

Remarks by Lawrence Schembri Deputy Governor of the Bank of Canada Atlantic Institute for Market Studies Halifax, Nova Scotia 8 November 2016

Wood, Wheat, Wheels and the Web: Historical Pivots and Future Prospects for Canadian Exports

Introduction

Thank you for that kind introduction. It's always a pleasure to visit Halifax. And thank you to the Atlantic Institute for Market Studies for the opportunity to speak here today. The research papers you publish on economic and social issues are thoughtful contributions to the public discourse.

Since its founding in 1749, Halifax has served as a critical point of transit for Canadian trade. With its extensive port facilities, this city has supported the growth and evolution of Canadian exports from the early trading of fish and fur in sailing vessels to modern consumer and industrial goods in huge container ships.

Inspired by the historic and ongoing contribution Halifax has made to Canada's international trade, my speech today is about the evolution of and prospects for our exports. The question I will try to answer is: What insights can we draw from the history of Canadian exports that will help us better understand our recent export performance and prospects for the future?

This is a particularly important question today, given the slower-than-expected recoveries in global demand and Canadian exports since the Great Recession of 2008–09. While Canadian exports have grown over this period by approximately 4 per cent per year, their growth to date remains below the experience of past recoveries. For example, exports grew nearly 8 per cent per year over a similar length of time during the recoveries from the recessions of 1981–82 and 1990–91. This difference is important because stronger export growth is critical to achieving a more sustainable growth path for the Canadian economy.

Throughout our history, we have successfully relied on trade, both exports and imports, to support our rising standard of living. Exports have always been an important source of economic growth for Canada (**Chart 1**). Today, exports and

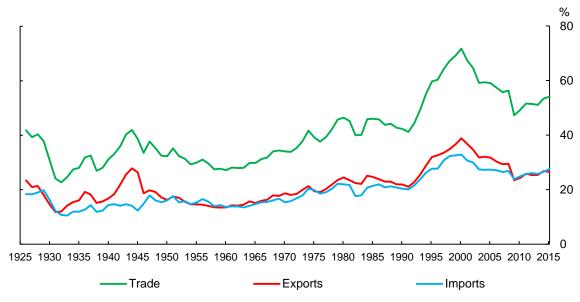
I would like to thank Daniel de Munnik, Karyne Charbonneau and Laura Murphy for their help in preparing this speech.

imports represent about 65 per cent of our output, which is one of the highest ratios among the G7 countries (**Chart 2**).

Exports are not a goal in and of themselves, however, but a means to acquire imports for consumption and investment. Furthermore, trade generates global benefits because it encourages countries to specialize in the production of those goods and services in which they have a comparative advantage—in other words, in the goods and services they are relatively more efficient at producing.

Chart 1: Trade has always played an important role in the Canadian economy

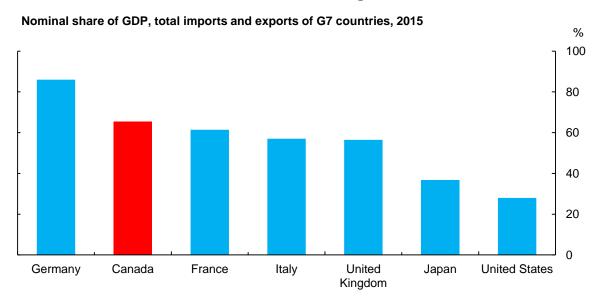
Nominal shares, trade and goods imports and exports as a share of GDP, annual data, 1926-2015



Sources: Statistics Canada and Bank of Canada calculations

Last observation: 2015

Chart 2: Canada remains a trade leader among advanced economies



Sources: Organisation for Economic Co-operation and Development (OECD) database and Bank of Canada calculations

Last observation: 2015

Because of our geography, which has given us an abundance of natural resources and proximity to the largest market in the world, resource-based products destined for the United Sates have dominated our export mix. Nonetheless, over our history, Canada has transitioned from being a primary goods powerhouse—principally, wood, wheat and other agricultural goods—with a limited set of trading partners to a well-diversified modern economy. Today, we export a broad range of manufactured goods, including almost anything with wheels—automobiles, trucks, airplanes and subway cars—and an expanding range of web-based services. To sustain our success as an exporter, we must continue to develop new exports and new markets.

Our demonstrated ability to adjust flexibly, or "pivot" in response to a variety of external and internal forces, reflects, in part, our strong political and legal institutions and our commitment to policies that support economic activity and trade. These include well-defined property rights and legally enforceable contracts, as well as growth-promoting economic policies, such as trade liberalization, and prudent fiscal and financial policies. In addition, our inflation-targeting monetary policy and flexible exchange rate have helped us adjust to shocks and achieve low, stable and predictable inflation and strong and sustainable economic growth.

I'll begin my presentation with a simple analytical framework that highlights the key factors that have influenced the evolution of our exports. I'll discuss how those factors shaped the changes in our exports and their destination over history. I'll review three phases in our recent export history. And, in the last section, I'll consider the prospects for Canada's exports and their contribution to the Bank's outlook for the economy.

