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Canada

Canada's State of Trade

Trade and Investment Update - 2010

Including a special feature on

The Canadian Trade Commissioner

Service and Exporter Performance

Canada's State of Trade

Trade And Investment Update - 2010

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ABOUT THIS DOCUMENT

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Message from the Honourable Peter Van Loan, Minister of International Trade

Honourable Peter Van Loan
Minister of International Trade

As Canada's Minister of International Trade, I am pleased to present the 2010 edition of *Canada's State of Trade*. This report provides an overview of trends in Canada's international commercial performance over the past year.

Last year was a challenging year for the global economy. While Canadian exports, imports and foreign direct investment flows decreased last year, Canada did better than most. We had the mildest recession of any G7 country, and for the first time in a generation, Canada's unemployment rate is lower than that of the United States.

More importantly, Canada has emerged from the crisis in a strong position. Our government implemented the Economic Action Plan to create jobs and stimulate our economy, and we showed leadership internationally by outlining our plan to return to fiscal balance. We generated results.

All of the major forecasts point to Canada leading growth among advanced nations in the coming years. The strength of Canada's financial system is the envy of the world. By 2015, Canada's debt-to-GDP ratio is projected to be less than half that of the next best G7 country. Furthermore, by 2013 Canada is expected to have the lowest statutory corporate tax rate among the G7.

While Canada remains committed to progress at the World Trade Organization, we are moving forward on an aggressive agenda of free trade negotiations with partners around the world. This includes negotiations with the European Union, Canada's most ambitious negotiations since the North American Free Trade Agreement.

This is in addition to recent successes on free trade agreements with the European Free Trade Association, Peru, Colombia, Jordan and Panama, and ongoing negotiations that include the Caribbean Community, the Dominican Republic, Ukraine and the Central American countries of El Salvador, Honduras, Nicaragua and Guatemala.

Canada is a world leader in promoting free trade and offers key competitive advantages for investors:

- Lowest taxes on new business investment in the G7
- Lowest budgetary deficit and debt-to-GDP ratio in the G7
- Fastest economic growth in G7 for 2010, 2011 and 2012 according to IMF

- World's soundest banking system according to World Economic Forum
- Outstanding quality of life

But we will not rest on our laurels. Our competitors are not sitting still. We will continue making Canada the destination of choice for businesses and investment.

We have taken unilateral action by eliminating nearly all of the tariffs on productivity-improving machinery and equipment as well as manufacturing inputs with the remaining tariffs to go to zero by 2015. This will make Canada the first G-20 country to become a tariff-free zone for manufacturing.

As this report clearly shows, Canadian exporters are continuing to diversify into the fast-growing economies of the world, including many small and medium exporters. Many of them are using the Trade Commissioner Service (TCS) to help them do it. From offices across Canada and around the world, our Trade Commissioners provide a range of services to help Canadian businesses navigate—and succeed in—global markets. This publication contains the results of a new study that shows that businesses that use the service have exports that are 18 percent higher than firms that do not. We are committed to helping more Canadian businesses realize these benefits by tapping into the many tools the TCS provides.

We must continue working together to stay ahead of the curve in this increasingly competitive and rapidly changing global economic environment. Together, we can ensure that Canada remains the best location in the world from which to run a global company, to export and in which to invest, work, live and create.

The Honourable Peter Van Loan
Canada's Minister of International Trade

Executive Summary

2009 was a landmark year. The global economy suffered the worst downturn since the Great Depression of the 1930s, enduring dramatic shifts in global economic and financial markets in an extraordinarily challenging environment. The banking system teetered on the abyss, tested by weak credit markets, a collapse in equity markets, and heightened requirements for liquidity and capital. From August 2008 through mid-2009 output contracted and global trade plunged. Policy intervention on an unprecedented scale was essential to jump-start the recovery. Monetary policy has been highly expansionary and supported by unconventional liquidity provision, while fiscal policy provided a major stimulus in response to the deep downturn. The downturn bottomed out toward mid-2009, and a turnaround has been underway since that time.

Real output contracted by 0.6 percent in 2009—the first and only contraction in global GDP for at least thirty years. The recession was most severe within the advanced economies, which collectively contracted by 3.2 percent last year. Japan and the advanced EU nations were hardest hit, while North America (the United States and Canada) fared somewhat better, and all other advanced nations performed the best. The emerging and developing economies broadly experienced a slowdown in economic activity in 2009, but avoided outright contraction. Together, these economies registered growth of 2.4 percent last year, compared to 6.1 percent a year earlier.

As economies emerge from the global recession, activity remains dependent on highly accommodative macroeconomic policies. Overall, the world looks poised for further recovery at varying speeds. Global growth is projected at 4.2 percent in 2010 and 4.3 percent in 2011. The advanced economies are expected to expand by 2.3 percent in 2010 and growth is expected to edge up to 2.4 percent in 2011. For the emerging and developing economies, growth is expected to reach 6.3 percent in 2010 and 6.5 percent in 2011.

For the United States, substantial monetary and fiscal easing, alongside other policies aimed directly at the financial and housing sectors, helped to stimulate economic activity. After four quarters of contraction, GDP growth turned positive in the third quarter, rising by 2.2 percent (seasonally adjusted annual rate) and accelerated to 5.6 percent in the fourth quarter of 2009, reflecting a pick up in investment and a slowdown in inventory destocking. Nonetheless, for the year as a whole, real U.S. GDP growth was down by 2.4 percent in 2009. Growth in the euro area resumed in the third quarter, but was anaemic in the final quarter of last year: overall growth for the year declined 4.1 percent. The United Kingdom was even harder hit, down 4.9 percent, as growth only resumed in the fourth quarter. For Japan, real GDP contracted for the second consecutive year, falling 5.2 percent last year; however, as the year progressed, Japan's economy picked up mainly due to improvement in overseas economic conditions and to various policy measures.

The pattern of economic recovery has varied within developing Asia, with the larger economies (China, India and Indonesia) escaping a recession, and the smaller export¬oriented economies experiencing a sharp V-shaped business cycle. Overall, emerging Asia's GDP slowed to 6.6 percent growth from 7.9 percent in 2008. By the end of 2009, output in most of Asia had returned to pre-crisis levels, even in those economies hit hardest by the crisis.

As a result of a steep decline at the end of 2008 and early 2009, output in the Latin America and Caribbean (LAC) region contracted by 1.8 percent as a whole. The decline in U.S. activity heavily impacted Mexico, and GDP fell 6.5 percent in that country, while Brazil escaped with only a 0.2 percent contraction. The interconnectedness of European economies led to a rapid transmission of the collapse from developed Europe to developing Europe, resulting in an output contraction of 3.7 percent. Output contracted by 6.6 percent in the Commonwealth of Independent States, led by a 7.9 percent decline in Russia, while Africa and the Middle East managed to avoid the recession, growing by 2.1 percent and 2.4 percent, respectively.

Canadian economic activity was deeply affected by the global recession—real output contracted in the fourth quarter of 2008 and continued to fall over the first half of 2009 before returning to growth in the second half of the year. For the year as a whole, real GDP contracted by 2.6 percent in 2009. It was the second-largest decline in real output since the years of the Great Depression, and not far off from the 2.9 percent decline catalogued during the 1982 recession. Output fell in each province and territory, except Prince Edward Island and the Yukon. Provincially, the largest output declines occurred in the resource-intensive economies of Newfoundland and Labrador, Saskatchewan, and Alberta. Manufacturing output fell across most provinces and in all the territories. Job losses were widespread across Canada, with only three provinces—Saskatchewan, New Brunswick and Manitoba—posting gains over 2008 levels. The unemployment rate slipped 2.2 percentage points to 8.3 percent, as the economy shed some 276,900 jobs, the first setback after 16 years of growth. Lower energy prices exerted significant downward pressure on the CPI last year, as inflation expanded by only 0.3 percent, the lowest rate since 1994.

Nevertheless, relative to other advanced economies, Canada's downturn was short and mild. Measured from peak-to-trough, Canada experienced the smallest contraction within the G7, with a 3.3 percent decline in GDP. Moreover, after reversing the decline in the third quarter, the recovery has gained momentum over the fourth quarter of 2009 and into the first quarter of 2010.

The decline in economic activity triggered the sharpest decline in world trade in more than 70 years. In volume terms, global merchandise trade fell 12.2 percent; however, in value terms, the reduction was even steeper, at 23 percent. Falling energy and commodity prices were behind a significant portion of the trade losses, but declines were widespread, particularly in durable goods. All major countries and regions registered declines in both the value and volume of their merchandise exports in 2009. World services exports also declined 13 percent, marking the first time since 1983 that services trade declined. Echoing the better overall Asian economic performance in 2009, China displaced Germany as the world's leading merchandise exporter last year. For Canada, merchandise exports plunged 31 percent in US dollar terms, while imports were down 21 percent on the same basis. For services, Canadian exports and imports were off by 12 percent and 11 percent, respectively, again in US dollar value terms. Weakness was evident throughout much of the year, but began to pick up in the second half of the year as the global economy moved into recovery phase.

Canadian exports and imports of goods and services to and from all major markets declined between 2008 and 2009. In Canadian dollar terms, exports of goods and services to the world fell by 22.1 percent, while imports declined by 13.6 percent. The bulk of the decline was disproportionately attributable to trade with the United States, as that country was responsible for 82.0 percent of the overall decline in exports and 65.2 percent of the decline in imports from 2008 to 2009.

The effects of the global economic downturn were pervasive in Canada's goods trade. Exports of Canadian goods experienced a 24.5 percent drop, the result of declining volumes and values. Export volumes were down 16.7 percent over 2008 levels, and export prices fell by 9.3 percent. All but five of some 62 major export commodities posted losses over the year. Energy products led the downward movement in Canada's exports trade in 2009, accounting for 37.0 percent of the decline. A 35.6 percent cut in prices was the main driver behind the declines in energy trade, although volumes experienced slight declines as well. Industrial goods and materials were responsible for about 25 percent of the overall decline, with automotive products (down 14.3 percent) and machinery and equipment (down 10.3 percent) accounting for the bulk of the remaining losses.

At the same time, import volumes were down 16.0 percent while prices squeezed out a slight increase of 0.6 percent, resulting in a 15.5 percent decline in total imports. All imports sectors also declined, with the exception of agricultural and fishing products. The losses were fairly evenly divided among energy (27.7 percent), automobiles (24.2 percent), industrial goods (24.1 percent), and machinery and equipment (21.3 percent). Of the 61 major import commodities, only fifteen commodities posted gains over 2008 values.

Drilling down to the more specific products driving Canadian trade, other petroleum gases (primarily natural gas) and crude oil accounted for about one third of the total decline in exports, one fifth of the decline in imports, and over half the decline in the trade balance in 2009. Falling energy prices (down well over 30 percent) lay at the heart of the decline, as they retreated from their historical highs recorded a year earlier. However, volumes were also down, likely reflecting the tough economic climate. On the export side, lower trade with the United States was behind the decline, while for imports, Canada purchased less crude oil from Algeria, the United Kingdom, Norway and Angola.

The financial difficulties experienced by major North American auto manufacturers and falling demand in the U.S. and Canadian markets curtailed trade in the automotive sector, further exacerbating a downward trend that began in 2005. Passenger vehicles and automotive parts bore the brunt of the declines. At the same time, exports of trucks were more than halved, while imports declined at much lower rates. In addition, imports of piston engines fell at more than twice the rate of exports, reflecting the malaise in the sector.

For non-energy resource products, both prices and volumes fell across most commodities helping to lower the value of exports for the year. In agriculture, beef exports continued to be hampered by trade restrictions and pork exports experienced headwinds via an association with the swine flu. Wheat was responsible for well over half the decline in cereals exports, with barley, oats and corn making up the remainder of the decline. Both canola seed and canola oil suffered sizeable cutbacks to their export levels as well.

In minerals and metals, trade is very sensitive to economic conditions. In times of economic booms, trade is very robust, while during a downturn in economic output, the demand for these products is weakened. Thus, trade in these products was heavily impacted by the global, synchronized recession of last year. Canadian exports were down to almost all developed countries, most notably to the United States. Reduced output in the North American automotive sector also contributed to the weakness in this sector. Trade losses were widespread, in particular for aluminum, iron and steel, and nickel products.

In the wood, pulp, and paper sector, exports have been on a downward trend for some time. For wood products, the downturn in the U.S. housing sector has helped curtail exports. For paper products, slumping newspaper circulation and advertising around the world has depressed the market for newsprint. Pulp exports have likewise been affected. Exports to the United States accounted for much of the declines.

In advanced manufactures, trade levels were generally down from 2008 levels. Gas turbines (largely used in the aircraft sector) registered a relatively small decline in exports, while imports advanced. Exports of telephone equipment and parts experienced another sharp decline, as imports were unchanged. Bucking the overall trend, exports of television receivers and video monitors and projectors advanced by nearly two thirds at the same time as imports declined. The bulk of the declines occurred in trade with the United States.

The financial crisis was characterized by major credit constraints stemming from undercapitalized financial positions in the banking sector. Credit was both expensive and difficult to access. As a result, cross-border capital flows withered. Investment flows such as bank loans and portfolio investment were most severely affected, but foreign direct investment (FDI) was affected too. Global FDI flows have been halved in the two years since the financial crisis erupted, with the bulk of the decline occurring in 2009. All major countries and regions experienced reductions in FDI inflows, including Canada, where inflows to the country fell at a more rapid pace than the global average. As a result, the stock of FDI in Canada was up by only 1.6 percent—well below the 9 percent annual average over the last decade—and reflected slower investment activity, especially from the United States.

At the same time, flows of Canadian direct investment abroad (CDIA) fell 44.1 percent to $46.3 billion. However, despite the positive outflows, the stock of CDIA declined by 7.5 percent ($48.4 billion) in 2009. This was the result of a revaluation effect of a substantially stronger Canadian dollar at the end of last year, and was concentrated in assets in the United States. The resurgence of the Canadian dollar against most foreign currencies toward year-end subtracted about $72 billion from the overall position of CDIA last year. Without the currency effect, CDIA would have increased by between $23 billion and $24 billion over the year. Investment was down across most sectors, although increases were posted for finance and insurance, and information and cultural industries. Positions were down across most major regions, with the exception of Asia and Oceania where CDIA edged up 2.2 percent.

The information boxes in this year's *State of Trade* report examine three separate, but interdependent, facets of Canada-U.S. trade in goods—trade by U.S. sub-national region, trade by affiliation, and trade by mode of transportation. By U.S. regional destination, there has been a shift away from the Great Lakes and Mid-East regions toward faster-growing markets in the South and West. This trend continued during the recession, notwithstanding that these regions were among the hardest hit by the U.S. housing crisis. The industry mix of the Great Lakes region, home to much of the troubled U.S. auto industry, has been a drag on Canadian exports, especially in the present decade.

At the same time, the share of Canada-U.S. trade that is intra-firm continues to trend downward, particularly due to a decline in trade in automotive products and less intra-firm trade within the auto sector. Nonetheless, among the G7, Canada has the highest share of trade in goods with the United States accounted for by U.S. affiliates. Finally, examining where and how Canadian goods cross the U.S. border reveals that the concentration of goods entering the United States by border crossings has decreased. This is attributed to a decline in the share of Canadian goods moved by truck via the Detroit-Windsor crossing over this decade, and, in particular, to the collapse in auto trade.

Special Feature: The Impact of Trade Commissioner Service on Canadian Exporter Performance

Until the recent development of new data bases, little was known about the characteristics and dynamics of Canadian exporters at the firm level. This year's feature article marries the Statistics Canada Exporter Registry database with the Foreign Affairs and International Trade Canada (DFAIT) Trade Commissioner Services (TCS) client management database to examine linkages between exporter performance and the TCS, which is the Government of Canada's export promotion service.

This feature article presents the first-ever econometric assessment of the impact of the TCS on Canadian exporter performance: the results show this impact is consistently positive. Exporters that receive assistance have an average export value 18 percent higher than comparable exporters that did not access this service. TCS assistance also plays a very strong role in helping firms to diversify into new markets: TCS clients export to 36 percent more markets than non-clients. In addition, the TCS has a positive impact on product diversification.

The article also explores exporter performance more generally and shows that the entry of firms into new markets, rather than growth in sales by existing exporters, has been the growth engine for Canada's exports in recent years. New entrants drove the increase in exports to Asia and Latin America. In the U.S. market, the entry of new exporters was critical in offsetting the exit of many firms from this market. Small and medium-sized firms have been at the forefront of the entry into new markets. Their share of every regional market has increased, and in Asia, they account for nearly half of export sales.

Global Economic Performance

Overview and Global Prospects[1]

In terms of global economic performance, the recent past can be divided into two parts. From August 2008 through mid-2009, the world suffered one of the worst global economic downturns in history. The banking system teetered on the abyss, real output fell, and global trade plunged across most economies. Policy intervention on an unprecedented scale was essential to jump-start the recovery. Monetary policy has been highly expansionary and supported by unconventional liquidity provision, while fiscal policy provided a major stimulus in response to the deep downturn. Recoveries in real and financial activity are mutually supportive. The downturn bottomed out toward mid-2009, and a turnaround has been underway since that time. Nonetheless, even as the recovery has gained traction and risks to global financial stability have eased, stability has not yet been assured.

While activity remains dependent on highly accommodative macroeconomic policies, the recovery has evolved better than many had expected. However, growth has been recovering at varying speeds—tepidly in many advanced economies but solidly in most emerging and developing economies.

After recording growth rates in excess of 5 percent in both 2006 and 2007, global real gross domestic product (GDP) slowed to 3.0 percent in 2008 before contracting by 0.6 percent in 2009. It was the first and only contraction in global GDP in the history of this data series, dating back to 1980. The losses were widespread, with only a few minor economies not experiencing a slow-down or a contraction. The recovery also picked up momentum as the year progressed: world real GDP growth reached about 3.2 percent on an annualized basis during the second quarter of 2009 and rose to over 4.5 percent during the second half of the year.

The bulk of the declines were tallied by the advanced economies, which collectively contracted by 3.2 percent last year (Table 1). Japan (down 5.2 percent) and advanced EU nations (U.K. down 4.9 percent and the euro area down 4.1 percent) were hardest hit, while North America (United States down 2.4 percent and Canada down 2.6 percent) fared somewhat better, and all other advanced nations performed the best (down 1.1 percent). Yet, a number of encouraging signs suggest that the advanced economies are squarely on a path to recovery. A nascent turn in the inventory cycle and slowing deterioration (followed more recently by improvements) in U.S. labour markets have contributed to the positive developments, and strong manufacturing orders and a recovering corporate bond market are helping foster investment.

The United States is off to a somewhat later but better start than Europe or Japan. The stronger U.S. recovery reflects a variety of differences between the United States and

1 Statistics, estimations, and projections in this chapter come from the International Monetary Fund's *World Economic Outlook*, April 2010, supplemented by statistics from the U.S. Bureau of Economic Analysis, the Japan Cabinet Office, the European Central Bank, the U.K Office for National Statistics, and the World Economic Outlook April 2010 database.

the euro area and Japan: fiscal stimulus was larger; the nonfinancial corporate sector is less reliant on bank credit, which remains constrained, whereas bond markets have staged a comeback; non-financial corporate balance sheets are stronger and rapid restructuring has boosted productivity; and the Federal Reserve reacted earlier and with larger policy rate cuts to lower levels in real terms. In contrast, the large appreciation of the yen may have weighed on the recovery of Japan's exports, which fell sharply during the global trade slump, and the re-emergence of deflation has pushed up real borrowing rates and wages. The euro area's trade links with troubled emerging European and Commonwealth of Independent States (CIS) economies and the euro's intermittent appreciation have curbed the euro area's exports. In addition, several euro area economies were hit particularly hard by the financial and real estate crises.

TABLE 1-1

Real GDP Growth (%) in Selected Economies (2006-2009 and forecast 2010)

	2006	2007	2008	2009	2010
World	5.1	5.2	3.0	-0.6	4.2
Advanced Economies	3.0	2.8	0.5	-3.2	2.3
Canada	2.9	2.5	0.4	-2.6	3.1
United States	2.7	2.1	0.4	-2.4	3.1
United Kingdom	2.9	2.6	0.5	-4.9	1.3
Japan	2.0	2.4	-1.2	-5.2	1.9
Euro Area	3.0	2.8	0.6	-4.1	1.0
of which France	2.4	2.3	0.3	-2.2	1.5
of which Germany	3.2	2.5	1.2	-5.0	1.2
of which Italy	2.0	1.5	-1.3	-5.0	0.8
Developing Economies	7.9	8.3	6.1	2.4	6.3
China	11.6	13.0	9.6	8.7	10.0
India	9.8	9.4	7.3	5.7	8.8
Russia	7.7	8.1	5.6	-7.9	4.0
Brazil	4.0	6.1	5.1	-0.2	5.5
Mexico	4.9	3.3	1.5	-6.5	4.2
ASEAN-5	**5.7**	6.3	4.7	1.7	5.4
Indonesia	5.5	6.3	6.0	4.5	6.0
Malaysia	5.8	6.2	4.6	-1.7	4.7
Philippines	5.3	7.1	3.8	0.9	3.6
Thailand	5.1	4.9	2.5	-2.3	5.5
Vietnam	8.2	8.5	6.2	5.3	6.0
NIEs	5.8	5.8	1.8	-0.9	5.2
Hong Kong	7.0	6.4	2.1	-2.7	5.0
Korea	5.2	5.1	2.3	0.2	4.5
Singapore	8.7	8.2	1.4	-2.0	5.7
Taiwan	5.4	6.0	0.7	-1.9	6.5

Source: IMF World Economic Outlook database, April 2010.

The emerging and developing economies broadly experienced a slowdown in economic activity in 2009, but avoided outright contraction. Together, these economies registered growth of 2.4 percent in 2009, compared to 6.1 percent a year earlier. Nonetheless, a number of developing regions recorded lower output in 2009 than in 2008, including Central and Eastern Europe, the CIS countries, and Central and South America. A number of factors are now in place putting these economies on a path to recovery. In the key emerging and developing economies, final domestic demand was already very strong. In addition, these economies have been helped by the turn in the inventory cycle, and external demand is being lifted by the returning normalization of global trade.

In key emerging Asian economies output already exceeds pre-crisis levels by a wide margin, and output growth, averaging about 10 percent during 2009 (Q2 through Q4), is outpacing estimates of full-capacity (potential) output growth. By the third quarter of 2009, growth began to exceed estimates of potential output in a number of Latin American economies too. However, production levels in this region as a whole have barely reached pre-crisis levels, and there is still economic slack in many countries. Recovery is lagging in a number of economies in emerging Europe and the CIS, although some are beginning to rebound strongly from deep troughs. Middle Eastern economies are benefiting from rising demand for oil and rising oil prices. Experience in sub-Saharan Africa is diverse. Most middle-income economies and oil exporters, which experienced sharp decelerations or contractions in output in 2009, are now recovering, supported by the rebound in global trade and commodity prices. At the same time, in most low-income economies, output growth, after slowing in 2009, is now again close to trend rates.

Overall, the world looks poised for further recovery at varying speeds, both across and within regions. Global growth is projected at 4.2 percent in 2010 and 4.3 percent in 2011 by the IMF. The advanced economies are now expected to expand by 2.3 percent in 2010, coming on the heels of a 3.2 percent decline in output in 2009, and their growth is expected to edge up to 2.4 percent in 2011. For the emerging and developing economies, growth is expected to reach 6.3 percent in 2010 and 6.5 percent in 2011, following a modest 2.4 percent in 2009.

United States

Real GDP turned down in the United States in 2009, decreasing 2.4 percent after a modest increase of 0.4 percent in 2008. The main contributors to the decline were downturns in non-residential fixed investment, in inventory investment, and in consumer spending, partially offset by an improvement in net exports.

Non-residential fixed investment turned down sharply, falling 17.8 percent in 2009 and removing 2.1 percentage points from real growth in 2009. The downturn reflected deep cuts to expenditures on structures and a larger decrease in spending on equipment and software, down 19.8 percent and 16.6 percent, respectively. Residential fixed investment also declined, but at a slightly slower pace than in 2008 (20.5 percent compared to 22.9 percent a year earlier). Inventory destocking also subtracted 0.7 percentage points from growth in real GDP, after subtracting 0.4 percentage points the year before.

Consumer spending fell in 2009 which reduced growth in real GDP by 0.4 percentage points. Spending for services slowed, while spending for durable goods fell somewhat less than in 2008. The pace of government spending also eased, reflecting a slowdown in federal government spending and a downturn in state and local government spending.

Net exports added 1.1 percentage points to the growth in real GDP. Exports turned down for the first time since 2002, but imports decreased more than in 2008. Except for a slight increase in services imports, goods and services trade was down in both directions contributing to the declines.

A stimulus-led recovery is under way in the United States,[2] but that recovery is expected to be gradual, particularly when the effects of the stimulus subside. In response to the stimulus and a robust inventory cycle, real GDP grew at a seasonally adjusted annualized rate of 2.2 percent in the third quarter of 2009 and by 5.6 percent in the fourth quarter. But private final demand is still subdued. In the fourth quarter, reduced inventory draw-downs contributed more than half of growth. During the same period, net exports also made a modest positive contribution to growth, as the rebound in global trade and recovery in partner economies boosted exports. However, gross private domestic investment (i.e., residential housing and business investment in plant and equipment) remains well below pre-crisis levels.

The labour market remains unusually weak. Since the start of the crisis, more than 7 million jobs have been lost, and 8.8 million people are involuntarily working part-time. The rate at which jobs are being lost has slowed substantially, but employment growth remains negative, and the unemployment rate had reached 10 percent by the end of 2009, although it decreased marginally during the first quarter of 2010.

Real GDP is projected to grow by 3.1 percent in 2010. The recovery will be tempered by the continued need to rebuild household wealth, the expected slow but necessary process of financial sector repair and deleveraging, and continued weakness in the labour market. Thus, private demand is expected to remain soft. The removal of policy stimulus will subtract from growth, which will moderate to 2.6 percent in 2011. Unemployment is projected to remain high in 2010, at 9.4 percent, before declining to 8.3 percent in 2011 as employment growth picks up. Inflation is expected to remain subdued, at 2.1 percent in 2010 and 1.7 percent in 2011, given continued economic slack.

Japan

The Japanese economy contracted for the second consecutive year in 2009. Real GDP was down 5.2 percent, after declining 1.2 percent in 2008. The slowdown reflected sharp contractions in private investment, personal consumption, and trade flows, particularly exports.

For the year as a whole, private non-residential investment plunged 19.3 percent after six years of consecutive increases. At the same time, private residential investment was 14.2 percent lower than in 2008. All told, private non-residential investment removed 3.1 percentage points from real growth while private residential growth removed another one half of a percentage point. Inventory adjustments removed a further 0.3 percentage points.

For net trade, real exports from Japan fell by 24.0 percent, and were only partially offset by a 17.0 percent decline in real imports. This resulted in a net 1.2 percentage point reduction in growth from trade.

Household consumption also contributed negatively to Japanese growth in 2009, removing 0.6 percentage points from real GDP growth.

2 According to the IMF, the fiscal stimulus boosted real GDP growth by an estimated 1 percentage point in 2009. (*WEO Outlook* April 2010, page 44.)

Stimulus spending was very much in evidence last year in Japan, as public expenditures were on the rise. Government consumption rose by 1.6 percent, while public investment also increased, up 6.0 percent in real terms and registering the first increase of the decade. These public expenditures together added about 0.5 percentage points to GDP growth.

As the year progressed, Japan's economy picked up mainly due to improvement in overseas economic conditions and to various policy measures, although there is not yet sufficient momentum to support a self-sustaining recovery in domestic private demand. Exports and production have increased mainly against a backdrop of high growth in emerging economies. Business sentiment has improved, as has business fixed investment.

Improvements in the corporate sector originating from exports are expected to spill over to the household sector; nonetheless, domestic demand is likely to remain weak as a result of several factors, including the re-emergence of deflation, continued excess capacity, and a weak labour market. Continued appreciation of the yen in 2010 could dampen the contribution of net exports to growth, particularly in comparison with the rest of Asia. As a result, the growth rate of the economy is likely to only gradually rise, but will be dependent on planned fiscal policy support and the global upturn. GDP is projected to grow by 2 percent in 2010, supported by fiscal stimulus and rising exports. A more broad-based recovery is expected for 2011, following a moderate pickup in business investment.

Euro area

Following the sharpest recession since the Second World War, euro-area GDP bottomed out in the second quarter of 2009 and has recovered modestly since then. Measured from peak to trough, GDP fell by 5.2 percent during the 2008-2009 recession, which was more than twice the decline observed in the next-sharpest recession going back to 1970. The quarterly pick up in GDP in the third quarter of 2009 was among the higher initial growth rates following recession troughs; however, this was followed by a stagnant change in GDP in the fourth quarter of 2009. As a consequence, the pick up since the trough in the second quarter of 2009 has been very modest and euro-area GDP remains far below its pre-recession peak.

For the year as a whole, euro-area GDP declined 4.1 percent, following 0.6 percent growth in 2008. Only government consumption made a positive contribution to growth as all other major components to real growth retracted for the year. The declines were led by investment, as gross fixed capital formation fell 10.8 percent in 2009 and subtracted 2.4 percentage points from growth. Investment has been contracting since the second quarter of 2008 on account of weak demand, low business confidence, negative earnings growth, historically low capacity utilization, and tight lending standards. Inventory draw-downs were next in importance, removing 0.8 percentage points from growth for the year. Net exports, the difference between exports and imports, removed 0.7 percentage points from growth, due to the more pronounced fall in real exports (down 12.9 percent) compared with real imports (down 11.5 percent). Finally, consumer expenditures fell 1.1 percent after posting a 0.4 percent increase in 2008: the decline removed 0.6 percentage points from growth. Government consumption accelerated from 2008 to 2009, rising by 2.3 percent versus a 2.1 percent rise a year earlier, and contributed 0.4 percentage points to growth.

Within the euro area, experiences and recovery prospects by country varied considerably. The area was amongst the hardest hit during the global crisis and is coming out of recession at a slower pace than other regions.

A substantial macroeconomic stimulus has supported the recovery in core advanced European economies (as reflected in the acceleration of government consumption noted above), although private demand has yet to take a firm hold. However, according to the IMF, large current account and fiscal imbalances threaten the recovery in some smaller European economies, with potentially damaging effects on the rest of the region. In particular, concerns about sovereign solvency and liquidity in Greece (and possible contagion effects on other vulnerable euro-area countries) threaten the normalization in financial market conditions. Separately, unresolved problems in the banking sector, which plays a key role in financial intermediation in Europe, have hampered the return to normality.

Nevertheless, the ongoing recovery in Europe has been supported by several factors. First, the turn in the inventory cycle boosted activity in the euro area during the second half of 2009. Second, the normalization of global trade has contributed significantly to growth in the euro area and in emerging Europe. And finally, forceful policies have also fostered recovery, including supportive macroeconomic and financial sector measures for many European economies and coordinated assistance from multilateral institutions for the hardest-hit economies in the region.

Against this backdrop, advanced Europe's growth performance is expected to be modest. In particular, euro-area GDP is projected to grow at 1.0 percent in 2010, edging up to 1.5 percent in 2011. Nevertheless, there will be pronounced differences in performance across the region. The recovery is expected to be moderate in Germany and France, where export growth is limited by external demand, investment is held back by excess capacity and credit constraints, and consumption is tempered by higher unemployment. Coming out even more slowly from the recession will be smaller euro area economies, where growth is constrained by large fiscal or current account imbalances (e.g. Greece, Ireland, Portugal and Spain).

The uncertainty around the outlook in Europe has increased, with two downside risks becoming more pronounced. In the near term, the main risk is that, if unchecked, market concerns about sovereign liquidity and solvency in Greece could turn into a full-blown sovereign debt crisis, leading to some contagion.[3] The second downside risk lies in the need to adjust fiscal and current account imbalances in peripheral economies. Although resolving these imbalances is expected to dampen growth, delays in taking decisive policy action could lead to a protracted process punctuated with occasional crises.

United Kingdom

Economic activity in the U.K. contracted by 4.9 percent in 2009, the largest fall on record, compared with a rise of 0.5 percent in 2008. The contraction in real GDP primarily reflected acceleration in cut-backs to gross fixed capital formation, inventory draw-downs, and reduced consumer expenditures.

For the year 2009, gross fixed capital formation decreased by 14.9 percent erasing 2.6 percentage points from growth. A 20.1 percent decline in private capital formation was partially offset by a 17.2 percent increase in public capital expenditures to account for the decline.

3 See the IMF's *Global Financial Stability Report*, April 2010, Chapter 1, for further details.

At the same time, the level of inventories fell by £15.2 billion, the largest fall on record, compared with a rise of £0.9 billion in 2008. This inventory draw-down removed 1.2 percentage points from growth in 2009.

Compensation of employees fell by 0.5 percent, the only decline on record, helping contribute to a 3.2 percent decline in household final consumption expenditure during 2009. This reduction in consumer spending removed 2.0 percentage points from growth.

For the year as a whole, government final consumption expenditure rose by 2.2 percent, contributing 0.5 percentage points to growth. A weak external environment contributed to a 10.6 percent decline in exports while imports contracted by even more, at 11.9 percent. As a result, net exports contributed 0.7 percentage points to U.K. growth in 2009.

Following six consecutive quarters of declines dating back to the second quarter of 2008, growth resumed in the fourth quarter of 2009 in the United Kingdom. Recovery there is projected to continue at a moderate pace; with previous depreciation in the pound sterling bolstering net exports even as domestic demand likely remains subdued. More specifically, GDP is expected to grow by 1.3 percent in 2010 and to grow by 2.5 percent the following year. Of course, some of the uncertainties surrounding the euro-area forecast equally apply to the United Kingdom.

Emerging Economies

Emerging Asia

The downturn in many Asian economies in late 2008 was steeper than many had expected; however, recovery came quickly and was just as sharp. The recovery has also been more balanced in Asia than elsewhere, with output growth in most economies supported by both external and domestic demand. Although macroeconomic stimulus was substantial, private demand also gained traction in many economies. Ample policy room and strong sectoral balance sheets suggest that, for many economies in the region, the recovery will be relatively robust.

Four factors helped to support Asia's recovery. First, the rapid normalization of trade following the downturn in late 2008 greatly benefited the export-oriented economies in the region. Second, the bottoming out of the inventory cycle, both domestically and in major trading partners, such as the United States, has boosted industrial production and exports. Third, a resumption of capital inflows into the region—in response to widening growth differentials and a renewed appetite for risk—has created abundant liquidity in many economies. Finally, domestic demand has been resilient, with strong public and private components in many of the region's economies. This resilience is in part attributable to the fact that stronger balance sheets were in place at the onset of this crisis, in both the private sector and the public sector. Low public debt levels also allowed many Asian economies to implement strong and timely countercyclical policy responses to the crisis—IMF estimates indicate that fiscal stimulus added some 1.7 percentage points to Asia's growth in 2009. Monetary loosening also eased financial conditions across the region—through aggressive cuts in policy interest rates and, in some economies, measures to increase liquidity.

Against this backdrop, emerging Asia's GDP is projected to grow by 8.7 percent in both 2010 and 2011. However, significant differences remain within the region.

In both China and India, strong domestic demand will support the recovery. In **China**, GDP growth exceeded the government's 8 percent target in 2009 and is expected to be close to 10 percent in both 2010 and 2011. What has been so far mainly a publicly driven growth path, built on infrastructure investment, is expected to turn toward stronger private consumption and investment.

In **India**, growth is projected to be 8.8 percent in 2010 and 8.4 percent in 2011, supported by rising private demand. Consumption will strengthen as the labour market improves, and investment is expected to be boosted by strong profitability, rising business confidence, and favourable financing conditions.

The strength in final domestic demand in India and especially China is expected to have positive spillovers for other Asian economies, particularly exporters of commodities and capital goods. Given their extreme openness and high dependence on external demand, growth in the **newly industrialized economies** (the NIEs—Hong Kong, the Republic of Korea, Singapore, and Taiwan) is projected to rebound sharply from a near 1 percent decline in 2009 to over 5 percent in 2010. In Korea, economic activity is expected to accelerate to 4.5 percent in 2010 and to 5.0 percent in 2011, up strongly from 0.2 percent in 2009. Taiwan is expected to rebound from a 1.9 percent contraction to an expansion of 6.5 percent in 2010, the strongest expected rate of growth among the NIEs. For Singapore, the expected rebound will see that economy move from a 2.0 percent contraction in 2009 to 5.7 percent growth in 2010, while for Hong Kong, the projected reversal is from a 2.7 percent contraction to 5.0 percent growth. This reflects not just strong export growth—with capital exports to China an important element—but also a continued boost from the inventory cycle and a boost in business investment in response to high capacity utilization and strong business confidence. All these factors should help offset the impact of the expected withdrawal of fiscal stimulus in 2010.

The **Association of Southeast Asian Nations (ASEAN-5)** economies[4] are projected to grow by 5.4 percent in 2010 and by 5.6 percent in 2011. Private domestic demand is expected to be the main driver of growth, with net exports playing a lesser role than in the past, reflecting stronger imports relative to historical standards. Among the ASEAN-5, the Indonesian economy has proved to be remarkably resilient, with output growing at 4.5 percent in 2009 compared with 1.7 percent for the ASEAN-5 as a whole, thanks to strong domestic demand and less dependence on trade. Indonesia's growth is expected to accelerate to 6.0 percent in 2010 and to 6.2 percent in 2011, reflecting a pick-up in private investment.

Emerging Europe

The fortunes, and woes, of emerging Europe are inextricably linked to those of advanced Europe. Overall, the region suffered a 3.8 percent contraction in output in 2009. External financing constraints forced a sharp decline in output in some emerging European economies, particularly those with large current account deficits and heavy dependence on foreign financing (e.g. the Baltics, Bulgaria, and Romania). The impact on the Baltic states was particularly strong in 2009, with output falling by 14.1 percent in Estonia, by 15.0 percent in Lithuania, and by 18.0 percent in Latvia. Although current account imbalances have adjusted in many emerging European countries, remaining external financing constraints, vulnerable household and corporate balance sheets, and financial sector deleveraging will limit the speed of the recovery in the hardest-hit economies in emerging Europe. Thus, growth prospects vary widely in emerging

4 The Association of Southeast Asian Nations (ASEAN) comprises Indonesia, Malaysia, Philippines, Thailand, and Vietnam.

Europe. Economies that weathered the global crisis relatively well (Poland) and others where domestic confidence has already recovered from the initial external shock (Turkey) are projected to rebound more strongly, helped by the return of capital flows and the normalization of global trade. At the same time, economies that faced the crisis with unsustainable domestic booms that had fuelled excessively large current account deficits (Bulgaria, Latvia, and Lithuania) and those with vulnerable private or public sector balance sheets (Hungary, Romania, and the Baltic states) are expected to recover more slowly, partly as a result of limited room for policy manoeuvres.

Turkey is projected to experience the strongest recovery in 2010, with output expected to rise by 5.2 percent; however, growth is expected to moderate in 2011, falling to 3.4 percent. In Central Europe, the expectations are more mixed. Poland, the only economy to avoid contraction in 2009, is expected to record a moderate recovery in 2010—growing by 2.7 percent and accelerating to 3.2 percent in 2011. On the other hand, Hungary, which contracted by 6.3 percent in 2009, is projected to mildly contract 0.2 percent in 2010 before resuming growth in 2011. With regard to the Baltic states, Lithuania (down 1.6 percent) and Latvia (down 4.0 percent) are expected to post the worst performance amongst the emerging European economies in 2010; however, they are set to resume expansion in 2011.

Latin America and the Caribbean (LAC)

Having weathered the global downturn comparatively well, the LAC region is poised for a strong recovery. The recovery has been shaped by a number of factors. First, accommodative policies are helping underpin domestic demand. Second, good fundamentals (sound financial systems and solid balance sheets) are helping the region recover and re-attract capital flows in an improved global financial environment. Third, higher commodity prices and external demand are supporting growth in many economies, given their dependence on commodity-related earnings. However, weak external demand for tourism from North America and Europe is impeding growth in a number of economies in the region, especially in the Caribbean, whereas lower remittances are affecting many LAC economies.

