scotian exporters in 2011. This reflects the importance of the European Union as the world's largest trading bloc, as well as the strength of its historic and logistics connections with Nova Scotia, despite the economic turmoil in the region. Fewer Nova Scotian exporters, about 17 per cent, shipped goods to markets in Asia in 2011.

TABLE SF1: INTERNATIONAL MERCHANDISE EXPORTERS, BY EMPLOYMENT SIZE, 2011

		Fewer than 25 Employees		25 or More Employees		Total
NAICS[a] code	Industry Group	Establish-ments (#)	Share of exports (%)	Establish-ments (#)	Share of exports (#)	Establish-ments (#)
11	**Agriculture, Forestry, Fishing and Hunting**					
111	Crop Production	23	59.3	13	40.7	36
114	Fishing, Hunting and Trapping	23	48.8	8	51.2	31
115	Support Activities for Agriculture and Forestry	3	100.0	0	0.0	3
112,113	Animal production; Forestry and Logging	x	x	x	x	22
21	**Mining and Oil and Gas Extraction**	x	x	x	x	15
22 & 23	**Utilities; Construction**	18	49.5	12	50.5	30
31-33	**Manufacturing**					
311	Food	15	4.9	52	95.1	67
314	Textile Product Mills	x	x	x	x	7
312,313, 315, 316	Beverage and Tobacco; Textile Mills; Clothing; Leather	6	1.8	9	98.2	15
321	Wood Products	7	0.5	14	99.5	21
323	Printing and Related Support Activities	6	14.9	5	85.1	11
325	Chemicals	x	x	x	x	16
327	Non-Metallic Mineral Products	4	66.9	3	33.1	7
322, 324, 326	Paper; Petroleum and Coal; Plastics and Rubber	5	0.0	27	100.0	32
332	Fabricated Metal Products	10	25.6	12	74.4	22
333	Machinery	7	10.3	12	89.7	19
334	Computer and Electronic Products	x	x	x	x	16
335	Electrical Equipment, Appliance and Component	x	x	x	x	6
336	Transportation Equipment	5	2.6	10	97.4	15
339	Miscellaneous Manufacturing	6	34.7	5	65.3	11
331, 337	Furniture; Primary metal	5	1.8	5	98.2	10
41-90	**Services**					
41	Wholesale Trade	168	58.0	65	42.0	233
44 & 45	Retail Trade	51	55.3	22	44.7	73
48 & 49	Transportation and Warehousing	28	92.0	8	8.0	36
51	Information and Cultural Industries	x	x	x	x	12
52 & 53	Finance and Insurance	12	98.3	5	1.7	17
54 to 56	Business services	48	43.6	19	56.4	67
61 to 90	Other	33	82.5	14	17.5	47
	Grand Total	483	13.6	320	76.4	897

Source: Adapted from Statistics Canada, custom tabulation derived from the Exporter Register Database, May 2013.
Note: "x" denotes suppressed data .
[a] North American Industry Classification System.