The Determinants of Exports: An Analytical Framework

For the purpose of this analysis, I'll use a framework that focuses on three broad and often related factors that influence the volume, value, composition and destination of Canadian exports over time:

- economic growth and development in other countries, chiefly in our trading partners and competitors;
- trade policies, including tariffs and quotas, and other structural factors, such as changing technology and tastes; and
- natural resource or commodity prices and the exchange rate (Figure 1).¹

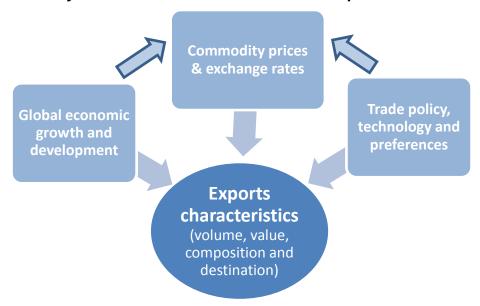
These factors affect what we sell, to whom we sell, how much we sell and at what price.² Using this framework, let's look at how our export mix and trading

² Note that with this framework, I am abstracting from the factors in traditional trade theory such as geography and resource endowments, which either do not change or change slowly over time.

¹ The relative prices for commodities would be affected indirectly by shifts in these exogenous factors but are worth highlighting since they are an important channel of transmission to Canadian exports.

partners have changed since Confederation in response to these key determinants.

Figure 1: Analytical framework: Determinants of exports



Historical Pivots: What We Trade and Who We Trade With

Since Confederation in 1867, the composition of our exports has evolved considerably (**Chart 3**), as have the destinations to which we ship them. In Canada's earliest years, we exported what we extracted from our forests and produced on our farms.³ This pattern continued until the early 20th century, when commodities such as iron ore, nickel and copper became more prominent.

The two world wars accelerated two important trends: the move from rural to urban life and the adoption of new technologies in the form of mechanization and electrification. These trends facilitated the transition to an industrial, export-driven economy based on new commodities, such as oil and gas and manufactured goods.

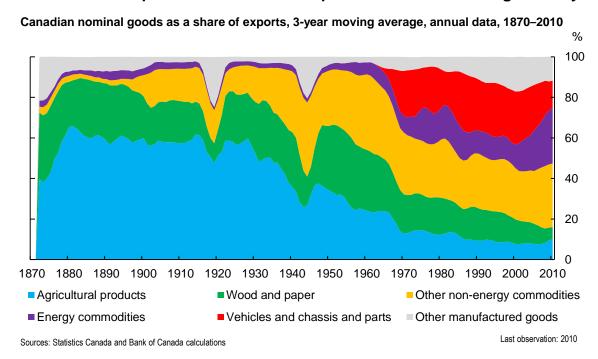
Perhaps the most significant development following the Second World War was trade liberalization, a trend that continues to this day. The world learned a hard lesson about the cost of protectionism during the Great Depression, when trade collapsed, partly as a result of misguided policies such as the US Smoot-Hawley tariff.⁴

Clearly, Canada's proximity to the United States and our abundance of natural resources have played an important role in determining our exports.

³ J. R. Baldwin and R. Macdonald, "Natural Resources, the Terms of Trade, and Real Income Growth in Canada, 1870 to 2010," Statistics Canada Catalogue No. 11F0027M—No. 079, p. 26, April 2012.

⁴ A.E. Safarian, *The Canadian Economy in the Great Depression*, 3rd ed., Carleton Library Series (Montréal and Kingston: McGill-Queen's University Press, 2009). The recovery was further hindered by the passage in the United States of the *Tariff Act* of 1930 (the Smoot-Hawley Tariff),

Chart 3: The composition of Canada's exports has evolved through history



Trade agreements have been transformative for Canada.

The first General Agreement on Tariffs and Trade (GATT), signed in 1947 by 23 countries, including Canada, reduced or froze more than 45,000 tariff rates. ⁵ That agreement, together with subsequent GATT rounds, led to a more than sevenfold increase in world and Canadian goods exports between 1948 and 1972.

The 1965 Canada–United States Automotive Products Agreement, more commonly known as the Auto Pact, marked an even more important turning point for Canadian exports and the economy.⁶

The Auto Pact freed trade in autos and auto parts between the two countries and guaranteed Canada a share of total auto production. The auto industry in Canada expanded, became more efficient and was able to export on a large scale.

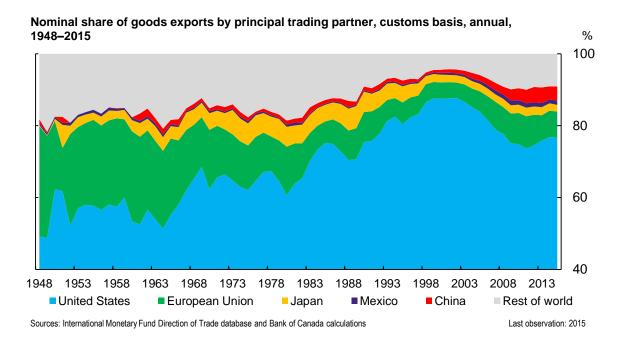
Now, let's look at our trading partners (**Chart 4**). Again, we see the flexible adjustment of Canadian exports in response to changing circumstances.

which raised tariffs to record levels on a broad range of imported goods. Like other countries, Canada responded almost immediately, imposing new tariffs on the major imports from the United States. In the three years when the Smoot-Hawley tariffs were in place, US imports declined by more than 65 per cent.

