

Canada's State of Trade Trade and Investment Update - 2007

ABOUT THIS DOCUMENT

Canada's State of Trade - 2007 has been prepared by The Office of the Chief Economist of Foreign Affairs and International Trade Canada under the general supervision of Anthony Burger, Chief Economist. The report was written by Jean-Bosco Sabuhoro and Aaron Sydor, with statistical assistance from Suzanne Desjardins and Erica Pohjola. This report features a special article: "The Rise of Global Value Chains" that was written by Aaron Sydor. Small boxes were written by staff within The Office of the Chief Economist: "Characteristics of Canadian Exporters" by David Boileau and "Foreign Affiliate Trade Statistics" by Bjorn Johansson.

Your comments concerning this year's report are welcome. Please direct them to the following e-mail address: tradestats.eet@international.gc.ca.

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A Message



from
The Honourable David Emerson,
 Minister of International Trade and
 Minister for the Pacific Gateway and
 the Vancouver-Whistler Olympics

As Canada's Minister of International Trade, I am pleased to present *Canada's State of Trade: 2007*. This report provides an overview of Canada's economy in the global context, demonstrating the impact of international economic trends on Canada's trade and investment performance by sector and by region.

This year's edition shows that 2006 was a good year for Canada. Despite a slowing of the U.S. economy and a strong Canadian dollar, our exports reached an all-time high. Stocks of foreign direct investment in Canada and Canadian direct investment abroad also reached record levels. Our gross domestic product (GDP) growth was among the highest of the G7 countries. Unemployment reached a thirty-year low. Canada was the only G7 country to register a budgetary surplus in 2006, and government debt continues to fall. Inflation remains low and stable. This is, by any standard, an impressive performance.

Despite our success, we cannot ignore some fundamental challenges.

Canada's performance in 2006 was largely driven by one sector, natural resources, which was both the main source of our trade surplus and the key force behind the majority of new foreign investments into Canada. As a result, our overall trade surplus continued to shrink, along with our share of global trade and foreign direct investment. Our manufacturing sector continued to feel the impact of a high Canadian dollar, the slowing of the U.S. economy in the second half of last year and increased competition from Asia. And despite some improvements, Canada's productivity continues to lag behind that of our major competitors.

On the global front, we are being outpaced by our competitors: not just by fast-growing emerging economies like China and India, but also by our more traditional competitors such as the U.S. and Europe, who are aggressively pursuing international policies to strengthen their competitive advantage.

Rather than rest on current successes, Canada must take on this challenge and plan for what lies ahead.

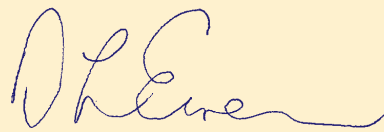
Canada's New Government is committed to building Canada's capacity to successfully participate in the ever-changing global economy.

Through *Advantage Canada*, we are taking important steps to create the right conditions for Canadian businesses and investors alike to compete, both here in Canada and in world markets. We have introduced tax cuts and incentives. We are investing in workforce education and training. We are removing impediments

to the movement of skilled workers, goods and services. We are making Canada more attractive to foreign investment. And we are making strategic infrastructure investments to improve the flow of people, goods and services across Canadian roads and bridges, and through our ports, airports and gateways.

Advantage Canada includes a plan — the Global Commerce Strategy — to more aggressively engage the world beyond our borders. The Global Commerce Strategy is a focused course of action for making Canada a partner of choice for international business by negotiating improved access to international markets, capital, technology and talent, and by connecting Canadian business with expanding global opportunities.

I look forward to working with all sectors of Canada's economy to strengthen Canada's competitive advantages for global engagement and to secure our prosperity well into the future.

A handwritten signature in blue ink, appearing to read "D. Leung". The signature is fluid and cursive, with a long horizontal stroke at the end.

Executive Overview

The global economy continued to perform well in 2006 with growth improving to 3.9 per cent up from 3.4 per cent the year before, led by strengthened performance in Europe and Japan. The U.S. also posted strong GDP growth in 2006 although signs of weakness were beginning to appear towards the end of the year and have carried over into 2007. China also made an important contribution to strong global performance in 2006 with that country's growth continuing to surprise on the upside while India and much of the rest of South-East Asia also maintained their strong performance.

Canada's economic performance continued to be strong in 2006 with GDP growth slowing only slightly to 2.7 per cent and unemployment rates falling further to an average of 6.3 per cent in 2006 – a rate not seen in more than 30 years. Provinces with a heavy share of their economies based on natural resources did best. Alberta and British Columbia witnessed the fastest growth with rates of 6.8 per cent and 3.6 per cent respectively. Manitoba and Newfoundland and Labrador also performed above the national average.

For Canada's international commercial performance, 2006 was, to a large extent, a resource story. Strong global growth in 2006 contributed to further gains for resource prices and contributed to an appreciation of the Canadian dollar by 6.8 per cent against the US\$ for the year, a trend which has carried over into 2007. Although Canadian exports were up by 1.1 per cent in 2006 to a record \$523.7 billion, Canada would have seen a decline in over-all exports in 2006 if it were not for exports of resources and resource-based products, particularly industrial materials (up 11.9%). Exports of forestry

products were down for the year (down 8.6%), in large part due to the slowing U.S. housing market and lower prices. Agricultural exports witnessed a gain (up 4.3%) while energy exports remained flat. Non-resource-based goods exports were also flat with a gain in consumer goods (up 5.0%) and machinery and equipment (up 1.3%) but were offset by a decline in automotive exports (down 6.0%). Service exports were almost unchanged, gaining only 0.3%. The expansion of resource exports were also largely responsible for Canadian exports diversifying away from the U.S. in 2006 as the U.S. is a relatively more important market for non-resourced-based exports, particularly automotive exports. The U.S. share of Canadian merchandise exports fell from a peak of 87.1 per cent in 2002, to 81.6 per cent in 2006.

Resources and resource-based products were also responsible for much of the gain in imports which grew by 4.2 per cent to reach \$486.5 billion in 2006. The two fastest growing import sectors, were industrial materials (up 6.9%) and Agriculture (up 6.3%); However, consumer products also witnessed strong growth (up 5.2%) as did services (up 4.1%) driven by strong consumer demand in Canada. China continued to grow in importance as a source of Canadian imports, rising to 8.7 per cent of Canada's total merchandise imports in 2006, up from 3.2 per cent as recently as 2000. As with exports, the importance of the U.S. has also declined for imports, dropping from 64.3 per cent in 2000 to 54.9 per cent in 2006. As a result of the stronger growth in imports, compared to exports, Canada's trade surplus narrowed to \$37.2 billion in 2006. Canada's trade surplus in resources and resource-based products is now equivalent to the country's entire global trade surplus.

Resources, along with merger and acquisition activity in a variety of sectors, were the primary drivers of the surge in FDI flows into Canada in 2006 which reached \$78.3 billion, more than double the \$35.0 billion witnessed the previous year. This was also the first year since 2000 in which FDI flows into Canada were greater than Canadian direct investments abroad. Although Canadian companies continued to expand abroad in 2006 with net outward investments of \$51.3 billion.

The Rise of Global Value Chains

The global economic environment is changing. Global business is moving away from a world of goods produced in one country and then exported to another and of branch plants producing to serve markets that are too distant for exports or protected by high tariffs. Rather, trade is increasingly in intermediate inputs and services, and investments are made to take advantage of location specific advantage which, in turn, feed into regional or global production networks. At the same time, a large portion of the world's population, most notably in China and India, are becoming ever more integrated into the global economy.

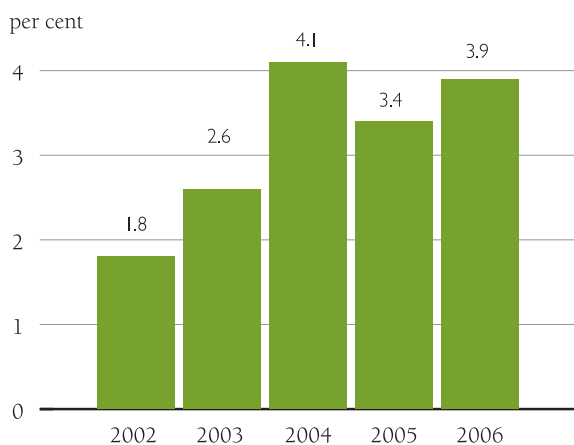
To date, the rise of global value chains has been dominated by fears of offshoring work to low-wage countries. But, evidence suggests that these fears are overdone. Jobs lost due to offshoring represent only a very small fraction of total job turnover in a given year and occupations that are claimed to be at risk of being offshored continue to grow in Canada. But this misses the most important impact of the rise of global value chains.

In a world in which each stage of the value chain can be located anywhere in the world based on where it can be performed most efficiently and linked up to the other stages of production, the challenge is to make Canada the location of choice for those high-valued activities that are essential to improving the prosperity of Canadians.

Global Economic Performance

Despite oil prices which peaked at US\$75 a barrel in the first half of the year, the global economy accelerated in 2006, growing by 3.9 per cent, compared with an increase of 3.4 per cent in 2005. While this strong global performance reflects, in part, the robust expansion in developing economies led by China and India, it was remarkably broad-based among developed and developing economies (see Table 1-1). Most of the growth in global output was concentrated in the first half of the year. World industrial production grew 6.7 per cent in the first half of 2006, compared with 4.3 per cent in 2005. Among developing countries, rates of growth of industrial production eased in the second and third quarters, but this was partially offset by stronger growth in Japan and among high-income countries in Europe.¹

FIGURE 1-1
World Real GDP Growth, 2002-2006



Source: Global Insight

The United States

Real GDP increased 3.3 per cent in 2006, compared with an increase of 3.2 per cent in 2005. The slight acceleration in real GDP growth primarily reflected an upturn in inventory investment and an acceleration in exports, investment in non-residential structures, and state and local government spending. The accumulation in private inventories contributed 0.2 percentage points to real GDP growth; in contrast, declining inventory investment in 2005 subtracted 0.3 percentage points from real GDP growth. Exports accelerated in 2006, increasing 8.9 per cent, following an increase of 6.8 per cent in 2005. Exports outpaced imports for the second consecutive year, adding 0.9 percentage points to real GDP growth after contributing 0.7 percentage points in 2005. Investment in non-residential structures accelerated sharply, increasing 9.0 per cent after a dismal 1.1 per cent increase in 2005. This resulted in a contribution of 0.3 percentage points to real GDP growth. Residential fixed investment turned down in 2006, decreasing 4.2 per cent after increasing 8.6 per cent in 2005. The downturn, due primarily to a decrease in single-family structures, subtracted 0.3 percentage points from real GDP growth in 2006, compared to an addition of 0.5 percentage points in 2005. Last year, the U.S. current account deficit reached 6.5 per cent of GDP compared to 6.3 per cent in 2005.

Early data for 2007 is mixed. Many indicators, including housing starts, new factory orders for durable goods and retail sales, showed continued weakness. On a more positive note, the unemployment rate fell to a near five-year low of 4.5 per cent

1 World Bank (2007). Global Economic Prospects: Managing the Next Wave of Globalization.

in February, with job losses in manufacturing and construction being offset by strong gains in the services sector. Moreover, consumer confidence in February also increased to its strongest reading in five years, on the back of good wage gains and ample job opportunities. Finally, corporate profitability and equity prices are at high levels while real interest rates are still low by historical standards, which should support business investment.

Overall, the consensus forecast continues to be for a soft landing in the U.S. economy. Even though the negative effects in the construction and the manufacturing sectors may continue to be felt, these will be

partially offset by strengthened export performance and continued strength in services.