TABLE SF2: INTERNATIONAL MERCHANDISE EXPORTERS, BY EXPORT VALUE, 2011

		Exporters: less than $1 million per year		Exporters: $1 million or more per year		Total
NAICS code	**Industry Group**	**Establish-ments (#)**	**Share of exports (%)**	**Establish-ments (#)**	**Share of exports (#)**	**Establish-ments (#)**
11	**Agriculture, Forestry, Fishing and Hunting**					
111	Crop Production	32	47.0	4	53.0	36
114	Fishing, Hunting and Trapping	17	9.0	14	91.0	31
115	Support Activities for Agriculture and Forestry	3	100.0	0	0.0	3
112,113	Animal production; Forestry and Logging	x	x	x	x	22
21	**Mining and Oil and Gas Extraction**	x	x	x	x	15
22 & 23	**Utilities / Construction**	26	16.4	4	83.6	30
31-33	**Manufacturing**					
311	Food	26	2.0	41	98.0	67
314	Textile Product Mills	x	x	x	x	7
312,313, 315, 316	Beverage and Tobacco; Textile Mills; Clothing; Leather	x	x	x	x	15
321	Wood Products	13	0.9	8	99.1	21
323	Printing and Related Support Activities	11	100.0	0	0.0	11
325	Chemicals	9	1.7	7	98.3	16
327	Non-Metallic Mineral Products	7	100.0	0	0.0	7
322, 324, 326	Paper; Petroleum and Coal; Plastics and Rubber	16	0.1	16	99.9	32
332	Fabricated Metal Products	18	26.0	4	74.0	22
333	Machinery	10	3.7	9	96.3	19
334	Computer and Electronic Products	8	0.7	8	99.3	16
335	Electrical Equipment, Appliance and Component	x	x	x	x	6
336	Transportation Equipment	10	6.2	5	93.8	15
339	Miscellaneous Manufacturing	11	100.0	0	0.0	11
331, 337	Furniture; Primary metal	x	x	x	x	10
41-90	**Services**					
41	Wholesale Trade	170	4.0	63	96.0	233
44 & 45	Retail Trade	70	42.9	3	57.1	73
48 & 49	Transportation and Warehousing	31	35.8	5	64.2	36
51	Information and Cultural Industries	12	100.0	0	0.0	12
52 & 53	Finance and Insurance	x	x	x	x	17
54 to 56	Business services	54	2.5	13	97.5	67
61 to 90	Other	44	31.4	3	68.6	47
	Grand Total	598	2.1	207	91.5	897

Source: Adapted from Statistics Canada, custom tabulation derived from the Exporter Register Database, May 2013.
Note: “x” denotes suppressed data.

TABLE SF3: INTERNATIONAL EXPORTERS OF GOODS, BY DESTINATION OF EXPORTS, 2011

Destination by Region	Exporters (#)	Share of Total Exporters (#)
United States	640	71.3
Eastern Seaboard	471	52.5
Industrial Heartland	192	21.4
Midwest	173	19.3
Southeast	196	21.9
West	159	17.7
Mexico, Central and South America	111	12.4
Europe	260	29.0
Asia	150	16.7
Other	197	22.0
Total exporting establishments	**897**	

Source: Adapted from Statistics Canada, custom tabulation derived from the Exporter Register Database, May 2013.
Note: The sum of exporting establishments by destination exceeds total number of exporting establishments because an establishment may export to several destinations.

SF2: Nova Scotia's Participation in Global Value Chains

A recent development in the global economy is the emergence of global value chains, which have been facilitated by reduced costs associated with trade across borders. A *value chain* is a term used to describe the full range of activities that firms undertake to bring a product or service from conception to end use and beyond. This includes research, design, production, distribution, marketing, and after-sales support. Spreading these activities around the world to maximize efficiencies and quality creates a *global value chain*. Large international companies can now identify the most beneficial location (by cost-efficiency, access to strategic assets, or proximity to customers, for example) for each step in the chain.

The emergence of global value chains and the growth of the lead companies that control them have resulted in a dramatic change in the nature of international trade flows. Global chains, however, involve more than large international companies. They provide significant opportunities for small and medium-sized companies as well.

The following box provides an example of a global value chain that involves firms located in Nova Scotia: the vessel construction and outfitting associated with the $25 billion National Shipbuilding Procurement Strategy.

Shipbuilding Global Value Chains

In 2012, the Province of Nova Scotia commissioned Duke University's Center on Globalization, Governance & Competitiveness (CGGC) to analyze the global value chains involved in the construction and outfitting of the vessels to be built at the Irving Shipyard as part of the National Shipbuilding Procurement Strategy (NSPS).[14]

The assembly, outfitting, and systems integration of the vessels will be located here in Nova Scotia. The components, equipment, and services needed to complete the vessels could be procured across the globe. Modern shipbuilding involves multiple actors performing a complex set of design, production, and post-production activities to design, construct, and maintain a ship. This is the essence of the current global value chain reality, necessitating the need to identify the shipbuilding value chains and how they operate at regional and global levels, and to support Nova Scotian companies to access these value chains and move into higher value-added activities.