⁵ The GATT was superseded in 1994 by the Uruguay Round Agreements, signed by 123 nations, which established the World Trade Organization.

⁶ Of the sevenfold increase from 1948 to 1972, more than a quarter of this was in the category of "vehicles and chassis and parts" post-1964, which underscores the importance of the Auto Pact agreement for Canadian exports.

Chart 4: The destination of our exports has also evolved



After the Second World War, most of our exports were destined for the United Kingdom and the rest of Europe and the United States. You can see in the chart the spike in trade to the United States after the first GATT agreement in the late 1940s and the steady rise in the importance of the United States with subsequent trade agreements. In recent decades, we've seen an increase in the shares to Mexico and to China.

Today, while the United States remains our dominant trading partner—it is the destination for about 75 per cent our exports—our markets have become more diverse relative to 15 years ago.

I've compressed a great sweep of Canadian history into these charts. They illustrate three important points about our exporting history:

- first, exports have been critically important to our economic development;
- second, we have been able to flexibly adjust to shifts in demand for our exports, global shocks, new technologies and trade policies; and
- third, we have been able to sustain our economic success by developing new exports and new markets.

Now let's consider the more recent forces that have affected our exports and their economic impact in greater detail.

Recent Experience: Three Phases

Phase 1: 1988–2002—Canada–United States Trade Liberalization

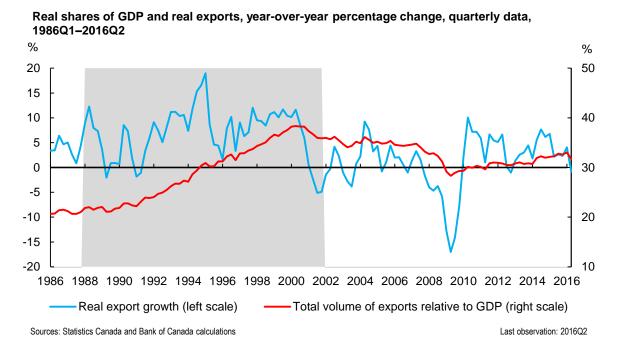
The Canada–United States Free Trade Agreement (CUSFTA), signed in 1988, and the North American Free Trade Agreement (NAFTA), which came into effect in 1994, continued the postwar trend in trade liberalization. Momentum at the multilateral level under the GATT process had been slowing, and the two new

agreements were intended to maintain the pace at the regional level.⁷ They had a major impact on our exports, which grew strongly in volume and as a share of GDP (**Chart 5**).⁸

The agreements provided privileged access, and thereby increased exposure to, the United States during the 1990s (**Chart 6**), when it was one of the fastest-growing economies in the world (**Chart 7**). The 1990s was also a period when commodity prices were relatively low and our flexible exchange rate adjusted downward, which facilitated the expansion of the export of manufactured goods. As a result, the share of our goods exports to the United States increased steadily, from roughly 70 per cent in 1988 to just under 90 per cent in 2002.

Non-commodities led the way. Within non-commodities, machinery and equipment experienced the strongest growth, while growth in motor vehicles and parts, which account for the largest proportion of non-commodity exports, was lower because trade in these goods had already been liberalized under the Auto Pact (**Chart 8**). Energy exports also grew rapidly as these agreements helped integrate the North American energy market. As a consequence, our exports became more diversified throughout the 1990s.

Chart 5: 1988-2002—Exports grew strongly and as a share of GDP...

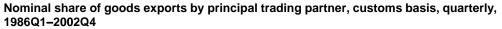


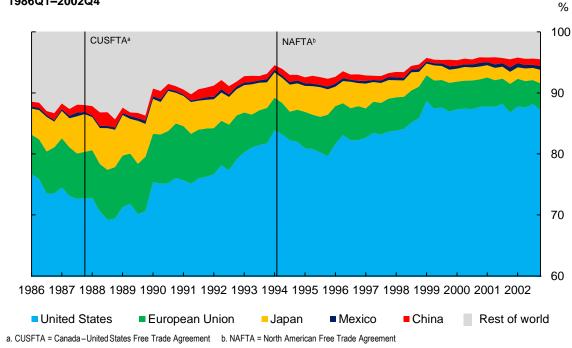
⁷ The impetus for the pursuit of a free trade agreement with the United States came in part from the landmark Royal Commission on the Economic Union and Development Prospects for Canada, otherwise known as the Macdonald Commission.