Japan

Economic growth in Japan was sustained in 2006, with the economy expanding by 2.2 per cent. This solidifies the expansion which began in 2003. Growth has averaged about 2.4 per cent per year over the last four years. Strong corporate profits, improved corporate balance sheets and the resumption of bank lending boosted investment spending which alternated with exports as the main driver of growth over the course of the year. For the entire

TABLE 1-1
Real GDP growth in Selected Economies

	2002	2003	2004	2005	2006
North America					
Canada	2.9	1.8	3.3	2.9	2.7
US	1.6	2.5	3.9	3.2	3.3
Japan ²	1.4	2.7	2.7	1.9	2.2
EU-members					
France	1.1	1.1	2.0	1.2	2.0
Germany	0.0	-0.2	1.2	0.9	2.7
Italy	0.3	0.0	1.2	0.1	1.9
Spain	2.7	3.0	3.2	3.5	3.9
UK	2.1	2.7	3.3	1.9	2.7
Emerging Economies					
China	9.1	10.0	10.1	10.4	10.7
India	4.3	7.2	8	9.2	9.2
Russia	4.7	7.3	7.2	6.4	6.7
Brazil	2.7	1.1	5.7	2.9	3.7
Mexico	0.8	1.4	4.2	2.8	4.8
NIEs					
Hong Kong	1.8	3.2	8.6	7.5	6.8
Korea	7.0	3.1	4.7	4.2	5.0
Singapore	4.2	3.1	8.8	6.6	7.9
Taiwan	4.2	3.4	6.1	4.0	4.6
ASEAN-4					
Indonesia	4.5	4.8	5.0	5.7	5.5
Malaysia	4.4	5.5	7.2	5.2	5.9
Philippines	4.4	4.9	6.2	5.0	5.4
Thailand	5.3	7.1	6.3	4.5	5.0

² As there was a wide discrepancy between the IMF WEO database and Japanese data for growth rates in 2002 and 2003, I opted for the latter.

Source: IMF, World Economic Outlook Database, April 2007

year, exports were up 14.6 per cent, partly reflecting a 22.1 per cent increase in sales to the rapidly growing Chinese import market.

In 2007, GDP is expected to grow at the same pace as in 2006 but near-term prospects depend critically on whether the rebound in consumer spending seen in the last quarter of 2006 can be sustained.

Euro Area

Despite headwinds from high oil prices, monetary tightening and a slowdown of the US economy in the second half of 2006, economic activity in the euro area accelerated in the fourth quarter of 2006. For the whole year, the euro area economy grew by 2.6%, the highest rate in six years and almost double the 1.4 per cent recorded in 2005.³ Domestic demand remained the main contributor to growth but net exports improved after a relatively lacklustre performance in 2005. The recovery of domestic demand was initially driven by a surge in investment spending. Other contributors include budgetary consolidation and a greater focus on the need to secure sustainable public finances in light of an ageing population. Although all the four largest economies – Germany, France, Italy and Spain – recorded solid real GDP growth in 2006, recovery in the German GDP growth led the euro area. Among factors underpinning the German expansion in economic activity are booming exports, a solid increase in capital formation, a better functioning of labour markets and an increase in private consumption, after several years of stagnation.

The outlook for the euro area is bright with real GDP growth forecast to grow 2.5 per cent for the next two years.⁴ The slight deceleration would reflect both the effect of some monetary and fiscal tightening, and a lower contribution of net exports to growth.

The UK

GDP growth of 2.7 per cent in 2006 confirms that the U.K. economy has rebounded from the

weak performance (1.9 per cent) in 2005. Growth was mainly driven by domestic consumption and business investment. Although trade volumes were strong during the first half of the year, net exports recorded a negative contribution to economic growth for the full year. Initial indications suggest that retail trade confidence will remain robust in 2007. GDP is expected to maintain its steady growth early in the year before decelerating, owing to the effects of higher interest rates.

The Emerging Economies

In 2006, economic expansion remained robust in emerging Asia, led by very strong growth in China and in India. Although still lagging growth in emerging Asia, 2004-2006 was the strongest three-year period of growth in Latin America since the late 1970s.

China

China's economy grew 10.7 per cent in 2006, up from 10.4 per cent in 2005. This was the fourth successive year with a growth rate exceeding 10 per cent. There was a modest slowing in the second half of 2006 following tightening measures that had been implemented since April, aimed at curbing excessive investment growth, which, together with exports and consumption, were the principal drivers of growth in 2006. The tightening measures included monetary policy operations to curb increases in liquidity, credit and monetary growth. Concerns have been raised that over heating could lead to over-investment and to speculative "bubbles" in real state and equities. However, the slight slowdown in investment in the second half of 2006 was partly offset by further increases in exports, which grew by about 20 per cent for the whole year in U.S. nominal dollar terms. As a result, the contribution of net trade to GDP growth increased to 3.3 percentage points in the second half of 2006, up from close to 2.0 percentage points in the first half. In addition, the trade surplus reached historical new highs,

³ European Commission (2007). Interim Forecast, February.

⁴ Ibid.

rising to US\$177.5 billion compared to US\$102.1 billion in 2005 and US\$ 32.8 billion in 2004.

Despite recent policy measures to slow the Chinese economy, including tax measures and appreciation of the yuan, near-term economic prospects for China remain very favourable as continued productivity growth and a resilient world economy suggest only a minor slowdown in Chinese exports.

India

Growth in real GDP, a robust rate of 9.2 per cent, remained the same as in 2005. The Indian economy has, thus, recorded an average growth of over 8 per cent for the last three years. This outcome has been achieved in an environment of macroeconomic and financial stability. Despite continued pressure from international crude oil prices, inflation was lower than projected and inflationary expectations remained well-contained. Strong macroeconomic performance during 2006 was underpinned by robust export growth for the fourth consecutive year, sustained non-oil import demand, buoyant investment activity, and acceleration in credit growth which boosted personal consumption.⁵

Brazil

Economic activity in Brazil accelerated in 2006, growing by 3.7 per cent compared to 2.9 per cent the year before. The sectors which experienced the fastest growth were related to natural resources: iron ore (10.9 per cent), extraction of petroleum and gas (5.1 per cent), and construction (4.6 per cent). Financial intermediation, complementary social security and related services (6 per cent) and agriculture (4.1 per cent) also witnessed strong growth.⁶

Mexico

Mexico's real GDP grew by a strong 4.8 per cent in 2006, up from 2.8 per cent in 2005. Robust domestic demand, spurred by higher employment and continued increases in bank credit to business

and households, was the main driver of economic growth. A weakening is expected to occur in 2007 as global growth moderates and oil and metal prices decline from record levels in 2006.

Russia

In Russia, GDP maintained a strong pace in 2006, growing by 6.7 per cent, about the same rate as in 2005. High international prices of – and strong external demand for – oil, gas and metals underpinned the economic expansion. Also, rising export revenues have spilled over into strong domestic demand. And private capital inflows have further contributed to the country's strong economic performance.

NIEs

As a group, the Newly Industrialized Asian Economies – Hong Kong, Korea, Singapore and Taiwan – grew by 5.3 per cent in 2006. With respect to individual countries, GDP in Hong Kong expanded by 6.8 per cent in 2006 driven by thriving exports, vibrant inbound tourism and strong consumer spending. The Korean economy expanded by 5 per cent, supported by stronger private consumption, growth in facility investment and strong exports. However, private consumption has moderated since the fourth quarter of 2006. This, combined with moderating export demand will result in slightly slower GDP growth in 2007. The Singapore economy grew at a brisk pace in 2006 – 7.9 per cent – higher than the 6.6 per cent growth registered in 2005.⁷ Domestic and external demand in the first three quarters of 2006 were the main drivers of growth. The Taiwanese economy increased by 4.6 per cent in 2006. Exports were the main locomotive for economic growth, with net exports contributing 3.5 per cent to real GDP growth.⁸ In addition, Taiwan's total trade broke the US\$ 400 billion mark for the first time. Despite this stellar performance in exports, monetary tightening

5 Reserve Bank of India.

6 Instituto Brasileiro de Geografia e Estatística, March 2007.

7 Statistics Singapore

8 Taiwan's Directorate-General of Budget, Accounting and Statistics.

and higher energy prices led to weakening domestic demand.

ASEAN-4

Indonesian economic growth accelerated in the second half of 2006, with growth for 2006 as a whole reaching 5.5 per cent, on the back of a pick-up in private consumption and investment as well as an increase in export growth. Whether recent natural disasters (floods in Jakarta) will have a negative effect on GDP growth in 2007, remains to be seen. The Malaysian economy expanded by a robust 5.9 per cent in 2006, up from 5.2 per cent in 2005. Strong growth in manufacturing (7 per cent), in agriculture (6.4 per cent) and in services (6.5 per cent) was the main driver of the economic expansion.⁹ Real GDP grew by 5.4 per cent in the Philippines, helped by strong growth in business process outsourcing, electronics exports, remittances inflows and consumption. This was only the third time since the 1970's in which growth of 5.0 per cent or more was recorded in three consecutive years. The Thailand's economy grew by 5.0 per cent in 2006, slightly higher than the 4.5 recorded in 2005, helped by strong export growth and sound macro-economic and fiscal policies.

Uncertainties and risks to the global economy

In spite of the solid growth in 2006 and a solid outlook for 2007, there are lingering uncertainties and important risks that could hamper the global economic growth in the near and medium term.

Various measures of performance in the housing sector in the United States point to a significant slowdown. For example, new home sales, which had been on a steady rise for several years, declined in 2006 by about 20 per cent from the level of 2005. Existing home sales have also dropped. Given this piling-up of the inventory of both unsold new and existing homes, it is surprising that the adjustment in the level of house prices has only been moderate.¹⁰

A number of factors might act as a moderating force to the full bursting of the housing bubble. Mortgage interest rates are still low by historical standards. Also, the banking system generally has sound balance sheets compared to the 1980's and early 1990's. Finally, the mortgage default rates have not been that high, thus far.

The slowing housing sector in the United States will also have a negative impact on wealth thereby affecting consumer confidence.

The housing sector will likely continue to act as a drag on U.S. growth as the correction in that market continues, but to a lesser extent than in previous years due to indications that the demand side seems to be stabilizing. Provided that growth in other sectors remain solid, fallout from the housing sector correction is not expected to spill over into the broader economy.

The decline in oil prices experienced in the latter portion of 2006, followed by a rebound in early 2007, provided a reminder of the volatility still present in the oil market. Substantial price decreases from current levels should be limited provided that the current global expansion continues, and the Organization of the Petroleum Exporting Countries (OPEC) continues with its commitment to initiate production cuts in response to weakening prices. The possibility of another price spike remains, however, given limited spare capacity and continuing geopolitical problems in the Middle East mean that further supply disruptions are possible.

From the perspective of the global economy recent movements towards containing the large global imbalances that exist are heartening. These include a decrease in the U.S. dollar, and more flexibility in some of the currencies of surplus countries in East Asia (e.g. China). But they have not significantly changed the outlook. The current set of real exchange rates and policies suggest that global imbalances will continue to be large. The challenge continues to be to ensure that any correction occurs

⁹ World Bank (2007). East Asia and Pacific Update, April 2007.

¹⁰ UNCTAD (2007). World Economic Situation and Prospects 2007.

smoothly rather than in a manner, as disruptive to the world economy.

While inflationary pressures in most advanced economies have broadly eased, 12-month core inflation in the U.S. remains somewhat above the implicit comfort zone preferred by the Federal Reserve, and both slowing productivity growth and increases in some measures of wages have added to cost pressures.

In the euro area, price and wage increases are still subdued, but given that unemployment rates have fallen and capacity utilisation rates are high, inflationary pressures could increase if labour markets continue to tighten.