The shipbuilding value chain developed by CGGC has three major phases: pre-production, production, and post-production. *Pre-production* includes the ship design phases and project management, including material and production planning. *Production* includes hull construction, the platform systems to move and control the ship, and high-technology mission system production and integration. *Post-production* activities entail the maintenance and repair of the ship in the long term, as well as training and customer support.

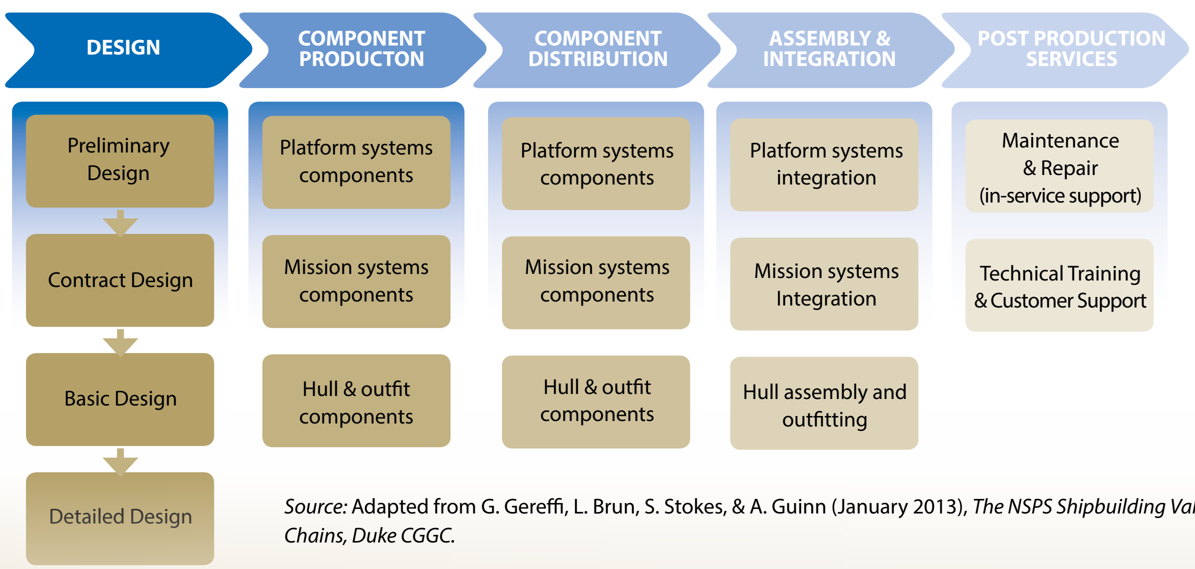
In the past, shipbuilding was undertaken in one location by a vertically integrated firm. Today's shipbuilders are essentially prime contractors, responsible for managing the wide range of activities in the value chain, including specific tasks such as procurement, sub-contracting, risk management, and scheduling. Irving Shipbuilding Inc. is a prime contractor in the combat vessel portion of NSPS.

The design, component production, platform and mission systems integration, and outfitting of the shipbuilding value chain are undertaken around the world. For example, Irving Shipbuilding has selected multinational firms Lockheed Martin and General Electric, UK-based Lloyd's Register Group, Danish firm Odense Maritime Technology, and Nova Scotia-based Fleetway Inc. as its team to fulfill the design phase of the Arctic Offshore Patrol Ships (AOPS) project.

A similar approach will be used throughout the value chain for the AOPS vessels. The steel for the ship's hull will come from outside Nova Scotia. Lockheed Martin has been selected as the mission system integrator, and the platform systems provider could be one of a number of multinationals. Each of these "Tier 1" firms will contract with specialized suppliers for the components of each of these systems.

Nova Scotian companies are well positioned to participate in every aspect of the shipbuilding value chain, as suppliers to these Tier 1 firms: 74 firms were identified in the component production segment, 18 in component distribution, 18 in assembly and integration, 32 in production support services, and 13 in post-production services. These firms include both multinationals with locations in Nova Scotia and local companies who design, assemble, and provide high-quality products and services. These companies are particularly well placed to supply the advanced sub-systems of the ships, such as navigation, electronic, and communications equipment, as well as engineering and support services. Participation in the NSPS would strengthen the position of Nova Scotian companies in international markets and help those who are non-exporters to become exporters.