⁸ While the CUSFTA had significant short-term adjustment costs as some manufacturing industries contracted and others expanded, overall labour productivity in the manufacturing sector increased, which left it better able to export. See D. Trefler, "The Long and the Short of the Canada-U.S. Free Trade Agreement," available at www-

^{2.}rotman.utoronto.ca/~dtrefler/papers/Trefler_aer_2004.pdf

Chart 6: ...and Canadian exposure to the US market grew



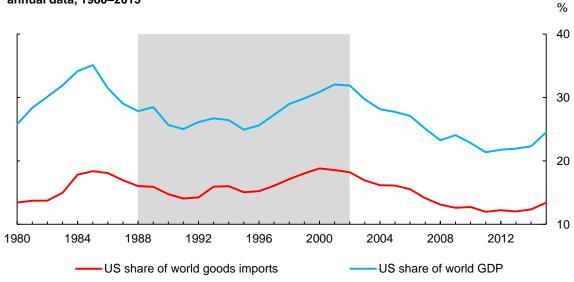


Sources: International Monetary Fund Direction of Trade database and Bank of Canada calculations

Last observation: 2002Q4

Chart 7: Over this period, the United States was one of the fastest-growing economies

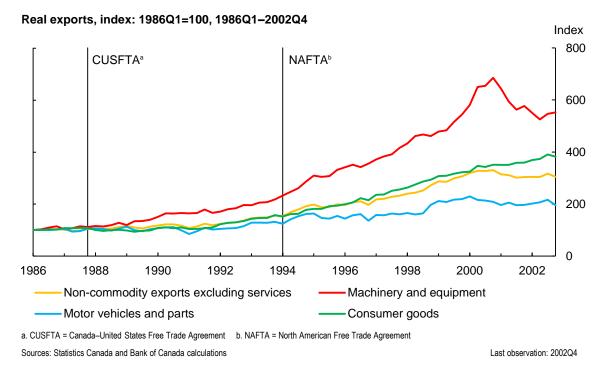
Nominal share of US merchandise imports over world imports and US GDP over world GDP, annual data, 1980-2015



Sources: International Monetary Fund Direction of Trade and World Economic Outlook databases, Haver Analytics and Bank of Canada calculations

Last observation: 2015

Chart 8: Within non-commodity exports, machinery and equipment experienced the strongest growth



Phase 2: 2002-08-Enter China

Shortly after the turn of the millennium, China joined the World Trade Organization (WTO), which had a profound effect on global trade and on Canada's exports. While growth in export volumes slowed relative to the previous period, the value of our exports, primarily commodities, increased substantially (**Chart 9**).

China's rapid development as an industrial and export powerhouse and its rapid urbanization represented a large shock to the global supply of manufactured goods for export. More importantly for Canada, the changes in China greatly increased the global demand for commodities as inputs for the production of manufactured goods and the construction of transport systems, housing and other urban amenities (**Chart 10**).

The economic impact on Canada of these shocks was immense. Canada benefited from the lower prices for imports from China—whose share of our imports rose from under 4 per cent in 2000 to more than 12 per cent in 2015—and from the higher prices for exports of commodities to China. The commodity price increases in turn caused a rise in the value of the Canadian dollar (**Chart 11**).

Chart 9: 2002–08—China's entry to the WTO increased the value and slowed the volume of Canada's exports

Real shares of GDP and real exports, year-over-year percentage change, quarterly data, 1986Q1-2016Q2

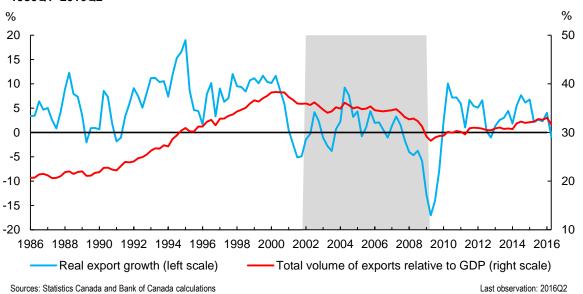
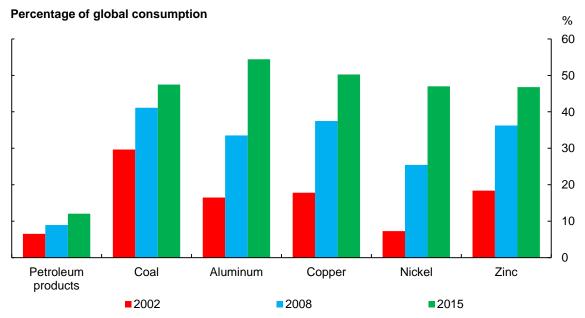


Chart 10: China's share of global resource consumption increased

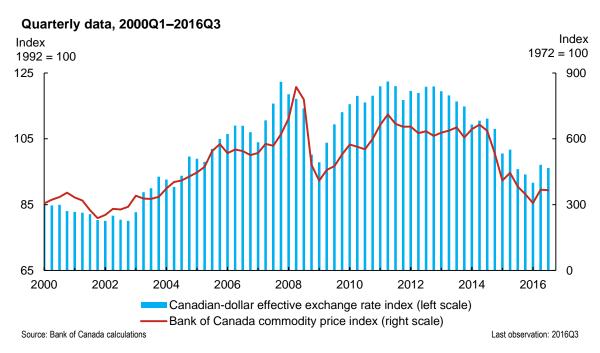


Note: The latest coal consumption data are for 2012.