The world economy is expected to continue to experience solid growth in 2007 and 2008, although mild deceleration is anticipated. The 2007 slowdown is expected to be most prominent in the U.S., but to moderate over the course of the year as the drag produced by the housing sector eases off.

Overview of World Trade Developments

By a wide margin, merchandise trade growth outpaced that of world GDP in 2006. The volume of world merchandise exports increased by 8.2 per cent, more than double the growth in world GDP (3.9 per cent).

In nominal terms, world merchandise exports increased by 15.2 per cent to US\$11.76 trillion in 2006 (See Table 2-1) while commercial services exports were estimated to have risen by 11 per cent to US\$2.71 trillion in 2006 (see Table 2-3). Growth in global merchandise exports outpaced growth in commercial services exports, but a significant portion was due to price appreciation. Commodity prices continued to rise in 2006, increasing by 21.9 per cent. Unlike the preceding two years,

much of this increase came from non-fuel commodities with industrial inputs seeing the fastest increase.

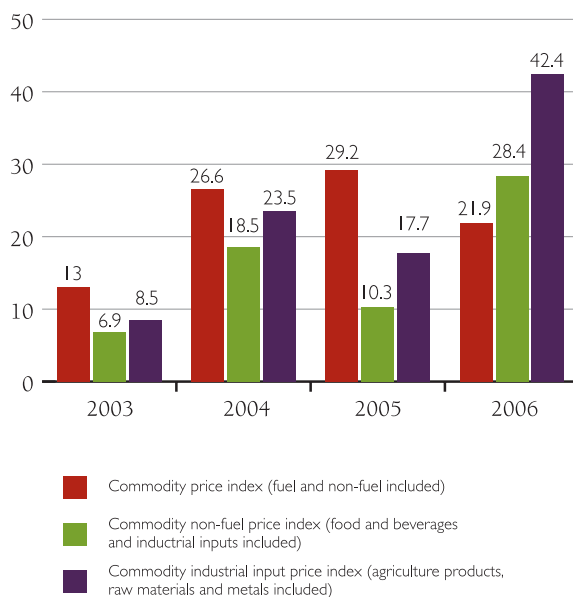
The four regions with the highest share of fuels and other mining products in their merchandise exports — the Middle East, Africa, the Russian Federation, and South and Central America— again recorded the fastest annual export growth in 2006, well above the world average export growth.

In North America, Mexico witnessed stronger export and import growth than Canada and the U.S. Although the U.S recorded the best annual export growth (14.5 per cent) in more than a decade, its merchandise trade deficit continued to grow as imports continued to dominate exports in absolute terms.

In spite of the weakest regional growth rate (12.7 per cent), Europe's share in world merchandise exports (including intra-European trade) remained the world's largest, at 42 per cent. This growth was also an improvement over previous years. The same can be said for Europe import growth (14.1 per cent). Among the major European trading countries, the U.K. and Germany recorded export growth approaching the global average. Intra-EU-25 trade rose by 13.1 per cent, which was somewhat stronger than extra-EU-25 export growth (11 per cent) but slower than imports from third countries (15 per cent).

Asia's merchandise export and import growth continued to outpace world trade in 2006. Among the major Asian traders, China recorded the highest export growth (27.2 per cent), followed by India (20.8 per cent). For import growth, India and China also led all major traders, with the exception of Russia. In addition, China's export growth

FIGURE 2-1
Increases in Commodity Price Indexes, 2003-2006 (%)



IMF, WEO, April 2007

TABLE 2-1
World Merchandise Trade by Region and Selected Country (US\$ billion and %)

	Exports				Imports			
	Value	Annual percentage change			Value	Annual percentage change		
	2006	2000-06	2005	2006	2006	2000-06	2005	2006
World	11,762.1	11.0	13.7	15.4	12,080.0	10.8	13.4	14.3
North America	1,675.2	5.4	11.7	13.2	2,546.2	7.1	13.7	11.2
United States	1,037.3	4.8	10.7	14.5	1,919.6	7.3	13.7	10.6
Canada	387.6	5.8	13.5	7.8	357.3	6.5	14.8	11.2
Mexico	250.3	7.0	13.1	17.0	268.2	6.6	12.5	15.3
South and Central America	426.2	13.8	24.5	20.3	350.7	9.2	22.9	17.5
Brazil	137.5	16.5	22.6	16.2	88.5	7.0	16.9	14.0
Europe	4,956.8	11.1	8.6	12.7	5,218.4	11.1	9.9	14.1
EU-25	4,526.6	10.9	8.0	12.4	4,743.3	10.8	9.4	13.9
Germany	1,112.3	12.4	6.7	14.6	910.2	10.6	8.6	17.1
United Kingdom	443.4	7.6	10.6	15.3	600.8	9.8	9.1	17.0
France	490.1	6.9	2.5	5.8	533.8	7.9	7.0	5.8
Italy	409.6	9.3	5.5	9.8	436.1	10.6	8.3	13.3
Spain	206.2	10.2	5.5	7.0	318.8	12.6	11.8	10.4
Russia	304.5	19.3	32.9	25.0	163.9	24.2	28.7	30.8
Africa	360.9	16.0	29.7	21.0	289.8	14.4	20.3	15.8
South Africa	58.4	11.8	11.9	13.1	77.3	17.3	16.5	24.0
Middle East	644.4	15.7	34.7	19.2	373.4	14.3	18.7	13.9
Asia	3,276.1	11.9	15.7	17.6	3,023.1	12.3	16.5	15.9
China	969.1	25.4	28.4	27.2	791.6	23.3	17.6	20.0
Japan	647.1	5.1	5.2	8.8	577.5	7.2	13.3	12.1
India	120.2	19.0	30.2	20.8	174.4	22.5	40.6	25.1
NIEs	844.0	9.1	11.8	15.3	786.9	8.6	13.0	17.1
Developing economies	4,274.0	14.2	22.1	20.0	3,749.0	12.9	18.0	16.7

Source: WTO Statistics, April 2007

continued to exceed its import growth by a wide margin. As a consequence, China's merchandise trade surplus reached a record US\$ 177.5 billion. It is important to note that, in the second half of 2006, Chinese merchandise exports exceeded those of the United States, but for the whole year U.S. exports still exceeded Chinese exports. Therefore, it is likely that China will surpass the U.S. as the world's second largest exporter in 2007. The dollar value of Japanese merchandise exports grew by nearly 9 per cent in 2006 but continued to lag behind the expansion of world exports (15.4 per cent) and its own import growth (12.1 per cent).

As in 2005, Africa's merchandise exports (21 per cent) increased faster than imports (15.8 per cent). At 3.0 per cent, Africa's share in world merchandise exports reached its highest level since 1991. Although oil exports played an important role in boosting Africa's export growth, non-oil exporting African countries increased their exports by about 16.0 per cent as well. South Africa, the region's largest merchandise trader, saw a rise in its imports of 24 per cent while exports advanced by 13.1 per cent.

As in 2005, South and Central America's merchandise export and import growth continued to

TABLE 2-2
Leading Exporters and Importers in world merchandise trade, 2006 (US\$ billion and %)

Rank	Exporters	Value	Share	Growth		Rank	Importers	Value	Share	Growth	
				05-06	05-06					05-06	05-06
1	Germany	1,112.3	9.2	14.6	1	U.S.	1,919.6	15.5	10.6		
2	U.S.	1,037.3	8.6	14.5	2	Germany	910.2	7.4	17.1		
3	China	969.1	8.0	27.2	3	China	791.6	6.4	20.0		
4	Japan	647.1	5.4	8.8	4	U.K.	600.8	4.9	17.0		
5	France	490.1	4.1	5.8	5	Japan	577.5	4.7	12.1		
6	Netherlands	462.1	3.8	13.7	6	France	533.4	4.3	5.8		
7	U.K.	443.4	3.7	15.3	7	Italy	436.1	3.5	13.3		
8	Italy	409.6	3.4	9.8	8	Netherlands	416.1	3.4	14.4		
9	Canada	387.6	3.2	7.8	9	Canada	357.3	2.9	11.2		
10	Belgium	372.0	3.1	11.2	10	Belgium	355.9	2.9	11.7		

Source: WTO Statistics, April 2007

outpace global averages in 2006. However, the expansion rate at 20.3 per cent for exports and 17.5 per cent for imports was smaller than the year before. Most of this deceleration can be accounted for by the performance of the region's oil exporters and by Brazil.

Trade developments in 2006 were very favourable for developing countries as a group. Their combined merchandise exports rose by 20.0 per cent to \$4.27 trillion, and imports went up by 16.7 per cent. The share of developing countries in world merchandise exports reached a historic high of 36 per cent. Their share in world merchandise imports was 31.0 per cent, the largest in more than 25 years.

Notwithstanding annual variation in trade, the list of top 10 individual country exporters and importers stayed the same in 2006 as the year before. And the ranking did not change from the preceding year, with the exception of the United Kingdom which overtook Japan as the world's fourth largest importer of merchandise.

World commercial services exports were equivalent to 23 per cent of world merchandise exports. The growth rate for global commercial services trade in 2006 was virtually the same as in 2005. As for commercial services categories, transportation and

travel services increased by 9.2 per cent and 7.3 per cent respectively, while other commercial services – the largest among the three – expanded by 13.1 per cent

By region, Europe and North America, recorded, as in the preceding year, export and import growth below the world average while Asia's commercial services exports continued, for the third consecutive year, to expand faster than the global average and faster than the region's services imports, thereby reducing the region's deficit in services trade.

Among the major individual country traders, India, Russia and Brazil registered the highest growth in commercial services exports in 2006, 33.8 per cent, 22.0 per cent and 20.6 per cent, respectively. India and Brazil recorded the highest growth (40.5 per cent and 19.9 per cent) in commercial services imports as well. It is worth noting that the growth rate in India's services imports surpassed the growth rate in its services exports in 2006.

TABLE 2-3
World Commercial Services Exports and Imports by Region and Selected Country (US\$ billion and %)

	Exports				Imports			
	Value	Annual percentage change			Value	Annual percentage change		
	2006	2000-06	2005	2006	2006	2000-06	2005	2006
World	2,710.8	10.5	10.9	10.6	2,619.6	10.0	10.6	10.3
North America	459.6	5.6	10.1	8.8	400.9	6.9	9.3	9.4
United States	387.4	5.7	10.0	9.4	306.7	6.7	9.1	9.1
Canada	56.0	6.1	9.0	7.2	71.6	8.6	10.3	11.6
South and Central America	77.0	8.5	18.0	14.2	80.1	6.6	20.9	13.5
Brazil	18.0	12.3	28.3	20.6	26.7	9.4	38.4	19.9
EU-25	1,247.2	11.5	8.6	8.8	1,132.3	10.3	7.8	7.9
UK	223.1	11.1	5.4	9.3	169.4	9.8	9.5	6.5
Germany	164.2	12.8	9.9	10.6	214.5	7.9	3.9	6.7
France	112.4	5.8	5.8	-2.3	108.0	10.3	7.8	3.0
Italy	100.5	10.2	6.6	13.1	100.9	10.8	8.8	13.5
Spain	100.3	11.5	8.7	8.1	76.6	15.2	10.8	17.5
Russia	29.8	20.9	20.8	22.0	44.9	18.5	17.8	16.7
Africa	64.4	12.7	12.1	11.8	79.8	13.4	20.6	11.9
Asia	613.9	12.1	14.4	15.2	665.5	10.3	11.6	14.3
Japan	121.4	8.8	13.7	12.5	142.8	3.8	1.7	7.7
China	87.0	...	19.1	...	100.0	...	16.2	...
India	72.8	28.7	46.4	33.8	69.5	24.3	35.5	40.5
NIEs	208.3	9.9	9.0	13.9	197.4	9.8	9.7	12.4

Source: WTO Statistics, April 2007

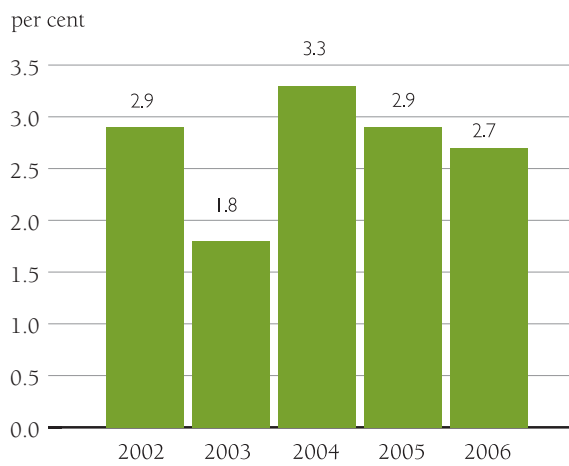
Canadian Economic Performance

Gross domestic product

Canadian economic performance continued to be solid in 2006 with a real GDP growth rate of 2.7 per cent, a slight deceleration from the 2.9 per cent of the preceding year. This growth has been primarily driven by consumer spending and non-residential investment (largely investments in resource extraction and related infrastructure). Spending on durable and semi-durable goods helped boost imports of consumer goods.