Against this backdrop, GDP in the LAC region is projected to grow at 4.0 percent in 2010 and 2011, although prospects vary considerably across the region.

The recovery is projected to be especially strong in many commodity-exporting, financially integrated economies,[5] which account for about two thirds of the LAC region's GDP. In **Brazil**, growth in 2010 is expected to rebound to 5.5 percent, led by strong private sector consumption and investment. Despite a devastating earthquake in the country, Chile's GDP is projected to grow at about 4.7 percent in 2010 and 6.0 percent in 2011, supported by highly accommodative policies, a recovery in commodity prices, and reconstruction efforts. In **Mexico**, growth is expected to rebound to 4.2 percent in 2010, helped in part by the U.S. recovery. In Peru, the top growth performer of the region, GDP is projected to expand by 6.3 percent in 2010, mostly thanks to favourable internal dynamics and high commodity prices. The rebound is also projected to be relatively strong in Bolivia, Paraguay, and Uruguay—with growth rates of 4.0 percent, 5.3 percent, and 5.7 percent, respectively—whereas the recov-

5 Financial integration typically refers to an individual country's degree of financial integration with the global economy in terms of capital flows (i.e. ability to borrow from the rest of the world, ability to invest in foreign assets, and the ability to receive foreign direct investment).

ery is expected to be weak in Argentina and Colombia and to be delayed in Venezuela, given ongoing power shortages.

The recovery is also expected to be less strong in many commodity-importing economies in the region that have large tourism sectors (for example, Antigua and Barbuda, the Bahamas, Barbados, and St. Lucia). Weaker prospects for tourism, coupled with limited policy room to support the recovery, are expected to weigh on near-term growth.

The risks to LAC growth are substantial but broadly in balance. The main downside risks are external to the region. They relate to the fragility of the recovery in advanced economies and a potential weakness in commodity prices. There are also significant upside risks, however. These include even stronger internal dynamics, which could attract higher capital flows.

Commonwealth of Independent States (CIS) Economies

The CIS region is emerging from the recession at a moderate pace, after having suffered a large output collapse during the crisis. Higher commodity prices (oil, gas, and metals) are once again supporting production and employment in commodity-exporting economies in the region, and the normalization of global trade and capital flows is helping CIS economies recover. The turnaround in real activity in Russia is also benefiting the rest of the region by boosting external demand for employment, capital, and goods from these economies. However, lingering financial sector vulnerability and heavy dependence on external financing is holding back growth in several economies in the region.

In this context, real activity in the CIS region is projected to expand by 4.0 percent in 2010, before moderating slightly to 3.6 percent in 2011.

Within the region, growth prospects are diverse. In Russia, growth is expected to stage a modest recovery, reaching 4.0 percent in 2010. However, despite relatively high oil prices and substantial government stimulus, underlying private domestic demand is likely to remain subdued, with bad loans in the banking system expected to stifle credit and growth in consumption.

Energy exporter Uzbekistan is benefiting from high commodity prices and is expected to remain among the top performers in the region in 2010, growing at 8.0 percent. Higher volumes of gas exports and large-scale investments are expected to raise growth in Turkmenistan, which is projected at 12.0 percent in 2010. More generally, those economies with less externally linked financial sectors are expected to continue to do best. Nevertheless, for most CIS economies, growth prospects remain highly dependent on the speed of recovery in Russia, which could surprise in either direction.

Middle East

The global downturn reduced growth in the Middle East region by more than half, as output in the region expanded by 2.4 percent in 2009, down from 5.1 percent in 2008. Growth in the region is expected to rebound quickly, influenced by three factors. First, higher commodity prices and external demand are boosting production and exports in many economies in the region. Second, government spending programs are playing a key role in fostering the recovery. Third, a sluggish recovery in Europe may put a damper on export growth, workers' remittances, and tourism revenues in certain parts of the region (e.g. Morocco and Tunisia), although these flows are gradually improving.

Considering these and other factors, GDP in the Middle East is projected to grow at 4.5 percent in 2010, edging up to 4.8 percent in 2011. As in the other regions, recovery prospects vary substantially across Middle Eastern economies.

Among the oil exporters, the strongest performer is Qatar, where real activity is projected to expand by 18.5 percent in 2010, underpinned by continued expansion in natural gas production and large investment expenditures. In Saudi Arabia and Kuwait, GDP is expected to grow at about 3.7 percent and 3.1 percent, respectively, this year supported in both cases by sizable government infrastructure investment. In the United Arab Emirates, growth in 2010 is projected to be subdued, at 1.3 percent, with property-related sectors expected to contract further.

Among the oil importers, Egypt's GDP is projected to grow 5.0 percent in 2010 and 5.5 percent in 2011, helped by stimulative fiscal and monetary policies. Morocco and Tunisia will continue to grow at rates between 3.2 percent to 4.0 percent in 2010 and between 4.5 percent to 5.0 percent in 2011, assuming exports, tourism, remittances, and foreign direct investment continue to improve.

Africa

Notwithstanding relatively weak financial linkages with advanced economies, Africa was not unaffected by the global downturn. Shocks from the global crisis hit the region mainly through the trade channel. Nonetheless, Africa has weathered the global crisis well, and its recovery from the slowdown in 2009 is expected to be stronger than following past global downturns. Although some middle-income and oil-exporting economies were hit hard by the collapse in export and commodity markets, the region managed to avoid a contraction in 2009, growing by 2.1 percent last year. Its growth is projected to accelerate to 4.7 percent in 2010 and to 5.9 percent in 2011. This recovery reflects the relatively limited integration of most low-income economies into the global economy and the limited impact on their terms of trade, the rapid normalization in global trade and commodity prices, and the use of countercyclical fiscal policies. Remittances and official aid flows were also less affected than anticipated by the recessions in advanced economies. Banking sectors have so far proved generally resilient, and private capital inflows have resumed into the region's more integrated economies.

Reflecting their greater openness to trade, the region's middle-income economies were among the hardest hit. Output in South Africa, the largest of these countries, declined by 1.8 percent in 2009. Although the rebound in world trade is supporting recovery, South Africa's growth—projected at 2.6 percent in 2010 and 3.6 percent in 2011—will be tempered by high unemployment, tight credit conditions, and the recent strength of the rand.

Declining global demand and the collapse in oil prices also dealt a blow to the region's major oil exporters. Fiscal surpluses, some of which had been substantial, were cut markedly, and some economies swung into fiscal deficit. As a result, output growth in these economies slowed by 3.5 percentage points to 3.9 percent in 2009, although strong performance in the non-oil economy allowed Nigeria, the region's largest oil producer, to avoid a substantial slowdown. The recovery of oil prices and stronger global demand will raise growth for these economies to 6.8 percent in 2010 and to 7.1 percent in 2011.

In the region's low-income economies, the slowdown in economic activity was more modest, owing to their more limited trade and financial integration. Growth in a number of the more fragile economies even accelerated last year, reflecting mainly stronger policies and reconstruction assistance following periods of civil conflict, economic instability, and previous external shocks. For the low-income economies as a whole, output is projected to grow by 4.7 percent in 2010 and by 6.7 percent in 2011. Ethiopia will lead the gains, with growth expected at 7.0 percent in 2010 and accelerating to 7.7 percent in 2011.

Assumptions and Risks

As indicated earlier, all projections in this chapter stem from the IMF's April 2010 *World Economic Outlook*. In making its projections, the IMF has adopted a number of technical assumptions that underpin their estimations. Key among these assumptions are that (1) for the advanced economies, real effective exchange rates remain constant at their average levels over the February 23-March 23, 2010, period; (2) that established policies (fiscal and monetary) of national authorities are maintained; and (3) that the price of oil will average US$80.00 a barrel in 2010 and US$83.00 a barrel in 2011. In addition, there are a number of working hypotheses concerning various deposit rates in the world's financial sectors. Interested readers should consult the *Outlook* for further details on these technical assumptions.

For the most part, the assumptions made by the modellers are based on officially announced budgets, adjusted for differences between the national authorities and the IMF regarding macroeconomic assumptions and projected fiscal outturns, with medium-term projections incorporating policy measures that are judged likely to be implemented. Similarly, assumptions about monetary policy are based on the established policy framework in each country.

The outlook for activity remains unusually uncertain and downside risks stemming from fiscal fragilities have come to the fore. The main concern is that room for policy manoeuvres in many advanced economies has either been largely exhausted or has become much more limited, leaving these fragile recoveries exposed to new shocks. In addition, bank exposure to real estate continues to pose downside risks, mainly in the United States and parts of Europe. Risks related to the growth of public debt in advanced economies have risen sharply, as have those related to sovereign debt. Market concerns about sovereign liquidity and solvency in Greece could turn into a full-blown and contagious sovereign debt crisis[6] which, in turn, could be transmitted back to banking systems or across borders. However, a widespread public debt scare across major advanced economies appears unlikely, because together these economies have broad tax and investor bases. In this regard, risk assessments by investors are likely to increasingly differentiate among economies, showing greater sensitivity to deteriorating budgetary outlooks.

However, one risk that has diminished is that the systemic risks originating in the financial sector have fallen as the recovery has become more robust. Banking system health is generally improving alongside the economic recovery, continued deleveraging, and normalizing markets.

6 See the IMF's April 2010 *Global Financial Stability Report* for a further explanation.

Overview of World Trade Developments

The financial crisis that began in the United States in 2008, and spread rapidly to Europe and around the world through trade, financial, and confidence channels, triggered a synchronous and deep global recession. Toward the middle of 2008, global economic activity began to significantly deteriorate. By the start of 2009, most of the major economies in the world had fallen into recession or were experiencing downward turns in economic activity.

World merchandise exports peaked in the second quarter of 2008, before falling for three consecutive quarters. By the end of the first quarter of 2009, global merchandise exports were 38.2 percent lower than before the fall. Since then, they have rallied—registering quarterly growth rates in the range of 8 to 10 percent—and closed out the year 18.8 percent below their previous peak.

The global economic crisis resulted in a 12.2 percent reduction in the volume of global trade in 2009—the largest such decline since World War II. Trade in current U.S. dollar terms fell even further (down 23 percent) than trade in volume terms, thanks in large part to falling prices of oil and other primary commodities. In contrast, world economic output fell by 2.3 percent, in real terms.

A sharp contraction in global demand is thought to be the primary reason behind the decline, magnified by the product composition of the fall in demand, by the presence of global supply chains, and by the fact that the decline in trade was synchronized across countries and regions.

All major countries and regions registered declines in the volume of their merchandise exports in 2009. Likewise, imports into all major countries and regions were down, most notably to Russia and the other Commonwealth of Independent States countries.

Notwithstanding the reductions in trade, China displaced Germany as the world's largest exporting nation in 2009. China also moved ahead of Germany to become the world's second-largest importer, behind the United States last year.

Merchandise Trade

Trade Values (nominal trade)

After having expanded by 15 percent in 2008 and by 16 percent in 2007, the value of world merchandise exports fell 23 percent to US$12.15 trillion in 2009 (Table 2-1).

There are a variety of explanations for the dramatic decline. According to the WTO,[1] declines in wealth during the recession caused households and firms to reduce their spending on all types of goods, notably consumer durables (e.g. automobiles) and investment goods such as industrial machinery. Purchases of these items could be easily postponed in response to heightened economic uncertainty, and they may also have been more sensitive to credit conditions than other types of goods. While these products hold comparatively small shares in

1 WTO Press Release Press/598, "Trade to expand by 9.5% in 2010 after a dismal 2009 WTO reports," March 26, 2010.

TABLE 2-1

World Merchandise Trade by Region and Selected Countries (US$ billions and %)

	EXPORTS				IMPORTS			
	Value US$B	2009	Annual % change		Value US$B	2009	Annual % change	
	2009	Share (%)	2008	2009	2009	Share (%)	2008	2009
World	**12,147**	**100.0**	**15**	**-23**	**12,385**	**100.0**	**16**	**-24**
N. America	**1,602**	**13.2**	**11**	**-21**	**2,177**	**17.6**	**8**	**-25**
U.S.	1,057	8.7	12	-18	1,604	13.0	7	-26
Canada	316	2.5	9	-31	330	2.7	7	-21
Mexico	230	1.9	7	-21	242	2.0	10	-24
Central & S. America	**461**	**3.8**	**21**	**-24**	**444**	**3.6**	**30**	**-25**
Brazil	153	1.3	23	-23	134	1.1	44	-27
Europe	**4,995**	**41.1**	**11**	**-23**	**5,142**	**41.5**	**12**	**-25**
EU(27)	4,567	37.6	11	-23	4,714	38.1	12	-25
Germany	1,121	9.2	9	-22	931	7.5	12	-21
France	475	3.9	9	-21	551	4.4	14	-22
Italy	405	3.3	8	-25	410	3.3	8	-26
U.K.	351	2.9	5	-24	480	3.9	2	-24
C.I.S.	**452**	**3.7**	**35**	**-36**	**332**	**2.7**	**32**	**-33**
Russia	304	2.5	33	-36	192	1.6	31	-34
Africa	**379**	**3.1**	**28**	**-32**	**400**	**3.2**	**27**	**-16**
Middle East	**691**	**5.7**	**33**	**-33**	**493**	**4.0**	**28**	**-18**
Asia	**3,566**	**29.4**	**15**	**-18**	**3,397**	**27.4**	**21**	**-21**
China	1,202	9.9	17	-16	1,006	8.1	18	-11
Japan	581	4.8	9	-26	551	4.4	23	-28
India	155	1.3	30	-20	244	2.0	40	-24
NIEs	**853**	**7.0**	**10**	**-17**	**834**	**6.7**	**17**	**-24**

Source: WTO and author's calculations.

world output, they comprise a disproportionately large share of world trade. Thus, a decline in demand for these products had greater impacts on trade than on GDP. Moreover, the reduction in demand for these products fed through to markets that supply inputs for their production, particularly iron and steel.

There is also the possibility that some of the decline is attributable to the "double counting" of traded intermediate products, associated with the rise of global value chains.[2] This is reflected in the fact that exports have been growing faster than production since the 1980s. This ratio has increased steadily since 1985, and jumped

2 "The international fragmentation of production implies that the export of one manufactured good now involves multiple border crossings of intermediate goods with incremental value added at each production stage. Since trade flows are measured in gross terms while GDP is measured in value-added, the change in trade flows is a multiple of the change in demand for the final exported good." OECD Economics Department Working Paper No. 729, quoting Yi (2009).

by nearly one third between 2000 and 2008, before dropping in 2009 as world exports fell faster than world GDP.

A final factor that reinforced the 2009 trade slump was its synchronized nature. Exports and imports of all major countries fell at the same time, leaving no region untouched. It is likely that the fall in world trade would have been smaller if contraction in some regions had been balanced by expansion in others.

In contrast to 2008, when faster rates of growth for merchandise exports were recorded for the developing economies, exports fell by more for the developing economies than for the developed economies in 2009, with the exception of Asia. One possible explanation for this was the softening of most commodity prices in 2009, as commodities comprise a large portion of developing economies' exports.

The retreat of oil prices from record highs in mid-2008 contributed to the 36 percent drop in exports from the Commonwealth of Independent States (CIS) region. Russia, the largest of the CIS economies, also experienced a 36 percent reduction in exports.

Exports from the Middle East, also an oil-dependant region, were next in terms of largest relative declines, as exports from the region were down by 33 percent from their 2008 levels. Africa followed, experiencing a 32 percent decline in exports last year, while those for Central and South America were off by 24 percent.

The decline in European exports matched the world average, falling by 23 percent, as did those for the EU alone. Exports from Germany retracted by 22 percent and those from France by 21 percent, helping to stem the greater losses experienced elsewhere in the EU, most notably the United Kingdom and Italy, where exports were down by 24 percent and 25 percent, respectively.

Exports from North America performed slightly better than did global exports, falling by 21 percent. There were considerable performance differences within the region, with exports from the United States falling the least (down 18 percent) and those from Canada falling the most (down 31 percent in U.S. dollar terms). Part of the Canadian decline is attributable to the 6.7 percent depreciation of the Canadian dollar given that the rates of change are based on U.S. dollar values, and another part is attributable to the correction in commodity prices, most especially energy prices.

Most of the Asian economies were less exposed to the factors underlying the financial crisis. They were, nonetheless, highly exposed to the collapse in world demand on the trade front, particularly via supply chains in manufactured goods. Overall in 2009, exports from Asia were 18 percent below their 2008 levels. China posted a 16 percent decline in exports, just slightly ahead of the Asian NIEs[3] (down 17 percent). India (down 20 percent) and Japan (down 26 percent) recorded larger declines than the Asian average.

Total world merchandise imports fell by 24 percent in 2009. In North America, the decline averaged 25 percent, as the declines were greatest in the United States (down 26 percent), followed by Mexico (down 24 percent) and Canada (down 21 percent).

Imports into Europe also fell by 25 percent last year. Smaller declines in Germany and France (down 21 percent and 22 percent, respectively) were offset by larger declines in Italy (down 26 percent) and elsewhere.

3 Four economies comprise the newly industrialized economies (NIEs) of Asia. They are: Hong Kong, Korea, Singapore, and Taiwan.

Most of the developing regions experienced somewhat smaller declines in their merchandise imports than the world average. Imports into Africa fell the least, likely reflecting that region's dependence on imports for many products. Still, imports into Africa were down 16 percent in 2009 over 2008.

For the Middle East, imports were down by 18 percent, while for Central and South America, they were 25 percent lower in 2009.

Imports into Asia also declined by 21 percent, as a smaller decline in China (down 11 percent) helped offset larger declines in Japan (down 28 percent) and in India and the NIEs (both down 24 percent).

The CIS region (down 33 percent) was the only other developing economies region, other than Central and South America, to experience a larger decline in merchandise imports than the world average. A 34 percent decline in imports into Russia helps to explain this performance.

Trade Volumes (real trade)

As with trade values, all countries and regions registered declines in the volume of their merchandise exports in 2009. The largest of the developed economies—the United States (down 13.9 percent), the European Union (down 14.8 percent) and Japan (down 24.9 percent)—all registered declines larger than the world average (down 12.2 percent). In contrast, the smallest declines were recorded by the developing economies, most notably the oil exporting regions of the Middle East (down 4.9 percent), Africa (down 5.6 percent), South and Central America (down 5.7 percent) and the CIS region (down 9.5 percent). Asia also saw export volumes decline (down 11.1 percent), led by India (down 6.2 percent) and China (down 10.5 percent), but by slightly less than the world average. Overall, Japan registered the most dramatic decline in real exports last year, falling by 24.9 percent.

The situation was reversed on the import side, where the two largest declining regions were the CIS (down 20.2 percent) and South and Central America (down 16.5 percent). Among the remaining countries, declines in the United States (down 16.5 percent) and the European Union (down 14.5 percent) exceeded the world average, while Japan's drop (down 12.8 percent) was nearly equal to the world rate (down 12.9 percent). The Middle East (down 10.6 percent), Asia (down 7.9 percent), and Africa (down 5.6 percent) all registered declines below the world average. Imports declined the most within developed Asia, where they fell by 12.8 percent in Japan and by 11.4 percent in the NIEs, while they were down 4.4 percent for India. China was the only country to post an increase in real imports in 2009, as imports edged up 2.8 percent last year.

Prices and Exchange Rates

Over and above falling volumes of trade, prices for energy and most commodity products (except gold) also retreated in 2009. With both price and volume declines, it is not surprising that there were significant impacts on nominal merchandise trade values as well as growth rates last year.

Oil prices, which had reached over US$145 a barrel[4] in July 2008, began the year in the mid-US$40 range (Figure 2-1). By February 12, the price had sunk to US$34.03, the low for the year. The price rallied, breaching the US$70 mark on June 9. Prices fluctuated in a range between US$60 and US$73 over the summer and autumn before rallying in mid-October and peaking for the

4 Prices quoted are for West Texas Intermediate (WTI) crude traded in the spot market at Cushing, Oklahoma, as quoted by the U.S. Energy Information Administration (USEIA) at http://tonto.eia.doe.gov/dnav/pet/pet_pri_spt_s1_d.htm

year at US$81.03 on October 21. Prices slowly tumbled until mid-December when they began to rise again. They closed the year at US$79.39 on December 31. Overall, WTI crude prices were 37.8 percent lower in 2008 compared to 2009.

In Canada, average annual energy prices in U.S. dollar terms fell by 42.4 percent in 2009 according to Bank of Canada statistics, while those for industrial materials were 15.2 percent lower than a year earlier and those for food were down by 21.7 percent.

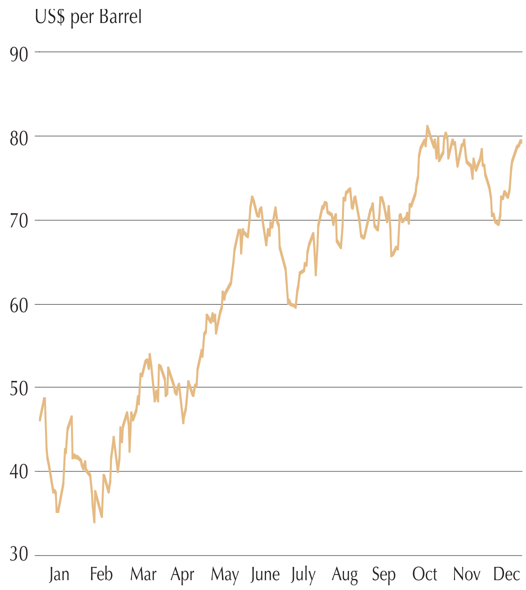
On the other hand, gold prices, which started 2009 at US$874.50[5] (and reached a low of US$810 on January 15), trended upwards throughout the year, reaching a peak of US$1212.50 in early December, before closing the year at US$1087.50 on December 30.

On the exchange rate front, the Canadian dollar fell against its American counterpart in 2009, depreciating 6.7 percent for the year. The dollar, which was worth an average US93.81¢ in 2008 was worth an average US87.57¢ in 2009, a loss in value of US6.24¢. Because of the depreciation, the value of a dollar's worth of Canadian trade (either exports or imports) was worth less in 2009 than in 2008 when converted into U.S. dollars, thereby overstating the decline in Canadian trade performance.

The U.S. dollar also strengthened elsewhere last year, notably against the pound sterling (up 18.4 percent) and the euro (up 5.7 percent) as the United States became somewhat of a safe haven for international capital during this unsettled period. However, key Asian currencies appreciated against the U.S. dollar, including the Japanese yen and the Chinese yuan (or renminbi).

FIGURE 2-1

Price of Oil, 2009



Source: US Energy Information Administration, WTI, Cushing Spot Price

Leading Merchandise Traders by Value

Notwithstanding a 16 percent decline in its exports, China managed to displace Germany as the world's leading merchandise exporter, as Germany's exports fell by somewhat more, down 22 percent (Table 2-2). China's share in world merchandise exports was 9.9 percent, compared to 9.2 percent for Germany.

The United States and Japan held onto the third and fourth positions, with world shares of 8.7 percent and 4.8 percent, respectively.

EU nations accounted for all but one of the remaining top ten positions. With similar rates of decline, there was no change in the rankings of the fifth through eighth spots, as the Netherlands, France, Italy, and Belgium held onto these spots in the order in which they are listed.

5 Price per troy ounce, London Afternoon (PM) Gold Price Fixings as quoted from www.usagold.com/reference/prices/2009.html

TABLE 2-2

Leading Exporters and Importers in World Merchandise Trade 2009
(US$ billions and %)

2009 Rank	2008 Rank	Exporters	2009 US$B Value	2009 % Share	2009 Rank	2008 Rank	Importers	2009 US$B Value	2009 % Share
1	2	China	1,202	9.9	1	1	United States	1,604	13.0
2	1	Germany	1,121	9.2	2	3	China	1,006	8.1
3	3	United States	1,057	8.7	3	2	Germany	931	7.5
4	4	Japan	581	4.8	4	5	France	551	4.4
5	5	Netherlands	499	4.1	4	4	Japan	551	4.4
6	6	France	475	3.9	6	6	United Kingdom	480	3.9
7	7	Italy	405	3.3	7	7	Netherlands	446	3.6
8	8	Belgium	370	3.0	8	8	Italy	410	3.3
9	12	Korea	364	3.0	9	12	Hong Kong	353	2.8
10	9	United Kingdom	351	2.9	10	9	Belgium	351	2.8
12	11	Canada	316	2.5	11	11	Canada	330	2.7

Source: WTO and author's calculations.

Korea, the twelfth-largest exporter in 2008, moved into the ninth position in 2009, as that country posted the lowest decline in exports (down 14 percent) among the leading merchandise exporters.

The United Kingdom slipped one ranking place between 2008 and 2009, to fill out the final place among the top ten exporters.

Canada, which had been in eleventh position in 2008, fell to twelfth in 2009. Canada managed to move past Russia, which had been in tenth place in 2008; however, it was surpassed by Hong Kong and, of course, Korea, to explain the downward shift.

In spite of some correction in its external imbalances, the United States remained far and away the world's largest merchandise importer. Germany and China held onto the next two positions, with China becoming the second-largest importer and Germany falling to third. As with exports, it was because the decline for China was less dramatic than that for Germany that China moved up one spot. France and Japan tied for fourth spot, as a 22 percent decline in French imports compared to a 28 percent decline in Japanese imports allowed France to move into a tie with Japan. The United Kingdom, the Netherlands, and Italy retained the sixth through eighth spots while a relatively small reduction in imports into Hong Kong (down 10 percent) allowed that economy to move into ninth place (up from twelfth in 2008) while Belgium slipped to tenth spot. Canada retained its eleventh place ranking while Korea fell from tenth in 2008 to twelfth.

Services Trade

World services exports declined 13 percent (US$500 billion) to US$3.31 trillion (Table 2-3). This marked the first time since 1983 that trade in services declined year on year.

The decline in services was a little more than half that of merchandise trade in 2009. This is partly a reflection of the disproportionate impact that the global crisis had on durable goods, and of the greater effect of

TABLE 2-3

World Services Trade by Region and Selected Countries, (US$ billions and %)

	EXPORTS				IMPORTS			
	Value US$B	2009	Annual % change		Value US$B	2009	Annual % change	
	2009	Share (%)	2008	2009	2009	Share (%)	2008	2009
World	**3,310**	**100.0**	**12**	**-13**	**3,115**	**100.0**	**13**	**-12**
N. America	**542**	**16.4**	**9**	**-10**	**430**	**13.8**	**7**	**-10**
U.S.	470	14.2	10	-9	331	10.6	8	-9
Canada	57	1.7	-	-12	77	2.5	-	-11
Mexico	15	0.5	-	-	22	0.7	-	-
Central & S. America	**100**	**3.0**	**16**	**-8**	**111**	**3.6**	**21**	**-8**
Brazil	26	0.8	27	-9	44	1.4	28	-1
Europe	**1,675**	**50.6**	**12**	**-14**	**1,428**	**45.8**	**11**	**-13**
EU(27)	1,513	45.7	11	-14	1,329	42.7	11	-13
Germany	215	6.5	11	-11	255	8.2	11	-10
France	140	4.2	10	-14	124	4.0	10	-12
Italy	101	3.1	7	-15	114	3.7	8	-11
U.K.	240	7.3	2	-16	160	5.1	1	-19
C.I.S.	**69**	**2.1**	**28**	**-18**	**91**	**2.9**	**26**	**-21**
Russia	42	1.3	30	-17	60	1.9	29	-19
Africa	**78**	**2.4**	**19**	**-11**	**117**	**3.8**	**27**	**-11**
Middle East	**96**	**2.9**	**20**	**-12**	**162**	**5.2**	**18**	**-13**
Asia	**751**	**22.7**	**14**	**-13**	**776**	**24.9**	**14**	**-11**
China	129	3.9	20	-12	158	5.1	22	0
Japan	124	3.8	15	-15	146	4.7	10	-11
India	86	2.6	18	-	74	2.4	26	-
NIEs	**247**	**7.5**	**-**	**-**	**221**	**7.1**	**-**	**-**

Source: WTO and author's calculations.

price declines on goods trade. It may also point toward the more limited role of services in supply chain transactions.

The CIS region posted the largest relative decline in services exports, as these exports fell by 18 percent over 2008. Europe also registered a decline greater than the world average, down 14 percent. Most of the major EU economies posted losses at or greater than 14 percent, with the exception of Germany, where services exports were down by only 11 percent. Asian exports of services fell in line with the world average, although the decline was greater for Japan, down 15 percent.

The Middle East (down 12 percent) and Africa (down 11 percent) saw their services exports shrink at a slower pace than the world average. The same was true for North America, where both Canada and the United States experienced declines in services exports by 12 percent and 9 percent, respectively. Services exports retracted the least in Central and South America, where they fell by only 8 percent in 2009.

The story was similar for services imports, with imports falling faster in the CIS and European regions, although several of the major EU economies performed better than the world average, except the United Kingdom. Middle Eastern imports of services also declined faster than the world average.

Asian imports of services fell at a slower pace than the world average, as did African imports. Services imports into both regions fell by 11 percent. Within Asia, China's imports were unchanged from the previous year.

As with exports, the decline in services imports was below the world average in North America, with imports into Canada and the United States falling by 11 percent and 9 percent, respectively. And finally, services imports declined the least in Central and South America, as they fell at the same rate as posted for services exports 8 percent.

Exports of transport services fell 21 percent, registering the largest drop among service categories, followed by travel (down 11 percent) and commercial services (down 10 percent). The drop in transport services was roughly the same as the drop in merchandise trade. This is unsurprising as this category is closely linked to trade in goods. Commercial services accounted for slightly more than half of all services (53 percent), while travel accounted for roughly one quarter of all services exports, and transportation services made up the remainder (Table 2-4).

Leading Services Traders by Value

In 2009, the United States exported nearly twice the value of services as its nearest competitor, the United Kingdom, the former accounting for 14.2 percent of the world's exports of services compared to 7.2 percent for the latter. Germany (6.5 percent) and France (4.2 percent) accounted for the next two spots (Table 2-5).

China (3.9 percent) slipped past Japan (3.8 percent) for fifth and sixth place, respectively. The final four spots among the ten leading exporters of services were all EU countries: Spain (3.7 percent), Italy (3.0 percent), Ireland (2.9 percent) and the Netherlands (2.8 percent).

Canada held a 1.7 percent world share, and was the world's eighteenth-largest exporter of services in 2009.

On the import side, the United States again was the top services trader by value at 10.6 percent of the total, followed by Germany (8.2 percent) and the United Kingdom (5.1 percent). An 11 percent reduction in imports into Japan, coupled with no change in imports into China raised China's ranking to fourth, while Japan slipped to fifth. France (4.0 percent), Italy (3.6 percent) and Ireland (3.3 percent) all managed to register services imports in excess of US$100 billion, despite the contractions in their services imports during 2009. The Netherlands and Spain (both at 2.8 percent) rounded out the top ten.

TABLE 2-4

World Exports of Services in 2009, (US$ billions and %)

	Value (US$B)	Share (%)	2008-09 growth (%)
All services	**3,312**	**100.0**	**-13**
Transportation	704	21.3	-21
Travel	854	25.8	-11
Commercial services	1,754	53.0	-10

Source: WTO and author's calculations.

TABLE 2-5

Leading Exporters and Importers in World Services Trade 2009
(US$ billions and %)

2009 Rank	2008 Rank	Exporters	2009 Value US$B	2009 Share %	2009 Rank	2008 Rank	Importers	2009 Value US$B	2009 Share %
1	1	United States	470	14.2	1	1	United States	331	10.6
2	2	United Kingdom	240	7.2	2	3	Germany	255	8.2
3	3	Germany	215	6.5	3	2	United Kingdom	160	5.1
4	4	France	140	4.2	4	5	China	158	5.1
5	6	China	129	3.9	4	4	Japan	146	4.7
6	5	Japan	124	3.8	6	6	France	124	4.0
7	7	Spain	122	3.7	7	7	Italy	114	3.6
8	8	Italy	101	3.0	8	9	Ireland	104	3.3
9	9	Ireland	95	2.9	9	9	Netherlands	87	2.8
10	9	Netherlands	92	2.8	10	8	Spain	87	2.8
18	20	Canada	57	1.7	11	12	Canada	77	2.5

Source: WTO and author's calculations.

Canada registered a 2.5 percent world share, and was in the eleventh position among the world's leading importers of services in 2009. A smaller decline in services imports into Canada (down 11 percent) than for Korea (down 19 percent) allowed Canada to surpass Korea in the rankings between 2008 and 2009.

Canada's Economic Performance

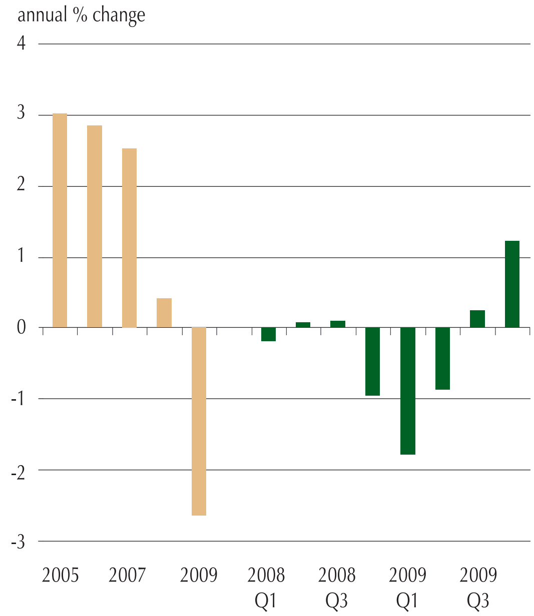
Canadian economic activity was deeply affected by the global recession—real output contracted in the fourth quarter of 2008, and continued to fall over the first half of 2009 before returning to growth in the second half of the year. For the year as a whole, real GDP contracted by 2.6 percent in 2009. It was the second-largest decline in real output since the years of the Great Depression, and not far off from the 2.9 percent decline catalogued during the 1982 recession. Output fell in each province and territory, except Prince Edward Island and the Yukon. Provincially, the largest declines in output occurred in the resource-intensive economies of Newfoundland and Labrador, Saskatchewan and Alberta. Manufacturing output fell in every province and territory, except P.E.I. Job losses were widespread across Canada, with only three provinces Saskatchewan, New Brunswick and Manitoba posting gains over 2008 levels. The unemployment rate slipped 2.2 percentage points to 8.3 percent as the economy shed some 276,900 jobs—the first setback after 16 years of steady employment growth.

Gross Domestic Product

Provoked by the bursting of a global financial bubble, the world economy was in the midst of a synchronized recession at the start of 2009. Canadian economic activity was deeply affected by these events, and real output contracted in the fourth quarter of 2008 and continued to fall over the first half of 2009 before growth returned in the second half of the year (Figure 3-1). For the year as a whole, real GDP contracted by 2.6 percent, down from the 0.4 percent growth registered in 2008.

FIGURE 3-1

Canadian Real GDP Growth, 2005-2009



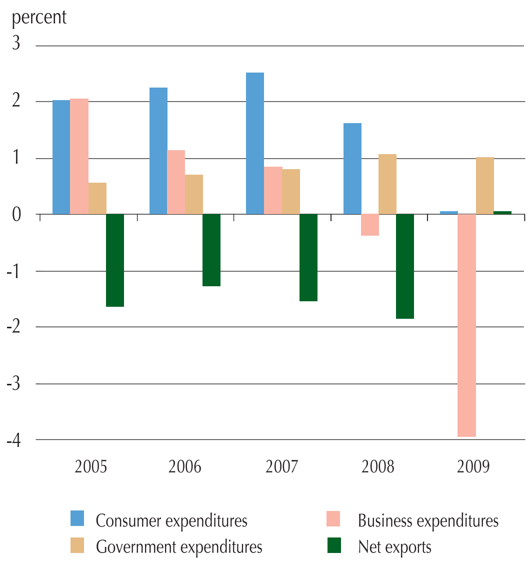
Source: Statistics Canada

Turning to the expenditure-based categories of GDP (Figure 3-2), growth in real **personal consumption expenditures** on goods and services managed to hold its level of a year earlier, as expenditures advanced by 0.2 percent. It was the slowest rate of expansion for this category since the 1991 recession when real expenditures contracted by 1.6 percent.

Real expenditures on goods fell by 1.2 percent while those for services were up by 1.1 percent. Spending on semi-durables

FIGURE 3-2

Contribution to Real GDP Growth, 2005-2009



Source: Statistics Canada

and durables fell by 2.9 percent and 2.8 percent in volume terms, respectively, while that for non-durables, the largest of the three goods categories, advanced by 0.6 percent. Expenditures were down broadly, except for those related to food, shelter, and health care. Consumers appear to have put off discretionary spending given that disbursements on the following fell the most: miscellaneous personal effects (down 8.6 percent); furniture, carpets, and other floor coverings (down 7.3 percent); semi-durable household furnishings (down 5.7 percent); reading and entertainment supplies (down 4.7 percent); and new and used motor vehicles (down 3.2 percent). With the slowdown in spending, this category of GDP contributed slightly less than 0.1 percentage points to real GDP growth, down from 1.6 percentage points in 2008 and 2.5 percentage points in 2007.

Real **business investment** tumbled for the second consecutive year to a level not seen since 2004. Between the fourth quarter of 2007 and the second quarter of 2009, business investment plunged 21.2 percent before starting to turn around in the second half of last year. Investment in machinery and equipment fell 19.2 percent over the year as most sub-categories (e.g. industrial machinery, agricultural machinery, computer and other office equipment, telecommunications equipment, and transportation equipment) experienced double-digit declines. Investment in plants was off by 15.6 percent, with investment in engineering structures down 18.2 percent and investment in buildings down 8.4 percent.

Investment in residential construction, which includes new housing construction, resales, and renovation activity, fell for the second consecutive year—down by 7.4 percent over 2008 levels. The overall decline came mostly from declines in new housing construction, down 20.1 percent in real terms. Resale activity was up 10.6 percent while renovation activity posted a small gain of 1.2 percent.

Inventories for non-farm businesses were drawn down last year reversing the accumulation that had occurred in 2008 while farming inventories were accumulated, resulting in a net $4.9 billion reduction in business inventories in real terms in 2009.

Overall business activities removed 4.0 percentage points from economic growth in 2009, significantly more than the 0.4 percentage points it removed from growth in 2008. Business investment accounted for the bulk of the decline at 2.8 percentage points while changes in inventories accounted for the remaining 1.2 percentage points of decline.

In 2009, the volume of **exports and imports of goods and services** fell by 14.0 percent and 13.4 percent, respectively. In real terms, this means that exports of Canadian goods and services fell by $68.1 billion (in chained 2002 dollars) while imports fell $77.1 billion on the same basis. The decline in real exports removed nearly 4.6 percentage points in 2009 while the decline in real imports raised growth by 4.6 percentage points over the year. As a result, the overall impact of trade on growth in 2009, although very small (one half of one-tenth of a percentage point), was nevertheless positive for the first time since 2001.

About 95 percent of the decline in the volume of exports in 2009 occurred on the goods side. Three categories of goods accounted for the majority of the declines: automotive products (down $26.0 billion in chained 2002 dollars, or 32.8 percent), machinery and equipment (down $17.7 billion in chained 2002 dollars, or 17.2 percent), and industrial goods and materials (down $15.4 billion in chained 2002 dollars, or 20.6 percent). Overall, the volume of exports of goods was down 15.3 percent last year. Services exports experienced a more modest 5.5 percent decline in real terms: transportation services fell the most (down 12.0 percent), while commercial services and travel slipped by 4.8 percent and 4.4 percent, respectively.