Sources: World Bureau of Metal Statistics, US Department of Energy and Bank of Canada calculations

Last observation: 2015

Chart 11: Movements in commodity prices and the value of the Canadian dollar were closely linked



The sizable increase in commodity prices spurred the expansion of our resource-based industries and exports, particularly oil and gas. And the lower import prices and stronger export prices caused an improvement in Canada's terms of trade and gross domestic income (GDI).⁹

However, the substantial appreciation of the dollar and a broader opening to world trade among emerging-market economies (EMEs) led to significant structural adjustments in what we exported and their destination. US import demand was growing more slowly than global demand and Canadian exporters lost US import market share. Between 2001 and 2009, Canada's share of US merchandise imports fell by more than 4 percentage points. We were competing with China and other EMEs not just in the United States, but in markets all over the world.

With these global shifts, Canadian goods exports once again transitioned. Our share of exports to the rapidly growing EMEs increased significantly. Our exports destined for China rose from 1 per cent in 2001 to just over 3 per cent in 2009.

¹⁰ Relative to the United States, Canada's labour costs increased by 45 per cent between 2000 and 2007, primarily because of the Canadian dollar appreciation (D. de Munnik, J. Jacob, and W. Sze, "The Evolution of Canada's Global Export Market Share," Bank of Canada Working Paper No. 2012-31, October 2012).

⁹ Between 2001 and 2009, the Bank of Canada commodity price index increased by 60.8 per cent (the Bank's energy price index rose 88.5 per cent over the same period). This run-up contributed to growth in our terms of trade, which led to an increase in GDI. Indeed, over the cycle, it contributed to GDI growth of 7.4 per cent from 2002 to 2012.

¹¹ The US share of world imports declined from 18.6 per cent in 2001 to 14 per cent in 2007. During this period, world imports were growing at an annual average of 14.4 per cent, compared with 9.3 per cent for the United States.

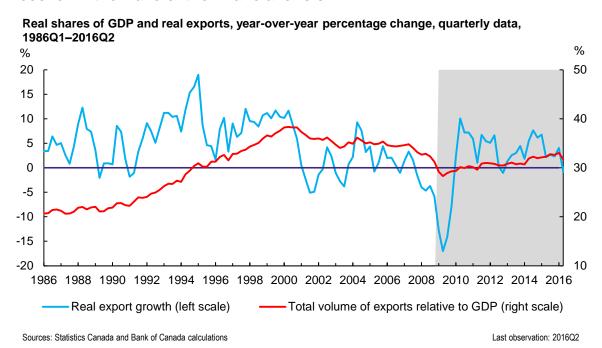
And the share of exports destined for the "rest of world" (i.e., not the European Union, Japan, Mexico, China or the United States) rose from 4 per cent in 2001 to 10 per cent in 2009.

Phase 3: 2008–16—The Great Recession and its aftermath

The strong global expansion of the 2000s came to a screeching halt with the global financial crisis of 2008–09 and the resulting Great Recession. Global trade and Canadian exports plummeted.

Given the magnitude of the economic downturn, this decline in global trade and Canadian exports was not unexpected. What is now proving more difficult to explain is the weak recovery in exports, especially non-commodity exports, since 2012 (**Chart 12**).

Chart 12: 2008–16—Canada's exports plummeted and have been slow to recover in the wake of the financial crisis

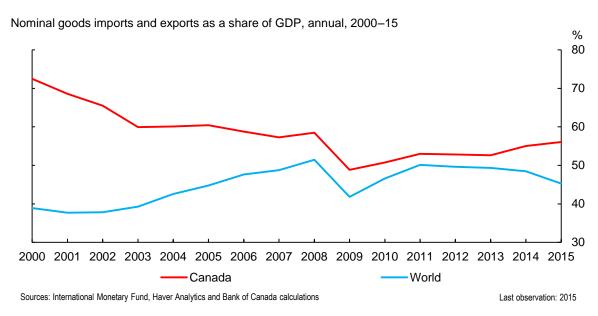


At the global level, trade has been held back by the slow recovery in demand, particularly in the United States and other advanced economies. And the ratio of trade to output at the global level has stopped increasing at the rate it had been before the crisis. At that time, global trade was rising twice as fast as global GDP and, more recently, the ratio has been essentially flat (**Chart 13**). A number of explanations have been advanced to explain this shift, which are also relevant for explaining Canada's recent export performance.

¹² There are a number of explanations for this slow global recovery, including the well-known arguments by Reinhart and Rogoff that post-financial-crisis recoveries are generally much weaker because the financial system is impaired and deleveraging must occur. In addition, a series of significant adverse shocks, including the euro area crisis, have contributed to the slow recovery. See C. Reinhart and K. Rogoff, *This Time Is Different: Eight Centuries of Financial Folly* (Princeton, NJ: Princeton University Press, 2009).

First, the composition of global demand has changed. The share of business investment, which is intensive in traded goods, has declined. A good part of Canada's slower-than-expected export performance can be explained by the weak recovery in US business and residential investment. This pervasive weakness in global business investment growth is also a challenge to understand, but the most compelling explanations are the combination of heightened uncertainty, especially about the profile for demand growth, which has been compounded by political events, and elevated risk aversion on the part of firms coming out of the Great Recession.¹³

Chart 13: Since the Great Recession, world trade has flattened relative to GDP



The second explanation for the recent weakness in global trade growth is that the pace of trade liberalization has recently slowed, if not reversed. Clearly, China can join the WTO only once, as it did in 2001. However, since the crisis, the WTO has recorded a troubling increase in the number of protectionist measures. ¹⁴ For Canadian exports, the most noteworthy concern being expressed by firms we survey is about the US "Buy American" policies.