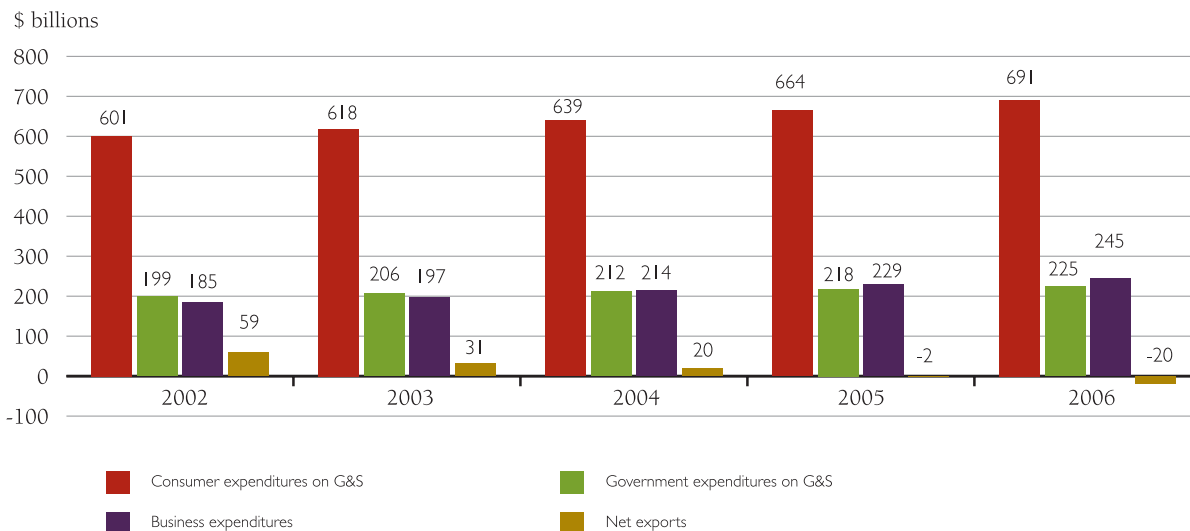
As shown in Figure 3-2, all expenditure-based categories of GDP advanced in 2006, with the exception of net exports. However, there was considerable variation among the various components of GDP growth. Personal expenditure on consumer goods and services advanced 4.1 per cent in 2006,

FIGURE 3-1
Canadian Real GDP Growth, 2002-2006



Source: Statistics Canada

FIGURE 3-2
Real Gross Domestic Product, Expenditure-Based, 2002-2006



Source: Statistics Canada

its best performance since 1997. The strength of personal spending comes as no surprise as both labour income and corporate profits increased by about 6 per cent. The fastest growth was registered in expenditures on goods, both durable (6.8 per cent) and semi-durable (7.2 per cent), as declining prices in both of these groups encouraged increased spending. Purchases of furniture, carpets and other floor coverings, of household appliances and of consumer electronics and recreational vehicles all registered record double-digit increases from 2005. Spending on semi-durable household furnishings such as lamps and glassware rose 6.7 per cent over the same period. Purchases of services also witnessed significant gains (4.2 per cent) in 2006. Transportation grew 4.1 per cent in 2006 as Canadians flocked to airlines, with spending on air transport growing by (6.3 per cent) matching 2005. Canadians' travel spending abroad increased 10.0 per cent, the fourth straight year of exceptional growth. Overall, consumer spending contributed 2.2 per cent to real GDP growth, leading all other categories.

In 2006, business investment continued to be an important contributor to economic growth, adding 1.2 per cent. However, since 2005, investment in non-residential structures has surpassed investment in residential structures as a contributor to real GDP growth. While growth in residential investment in 2006 decelerated to 2.4 per cent, non-residential structures accelerated to 10.7 per cent bolstered by a 14.0 per cent increase in engineering investment. Despite a slight deceleration from 2005, business investment in machinery and equipment advanced by a robust 8.0 per cent rate in 2006, largely as a result of strong growth in expenditures on computers and other office equipment, software, telecommunications equipment, trucks and industrial machinery.

The contribution of net exports to real GDP growth was negative (-1.21 per cent) as growth of real imports (5.2 per cent) outpaced growth of real

exports (1.3 per cent). In dollar terms, the value of Canadian exports and imports reached record levels in 2006, although the nominal trade balance fell to its lowest point in seven years, partly reflecting, lower energy export prices.

Turning to individual sectors and industries, the growth in the services-producing industries (3.6 per cent) once again surpassed that of the goods-producing industries (0.8 per cent) in 2006. The 6.8 per cent appreciation of the Canadian dollar against the U.S. dollar combined with higher costs was a drag on growth in export-sensitive manufacturing and sectors vulnerable to import competition. This can be seen in such sectors as the textile and clothing industries (-8.8 per cent), the tobacco industry (-33.0 per cent) and the paper industries (-6.6 per cent). In addition, the increase in the price of crude oil forced consumers both in Canada and the United States to pay heed to fuel consumption in their choice of motor vehicles they were buying. Wholesale and retail trade, construction, and finance and insurance were among the key contributing sectors to the growth while manufacturing (-3.9 per cent) and forestry and logging were hard hit (-0.8 per cent).

Wholesale trade expanded 6.8 per cent in 2006, supported by sales of motor vehicles, electronic equipment, machinery, and household and personal products. Retail trade also witnessed a strong increase in 2006 (5.2 per cent). Consumers spent more on used cars, home furnishings and electronic products, as well as at general merchandise stores. The construction sector edged up 7.4 per cent, propelled by intense repair and engineering construction activities (11 per cent), principally attributable to investments in oil sands projects. Air transportation increased 9.2 per cent, the third year in a row of near 10 per cent growth whereas the finance and insurance sector rose 5.1 per cent in 2006.

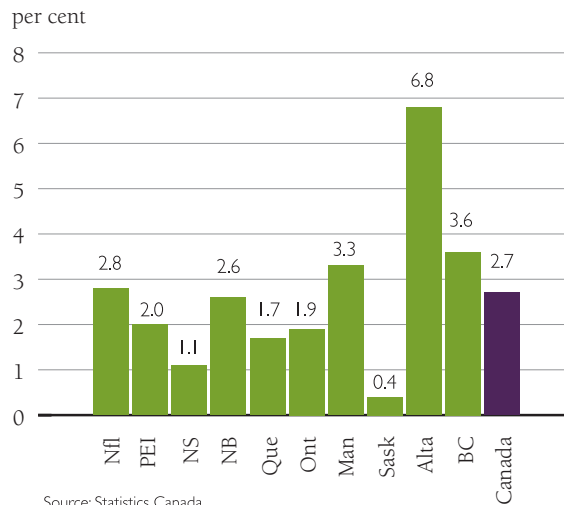
GDP growth by province

In contrast with the clear-cut regional divide in GDP growth observed in 2005, the picture was somewhat mixed in 2006. Once again, with the exception of Saskatchewan, provinces west of Ontario recorded growth rates above the Canadian average of 2.7 per cent; however this year Newfoundland and Labrador also topped the national average and New Brunswick was close to the national average rate as well.

Alberta's economy grew at a brisk 6.8 per cent in 2006, more than double the national average. This was the third consecutive year during which Alberta has led all other provinces in growth. Continued oil price increases in 2006 supported strong corporate profits and business investment, which, in turn, stimulated labour income and spending. The buoyancy of Alberta's economy combined with a low unemployment rate of 3.4 per cent were enough to attract about 57,000 inter-provincial migrants from across Canada, the largest movement of people to one province since 1972. As a result, residential construction increased 8.1 per cent, and consumer spending accelerated to 7.9 per cent. Manufacturing activity in Alberta was not outdone, rising by 7.6 per cent on the heels of a 6.3 per cent increase in 2005. The bulk of the growth came from petrochemical industries and suppliers of machinery and equipment to the burgeoning oil-sands infrastructure projects.

Economic activity in British Columbia outpaced national average growth for the fifth consecutive year with a 3.6 per cent increase in 2006, slightly less than the 3.7 per cent increase in 2005. Domestic demand, boosted by an increase in labour income (8.2 per cent) and a historically low unemployment rate (4.8 per cent), was the main driver of growth. By industry, construction (10.1 per cent), wholesale trade (9.7 per cent) and retail trade (5.9 per cent) led growth. And, in general, services-producing industries outpaced goods-producing industries in 2006, especially the construction industry which benefited from investment relating to the 2010 Olympics.

FIGURE 3-3
Real GDP Growth by Province, 2006



The Saskatchewan economy decelerated steeply to 0.4 per cent growth after three years of growth exceeding the national average. Production of goods-producing industries fell 9.1 per cent as a result of a drop in crop production (9.1 per cent) due to poor weather conditions and decreased exports in key mining products (uranium and potash). However, corporate profits remained strong as world demand for these products kept prices high. In addition, investment and consumer spending continued to be solid as Saskatchewan took advantage of its proximity to Alberta.

Manitoba's economy grew by 3.3 per cent in 2006, up from the 2.7 per cent increase in 2005, reflecting the best crop in three years. Strong consumer spending – supported by low interest rates and the second lowest unemployment rate in the nation (4.3 per cent) – business investment, inter-provincial shipments of metal and agricultural products, and the opening of the U.S. border for cattle were the main factors underpinning the strong growth.

At 1.9 per cent, the economic expansion in Ontario lagged the Canadian average for the fourth consecutive year. A combination of factors contributed to the further deceleration in 2006 compared with the 2005 performance. These included a decrease

in manufacturing production, especially in motor vehicle and auto parts production, a continued appreciation of the Canadian dollar and increased foreign competition. Services production outperformed goods production and employment gains in the various service industries more than compensated for job losses in manufacturing. As a consequence, the unemployment rate fell to 6.3 per cent. In addition, strong labour income and low interest rates helped raise personal expenditure by 4.0 per cent.

Growth of the Quebec economy decelerated to 1.7 per cent in 2006, after posting 2.2 per cent growth in 2005. This reflected a slowdown (0.1 per cent) in goods production which lagged behind services production. Within the manufacturing sector, primary metals, including aluminium production, aerospace production and pharmaceutical production were standout performers. As in Ontario, job losses in manufacturing were more than offset by job gains in services. As a result, unemployment fell to 8.0 per cent.

New-Brunswick's economy grew by 2.6 per cent in 2006, compared to the weak 0.3 per cent growth in 2005. Construction rebounded in 2006 with two mega-projects - a liquefied natural gas terminal in St. John and the refurbishment of a nuclear plant. Also, manufacturing grew at a faster pace of 3.6 per cent, lagging behind only Alberta. In addition, New Brunswick employment growth was the best among the provinces east of Ontario, which helped push the unemployment rate to a 31-year low of 8.8 per cent.