Likewise, the bulk of the declines in the volume of imports came on the goods side, led by machinery and equipment (down $33.0 billion in chained 2002 dollars, or 19.1 percent), automotive products (down $22.7 billion in chained 2002 dollars, or 25.3 percent), and industrial goods and materials (down $12.2 billion in chained 2002 dollars, or 14.9 percent). In total, the volume of goods imports was down 14.7 percent over 2008 levels. Services imports fell 7.0 percent by volume last year. As was the case for exports, transportation services led the declines for imports, down 11.0 percent, followed by travel (down 7.4 percent) and commercial services (down 4.8 percent).

With respect to **GDP by industrial activity**, the economy began the year on the downside of the business cycle. That trend continued over the first five months of the year, as GDP fell by 2.0 percent from its December 2008 level. Over the summer months, the economy mounted a weak recovery but could not sustain that momentum and GDP again dipped in August before registering four consecutive months of growth to close out the year. Altogether, GDP for December 2009 was 2.5 percent below the peak observed in July 2008.

The heavy impact of the recession on the production of **goods** caused output to fall for the second consecutive year, down 9.2 percent in 2009, with all major sectors contracting. The **services** sector also contracted over the year, as output fell 0.1 percent. A small number of sectors managed to expand their output, but the majority registered declines.

Manufacturing, the largest of the goods-producing sectors, was also the hardest hit. Reductions in foreign demand and domestic consumer expenditures on goods, along with inventory draw downs, combined to create a 12.3 percent reduction in output. Losses were widespread, led by primary metals, textile products, transportation equipment, plastics and rubber, clothing, machinery, non-metallic minerals, fabricated metals, wood and textile mills—all which experienced declines of 15.0 percent or greater. Overall, 19 of the 21 major manufacturing industries experienced declines in output in 2009, with only miscellaneous manufacturing (up 2.8 percent) and food manufacturing (up 2.6 percent) registering output growth in 2009.

The above-mentioned downturns residential, industrial, and engineering structures were at the heart of the decline in **construction**, as output was down by 6.7 percent.

Forestry, fishing, oil and gas were also affected by reduced foreign demand as well as by price effects. Output in forestry and logging fell 19.6 percent, down for the fourth consecutive year. In contrast, fishing increased its output for the third year in a row, advancing 5.3 percent last year. However, oil and gas had the largest absolute decline in output in this sector, retracting by 8.2 percent in 2009, or $4.6 billion.

In the two other major categories of goods, **agriculture** output fell 7.2 percent and **utilities** production was down by 4.6 percent last year.

The effect of the recession on **services** was much less than on goods; output fell only 0.1 percent in 2009. Gains were led by finance, insurance, real estate and leasing, health care and social assistance, public administration, and educational services, while all other sectors recorded losses.

Within the **finance, insurance, real estate and leasing sector**, most of the gains were registered by real estate and leasing, which advanced 2.8 percent. Gains in finance and insurance were more modest, up by only 0.4 percent.

During the recession, public spending on infrastructure and social services rose, reflected by a 2.3 percent increase in **public administration** output for the year.

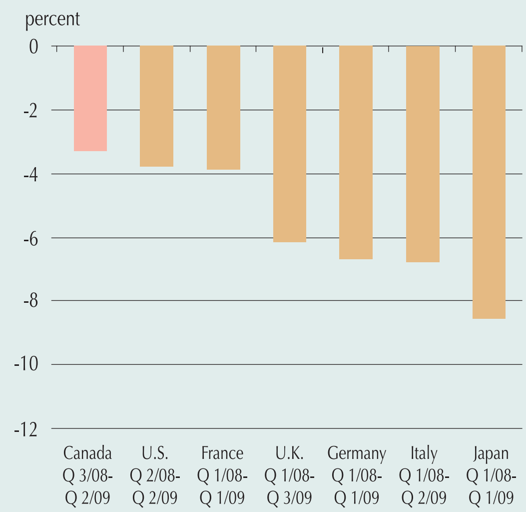
In parallel with the decline in personal consumption expenditures, output in trade fell, declining by 3.8 percent. Retail trade was

Canada's recession: short and mild

After posting growth rates in excess of 5.0 percent in both 2006 and 2007, global real GDP growth slowed to 3.0 percent in 2008, before contracting by 0.6 percent in 2009. However, different economies entered into economic decline at different periods, with the G7 North American economies staving off the downturn for longer than their European and Japanese counterparts. Most of the major economies endured four quarters of decline, with the exception of Canada, where the downturn was shorter by one period, and Italy and Great Britain, which suffered longer declines.

All G7 members emerged from recession in 2009. Measured from peak-to-trough, Canada recorded the mildest downturn, with a 3.3 percent decline in GDP. The United States experienced the second-smallest contraction (down 3.8 percent), while Japan posted the largest decline in GDP (down 8.6 percent).

G7 GDP Contractions (peak-to-trough)



Source: Office of the Chief Economist
Data: National Statistical Agencies.

down 1.0 percent and wholesale trade was down 6.8 percent. Likewise, output in **transportation and warehousing** was down 4.3 percent compared to the previous year. Most other services sectors, including **accommodation and food services, business, building and other support services, information, culture and recreation, professional, scientific and technical services,** and **other miscellaneous services** posted small losses in output ranging from 0 to 2 percent, generally speaking.

GDP by Province

The national decline in real output was mirrored on a regional basis, as output fell in each province and territory, except Prince Edward Island and the Yukon. However, the economic downturn affected some regional economies more than others, with Ontario, the western provinces, and northern territories affected more than Quebec and the Maritime provinces (Figure 3-3). The exceptions to this were the Yukon, with its positive growth; Manitoba, which registered small negative growth; and Newfoundland and Labrador, which posted double-digit negative growth.

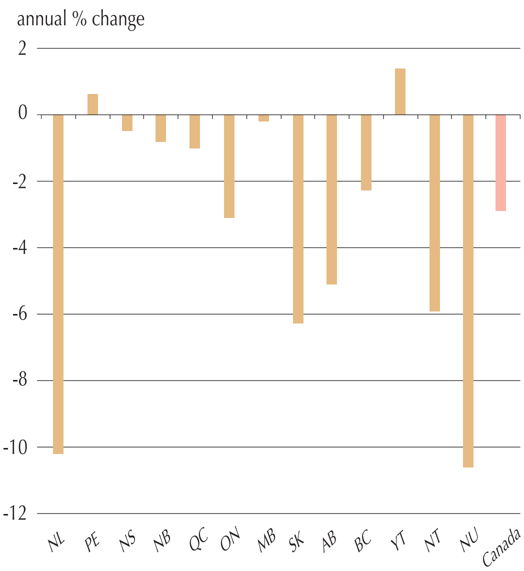
As indicated above, goods-producing sectors were hardest hit. Provincially, the largest declines in output occurred in the resource-intensive economies of Newfoundland and Labrador, Saskatchewan and Alberta—these three provinces also registered the biggest volume declines in mining and oil and gas extraction.

Manufacturing output fell in every province and territory except Prince Edward Island. Manufacturers in Ontario, Alberta, British Columbia, Newfoundland and Labrador, and all three territories experienced double-digit declines in production in 2009.

In **Newfoundland and Labrador**, economic output fell 10.2 percent in 2009, following a 0.7 percent increase the year before.

FIGURE 3-3

Real GDP Growth by Province, 2009



Source: Statistics Canada

Sharp drops in oil extraction and metal ore mining were behind the declines, as these two sectors accounted for over 80 percent of the overall decline. In manufacturing, a 23.5 percent decline in the production of seafood product preparations accounted for just under half of the sector's overall decline. Seafood preparations fell in concert with a decline in fishing output. The permanent closure of a paper mill triggered a 54.6 percent drop in forestry activity.

Construction activity advanced 4.0 percent after having retracted 1.3 percent in 2008. Both residential and non-residential building construction registered increases, while engineering construction weakened following the completion of several construction projects.

The economy of **Prince Edward Island** grew for the eighth consecutive year, up by 0.6 percent in 2009, following a 0.7 percent increase a year earlier. As mentioned above, P.E.I. was the only province that increased its manufacturing output last year. The transportation equipment industry posted gains, while a plant closure hampered production in food industries thereby limiting the gains. Output in agriculture, forestry, fishing and hunting fell 1.6 percent, notwithstanding increased output in aquaculture and a higher lobster harvest. Health care and public administration also contributed to the overall gains.

Nova Scotia posted a 0.5 percent decline in GDP—well below the national average of 2.9 percent—following 2.4 percent growth in 2008. Declines in mining and oil and gas extraction and manufacturing outweighed gains in construction and in several service sectors—notably hospitals, education, and public administration. A mine closure and lower gas extraction led to a 24.3 percent drop in output in mining and oil and gas extraction, while weak demand from abroad helped curtail output in forestry and forest products.

In **New Brunswick**, output fell 0.8 percent, after having risen by 0.1 percent in 2008. The goods-producing sectors were responsible for most of the declines, led by construction, which fell 8.4 percent as work neared completion on several engineering construction projects. Residential construction fell too (down 6.5 percent), although the losses were partially offset by a 5.2 percent gain in non-residential construction. Output in forestry and forest products was down 16.6 percent owing to weak demand from abroad, while falling commodity prices hampered mining output and exploration activities, as output in this sector retracted by 18.1 percent. Public sector output expanded in areas such as health care, public administration, and education, and retail output posted a 2.2 percent increase as labour income increased.

The **Quebec** economy contracted by 1.0 percent in 2009, after having expanded by 1.3 percent in 2008. Manufacturing accounted for more than the whole of the decline, although wholesaling, electricity, and forestry output also registered notable losses. Advances in construction, retail, and the public sector partially offset the declines. Forestry output fell 13.5 percent. Further downstream, production in wood products (down 13.2 percent) and in pulp and paper (down 19.5 percent) fell in tandem. Elsewhere in manufacturing, output was down 12.0 percent for transportation equipment, including an 8.1 percent decline in aerospace products. Production of primary and fabricated metals also registered a notable decline (down 12.8 percent), as did machinery manufactures (down 15.1 percent), and electronic product manufactures (down 16.6 percent). Construction output increased 2.6 percent overall as electric power engineering construction and transportation engineering construction advanced while residential and non-residential building construction suffered losses.

In **Ontario**, the effects of a weak global environment accelerated, and GDP fell 3.1 percent after having been trimmed back by 0.3 percent in 2008. Manufacturing incurred most of the losses, followed by wholesale activity and construction to a lesser extent. Overall, 17 of the 21 major manufacturing industry groups posted declines. Motor vehicles and parts output fell the most—by over 29 percent—following a decline of nearly 24 percent in 2008. Primary and fabricated metals (down 29.6 percent) and machinery manufactures (down 20.4 percent) also posted sizeable declines. Weak export demand was at the root of declines in the production of wood. With manufacturing output down, transportation services output contracted in 2009 by 4.2 percent. Wholesale activities were also off, down 6.1 percent. A 10.6 percent decline in residential construction, along with a smaller 2.8 percent fall in non-residential construction, accounted for most of the decline in construction, as gains in engineering construction were largely offset by declines in repair construction.

After a 2.2 percent expansion in 2008, economic activity in **Manitoba** edged down 0.2 percent in 2009. Gains in construction and public sector output were offset by losses in manufacturing and in agriculture, forestry, fishing, and hunting. Crop production edged down in 2009 after a bumper harvest a year earlier, while animal production declined as world demand softened. Manufacturing output slipped 9.0 percent as output retreated in most industries. However, three industries—primary and fabricated metals, printing, and wood products—accounted for about half of the overall decline in the sector. In construction, most of the gains came from engineering construction, in particular, electric power engineering construction. Education, health care, and public administration also registered gains.

Saskatchewan's GDP contracted by 6.3 percent in 2009, after expanding by 4.4 percent in 2008. After Nunavut and Newfoundland and Labrador, this constituted the third-largest decline among the Canadian provinces and territories. Mining and oil and gas production fell 17.6 percent; potash production fell by more than 50 percent as a result of weak export demand. Oil and gas extraction fell for the sixth consecutive year, down 3.3 percent, and mining exploration retreated 35.0 percent as commodity prices declined. Crop production remained high, although down from record levels in 2008. Manufacturing activity also declined, down 7.0 percent, mostly attributable to declines in industries that supply materials to mining industries. Wholesale activity was 18.2 percent lower in 2009 than in 2008, while transportation and warehousing was down by 3.7 percent. Partially offsetting the declines were small advances in most other services industries, except for wholesaling and transportation, especially those related to public sector output. Construction activity also edged up 0.1 percent, as non-residential building construction increases were offset by declines in residential and engineering construction.

Following a 0.3 percent increase in 2008, **Alberta**'s GDP fell 5.1 percent in 2009. Declines were widespread, with most goods producing sectors and several services sectors down. Construction activity fell 22.6 percent after several oil and gas engineering construction projects were put on hold and both residential and non-residential building construction declined. Crop and animal production was also down significantly, falling 22.0 percent. Manufacturing output was down 16.5 percent overall, with machinery manufacturing, chemicals, wood, metal, and cement products all declining by more than 20 percent, and meat products down by 19.1 percent. Retail trade experienced a rare setback, falling to levels not seen since 2006, and wholesale trade was off by 11.5 percent. With the drops in construction, manufacturing, and mining activities, output in professional and technical services, in administrative and support services, in miscellaneous services (such as repair and maintenance), and in transportation services all fell for the first time in many years.

In **British Columbia**, GDP fell 2.3 percent, compared to a 0.2 percent increase a year earlier. A 14.5 percent contraction in manufacturing output accounted for about 60 percent of the overall decline. Manufacturing output losses were widespread, led by wood, metals, pulp and paper, machinery, and cement products. Production in forestry products continued to decelerate for the fifth straight year, falling by 18.8 percent last year. Falling export demand resulted in the decline, as did a 15.8 percent drop in residential building construction. Job losses throughout the forestry and downstream sectors contributed to a decrease in labour income, affecting both retail (down 2.3 percent) and wholesale trade (down 8.7 percent).

The **Yukon** economy grew by 1.4 percent in 2009, after having expanded by 4.3 percent the previous year. Mining activity and construction associated with a new mine helped to raise territorial output, while completion of work on transmission lines allowed for more electric power generation. In services, public sector output, especially in public administration, expanded, while those related to tourism and trade experienced setbacks.

In the **Northwest Territories**, GDP fell by 5.9 percent last year, compared with a 7.7 percent decline in 2008. Some 90 percent of the decline was attributable to mining and oil and gas extraction as diamond mining output dropped sharply in tandem with a slump in world demand. Construction activities were up by 3.8 percent, although strong advances in residential and non-residential building construction were mitigated by declines in engineering construction, as several mining projects were put on hold due to the uncertain economic climate. Reduced economic activity led to a decrease in labour income, affecting both retail (down 2.5 percent) and wholesale trade (down 12.2 percent).

The **Nunavut** economy experienced the sharpest contraction of all Canadian regions, falling 10.6 percent in 2009 after rising 8.9 percent in 2008. Reduced construction activity was responsible for much of the decline. Notwithstanding strong increases in residential and non-residential building construction, construction output fell by 40.7 percent as engineering construction contracted sharply following the completion of work at the Meadowbank gold mine. By year's end, the mine had not begun production, and Nunavut was without a producing gold or diamond mine for the first time since the territory was formed. As a result, mining and oil and gas production fell 43.8 percent over the year, accounting for most of the remainder of the decline.

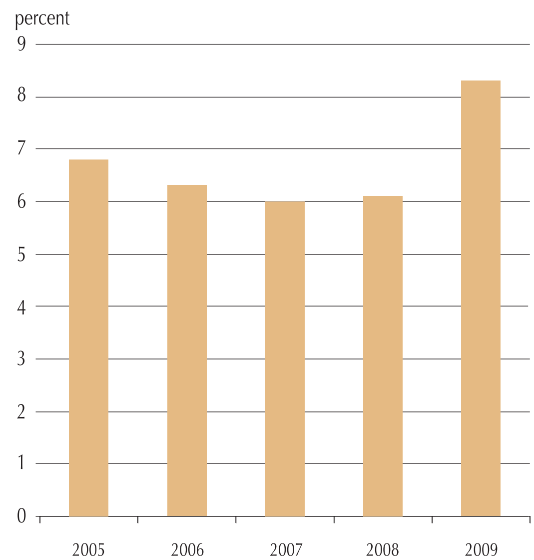
Employment

After 16 years of growth, Canada experienced a setback in job creation in 2009, as employment fell 1.6 percent (i.e. by 276,900 jobs). All the job losses came from full-time positions as part-time jobs expanded by 71,300. With the overall job losses, the national unemployment rate slipped 2.2 percentage points to 8.3 percent for 2009 (Figure 3-4).

Job losses were widespread across Canada, with only three provinces Saskatchewan, New Brunswick and Manitoba posting gains over 2008 levels. Saskatchewan was the only province to add to both full-time and part-time jobs. On the other hand, both Newfoundland and Labrador and Quebec shed jobs in both categories.

FIGURE 3-4

Unemployment Rate in Canada, 2005-2009



Source: Statistics Canada

Four provinces accounted for the bulk of the job losses. Losses in Ontario were responsible for almost 60 percent of the national total, followed by B.C. at nearly 20 percent, Quebec at 13.5 percent, and Alberta at 9.1 percent.

All major categories in the goods-producing sector shed jobs in 2009. The number of manufacturing jobs fell 9.1 percent over the 2008 level, as this sector cut some 179,700 net positions. The impact of the recession was also severe on construction employment, which shed 70,800 net jobs, a decline of 5.7 percent over the previous year. Forestry, fishing, mining, oil and gas reduced its workforce by 23,900, while agriculture and utilities registered smaller losses of 6,500 and 4,000 jobs, respectively, last year.

The services sector added 8,000 positions to the payroll over 2009. Gains in health care and social assistance (up 51,600), miscellaneous services (up 37,200) and finance, insurance, real estate and leasing (up 23,600) were largely offset by losses in trade (down 39,000), transportation and warehousing (down 37,400) and business, building and other support services (down 30,000).

The above analysis is based on annual averages. However, the brunt of the economic downturn was most severely felt in late 2008 and through the first half of last year. From November 2008 through July 2009, the Canadian economy shed 417,400 jobs. It has since recouped 158,500 jobs over August 2009 through February 2010, notwithstanding some 51,500 jobs lost in October and December of 2009, combined. Nonetheless, employment levels remain below their previous high mark (or peak level) observed in October 2008, and will likely remain so for the remainder of 2010.

Inflation

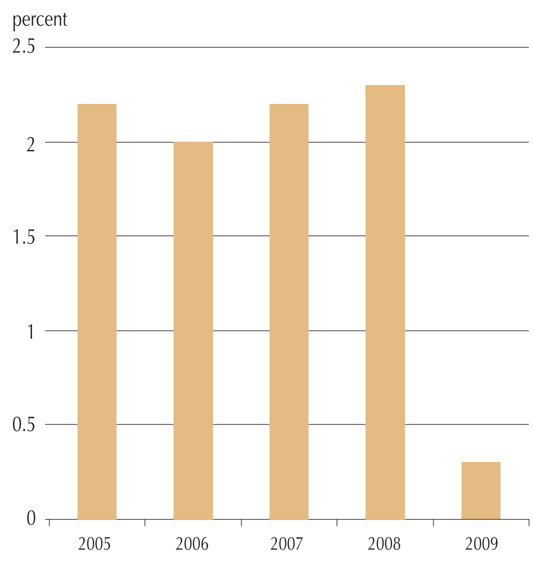
For the year as a whole, consumers paid only 0.3 percent more, on average, for goods and services included in the Consumer Price Index (CPI) basket in 2009 compared to 2008 (Figure 3-5). This was the smallest increase in annual inflation since the 0.1 percent increase registered in 1994. In fact, overall prices were lower between June and September 2009 than they were over the corresponding months a year earlier.

Energy prices exerted the most significant downward pressure on the CPI last year as they retreated from their historical highs recorded a year earlier. Prices for energy were 13.5 percent lower in 2009, as gasoline prices fell 17.5 percent for the year, while prices for natural gas were down 20.1 percent and those for fuel oil and other fuels were down 29.9 percent.

Of the eight major components that comprise the CPI, three were down over the year while five increased. Gains were led by

FIGURE 3-5

Inflation Rate in Canada, 2005-2009



Source: Statistics Canada

food prices, which rose 4.9 percent, and health and personal care prices, which were up by 3.0 percent. Prices for household operations, furnishings and equipment, alcohol and tobacco, and recreation and education prices also advanced in 2009. Prices fell for transportation, shelter, and clothing and footwear which helped to limit the overall increases in the CPI.

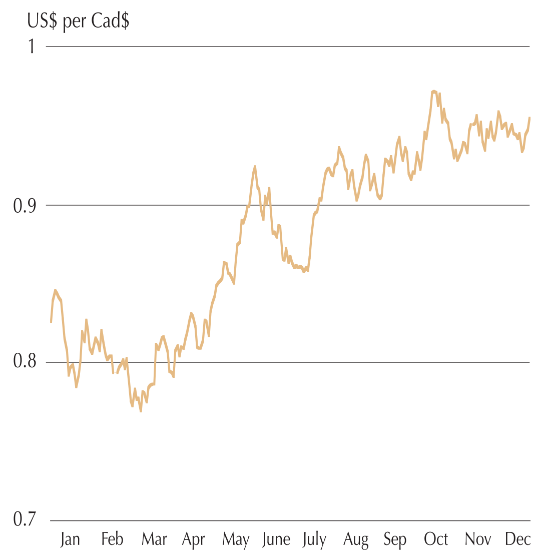
The Canadian dollar

After appreciating for six consecutive years against the U.S. dollar, the Canadian dollar fell against the U.S. dollar in 2009. Averaging US87.57¢ in 2009, the Canadian dollar was worth US6.24¢ less than in 2008, a decline of 6.7 percent in its value against the U.S. dollar over the year. Relative to the other major currencies, and based on annual averages, the Canadian dollar also fell 15.0 percent against the yen and by 1.6 percent against the euro, while it was up 10.2 percent against the British pound sterling.

The value of the Canadian dollar was very volatile in trading during 2009. Trading occurred over a range of US76.9¢ to US97.2¢ for the year (Figure 3-6). The dollar began the year at US82.6¢ on January 2, 2009, quickly rose US2¢, then began slowly falling to US76.9¢ by March 9. At the end of May, the dollar broke through the US90¢ mark but, unable to sustain that level, fell back to US85.8¢ by July 8. The Canadian dollar subsequently rallied, peaking at US97.2¢ on October 14 before closing out the year at US95.6¢.

FIGURE 3-6

Canada-U.S. Exchange Rate, 2009



Source: Bank of Canada

Overview of Canada's Trade Performance

The world's economies entered 2009 in the acute phase of a deep and synchronized recession. Global merchandise trade had retracted mildly in the third quarter of 2008 before plummeting 21.0 percent in the fourth quarter and falling by nearly as much again in the first quarter of 2009. It began recouping lost ground beginning with the second quarter of the year. By contrast, Canadian merchandise trade started its downturn, and subsequent pull out, later than the world's economies—by about one fiscal quarter.

Goods and services exports from Canada fell 22.1 percent, from $560.3 billion in 2008 to $436.3 billion in 2009. Goods exports tumbled 24.5 percent to $369.6 billion, as prices and volumes both declined. Export volumes were down for the second consecutive year, while prices reversed, wiping out the notable increases registered in 2008. Losses were led by energy products, which accounted for about 40 percent of the overall export decline. As discussed in the previous chapter, the average value of the Canadian dollar was lower for the year, although it strengthened as the year progressed, making Canadian exports relatively more expensive. This coincided with the period of recovery in global trade, and likely served to moderate the growth in Canada's exports over the second half of the year. Services exports posted a smaller loss, down 5.4 percent to $66.7 billion.

Canada imported $463.2 billion worth of goods and services last year, down 13.6 percent from the $536.0 billion imported in 2008. As was the case for exports, goods and services imports each posted declines. Goods imports were down 15.6 percent to $374.0 billion, while services imports were down 4.0 percent to $89.2 billion. Declines in both goods and services imports were widespread, with only agricultural and fishing products registering a gain among the major categories. As with exports, the declines in goods imports were led by energy. Goods imports resumed their growth beginning in the third quarter of the year, while services imports started to pick up in the final quarter of 2009.

The current account balance fell by $49.4 billion, as it moved from a surplus of $8.1 billion in 2008 to a deficit of $41.3 billion in 2009. The decline was entirely accounted for by a $51.3 billion decline in the goods and services trade balance.

The following sections examine the performance of Canada's goods and services trade, starting with an overview of the developments in goods and services trade with major partners,[1] followed by examinations of goods trade and of services trade, and ending with a brief explanation of the current account balance.

Goods and Services

In line with the global recession, Canadian exports of goods and services to the world plunged 22.1 percent ($124.1 billion)

1 "Major partners" is a term used in Canada's international balance of payments (BOP) to break out international transactions at a more detailed partner level than the aggregate (total) all-countries level. In this chapter, the major partners comprise the United States, the European Union, Japan, and the rest of the world (ROW).

TABLE 4-1

Canadian Goods and Services Trade by Region, 2009
($ millions and annual percent change)

	Exports of Goods and Services			Imports of Goods and Services			G&S Balance
	2009	2009 share	% growth over 2008	2009	2009 share	% growth over 2008	2009
World	**436,284**	**100.0**	**-22.1**	**463,200**	**100.0**	**-13.6**	**-26,916**
U.S.	305,917	70.1	-25.0	286,820	61.9	-14.2	19,097
EU	44,545	10.2	-14.7	53,563	11.6	-14.2	-9,018
Japan	10,143	2.3	-24.2	11,341	2.4	-18.8	-1,198
ROW*	75,680	17.3	-13.0	111,476	24.1	-11.0	-35,796
	Exports of Goods			Imports of Goods			Goods Balance
	2009	2009 share	% growth over 2008	2009	2009 share	% growth over 2008	2009
World	**369,633**	**100.0**	**-24.5**	**373,968**	**100.0**	**-15.6**	**-4,335**
U.S.	271,001	73.3	-26.7	236,280	63.2	-15.8	34,721
EU	32,258	8.7	-18.5	38,776	10.4	-17.0	-6,518
Japan	8,873	2.4	-25.3	9,307	2.5	-20.2	-434
ROW	57,501	15.6	-16.1	89,605	24.0	-13.7	-32,104
	Exports of Services			Imports of Services			Services Balance
	2009	2009 share	% growth over 2008	2009	2009 share	% growth over 2008	2009
World	**66,651**	**100.0**	**-5.4**	**89,233**	**100.0**	**-4.0**	**-22,582**
U.S.	34,915	52.4	-7.6	50,540	56.6	-5.6	-15,625
EU	12,287	18.4	-2.7	14,789	16.6	-5.9	2,502
Japan	1,270	1.9	-15.9	2,033	2.3	-11.2	-763
ROW	18,179	27.3	-1.9	21,872	24.5	2.0	-3,693

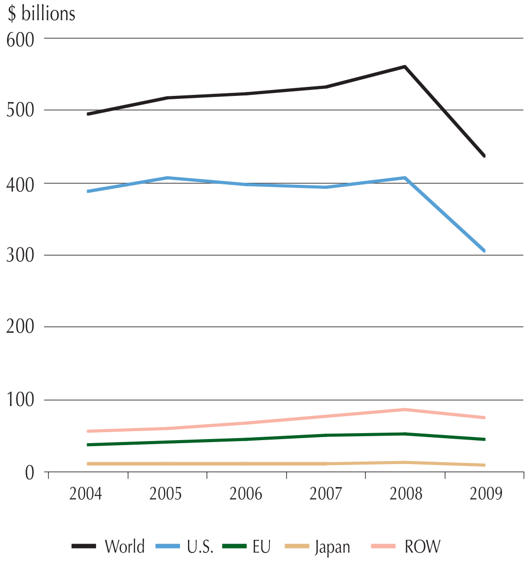
* ROW = Rest of World
Source: Statistics Canada CANSIM Matrix 376-001

in 2009. At the same time, Canada's appetite for imported goods and services fell 13.6 percent ($72.8 billion) (Table 4-1). For Canada, this meant that a 15-year-long unbroken period of surpluses in goods and services trade was reversed, and the country registered a $26.9 billion trade deficit, its first such deficit since 1993. This was a $51.3 billion decline from the $24.4 billion trade surplus recorded in 2008. Virtually all the decline came on the goods side, as the balance of trade for goods fell by $51.2 billion.

Canada's exports of goods and services peaked in the third quarter of 2008 and declined over the next three quarters, before rallying in the second half of 2009. By the second quarter of 2009, Canada's total exports were 29.0 percent below their previous peak. By year's end, total exports were still 23.5 percent below peak. Again, it was the goods side that accounted for much of the loss, as goods exports remained 26.0 percent below their high mark set in the

FIGURE 4-1

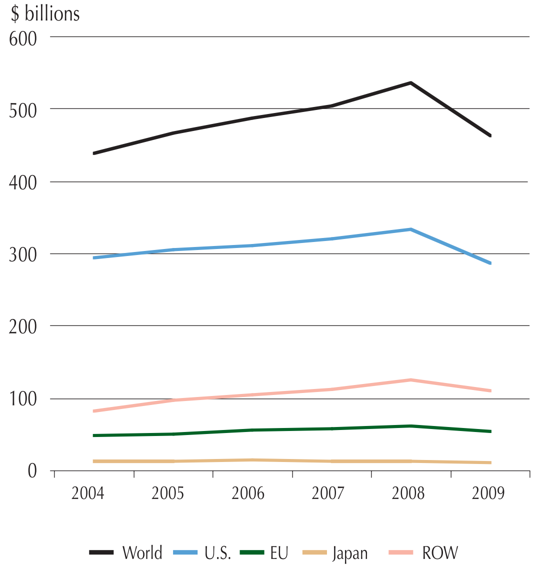
Canada's Exports of Goods and Services by Major Area, 2004-2009



Source: Statistics Canada

FIGURE 4-2

Canada's Imports of Goods and Services by Major Area, 2004-2009



Source: Statistics Canada

third quarter of 2008. In contrast, services exports continued to grow until the fourth quarter of 2008 before falling over the next three quarters. As of the fourth quarter of 2009, they were 6.3 percent below the peak set the previous year.

Within this global recessionary setting, Canadian exports and imports of goods and services to and from all major markets (the United States, the EU, Japan, and the rest of the world[2] [ROW]) fell between 2008 and 2009 (Figures 4-1 and 4-2). Lower trade with the **United States** was responsible for most of the decline. U.S. imports from Canada peaked in the second quarter of 2008, but had plunged nearly 43 percent (in US dollar terms) by the first quarter of 2009 before slowly beginning to return to their previous levels. As of the fourth quarter of 2009, they were still nearly 32 percent (in US dollar terms) below their quarterly peak. As Canada's principal trading partner, the United States has had a dramatic impact on bilateral trade: the United States was the destination for 70.1 percent of Canadian exports of goods and services in 2009, yet was responsible for 82.0 percent of the decline in Canada's exports from 2008 to 2009. Similarly, the United States accounted for 61.9 percent of Canada's imports and 65.2 percent of the decline. Overall, Canadian exports to the United States fell by $101.8 billion in 2009, a 25.0 percent reduction from 2008. At the same time, imports from the United States declined by a more modest 14.2 percent ($47.5 billion). Bilateral trade in goods registered much larger declines than did bilateral trade in services. Notwithstanding the sizeable difference between the drop in exports and that of imports, Canada maintained a trade surplus with the United States of $19.1 billion. The United States is the only major trading partner with which Canada maintains a trade surplus.

2 The world economies excluding the United States, the EU, and Japan.

Exports of goods and services to the **EU** fell 14.7 percent in 2009, as exports of goods were down by 18.5 percent while those for services were down only 2.7 percent (Figure 4-3). At the same time, imports from the EU declined 14.2 percent with goods imports down 17.0 percent and services imports down 5.9 percent. Because Canada's imports from the EU are larger than its exports to that region, there was a $1.2 billion narrowing in the trade deficit between Canada and the European Union to $9.0 billion. The gains were equally split between goods and services, as trade deficits for each fell $0.6 billion.

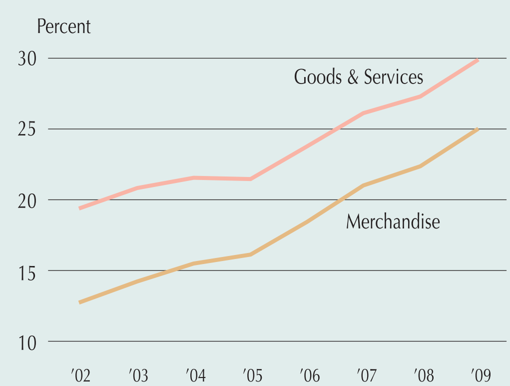
After narrowing in 2008, Canada's trade deficit with **Japan** widened by $0.6 billion in 2009, to $1.2 billion. The losses came on the goods side, as Canada improved its services trade deficit by $16 million last year. Canada's goods exports to Japan fell 25.3 percent ($3.0 billion) while imports were down by 20.2 percent ($2.4 billion). As a result, the small trade surplus ($0.2 billion) in goods registered in 2008 was eliminated, and replaced by a $0.4 billion deficit in 2009. The services trade deficit with Japan held steady at $0.8 billion.

Canada's trade with the **rest of the world** was the least affected by the global recession of all the major trading partner regions. Exports of goods and services fell by a comparatively modest 13.0 percent ($11.4 billion) while imports declined by only 11.0 percent ($13.8 billion). With the

Canadian Exports Continue to Diversify Beyond the United States

Canadian exports have significantly diversified beyond the U.S. market since 2002, and this trend continued in 2009. In 2002, less than 20 percent of Canadian goods and services exports were destined for non-U.S. markets; by 2009 this share had increased to nearly 30 percent. For merchandise trade only, the non-U.S. share has risen from under 13 percent to 25 percent over the same period. Until 2008, this rise had been due to faster growth of Canadian exports to non-U.S. markets, but in 2009 it was because exports to non-U.S. markets declined less rapidly than did exports to the U.S. Looking forward, this trend may slow or possibly reverse - in the short term. Canadian exports to the U.S. declined more rapidly than Canadian exports to non-U.S. markets in 2009 due largely to falling energy prices and the poor performance of the auto sector, and thus may also rebound more quickly as conditions improve. But longer-term, Canadian exports are expected to continue diversifying toward fast-growing emerging markets.

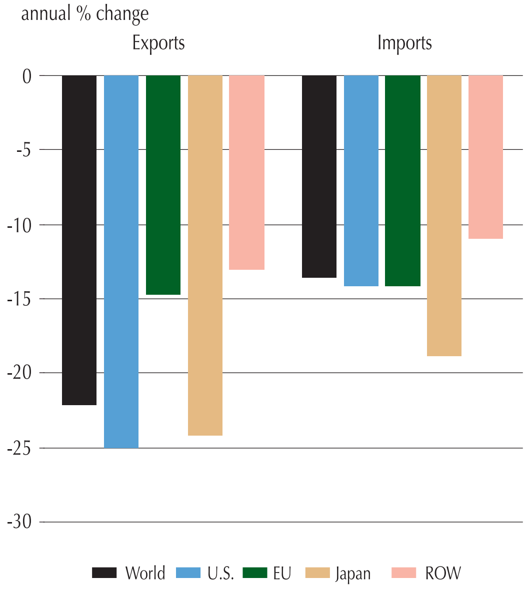
Share of Canadian Exports to Non-U.S. Markets



Source: Statistics Canada

FIGURE 4-3

Growth in Canada's Exports and Imports of Goods and Services by Major Area, 2009



Source: Statistics Canada

decline in imports somewhat greater than that of exports, the trade balance with this region improved by $2.5 billion. The gains came from goods trade as the deficit narrowed by $3.2 billion. A combination of fewer services exports and more services imports caused the services trade deficit to widen by $0.8 billion to $3.7 billion. The increase in services imports from this region was the only area of growth in Canada's trade with the major trading partners in 2009.

Goods Trade

As mentioned above, virtually all the decline in overall trade occurred in goods trade, and the bulk of the decline was disproportionately incurred by trade with the **United States**. Just under $99 billion of the roughly $120 billion decline in goods exports came from reduced flows of exports to our southern neighbour. At the same time, some $45 billion fewer imports (out of a total decline of $69 billion for all imports) flowed into Canada from the U.S.

The **rest of the world** region was next in importance in terms of the decline of goods trade for Canada in 2009. This region represented roughly half the remaining declines, apart from those accounted for by the United States. Canada's exports of goods to the ROW fell 16.1 percent in 2009, to $57.5 billion, $11.0 billion lower than the previous year. However, imports of goods from the region fell by slightly more (down 13.7 percent) to $14.3 billion. This difference generated the improvement in the overall trade balance with the region.

Canadian exports of goods to the **EU** in 2009 retreated to a level approximately comparable with the 2006 level of exports: they fell 18.5 percent ($7.3 billion) to $32.3 billion. Imports of goods from the EU fell by slightly more, down 17.0 percent ($7.9 billion) to $38.8 billion.

Finally, goods exports to **Japan** fell the least in dollar terms (down $3.0 billion) among the major trading partners. However, this was a 25.3 percent decline over 2008 levels, the second-highest percentage decline in goods exports (after the United States, where Canada's exports fell 26.7 percent). Goods imports from Japan were down 20.2 percent ($2.4 billion) in 2009 to $9.3 billion. As mentioned previously, Canada moved from a trade surplus with Japan in goods in 2008 to a deficit in 2009.

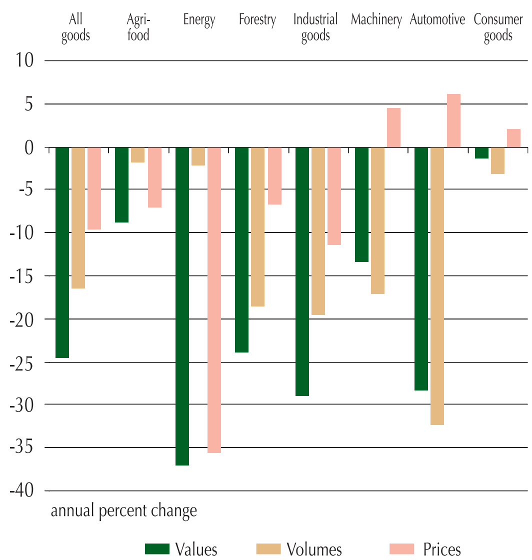
Sectoral Performance of Goods Trade[3]

The effects of the global economic downturn were found throughout Canada's goods trade. All major export sectors experienced declines, most notably energy products and industrial goods and materials, which cumulatively accounted for about two thirds of the total decline. Likewise, all

3 This section is based on analysis provided in Statistics Canada Catalogue 65-208-X (2010), *International Merchandise Trade, Annual Review 2009*.

FIGURE 4-4

Growth in Canada's Goods Exports by Major Groups, 2009



Source: Statistics Canada

imports sectors also declined, with the exception of agricultural and fishing products, which posted a slight 2.9 percent increase.

The overall 24.5 percent drop in Canadian goods exports in 2009 was a result of declining volumes and values. Export volumes were down 16.6 percent over 2008 levels, following a 7.7 percent decline the previous year. At the same time, export prices fell by 9.5 percent, reversing two thirds of the 14.6 percent gain posted in 2008 (Figure 4-4). Of some 62 major commodities in the balance of payments export statistics, only four commodity groups—miscellaneous cereal preparations, precious metals and alloys, asbestos, and aircraft, engines and parts—posted gains over 2008 export values. The aggregate or total of these gains was only $561 million, with precious metals and alloys accounting for about three quarters of the gain.

Energy products led the overall downward movement in Canada's goods exports in 2009, accounting for nearly 40 percent of the decline. A 35.4 percent drop in prices was the main driver behind the declines in energy trade, although volumes experienced slight declines as well. Industrial goods and materials were responsible for about a quarter of the decline, with automotive products (down 14.4 percent) and machinery and equipment (down 10.4 percent) accounting for the bulk of the remaining losses.