¹³ For recent discussions of elevated risk aversion and heightened uncertainty, see A. Haldane, Bank of England, "Stuck" (speech to the Open University, London, England, 30 June 2015) and M. Carney, "Uncertainty, the Economy and Policy" (speech at the Court Room, Bank of England, 30 June 2016). Other explanations include slower than expected trend growth, especially in advanced countries, and a shift in these countries to production that is less intensive in traditional forms of business investment in plant and machinery and equipment.

¹⁴ According to the WTO, from mid-October 2015 to mid-May 2016, the G20 economies applied 145 new trade-restrictive measures, or an average of almost 21 new measures per month. Since 2009, a total of 1,583 trade-restrictive measures were imposed by G20 countries. See *Report on G20 Trade Measures*: *Mid-October 2015 to Mid-May 2016*, World Trade Organization, 21 June 2016. See also S. S. Poloz, "A New Balance Point: Global Trade, Productivity and Economic Growth" (speech to the Investment Industry Association of Canada and the Securities Industry and Financial Markets Association, New York, New York, 26 April 2016).

The third global explanation is the diminishing impact of global value chains. Improvements in logistics technologies promoted an increase in production specialization and cross-border trade in intermediate inputs. The declining impact is most clearly seen in China, which has started to move up the value chain and produce intermediate goods domestically rather than import them.¹⁵

In terms of factors more specific to Canada that have held back our exports in the wake of the Great Recession, the most important are related to our ability to produce and export non-commodity goods, which represent about 60 per cent of our exports since the financial crisis. The remainder is split between energy and non-energy commodities.

Our goods exports were severely affected by the sharp decline in global demand during the Great Recession. Our non-commodity goods exports were harder hit than in any post-war recession, decreasing by about 17 per cent between the third quarter of 2008 and the second quarter of 2009. A big part of that decrease was the shutdown of a substantial portion of Canadian auto production. In addition, from the peak in 2008 to the trough in 2010, the number of exporters fell nearly 20 per cent, dropping by almost 9,000 firms.

This shock to non-commodity exports exacerbated an ongoing trend, discussed in the previous section, in which Canada was losing US market share, owing to the appreciation of the Canadian dollar, relatively weak labour productivity growth and the entry of new exporters. In our surveys, companies have also mentioned deficient infrastructure, regulatory uncertainty and relatively high electricity costs. All of these export competitiveness challenges suggest that our export shortfall may be more persistent than previously believed.

While countries, most notably China, Mexico and other EMEs, have seen their exports of non-commodities to the United States increase over the past 15 years, Canada's exports have essentially remained unchanged in nominal terms (**Chart 14**). The loss of US market share for our non-commodity goods exports was particularly concentrated in motor vehicles and parts, in which Canada had been historically strong.¹⁹

¹⁶ About one-quarter of the subsectors for non-energy goods exports (about 500 out of 2,000) have registered export declines of more than 75 per cent since 2000. See A. Binette, D. de Munnik and J. Melanson, "An Update—Canadian Non-Energy Exports: Past Performance and Future Prospects," Bank of Canada Discussion Paper No. 2015-10, October 2015.

¹⁵ Canadian firms have also experienced a reduction in their use of imported intermediated goods.

¹⁷ From peak to trough, Canada's auto sector saw a 70 per cent decline in production. See S. S. Poloz, "Reconstruction: Rebuilding Business Confidence in Canada" (speech to the Oakville Chamber of Commerce, Burlington, Ontario, 19 June 2013).

Chamber of Commerce, Burlington, Ontario, 19 June 2013).

18 T. Macklem, "Global Growth and the Prospects for Canada's Exports" (speech to the Economic Club of Canada, Toronto, 1 October 2013).

¹⁹ Forest products also lost significant market share. These losses were found to have taken place over the 2002–14 period, although they were more rapid before and during the crisis. For more details, see R. Barnett and K. Charbonneau, "Decomposing Movements in U.S. Non-Energy Import Market Shares," Bank of Canada Staff Discussion Paper No. 2015-5, August 2015.

Chart 14: US non-energy goods imports from Canada have stagnated relative to imports from other countries

Nominal US imports by country, annual data **US\$** billions 2,200 2,000 1,800 1,600 1,400 1,200 1,000 800 600 400 200 2002 2004 2006 2008 2010 2012 2014

Sources: US Census Bureau, Haver Analytics and Bank of Canada calculations

Mexico

Canada

Last observation: 2015

Other countries

These significant losses in US market share and the resulting decline in productive capacity are compelling explanations for why the recovery in non-commodity goods exports has been weaker relative to historical experience. In particular, such losses have likely generated hysteretic, or very persistent, adverse effects. In such circumstances, Canadian firms would have the incentive to re-enter these export markets and incur the sunk-cost investments associated with expanding productive capacity only when the outlooks for global and US demand are much stronger than they are currently.²⁰

■ China

With respect to commodity exports, commodity prices and our dollar declined sharply during the Great Recession, but they both bounced back relatively quickly, supported by the strong recovery in Chinese demand. This rebound in commodity production and exports helped buffer the Canadian economy from the worst of the recession.