Economic growth in Nova Scotia decelerated to 1.1 per cent in 2006 as domestic spending remained steady but exports declined sharply (3.8 per cent). Also, manufacturing continued to struggle as elsewhere in the country.

Prince Edward Island grew 2.0 per cent in 2006, the same as in 2005. A rebound in agriculture, construction and business services underpinned this performance.

Output in Newfoundland and Labrador advanced 2.8 per cent in 2006, on the back of mining

industry. This reflected a full year of production at the Voisey's Bay mine. In turn, increased mining production boosted exports which expanded by 4.7 per cent, after a decline in 2005. Also support activities for mining and gas extraction were up strongly.

Employment

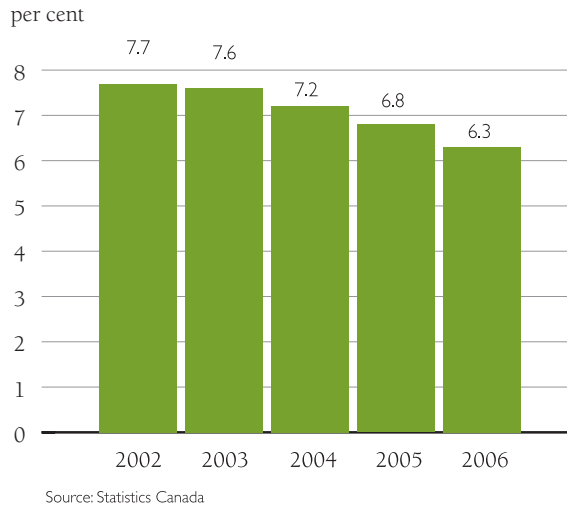
In 2006, employment creation in Canada remained solid, boosted by torrid growth in the number employed in Alberta (4.8 per cent) and British Columbia (3.1 per cent). For the country as a whole, employment grew 1.9 per cent with 314.6 thousand net new jobs created, more than in each of the two preceding years. Once again, the bulk of the increase consisted of full time jobs (2.3 per cent) with part-time jobs accounting for just 0.4 per cent.

The services-producing sector accounted for most of the gain in 2006, with an increase of 2.7 per cent (331,100) compared to a 0.4 per cent decline (16,500) for the goods sector. Within the goods-producing sector, manufacturing saw employment fall by 4.1 per cent (89,700). The decline in manufacturing employment was experienced in most provinces, but was especially strong in Quebec and Ontario. Production of non-durables was hardest hit among manufacturing sectors with employment contracting by 7.8 per cent (69,500). Mining and oil and gas extraction saw a stellar year with employment rising by 14.2 per cent (29,900). Forestry and logging with support activities experienced the sharpest decline of all industries, down 9.4 per cent (6,500). The strength in construction employment observed over the past few years continued in 2006 with an increase of 4.9 per cent (50,200). Added employment in the industry coincided again with more non-residential structures. Within the services-producing sector, real state and leasing had the strongest employment growth in 2006, up 6.6 per cent (18,600). Management of companies and administrative and other support services witnessed a strong year growing by 5.4 per cent (35,600). And finance and insurance experienced another robust performance with an increase of 4.8 per cent (34,100).

Although the participation rate remained the same as in 2005, the employment rate increased slightly as the unemployment rate in Canada reached historic lows, reaching an average of 6.3 per cent in 2006, down from 6.8 per cent in 2005. And the unemployment rate closed the year at 6.1 per cent in December 2006.

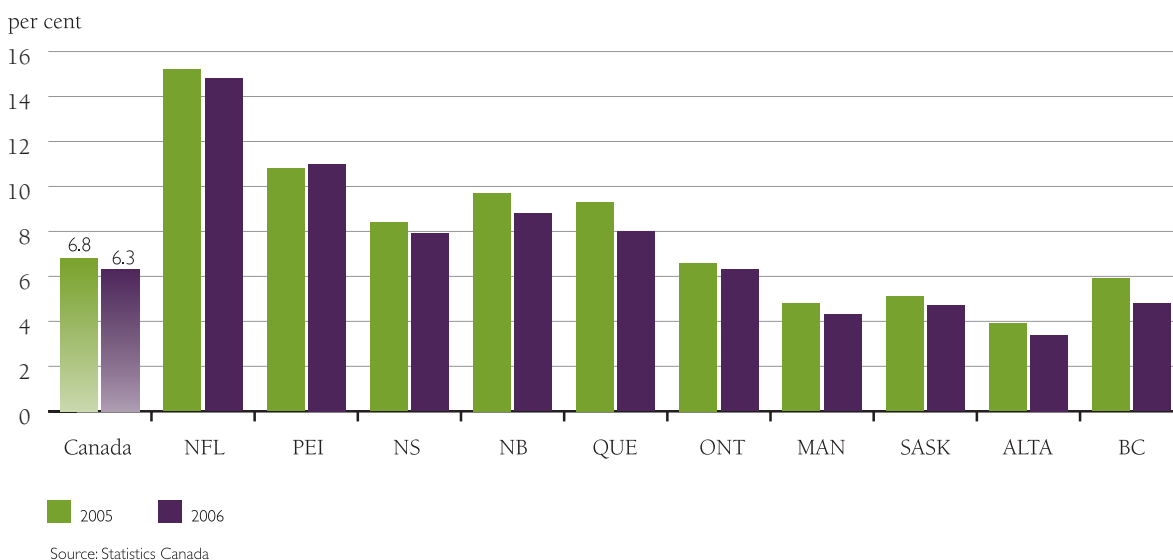
The unemployment rate decreased in all provinces, with the exception of Prince Edward Island. However, there was a great deal of variation in performance. All provinces east of Ontario experienced higher unemployment rates relative to the national average while those west were lower. Alberta, Manitoba and British Columbia registered the lowest unemployment rates in 2006, at 3.4 per cent, 4.3 per cent and 4.8 per cent, respectively. The case of British Columbia is even more revealing. Employment in British Columbia grew 3.1 per cent in 2006, after posting a 3.3 per cent gain in 2005. This employment gain over the two-year period matched Alberta's growth over the same period, and has been exceeded by only one other major province in the past decade- Ontario's 6.6 per cent

FIGURE 3-4
Unemployment Rate in Canada, 2002-2006



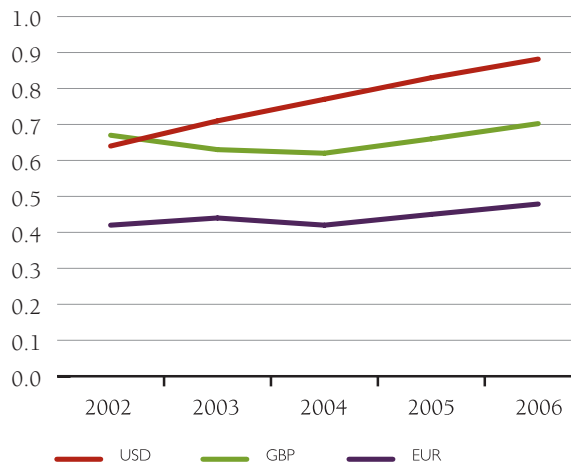
gain over the period 1999-2000 at the peak of the ICT boom. By early 2007, unemployment in British Columbia had fallen below 4.0 per cent, a level that only Alberta and Saskatchewan have successfully broken through.¹

FIGURE 3-5
Unemployment Rates in Canada Provinces, 2005-2006



1 Cross, Philip (2007). Year End Review: Westward Ho! Canadian Economic Observer, April 2007.

FIGURE 3-6
Canadian Dollar Against the US\$, the Euro and the UK Pound



Source: Bank of Canada

The dollar

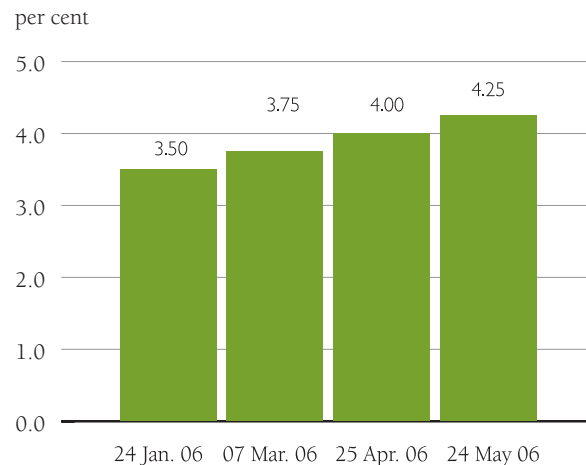
As displayed in Figure 3-6, the appreciation of the Canadian dollar against the main currencies (the US dollar, the euro and the UK pound) continued in 2006. For example, the Canadian dollar appreciated against the US dollar a further 6.8 per cent while the appreciation rates against the euro and the pound were 6.0 per cent and 5.6 per cent, respectively.

The appreciation of the dollar reflected partly a rise in the commodity prices. Despite currency appreciation, Canadian exports of goods increased slightly in 2006 (1.2 per cent). We will show later in the Report that the appreciating dollar has had a greater impact on some categories of goods exports than on others.

Interest rates

The gradual rise in short-term interest rates observed in 2005 continued in the first half of 2006. As shown in Figure 3-7, the Bank of Canada raised its key policy interest rate by 25 basis points on four occasions through 2006 bringing it to 4.25 per cent.

FIGURE 3-7
The Bank of Canada Key Policy Rate



Source: Bank of Canada

The key policy interest rate has not changed from May 24, 2006 to April 26, 2007.² Short-term real interest rates are still low by historical standards, which should sustain consumer spending, investment in residential and non-residential structures. All these factors have underpinned Canadian real GDP growth in recent years.

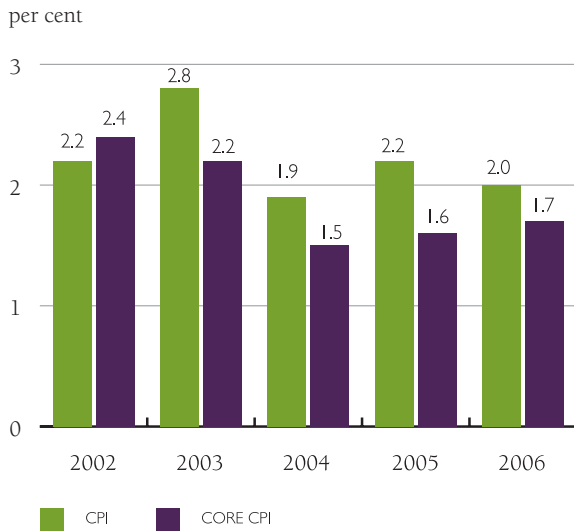
Prices

For the entire year 2006, consumers paid an average of 2.0 per cent more than they did in 2005 for the goods and services included in the Consumer Price Index (CPI) basket. The single largest contributor to this increase was homeowner's replacement cost (7.3 per cent)³, which can be accounted for by the ongoing demand for new houses, fuelled by rising employment and buoyant economy in the western provinces. Other contributors to the increase in the CPI were electricity (5.7 per cent) reflecting price increases in Alberta and Ontario, gasoline (5.5 per cent), and purchasing and leasing vehicles (1.5 per cent). On the other hand, other factors had a moderating effect on this increase such as

² The key policy rate is the overnight rate at which major financial institutions borrow and lend one-day funds among themselves; the Bank of Canada sets a target level for that rate. Changes in the target for the overnight rate influence other interest rates, such as those for consumer loans and mortgages. They can also affect the exchange rate.