Exports of energy products fell 38.0 percent ($45.7 billion) to $80.1 billion in 2009. With this decline, energy products moved from being the top export sector in 2008 to the second-largest export sector in 2009, behind machinery and equipment. Goods such as crude petroleum and natural gas, which largely remain in North America, were strongly affected by the economic downturn in the United States, while coal was affected by the industrial slowdown in Asia.

After rising over much of this decade, prices for crude oil plunged by over 30 percent in 2009. A small increase (1.9 percent) in the volume of exports partly offset the price decline. The decline in oil exports accounted for a little over 40 percent of the overall decline in the value of energy exports.

The value of exports of natural gas was reduced by more than half, falling from $33.0 billion to $16.0 billion. The decline came principally from a 48.1 percent drop in prices, reflecting lower industrial demand and high inventory levels in both Canada and the United States. Export volumes were also down over the year, falling 7.0 percent. The decline in natural gas exports accounted for about 37.4 percent of the overall decline in energy exports.

Lower demand from Asia was behind the 25.9 percent decline in coal exports, which had benefited from a supply shortage in the Asia-Pacific region in 2008. Volumes were down by almost 20 percent and prices by 8 percent. Overall, exports of coal fell $1.5 billion to $4.3 billion in 2009.

A slight increase in the volume of electricity exports (up 7.6 percent) was offset by a 41.5 percent decline in prices, as overall electricity exports plummeted nearly 40 percent in 2009. The net result was a near $1.4 billion decline in electricity exports, to $2.4 billion last year.

Exports of **industrial goods and materials** fell 29.0 percent ($32.3 billion) to $79.2 billion in 2009. It was the first annual decline following five years of growth. Metals and alloys led the declines, followed by chemicals, plastics and fertilizers. Together, these two groups accounted for nearly 70 percent of the decline within industrial goods and materials. However, losses were widespread, with only gold (precious metals and alloys) registering an increase. Miscellaneous industrial goods and materials and metal ores accounted for the remainder of the declines in industrial goods and materials, with losses fairly evenly split between these two groups. Overall, this sector was responsible for roughly 30 percent of the total decline in goods exports last year. Both prices (down 11.4 percent) and volumes (down 19.9 percent) contributed to the reduction. With the declines, industrial goods and materials slipped from the second-largest to the third-largest export category in 2009.

Exports of **automotive products** fell again in 2009, continuing a trend that began in 2005. Last year, automotive products were down 28.3 percent ($17.3 billion) to $43.8 billion. The volume of exports was slashed by nearly one third as manufacturers in Canada reduced production in the face of falling demand in the United States. The volume of automotive products exported was just under half that exported in 2005.

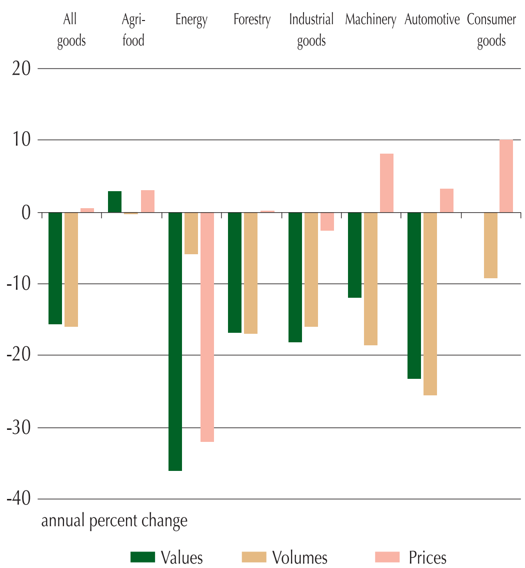
All three components of automotive products—passenger autos, trucks, and parts—experienced reductions in their exports in 2009, declining by 22.9 percent ($7.8 billion), 48.3 percent ($3.5 billion), and 30.5 percent ($6.0 billion), respectively. Despite the U.S. cash-for-clunkers program which started in July 2009, companies were left with unmoveable inventories as consumers and businesses alike postponed purchases of durables such as trucks and automobiles. The volume of truck exports plunged by over 50 percent while that for automobiles was down by 28.8 percent. With production of automotive products reduced on both sides of the border, the volume of exports of motor vehicle parts also fell last year, down by nearly one third.

Likewise, the combined effects of reduced business investment in equipment and less discretionary spending on consumer electronics in the United States and abroad contributed to a 13.5 percent reduction in Canada's exports of **machinery and equipment** (M&E). M&E exports fell to $80.5 billion last year, the lowest level since 1997. The decrease was entirely driven by a 17.2 percent decline in volumes, even as prices increased 4.4 percent. Volumes were down for all M&E commodities, with the exception of aircraft, engines, and parts, which registered a small increase over 2008 levels.

The other machinery and equipment group was responsible for over 60 percent of the decline in M&E exports. Exports in this group, which includes televisions, office machinery and equipment, and various other miscellaneous tools and pieces of equipment, were down $7.6 billion from 2008. In particular, exports of other equipment and tools, which includes such items as electronic processors and controllers, fell 18.6 percent ($4.3 billion). Industrial and agricultural machinery accounted for the bulk of the remainder of the decline in M&E

FIGURE 4-5

Growth in Canada's Goods Imports by Major Groups, 2009



Source: Statistics Canada

exports, falling by $4.2 billion, with industrial machinery accounting for most of the decrease (down $4.1 billion).

Notwithstanding these declines, M&E became the leading export category in 2009, overtaking industrial goods and materials and displacing energy for the top spot.

With the exception of miscellaneous cereal preparations, exports for all major agricultural commodities fell in 2009, as both prices and volumes fell across most commodities. Overall, exports of **agricultural and fishing products** decreased by $3.6 billion, led by declines in wheat (down $1.0 billion), live animals (down $0.7 billion), and canola (down $0.4 billion). Both wheat and canola sustained substantial price declines (down 28.4 percent and 23.7 percent, respectively), as export volumes were up between 17 and 18 percent. Within the live animals group, beef exports continued to be hampered by trade restrictions, while lower pork exports reflected the negative image associated with the swine flu. Agricultural and fishing products remained the fifth-largest export category, behind automotive products in fourth place.

Forestry products exports have been trending downward since 2004. In 2009, export performance continued the trend, falling a further 24.0 percent ($6.2 billion) over 2008 levels to reach $19.5 billion. Lumber and sawmill products were responsible for about 40 percent of the decline. The low number of housing starts in the United States softened demand for spruce, pine, and fir; volumes were down 18.9 percent and prices were down 9.0 percent over 2008. The remaining losses were fairly evenly split between wood pulp and newsprint.

The smallest export category is **other consumer goods**, which includes such commodities as footwear and apparel, medical supplies, toys, and household goods. Exports of these consumer goods fell 1.3 percent to $17.9 billion, as volumes fell 3.2 percent and prices moved up 2.0 percent.

Imports also declined in all sectors except agricultural and fishing products, which posted a slight 2.9 percent increase. Import volumes were down 16.0 percent while prices increased slightly by 0.7 percent, resulting in an overall 15.5 percent decline in the value of total imports (Figure 4-5).

On the import side, the losses were fairly evenly divided among energy (27.9 percent), automobiles (24.2 percent), industrial goods (24.0 percent), and machinery and equipment (21.4 percent). Of the 61 major commodities in the balance of payments import statistics, only 15 commodities posted gains, totalling $4.0 billion with precious metals and miscellaneous end products accounting for over one third of these advances.

The decline in imports of **energy products** nearly matched that of exports, falling 36.0 percent ($19.1 billion) to $34.0 billion. It was the first decline following six years of increases. Lower imports of crude petroleum (down $13.2 billion) accounted for the bulk of the decline. At the same time, imports of coal and of petroleum and coal products were down by $1.5 billion and $4.4 billion, respectively. As with exports, falling prices (down 31.8 percent) were mostly responsible for the declines, although volumes also declined (down 6.2 percent).

The poor economic environment was also reflected in the lower **automotive** imports statistics. The value of auto imports was down 23.1 percent ($16.6 billion) to $55.3 billion in 2009 because of a reduction in volumes. With a weak commercial automotive market, imports fell alongside domestic production. Imports of passenger cars were down 27.8 percent, while truck imports were down 15.3 percent. As with exports, lower production levels translated into lower imports of automotive parts, which fell 23.0 percent from 2008. It was the second consecutive year that automotive imports into Canada have declined.

The economic downturn also exerted an impact on imports of **industrial goods and materials.** Lower production levels reduced the demand for imported manufacturing inputs. Overall, imports of industrial goods and materials were down 18.0 percent ($16.5 billion) to $75.1 billion in 2009. Fewer imports of metals and metal ores accounted for almost half the decline, as both prices and volumes were hit hard. Within this group, the only commodity to register an increase was precious metals including alloys. As previously mentioned, global demand for gold was quite strong last year, and Canada was no exception. Imports of precious metals/alloys climbed 27.2 percent last year as volumes increased (up 7.6 percent) in the face of a strong price increase (up 18.2 percent).

The other half of the decline in industrial goods and materials was fairly evenly split between chemicals and plastics on the one hand and miscellaneous industrial goods and materials on the other. Imports of chemicals and plastics fell for the first time since 2003, down 14.0 percent to $27.1 billion. Volumes fell by 10.3 percent while prices fell less (4.1 percent). Import volumes of miscellaneous industrial goods and materials were down nearly 20 percent while prices were up by over 5 percent, which translated into the overall value of these imports falling 15.4 percent to $23.2 billion.

Losses in **M&E** imports were widespread, as all commodities that comprise this group registered declines in 2009. The volume of M&E imports declined by 18.5 percent in tandem with a 19.2 percent decline in real business investment in machinery and equipment. At the same time, prices increased 8.0 percent which helped mitigate the overall decline in the value of M&E imports. Overall, imports of machinery and equipment fell 12.0 per cent to $107.9 billion.

Lower imports of industrial and agricultural M&E (down 43.9 percent) accounted for the largest portion of the loss. The industrial M&E category, in particular miscellaneous industrial M&E and excavating M&E, was largely responsible for this decline. Imports of excavating machinery were constrained by lower production levels in the petroleum sector.

Imports of other machinery and equipment were down 7.8 percent to $52.0 billion as imports of miscellaneous communication and related equipment fell 6.9 percent and other equipment and tools imports fell 8.2 percent. This reversed five years of consecutive growth in this group.

Agriculture and fishing products was the only major commodity group to register an increase in imports in 2009—the fifth consecutive year of increases—and gains

TABLE 4-2

Services Trade by Major Category, 2009
($ millions and annual percent change)

	Exports			Imports			Balance	
	2009	$ change over 2008	% growth over 2008	2009	$ change over 2008	% growth over 2008	2009	$ change over 2008
ALL SERVICES								
World	**66,651**	**-3,827**	**-5.4**	**89,233**	**-3,744**	**-4.0**	**-22,582**	**-83**
U.S.	34,915	-2,892	-7.6	50,540	-2,978	-5.6	-15,625	86
EU	12,287	-341	-2.7	14,789	-929	-5.9	-2,502	588
Japan	1,270	-241	-15.9	2,033	-257	-11.2	-763	16
ROW*	18,179	-354	-1.9	21,872	422	2.0	-3,693	-776
TRAVEL								
World	**15,592**	**-527**	**-3.3**	**27,759**	**-975**	**-3.4**	**-12,167**	**448**
U.S.	7,095	-530	-7.0	15,716	-859	-5.2	-8,621	329
EU	3,100	-22	-0.7	4,725	-308	-6.1	-1,625	286
Japan	312	-125	-28.6	177	3	1.7	135	-128
ROW	5,086	151	3.1	7,141	190	2.7	-2,055	-39
TRANSPORTATION								
World	**10,501**	**-2,097**	**-16.6**	**19,414**	**-2,176**	**-10.1**	**-8,913**	**79**
U.S.	4,687	-838	-15.2	7,102	-1,278	-15.3	-2,415	440
EU	2,684	-599	-18.2	4,528	-487	-9.7	-1,844	-112
Japan	450	-141	-23.9	591	-25	-4.1	-141	-116
ROW	2,680	-519	-16.2	7,192	-387	-5.1	-4,512	-132
COMMERCIAL SERVICES								
World	**36,682**	**-1,292**	**-3.2**	**40,885**	**-599**	**-1.4**	**-2,230**	**-693**
U.S.	22,480	-1,611	-6.7	27,358	-842	-3.0	-4,878	-769
EU	6,276	283	4.7	5,183	-138	-2.6	1,093	421
Japan	473	24	5.3	1,234	-235	-16.0	-761	259
ROW	9,453	12	0.1	7,110	614	9.5	2,343	-602
GOVERNMENT SERVICES								
World	**1,876**	**89**	**5.0**	**1,175**	**5**	**0.4**	**701**	**84**
U.S.	653	88	15.6	364	1	0.3	289	87
EU	228	-1	-0.4	352	2	0.6	-124	-3
Japan	35	0	0.0	31	0	0.0	4	0
ROW	961	3	0.3	427	2	0.5	534	1

* ROW = Rest of World
Source: Statistics Canada CANSIM Matrix 376-001

were widespread. Imports in this group rose 2.9 percent ($0.8 billion) to $29.3 billion. A 6.2 percent increase in the volume of imported fruits and vegetables was partly offset by a 1.3 percent decline in prices as the overall value of imports of fruits and vegetables increased by $0.4 billion. By contrast, a 4.9 percent increase in prices led the way for other agricultural and fishing products, while volumes were down 2.6 percent. Overall, imports of other agricultural and fishing products were up by $0.5 billion last year.

Imports of **other consumer goods** nudged down 0.1 percent as a 10.0 percent increase in prices was insufficient to offset a 9.1 percent decline in volumes. Imports of footwear advanced while those for apparel were down. In the miscellaneous consumer goods category, most of the $1.4 billion gain in miscellaneous end products was offset by reductions in the import values of watches, sporting goods and toys (down $0.4 billion), photographic goods (down $0.4 billion), televisions, radios, phonographs (down $0.3 billion), and printed matter (down $0.2 billion).

Finally, imports of **forestry products**, the smallest import category, fell 16.9 percent ($0.5 billion) to $2.4 billion. The bulk of the decline (94.0 percent) was due to a reduction in imports of wood fabricated materials.

Services Trade

Services trade also contracted last year, with exports falling faster than imports. In 2009, services exports declined 5.4 percent to $66.7 billion while services imports dropped to $89.2 billion, resulting in a $22.6 billion deficit for the year. This was $0.1 billion more than the deficit in 2008. The increased deficit was due to a $0.7 billion increase in the commercial services deficit, which was partly offset by reductions in the travel and transportation deficits combined with an increased trade surplus for government services.

Regionally, the overall increase in the services trade deficit came from a widening of the deficit with the ROW, as Canada narrowed its deficits with the United States, the EU, and Japan last year. In the case of the EU, the deficit with the U.K. widened by $354 million while that with the rest of the EU narrowed by $942 million, generating an overall reduction in the deficit with this region.

Nevertheless, Canada runs trade deficits for services with all of its major partners (Table 4-2). The largest is with the United States ($15.6 billion), followed by the ROW ($3.7 billion). Next largest is that with the EU ($2.5 billion), while that with Japan is the smallest ($0.8 billion).

Canadian **travel expenditures** abroad fell 3.4 percent in 2009. However, somewhat surprisingly, it was not personal travel expenditures that bore the brunt of the decline, as these declined by only 1.6 percent. Rather, it was business travel expenditures that fell substantially (down 14.3 percent). The situation was similar for foreign travel spending in Canada, where foreign personal travel expenditures were down 0.2 percent and foreign business travel expenditures were down by 16.7 percent. The net result was that Canadians reduced their travel expenditures abroad more than foreigners reduced their expenditures in Canada, thereby helping to narrow the travel services trade deficit by $448 million to $12.2 billion.

Individual Canadians are apparently choosing more exotic locations or those that are further afield. Canadian expenditures abroad were up for Japan and the ROW, while they were down for the United States and the EU. At the same time, expenditures by Americans, Japanese, and Europeans in Canada were down, while those from the ROW were the only ones to register an increase last year.

In line with the fall in goods trade with all major partners, trade in transportation services to all regions fell. **Transportation services** exports fell by 16.6 percent ($2.1 billion) as exports fell from between 15.2 percent to the United States to 23.9 percent to Japan. Exports of water transportation services were down by almost

21 percent, while those for air transport were down 17.2 percent and those for land transportation were down by 10.5 percent. Imports of transportation services also fell across the board, most notably from the United States (down 15.3 percent). Overall, imports of transportation services were down 10.1 percent. Again, those for water transportation fell the furthest (down 13.6 percent), followed by air transport (down 7.8 percent) and land transport (down 4.7 percent). On a regional basis, imports were down by 15.3 percent from the United States, by 9.7 percent from the EU, by 5.4 percent from the ROW and by 4.1 percent from Japan.

Commercial services are the largest of the services categories and made up almost 60 percent of services exports and over 45 percent of services imports in 2009. Exports of commercial services fell 3.2 percent ($1.3 billion) and imports fell 1.4 percent ($0.6 billion), widening the trade deficit from $1.5 billion in 2008 to $2.2 billion in 2009. Exports of commercial services were up to all major partners, except to the United States. However, because 60 percent of commercial services exports are destined for the United States, the decline to this region was sufficient to lower total exports of commercial services in 2009. Imports of commercial services were also down across the major partners, with the exception of the ROW, where imports were up 9.5 percent.

The bulk of the decline in exports of commercial services came in other (non-insurance) financial services, which fell by $0.7 billion. Important, but smaller, declines were also registered for miscellaneous services to business and computer and information services (both down $0.3 billion), as well as for research and development services and audio-visual services (both down $0.2 billion). Four sectors—communications, construction, management services, and architectural, engineering, and other technical services—recorded increases in their exports last year, with the largest gain registered by communications, up $0.4 billion.

On the import side, declines were also widespread, led by royalties and licence fees (down $0.7 billion) and research and development services (down $0.3 billion). Strong gains were registered for audio-visual services (up $0.6 billion) and architectural, engineering, and other technical services (up $0.2 billion) and communications (up $0.1 billion).

The Current Account

The current account records the flow of transactions between Canada and its commercial partners. The exchange of goods and services, as discussed above, is the largest component of these transactions. The remaining two components of the current account capture the flow of payments and receipts of investment income and current transfers.

The current account moved from a surplus of $8.1 billion in 2008 to a deficit of $41.3 billion in 2009—which amounted to a decline of $49.4 billion. This was the largest annual change in the current account balance in the history of this data series, dating back to 1926. The last time Canada recorded a current account deficit was in 1998.

The decline in the current account balance was entirely due to the $51.3 billion decline in the goods and services balance. The severe decline in goods trade accounted for all but $0.1 billion of the overall decline in trade.

While there was an overall $3.0 billion improvement in the investment income deficit, this improvement was the result of reduced income flows in both directions. Total Canadian receipts of investment income were $13.9 billion lower in 2009 than in 2008, which amounted to a 19.3 percent decline. Profits earned by Canadian direct investors were down by $7.7 billion while dividend and interest payments to portfolio and other investment holders were down by $1.8 billion and $4.4 billion, respectively. At the same time, the inward flow of current transfers was down by $1.6 billion last year.

However, Canadians reduced their payments to foreign investors by 19.4 percent (down $16.9 billion). Compared to 2008, foreign direct investors received $11.0 billion less last year, other investment holders received $6.9 billion less and portfolio investors received $1.1 billion more. Canadian current transfers abroad were also down by $0.5 billion over the year.

Canada has always run an investment income deficit. In 2009, as a result of the greater reduction in outflows than for inflows, this deficit was reduced from $15.2 billion to $12.2 billion.

Key Developments in Canadian Merchandise Trade in 2009

As evidenced by the previous chapter, market conditions in 2009 resulted in a dramatic reduction in Canada's trade, with most of the impact occurring on the goods side. The weakness in global demand had a double impact. With the global economy in the grip of the biggest downturn in some 80 years, the demand for many Canadian products was down. The labour market and consumer confidence were affected, and Canadian consumers reduced their purchases, which also scaled back Canadian demand for imported products. And with lower production levels in Canada, there was a concomitant reduction in demand for imported inputs into the Canadian production process.

However, as we have also seen, regions and sectors were affected to differing extents. This chapter examines in greater detail the developments in Canada's merchandise trade in 2009—across trading partners, commodities, and provinces—using Canadian trade statistics that are prepared at the detailed commodity and individual country levels.[1]

Canadian merchandise exports declined to $359.7 billion in 2009, while merchandise imports fell to $365.2 billion. Much of this trade was concentrated in a small number of countries. The top six countries—the United States, the United Kingdom, Japan, China, Mexico and Germany—accounted for nearly seven of every eight dollars of merchandise exports and six of every eight dollars of merchandise imports in 2009. In terms of top trading partners, China regained third position in the ranking of Canadian export destinations, as Japan moved back to fourth position. India jumped to tenth position from thirteenth while Belgium slipped out of the top ten, falling from ninth to eleventh place. On the import side, Algeria and South Korea exchanged positions, as the former fell three places to tenth spot and the latter moved in the opposite direction. Italy moved into the top ten (at ninth spot) while Norway dropped out of the top ten import sources.

In terms of specific products driving Canada's trade performance in 2009, other petroleum gases (primarily natural gas) and crude oil accounted for the lion's share of the decline in both trade levels and in the trade balance. Together, these two products accounted for roughly half the deterioration in the trade balance in 2009. Falling energy prices lay at the heart of the decline, as they retreated from their historical highs recorded a year earlier. However, volumes were also down, reflecting the tough economic climate. On the export side, lower trade with the United States was behind the decline. All of the reductions in crude petroleum and natural gas exports and nearly 70 percent of the decline in non-crude petroleum exports occurred with the United States. For imports, Canada purchased less crude oil from

1 Canadian trade statistics are provided in two basic forms: Customs basis and Balance of Payments basis. In Chapter Four, the analysis of trade with "major partners" used trade data prepared on the Balance of Payments basis. Trade statistics at greater detailed commodity and individual country levels are provided on a Customs basis only. Since Chapter Five examines trade developments in detail, the data in this chapter is provided on a Customs basis.

Algeria, the United Kingdom, Norway, and Angola, and less non-crude petroleum from the United States.

The financial difficulties experienced by major North American auto manufacturers and falling demand in the U.S. and Canadian markets curtailed trade in the automotive sector. Passenger vehicles and automotive parts bore the brunt of the declines. At the same time, exports of trucks were more than halved, while imports declined at much lower rates. In addition, imports of piston engines fell at more than twice the rate of exports, reflecting the malaise in the sector.

For non-energy resource products, both prices and volumes fell across most commodities lowering the value of exports for the year. In agriculture, beef exports continued to be hampered by trade restrictions and pork exports experienced headwinds via an association with the swine flu. Wheat was responsible for well over half the decline in cereals exports, with barley, oats, and corn making up the remainder of the decline. Both canola seed and canola oil suffered sizeable cutbacks to their export levels as well.

In minerals and metals, trade is very sensitive to economic conditions. In times of economic booms, trade is very robust, while during a downturn in economic output, the demand for these products is weakened. Thus, trade in these products was heavily impacted by the global, synchronized recession of last year. Exports were down to almost all developed countries, most notably to the United States. Reduced output in the North American automotive sector also contributed to the weakness in this sector. Trade losses were widespread, in particular for aluminum, iron and steel, and nickel products.

In the wood, pulp and paper sector, exports have been on a downward trend for some time. For wood products, the downturn in the U.S. housing sector curtailed exports. For paper products, slumping newspaper circulation and advertising around the world has depressed the market for newsprint. Pulp exports have likewise been affected. Exports to the United States accounted for much of the declines in this sector.

Trade by Top Ten Partners

Merchandise Exports

Canadian merchandise exports to the world fell by 25.6 percent to $359.7 billion in 2009, a decline of $123.9 billion. The share of the United States in total merchandise exports fell by 2.6 percentage points last year, while that of other major trading partners increased, especially China (up 0.9 percentage points) and the United Kingdom (up 0.7 percentage points).

The **United States** accounted for three quarters of total exports in 2009, down from 77.6 percent in 2008. Exports to the United States were down $105.7 billion last year to $269.8 billion. This was a 28.1 percent decline in exports, the largest relative decline among Canada's top ten export partners, and was equivalent to over 85 percent of the overall decline in exports to all destinations last year. Weak market conditions and a large correction in commodity prices were key factors behind the decline. Energy products, especially crude oil, down $25.0 billion (37.1 percent), and natural gas, down $18.1 billion (49.8 percent), accounted for the bulk of the decline, while exports of automotive products continued to fall sharply. Exports of passenger automobiles fell $7.9 billion (23.4 percent), while exports of automotive parts were down $3.6 billion (36.2 percent). Exports of trucks fell by over 60 percent for the second consecutive year to $1.4 billion; they are now one-seventh the amount they were just two years ago.

The **United Kingdom** was next in importance, receiving $12.1 billion (2.7 percent) of Canada's total exports. Export opportunities in the United Kingdom have been affected by a protracted recession there. After six consecutive quarters of decline, the United Kingdom only returned to growth in the final quarter of 2009. Nonetheless, Canadian exports to that country fell by only 7.1 percent, or $920 million. It was the second-best performance among the top ten export destinations, behind the gain registered by China. Major declines were concentrated in a few commodities, led by nickel (down $633 million), precious metals scrap (down $402 million), diamonds (down $204 million), radioactive isotopes (down $179 million), non-crude oil (down $124 million), and telephone equipment and parts (down $105 million). Partly offsetting the losses was a $1.0 billion increase in gold.

China reclaimed third position (from Japan) in 2009, as exports increased 6.6 percent to $11.2 billion. Among the top export destinations, China was the only country that registered an increase in exports from Canada. Canola products led the gains as exports of canola seeds advanced by $628 million (80.2 percent) and those for canola oil were up by $127 million (47.1 percent). Energy exports were up sharply, despite the strong price declines noted in the previous chapter. Coal exports almost quadrupled, while crude oil exports almost tripled. Several mineral ores also recorded strong advances, including iron, copper, and zinc. However, nickel (down $208 million), potash (down $414 million), and sulphur (down $662 million) all experienced setbacks in their exports to China.

Japan slipped to fourth spot as Canadian exports to that country were down 25.0 percent to $8.3 billion. Coal suffered the largest setback, falling $483 million. This was likely a partial undoing of a situation the previous year whereby Canadian exports profited from a regional supply disruption.[2] Nonetheless, Canadian exports of coal to Japan were still 85 percent higher in 2009 then they were in 2007. Canola (seeds) and wheat exports were down by $418 million and $248 million, respectively. A number of metals (e.g. aluminum, nickel, and cobalt) and mineral ores (including copper, iron, and molybdenum) also suffered setbacks in exports to Japan last year.

Mexico was Canada's fifth-largest export destination in 2009. Exports to Mexico were valued at $4.8 billion, down $1.0 billion (17.8 percent) from 2008. Canola seeds experienced the largest decline, at $353 million, followed by various automotive products, which combined for a $261 million decline. Other notable declines included a variety of steel products, coal, telephone equipment and parts, and potash. Exports of integrated circuits registered an increase of $231 million in exports last year to partially offset the losses noted above.

Germany ranked sixth in 2009. Exports to Germany fell by $747 million (16.7 percent) to $3.7 billion. Three products accounted for the bulk of the decline: iron ores, down $399 million (46.2 percent); coal, down $176 million (60.5 percent); and copper ore, down $166 million (66.4 percent). For the most part, these losses wiped out the gains registered by these products in 2008.

South Korea ranked seventh in 2009, with exports falling $309.5 million (8.1 percent) to $3.5 billion. The bulk of the losses were accounted for by coal, nickel and wood pulp, which fell by $216 million (16.9 percent), $173 million (78.5 percent), and $155 million (40.2 percent), respectively.

2 See *Canada's State of Trade 2009* report for more on this.

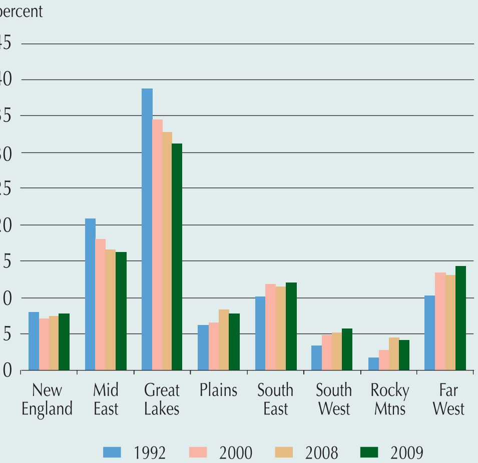
Canadian exports to U.S. regions, 1992-2009

The evolution of Canadian goods exports to the United States from 1992 to 2009 can be divided into three distinct periods. From 1992 to 2000, Canadian exports to the United States grew rapidly, expanding at an average annual rate of 14.0 percent. From 2000 to 2008, they stagnated, expanding at an average annual rate of only 0.5 percent. Finally, from 2008 to 2009, they declined by 28.1 percent as a result of the recession. However, these observations mask the fact that the United States is not a single market; rather it comprises identifiable regional markets, each with its own distinctive trends and driving forces. A more accurate depiction of Canada's export performance in the United States can therefore be derived by examining separately the results for each the following eight U.S. regions: New England, Mid-East, Great Lakes, Plains, South East, South West, Rocky Mountains, and Far West.

Broadly speaking, Canada's exports to the United States have been diversifying away from the traditional markets of Great Lakes and Mid-East toward the faster-growing markets in the South and West (Figure 1). Between 1992 and 2009, the combined share of Canada's overall exports to the United States held by Great Lakes and Mid-East fell from 59.7 percent to 47.6 percent. Meanwhile, Canada's exports grew to Far West, South West, and Rocky Mountains, and to a lesser extent to South East and Plains. Exports to New England have been relatively stable.

Shifts in Canadian goods exports to U.S. regions are broken down into three underlying factors:[1]

FIGURE 1
Canadian exports to the US, US regional shares (percent)



Source: Statistics Canada

- **National growth (NG)** indicates how Canadian exports to the region would have changed had they kept pace with total Canadian exports to the United States.
- **Industry mix (IM)** determines the extent to which the region is populated by industrial sectors where Canada's exports are growing either faster or slower that the national average. A positive IM indicates the region has an industrial structure with a higher than average tendency to attract Canadian exports. Conversely, a negative IM indicates the region has an industrial structure with a lower than average tendency to attract Canadian exports.
- **Regional demand (RD)** reflects factors that have fostered or impeded demand for Canadian exports for each region, taking into account the region's NG and IM.

1 Source: Industry Canada Trade Data Online database. The data used in this analysis are Canadian export values to U.S. states aggregated to U.S. regions.

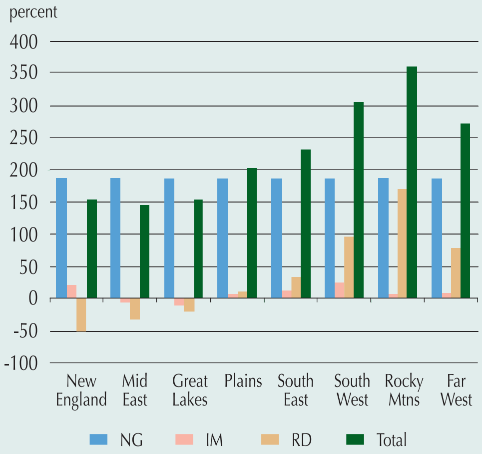
Because the NG is common to all regions, the analysis will largely focus on the effects of IM and RD factors to help explain Canadian exports among the eight U.S. regions.

From 1992 to 2000, Canadian exports to the United States grew rapidly, up 184.8 percent over the period (Figure 2). This represents the NG benchmark. In general, RD was the most important factor influencing Canada's export performance in the region, while the impact of IM was minimal. Exports to Plains, South East, South West, Rocky Mountains and Far West expanded faster than the national average, while those to New England, Mid-East and Great Lakes expanded more slowly than the national average.

From 2000 to 2008, both the IM and RD factors played pivotal roles in explaining regional export performance; in many instances, the two factors produced opposing effects. Over the period, Canadian exports to the United States (NG) grew by only 4.4 percent. Exports to New England, Plains, South West and Rocky Mountains grew faster than the national average, while those to South East and Far West grew slower than the national average.

Meanwhile, Canadian exports fell to Mid-East and Great Lakes (Figure 3), influenced by different factors for each region. For Great Lakes, the IM factor weighed heavily on Canadian exports, mostly due to the troubled auto sector. However, this effect was partially offset by the RD factor in conjunction with the NG effect, neither of which was sufficient to pull exports into the positive range for the period. By contrast, for Mid-East, negative RD was a major factor in reducing Canadian exports to the region.

FIGURE 2
Contribution to Canadian Export Growth by Region, 1992-2000



RD effects also helped cap advances in Far West and in Plains. The RD effect in Far West did not entirely offset the NG and IM effects; Canadian export growth to the region was minimal. However, notwithstanding the negative RD effect, Canadian export growth to Plains was relatively strong—second only to Rocky Mountains. This was due to a strongly positive IM effect (up 36.1 percent), supported by rising exports of energy.

The IM effect was also very positive for Rocky Mountains (up 45.0 percent), underpinned by growing energy exports. The strong RD effect worked in concert with the IM effect to generate strong growth in Canadian exports to this region. However, because Canadian exports to this region are the smallest among the eight regions, there was little impact on overall Canadian exports to the United States.

For South East and South West, IM stunted Canadian export growth. For South East, a small positive RD effect combined with the NG effect helped Canadian exports experience positive, albeit marginal, growth. For South West,

FIGURE 3
Contribution to Canadian Export Growth by Region, 2000-2008

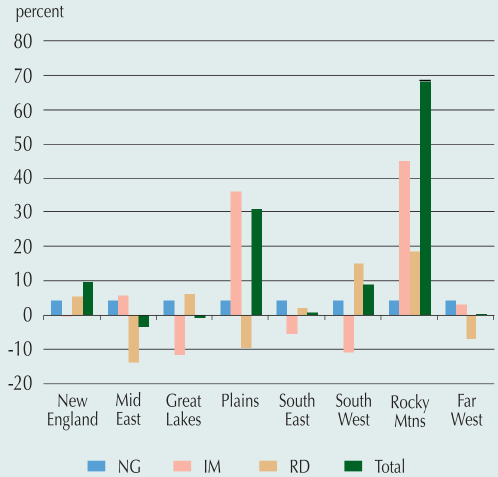
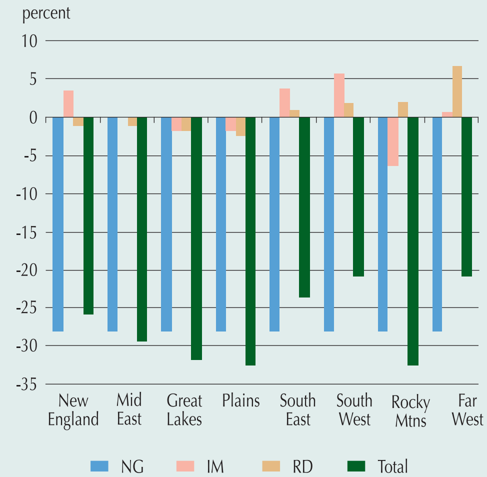


FIGURE 4
Contribution to Canadian Export Growth by Region, 2009



RD had a stronger effect than it did for South East, hence export growth was somewhat stronger.

Finally, for New England, RD produced gains that were weakly supported by IM effects.

From 2008 to 2009, the impact of the recession is clearly evident: the NG factor dominated Canada's declining export performance across the United States (Figure 4). Canadian exports to the United States overall fell by 28.1 percent (NG), and these declines were reflected across all eight U.S. regions. Small positive IM effects for New England, South East, and South West helped mitigate export losses to those regions in 2009, as did small positive RD effects for Far West, South East, and South West.

The **Netherlands** ranked eighth in 2009. Exports to the Netherlands were down $942 million (25.4 percent) to $2.8 billion. A $372 million decline (68.8 percent) in unwrought aluminum, a $237 million decline (30.8 percent) in non-crude oil, a $102 million decline (38.3 percent) in unwrought nickel, and a $98 million decline (88.1 percent) in rail locomotives accounted for much of the losses.

France ranked ninth in 2009, up from tenth spot in 2008. Exports to France fell $559 million (17.2 percent) to $2.7 billion. The declines across categories were mostly small, with the exception of non-crude oil, which fell by $228 million (74.3 percent) and gas turbines, mainly for aircraft, which was down by $90 million. Exports of iron ores posted a notable increase of $154 million last year.

Rounding out Canada's top ten export markets was **India**, in tenth spot. India jumped from 13th place, surpassing Belgium (which had been in ninth place in 2008), along with Norway and Brazil. Canadian exports to India fell 11.2 percent ($270 million) to $2.1 billion. Potash (down $248 million) and newsprint (down $175 million) were largely responsible for the decline, while dried legumes posted an offsetting $114 million increase.

Merchandise Imports

Canadian merchandise imports from the world fell by 15.9 percent to $365.2 billion in 2009, a decline of $68.8 billion. Changes in market shares for the top ten partners were much more evident on the import side than was the case for exports. A number of the largest supplying countries lost import shares last year, including the United States (down 1.2 percentage points), Algeria (down 0.7 percentage point), and the United Kingdom (down 0.3 percentage point). At the same time, China (up 1.0 percentage point), Mexico, and South Korea (each up 0.4 percentage point) increased their shares in Canadian imports in 2009.

The **United States** accounted for slightly over half of Canada's total imports in 2009. Imports from the United States fell to $186.8 billion last year from $227.3 billion a year earlier. This was a $40.5 billion (17.8 percent) decline and accounted for nearly 60 percent of the total decline in imports between 2008 and 2009. As with exports, falling commodity prices affected import trade values. As well, automotive products and engines also bore the brunt of the decline. Imports of passenger cars fell the most, down $5.4 billion, followed by automotive parts, at $4.0 billion. Trailers and trucks imports also declined by $0.8 billion and $0.6 billion, respectively. In addition, imports of spark-ignition piston engines were down $1.9 billion, and compression-ignition piston engines were off by $0.5 billion. Energy products also registered notable declines, especially non-crude oil (down $2.8 billion), natural gas (down $1.6 billion), electricity (down $0.7 billion), and crude oil (down $0.6 billion). Medicaments recorded the largest increase in imports from the United States in 2009, up $0.5 billion. This was most likely in response to the campaign by the various governments to inoculate the citizenry against the swine flu virus in the latter months of 2009.

Merchandise imports from **China**, which continued to be Canada's second-largest source, declined by $3.0 billion (7.0 percent) to $39.7 billion in 2009. The declines were led by coke (down $270 million), spark-ignition piston engines (down $191 million), and magnesium (down $150 million). Toys, aluminum bars, tubes and pipes of iron and steel, and seats and parts also registered declines in excess of $100 million. Telephone equipment and parts recorded the largest increase, at $246 million.

Mexico ranked third as a source of merchandise imports into Canada. Imports from Mexico into Canada were down $1.4 billion (7.8 percent) to $16.5 billion in 2009. Electrical and electronic products, crude oil, and automobiles and their parts were responsible for much of the decline. Imports of televisions registered the largest declines, falling $531 million, followed by crude oil (down $512 million), passenger automobiles (down $365 million), insulated wire and cables (down $140 million), and automotive parts (down $130 million). Similar to China above, telephone equipment and parts recorded the largest gain in imports, at $254 million.

Japan placed fourth among the top ten import sources. Imports from Japan fell by $2.9 billion, or 19.2 percent, between 2008 and 2009. Passenger cars experienced the largest decline, falling $1.3 billion while automotive parts registered the largest increase, at $148 million.

Imports from **Germany**, Canada's fifth-largest source, were down $2.1 billion (16.1 percent) to $10.7 billion. It was the only decline for this country in this past decade. Declines were widespread, although, for the most part, not very big. Passenger automobiles accounted for the largest decline, at $227 million, followed by medicaments, at $217 million.