However, this strong post-crisis recovery in commodity prices and exports helped mask the effects on the Canadian economy of the slowing in global trade and the losses in export capacity and export market share in the non-commodity sector. The commodity price collapse in 2014 exposed these structural weaknesses, which are now weighing heavily on the recovery of our exports.

²⁰ For more details on trade hysteresis, see R. Baldwin and P. Krugman, "Persistent Trade Effects of Large Exchange Rate Shocks," *The Quarterly Journal of Economics* 104, no. 4 (November 1989): 635–54.

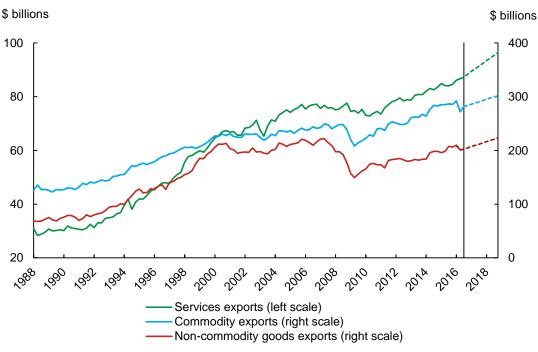
The Commodity Price Shock and Prospects for Canadian Exports

The drop in commodity prices and the associated depreciation of the Canadian dollar ushered in a complex adjustment within the Canadian economy. As a result, the exporting landscape is transitioning once again. Canada's resource sector is shrinking in economic importance as investment and employment shift toward the non-resource sector. Our simulations suggest that commodity exports could decline from the 2014 level of 50 per cent to roughly 40 per cent of total exports by 2020.²¹

At the same time, the depreciation of the dollar (**Chart 11**) has helped the adjustment process by boosting demand for Canadian non-commodity exports and some domestically produced import-competing substitutes (**Chart 15**). For example, exports of pharmaceuticals and medicinal products, furniture and fixtures, and industrial machinery and equipment have grown strongly since the depreciation began.

Chart 15: Real exports are expected to continue increasing

Billions of chained 2007 dollars, quarterly data



Sources: Statistics Canada and Bank of Canada calculations and projections

Last observation: 2016Q2

²¹ L. Patterson, "Adjusting to the Fall in Commodity Prices: One Step at a Time" (speech to the Edmonton Chamber of Commerce, Edmonton, Alberta, 30 March 2016).

Prospects for Canadian exports

Looking ahead, Canadian exports will be underpinned by a US economy that is gaining momentum. US growth will be driven by rising employment, household income and private demand, although the composition of US demand is projected to be somewhat less favourable for Canadian exports. Taking this into consideration, the Bank revised downward, in its October Monetary Policy Report, its growth projections, particularly for goods exports. We expect US business and residential investment to grow more slowly than we had projected earlier in the year. In addition, because goods exports have been soft—their level is essentially unchanged over the past year—it is likely that structural factors, including lost export capacity and competitiveness challenges, are having a more pronounced impact. Our research on this issue is ongoing. Another relevant factor is that although the dollar has depreciated against the US dollar in recent years, the improvement in Canada's export competitiveness is less than expected because the currencies of competitors for US market share have also experienced sizable depreciations, in some cases by more than that of the Canadian dollar.²²

We also know from past experience that our economy is flexible and can pivot in new directions to enhance and diversify our export performance. So while we have revised our projections for goods exports, we still see significant growth prospects for the production and export of services. This is an important element of our economic outlook. Financial, management, engineering, computer and information, and travel and transportation services currently constitute about 15 per cent of our exports (**Chart 16**). Most notably, while the share of manufactured goods in Canada's exports has been falling since 2000, the services share has been rising. In particular, firms in the information technology service sector, which sells business solutions, software and entertainment services, are benefiting from strong foreign demand.

The expansion of the production and export of services in Canada and other advanced economies is driven by a number of developments, including the trend toward outsourcing the provision of standardized services.²⁵ Other contributions

²² This is reflected in the Canadian effective exchange rate index. See R. Barnett, K. Charbonneau and G. Poulin-Bellisle, "A New Measure of the Canadian Effective Exchange Rate," Bank of Canada Staff Discussion Paper No. 2016-1, January 2016.

²³ This share is likely underestimated because of the difficulty in measuring services. For example, official trade statistics do not count the services content embodied in manufactured goods as services. See J. Palladini, "Good Service Is Good Business: How Services Add Value to Canadian Goods Exports," Conference Board of Canada, September 2015.

²⁴ The results of the Bank's recent survey of firms in this sector can be found on our website. See

²⁴ The results of the Bank's recent survey of firms in this sector can be found on our website. See W. Dong, J. Fudurich and L. Suchanek, "The Digital Economy—Insight from a Special Survey with IT Service Exporters," Bank of Canada Staff Discussion Paper No. 2016-21, November 2016.