³ The replacement cost is the cost of replacing worn-out structural components of housing, but it is estimated from the price of new homes (excluding land).

FIGURE 3-8
CPI and Core CPI Annual Increases



Source: Bank of Canada

computer equipment and supplies (-17.6 per cent), video equipment (-10.4 per cent), men's clothing (-2.8 per cent) and women's clothing (-2.4 per cent).

The Core CPI, which excludes volatile items such as energy and food, rose much less, at 1.7 per cent

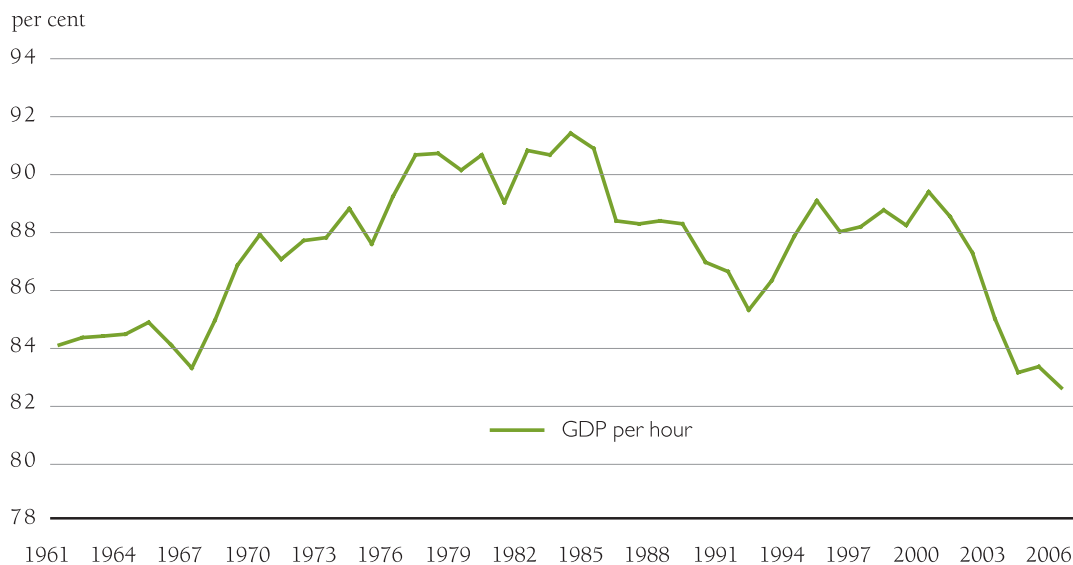
in 2006 and was only slightly higher than the 1.6 per cent increase witnessed in 2005.

Productivity gap

Canada's productivity performance continues to lag our main competitors. Figure 3-9 displays Canada's labour productivity levels in the total economy relative to those of the U.S. In 2006, Canadian labour productivity for the whole economy was only 82.5 per cent of U.S. levels, down considerably from 89.3 per cent as recently as 2000. This translates into an annual income gap with the United States of US\$14,279 per person (on a purchasing power parity basis).

Comparisons to the U.S. are natural as it is Canada's largest market and biggest competitor, as well as being the most dynamic economy in the world. But there are an increasing number of other countries which are also outperforming Canada in terms of productivity performance. Not only are Germany, Ireland, Italy, the UK, Sweden, Netherlands, Denmark, Belgium, and Austria outperforming Canada, but France, Luxembourg and Norway outperform both Canada and the US.⁴

FIGURE 3-9
Relative Labour Productivity Levels in the Total Economy in Canada, (Canada as % of the United States)



Source: Center for the Study of Living Standards

⁴ Groningen Growth and Development Centre Database, February 2006.

Overview of Canada's Trade Performance

IV

The solid growth in the global economy and in Canada created a favourable environment for the expansion of international trade in 2006. Canada saw another record trade performance with natural resources playing a key role in this strong performance.

Despite a further 6.8 per cent appreciation in the Canadian dollar against the US dollar, exports of goods and services increased 1.1 per cent to

\$523.7 billion in 2006. This was equivalent to 36.4 per cent of Canadian gross domestic product. Using the exports of goods and services-to-GDP-ratio and the total trade of goods and services-to-GDP-ratio as indicators of openness, Canada ranked second among the G8 countries in 2006 (see Table 4-1). However, using the Herfindahl index¹, OECD data for 2005 shows that Canada's exports were the second least diversified in terms of destinations in OECD countries, behind only Mexico.

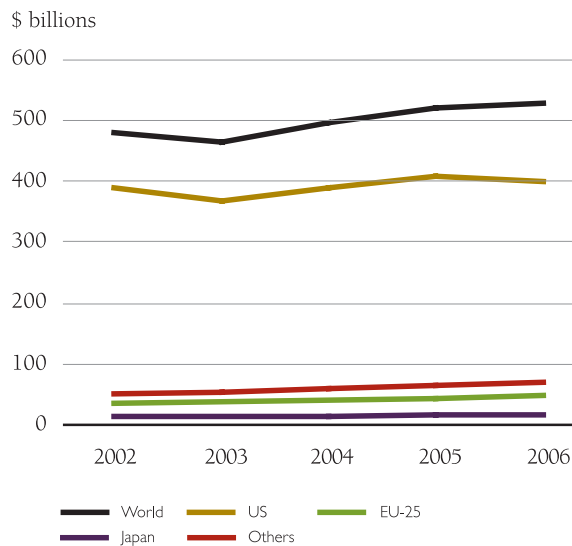
TABLE 4-1
Indicators of Openness to Trade

Exports of Goods and Services as a Proportion of GDP, 2004-2006			
	2004	2005	2006
Canada	38.2	37.8	36.4
France	25.7	26.1	27.5
Germany	38.2	40.7	44.9
Italy	25.4	26.1	n.a.
Japan	13.4	14.3	n.a.
U.K.	25.4	26.4	28.5
U.S.	10.1	10.5	11.1
Russia	34.4	35.1	33.9
Memorandum			
Mexico	29.6	29.9	n.a.
Total Trade of Goods and Services as a Proportion of GDP, 2004-2006			
Canada	72.3	71.8	70.2
France	51.2	53.1	56.5
Germany	71.5	76.2	84.5
Italy	50.0	52.2	n.a.
Japan	24.8	27.2	n.a.
U.K.	53.7	56.5	61.4
U.S.	25.4	26.7	27.9
Memorandum			
Russia	34.4	35.1	33.9
Mexico	61.2	61.4	n.a.

Source: IMF international Financial Statistics
n.a.: not available

1 The Herfindahl index of geographical concentration for a country's exports is the sum of the squares of the export shares of each country of destination in that country's total world exports expressed as percentages.

FIGURE 4-1
Exports of Goods and Services by Major Area, 2002-2006, %



Source: Statistics Canada

Imports of goods and services outpaced exports of goods and services, increasing by 4.2 per cent to reach \$486.5 billion. As a result, the trade balance declined by \$13.9 billion to \$37.2 billion. The annual surplus on goods accounted for most of this, falling \$10.6 billion to \$54.3 billion. The balance of the current account which covers net transactions on goods, services, investment income and current transfers dropped by 23.5 per cent to \$24.3 billion, down from \$31.8 billion in 2005.

The year 2006 saw Canada's exports of goods and services to two of its principal markets (the U.S., the EU-25, Japan and other countries) fall while imports of goods and services from all these areas went up.

Exports of goods to the U.S. decreased 1.9 per cent to \$361.7 billion whereas imports of goods from the U.S. rose by 1.9 per cent to \$264.8 billion. The goods surplus with the U.S. dropped by about 11 per cent to \$96.9 billion but was still over \$40 billion larger than our global trade surplus and therefore the sole source of our overall trade balance.

Exports of goods to the EU-25 grew by 16.2 per cent to \$33.6 billion in 2006, powered by a robust growth in goods exports to the U.K. The latter became Canada's second largest destination for goods, overtaking Japan in 2006. By a wide margin, growth in exports to the EU-25 outpaced the growth in imports (9.5 per cent). As in all years since 1983, imports from the EU exceeded exports, resulting in a goods deficit with the European Union of \$ 8.4 billion, down by about \$1 billion.

Canadian goods exports to Japan expanded by 2.8 per cent to \$10.8 billion while imports of goods from Japan increased by 5.9 per cent to \$11.9 billion. As a consequence, the goods deficit with Japan was over \$1 billion.

Canadian goods exports to others² advanced by 16.4 per cent to \$52.5 billion while imports grew 8.6 per cent to \$85.6 billion in 2006. The rate of growth in exports almost doubled growth in imports. For the first time in 5 years, the goods trade deficit with others slightly decreased to \$33.1 billion, compared with \$33.7 billion in 2005. This development was also reflected in Canada's goods trade deficit with all non-U.S. destinations which declined to \$42.6 billion.

By geographical area, 78.9per cent of goods exports were destined for the U.S. About 7.3per cent and 2.3per cent of goods exports were bound for the EU and Japan, respectively. In 2006, the UK passed Japan as the second most important single country destination of Canadian goods exports at 2.6per cent while non-OECD countries captured a record 7.4per cent of Canadian exports, reflecting the increasing demand from large emerging economies.

As shown in Figure 4-3, with the exception of forestry products and automotive products, which declined by 8.6per cent and 6.0%, respectively, all major categories of exports increased, led by industrial goods and materials (11.9%).³ The export value of industrial goods and materials reached

² Meaning "not the US, the EU-25 or Japan".

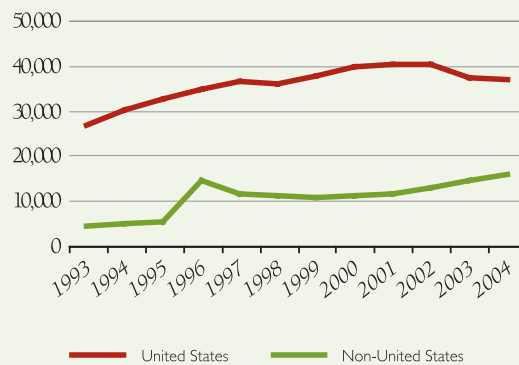
³ Industrial goods and materials are comprised of metal ores, chemicals, plastics and fertilizers, and metals and alloys

Characteristics of Canadian Exporters

In 2004, there were 43,798 exporting enterprises in Canada. This was up 59 per cent from 27,593 in 1993 (when data was first collected), but down from a high of 45,198 in 2002¹. The United States is the main destination for Canadian exporters; in 2004 there were 36,727 enterprises exporting to the U.S. versus only 15,489 enterprises exporting to Non-U.S. destinations². However, Canadian exporters appear to be diversifying; while the number of exporters to the U.S. dropped from a high of 39,781 in 2002, the number of exporters to non-U.S. destinations has continuously risen since 1999, climbing from 10,667 to 15,489 in 2004.

After the U.S., the largest destinations by number of exporters were the United Kingdom, Germany, Japan, France and China³. Interestingly, the top countries by number of exporters do not correspond to the top countries by export value.

Number of Exporting Enterprises by Destination



Source: Statistics Canada Exporter Registry

For example, in 2004, Japan was the second largest destination by value, the U.K. third and Germany sixth. This indicates a difference in export intensity by export destination. In 2004 enterprises exporting to the U.S. exported an average of \$8.7 million per enterprise, while enterprises exporting to non-U.S. destinations

Canadian Exporters by Industry Group

Industry Grouping	% Exporter Population	% Export Value	Average Value per Exporter (millions \$)
Agriculture, forestry, fishing and hunting	4.8	1.1	2.0
Mining and oil and gas extraction	1.3	5.9	38.2
Utilities	0.1	0.7	38.6
Construction	2.6	0.3	1.0
Manufacturing	47.3	66.3	11.8
Wholesale trade	22.4	11.7	4.4
Retail trade	4.6	0.4	0.7
Transportation and warehousing	3.2	4.2	11.1
Information and cultural industries	1.2	0.1	1.0
Finance and insurance	2.0	6.4	27.1
Business services	7.5	2.4	2.7
Other	2.9	0.4	1.1

Source: Statistics Canada Exporter Registry

- 1 Data on the number of exporting enterprises comes from Statistics Canada's "Exporter Registry", as of the writing of this article the latest data available was for 2004.
- 2 Note that the number of exporters to the U.S. and Non-U.S. does not add up to the total, this is because many enterprises export to both U.S. and Non-U.S. destinations, these enterprises are only counted once in the total aggregate.
- 3 Includes mainland China only.

exported only half that amount, with an average of \$3.8 million in exports.