THE SHIPBUILDING GLOBAL VALUE CHAIN



Source: Adapted from G. Gereffi, L. Brun, S. Stokes, & A. Guinn (January 2013), *The NSPS Shipbuilding Value Chains, Duke CGGC.*

[14] The report is available at http://www.gov.ns.ca/econ/docs/NSPS%20GVC%20Analysis%20Jan%202013.pdf.

How is Nova Scotia involved in global value chains? Trade flows analyzed in previous sections are an important indicator of the extent to which firms trade across borders, but they do not measure their participation in global value chains. Participation in global value chains means that firms in Nova Scotia add value to a good or service and trade that value-added good or service to firms located around the world. A *value-added export* can be measured as the value of an export less its imported content — that is, the value of what has been produced in Nova Scotia. Value-added exports contribute to the GDP of Nova Scotia and generate jobs. To help us understand Nova Scotia's participation in global value chains, the following provides estimates of Nova Scotia's value-added exports and outlines their benefits.[15]

Nova Scotia's value added exports

Nova Scotian firms rely heavily on imported inputs to produce goods and services for export. Nova Scotia produces 57 per cent of its exports, whether international or interprovincial (Tables SF4 and SF5). It is this value-added activity that results in benefits, income and jobs. The other 43 per cent of exports comprise inputs that have been imported from across Canada or overseas. Of the $15.8 billion exported in 2008, approximately $9 billion was value added by Nova Scotian firms. The remaining $6.7 billion comprised imported inputs (rubber imported by Michelin, for example, for its tire production in Nova Scotia). The $9 billion of value-added exports constituted 28 per cent of Nova Scotia's GDP.

This significant reliance on imported inputs can be explained in part by the fact that Nova Scotia is a small economy. In comparison, 79 per cent of Canadian exports are produced within Canada.[16] The United States, which has a much larger internal market, produces 85 per cent of its exported goods and services. Because imports are an important driver of Nova Scotia's economy, it can be argued that reducing barriers to imports from other jurisdictions can have a positive impact on Nova Scotia's exporters.

Although a high proportion of imported inputs is to be expected in a small economy, the small contribution of international and interprovincial value-added exports to Nova Scotia's GDP — just 28 per cent — is an issue of concern. In a small economy, exports should make a more significant contribution to GDP. Nova Scotia's internal market is too small to support efficient production and significant job creation. Therefore, growing exports are crucial to the economic development of the province.

Participation in Sector Global Value Chains

Participation in global value chains varies at the sector level in Nova Scotia. The province's mining, oil, and gas extraction sector, which is dominated by the production of natural gas, is the most export-oriented sector of the economy. If import content is removed, this sector exports 84 per cent of its sector GDP, with 68 per cent of its sector GDP being shipped internationally and 16 per cent to the rest of Canada. The sector also has the lowest import content of exports (11 per cent of exports). High export orientation and low import content indicate that Nova Scotia provides raw materials and energy to other countries, which use them to produce value-added goods and services. Another Nova Scotian sector that ships resource-based exports to the world is the agriculture, forestry, and fishing sector. Like the mining, oil, and gas extraction sector, it exports a large share (66 per cent) of its sector GDP but relies to a greater extent on imported inputs to produce exports (imports account for 39 per cent of the value of exports).

Nova Scotia's manufacturing sector is highly integrated into global value chains because it adds value to imported inputs and sells products to other firms in the value chains. Its exports represent 300 per cent of its GDP. This is explained by the fact that output contains a significant proportion of imports (61 per cent). This reflects the nature of today's manufacturing sectors, which tend to locate value chains across the world. After the import content is removed, it appears that Nova Scotia's manufacturing exports represent 117 per cent of its GDP. This implies that manufacturing is closely linked to other sectors of the Nova Scotian economy, such as services, and the value added produced in those sectors is included in manufacturing exports. With a significant reliance on imported inputs and an export orientation, Nova Scotia's manufacturing sector tends to be located either in the middle of global value chains (where exports are intermediate inputs used in the production of final goods in other locations) or at the end of the value chain (where exports are finished goods).