The **United Kingdom** was ranked as Canada's sixth-largest supplier of imports in 2009, unchanged from 2008. Imports from the United Kingdom were down 25.3 percent to $9.4 billion. With the exception of oil-supplying Algeria, imports from the United Kingdom fell the most ($3.2 billion) among the top non-U.S. import suppliers. Energy products accounted for the lion's share of the decline as imports of crude petroleum declined by $3.0 billion. Imports of cars and trucks were next in importance, falling by $89 million and $71 million, respectively. Imports of gold and aircraft engines posted the largest increases, at $156 million and $144 million, respectively.

Although imports from **South Korea** fell in 2009, that country vaulted from tenth position to seventh position among the leading import suppliers to Canada. This was because imports from South Korea fell by only $79 million (1.3 percent) to $5.9 billion last year. It was the lowest decline amongst the top ten suppliers. For those products posting declines, the losses were not very big, with the largest at $130 million for telephone sets and parts. South Korea was the only country among the leading automotive import suppliers to register an increase in passenger car imports into Canada in 2009, at $153 million.

France also improved its ranking from 2008 to 2009, moving from ninth place to eighth place. Imports from France were down by $426 million (7.0 percent) to $5.6 billion last year. While the number of products that registered declines outweighed those that registered increases, most of the gains and losses were small. Gains were led by medicaments (up $148 million) while losses were greatest for non-crude oil (down $81 million).

After having placed just outside the ten leading import suppliers in 2008, **Italy** joined this group in 2009, placing ninth. Notwithstanding this upward movement in the rankings, imports from Italy were down by 13.2 percent (or $677 million) to $4.4 billion. Both gains and losses were not very large, as medicaments posted the largest increase (up $87 million) while iron and steel tubing and pipes recorded the largest decline, at $55 million.

Imports from **Algeria**, which had moved from tenth place to seventh in 2008, reverted back to their tenth place ranking last year. Imports were more than halved, falling by $3.9 billion (51.1 percent) to $3.8 billion. The decline was entirely due to crude petroleum, which accounted for 99.95 percent of Canada's imports from Algeria last year.

Merchandise Trade by Top Products

Out of approximately 1,300 goods,[3] the 28 products selected for Table 5-1 were chosen for their overall impact on the change in Canada's trade balance. Together, these products accounted for nearly half of Canadian merchandise exports in 2009, nearly 30 percent of merchandise imports, and about 80 percent of the change in Canada's merchandise trade balance between 2008 and 2009. As shown in the table, these top drivers fall into two broad categories: trade surplus products and trade deficit products. Within each category, trade can be further subdivided into trade that is

3 Canada's merchandise trade is usually reported by what is known as the Harmonized System (HS) of Trade Classification, an internationally defined system for codifying traded products. Within the HS system, trade is broken down into some 97 chapters, also known as the HS 2-digit level. Each chapter is then broken down into sub-categories at the 4-digit level and each 4-digit sub-category is further broken down into individual products at the 6-digit level. This section examines Canada's top traded products at the 4-digit HS level.

TABLE 5-1

Canadian Merchandise Trade by Top Drivers
($ millions and percent)

	2009 Exports $	Export Growth %	2009 Imports $	Import Growth %	2009 Balance $	2009-08 Change in Balance $
TRADE SURPLUS PRODUCTS						
Large Exports and Large Imports						
Petroleum Gases	18,214.9	-49.8	3,531.9	-29.6	14,683.0	-16,575.1
Crude Oil	42,700.4	-36.7	21,233.2	-37.5	21,467.2	-12,015.8
Oil (Not Crude)	11,970.2	-33.0	6,944.0	-33.7	5,026.2	-2,359.0
Passenger Cars (Persons)	26,565.0	-23.0	19,419.6	-28.0	7,145.5	-407.1
Gas Turbines	4,750.9	-9.1	4,527.4	4.0	223.5	-646.5
Sub-Total	104,201.5	-35.4	55,656.1	-31.1	48,545.4	-32,003.5
Large Exports and Small Imports						
Potash	3,662.8	-42.0	24.8	19.4	3,638.0	-2,652.6
Aluminum, Unwrought	4,861.8	-33.9	206.2	-39.9	4,655.7	-2,361.2
Nickel Mattes	1,505.4	-55.5	49.8	-42.1	1,455.6	-1,840.2
Chemical Woodpulp	3,649.1	-30.2	156.6	-9.7	3,492.5	-1,560.3
Newsprint, In Rolls Or Sheets	2,803.0	-34.3	43.3	-26.9	2,759.7	-1,445.2
Nickel, Unwrought	1,696.7	-46.3	12.3	-71.7	1,684.4	-1,434.2
Sawn Lumber	3,944.5	-26.5	396.5	-21.8	3,548.0	-1,315.5
Copper, Unwrought	1,175.6	-48.8	80.0	-55.4	1,095.6	-1,021.2
Wheat and Meslin	6,021.3	-13.8	18.9	56.0	6,002.5	-974.0
Coal	4,967.7	-19.6	1,051.5	-20.9	3,916.2	-929.7
Polymers of Ethylene, Primary Forms	3,280.1	-28.2	980.7	-27.3	2,299.4	-922.6
Aircraft and Parts	7,808.9	13.2	2,291.8	-38.7	5,517.0	2,357.7
Iron Ores & Concentrates	3,369.5	9.2	298.1	-72.1	3,071.3	1,055.1
Sub-Total	48,746.5	-24.2	5,610.7	-36.7	43,135.8	-13,044.1
TRADE DEFICIT PRODUCTS						
Large Exports and Large Imports						
Telephone Equipment & Parts	3,649.2	-23.1	6,214.4	-0.0	-2,565.1	-1,096.6
Medicaments, in Dosage Form	5,633.4	7.6	9,512.1	14.1	-3,878.7	-775.2
Sub-Total	9,282.6	-7.0	15,726.4	8.1	-6,443.8	-1,871.8
Small Exports and Large Imports						
Aluminum Oxides & Hydroxides	98.1	-30.0	1,302.7	-28.1	-1,204.6	465.9
Computers, Magnetic Readers, etc.	1,962.4	-19.4	7,423.1	-13.0	-5,460.7	631.8
Television Receivers, incl. Video Monitors & Projectors	570.5	63.7	3,468.5	-20.0	-2,897.9	1,086.6
Bulldozers, Graders, Scrapers etc.	216.7	-54.4	1,855.1	-46.0	-1,638.4	1,324.1
Vehicles (Transport of Goods)	1,592.4	-57.4	8,591.4	-6.9	-6,999.1	-1,508.9
Trailers etc.; Not Mechanically Propelled, Parts	263.8	-37.5	1,608.2	-33.3	-1,344.4	644.3
Tractors	707.7	-62.7	1,983.1	-16.3	-1,275.5	-799.7
Piston Engines	2,090.6	-16.3	3,266.0	-38.5	-1,175.4	1,641.0
Sub-Total	7,502.2	-37.2	29,498.1	-21.2	-21,995.9	3,485.3
Total of Above	**169,732.8**	**-31.7**	**106,491.3**	**-24.8**	**63,241.5**	**-43,434.1**
World Total	**359,700.3**	**-25.6**	**365,151.4**	**-15.9**	**-5,451.1**	**-55,054.6**

Source: Office of the Chief Economist, DFAIT; with data from Statistics Canada.

substantially two-way and trade that is primarily one-way.

Products in which there is substantial two-way trade (i.e., with both large exports and large imports) and in which Canada reports a trade surplus include energy products, passenger cars, and aircraft engines. The resource-based products within this group experienced substantial declines in both exports and imports because of the price effects already noted. Together, these five products accounted for 58.1 percent (or $32.0 billion) of the overall decline in Canada's merchandise trade balance, with natural gas (30.1 percent of the trade balance) and crude oil (21.8 percent of the trade balance) accounting for much of decline.

Products in which Canada reports large exports and smaller imports are principally non-energy resources, such as wheat, potash, wood products, and metals. Several of these products experienced significant price corrections from high levels observed in 2008. Pulp and paper, on the other hand, has been declining on a longer-term basis, while lumber is affected by the slowdown in U.S. housing construction. Jointly, these products accounted for another 23.7 percent of the overall decline in Canada's 2009 merchandise trade balance, or $13.0 billion.

Products with substantial two-way trade but in which Canada reports a trade deficit include telecommunications equipment and medicines. A weak global business investment environment explains the fall in telecommunications exports. On the other hand, trade in medicine was up, possibly linked to efforts to inoculate the populace from certain strains of the swine flu. The trade deficit in these products expanded by $1.9 billion, or 3.4 percent of the overall decline in the merchandise trade balance last year.

Finally, products in which Canada reports large imports and smaller exports fall mostly in the manufacturing sector. For the most part, trade in these manufactures was down over 2008 levels, in line with the economic downturn. However, exports of television receivers registered a strong advance last year. The eight products in this category registered a $3.5 billion improvement in their trade deficits, to partially offset the deterioration in merchandise trade balances registered by the other three categories discussed above.

Merchandise Trade by Major Product Groups

This section examines 2009 trade performance in the following product groupings: energy, vehicles and parts, machinery and mechanical appliances, electrical and electronic machinery, technical and scientific equipment, agricultural and agri-food products, minerals and metals, chemicals, plastics and rubber, wood, pulp and paper, textiles, clothing and leather, consumer and miscellaneous manufactured products, and other transportation equipment.

Energy Products[4]

As discussed in the previous chapter, energy products played an important role in the decline of both Canadian exports and imports of goods in 2009, mostly because of falling energy prices accompanied by falling trade volumes.

Canadian exports of mineral fuels and oils plunged $51.6 billion (38.7 percent) in 2009 to $81.8 billion, wiping out the $39.8 billion surge in exports a year earlier. Similarly, imports declined, completely reversing the increase registered in 2008, as imports of these products fell by $19.4 billion (36.1 percent) to $34.4 billion for the year. With exports declining by more than imports, the

4 HS Chapter 27.

trade surplus for energy products narrowed by $32.2 billion from $79.6 billion to $47.4 billion.

In 2009, the United States received 91.7 percent of Canada's energy exports, supplied 31.2 percent of our energy imports, and was responsible for more than the total decline in the trade surplus. In fact, Canada improved its overall energy trade surplus by $10.4 billion with the non-U.S. rest of the world. The bulk of the improvements came from trade with Algeria, the United Kingdom, Norway, Angola, and Iraq, as Canada reduced its trade deficits with these countries by lowering energy imports. Gains were also registered for China, as an increase in exports combined with a decrease in imports was the reason behind a movement from an energy trade deficit in 2008 to a surplus in 2009.

Three commodities—crude oil, non-crude oil, and other petroleum gases (primarily natural gas)—make up more than 90 percent of the trade in energy products, for both exports and imports. Crude oil is the dominant commodity, accounting for over half of all energy exports and more than 60 percent of energy imports. Crude oil exports plunged 36.7 percent, down $24.7 billion in value to $42.7 billion in 2009. All of the loss came from lower exports to the United States (down $25.0 billion). Small gains in exports were registered for a number of Asian economies, including China, Malaysia and India. At the same time, imports fell at a slightly greater pace—down 37.5 percent, or $12.7 billion, to $21.2 billion. The losses were concentrated in a number of trading partners, led by Algeria (down $3.9 billion), the United Kingdom (down $3.0 billion), Norway (down $2.6 billion), Angola (down $1.4 billion) and Iraq (down $0.9 billion). With the decline in exports exceeding that for imports, Canada's trade surplus in crude oil narrowed by $12.0 billion to $21.5 billion.

Petroleum gases (principally natural gas) accounted for 22.3 percent of energy exports and 10.3 percent of energy imports in 2009. Virtually all of Canada's trade in petroleum gases is with the United States (over 99.9 percent of exports and 96.0 percent of imports). Exports were almost halved between 2008 and 2009, falling from $36.3 billion to $18.2 billion. Imports were much smaller: they fell by 29.6 percent, or $1.5 billion to $3.5 billion. As a result of these movements, the trade surplus in petroleum gases shrank by $16.6 billion, to $14.7 billion, to account for just over half the overall decline in the surplus of energy products.

Heavy petroleum oils accounted for about 60 percent and light petroleum oils (including gasoline) for about 40 percent of non-crude oil trade. Trade was down by roughly a third in both directions. Overall exports of non-crude oil fell $5.9 billion to $12.0 billion, while imports retracted by $3.5 billion to $6.9 billion—mostly on declines with the United States. The trade surplus narrowed by $2.4 billion as that for light petroleum declined by just under $1.1 billion to a little over $1.1 billion while that for heavy oils was lower by $1.3 billion to $3.9 billion.

Most of the smaller energy categories registered deterioration in their trade surpluses last year, including coal (down $0.9 billion to $3.9 billion) and electricity (down $0.7 billion to $1.7 billion).

Vehicles and Parts[5]

Exports of vehicles and parts fell for the fifth consecutive year in 2009, declining by $15.5 billion (28.8 percent) to $38.3 billion. Almost 95 percent of the decline was attributable to a $14.7 billion decrease in exports

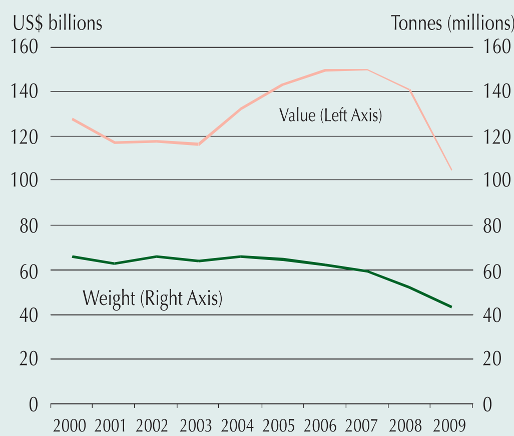
5 HS Chapter 87.

Canadian exports to the United States by truck

The United States is by far Canada's largest destination for exports, and trucking is the dominant mode for transporting them. Although exports by truck accounted for over 50 percent of exports to the United States in 2004, this fell to 46.7 percent in 2009.[1] Increased volumes and dollar values of pipeline traffic, in conjunction with stagnant or reduced truck traffic, contributed to the decline in the relative proportion of exports by truck. After little growth between 2000 and 2003, the value of exports by truck grew between 2003 and 2007, mainly due to increased valuation in Canadian dollar terms, before declining again from 2007 onward. However, in terms of trucking volumes, the data show a considerable decline (33.8 percent) in the period between 2000 and 2009.

Trucks are most often used to transport goods with values in the middle of the spectrum. Common trucked exports include automotives, machinery and electronics. Lower-valued goods such as agricultural products and natural resources tend to be shipped by rail and/or by sea, or by pipeline in the case of oil and

Canadian Exports to the United States by Truck



Canada's Exports to the U.S. by Mode

Mode	% of Total Exports to U.S.*	Export Value (US$B)	Value (US$) per kg	Commodities breakdown (%)
Truck	46.7	105.1	2.42	automotive (16%); machinery (13%); electronics (6%); plastics (5%); paper (5%)
Pipeline	20.3	45.6	0.53	oil & gas (99%)
Rail	18.3	41.1	0.85	automotive (36%); paper (7%); aluminium (6%); fertilizer (6%); plastics (5%); oil &gas (5%); wood (5%)
Vessel	6.8	15.3	0.28	oil & gas (82%); organic chemicals (3%); mineral ores (3%); aluminium (3%)
Air	3.8	8.6	205.99	electronics (23%); machinery (16%); precious metals (16%); technical/scientific equipment (10%); aerospace (9%); pharmaceuticals (5%)

* Percentage does not add up to 100%, mail and other modes (not shown) account for another 4%

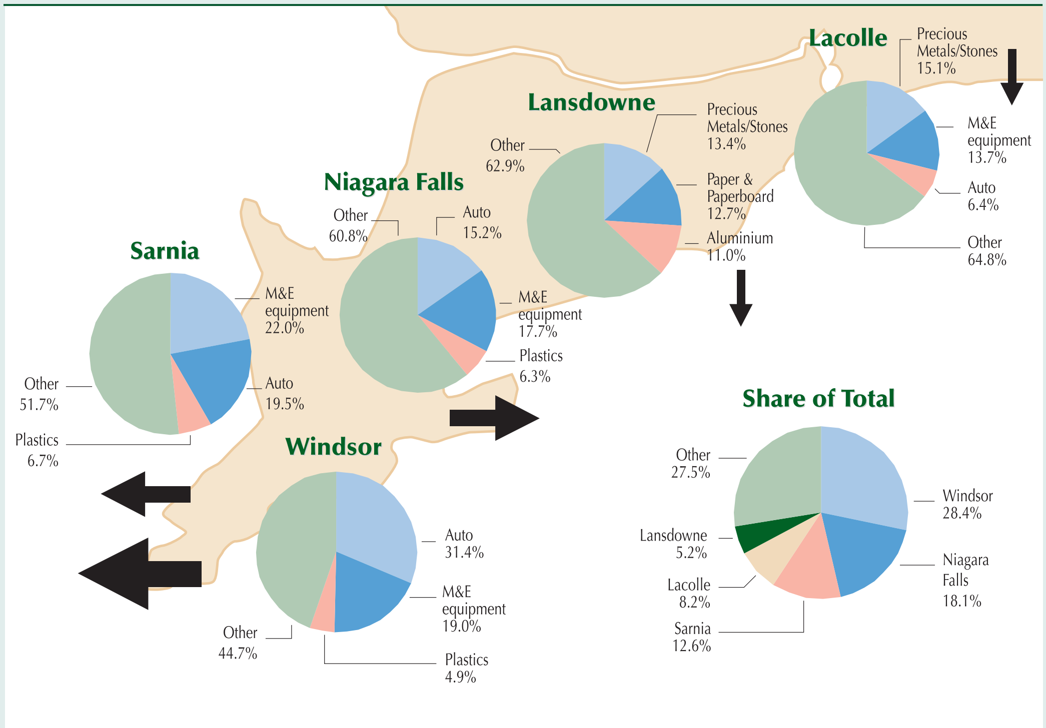
1 Canadian designations of these crossings are Windsor, Niagara Falls, Sarnia, Lacolle and Lansdowne. In the U.S. BTS data they are referred to as Detroit, Buffalo, Port Huron, Champlain-Rouses Point and Alexandria Bay respectively.

natural gas, while high-value and time-sensitive goods – such as precious metals, technical/scientific equipment and pharmaceuticals – are more often shipped by air. This is borne out by the value per kilo statistics (see table). In 2009, the value of trucked exports to the United States averaged US$2.42/kg, with rail and marine vessel loads valued much lower, and air loads much higher (US$206/kg).

Most Canadian exports crossing the border into the United States by truck do so at five main entry points, four of which are located in southern Ontario and the fifth in nearby Lacolle, Quebec.[2] Together, these five border points received 72.5 percent of Canadian exports by truck to the United States in 2009. However, the importance of the "big five" border points has been declining since 2000, when they received more than 75 percent of Canada's exports into the United States by truck. By 2009, all except for Lacolle had lost share in total exports by truck.

We can also assess the overall concentration of trucked exports through all Canada-U.S. crossings by using the Herfindahl-Hirschman Index (HHI). The HHI was originally developed as a component of industrial organization theory but is commonly used to evaluate degrees of concentration. The HHI, which ranges between 0 and 1, is used here to measure the relative concentration of trucked exports at border crossing points; higher scores indicate higher concentrations of goods transported in fewer crossings. The data show that the HHI increased

Top Five Crossings for Canadian Exports by Truck, 2009



2 Canadian designations of these crossings are Windsor, Niagara Falls, Sarnia, Lacolle and Lansdowne. In the U.S. BTS data, they are referred to as Detroit, Buffalo, Port Huron, Champlain-Rouses Point and Alexandria Bay respectively.

Top Five Entry Points for Candian Exports to the United States by Truck (US$B and %)

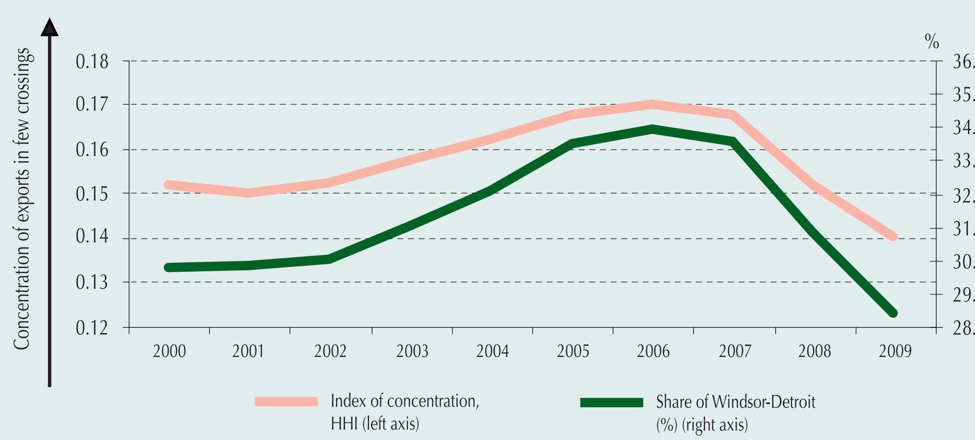
Port/District Description	2000		2006		2009		2000-06 Change (percentage points)	2006-09 Change (percentage points)
	US$B	%	US$B	%	US$B	%	%	%
Windsor	38	29.7	51	33.9	30	28.4	4.2	-5.5
Niagara Falls	25	19.2	27	17.9	19	18.1	-1.3	0.2
Sarnia	17	13.0	19	12.6	13	12.6	-0.4	0.0
Lacolle	10	7.6	10	6.5	9	8.2	-1.1	1.8
Lansdowne	7	5.8	7	5.0	5	5.2	-0.8	0.2
Top five totals	96	75.2	114	75.8	76	72.5	0.6	-3.3

between 2000 and 2006, remained flat in 2007, and then fell significantly in 2008 and 2009. By all measures, exports transported by truck are now less concentrated than at the beginning of the decade.

The primary factors behind these concentration patterns are the changes in North American automotive trade and the effects of the global economic crisis. From 2000 to 2006, an increasing amount of trade by truck flowed through Windsor to Detroit, while the share of trucking traffic held by the other four of the "big five" entry points fell. This was reflected in the HHI during the period. This also corresponds to a period of growth in Canadian auto exports (HS 87), 63.8 percent of which were trucked across the Windsor-Detroit border by 2007. In fact, trucked exports of automotive products grew at an average annual rate of 3.0 percent between 2000 and 2006, faster than other (non-auto) trucked exports (2.6 percent). Over that period, Windsor's share of total trucked exports increased by 4.2 percentage points, while the other four crossing points lost a combined 3.6 percentage points.

The subsequent collapse in automotive trade was the main reason why the share of exports passing through the Windsor-Detroit border by truck dropped 5.5 percentage points between 2006 and 2009. The value of Canadian exports at this border point declined considerably, falling from US$51 billion to US$30 bil-

Concentration of Canadian Exports to the United States (by truck)

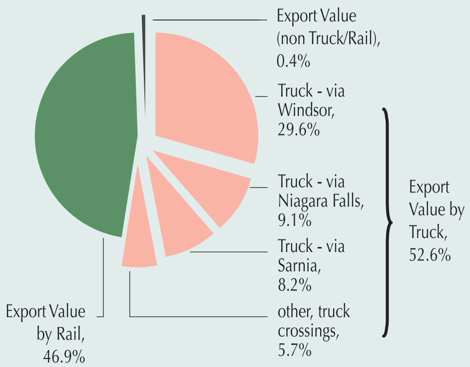


lion over this period. Other key crossing points gained share (especially Lacolle, due largely to exports of precious stones and metals). But the fall in Windsor's share over this period was not fully offset by gains at the other "big five" crossing points, resulting in a more diversified pattern of truck trade across the border.

Thus, almost all of the diversification over that period can be attributed to the sharp fall in auto exports passing through Windsor into Detroit. These have declined by US$11.2 billion since 2007, compared to a total US$15.6-billion decline in auto exports by truck over that period. As a result, Windsor's share of Canadian automotive exports trucked to the United States fell from 63.8 percent in 2007 to 56.3 percent in 2009. Despite a sharp fall in auto exports (down US$2.7 billion) in Niagara Falls, the share of those exports (by truck) arriving at that border crossing remained constant, while the share of the other three top crossings rose.

The influence of the auto trade on export concentrations at the top five border crossing points is evident when the composition of Canada's auto exports to the United States is analyzed. As shown in the accompanying chart, some 52.6 percent of Canadian auto exports to the United States are transported by truck, most of which cross through Windsor into the United States at Detroit. Including Niagara Falls and Sarnia, southern Ontario crossings account for 89.1 percent of trucked exports of automotive products.

Canadian Exports of Automotive Products to the United States, 2009



of these products to the United States, as the financial difficulties experienced by major North American auto manufacturers and falling U.S. demand curtailed exports. Three products—passenger vehicles, auto parts, and motor trucks—were behind the losses, as their exports fell by $8.0 billion, $4.2 billion, and $2.1 billion, respectively.

Vehicle imports fell nearly as much as exports last year, declining by $13.8 billion (21.9 percent) to $49.4 billion. Imports of automotive products suffered in the face of dwindling domestic sales. Imports from four of the top five supplying countries fell in 2009. A 26.1 percent decline in imports from the United States accounted for over 80 percent of the overall decline. Imports from Japan were down by $1.2 billion, while those from Germany and Mexico were off by $370.3 million and $306.1 million, respectively. Only fifth-ranked South Korea managed to buck the trend, increasing the value of its exports to Canada by 11.3 percent, or $195.8 million. As was the case for exports, passenger vehicles and auto parts were behind the losses, with imports of these products falling by $7.5 billion and $4.0 billion, respectively. Imports of trailers (down

$0.8 billion) and motor trucks (down $0.6 billion) accounted for much of the remainder of the declines.

With exports falling more than imports, the trade deficit for vehicles and parts widened by $1.7 billion, to $11.1 billion in 2009. A $3.3 billion increase in the automotive deficit with the United States accounted for more than the total decline, as reduced imports from other sources helped to improve sectoral trade balances elsewhere. Much of the deterioration in the trade deficit came from the trade in motor trucks. Truck exports fell $2.1 billion to $1.6 billion while imports dropped by only $0.6 billion to $8.6 billion, as the trade deficit for trucks grew by $1.5 billion, to $7.0 billion. The trade deficit in automotive parts edged wider, growing to $8.0 billion from $7.8 billion, while the trade surplus in passenger cars narrowed $0.4 billion to $7.1 billion last year.

Mechanical Machinery and Appliances[6]

Mechanical machinery and appliances (hereafter machinery) comprises a single chapter in the HS classification system. It is also one of the largest categories of goods in Canada's trade, covering a variety of items ranging from ball bearings to mobile cranes and derricks. It is also among the largest categories in terms of value of imports, behind only chemicals, plastics and rubber.

Machinery exports fell $6.4 billion (17.5 percent) in 2009, to $30.2 billion. Declines were widespread, with only 13 of 87 sub-categories registering increases. Leading the declines were parts for moving machinery (such as cranes, bulldozers, and forklifts), gas turbines (mainly for aircraft), and computers and components, as these exports decreased by $607.9 million, $473.1 million, and $473.0 million, respectively. The bulk of the declines occurred in exports to the United States. Exports to that country fell by $5.6 billion, or 88.1 percent of the overall decline in machinery exports. Smaller, though still notable, declines were registered for Germany (down $122.4 million), Russia (down $111.7 million), and Cuba (down $100.2 million). Small gains were posted for a number of Middle East countries (e.g., Algeria, Qatar, Libya, and Oman) and a number of Asian economies, including Malaysia, Japan, Singapore, South Korea, and China.

Machinery imports were also down in 2009, falling by $10.7 billion (16.9 percent) to $52.8 billion. As with exports, the vast majority of the decline was with the United States, as imports from that country fell by $7.1 billion, or roughly two thirds of the total machinery decline. Imports from Japan (down $900.8 million), China (down $555.2 million), and Germany (down $496.6 million) also registered sizeable declines. Four products—piston engines, combustion engines, self-propelled dozers, and computers and components—accounted for half the declines in machinery imports. Gas turbines posted the largest increase, at $173.4 million, followed by agricultural machinery associated with harvesting, at $126.9 million.

With imports falling more than exports, the trade deficit for mechanical machinery and appliances narrowed by $4.3 billion, to $22.6 billion in 2009. The trade deficits with the United States (down $1.5 billion), Japan (down $0.9 billion), China (down $0.8 billion), and Germany (down $0.4 billion) all fell, to account for over 80 percent of the improvement in the trade balance.

6 HS Chapter 84.

Electrical and Electronic Machinery and Equipment[7]

Exports of electrical and electronic products contracted by $3.0 billion to $16.2 billion, most notably to the United States (down $2.4 billion, or 82.2 percent of the total). Smaller declines were registered for Germany (down $94.4 million), the United Kingdom (down $81.6 million), and Thailand (down $72.7 million). In contrast, exports to Mexico increased by $209.7 million. The declines were widespread, as 39 of the 48 major sub-components that comprise the category were down. However, the bulk of the declines were concentrated in five products—telephone and related equipment, integrated circuits, insulated cables and wires, electric motors and generators, and parts for televisions, radios, and radar equipment—which, when combined, accounted for nearly three quarters of the overall decline in this category. Within these five products, exports to the United States fell by $1.8 billion, to account for the bulk of the decline. Exports of seven products increased in 2009, with the largest increase being for monitors, projectors and television receivers—which rose by $222.0 million—mainly to the United States, the United Kingdom, and a number of Asian economies (including South Korea, Japan, China, Australia, Philippines, and Hong Kong).

Imports of electrical and electronic products retreated to $38.3 billion in 2009, down $4.1 billion from 2008. Lower imports from the United States (down $1.7 billion), Mexico (down $0.7 billion), Japan (down $0.4 billion), and Denmark (down $0.4 billion) accounted for three quarters of the decline, while Turkey posted the largest increase, at $37.2 million. As was the case for exports, declines were widespread across products, with 41 of 48 major sub-categories registering losses from the previous year. Five products posted reductions of more than $200 million, led by television receivers, various media for sound recording, television and radio transmission apparatus, electrical switching equipment, and insulated wire and cable. The majority of the losses from these five products accrued from fewer imports from Mexico (down $0.8 billion), the United States (down $0.7 billion), Japan (down $0.3 billion), and China (down $0.1 billion).

With exports retreating less than imports, the trade deficit in electrical and electronic machinery and equipment narrowed by $1.1 billion to $22.1 billion in 2009.

Technical and Scientific Equipment[8]

Exports of technical and scientific equipment slipped to $5.4 billion in 2009, down $0.5 billion over 2008, as exports to the United States declined by $369.7 million. At the same time, imports were down by $0.4 billion, to $11.2 billion, with the United States accounting for virtually all of the decline. Imports from Germany also fell $91.8 million, while those from China advanced by $68.9 million. On the export side, instruments and apparatus for physical or chemical analysis declined the most (down $108.9 million), followed by other miscellaneous measuring or checking instruments, appliances and machines (down $94.5 million), and instruments/apparatus used for measuring or detecting radiation and electrical phenomena (down $88.3 million). For imports, losses in thermostats (down $190.3 million), other miscellaneous measuring or checking instruments, appliances and machines (down $125.3 million), surveying, meteorological, and geophysical instruments (down $116.2 million), and instruments and apparatus for measuring or

7 HS Chapter 85.

8 HS Chapter 90.

checking liquids or gases (down $110.8 million) were partially offset by gains in miscellaneous optical devices, appliances and instruments (up $119.1 million), and medical/surgical instruments and appliances (up $121.7 million).

The trade deficit for technical and scientific equipment widened by $0.1 billion, to $5.8 billion last year.

Agricultural and Agri-food Products[9]

Canadian exports of agricultural and agri-food products retreated from their high levels of 2008, falling by $3.8 billion (or 8.9 percent) to $38.8 billion in 2009. As indicated in the previous chapter, both prices and volumes fell across most commodities, while exports of live animals and beef continued to be hampered by trade restrictions and pork exports experienced headwinds via an association with the swine flu. Among all agricultural products, cereals experienced the greatest decline in exports, falling $1.7 billion (or 19.2 percent) to account for over 44 percent of the overall decline. Wheat was responsible for slightly less than 60 percent of the fall within cereals, with barley, oats, and corn making up the remainder of the decline. Exports of live animals fell $691.6 million, as cattle accounted for three quarters of the decline and swine the rest. Notwithstanding the increases to China noted previously, both canola seed (down $406.5 million) and canola oil (down $326.7 million) also suffered sizeable cutbacks to their overall export levels. By destination, four countries accounted for more than the total decline in agricultural and agri-food exports, with those to the United States accounting for about two thirds of the total decline. Japan, Algeria, and Mexico followed, with declines of $742.5 million, $458.8 million, and $361.8 million, respectively. In addition, eight other countries—Belgium, Iran, Indonesia, Russia, Turkey, Malaysia, Pakistan, and Sudan—registered decreases in the range of $100 million to $300 million. However, these losses were offset by gains to Iraq, Bangladesh, and China of $316.3 million, $334.9 million, and $922.2 million, respectively.

Agriculture and agri-food products was the only major commodity group to register an increase in imports over 2008, as imports rose by $794.7 million (2.7 percent) to $29.8 billion last year. For the most part, changes by supplier were fairly small. For example, the largest decline was a $44.2 million drop in imports from France. Three countries accounted for over 80 percent of the total increase: the United States (54.9 percent), Mexico (15.2 percent), and Brazil (11.2 percent). Gains were led by a $239.4 million advance in preparations of cereals, flour starch or milk (including bread, pastry, and pasta), and by a number of fresh fruits and vegetables including berries (up $51.1 million), bananas (up $48.5 million), lettuce (up $44.7 million), mushrooms (up $43.5 million), and grapes (up $42.9 million).

With falling exports and rising imports, Canada's trade surplus in agriculture and agri-food products narrowed by $4.6 billion to $9.0 billion in 2009.

Minerals and Metals[10]

As previously mentioned, trade in minerals and metals is very sensitive to economic conditions. In times of economic booms, trade is very robust, while during a downturn in economic output the demand for these products is weakened. In 2009, exports of minerals and metals plunged by $21.8 billion to $48.5 billion. Losses were widespread throughout the category, led by aluminum,

9 HS Chapters 1 through 24.

10 HS Chapters 25, 26, and 68 through 83, except for Chapter 77. Chapter 77 is being held in reserve and presently does not exist in the HS system.

iron and steel, and nickel products, as exports of these products fell $4.2 billion, $3.9 billion, and $3.7 billion, respectively.

Exports were down to almost all developed countries, with the exception of a handful of countries (Singapore: up $104.6 million; France: up $86.1 million; Spain: up $8.5 million; Austria: up $7.1 million; and, Ireland: up $1.4 million). The United States accounted for much of the decline as that country has been in a prolonged recession dating back to 2007. Reduced output in the automotive sector and broad economic malaise helped push exports of aluminum, iron and steel, and iron and steel products down by $3.4 billion, $3.1 billion, and $2.2 billion, respectively, to account for over 60 percent of the reduction in U.S.-bound exports of minerals and metals. In addition, exports of copper and nickel also fell by sizeable amounts, accounting for a further 20 percent of the overall decline in exports to the United States for this sector. Exports to Japan and Norway also fell significantly in 2009. For Japan, exports were down $1.2 billion, while they were off by $1.1 billion for Norway. In the case of the former, it was mineral ores, aluminum, nickel, and other base metals that accounted for the decline, while for latter it was nickel, other base metals, and copper behind the fall.

On the import side, imports of metals and minerals decreased by $10.6 billion in 2009, to $39.5 billion. As was the case for exports, the declines were widespread, with only precious stones and metals registering an increase over 2008. Once again, because of the downturn, and, in particular, decreased automotive output, the bulk of the declines were concentrated in iron and steel, iron and steel products, and aluminum. Together, these three groups accounted for over 70 percent of the total decline in Canada's imports of minerals and metals, as they retreated by $3.9 billion, $2.5 billion, and $1.2 billion, respectively. The bulk of the declines came from fewer imports from the United States (down $8.0 billion, or 75.1 percent of the total) and China (down $1.2 billion, or 11.3 percent of the total). For the United States, iron and steel and articles of iron and steel posted the largest decreases, with mineral ores, aluminum, precious metals, and copper also declining. For China, it was again iron and steel, and articles of iron and steel that decreased the most, while other base metals and aluminum contributed to the decline.

With respect to precious stones and metals, imports increased by $0.4 billion—the only category in metals and minerals to register an advance. A $0.8 billion decline in imports from the United States was offset by increases from Peru (up $0.4 billion), Chile (up $0.3 billion), the United Kingdom and Argentina (both up $0.2 billion), and Switzerland and Surinam (both up $0.1 billion). Most of the U.S. decline was in gold and precious metals scrap, which were the areas where Peru and Chile advanced the most.

Notwithstanding the fact that imports of metals and minerals fell by $10.6 billion, the trade surplus for this category narrowed by $11.2 billion (to $9.0 billion), as exports fell by $21.8 billion in 2009.

Chemicals, Plastics, and Rubber[11]

Exports of chemicals, plastics, and rubber decreased by $9.3 billion to $38.9 billion in 2009. Fertilizers and plastics led the decline, falling by $3.0 billion each, and organic and inorganic chemicals exports fell by $1.8 billion and $1.5 billion, respectively. Smaller losses were registered for rubber, dyes and paints, miscellaneous chemicals, and perfumes, but these were largely offset by an increase in pharmaceuticals.

11 HS Chapters 28 through 40.

The bulk of the decline in fertilizer exports overall was due to a $2.6 billion decrease in potash exports, with nitrogen-based fertilizers accounting for much of the remainder. The United States accounted for a little over 40 percent of the decrease in potash exports. Developing Asia was responsible for another 40 percent of the decline, led by fewer exports to China, India, Malaysia and Indonesia. Much of the remainder of the decline was to Latin America, notably to Brazil, Mexico, and Colombia. A $375.3 million decline in exports to the United States accounted for more than the entire $369.5 million decline of nitrogen-based fertilizers.

Nearly 90 percent (or $2.7 billion) of the overall decline in exports of plastics was the result of fewer exports to the United States. While most sub-components of plastics were down, the largest declines were registered for polyethylene and polyester.

Exports of organic chemicals to the United States were down $1.3 billion from 2008 levels and those to China were off by $0.5 billion, to account for much of the overall decline in this category. The declines were mainly in cyclic hydrocarbons (40.8 percent of the total), acyclic alcohols and their derivatives (27.4 percent of the total), and acyclic hydrocarbons (25.9 percent of the total). Fewer exports of inorganic chemicals to the United States (down $0.8 billion) and, to a lesser extent, to the United Kingdom and China (down $0.2 billion each) were behind the decline in this category, as five products—ammonia, sulphur, uranium and radioactive isotopes, hydrogen, and sulphuric acid—accounted for about 87.0 percent of the overall decline.

Imports of chemicals fell by $3.2 billion to $53.4 billion in 2009. The losses were most heavy in plastics (down $1.9 billion), organic chemicals (down $1.4 billion), and inorganic chemicals (down $1.1 billion), and were partially offset by a $1.8 billion increase in imports of pharmaceuticals. Nearly two thirds of the decline (or $2.1 billion) came from fewer imports from the United States. Smaller, though sizeable declines, were registered for Germany, Surinam, Jamaica, Israel, Chile, and Trinidad and Tobago.

Canadian imports of plastics were down across most sub-categories, most notably for polyethylene (down $368.0 million), polypropylene (down $269.8 million), and PVC, or polyvinyl chloride, (down $215.1 million). Imports from the United States were down $1.7 billion, to account for nearly 90 percent of the overall decline in plastics imports.

Imports of organic chemicals declined $1.4 billion with four products—acyclic alcohols and their derivatives, other heterocyclic compounds, acyclic hydrocarbons, and cyclic hydrocarbons—accounting for about two thirds of the loss. Just over half of the decline came from U.S. imports, while smaller losses were registered for Switzerland, France, Israel, India, Chile, and Trinidad and Tobago, to account for much of the remainder.