Outsourcing the provision of services is intrinsic to the nature of economic progress: as economies and businesses grow and become more sophisticated, there are strong incentives for firms to become more specialized in their core business lines. Services that were once produced in-house are contracted out to companies that specialize in their production and can thus produce them more efficiently. Good examples of services that can be out-sourced are payroll, accounting and information technology.

to service exports include technological breakthroughs, especially those related to the development of the web and the digital economy, and shifting tastes toward services consumption as households become more affluent and spend a larger proportion of their incomes on education, health and travel services, to mention a few examples.

Billions of chained 2007 dollars, quarterly data, 1990Q1-2016Q2 \$ billions 90 75 60 45 30 15 0 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 ■ Transportation Travel Commercial Government

Chart 16: Services exports have been increasing steadily

Source: Statistics Canada

Given that the production of many of these services demands intensive use of skilled labour, Canada is well placed to provide and export such services. Another important element is that because tradable services generally entail lower costs to transport and deliver them than goods, they can typically be sold to a more geographically diverse set of customers. For example, web-based products can be transmitted to clients electronically. As a consequence, our export of services is more geographically dispersed than for goods (**Chart 17**). In particular, while the share to the United States is large, we export a sizable volume of services to other advanced economies and also to EMEs.

Last observation: 2016Q2

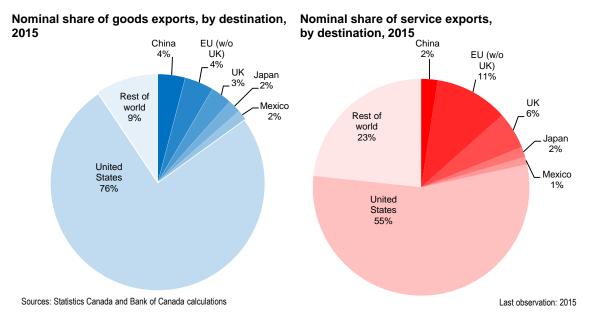
One component of service exports that is showing strong growth is commercial services to affiliated companies. These exports flow in both directions: from a subsidiary in Canada to a foreign parent and from a Canadian parent to a foreign subsidiary. The latter case is becoming more prominent as Canadian firms outsource production of less skill-intensive activities (e.g., assembly) to lowerwage countries and retain highly skilled activities such as product design, marketing and management services with the Canadian parent.

The production of services entails intensive labour input so exchange rate movements can have large effects on relative production costs. The most prominent example is travel services, whose net export position is very sensitive to the exchange rate.

The bottom line is that given our projections of a pickup in US and global growth, a stable exchange rate at a lower level and ongoing technological change,

especially in the digital economy, service exports will play an increasingly important role in our export growth.

Chart 17: The destinations of service exports are more diversified than those of goods exports



Conclusion

Let me wrap up.

Although exports have contributed importantly to Canadian economic growth over the post-recession period, we have repeatedly downgraded their contribution, as we did again in October, for two important and related reasons. First, the recovery in global demand has been serially disappointing, with ongoing private and public debt deleveraging in the United States and Europe and numerous adverse shocks, both political and economic, which have served to increase uncertainty. Second, the structural export capacity and competitiveness challenges that we have discussed have had a more persistent and pronounced impact on Canadian export performance than expected.

An important global economic shock that significantly affected our export projection is the sharp decline in oil and other commodity prices since 2014. The Canadian economy is making progress adjusting to this shock as economic activity in the energy sector seems to be bottoming out. The lower dollar has helped facilitate the adjustment of exports from the resource- to the non-resource-based sector, but most of its effect on overall export growth has likely already occurred.

Going forward, there is good reason to believe our export performance will strengthen further as the US and global economies gain momentum.

Let me leave you with three core messages:

1. First, throughout our history, the Canadian economy has been able to adapt and respond flexibly to large external forces, similar to those we

- have experienced recently, and to maintain the important contribution of exports to our economic well-being.
- Second, this capacity for flexible adjustment should continue because our trade is largely determined by market forces and is supported by strong political and legal institutions and sustainable economic policies, including our monetary policy framework, consisting of an inflation target and a flexible exchange rate. These institutions and policies provide a stable environment for Canadian ingenuity, innovation and investment.
- 3. Third, Canada's commitment to trade liberalization over the postwar period has opened doors for our exports, made our production more efficient and supported economic and employment growth and rising living standards. That said, new trade agreements can result in adjustment costs for certain firms and their employees, and it is incumbent on policy-makers to buffer the transition by ensuring adequate safety nets for workers and facilitating retraining and relocation. While mindful of these concerns, our commitment to trade liberalization should remain as firm as it has been in the past. Efforts to liberalize trade externally as well as internally must continue in earnest. The signing of the new trade agreement with the European Union will support growth going forward, as would the Trans-Pacific Partnership should it eventually come into force.

Canada has one of the most diversified, trade-driven economies in the world. The global economy exposes us to shocks, but also to opportunities. Historically, Canadian exporters have overcome the challenges and seized the opportunities. We should have confidence that ships will continue to sail out of Halifax with our goods and commodities and that clients around the world will continue to value our services.