[15] Calculations are based on 2008 data, the year preceding the full impact of the global financial crisis on Nova Scotia. Analysis makes use of provincial symmetric input-output tables and provincial input-output multipliers produced by Statistics Canada.
[16] OECD, *Trade in Value-Added* database, 2008 data.

Service exports do not rely on imported inputs to the same extent. However, the role of imports is still important in the service sector: in Nova Scotia, 30 per cent of service exports come from imports. The export orientation of the service sector is not large: after import content is removed, 24 per cent of the sector GDP is exported, 8 per cent internationally and 16 per cent to the rest of Canada. However, because the service sector GDP is large, exporting even a small percentage has a significant effect on Nova Scotia's economy: it generates $4 billion of GDP, almost half of all export-generated GDP.

Service firms located in Nova Scotia participate in many global value chain activities. Because of Nova Scotia's position as a continental gateway, many companies facilitate the flow of goods and services across borders. Transportation and wholesale services are significant international players. Nova Scotian firms involved in professional, business support, financial, and tourism services also participate in global value chains.

TABLE SF4: GROSS EXPORTS

	International		Interprovincial		Total	
Sector	**Amount ($ millions)**	**Share of sector GDP (%)**	**Amount ($ millions)**	**Share of sector GDP (%)**	**Amount ($ millions)**	**Share of sector GDP (%)**
Agriculture, forestry, fishing	382	61	290	46	672	107
Mining, oil and gas	1,403	77	321	18	1,724	95
Utilities	4	1	2	0	5	1
Construction	9	0	10	1	19	1
Manufacturing	3,781	154	3,605	147	7,386	300
Services	1,962	12	3,738	22	5,701	34
Government	81	1	172	2	253	3
Whole economy	**7,623**	**24**	**8,139**	**26**	**15,761**	**50**

TABLE SF5: VALUE-ADDED EXPORTS

	International		Interprovincial		Total		
Sector	**Amount ($ millions)**	**Share of sector GDP (%)**	**Amount ($ millions)**	**Share of sector GDP (%)**	**Amount ($ millions)**	**Share of sector GDP (%)**	**Share of gross export (%)**
Agriculture, forestry, fishing	233	37	178	28	411	66	61
Mining, oil and gas	1,242	68	284	16	1,526	84	89
Utilities	2	0	1	0	4	1	67
Construction	5	0	6	0	11	1	58
Manufacturing	1,472	60	1,403	57	2,875	117	39
Services	1,347	8	2,652	16	3,999	24	70
Government	63	1	135	2	198	3	78
Whole economy	**4,364**	**14**	**4,659**	**15**	**9,024**	**28**	**57**

Note: The table shows GDP generated within Nova Scotia. It does not take into account the fact that the demand for Nova Scotian exports generates GDP in other regions of Canada, because Nova Scotian industries demand inputs from other regions.

Interprovincial Exports More Beneficial to Nova Scotia than International Exports

As discussed above, exports generate 28 per cent of Nova Scotia's GDP. Exports are also important for jobs; export-related jobs represent 27 per cent of employment (Table SF6). Although Nova Scotian exports are almost equally split between international and interprovincial, the latter generates slightly higher levels of economic activity in terms of GDP (15 per cent versus 14 per cent for international exports) (Table SF5).

Interprovincial exports also generate more jobs in the economy (15 per cent) than international exports (11 per cent) (Table SF6).

Interprovincial exports contribute more to provincial GDP and employment because they are more concentrated in the service sectors. Services tend to be more labour intensive and do not involve as many imported inputs as goods do. In comparison, a significant percentage of international exports involve low-labour-intensive products such as natural gas.