For inorganic chemicals, imports were down $1.1 billion from 2008 levels. Imports were down from the United States ($324.3 million), China ($219.0 million), Surinam ($200.3 million), and Jamaica ($165.3 million) to account for more than 80 percent of the decline. Nearly half the declines resulted from fewer imports of aluminum oxides.

A $9.3 billion decline in exports coupled with a $3.2 billion decline in imports helped push Canada's trade deficit in chemicals, plastic, and rubber wider by $6.1 billion, to $14.5 billion in 2009.

Wood, Pulp, and Paper[12]

Exports of wood, pulp, and paper fell $6.9 billion to $24.8 billion in 2009, with wood and paper and paper products each accounting for about one third of the decline. Lower exports of pulp accounted for much of the remaining decline. Only exports of straw registered an increase.

Exports of wood products fell for the fifth consecutive year, down $2.4 billion in 2009. Almost 90 percent of the decline was accounted for by fewer exports to the United States. Japan was next, accounting for 9.1 percent of the decline. The declines were felt most heavily in lumber (down $1.4 billion), windows, doors, shingles, shakes, and panels (down $359.0 million), particle board (down $181.7 million), and plywood (down $98.7 million).

Paper and paperboard exports were down $2.2 billion to $10.9 billion in 2009. Exports to the United States fell by $1.5 billion, while those to India and Brazil were down $173.7 million and $77.5 million, respectively. Two thirds of the decline, or $1.5 billion, accrued to newsprint, while exports of uncoated paper and uncoated kraft liner paper fell by $0.5 billion and $0.2 billion, respectively.

Exports of pulp fell by $2.0 billion in 2009, with the United States accounting for about half the decline and a number of Asian economies (i.e., South Korea, Japan, Indonesia, Taiwan, and Thailand) accounting for a further quarter of the decline.

Imports of wood, pulp, and paper were down $1.1 billion as declines were widespread. Wood led the decreases, as imports fell $436.7 million, followed by paper and paperboard (down $290.0 million), pulp (down $188.5 million), and books and newsprint (down $166.0 million).

With exports down by $6.9 billion and imports down by only $1.1 billion, the trade surplus in wood, pulp, and paper narrowed by $5.8 billion to $12.0 billion in 2009.

Textiles, Clothing, and Leather[13]

Canadian exports of textiles, clothing, and leather (TCL) fell for the seventh consecutive year in 2009, as they slipped another $678.6 million down the scale, from $4.7 billion in 2008 to $4.0 billion. With the exception of small increases in miscellaneous vegetable textiles and wool, exports fell for all other major categories in this group. Exports to the United States fell $431.5 million, to account for just under two thirds of the losses. A quarter of the decline came from reduced exports of raw hides and raw furskins.

While export declines were widespread, it was exports of woven apparel as a group that fell the most, down $116.1 million in 2009, followed by those for furskins and artificial fur (down $95.7 million). Broadly speaking, reduced exports to the United States accounted for the bulk of the declines. One of the few exceptions to this observation was for furskins, where reduced shipments to Hong Kong accounted for just over half the decline—with the bulk of the remainder coming from European Union countries, where anti-fur sentiment is quite strong.

Imports of TCL products were down by $770.9 million to $15.7 billion. As with exports, declines were widespread, with only footwear imports registering a small increase last year. The declines were greatest for man-made filaments (down $115.5 million) and certain leather articles (down $108.9 million).

Regionally, fewer imports from the United States (down $366.7 million) accounted for just under half the overall decline. Imports from China were down

12 HS Chapters 44 through 49.

13 HS Chapters 41 through 43, and 50 through 65.

$194.0 million and those from Italy were down by $130.7 million. Next in terms of size of decline were imports from Mexico, Turkey, Taiwan, South Korea, and Hong Kong, at $56.8 million, $38.8 million, $33.3 million, $31.6 million, and $29.6 million, respectively. On the other hand, imports from a number of Asian countries registered increases, including from Pakistan, Cambodia, Indonesia, Vietnam, and, most notably, Bangladesh (at $162.1 million).

Consumer Goods and Miscellaneous Manufactured Products[14]

Exports of consumer and miscellaneous manufactured products fell by $4.8 billion in 2009. Over 60 percent of the decline was attributable to special provisions, in particular to reductions in the amount of low value export transactions and confidential commodities and in goods of U.S. origin returning to the United States. Once these special provisions are removed, exports of the remaining consumer and miscellaneous manufactured products fell by $1.8 billion, with over 90 percent of the decline attributable to furniture and bedding, which fell by $1.7 billion last year.

Exports of furniture, other than furniture for medical, surgical or dental use, declined by $1.0 billion in 2009, due to reduced exports to the United States. Exports of seats, other than barber and dental seats, also fell in 2009, down $0.5 billion, again because of fewer exports to the United States.

Exports of toys slipped by $141.6 million, with some 95 percent of the decline attributable to the United States.

Imports of consumer and miscellaneous manufactured products were down $3.5 billion in 2009, with half of the decline attributable to special provisions. After taking these special provisions into account, imports of consumer and miscellaneous manufactured products fell by $1.7 billion. Furniture and bedding, and toys and sporting goods were responsible for the bulk of the decline.

Losses in furniture and bedding were widespread as all but one sub-component of the category registered declines last year; the exception was furniture for medical, surgical or dental use, where imports edged up $2.5 million. The bulk of the declines were in seats and non-medical/surgical/dental furniture, with smaller declines recorded for lamps and lighting fixtures, prefabricated buildings, and mattresses and bedding. Overall, furniture and bedding imports were down $1.2 billion in 2009.

Likewise, all but one of the sub-components of toys and sporting goods fell in 2009, with overall imports of this category falling by $365.8 million in 2009. Toys led imports lower, falling by $158.5 million, while fishing rods, tackle, and equipment increased $5.4 million.

Other Transportation Equipment[15]

Exports of other transportation equipment expanded by 2.9 percent, or $334.9 million, to $12.0 billion in 2009—the only major group to register an increase last year. The advances were all in aircraft and related equipment, with exports up by $776.5 million. Partially offsetting the gains were declines in railway equipment, and ships and boats, where exports were down by $244.6 million and $196.9 million, respectively.

The gains in aircraft and related equipment were mainly centred on aircraft (which advanced by $909.0 million), supported by a $136.4 million increase in exports of aircraft parts. On the other hand, exports of launch gear and ground flight training equipment

14 HS Chapters 66, 67, and 91 through 99.

15 HS Chapters 86, 88, and 89.

retracted by $267.0 million to limit the overall advance. Sales of aircraft tend to be lumpy, given their long lifespans and high costs. Accordingly, there were no follow-up sales in 2009 on some $292.5 million of sales made the previous year to Uruguay, Yemen, and Sweden. However, Canadian producers brought eight new customers into the fold, generating $531.9 million in new sales in 2009 where none existed in 2008. For other existing customers, Canadian producers expanded their exports to Germany (up $320.2 million), Denmark (up $277.9 million), and the United Kingdom (up $138.8 million), while exports to the United States declined by $345.2 million last year.

On the import side, losses were widespread as imports of aircraft and related equipment fell $1.3 billion, and those for railway equipment, and ships and boats were off by $356.6 million and $300.2 million, respectively.

The decline in imports of ships and boats was dominated by a $304.2 million decrease in yachts and other pleasure craft.

For railway equipment, advances by self-propelled and not-self-propelled coaches were offset by greater losses to imports of locomotives and parts to account for the overall decline in this category.

A $1.4 billion decrease in imports of aircraft accounted for more than the total decline in aircraft-related equipment, as imports of aircraft fell by $1.4 billion. Partially offsetting the decline was a $118.9 million increase in parts imports.

Trade by the Provinces and Territories

Canadian merchandise trade was down across all provinces and territories, except for imports into Nunavut, where they jumped by 56.2 percent, or $17.9 million.

Ontario was perhaps the most impacted by the global downturn as the province accounted for one third of the total decline in Canadian merchandise exports in 2009, and nearly one half the total decline in merchandise imports. Overall, Ontario's exports fell $41.2 billion (21.8 percent) to $147.7 billion, while imports declined by $33.9 billion (14.0 percent), to $208.4 billion (Table 5-2). On the export side, fully one third of the decline ($14.8 billion) came from the automotive sector. Other important declines were centred on machinery and equipment (both mechanical and electrical) (down $5.6 billion), nickel (down $3.0 billion), iron and steel (down $2.9 billion), and energy (down $2.4 billion). Similarly, the decline in Ontario's imports was greatest in automotive products, machinery and equipment, and energy. Together, these three categories accounted for some 70 percent of the total provincial decline.

Exports from Alberta fell nearly as much as did exports from Ontario (down $40.4 billion) as they dropped 36.5 percent in value between 2008 and 2009. About four fifths of the decline came from energy, with losses fairly evenly split between crude oil and natural gas. As reported earlier, much of the decline related to price corrections in the sector, although volumes also declined slightly too. Imports into Alberta declined by $4.3 billion (19.3 percent) to $17.8 billion. Reduced activity in the energy sector lowered demand for imported iron and steel and their products by $0.9 billion. Electrical and non-electrical machinery and equipment imports fell by $0.7 billion, and imports of motor vehicles were down $0.6 billion from 2008.

Lower energy prices also impacted trade in Newfoundland and Labrador, where a $5.5 billion decline in energy exports accounted for about 90 percent of the overall $6.1 billion decline in provincial exports.

TABLE 5-2

Merchandise Trade by Province and Territory
($ millions and percent)

	2009 Exports $	2009 Export Growth %	2009 Export Share %	2009 Imports $	2009 Import Growth %	2009 Import Share %
Ontario	147,656.3	-21.8	41.0	208,368.4	-14.0	57.1
Alberta	70,430.5	-36.5	19.6	17,841.2	-19.3	4.9
Quebec	58,170.2	-18.1	16.2	63,194.9	-19.6	17.3
British Columbia	25,792.8	-23.3	7.2	36,648.6	-14.8	10.0
Saskatchewan	21,791.8	-26.4	6.1	7,243.7	-19.8	2.0
Manitoba	10,577.0	-18.9	2.9	12,998.2	-15.0	3.6
New Brunswick	9,911.6	-22.7	2.8	9,387.0	-12.6	2.6
Newfoundland and Labrador	8,514.0	-41.7	2.4	2,642.6	-37.4	0.7
Nova Scotia	4,336.3	-24.5	1.2	6,657.5	-20.9	1.8
Northwest Territories	1,526.4	-34.7	0.4	2.0	-86.5	0.0
Prince Edward Island	861.0	-2.0	0.2	41.3	-65.3	0.0
Yukon Territory	128.6	-2.6	0.0	76.2	-17.2	0.0
Nunavut	4.0	-83.0	0.0	49.8	56.2	0.0
Total	**359,700.3**	**-25.6**	**100.0**	**365,151.4**	**-15.9**	**100.0**

Source: Office of the Chief Economist, DFAIT; with data from Statistics Canada.

Likewise, cheaper prices lowered imports of energy by just over $1.6 billion to fully account for the overall $1.6 billion decline in that province's merchandise imports.

Across Canada, falling international energy prices affected the energy trade in each province. For Nova Scotia and New Brunswick, energy accounted for between 61.4 percent and 77.9 percent of the decline in provincial exports; with respect to imports, it was behind more than a quarter of the decline in Nova Scotia and all of the decline in New Brunswick. Although there was little impact on the import side, in Manitoba, energy accounted for about one fifth of the decline in that province's exports, while for Saskatchewan it was about one half. In British Columbia, energy was behind one third of the decline in provincial exports and one fifth of the decline in provincial imports. For the territories, energy was behind roughly 90 percent of the decline in imports in the Northwest Territories and for all of the decline in the Yukon.

For Prince Edward Island, exports of fresh and prepared seafood, and fresh fruits and vegetables fell a combined $61.8 million to lead that province's exports lower: P.E.I.'s exports slipped 2.0 percent ($17.1 million) to $861.0 million.

Cereals exports dipped 17.6 percent in Manitoba and 18.8 percent in Saskatchewan to account for roughly 10 percent of the decline in provincial exports. Wheat accounted for more than half the decline in each province. As well, in Saskatchewan, potash exports were down $2.4 billion to account for a further 30 percent of the decline in total exports for that province.

In British Columbia, the weak U.S. housing market was behind a $1.2 billion drop in lumber exports, while exports of pulp and paper fell by a similar amount.

Together, these three categories were behind slightly more than 30 percent of the decline in provincial exports in 2009.

On the imports side, beyond energy, reductions in machinery and equipment (both mechanical and electrical) and in motor vehicles trimmed between 40 percent and 60 percent off imports to Manitoba, Saskatchewan, and British Columbia. For Alberta, lower imports of these products cut total provincial imports back by 30 percent from 2008 levels.

Finally, in Quebec, export declines were widespread, with more notable declines in energy, lumber, pulp, paper, plastics, and iron and steel and their products. However, it was in machinery and equipment (down $2.2 billion) and in aluminum (down $2.9 billion) where the cutbacks in exports were the greatest. Cheaper energy prices lowered provincial imports by $9.5 billion, or 61.5 percent of the total.

Overview of Canada's Investment Performance

The world economic crisis strongly impacted foreign direct investment (FDI) inflows in 2009, which declined 38.7 percent (US$657.1 billion) to just over US$1 trillion. This is approximately half the value of inflows in 2007, preceding the crisis, when they totalled just under US$2 trillion. Canada's inward and outward investment flows were also impacted, but began to bounce back in the second half of 2009.

Despite the challenging economic environment, during the second half of the year Canadian Direct Investment Abroad (CDIA) outflows nearly recovered to their pre-crisis levels, reflecting Canada's relatively strong economic performance during the crisis. Although the stock of CDIA fell in 2009, this was entirely due to a revaluation adjustment as a result of a higher Canadian dollar.

On the other hand, the fall in FDI inflows to Canada in 2009 was greater than the global drop, following large inflows in 2007 and 2008 from mergers and acquisitions (M&As) in resource industries. FDI inflows also rebounded in the second half of the year, but are still below what they had been before the crisis. Canada's stock of inward FDI grew only marginally in 2009, due in part to weak growth in investment from Canada's largest source, the United States. The decline in U.S. investment, combined with strong growth from other source economies, has led to increased diversification among countries holding FDI stock in Canada. Canada's stock of inward FDI from China jumped by over two thirds in 2009, mostly due to Chinese investment in Canada's resource sector.

On a sectoral basis, the share of manufacturing continued to decline for both inward and outward investment stocks in 2009, as energy and mining increased reflecting the growing importance of this sector in the Canadian economy. The finance and insurance industries continued to dominate CDIA stocks, and now account for over 40 percent of the total.

Global Capital and Direct Investment Flows

Increased global capital market integration played a critical role in the rise of globalization over the last few decades, with total cross-border investment flows[1] rising dramatically in both developing and developed economies. However, net cross-border capital flows dwindled in 2008[2] (down 83.9 percent) as a result of the global financial crisis and the resulting uncertainty in financial markets, with a few countries, most notably the United Kingdom, experiencing a net capital outflow for the year.

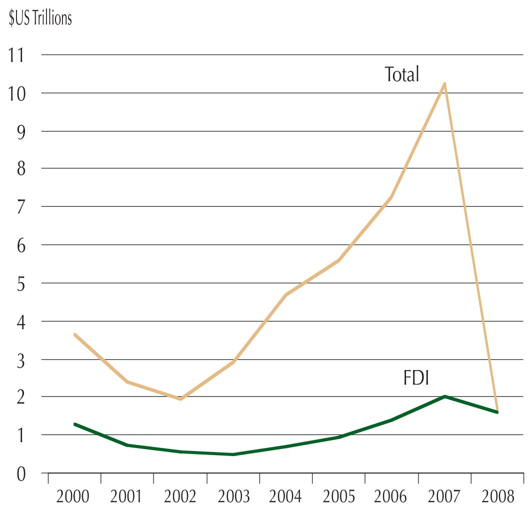
Foreign direct investment (FDI) proved to be the most stable of all the capital flows throughout the crisis (Figure 6-1). The year 2007 was the high-water mark for global direct investment flows (Figure 6-2), which hit US$1.98 trillion before declining 14.2 percent to US$1.7 trillion in 2008, and falling a further 38.7 percent in 2009 to just

1 Includes direct investment, portfolio investment, other investment flows (includes bank loans and deposits), and reserve assets.

2 Year of most recent available data.

FIGURE 6-1

Global capital inflows*

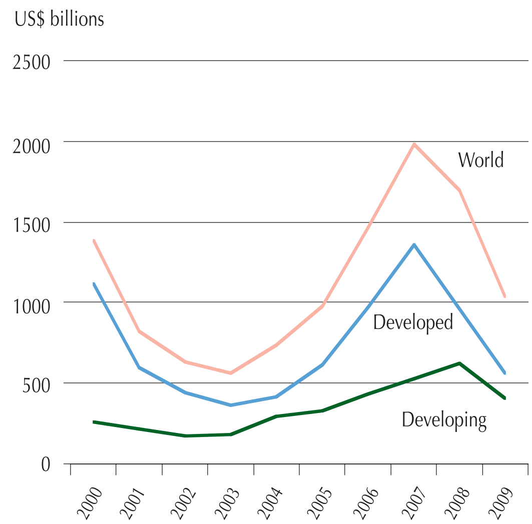


Data: IMF. Global Financial Stability Report and IFS. Total does not include Taiwan.

*Includes direct investment, portfolio investment, other investment flows (includes bank loans and deposits), and reserve assets.

FIGURE 6-2

Global FDI Inflows



Data: UNCTAD. World includes developed, developing and transition (not shown) economies.

over US$1 trillion. This marks a dramatic turnaround from previous years, where between 2004 and 2007 global FDI flows more than doubled as a result of strong global economic growth, increased corporate profits, higher stock prices, growth in private equity and hedge funds, and the increasing role of state investment agencies in emerging economies. The severity of the impact of the global financial crisis is also evident in the abrupt end to decades of uninterrupted growth in the world stock of FDI, which fell 4.8 percent in 2008 to US$14.9 trillion.[3]

The decline in 2009 flows was heavily driven by a sharp decline in cross-border mergers and acquisitions (M&As), which accounted for 71.0 percent of the overall decline. This led to a sharp increase in the greenfield share of FDI, rising to 76.9 percent in 2009 (Figure 6-3).

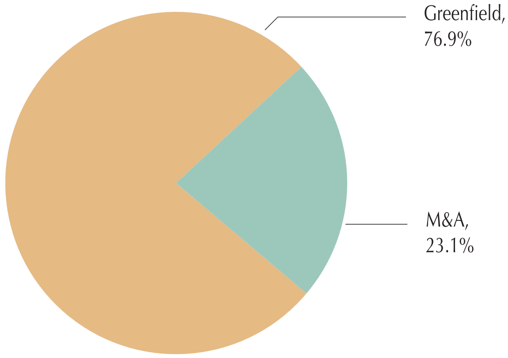
FDI inflows to developed countries contracted the most sharply, falling 41.2 percent in 2009 to US$565.6 billion (Table 6-1). However, unlike in 2008, flows to developing economies also fell in 2009, contracting by 34.7 percent to US$405.5 billion as the global downturn spread. Despite this drop, the share of flows to developing countries as a proportion of total global FDI continued to increase, reaching 39.0 percent, up from 36.6 percent in 2008.

Among developed economies, the United Kingdom and the United States stand out for the magnitude of their declines, with FDI inflows falling 92.7 percent to US$7.0 billion in the United Kingdom, and 57.0 percent to US$135.9 billion in the United States. These two countries together were responsible for 41.1 percent of the total global decline. Canada's FDI inflows also declined more strongly than the

3 Data: UNCTAD FDI database.

FIGURE 6-3

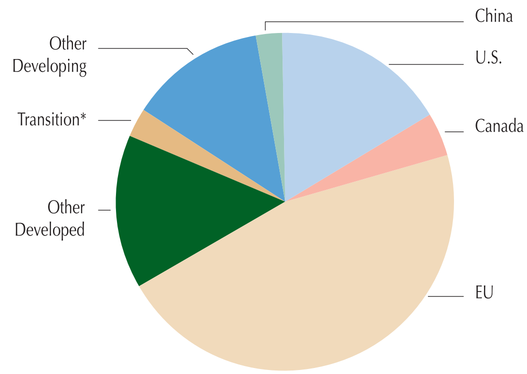
Mergers and acquisitions share of FDI inflows (2009)



Data: UNCTAD Global Investment Trends Monitor, January 19, 2010.

FIGURE 6-4

Global direct investment outflows (2008)



Data: UNCTAD.
*UNCTAD regional category "Transition" includes Russia, the CIS, and several countries in South East Europe.

global average. As a result, Canada's share of global inflows fell from 2.6 percent in 2008 to 1.9 percent in 2009.

FDI inflows to EU countries as a whole experienced a smaller decline than the global average. Excluding the United Kingdom, the decline is reduced to just 14.0 percent, far below the nearly 40 percent decline in world inflows. Two major EU economies, Italy and Germany, experienced growth in FDI inflows in 2009, which increased 75.5 percent to US$29.9 billion in Italy, and 40.7 percent to US$35.1 billion in Germany.

Inflows into Asia and Oceania[4] were down less than the global average, at 32.1 percent to US$264.1 billion. Within the region, inflows to China stand out because they remained relatively unchanged, falling just 2.6 percent to US$90.0 billion in 2009, making China the second-largest destination for FDI inflows, after the United States. India experienced a more significant decline, with inflows falling 19.0 percent to US$33.6 billion.

FDI inflows to Japan[5] remained weak for a large economy in 2009, experiencing a sizeable decline of 53.4 percent to just US$11.4 billion. This represents only 1.1 percent of world inflows, and Japan averaged just 0.85 percent of world inflows since 2000.

FDI inflows to Latin America and the Caribbean declined to US$85.5 billion, a drop of 40.7 percent. Inflows to Brazil were down sharply by 49.5 percent to US$22.8 billion. Inflows to Mexico also dropped significantly by 40.8 percent to US$13.0 billion.

Inflows to Africa also fell, dropping 36.2 percent to US$55.9 billion. While down significantly over 2008, this level remains much higher than in years prior to 2006, with Africa having seen considerable growth in FDI inflows since 2000. Within the continent, flows into Egypt were down 13.9 percent for the year to US$8.2 billion, and FDI inflows to South Africa fell even further, down 24.6 percent to US$6.8 billion.

FDI inflows to countries in South East Europe and the Commonwealth of Independent States fell 39.4 percent to

4 UNCTAD country aggregates are used to report global inflows.

5 Note that UNCTAD aggregate for Asia and Oceania excludes Japan.

TABLE 6-1

Global FDI inflows for selected regions and economies, 2004-2009 (US$ billions and percent)

Host Region/Economy	2005	2006	2007	2008	2009	Growth 2008/09 %	Share of world inflows 2009 %
World	**973.3**	**1,461.1**	**1,978.8**	**1,697.4**	**1,040.3**	**-38.7**	**100.0**
Developed economies	**613.1**	**972.8**	**1,358.6**	**962.3**	**565.6**	**-41.2**	**54.4**
Canada[a]	**25.7**	**59.8**	**108.4**	**44.7**	**19.3**	**-56.8**	**1.9**
United States	104.8	237.1	271.2	316.1	135.9	-57.0	13.1
Europe	506.1	631.7	899.6	518.3	373.5	-27.9	35.9
EU(27)	498.4	590.3	842.3	503.5	356.7	-29.2	34.3
France	85.0	78.2	158.0	100.7	65.0	-35.5	6.2
Germany	47.4	57.1	56.4	24.9	35.1	40.7	3.4
Italy	20.0	39.2	40.2	17.0	29.9	75.5	2.9
Netherlands	47.8	7.5	118.4	-3.5	37.8	--	3.6
United Kingdom	176.0	156.2	183.4	96.9	7.0	-92.7	0.7
Japan	2.8	-6.5	22.5	24.4	11.4	-53.4	1.1
Developing economies	**329.3**	**433.8**	**529.3**	**620.7**	**405.5**	**-34.7**	**39.0**
Asia and Oceania	214.0	283.4	332.7	388.7	264.1	-32.1	25.4
China*	72.4	72.7	83.5	92.4	90.0	-2.6	8.7
Hong Kong	33.6	45.1	54.4	63.0	36.0	-42.8	3.5
India	7.6	20.3	25.1	41.6	33.6	-19.0	3.2
Latin America and the Caribbean	77.1	93.3	127.5	144.4	85.5	-40.7	8.2
Brazil	15.1	18.8	34.6	45.1	22.8	-49.5	2.2
Chile	7.0	7.3	12.6	16.8	12.9	-23.0	1.2
Mexico	21.9	19.3	27.3	21.9	13.0	-40.8	1.2
Africa	38.2	57.1	69.2	87.6	55.9	-36.2	5.4
Russia	12.9	29.7	55.1	70.3	41.4	-41.1	4.0

Source: UNCTAD World Investment Report 2009 and Global Investment Trends Monitor January 2010.

a UNCTAD data for Canada is not available for 2009, Canada's inflows for 2009 are calculated using data from Statistics Canada converted to US$ using the annual average exchange rate.

* Does not include finance.

US$69.3 billion. Russia is the dominant recipient of inflows among these countries, although they fell 41.1 percent in 2009 to US$41.4 billion.

Global direct investment outflows in 2008[6] continued to be dominated by developed economies, which were responsible for 81.1 percent of outflows (see Figure 6-4), although the share from developing countries continues to increase. EU countries were the largest source of outflows with a 45.1 percent share, while the United States was the largest individual country source of FDI outflows at 16.8 percent. Despite

6 Year of most recent available data.

increases in Chinese direct investment abroad, China's share of total outflows remains low at 2.8 percent—smaller than Canada's 4.2 percent share.

Canada's Direct Investment Performance

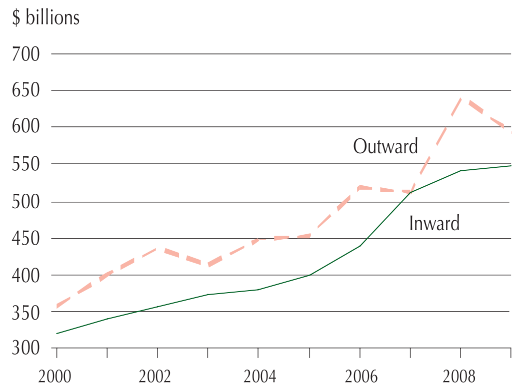
FDI provides benefits to Canadian firms through the transfer of knowledge, technology and skills, and increased trade related to the investment, all of which enhance Canada's productivity and competitiveness. FDI is also one of the ways in which Canadian companies can integrate into global value chains.

The global financial crisis hit with force in the second half of 2008, triggering a sharp decline in both inward and outward FDI flows, a slowdown in the growth of inward direct investment stocks and, as a result of a valuation adjustment due to currency changes, a sharp drop in CDIA stocks in 2009. Canada had experienced significant growth in both inward and outward stocks of FDI over the last 25 years. Prior to the global downturn, inward investment had accelerated dramatically between 2004 and 2007 as a result of a jump in cross-border M&As, strong economic growth, and investment in the resource sector.

Despite tough economic conditions, Canada saw inward investment stocks continue to increase modestly in 2009 (up 1.6 percent to $549.4 billion), albeit at a slower pace then in previous years (Figure 6-5). The stock of CDIA on the other hand declined by a significant 7.5 percent ($48.4 billion) in 2009 to $593.3 billion. However, the entire decline in the value of the CDIA stock in 2009 is due to a valuation readjustment resulting from the appreciation of the Canadian dollar against many currencies (in particular the U.S. dollar). This appreciation subtracted $72 billion (around 11 percent) from the overall Canadian outward direct investment position. Discounting this adjustment, CDIA would have increased by about $23.7 billion.

FIGURE 6-5

Canada's Inward and Outward Stocks of FDI



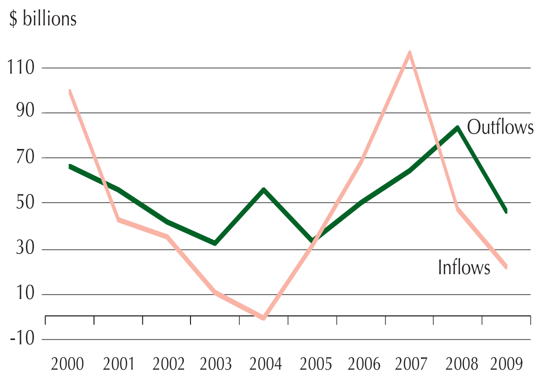
Data: Statistics Canada

Despite the drop in the measured value of the stock of CDIA, Canada maintained a positive net direct investment position (the difference between CDIA and FDI in Canada) of $43.9 billion, although down from $100.8 billion in 2008. For the thirteenth consecutive year CDIA in 2009 exceeded inward FDI, making Canada a net exporter of capital since the mid-1990s. Canada's net direct investment position with the United States, which had been positive for the first time in 2008 ($14.2 billion), turned negative (-$27.0 billion) in 2009 as a result of the appreciation of the Canadian dollar.

Canada's Inward FDI Flows

For the second consecutive year, Canada experienced a sharp decline in FDI inflows, which fell 53.7 percent to $22.1 billion (Figure 6-6). This is down 81.0 percent from the peak year in 2007 when inflows reached $116.4 billion, and continues a pattern of volatility over the 2000s. The quarterly FDI statistics show a modest rebound in Canadian inflows in the second half of

FIGURE 6-6
Canadian Direct Investment Flows



Data: Statistics Canada

2009 (Figure 6-7). This is a marked improvement from the negative flows in the first two quarters (disinvestment) but is still well below the average of inflows over the 2000s. The declines in 2008 and in 2009 were partly the result of fewer foreign acquisitions of large Canadian mining and energy companies (Figure 6-8), compared to 2007 when a number of very high profile sales took place.[7] While inflows were down over recent highs, they still remain above recent lows in 2003 and 2004.

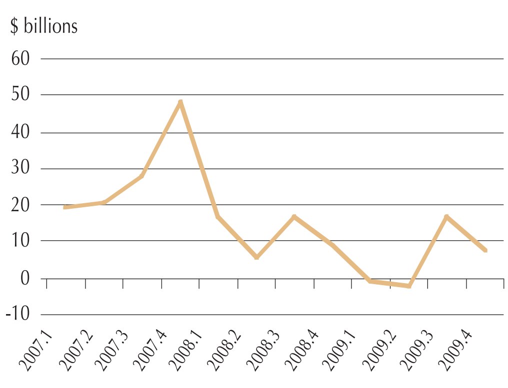
FIGURE 6-8
Foreign acquisitions of Canadian companies (>$5 billion CDN)

Year	Announced Value ($M)	Target	Acquiror
2009	8,270	Addax Petroleum Corp	Sinopec International Corporation
2008	5,900	Duvernay Oil Corp	Royal Dutch Shell plc
	5,000	Prime West Energy Trust	Abu Dhabi National Energy Company
2007	39,834	Alcan Inc.	Rio Tinto plc
	8,521	Ipsco Inc.	SSAB Svenskt Stal Aktibolaget
	7,054	Western Oil Sands Inc.	Marathon Oil Corporation*
	7,034	Novelis	Hindalco Industries Limited

Source: FP Infomart.
*Canadian partner involved

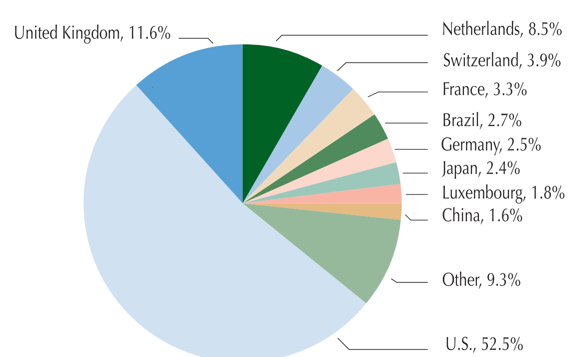
Internationally, Canada's decline in inflows was greater than that of the rest of the world. In 2009, Canada's share of world inflows declined for the second consecutive year, reaching 1.9 percent. This is below

FIGURE 6-7
Canadian Quarterly FDI Inflows



Data: Statistics Canada

FIGURE 6-9
Shares of FDI in Canada in 2009



Data: Statistics Canada

7 Note that not all of these investments may meet the definition of direct investment (or may do so at a different recorded value than the announced or market sales price) and are therefore not directly comparable with official direct investment statistics.

TABLE 6-2

Stock of Foreign Direct Investment in Canada by Region
(C$ billions and percent)

Region	2004	2008	2009	2004 Share (%)	2009 Share (%)	Growth 2008/09 %	Growth[a] 2004/09 %
World	**379.5**	**540.8**	**549.4**	**100.0**	**100.0**	**1.6**	**7.7**
North America and Caribbean	248.0	288.5	292.5	65.4	53.2	1.4	3.4
South and Central America	2.0	14.8	15.3	0.5	2.8	3.4	50.4
Europe	110.0	188.2	187.0	29.0	34.0	-0.7	11.2
Africa	0.5	1.8	1.8	0.1	0.3	2.5	28.3
Asia/Oceania	19.0	47.5	52.7	5.0	9.6	11.0	22.7
Top-10 Sources							
United States	243.3	283.5	288.3	64.1	52.5	1.7	3.4
United Kingdom	25.3	66.8	63.5	6.7	11.6	-5.0	20.2
Netherlands	20.0	49.2	46.5	5.3	8.5	-5.4	18.4
Switzerland	7.8	20.9	21.2	2.1	3.9	1.2	22.0
France	33.4	17.6	18.2	8.8	3.3	3.3	-11.4
Brazil	1.9	14.4	14.8	0.5	2.7	3.3	51.5
Germany	7.6	13.9	13.9	2.0	2.5	0.1	12.9
Japan	9.9	12.9	13.1	2.6	2.4	2.0	5.7
Luxembourg	2.9	7.0	9.9	0.8	1.8	41.1	27.3
China	0.1	5.2	8.9	0.0	1.6	69.0	139.2
Emerging Economies							
India	0.1	2.7	3.0	0.0	0.5	11.4	100.4
Russia	..	0.1	0.4	..	0.1	165.2	..

Data: Statistics Canada.

a) Compound average annual growth rate

Canada's share of world GDP (2.3 percent), and a sharp drop from Canada's share in 2007 (5.5 percent) and in 2008 (2.6 percent).

Regional Composition of Canada's Inward FDI Stock

Investors from the United States now hold only just over one half of Canada's inward FDI stock, with a 52.5 percent share valued at $288.3 billion (Table 6-2; Figure 6-9), down from nearly two thirds five years ago. In 2009, the recent trend of weak investment growth from the United States continued, with an increase of just 1.7 percent, and a five-year annual growth rate of just 3.4 percent (compared with 7.7 percent for all countries). This trend led to a reduced U.S. share of direct investment in Canada, which had been 64.1 percent in 2004. The U.S. share has shifted to investors from the U.K. (up 4.9 percentage points), and Asia-Oceania whose share has increased by 4.6 percentage points.

In 2009, the stock of FDI from the EU decreased by 1.2 percent to $163.7 billion. Despite this drop, European countries still account for six of the top ten sources of FDI in Canada and 34.0 percent of Canada's inward stock. The United Kingdom remained Canada's second-largest source of FDI, despite a 5.0-percent decline ($3.4 billion) to $63.5 billion. The stock of FDI from the Netherlands also fell, by 5.4 percent to

$46.5 billion, while that of Luxembourg jumped by 41.1 percent to $9.9 billion. Investments from France grew by a more modest 3.3 percent to reach $18.2 billion, while the stock of investment from Germany remained flat at $13.9 billion.

FDI from South and Central America continued to grow in 2009, albeit at a slower pace than in recent years, rising 3.4 percent to $15.3 billion. FDI from this region has risen dramatically in recent years, with a five-year annual growth rate of 50.4 percent. This growth is almost entirely attributable to investment from Brazil, which has a 96.9 percent share of the region's stock of FDI in Canada. Brazil remains in sixth place among all investors in Canada, and ahead of all other BRIC and developing/emerging economies for direct investment in Canada.

Investors from Asia and Oceania continued to lead growth in 2009, up 11.0 percent despite the economic downturn, raising the total stock from the region in Canada to $52.7 billion. Japan remains the largest investor from the region, with a 24.9 percent share of the Asia and Oceania stock after growing 2.0 percent in 2009 to $13.1 billion. Nevertheless, Japan's share has fallen dramatically in recent years, down from 52.4 percent in 2004, as emerging Asian economies, notably China, have increased their investments in Canada. China's stock of direct investment jumped 69.0 percent in 2009 to $8.9 billion, in part the result of M&As in the energy and mining sectors. This increase is remarkable given China held only $113 million in direct investment stocks in Canada as of 2004. Investment from the United Arab Emirates has also increased, from nearly negligible levels in recent years to hit $4.4 billion in 2009, although up only 1.9 percent from the previous year.

The stock of FDI from African countries grew marginally in 2009, rising to $1.8 billion. While little changed year over year, investment from Africa has grown strongly since 2004, when the investment stock sat at just $532 million.

Sectoral Composition of Inward FDI Stocks

Inward direct investment in 2009 grew slowly in most industries, with the exception of transportation and warehousing where it grew 123.0 percent to $8.9 billion (Table 6-3). Growth in FDI in mining and oil and gas extraction slowed in 2009 after several years of very strong growth, with a five-year average annual growth rate of 15.2 percent. The FDI stock in oil and gas extraction and support grew 2.7 percent in 2009 to $78.8 billion, for a 14.4 percent share among all industries (nearly double its share in 2000). Meanwhile mining, which had experienced strong growth since 2000, grew only 0.6 percent in 2009 to $25.4 billion. Within the mining and energy industries there were large swings in the ownership of FDI, with the U.S-held stock increasing $3.6 billion, the stock held by emerging and developed economies outside the OECD and the EU increasing by $3.8 billion, and the stock from the United Kingdom declining by $4.4 billion.

Manufacturing remains the largest destination industry for direct investment, but rose only marginally in 2009 at 0.4 percent to $195.2 billion. The share of direct investment in manufacturing has steadily eroded over the 2000s, standing at 35.5 percent in 2009, down substantially from 48.4 percent in 2000. The decline was widespread but led by beverage and tobacco products manufacturing (-7.0 percentage points), computer and electronics (-4.2 percentage points), electrical equipment (-2.9 percentage points), and transportation equipment (-2.9 percentage points). The decline in the manufacturing category would have been more severe if not for an increase in direct investment in primary metal manufacturing (+5.3 percentage points) as a result of large

TABLE 6-3

Stock of Foreign Direct Investment in Canada by Industry (C$ millions and percent)

	$ 2008	$ 2009	% 2009 Share	% Growth 2008/09	% Growth[a] 2004/09
All Industries	**540,830**	**549,400**	**100.0**	**1.6**	**7.7**
Manufacturing	194,317	195,151	35.5	0.4	6.8
Primary Metal	41,406	38,679	7.0	-6.6	41.5
Chemical	28,658	30,048	5.5	4.9	4.9
Transport Equipment	24,914	25,436	4.6	2.1	1.0
Petroleum and coal	29,638	31,027	5.6	4.7	15.6
Paper and Wood products	11,765	11,049	2.0	-6.1	-1.5
Mining and Oil and Gas extraction	102,033	104,272	19.0	2.2	15.2
Oil and Gas extraction and support	76,764	78,840	14.4	2.7	12.7
Mining	25,268	25,432	4.6	0.6	25.8
Transportation and warehousing	3,991	8,901	1.6	123.0	30.2
Finance and Insurance	73,082	71,936	13.1	-1.6	6.5
Management of Companies	59,657	59,931	10.9	0.5	2.7
Information and communication technologies (ICT)	20,932	21,561	3.9	3.0	1.6
All Other	86,818	87,648	16.0	1.0	7.8

Data: Statistics Canada
a Compound average annual growth rate

M&As in 2007, and steady growth in petroleum and coal products (+2.8 percentage points).