The difference in export intensity between destinations may depend on the industrial structure of exports to that destination, degree of foreign ownership, and the average size of the exporter. Table 1 shows the difference in export intensity between a variety of industry groups.

Foreign-owned establishments⁴ which export from Canada are much more export intensive than their domestically owned counterparts. In 2002, foreign-owned firms accounted for only 9.0 per cent of exporters; however they accounted for 45 per cent of total export value and averaged \$43.3 million of exports per establishment versus \$5.2 million by domestically

owned firms. Apart from being more export intensive, foreign-owned exporters operating in Canada also tend to export to a greater number of destinations; in 2002 18 per cent of foreign-controlled exporters sent goods to five or more countries compared to 6 per cent for Canadian-controlled exporters⁵.

Large firms are also more export intensive compared to smaller firms. At the establishment level, in 2003, firms with greater than 200 employees accounted for 6.3 per cent of establishments and 48.5 per cent of export value. While small firms, of less than 50 employees, accounted for 72.2 per cent of exporter population and only 25.5 per cent of the total export value.

Export Establishments by Employee Size

Number of employees	Number of Exporters	% of Exporter Population	Value of Exports (millions)	% of Export Value
Less than 50	31,277	72.2	88,731	25.5
50-99	5,638	13.0	55,283	15.9
100-199	3,685	8.5	35,244	10.1
200 and over	2,710	6.3	198,885	48.5
Grand total	43,310	100.0	348,143	100.0

Source: Statistics Canada Exporter Registry, for 2003

4 Note that data on foreign ownership and exporter employee size are at the establishment level, this is a different statistical measure than the previous data which is at the enterprise level. See page 8 of Statistics Canada "A Profile of Canadian Exporters, 1993 to 2004" for definitions.

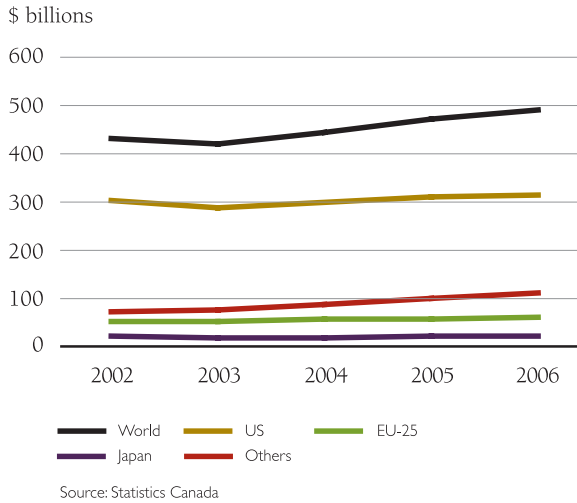
5 Byrd Craig, 2002, "Foreign Control of Canada's Merchandise Exports, 2002" Canada Trade Review, Statistics Canada

\$94.7 billion in 2006 on the strength of ores and alloys. The appreciation of the Canadian dollar against the U.S. dollar combined with a slowdown in the demand for forestry and automotive products from the U.S. accounted for a big part of that slower export growth. Energy exports were about as large as in 2005, resulting in a zero growth rate over 2005-2006.

Exports of agricultural and fish products (4.3 per cent) and of other consumer goods (5.0 per cent) also experienced a stronger growth. The former continued to benefit from the recent resumption of cattle exports to the United States and new markets for wheat and canola.

Machinery and equipment (20.9 per cent), industrial goods and materials (20.7 per cent), energy

FIGURE 4-2
Imports of Goods and Services by Major Area, 2002-2006



products (19.0 per cent) and automotive products (18.1 per cent) together accounted for about 79.0 per cent of goods exports in 2006.

Imports recorded gains across the board with the exception of forestry (-1.8%). As with exports, imports of industrial goods and materials advanced at a robust rate of 6.9 per cent to \$84.0 billion. This category which recorded a deficit as recently as 2001, was the sole sector to register a rising trade surplus in 2006, at \$10.7 billion. Imports of consumer goods

FIGURE 4-4
Composition of Goods Exports in 2006

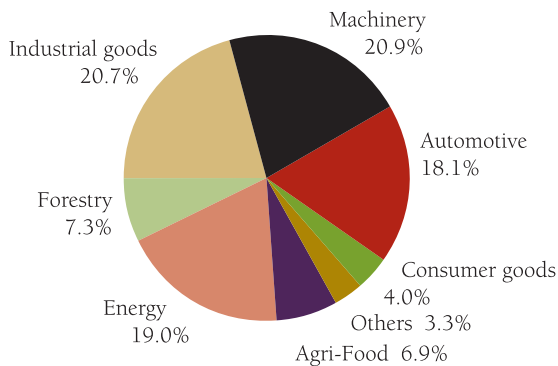
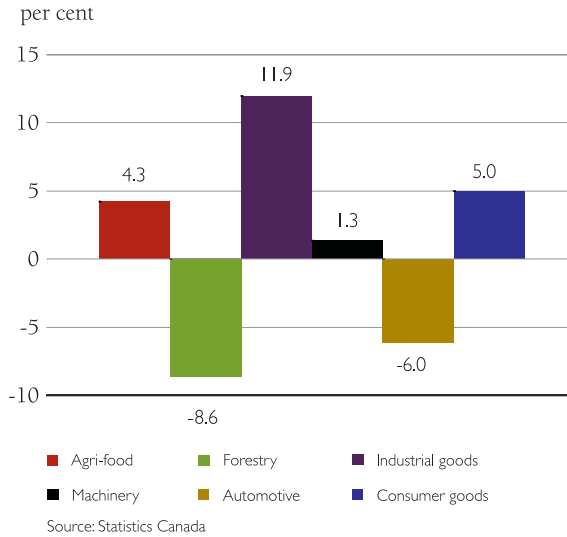


FIGURE 4-3
Growth in Goods Exports by Major Groups, 2005-2006



grew 5.2 per cent to \$52.0 billion. This reflected a strong domestic demand for imports of durable and semi-durable goods. The category recorded the largest trade deficit in 2006, at \$33.9 billion.

Machinery and equipment (28.4 per cent), industrial goods and materials (20.8 per cent), automotive products (19.7 per cent) and consumer goods accounted for more 80.0 per cent of all imports in 2006.

FIGURE 4-5
Growth in Goods Imports by Major Groups, 2005-2006

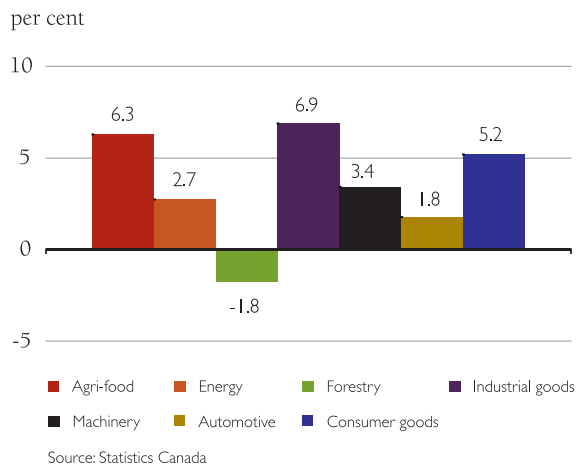
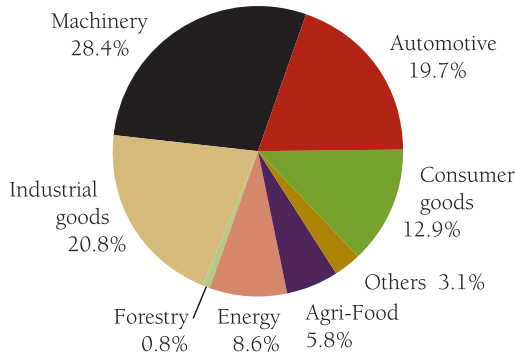


FIGURE 4-6
Composition of Goods Imports in 2006



Source: Statistics Canada

Composition of goods and trade surplus

The composition of Canadian goods trade has evolved over the past several years and this has had an impact on the size of the trade surplus. After peaking at \$70.7 billion in 2001, Canada's goods surplus has decreased, reaching \$54.3 billion in 2006. Meanwhile, structural changes have taken place in Canada's trading relationship with the world. As of 2006, the goods surplus was being sustained by gains in industrial goods and materials counterbalancing declines for consumer goods, machinery and equipment, automotive products, forestry products and energy products.

It is important to recall that the benefits of trade come from increased specialization and productivity arising from more exports and imports, not from sectoral surpluses per se. Clearly, the surge of Canada's energy exports in recent years has boosted Canada's standard of living. But Canadians have also benefited from rising consumer purchasing power as import prices have fallen. Similarly, increased spending by firms on imported machinery and equipment enhances their ability to compete both in Canada and abroad. The changes in sectoral trade balances show how the Canadian economy is reallocating resources as the global economic landscape shifts.

Trade balances by sector are a reflection of a country's industrial structure and spending patterns. As

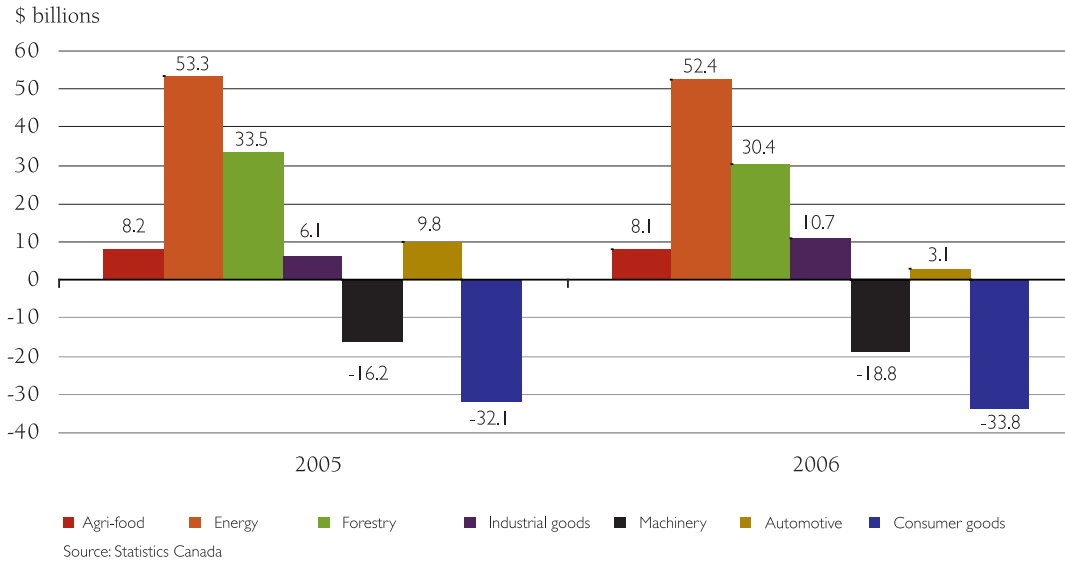
factors underpinning these patterns take a long time to change, sectoral trends in the trade balance typically persist for long periods. Canada is no exception. Of the seven major categories of goods, three have consistently posted a trade surplus since 1971. These are rooted in Canada's traditional resources: agricultural and fish products, forestry, and energy products. In nominal dollars, the surplus in agricultural and fish products was largest in 2001, at \$10.7 billion. The surplus for forestry products reached a plateau in 2005 at \$53.3 billion whereas the surplus for energy products reached a peak in 2000 at \$39.7 billion. Similarly, Canada has always run trade deficits for machinery and equipment and consumer goods.