Service Sector Exports Provide Significant Benefits to Nova Scotia

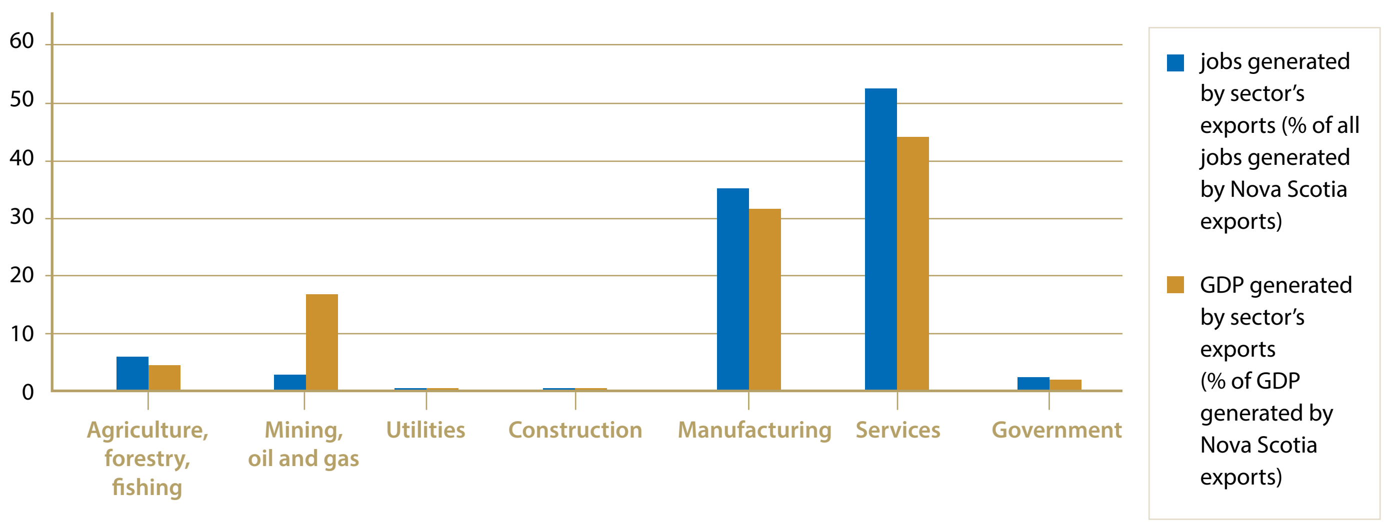
Income and employment generated by exports also vary across sectors. If both international and interprovincial exports are considered, the service sector contributes a significant amount of export-related income (44 per cent of all export-generated GDP) and jobs (53 per cent of export-generated jobs) to Nova Scotia (Figure SF2). Interprovincial exports currently account for a larger share of these benefits than international exports. On the international trade side, services and manufacturing exports account for almost equal shares of export-related GDP and employment. This would indicate that, as trade in services increases around the world, Nova Scotia's participation in global value chains will increase, and so will income and employment in the province.

TABLE SF6: JOBS DIRECTLY AND INDIRECTLY RELATED TO EXPORTS

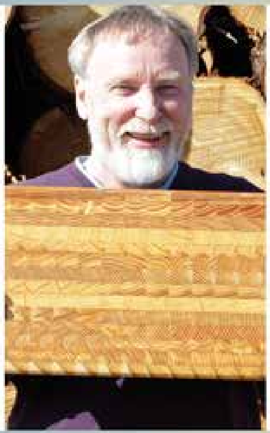
	Jobs related to international export		Jobs related to interprovincial export		Jobs related to total export	
Sector	**Jobs (#)**	**Share of all jobs in the economy (%)**	**Jobs (#)**	**Share of all jobs in the economy (%)**	**Jobs (#)**	**Share of all jobs in the economy (%)**
Agriculture, Forestry, Fishing	4,039	1	3,239	1	7,278	2
Mining, oil and gas	2,953	1	675	0	3,629	1
Utilities	8	0	4	0	12	0
Construction	92	0	108	0	200	0
Manufacturing	22,322	5	21,283	5	43,605	9
Services	21,525	5	43,541	9	65,066	14
Government	942	0	2,012	0	2,953	1
Whole economy	**51,882**	**11**	**70,861**	**15**	**122,743**	**27**

Note: The table shows jobs generated within Nova Scotia. It does not take into account the fact that the demand for Nova Scotian exports generates jobs in other regions of Canada as well, because Nova Scotian industries demand inputs from other regions.

FIGURE SF2: BENEFITS OF EXPORTS, BY SECTOR








NOVA SCOTIA