Foreign Affiliates in Canada

Information on foreign-controlled affiliates in Canada is gathered through the Corporations Returns Act (CRA), and provides information on foreign subsidiaries not available in the FDI data. CRA asset measures include the sourcing of funds domestically, giving a broader measure of foreign interests; as well, the CRA provides information on sales, employment, firm size, and profitability, data which are not available from the direct investment statistics. Among other things, this allows the performance of foreign-controlled firms to be compared with that of domestic firms within the Canadian economy.

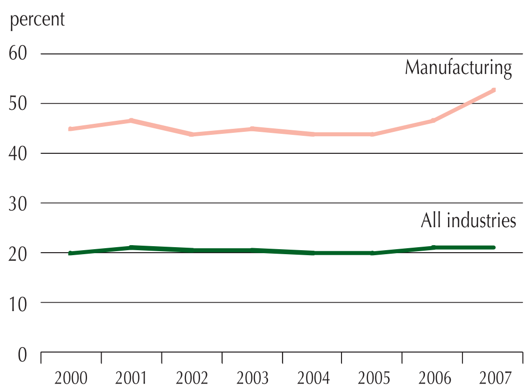
In 2007,[8] foreign-controlled firms accounted for 21.3 percent of all corporate assets in Canada, 29.4 percent of all operating revenues, and produced 26.2 percent of all operating profits.[9] Despite large increases in the stock of inward FDI in recent years, these shares have remained relatively flat (Figure 6-10) implying that domestically controlled firms expanded at a relatively similar rate, thereby keeping pace with the higher levels of foreign investment in the Canadian economy.

Foreign firms operating in Canada are much larger on average than their domestic counterparts (Table 6-4). Of the 1.34 million enterprises operating in Canada in 2007,

8 Year of most recent available data.

FIGURE 6-10

Foreign controlled assets in Canada



Data: Statistics Canada, Corporations Returns Act

only 0.4 percent were foreign controlled. However, foreign-controlled firms made up 15.4 percent of medium-sized firms, and 39.7 percent of all large enterprises.

The United States had by far the largest share of assets[10] among foreign-controlled firms at 58.9 percent, although the U.S. share has fallen in recent years, down from 66.1 percent in 2002. This is not unexpected as the U.S. share of direct investment in Canada also declined over this period. The United Kingdom, at 9.2 percent, and the Netherlands, at 5.6 percent, had the next largest shares, and combined with the United States accounted for nearly three quarters of the assets of foreign-controlled firms in Canada in 2007.

The distribution of foreign-controlled firms tends to be concentrated in certain industries such as manufacturing, mining and quarrying, and oil and gas extraction (Table 6-5). Finance and insurance have a lower share of foreign presence than the average (15.6 percent of assets of firms in those industries).[11] By contrast, more than half (52.8 percent) of manufacturing assets in Canada in 2007 were foreign owned (Figure 6-10), which represents the highest proportion of foreign control among non-financial Canadian industries. This share had been stable for most of the 2000s until 2007, when there was a large influx of FDI into the manufacturing sector in Canada through M&As. U.S. enterprises accounted for the largest share (32.0 percent) of total foreign-controlled manufacturing assets in Canada.

TABLE 6-4

Foreign control by size of enterprise (number of firms, 2007)

	Foreign	CDN	Total	Foreign Share (%)
Small enterprises	5,763	1,324,566	1,330,329	0.4
Medium enterprises	1,111	6,095	7,206	15.4
Large Enterprises	1,315	1,995	3,310	39.7

Data: Statistics Canada, Corporations Returns Act, 2007

9 Corporations Returns Act, Statistics Canada.

10 Excludes financial industries.

11 'Non depository intermediaries' is the one area of the financial industry with high levels of foreign control of assets, at 59.5 percent. Examples include firms who issue credit cards.

TABLE 6-5

Foreign control of assets by industry (non-financial), 2007, in percent

Manufacturing	52.8
Mining and quarrying (except oil and gas)[1]	47.6
Wholesale trade	41.8
Oil and gas extraction and support activities	38.5
Overall non-financial industries	**27.1**
Retail trade	22.8
Accommodation and food services	18.3
Administrative, waste management, remediation	17.3
Repair, maintenance and personal services	16.4
Arts, entertainment and recreation	13.4
Professional, scientific and technical services	12.6
Utilities	7.4
Real estate and rental and leasing	10.2
Transportation and warehousing	7.6
Information and cultural industries	6.4
Construction	4.7
Educational, healthcare and social assistance services	1.7
Agriculture, forestry, fishing and hunting	1.6

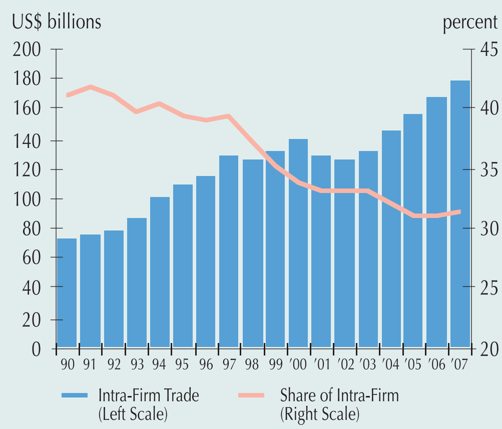
Data: Statistics Canada, Corporations Returns Act, 2007
1. Data from 2006

Intra-firm and Affiliate Trade Between Canada and the United States

Canada has the second-lowest share of intra-firm trade with the United States among the G7 nations, however, U.S. affiliates operating in Canada account for a larger share of trade than between any other G7 country. The latter includes U.S. affiliates in Canada exchanging goods with their U.S. parent (intra-firm trade) as well as with unrelated U.S. companies. These trends may actually reflect a higher degree of integration between Canada and the United States as U.S. firms find Canada an attractive location from which to serve the U.S. market, as shown by the high share of affiliate trade. But when exporting to the United States, affiliates deal directly with their customers without needing to go through their U.S. parents, as indicated by the low share of intra-firm trade.

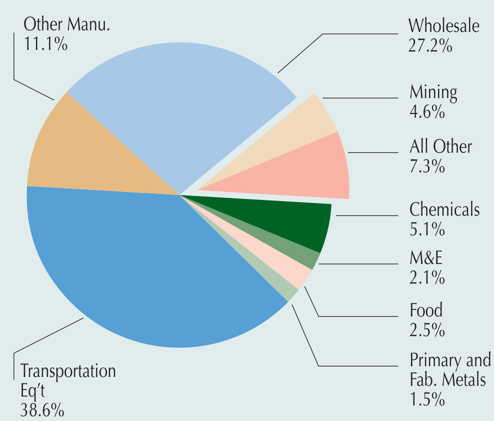
Nevertheless, the share of both intra-firm and U.S. affiliate trade between Canada and the United States has been on the decline. This is likely due to a combination of structural changes in the automotive industry over the past few years (as firms vertically disintegrated production, a number of auto parts suppliers located in Canada, previously affiliated with large U.S. auto makers, have become

Canada-U.S. Intra-Firm Goods Trade



Source: Office of the Chief Economist, DFAIT
Data: U.S. BEA

Canada-U.S. Intra-Firm Goods Trade



Source: Office of the Chief Economist, DFAIT
Data: U.S. BEA, 2007

independent companies), an overall decline in the share of highly integrated auto trade relative to overall Canada-U.S. trade, and the declining share of manufacturing in overall Canada-U.S. trade.

Intra-Firm Trade

In 2007, the latest year for which data is available, 32.1 percent of Canada-U.S. trade in goods was intra-firm, equivalent to bilateral trade of US$177.9 billion.[1] Although the value of intra-firm trade has more than doubled since 1990, the share of Canada-U.S. trade that is intra-firm has decreased over the same period, falling by about 10 percentage points since 1990, notwithstanding small increases in 2006 and 2007. This is due to faster growth in overall bilateral trade in goods between Canada and the United States which has outpaced growth in intra-firm trade.

In 2007, 60.9 percent of Canada-U.S. intra-firm trade was in manufacturing, down from nearly 80 percent at the beginning of the decade. Transportation equipment makes up the largest portion of Canada-U.S. intra-firm trade by far, accounting for 38.6 percent of the total. By contrast, mining accounts for a relatively small share (4.6 percent.) These two sectors are responsible for the decline in the intra-firm share of Canada-U.S. trade, due to a decline in the auto sector in recent years as well as less intra-firm trade within that sector, and growth in raw materials trade that is less intra-firm intensive.

Canada also had the second-lowest share of intra-firm trade with the United States among the G7 countries, after Italy. Almost all of Japan's trade with the United States was intra-firm (97.6 percent), due to the importance of wholesale trade affiliates, which accounted for nearly three quarters of Japan-U.S. intra-firm trade, while about two thirds of Germany-U.S. trade was intra-firm. Nonetheless, despite having a lower share, the magnitude of Canada's intra-firm goods trade with the United States ranks second among the

1 Data comes from the U.S. Bureau of Economic Analysis and covers the operations of foreign multinationals in the United States and U.S. multinationals abroad.

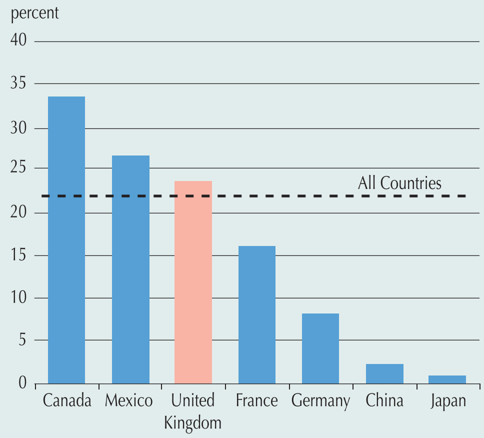
other G7 economies, due to the significant size of Canada-U.S. trade. About 36.1 percent of all Canadian goods exports to the United States were intra-firm, while only a quarter (24.8 percent) of Canadian goods imports from the United States was intra-firm. The bulk (80.4 percent) of intra-firm trade involves goods traded between U.S. parents and their affiliates rather than Canadian parent companies and their affiliates.

Affiliate Trade

Although Canada has one of the lowest shares of intra-firm trade with the United States among the G7, it has the highest share of trade accounted for by U.S. affiliates. In 2007, about 30.9 percent (US$176.3 billion) of Canadian trade in goods with the United States involved affiliates of U.S. companies operating in Canada. It is the latter that sets Canada apart and likely reflects the greater integration and levels of familiarity between the two economies. Unlike other foreign companies, Canadian and U.S. companies do not feel the need to establish a foreign presence in order to conduct trade. However, this type of trade has also experienced a decline in share of total trade over the past decade, down from about 40.9 percent in 1998. This was largely due to the manufacturing sector: U.S. affiliates' trade in this sector accounted for 22.8 percent of the total Canada-U.S. trade in goods in 2007, down from 34.7 percent in 1998.

In 2007, close to three quarters of the Canada-U.S. trade in goods carried out by affiliates of U.S. companies operating in Canada was in the manufacturing sector, with exports and imports reaching US$74.1 billion and US$55.8 billion, respectively. In fact, about a third of over-

Share of U.S. Manufacturing Imports from U.S. Foreign Affiliates in 2007



Source: Office of the Chief Economist, DFAIT
Data: U.S. BEA and USITC, 2007

all Canadian manufacturing exports to the United States were produced by affiliates of U.S. companies operating in Canada, a significantly higher share than other major U.S. import sources, such as Mexico or China. This in part reflects the integration of the Canada-U.S. automotive industry, since many affiliates of U.S. auto companies are still located Canada. The transportation equipment sector was responsible for 45.1 percent of Canadian goods exports by U.S. affiliates to the United States, representing over 61.5 percent of manufacturing exports by U.S. affiliates.

Canadian Direct Investment Abroad

CDIA outflows declined significantly in 2009, falling 44.1 percent to $46.3 billion. While CDIA outflows were low in the first half of the year, they picked up significantly in the second half as the economic recovery took hold. During the final two quarters of 2009, CDIA outflows had roughly returned to their 10-year average (Figure 6-11). It is also worth noting that CDIA outflows have been stronger and less volatile than inflows (Figure 6-6). Canada has also emerged as an important source of global direct investment outflows[12] with a 4.2-percent share, larger than Canada's share of world GDP (2.3 percent). Canada's annual share for the 2000s was 3.9 percent, compared to 3.0 percent over the 1990s, despite the growing importance of emerging economies in outward flows.

Regional Composition of CDIA Stocks

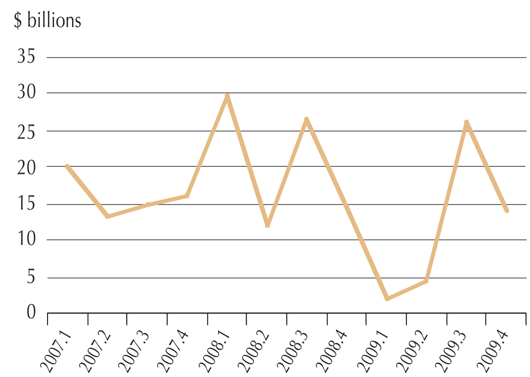
CDIA stocks in the United States, Canada's most important destination, fell by over 12 percent ($36.4 billion) in 2009 to $261.3 billion (Table 6-6; Figure 6-12). However, a stronger Canadian dollar was the cause of the decline, reducing the value of Canadian-held investments in the United States by $41 billion when converted back into Canadian dollars. Although the United States' share of CDIA (44.0 percent) fell in 2009, it remains close to the ten-year average (45.1 percent).

CDIA stocks in Europe decreased slightly (1.6 percent) in 2009 to $160.0 billion, although Europe's share of CDIA edged up slightly to 27.0 percent as it did not fall by as much as in other destinations. CDIA in the United Kingdom, the largest destination for CDIA in Europe, grew 9.3 percent ($5.6 billion) to $65.4 billion, despite a 4-percent appreciation of the Canadian dollar relative to the British pound. CDIA in Ireland fell 7.0 percent to $22.7 billion and in France fell 7.4 percent to $15.9 billion. Together, these three destinations account for 65.0 percent ($104.0 billion) of the total CDIA in Europe.

CDIA in the Caribbean countries (including Mexico) and Bermuda fared slightly better than average, declining by 7.3 percent to $99.5 billion. After strong growth in recent years, the value of CDIA in offshore financial centres Barbados and the Cayman Islands fell by 11.0 percent to

FIGURE 6-11

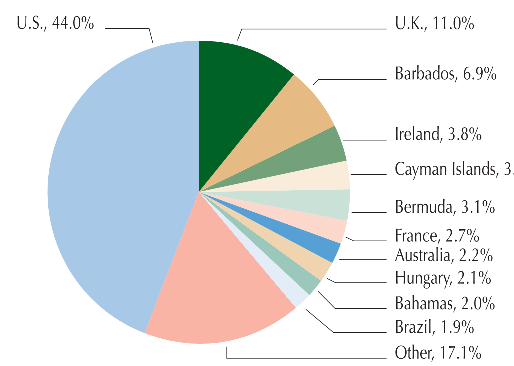
Canadian Quarterly CDIA Outflows (billions)



Data: Statistics Canada

FIGURE 6-12

Shares of CDIA in 2009



Source: Statistics Canada

12 In 2008, year of most recent available data for global outflows.

TABLE 6-6

Stock of Canadian Direct Investment Abroad by Region
(C$ billions and percent)

Region	2004	2008	2009	2004 Share %	2009 Share %	% Growth 2008/09	% Growth[a] 2004/09
World	**448.5**	**641.6**	**593.3**	**100.0**	**100.0**	**-7.5**	**5.8**
North America and Caribbean	260.2	405.0	360.8	58.0	60.8	-10.9	6.8
South and Central America	21.2	30.2	28.3	4.7	4.8	-6.3	6.0
Europe	130.2	162.5	160.0	29.0	27.0	-1.6	4.2
Africa	3.3	5.6	5.1	0.7	0.9	-9.3	9.2
Asia/Oceania	33.7	38.2	39.1	7.5	6.6	2.2	3.0
Top-10 Destinations							
United States	198.5	297.7	261.3	44.2	44.0	-12.2	5.7
United Kingdom	44.4	59.8	65.4	9.9	11.0	9.3	8.1
Barbados	27.1	45.8	40.8	6.1	6.9	-11.0	8.5
Ireland	19.9	24.4	22.7	4.4	3.8	-7.0	2.7
Cayman Islands	9.7	22.5	19.4	2.2	3.3	-13.7	15.0
Bermuda	12.4	18.0	18.2	2.8	3.1	0.7	8.0
France	14.3	17.1	15.9	3.2	2.7	-7.4	2.1
Australia	8.2	8.7	12.8	1.8	2.2	47.1	9.3
Hungary	8.4	13.2	12.2	1.9	2.1	-6.9	7.7
Bahamas	..	..	11.7	..	2.0	..	..
Emerging Economies							
Brazil	7.3	9.9	11.4	1.6	1.9	16.0	9.4
China	1.1	3.4	3.3	0.2	0.6	-2.4	25.4
India	0.2	0.8	0.6	0.0	0.1	-23.4	22.9
Russia	0.2	0.8	0.7	0.0	0.1	-3.6	32.4

Data: Statistics Canada, stocks.
a) Compound average annual growth rate

$40.8 billion, and 13.7 percent to $19.4 billion, respectively. The region's share of CDIA remained virtually unchanged at 16.8 percent.

Canada's direct investment in South and Central America declined 6.3 percent ($1.9 billion) in 2009 to $28.3 billion. The largest destination remains Brazil where the stock was up 16.0 percent to $11.4 billion, followed by Chile where CDIA declined 13.6 percent to $8.3 billion. As with inward FDI, CDIA in Brazil is greater than in the three other BRIC countries combined.

Asia and Oceania was the only region where the value of CDIA stock grew in 2009, edging up 2.2 percent to $39.1 billion. CDIA in Australia surged 47.1 percent to $12.8 billion, offsetting declines in Hong Kong (down 12.3 percent to $5.8 billion), Japan (down 14.0 percent to $3.6 billion), and India (down 23.4 percent to $601 million). CDIA in China was down 2.4 percent to $3.3 billion. Direct investment across the region is widely distributed, with nine countries having over $1 billion each in CDIA.

TABLE 6-7

Stock of Canadian Direct Investment Abroad by Selected Industry (C$ millions and percent)

	$ 2008	$ 2009	% 2009 Share	% Growth 2008/09	% Growth[a] 2004/09
Manufacturing	112,622	96,005	16.2	-14.8	-2.7
Mining and Oil and Gas extraction	104,507	89,943	15.2	-13.9	7.3
Oil and Gas extraction and support	78,862	65,786	11.1	-16.6	10.1
Mining	25,645	24,158	4.1	-5.8	1.4
Finance and Insurance	231,874	240,080	40.5	3.5	14.2
Management of Companies	91,402	61,392	10.3	-32.8	-4.4
Transport and warehousing	21,598	22,047	3.7	2.1	7.7
Information and cultural industries	18,445	22,145	3.7	20.1	3.0
Other	2,820	7,714	1.3	173.5	27.6
Information and communication technologies (ICT)	17,585	18,177	3.1	3.4	-6.5
All industries	**641,641**	**593,291**	**100.0**	**-7.5**	**5.8**

Data: Statistics Canada

a Compound average annual growth rate

The CDIA stock in African countries fell 9.3 percent ($522 million) in 2009 to $5.1 billion. Despite this drop, CDIA in Africa has grown significantly over the 2000s, at an average annual rate of 9.2 percent over the last five years.

Sectoral Composition of CDIA Stocks

Although the value of CDIA for most industries fell in 2009, the declines were far from evenly distributed. The largest drop was in the management of companies and enterprises category, which declined by over $30 billion (32.8 percent) to $61.4 billion. The next largest decline was in manufacturing where CDIA fell 14.8 percent ($16.6 billion) to $96.0 billion, followed by mining and oil and gas extraction where it fell 13.9 percent ($14.6 billion) to $89.9 billion.

Despite widespread declines, some industries saw substantial increases in the stock of CDIA. The finance and insurance industries, the largest recipients of CDIA, experienced a 3.5-percent increase ($8.2 billion) to $240.1 billion. CDIA has become increasingly concentrated in the finance and insurance industries, with this category now representing 40.5 percent of the CDIA stock. Information and cultural industries posted a substantial gain of 20.1 percent ($3.7 billion) to $22.1 billion and "all other industries", a catch-all for smaller industries, experienced an increase of 173.5 percent ($4.9 billion) to $7.7 billion.

The year-over-year decline in CDIA stocks in manufacturing, at 14.8 percent, was greater than average, and brought manufacturing's share of CDIA down to just 16.2 percent. The share of CDIA in manufacturing is much lower than that of inward FDI. Nevertheless, manufacturing remains the second-largest recipient of CDIA, followed closely by mining and oil and gas extraction.

Canadian Affiliates Abroad

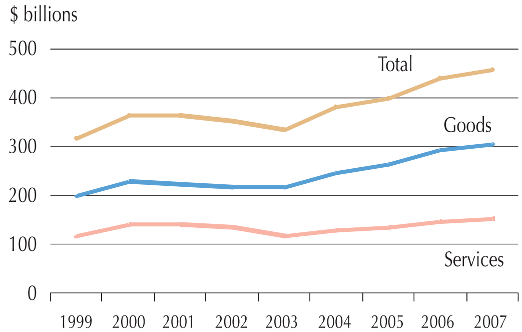
Foreign Affiliate Trade Statistics[13] (FATS) are a complementary source of information to CDIA statistics, providing an enhanced picture of the international activities of the affiliaties/subsidiaries of Canadian MNEs located abroad. While current data extend only to 2007, which precedes the economic crisis, these data provide evidence of greater diversification of Canadian MNEs' sales and employment away from the United States and the EU toward emerging markets. FATS also show declining Canadian affiliate activity in manufacturing industries, but with substantial growth in mining and energy, and finance.

Growth in global sales and employment by Canadian affiliates was strong in 2007 (Table 6-8; Figure 6-13), with sales increasing by 3.6 percent to $458.4 billion and employment increasing by 4.6 percent to 1.1 million. Sales and employment activity over the five preceding years mirrored the brisk growth observed in CDIA, with a five-year annual growth rate of 5.3 percent for sales and 4.8 percent for employment.

By region, growth among affiliates in 2007 continued a trend of faster expansion among emerging economies and developed economies outside the EU, providing further evidence of the diversification in the activities of Canadian companies internationally. Sales of affiliates based in the United States were nearly flat, declining by 0.2 percent to $238.2 billion, with employment increasing only marginally by 1.9 percent to 599,000. Sales and employment for affiliates based in the United Kingdom both declined, with sales falling by 1.4 percent to $32.8 billion and employment falling by a substantial 8.1 percent to 68,000. Growth was stronger among affiliates based in "Other EU" countries, with sales increasing by 6.4 percent to $55.8 billion and employment rising 10.3 percent to 161,000. Non-EU, non-U.S. OECD affiliates experienced even stronger growth, with sales rising 11.3 percent to $38.9 billion and employment growing

FIGURE 6-13

Canada's Foreign Affiliate Sales ($ billions)



Source: Statistics Canada

15.3 percent to 83,000. The highest growth in sales occurred among affiliates in "All Other" countries, which includes emerging economies, with sales growing by 11.8 percent to $93.1 billion and employment rising 9.3 percent to 224,000. Affiliates in these countries now account for 20.3 percent of all sales by Canadian affiliates, and 19.7 percent of employment.

Among goods-producing industries, a movement away from manufacturing toward energy and mining continued, in parallel with the shifting weight of these industries domestically. Sales among all goods-producing affiliates in 2007 rose 3.4 percent to $305.9 billion (Table 6-9), and employment increased by 1.7 percent to 698,000. The industry which grew the most in 2007 was once again mining and oil and gas extraction, which experienced 18.4 percent annual growth in sales over the preceding five years, reaching $105.1 billion, but a slower rate of growth (5.9 percent) in employment to 153,000. Despite sales declining by 3.7 percent and employment declining by 0.9 percent in 2007 to $186.7 billion and 527,000,

13 For the purpose of FATS, a foreign affiliate of a Canadian company is a subsidiary where the Canadian parent owns more than 50 percent of the firm, a stricter definition than direct investment statistics which only require 10-percent control. Statistics Canada collects data on Canadian affiliates' sales and employment abroad with a limited breakdown by region and industry.

TABLE 6-8

Canada's Foreign Affiliate Sales and Employees by Region

Geographical area	2007 ($ or #)	Yearly growth (%)	5 year CAGR (%)	Share (%)
Total sales	**458,417**	**3.6**	**5.3**	**100.0**
United States	238,152	-0.2	1.8	52.0
U.K.	32,838	-1.4	-0.9	7.2
Other EU	55,805	6.4	7.7	12.2
Other OECD	38,556	11.3	11.5	8.4
Other	93,066	11.8	17.6	20.3
Total employees	**1,135**	**4.6**	**4.8**	**100.0**
United States	599	1.9	3.4	52.8
U.K.	68	-8.1	-5.9	6.0
Other EU	161	10.3	11.4	14.2
Other OECD	83	15.3	5.7	7.3
Other	224	9.3	9.5	19.7

(C$ millions, thousands of employees)
Source: Statistics Canada

respectively, manufacturing remains the largest industry for Canadian affiliates, accounting for 40.7 percent of total sales and 46.4 percent of total employees.

Foreign affiliates are an important vehicle for Canadian companies selling services into international markets: while foreign affiliate sales of goods are only about two thirds as large as Canadian exports of goods, affiliate sales of services are more than twice the value of services exports. The higher reliance on foreign affiliates for services may be because a local presence is needed for the delivery of some services. While accounting for a lower share of total sales and employment among Canadian affiliates than goods-producing industries, growth in foreign affiliate services' sales has outpaced that of sales exports in recent years, growing 4.2 percent to $152.6 billion in 2007, and employment climbing 9.8 percent to 437,000.

Within services, the finance industry is by far the largest by sales, with sales growing 11.5 percent in 2007 to $56.0 billion, and employment up 2.3 percent to 44,000. Strong growth in the finance industry may be the result of acquisitions in recent years of foreign institutions by large Canadian banks and insurance companies, predominantly in the United States and Latin America. Unlike the strong growth seen in the finance industry in 2007, the affiliate sales of retailers plunged 16.1 percent to $19.9 billion, with no growth in employment. Nevertheless, five-year growth in this industry has been robust, with 31.4 percent annual growth in sales and 47.2 percent growth in employment.

Comparing Canadian foreign affiliate sales with exports provides insight into the strategies Canadian MNEs employ to service international markets. Global foreign affiliate sales of goods and services have risen faster than exports in recent years, and as of 2007 were equal to 86.0 percent of exports, up from 74.8 percent in 1999. This growth is driven mostly by the sales of goods, which have risen from 53.8 percent to 66.0 percent of the value of goods exports over the same period. This shows that the

TABLE 6-9

Canada's Foreign Affiliate Sales by Industry
($C millions)

NAICS	2007 $	% change	5 year CAGR (%)	Share (%)
Goods and services	**458,417**	**3.6**	**5.3**	**100.0**
Goods	**305,852**	**3.4**	**6.9**	**66.7**
Agriculture, forestry, fishing and hunting	1,884	36.1	9.7	0.4
Mining and oil and gas	105,045	14.3	18.4	22.9
Utilities, construction	12,247	39.7	16.6	2.7
Manufacturing	186,676	-3.7	2.2	40.7
Services	**152,564**	**4.2**	**2.4**	**33.3**
Wholesale trade	11,219	-2.5	2.9	2.4
Retail trade	19,873	-16.1	31.4	4.3
Transport and warehousing	10,173	12.5	-3.6	2.2
Information and cultural	18,041	16.3	-10.6	3.9
Finance (non-bank) and insurance	55,961	11.5	4.2	12.2
Professional, scientific,technical services	8,109	6.2	-4.8	1.8
Management	19,191	4.8	28.1	4.2
Other services	9,997	-5.0	-8.3	2.2

Source: Statistics Canada

affiliate sales route is gaining in importance relative to exports for goods, although it is still far from the level of services, where affiliate sales of services are more than double services exports (almost 220 percent their value, which is unchanged from 1999). The ratio of foreign affiliate sales-to-exports varies greatly by region, with Canadian firms much more likely to serve the U.S. market through exports than through affiliate sales. The proportion of such sales relative to exports to the United States rose slightly in 2007, to just over 60 percent. By contrast, for the EU, affiliates accounted for 176.4 percent of sales in relation to exports, and more than 174.1 percent from non-OECD countries.

The Canadian Trade Commissioner Service and Exporter Performance

1. Overview

Until very recently, little was known about the characteristics and dynamics of the population of Canadian exporting firms. With the availability of Statistics Canada's Exporter Register that links Canadian international trade transactions to longitudinal data on Canadian firms, it is now possible to examine the performance of Canadian exporters in a number of new dimensions. The data set also allows links to be made between exporter performance and assistance received from the Canadian Trade Commissioner Service (TCS), the Government of Canada's export promotion service.

This feature article presents the first-ever econometric assessment of the impact of the TCS on the export performance of Canadian firms: the results show this impact to be consistently positive. Indeed, exporters that received TCS assistance exported, on average, 18 percent more than comparable exporters that did not receive TCS assistance. The results also show that TCS assistance is effective in helping firms diversify into new markets: TCS clients export to 36 percent more markets than non-clients. In addition, the TCS has a positive impact on export product diversification.

The second part of this special feature explores exporter performance more generally and shows that it is the entry of firms into new markets, rather than growth in sales by existing exporters, that has been the growth engine for Canada's export in recent years. New entrants drove the increase in exports to Asia and Latin America, and even in the U.S. market, the entry of new exporters was critical in offsetting the exit of many firms from this market.

Small and medium-sized enterprises (SMEs) have been at the forefront of firms entering new markets. Indeed, the share of every regional market held by Canadian SMEs has increased, and in Asia, SMEs account for nearly half of Canadian export sales.

2. The Impact of Trade Commissioner Services on Canadian Exporter Performance

Key Findings:

- **Firms that access TCS services export on average 18 percent more than comparable firms that have not used these services.**
- **This means that every dollar spent on the TCS results in $27 dollars in increased exports.**
- **The TCS is also effective in assisting exporters to diversify their markets (TCS clients export to 36 percent more markets).**

Recent international trade literature suggests that sunk costs associated with market entry are the main reason for low export market participation by domestic firms. In Canada, only 24 percent of Canadian manufacturers engaged in the export market

(Baldwin and Gu, 2003). These sunk costs include the costs of obtaining market information for foreign countries, identifying foreign customers, finding reliable suppliers, developing distribution channels in foreign markets, dealing with the local regulations, learning how to adapt a product to local market conditions, and many others. These costs must be borne to make export sales and are not recoverable if the attempt to export fails.

Recognizing that firms have to overcome additional costs to break into foreign markets, governments worldwide operate export promotion programs to assist their exporters. However, government intervention that encourages export market participation is appropriate only when there is market failure in providing information. Recently, Copeland (2008) sets out the case for trade and investment promotion policy. He argues that general information relevant for doing business abroad has many of the characteristics of a public good given that there are information spillovers, such that the success of single exporters can be imitated by other firms at a much lower cost. Such spillovers could result in under-investment in information, a market failure that would result in less exporting than is economically efficient.

Earlier empirical literature that evaluated the effectiveness of trade promotion programs had been focussed mainly on associating export promotion budgets with overall trade performance and had largely been carried out with aggregated data. The availability of firm-level data in recent years allows a more in-depth assessment, and most of this literature shows a positive impact of trade promotion on export performance[1]. For instance, Volpe Martincus et al. (2008) report that the rate of export growth for assisted exporters was 17.0 percentage points higher than for non-assisted exporters.

TCS Clients: the data set for impact assessment

The impact of the TCS on Canadian exporter performance is assessed by linking the TCS client management data maintained by Foreign Affairs and International Trade Canada with Statistics Canada's Exporter Register and Business Register. For each identified exporting firm, the combined dataset provides information on the trade promotion services the firm received, the firm's merchandise exports by destination, and the firm's key characteristics (size as measured by employment, length of time in business, length of export experience, sector, and productivity). The matched dataset covers the period from 1999 to 2006[2]. As the Exporter Register data is derived from customs documents, it includes only merchandise exports and excludes exports of services.

On average, there were 5,747 TCS clients per year in the period of 1999 and 2006. About 60 percent of TCS clients were matched to Statistics Canada's Business Register. Clients not matched to the Business Register would include: non-business entities such as business associations, universities, provincial and municipal governments and other federal departments; foreign firms targeted by the Invest in Canada program; and Canadian firms whose identifiers in the TCS client management system are recorded differently than in the Business Register.

Of the TCS clients matched to the Business Register, approximately 65 percent (or 40 percent of all TCS clients) were matched to Statistics Canada's Exporter Register. The remaining 35 percent of TCS clients in the Business Register would be firms receiving

1 Alvarez and Crespi (2000), Volpe Martincus and Carballo (2008) and Volpe Martincus, Carballo and Garcia (2010).

2 The most recent Exporter Register data, published following the initiation of this study, is for 2008.

services for international commercial activities, such as export of services or investment abroad, that are not covered by the Exporter Register. They would also include firms preparing to export, as well as firms that are exporting but are not the exporter of record in customs documentation (for example, firms selling through a wholesaler).

With respect to the types of trade promotion services accessed by exporters, market prospect information and key contacts searches are the most frequently requested types of assistance, which suggests that information cost is the key obstacle to foreign market entry that firms are seeking to overcome with TCS assistance (See Figure 1).

For the period examined, 2,270 TCS clients were matched to the Exporter Register on average per year. This implies that only about 5 percent of the total population of Canadian merchandise exporters accessed TCS services. This coincides with survey work indicating a low level of awareness of the TCS within the Canadian business community.

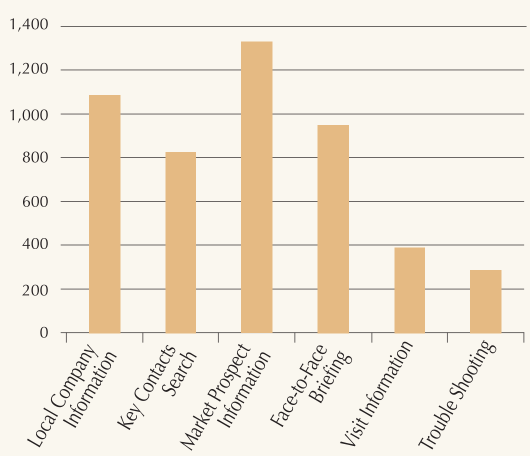
Characteristics of firms who seek TCS assistance

In addition to allowing for program evaluation, the matching of the TCS clients to Statistic Canada's Business and Exporter Registers allows for comparison of the TCS client population with the exporter population as a whole, to identify the profile of firms that are more likely to seek assistance.

SMEs comprise the vast majority of TCS clients. Over 50 percent of TCS clients are micro or small firms and some 30 percent are medium-sized firms.[3] However, in the exporter population as a whole, only 3 percent of the micro-sized exporters use the TCS compared to almost 17 percent of the large-sized exporters. This means that the larger the firm, the more likely it is to seek TCS assistance (See Figure 2).

FIGURE 1

TCS Clients by Service Type (Annual Average)

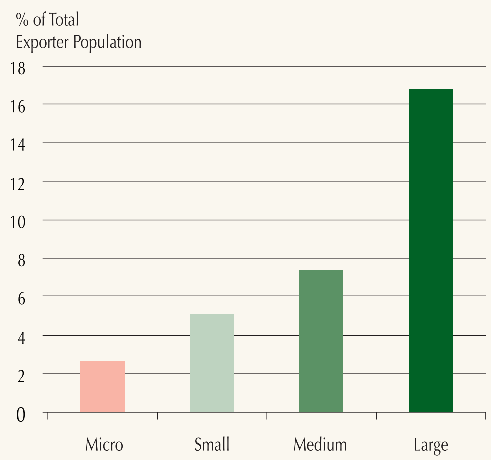


Source: Statistics Canada's Exporter and Business Register/Authors' calculations

Note: Each exporter can acquire more than one service.

FIGURE 2

Propensity to Seek TCS Assistance by Firm Size

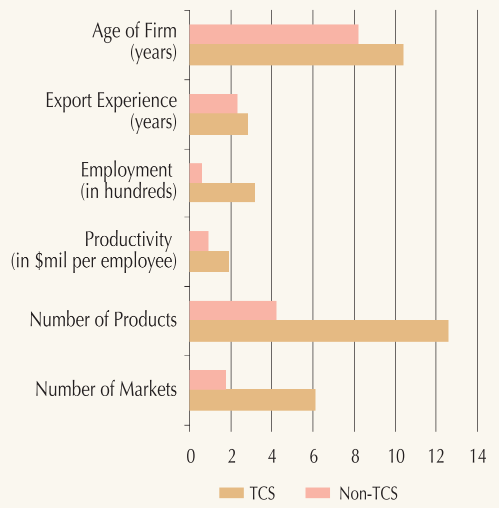


Source: Statistics Canada's Exporter and Business Register/Authors' calculations

3 The client exporter population is divided into four groups: the micro (1 to 10 employees), small (11 to 50 employees), medium (51 to 200 employees) and large (more than 200 employees).

FIGURE 3

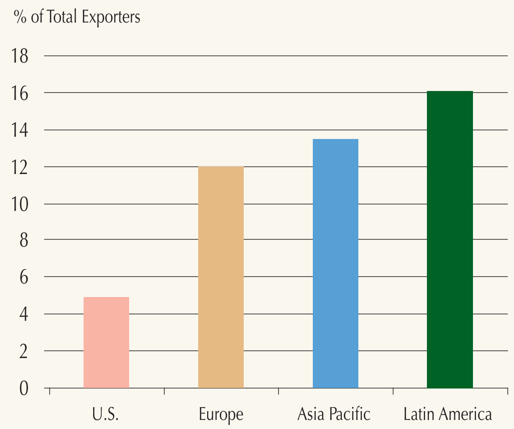
Characteristics of TCS and Non-TCS Exporters (Annual Average)



Source: Statistics Canada's Exporter and Business Register/Authors' calculations

FIGURE 4

Distribution of TCS Clients by Region



Source: Statistics Canada's Exporter and Business Register/Authors' calculations

Note: The sum of number of clients across regions does not equal to the total number of clients as some firms export to more than one region at the same time.

The likelihood that firms will seek TCS assistance also rises with the age of the firm (number of years in business), the number of markets it serves and the number of products it sells. TCS clients also have slightly higher productivity than the average exporter, and slightly more exporting experience (See Figure 3).

Firms that export to non-U.S. markets rely more frequently on TCS assistance (See Figure 4). Only 5 percent of firms that exported to the U.S. market accessed TCS assistance, compared to 12 percent of those that exported to Europe, 13.5 percent of those that exported to Asia-Pacific and 16 percent of those that exported to Latin America. This confirms that market entry costs are higher for Canadian firms in non-U.S. markets, and therefore the incentive to lower these costs by accessing TCS assistance is greater.

Firms operating in the food and beverage and in the computer, electronic and electrical equipment sectors are more likely to seek TCS assistance. This suggests that for more differentiated products, TCS assistance is more valued. Table 1 shows the sectoral distribution of TCS clients and non-client exporters. The sectoral distribution of TCS client exporters was fairly stable in the sample years. The wholesale & retail and other services sectors had the largest number of exporters, but these firms were proportionately less likely to seek TCS assistance. Firms in these sectors would normally be providers of import/export services, acting as intermediaries for the goods producers.

Assessing the impact of the TCS: the methodology[4]

The average treatment effects method has been adopted as the empirical framework for the present analysis. This approach is an adaption of experimental trials that involve a treatment group and a randomly

4 See Van Biesebroeck, Yu and Chen (2010).

TABLE 1

Distribution of Exporters by Sector—TCS Clients and Non-Clients
(% of Total Population – Annual Average, 1999-2006)

Sector (NAICS code)	Non-TCS	TCS
Agriculture (100)	5.5	3.0
Mining (200)	4.3	4.0
Food & Beverage (311-312)	2.4	9.1
Textiles & Clothing (313-315)	3.3	3.2
Wood & Paper Products (321-323)	5.3	4.0
Petroleum, Chemicals & Plastics (324-327)	6.1	8.7
Primary & Fabricated Metal (331-332)	6.3	5.3
Machinery (333)	5.4	8.6
Computer, Electronic & Electrical Equipment (334-335)	3.6	8.2
Transportation Equipment (336)	2.1	2.5
Miscellaneous Manufacturing (316, 337-339)	5.7	6.1
Wholesale & Retail (400)	32.1	20.9
Other Services (500-900)	17.9	16.6

Source: Statistics Canada's Exporter and Business Register/Authors' calculations

assigned control group. In the present case, exporters that received TCS assistance comprise the "treated" group. To be ascertained is whether exporters that received treatment perform better than comparable exporters that did not receive treatment, after con trolling for certain variables. Controlled variables include the following firm characteristics: number of years a firm was in business, number of employees as a measure of size, number of products, number of export markets, lagged value-added productivity and years of export experience.

The quality of comparisons and the estimation of the treatment effect depend on controlling for firm-level characteristics. Research on firm heterogeneity shows that successful exporters are often those with higher productivity, which in turn allows these exporters to bring down destination-specific sunk costs associated with accessing foreign markets. Similarly, the size of the firm, the amount of exporting experience, the number of export markets and the number of products are also found to be associated with export performance. Thus, controlling for these firm-level characteristics should ensure comparison of like exporters. Nevertheless, it is still possible there are unobservable firm characteristics influencing the success of exporting firms, which could lead to bias in the results.

The impact of TCS assistance is tested over three different time horizons. In the same year in which assistance is received, exporters that receive assistance are found to export **17.9 percent** more than comparable exporters who did not receive assistance. When the lagged effect of assistance is tested, the impact in the current year falls to **5.3 percent** and in the year following assistance it is **12.4 percent**, indicating that the impact of assistance increases with time. In a third test, the results show that exporters that received assistance more than once during the period examined had exports in subsequent years that were **25.6 percent** greater than non-clients

These results suggest that the current year impact of 17.9 percent likely captures more than the concurrent effect. For exporters that received the assistance continuously over the sample period, the estimated coefficient might capture both the concurrent and lagged effects. However, in the test of current and lagged effects, the impacts cannot be added together because not all firms are accessing service in all the years included in the data set.

The results show that the impact of the TCS on exporter performance is substantial. The results also indicate that the effect increases with time, rising in the year following service, and that once TCS assistance starts to influence export performance, the effect can continue to provide benefits as long as the exporter continues to export. Indeed, the long term impact of the TCS (26 percent) is higher than the immediate or following year effects. This may be because the specification applies only to continuing exporters, and it would reflect multiple TCS services if an exporter had received assistance multiple times.

Market and product effects

The results indicate that TCS assistance plays a strong role in helping firms to diversify into new markets and to introduce new products into export markets. An exporter that accessed TCS assistance exports on average to **35.7 percent more markets** than a comparable exporter that did not access TCS services. Similarly, an exporter with TCS assistance exports on average **15.5 percent more products** than a comparable exporter without assistance

Robustness Checks

Three robustness checks are carried out (see box), all of which corroborate the finding that TCS has a positive impact on exporter performance. The first check seeks to control for unobservable firm characteristics that might be driving export performance. The second controls for the influence of "peer exporters" and the third adopts a completely different methodology (propensity score matching) to compare clients with non-clients.

We assess the impact of export promotion on Canadian exporter performance using the following equation:

$$E[y|\omega,\mathbf{x}]=\gamma+\alpha\omega+\mathbf{x}\beta+\omega(\mathbf{x}-\psi)\delta$$

where γ is the variable that measures exporter performance (exports for a particular year), ω is the dummy variable indicating if treatment has been received, $\mathbf{x}$ represents the control variables and ψ is the sample means of $\mathbf{x}$. The estimated coefficient α measures the effect of TCS on exporter performance.

The timing of the TCS impact is tested with three different specifications of the equation.

1.1 **The concurrent effect of TCS on exports:** The treatment variable under this specification is a dummy variable that indicates if an exporter had received TCS assistance in the current year.

1.2 **The lagged effect of TCS on exports:** The treatment variable under this specification is a dummy variable that indicates if an exporter received TCS assistance in the preceding year.

1.3 **The lingering effect of TCS on the value of exports:** The treatment variable under this specification is a dummy variable that indicates if an exporter received TCS assistance in any of the years preceding the current period, but not in the current period. This estimation only includes exporters that are active in the export market for more than one year over the sample period.

The equation is then modified to gain further insights into the impact of the TCS:

2.1, 2.2 The market/product diversification effect of TCS. In these two cases the treatment variable is a dummy variable that indicates if an exporter had received TCS assistance in the current year, but the dependent variable is the number of markets/products served by the exporter, rather than the value of total exports by that exporter.

Robustness checks:

3.1 The panel fixed effect approach. This approach is used to control in part for unobservable firm characteristics. Unlike in the previous specifications where the data for the different years are pooled together, in this specification the data is organized in panel form. Only exporters who export consecutively at least for two years are included, reducing the sample size significantly compared to other regressions. The estimation result is expressed as the impact of the TCS on the growth rather than the level of exports (and is therefore not directly comparable to the results from the other specifications).

TABLE

Regression Results

No.	Specification	Estimated Coefficient for Treatment Variable (logarithm)		Export Gain (antilog equivalent)
		Current	Lagged or Lingering	
1.1	Concurrent Effect	0.165[a]		17.9%
		(0.027)		
1.2	Lagged Effect	0.052	0.117[a]	12.4%
		(0.038)	(0.029)	
1.3	Lingering Effect		0.228[a]	25.6%
			(0.018)	
2.1	Market Diversification	0.305[a]		35.7%
		(0.008)		
2.2	Product Diversification	0.144[a]		15.5%
		(0.013)		
3.1	Firm Fixed Effect	0.046[a]		4.9%
		(0.018)		
3.2	Peer Influences	0.079[b]	0.136[a]	14.6%
		(0.03)	(0.029)	

Note: (1) a and b represent significance levels of 1 percent and 5 percent, respectively. (2) The figures inside the brackets represent standard error.

3.2 **The effect of TCS under peer influence.** This specification examines whether the effect of TCS is reduced if we control for the influence of other exporters exporting to the same destination (peer exporters). The value of exports by peer exporters in the preceding period who export to the same destination as the exporter in the current year are included. The treatment variable is the same as the one used for the estimation of the lagged effect estimation. The results show that after controlling for peer influence, the effect TCS assistance does not disappear nor does it decline.

3.3 **(not shown in table) The effect of TCS evaluated with non-parametric techniques.** Propensity score matching using the kernel matching algorithm is applied to further validate the parametric estimation results. The treatment effect of TCS is positive and significant, which corroborates the findings based on the parametric estimations. The magnitude of the effect is much higher than those estimated using the parametric method, with TCS clients exporting **54 percent** more than comparable non-TCS clients.

Characteristics of firms that benefit the most from the TCS

The regression results provide insight into the types of firms that benefit the most from TCS assistance. These firms are typically "export–ready", i.e. larger firms with more years of business experience, but with fewer years of exporting experience and less diversified markets and products lines.

Combining these findings with those regarding the types of firms that are *most likely* to seek TCS assistance, we can state that older and larger firms are both more likely to seek TCS assistance, and benefit more from that assistance. However, while TCS clients tend to have somewhat more export experience, the TCS benefit declines with increased years of export experience. Similarly, while TCS clients tend to export more products to more markets, the benefit of TCS assistance declines as the number of products and markets increases.

Caveats

Two cautionary notes should be taken into account in interpreting the results. First, firms that receive TCS assistance but that do not export are excluded from this analysis. In many cases, this is appropriate in that the service provided could be in support of commercial activities other than exports of merchandise and is therefore outside the scope of this study (e.g., export of services, or support for investment abroad). However, there may be cases where service was provided for exports of merchandise but no merchandise was exported by the client. These exporters were excluded from the data set available for this study, which could bias the results upwards. This could be addressed in a future study with an expanded data set.

Second, as noted at the outset, estimating the average treatment effect in this study involves comparing the performance of exporters who received treatment with the performance of comparable exporters who did not receive such treatment, while controlling for observable firm-level characteristics. Nevertheless, it is still possible that there are unobservable firm characteristics influencing the success of exporting firms, leading to biased estimation results.

Cost Benefit Analysis

The aggregate value of exports by all TCS clients over the seven-year period of the study (2000-2006) was $260 billion.[5] Based on the estimate that TCS clients generate exports that are 17.9 percent higher than non-clients, the total value of the exports of these TCS clients would have been reduced by 17.9 percent to $220.5 billion, had they not received assistance. The estimated benefit from TCS assistance is therefore $39.5 billion.

Total government spending on the TCS over the period is estimated at $1.4 billion.[6] Dividing the benefit of $39.5 billion by the cost of $1.4 billion, yields the following result: on average **every $1 the government spends on the TCS** results in a **$27 increase in exports.** This must be considered approximate. Results will be underestimated in that the cost of TCS services are included for which the associated benefits are not included (i.e., clients engaged in the export of services and other commercial activities outside of merchandise exports). Overestimation will occur to the extent the 17.9 percent benefit includes the impact of services received in previous years.

3. Changing behaviour of Canadian exporters

Key Findings:

- **Exporters entering new markets make important contributions to Canada's export performance. Between 2000 and 2006, new entrants accounted for all of the growth in exports.**
- **New market entrants have been particularly important for growth in exports to Asia and Latin America. In the U.S. market, they have offset the decline in exports caused by exporters exiting that market.**
- **Not only is the diversification of Canada's export markets shown to be driven by new entrants, but it is the small and medium sized enterprises (SMEs) that are at the forefront of this diversification.**
- **SMEs have increased their share of the value of exports in all regions, and now account for nearly half of Canadian exports in the Asia-Pacific region.**

General profile of Canadian exporters

The number of Canadian exporters peaked in 2004 and has trended down since then (See Figure 5)[7]. As shown below, this decline in the number of exporters since 2004 is largely due to SME exporters departing the U.S. market. During the study period, Canadian exporters exported $360 billion and employed 3.4 million people annually. Total employment by Canadian exporting firms accounted for a fourth of total Canadian employment during this period. Both export values and employment peaked in 2005 before dropping in 2006.

Between 1999 and 2006, a typical Canadian exporter had been, on average, in business for 8.8 years, employed 73 people, exported 4.6 products to 2.0 countries, and generated total export sales worth $7.6 million.

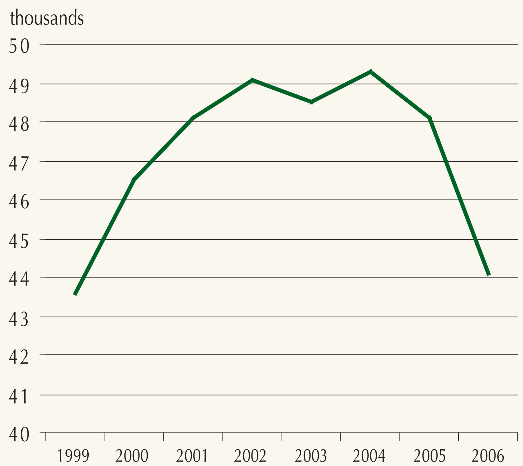
5 It should be noted that this export value excludes TCS clients that were eliminated from the regression analysis due to missing data in the Business Register.

6 This amount includes the cost of maintaining TCS offices both abroad and headquarters. It does not include the cost of FDI promotion, which the study does not measure, or of the trade policy activities of DFAIT.

7 Statistics Canada's publication "A Profile of Canadian Exporters" http://www.statcan.gc.ca/pub/65-506-x/65-506-x2008001-eng.pdf excludes the firms with annual exports less than $30,000. In this study, all exporters are included; therefore, the number of exporters reported in this paper is greater than that reported by Statistics Canada.

FIGURE 5

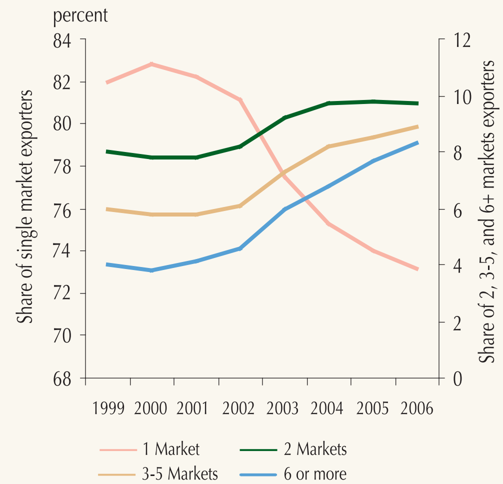
The Number of Canadian Exporters (,000 Enterprises)



Source: Statistics Canada's Exporter and Business Register/Authors' calculations

FIGURE 6

Exporters by Number of Export Markets (% of Total Exporters)



Source: Statistics Canada's Exporter and Business Register/Authors' calculations

Notably, the average number of markets served by each exporter increased from 1.7 in 1999 to 2.5 in 2006. In addition, the average number of years of experience of exporters doubled from 6 years in 1999 to almost 12 years in 2006, and the value of exports per exporter increased steadily from $7.4 million in 1999 to $8.6 million in 2006. However, the average number of products sold per firm did not increase over the period. The picture is thus one of a population of maturing firms gradually diversifying their export markets and increasing their export sales, but not their product palette.

The average 2.5 markets served by a typical Canadian exporter remains lower than the 3.3 markets served by a typical U.S. exporter (Bernard, Jensen and Schott, 2005). This is not surprising, given the large number of Canadian exporters who are single-market exporters to the U.S. market. However, as Canadian firms increasingly entered non-U.S. markets, the number of single-market exporters fell steadily. In 1999, the number of single-market exporters accounted for 82 percent of the total Canadian exporter population, while in 2006 this share fell to 73 percent.

Similarly, there was a steady increase in the number of multi-country exporters. In 1999, only 14 percent of Canadian exporters shipped their products to between two and five destinations; in 2006 18.6 percent of Canadian exporters did so. Similarly, in 1999 only 4 percent of Canadian exporters exported to more than 6 destinations; in 2006, 8.3 percent of Canadian exporters did so. The latter group, exporting to the largest number of destinations, grew the fastest (See Figure 6).

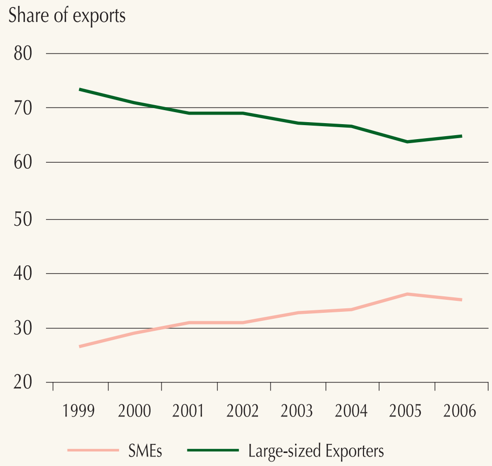
Trends by Size of Exporter

The share of SMEs in the Canadian exporter population remained stable at 95 percent over the period, but their contribution to total Canadian exports increased to 35 percent in 2006 from slightly more than 25 percent in 1999 (See Figure 7).

Between 1999 and 2006, many SME single-market exporters expanded into non-U.S. markets to become multi-market exporters.

FIGURE 7

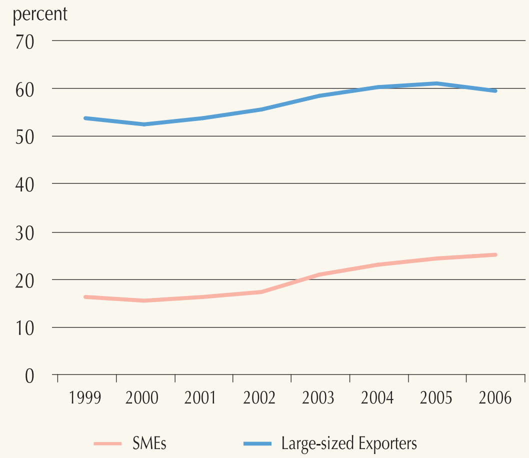
Share of Exports by Size (%)



Source: Statistics Canada Exporter and Business Register/Authors' calculations.

FIGURE 8

Share of Multi-Market Exporters in Total Exports



Source: Statistics Canada's Exporter and Business Register/Authors' calculations

The share of multi-market exporters in the total SME exporter group rose from 16 percent in 1999 to 25 percent in 2006, an increase of 9 percentage points. By comparison, the share of multi-market exporters among larger-sized firms only increased by 5 percentage points over the same period, from 54 percent to 59 percent (See Figure 8). Thus, the share of multi-market exporters rose more quickly within the SME population than among large-sized exporters.

It is noteworthy that the total number of multi-market SME exporters rose continuously until 2005 whereas the number of single-market SMEs (principally exporting to the U.S. market) first surged in the early 2000s and then fell back sharply as the Canadian dollar appreciated relative to the U.S. dollar post-2002. Indeed, the rate of expansion of multi-market SMEs accelerated in 2003 and 2004, the first two years that the Canadian dollar appreciated, coinciding with a decline in the single-market exporter group.

Sectoral Profile

The sectoral profile of the exporter population was relatively stable over the study period. Table 2 lists exporters by sector in 2006. Manufacturing plants made up about 42 percent of the total exporter population, but accounted for a substantially greater share of total Canadian exports (62.5 percent). This was largely due to the highly concentrated transportation equipment sector that constituted only 2.3 percent of the total Canadian exporter population but generated 20 percent of total export sales. Primary industries (e.g. agriculture and mining) accounted for about 10 percent of exports and a slightly smaller share of exporters. Tertiary industries (wholesale and retail distribution and the services sector) accounted for a large share of total exporters, but contributed a much lower proportion of total export values.

Within manufacturing, resource-based sectors (wood and paper products, petroleum, chemical and plastics, primary and fabricated metal) accounted for 18 percent

TABLE 2

Sector Profile of Canadian Exporters by North American Industry System (NAICS) in 2006

Sector (NAICS)	Number of Exporters	Proportion of All Exporters (%)	Value of Exports ($B)	Proportion of All Exports (%)
Agriculture (100)	2,021	4.5	4.1	1.1
Mining (200)	1,729	3.9	34.8	9.2
Food & Beverages (311-312)	1,233	2.8	12.2	3.2
Textile & Clothing (313-315)	1,479	3.3	3.1	0.8
Wood & Paper (321-323)	2,283	5.1	29.3	7.7
Petroleum, Chemical & Plastics (324-327)	2,941	6.6	41.9	11.0
Primary & Fabricated Metal (331-332)	2,985	6.7	37.5	9.9
Machinery (333)	2,726	6.1	13.5	3.5
Computer, Electronics & Electrical Equip. (334-335)	1,754	3.9	14.7	3.9
Transportation Equip. (336)	1,016	2.3	78.3	20.6
Miscellaneous Manufacturing (316, 337-339)	2,493	5.6	7.4	1.9
Wholesale & Retail (400)	13,880	31.0	63.5	16.7
Other Services (500-900)	8,245	18.4	40.0	10.5

Source: Statistics Canada's Exporter and Business Register/Authors' calculations

of total Canadian exporters and represented over 28 percent of total Canadian export values. By contrast, the textiles and apparel and miscellaneous manufacturing sectors, are dominated by a large number of SMEs that generate a relatively small share of total exports.

Market Profile

The most remarkable feature of Canadian exporter dynamics over the period of the study was the gradual shift away from the U.S. market towards markets in Europe, Asia and Latin America. As shown in Table 3, between 2001 and 2006, the number of Canadian firms that exported to the U.S. market, fell by 15 percent[8], while the number exporting to Asia, Europe, and Latin America increased sharply, with the biggest increase to Latin America (Figure 9).

SME exporters led the migration into new export markets both in terms of number of exporters and value of exports. The increase in export value generated by SME exporters is especially notable in the Asian markets. In 1999, SME exporters made up 35 percent of total export sales to Asia; in 2006, this share reached 47 percent—almost as much as the contribution by large-sized exporters (See Figure 10).

Direct trade versus through intermediaries

The mechanisms which support market diversification depend on a number of factors, including distance to market, significance of trade costs and size and productivity of the exporting firm. When trade costs (e.g., establishing own distribution networks) are high and potential markets are distant, exporters (particularly SMEs) are

8 Note that exporters exiting the U.S. market might continue to export to other markets, e.g., faster-growing emerging markets.

TABLE 3

Canadian Exporters by Destination

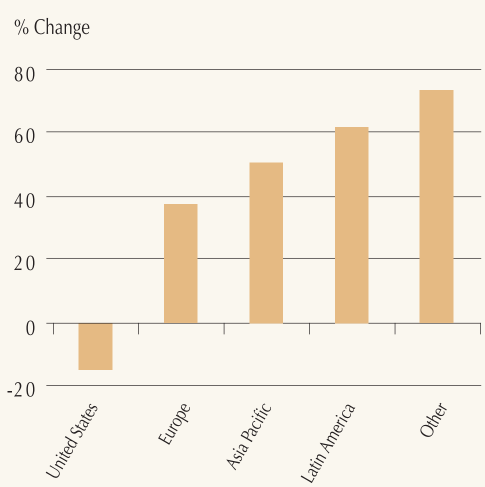
Year	United States	Europe	Asia Pacific	Latin America	Other
			Number		
1999	38,862	6,371	4,502	2,675	4,383
2000	41,578	6,451	4,731	2,675	4,416
2001	42,876	6,973	5,166	2,888	4,926
2002	43,111	7,638	5,880	3,118	5,647
2003	41,219	9,092	6,798	3,784	7,152
2004	40,553	10,169	7,853	4,508	8,434
2005	39,519	10,253	8,126	4,903	9,038
2006	36,276	9,552	7,784	4,670	8,548
Change 2001-06	-6,600	2,579	2,618	1,782	3,622
% Change 2001-06	-15.4	37	50.7	61.7	73.5

more likely to use intermediaries such as wholesalers and retailers to facilitate exporting. As such, the share of exports handled by wholesalers and retailers increases with the difficulty faced by exporters in accessing destination markets. As illustrated in Table 4, 70 percent of SME export sales to Asia and Latin America were by wholesalers and retailers in 2001. In more mature markets such as the United States and Europe, the share of SME exports via wholesale and retail networks was about 50 percent.

Of particular note is the decline of the importance of intermediaries in SME export sales to Asia and Latin America over the study period. This share dropped from 70 percent in 2001 to around 50 percent in

FIGURE 9

Growth in Number of Exporters, % change, 2001-06



Source: Statistics Canada's Exporter and Business Register/Authors' calculations

FIGURE 10

Share of Value of Exports by Size of Firm (%)

Source: Statistics Canada's Exporter and Business Register/Authors' calculations

TABLE 4

Share of Export Sales by Sector (%)

	United States		Asia	
	SME	Large	SME	Large
2001				
Agricultural & Commodities	8.5	6.7	13.1	6.6
Food & Beverages	5.1	4.9	4.7	5.5
Wood, Paper & Chemical	15.5	20.8	5.0	27.3
Other Manufacturing	20.8	55.4	7.0	21.7
Wholesale & Retail	49.6	12.2	70.0	39.0
2006				
Agricultural & Commodities	11.4	7.4	29.1	12.0
Food & Beverages	3.4	4.4	3.0	6.2
Wood & Paper & Chemical	14.1	22.9	4.1	22.9
Other Manufacturing	19.5	52.2	10.9	27.5
Wholesale & Retail	51.0	13.1	52.1	31.3
	Europe		**Latin America**	
	SME	**Large**	**SME**	**Large**
2001				
Agricultural & Commodities	12.7	12.6	6.9	3.8
Food & Beverages	5.6	2.4	5.2	5.3
Wood, Paper & Chemical	9.2	17.3	5.1	30.4
Other Manufacturing	25.3	56.6	11.7	33.4
Wholesale & Retail	46.8	9.8	70.8	27.1
2006				
Agricultural & Commodities	22.3	18.6	7.6	5.2
Food & Beverages	4.2	2.3	3.6	6.5
Wood & Paper & Chemical	6.6	13.7	8.3	28.1
Other Manufacturing	37.8	52.1	17.4	32.2
Wholesale & Retail	28.5	13.2	57.7	27.9

Source: Statistics Canada's Exporter and Business Register/Authors' calculations

2006; presumably once firms have established their potential for direct sales in foreign markets, the need for intermediaries diminishes.

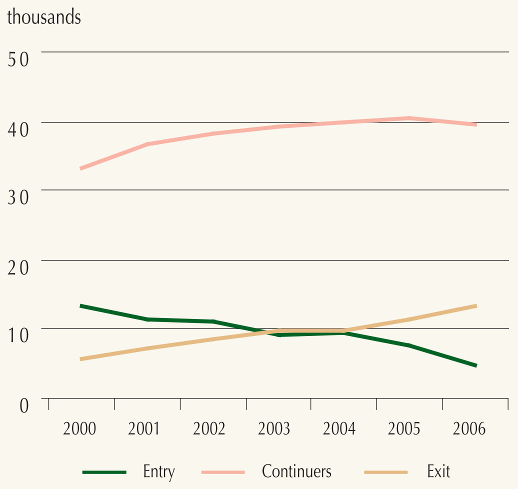
Entry and Exit Dynamics

Turnover or "churn" in the exporter population is considerable. On average, about 9,500 new Canadian firms entered the export market every year between 2000 and 2006, accounting for almost one quarter of the total Canadian exporter population. At the same time, a similar number of firms exited the export market (See Figure 11).

At the beginning of the study period, the number of exporters entering the export market exceeded those departing markets by a wide margin; however, by the end of the period, this situation had reversed. The dramatic decrease in the number of new entrants combined with the sharp increase in the number of exiting firms resulted in a net decrease in the number of exporters by the end of the period. As noted previously, the net decrease in number of Canadian exporters was a phenomenon exclusive to the U.S. market. Canadian exporters continued to enter non-U.S. markets.

FIGURE 11

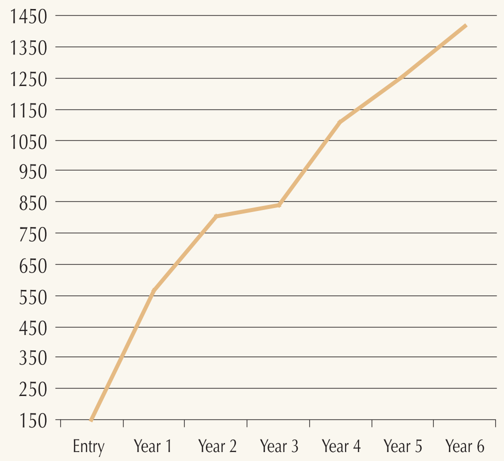
Number of Entries, Continuers and Exiters (,000), 2000-06



Source: Exporter and Business Register/Authors' calculations

FIGURE 12

The Average Value of Exports per Firm after Initial Entry ($000)



Source: Statistics Canada's Exporter and Business Register/Authors' calculations

The impact of this exporter churn on the annual value of exports was modest since, on average, continuing exporters accounted for 99 percent of the total value of exports. Nevertheless, as shown below, new entrants have a considerable impact on the value of exports over the longer term.

New exporters often start out with one export destination and generate very small export sales initially. Over 90 percent of all new exporters in Canada started off exporting to one destination, in most cases (for 85 percent of these new exporters) the United States was their first destination. In 2000, the value of exports generated by all new entrants summed to $1.98 billion, which is equivalent to 0.6 percent of total exports for the year. That share shrank to only 0.4 percent in 2006, reflecting the declining number of new entrants.

New trading relationships are much more fragile and prone to failure than those that are established. About 50 percent of exporters who started in 2000 were no longer exporting after two years, and after six years, only a quarter of new exporters were still exporting.

However, once the new entrants established themselves in the export market, their export revenues increased significantly (See Figure 12).

Market diversification of Canadian exporters was driven by the different entry and exit dynamics in the four regional markets. Between 2000 and 2006, there was a net exit from the U.S. market as the total number of new entrants (49,336) was less than the total number of exiters (51,091). By contrast, new entrants outnumbered exiters in each of the other major regional markets. The number of net entries was 792 for Asia, 821 for Europe, and 345 for Latin America.

While the number of continuing exporters to the U.S. market remained stable, this was not the case in the other three markets. Net increases in the number of continuing exporters were significant in Asia, Europe and Latin America. This indicates that new entrants in these latter three markets

TABLE 5

Entries, Exits, and Continuers by Region

Year	United States			Asia Pacific		
	Entries	Continuers	Exits	Entries	Continuers	Exits
2000	11,129	30,449	4,668	715	4,016	327
2001	9,483	33,393	6,077	639	4,527	366
2002	7,608	35,503	7,268	866	5,014	523
2003	6,647	34,572	8,011	924	5,874	657
2004	6,174	34,379	7,788	1,091	6,762	745
2005	5,371	34,148	8,375	821	7,305	910
2006	2,924	33,352	8,904	503	7,281	1,239
Total	49,336		51,091	5,559		4,767
Year	**Europe**			**Latin America**		
	Entries	**Continuers**	**Exits**	**Entries**	**Continuers**	**Exits**
2000	966	5,485	427	318	2,357	162
2001	870	6,103	553	263	2,625	174
2002	1,136	6,502	650	340	2,778	233
2003	1,281	7,811	782	403	3,381	256
2004	1,417	8,752	922	513	3,995	285
2005	775	9,478	1,298	424	4,479	447
2006	598	8,954	1,590	236	4,434	595
Total	7,043		6,222	2,497		2,152

Source: Statistics Canada's Exporter and Business Register/Authors' calculations

were able to consolidate their initial footholds in their new markets. This outcome is significant given the importance of continuing exporters in generating export sales.

Export growth can be decomposed into changes in the value of exports by established exporters (i.e., the intensive margin) and changes in the set of exporting firms (the extensive margin)[9]. Comparing the cumulative contribution of entries and continuers to total export growth between 2000 and 2006 yields the finding that the diversification of Canadian exports into non-U.S. markets has been mainly driven by changes at the extensive margin of trade. While continuing exporters explain a large part of the total value of exports, it was new entrants that accounted for most of the growth.

Table 6 shows the notable contribution of net entries to export growth. Total exports grew by 2.2 percent[10] between 2000 and 2006. Continuing exporters (i.e., those that were exporters in both 2000 and 2006) reduced overall export growth by 1.4 percentage points. By contrast, new entrants contributed 9.4 percentage points to growth. Meanwhile, exiters subtracted 5.8 percentage points from export growth. Thus, the net contribution by new entrants to total export growth over the period was almost 4 percentage points. Analysis of the entry and exit

9 See Chen and Yu (2010).

10 Statistics Canada's publication "A Profile of Canadian Exporters" http://www.statcan.gc.ca/pub/65-506-x/65-506-x2008001-eng.pdf includes exports by all exporters including those who are not matched to the Business Register, while the data reported in this feature article include firms matched to the Business Register only. Therefore, the growth rates presented reported here will differ from those based on the published data.

TABLE 6

Growth Decomposition by Market (%)

2000-06	Export Growth	Contribution of: Continuing Exporters	Entrants	Exits	Net Entrants
Total	**2.2**	**-1.4**	**9.4**	**-5.8**	**3.6**
U.S.	–3.5	-5.6	7.6	-5.5	2.1
Asia	28.7	14.7	30.6	-16.7	13.9
Europe	33.5	21.9	24.4	-12.9	11.5
Latin America	23.2	5.4	33.1	-15.2	17.9

Source: Statistics Canada's Exporter and Business Register/Authors' calculations.

dynamics taking place during the period confirms that the extensive margin was far more important in explaining the overall export growth than the intensive margin.

Table 6 also reports the decomposition of Canadian export growth by region. Total Canadian exports to the U.S. market declined by 3.5 percent between 2000 and 2006. This reflected the fact that the positive contribution of new entrants of 7.6 percentage points was more than offset by the negative contribution of continuing exporters of 5.6 percentage points, together with the negative contribution of 5.5 percentage points from exiters. The decline in export sales by continuing exporters highlights the deterioration of the trading environment for Canadian firms in the U.S. market, which induced many exporting firms to exit the U.S. market, particularly those that were less competitive. That said, without the large contribution of new entrants offsetting the negative effects of these departures and continuers, the decline in export sales would have been significantly greater. This underscores the vital importance of continuing export promotion to encourage new entrants: countries that depend on their existing export bases will suffer a steady erosion of their export performance.

In Asia, total Canadian export growth was high, up 28.7 percent from 2000 to 2006. Of this, 14.7 percentage points can be accounted for by the expansion of existing trading relationships (i.e., growth at the intensive margin). New entrants contributed an even greater 30.6 percentage points, while exiters subtracted 16.7 percentages points, resulting in a contribution from net entry of 13.9 percentage points.

Total export growth to Latin America reached 23.2 percent during the study period. Growth at the intensive margin contributed 5.4 percentage points while gross entries contributed significantly more (33.1 percentage points). The contribution of net entries was 17.9 percentage points. Clearly, with respect to Canada's total export growth to Latin America, the extensive margin contributed much more significantly to growth than the intensive margin.

Europe accounted for the highest export growth among all of Canada's destination regions, increasing by 33.5 percent. Of this, 21.9 percentage points can be accounted for by export sales of continuing exporters. This result is consistent with the findings in the previous section that Europe recorded the greatest growth in the number of continuing exporters among all regions. The gross contribution of new entrants amounted to 24.4 percentage points; this was partially offset by the negative contribution of exiters of 12.9 percentage points, resulting in a contribution from net entries of 11.5 percentage points.

5. Conclusion

The recent availability of export data at the firm level permits closer analysis of Canadian export performance than is possible with aggregated data. Linking these data with data from TCS client management database made feasible this first-ever econometric assessment of the impact of the Trade Commissioner Service (TCS) on Canadian exporter performance.

The estimation results show that TCS assistance has a consistently positive effect on the value of Canadian exports. Exporters that received assistance export almost 18 percent more on average than comparable exporters that did not receive such assistance. This finding is robust across a range of specifications and alternative methodologies. Furthermore, cost-benefit analysis suggests that every dollar spent on the TCS yields $27 in export sales. The assessment also finds that the TCS helps its clients export 15 percent more products to 36 percent more markets.

While the analysis shows that the typical Canadian firm has much to gain from TCS assistance, it also shows that some types of firms benefit more than others. Those that benefit more include firms that have been in business longer and are larger, which indicates that they are "export ready." These firms are also characterized by lower productivity, less export experience, and are less diversified in their products and markets, all indicators suggesting a greater need for assistance.

The firm-level data can also be used to analyze the dynamics underlying the diversification of Canada's exports away from the U.S. market. The average number of export destinations served per firm increased from 1.7 markets in 1999 to 2.5 markets in 2006, and the proportion of multi-market exporters in the total Canadian exporter population increased from 18 percent to almost 27 percent over the same period. The diversification was led by SME exporters, particularly towards Asia where SMEs now account for almost half of the value of exports to that region.

By tracking cohorts of market entrants, it is possible to identify the high attrition rate of firms that enter into export markets. Only a quarter of the 13,000 new entrants in 2000 were still exporting in 2006. However, these survivors had increased their export sales more than nine-fold from an average of about $150,000 to over $1.4 million.

Reflecting the rapid increase in export sales for firms that are able to establish themselves in export markets, new entrants play a significant role over time in driving the growth of Canadian exports, particularly in emerging markets, even after subtracting the negative impact of firms that exited markets. In Asia, net new entrants accounted for half of the growth in exports over the study period. In Latin America, new entrants accounted for almost 80 percent of export growth.

New entrants also played an important role in limiting the decline in Canadian export performance in the key U.S. market. Had it not been for the contribution of new entrants, exports to the U.S. between 2000 and 2006 would have declined by over 10 percent, rather than less than 4 percent as was actually the case.

Together, these findings with respect to the impact of new entrants on export growth underscore the vital importance of continuing export promotion aimed at helping new exporters overcome entry barriers, even in established markets. The analysis presented in this special feature demonstrates that the TCS is highly effective at helping exporters overcome barriers to market entry and diversify their markets.

References:

Alvarez, Roberto E. and Gustavo T. Crespi. 2000. " Exporter Performance and Promotion Instruments: Chilean Empirical Evidence," *Estudios de Economía* 27(2): 225-241.

Baldwin, John R. And Wulong Gu. 2003. "Participation in export markets and productivity performance in Canadian manufacturing," *Economic analysis research paper series*, Statistics Canada Catalogue no. 11F0027MIE — No. 011.

Bernard, Andrew B., J Bradford Jensen and Peter K. Schott. 2005. "Importers, Exporters and Multinationals: A Portrait of Firms in the U.S. that Trade Goods," *Discussion Paper CES 05-20*, Bureau of the Census, Center for Economic Studies, Washington, DC.

Bernard, Andrew B., J. Bradford Jensen, Stephen J. Redding, and Peter K. Schott. 2007. "Firms in International Trade," *NBER Working Paper No. 13054.*

Chen, Shenjie and Emily Yu "Exporter Dynamics in Canada: Market Diversification in a Changing International Economic Environment" in Dan Ciuriak (ed.), *Trade Policy Research 2010* Ottawa: Foreign Affairs and International Trade Canada.

Copeland, Brian R. 2008. "Is There a Case for Trade and Investment Promotion Policy?" in Dan Ciuriak (ed.), *Trade Policy Research 2007*. Ottawa: Foreign Affairs and International Trade Canada: 1-64.

Eaton, Jonathan, Samuel Kortum and Francis Kramarz. 2004. "Dissecting Trade: Firms, Industries, and Export Destinations," *Research Department Staff Report 332*, Federal Reserve Bank of Minneapolis.

Eaton, Jonathan, Marcela Eslava, Maurice Kugler and James Tybout. 2007. "Export Dynamics in Colombia: Firm-Level Evidence," *NBER Working Paper No. 13531*.

Girma, Sourafel, Yundan Gong, Holger Görg, and Zhihong Yu. 2007. "Can Production Subsidies Foster Export Activity? Evidence from Chinese Firm Level Data," *CEPR Discussion Paper No. 6052*.

Imbens, Guido W. 2004. "Nonparametric estimation of average treatment effects under exogeneity: A review," *Review of Economics and Statistics*, 86(1), February: 4-29.

Lawless, Martina, 2009. "Firm Export Dynamics and the Geography of Trade," *Journal of International Economics* 77(2): 245-254.

Lederman, Daniel, Marcelo Olarreaga and Lucy Payton. 2010. "Export Promotion Agencies: Do they work?" *Journal of Development Economics* 91(2), March: 257-265.

Van Biesebroeck, Johannes, Emily Yu and Shenjie Chen "The Impact of Trade Promotion Services on Canadian Exporter Performance "in Dan Ciuriak (ed.), *Trade Policy Research 2010* Ottawa: Foreign Affairs and International Trade Canada

Volpe Martincus, Christian and Jerónimo. Carballo. 2008. "Is Export Promotion Effective in Developing Countries? Firm-Level Evidence on the Intensive and the Extensive Margins of Exports," *Journal of International Economics* 76(1), September: 89-106.

Volpe Martincus, Christian, Jerónimo Carballo and and Pablo Garcia. 2010. "Firm Size and the Impact of Export Promotion Programs," in Dan Ciuriak (ed.) *Trade Policy Research 2010*. Ottawa: Department of Foreign Affairs and International Trade.

Wagner, Joachim. 2007. "Why More West than East German Firms Export," *IZA Working Paper No. 2656*, Institute for the Study of Labour, Bonn, Germany.

Wooldridge, Jeffrey M. 2002. *Econometric Analysis of Cross Section and Panel Data.* Cambridge MA: MIT Press.