Automotive products and industrial goods and materials are the only sectors that have posted both surpluses and deficits over the course of past 35 years. Even these reversals of trend were the exception rather than the rule, and were limited to short periods. The auto sector posted chronic deficits from 1972 to 1981. Since then, it has consistently posted surpluses, with the exception of 1986 and 1987. Industrial goods and materials (which include metals and chemicals) posted surpluses in 31 of the last 35 years, with deficits occurring on four occasions consecutively from 1998 to 2001 when metal prices were low and steel and chemical imports high.

Canada's overall goods trade surplus is increasingly relying on growing surpluses in energy and industrial goods and materials. The trade balance in the other five sectors has been affected by falling exports and/or rising imports. The strong appreciation of the Canadian dollar after 2002 had a major impact on prices outside of energy products and industrial goods and materials. Meanwhile, prices have fallen across the board for all non-energy imports since 2002, a reflection of the dollar appreciation and of low inflation in most of our major trading partners.

Along with the rising dollar, the integration of China into the world economy has played a key role in changing international trade patterns in recent years.

FIGURE 4-7
Goods Trade Balance by Major Groups, 2005-2006



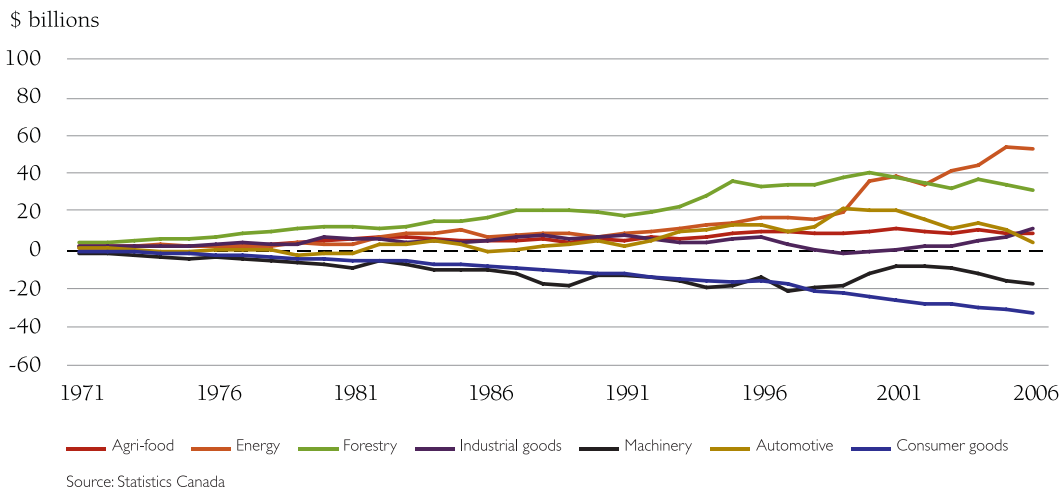
The ultimate impact has been a decrease in the prices of consumer goods and investment goods arriving in Canada. In addition, rapid industrialization in China and other Asian nations has contributed to the boom in commodity prices in recent years, notably for energy and metals.

Some of the changes in recent years have been spectacular. Automotive products which in 1999 had the largest surplus (\$21.4 billion) of all categories,

with the exception of forestry products, reached a modest surplus of \$3.1 billion last year. The surplus in energy products surpassed that in forestry for the first time ever in 2001, and by 2006 was \$20 billion larger, at \$52.4 billion.

Income generated from the boom in energy and metal prices has boosted consumer and business spending. This has pushed the deficit in consumer goods to new highs (\$33.8 billion) while the deficit

FIGURE 4-8
Trade Balance by Major Groups



for machinery and equipment was among the third largest this decade.

Services

Although services exports increased to \$65.1 billion in 2006, the services deficit rose to a record of \$17.1 billion, up from \$13.7 billion in 2005 as imports rose to a record \$82.2 billion. The \$3.4 billion increase in the deficit was largely due to higher transportation fares and other trip expenses for Canadians travelling abroad. Both travel and transportation deficits for the year were also the highest ever recorded, at \$7.2 billion and \$7.0 billion, respectively.

In terms of growth, total service imports (4.5 per cent) outpaced total service exports (0.3 per cent). By major categories, transportation service exports posted a strong growth (4.7 per cent); all other service exports declined, with government services experiencing the steepest drop (3.5 per cent). Within commercial service exports, while audio-visual services (7.5 per cent), research and development (5.5 per cent), construction services (4.8 per cent) and other financial services (4.1 per cent)

showed a robust growth, computer and information services (-8.6 per cent), and architectural, engineering and other technical services (-2.8 per cent) saw a decline in exports. On the import side, travel and transportation services grew by 6.2 per cent and 9.5 per cent, respectively, during the year. Commercial services imports advanced by 1.2 per cent in 2006, on the back of research and development (24.6 per cent), architectural, engineering and other technical services (17.6 per cent), other financial services (17.1 per cent) and audio-visual services (3.9 per cent). However, imports of construction services (-46.3 per cent), computer and information services (-9.2 per cent), and royalties and licence fees (-1.4 per cent) declined during the course of the year.

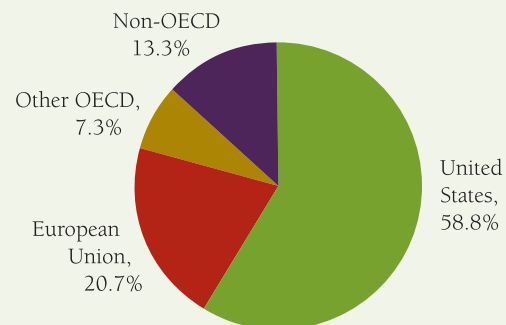
By geographical destination, the service trade deficit with the US widened from \$9.4 billion to \$10.7 billion. The increase in the deficit with non-US trading partners was even faster, advancing by 49.0 per cent from \$4.3 billion to \$6.4 billion. This reflected a surge in service imports from the EU-25 and from Others (e.g. other than the U.S., Japan and the EU).

Foreign Affiliate Trade Statistics (FATS)

As a complement to traditional exports, Canadian companies are also integrated into the world economy through overseas sales by Canadian owned foreign affiliates abroad. On a global level, foreign affiliate sales of Canadian companies increased from \$316.4 billion in 1999 to \$372.4 billion in 2004.

The geographic distribution of the value of foreign affiliate sales in 2004 is shown in Figure 1. Foreign affiliate sales in the United States (58.8%) dominated overall sales in 2004, followed by sales in the European Union (20.7%). However, compared to 1999, the share for the United States declined from 64.3%, with gains registered for all the other regions – the share for the EU increased by 1.1 percentage points, the share for Other OECD (i.e. other

FIGURE 1
Foreign Affiliate Sales, Geographic Distribution, 2004



than the US and the EU) countries expanded by 2.7 percentage points and the share for Non-OECD countries by 1.8 percentage points.

Employment by Canadian foreign affiliates expanded from 764,000 in 1999 to 942,000 in 2004; this 178,000 increase in employment constituted a 23.3 per cent expansion over the five year period. The largest increase in employment from 1999 to 2004 was registered by the EU (79,000; of which 31,000 was in the United Kingdom) followed by the US (up by 52,000). The geographic distribution of employment among foreign affiliates is similar to that of sales.

The value of foreign affiliate sales as a share of the value of Canadian exports of goods and services is shown in Figure 2. For the world, sales by foreign affiliates represented 75.5 per cent of Canadian exports in 2004. As Canadian firms are much more likely to serve the U.S. market through exports than through affiliate sales, this share was only 56.6 per cent in the U.S. However, foreign affiliate sales play a more important role among Canadian firms serving more distant markets, with foreign affiliate sales in 2004 at a level twice the value of exports to the EU and nearly three times the value of exports to non-OECD countries.

Figure 3 shows the market distribution of exports of goods and services compared to the combined value of exports and foreign affiliate sales. In 2004, the U.S. accounted for 78.5 per cent of Canadian world exports, but only for 70.0 per cent of the combined value of exports and foreign affiliate sales. On the other hand, the EU accounted for only 7.6 per cent of exports, but as much as 13.3 per cent of the combined value of

FIGURE 2
Foreign Affiliate Sales as Share of Total Exports
(Per cent of Goods and Services Exports, 2004)

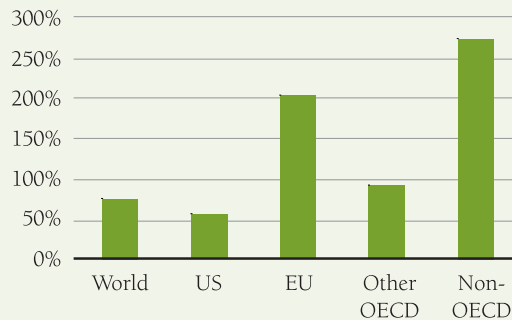
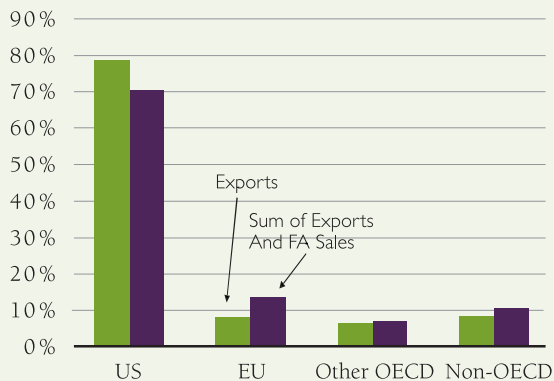


FIGURE 3
Market Distribution of Exports vs Combined Exports and Sales
(Per cent of World, 2004)



exports and foreign affiliate sales. Corporations with foreign affiliates tend to export to their affiliates, but the magnitude of such sales is a function of a number of factors, including the industrial sector in which the company is operating.

Merchandise trade⁴

In 2006, 81.6 per cent of merchandise exports were destined for the U.S., reflecting a decline of 1.8 per cent in exports to that country. By comparison, only

2.3, 2.1 and 1.7 per cent of merchandise exports were bound for the U.K., Japan and China, respectively. The EU-25 as a whole was the destination for 6.6 per cent of Canada's exports. Among the top-ten

⁴ The term "merchandise trade" is used to refer to commodity trade on a Customs basis in contrast with "goods trade" that refers to trade on a Balance of Payments basis. The Customs data is produced on an internationally harmonized commodity classification system (HS) that is broken down into chapters numbered from 1 to 99. Chapters 98 and 99 of the HS system represent special transactions and are excluded from the following analysis.

individual country destinations shown in Table 4-2, the growth of Canada's merchandise exports was the strongest with respect to the Netherlands (40.2 per cent), Mexico (30.3 per cent) and the U.K. (22.8 per cent), respectively. The latter overtook Japan as Canada's second largest single country export destination. Canada's exports to China rose only by 7.9 per cent in 2006. However, there has been redistribution in shares of major export markets over 2002-2005. Figure 4-9 reveals that, among the top-five destinations, the market share has increased for all markets, except for the U.S. and Japan. While the U.S. share decreased by 5.5 per cent, Japan's

share remained stable. The U.K. share more than doubled whereas the shares of China and all other countries advanced by 70 per cent and 41.8 per cent, respectively.

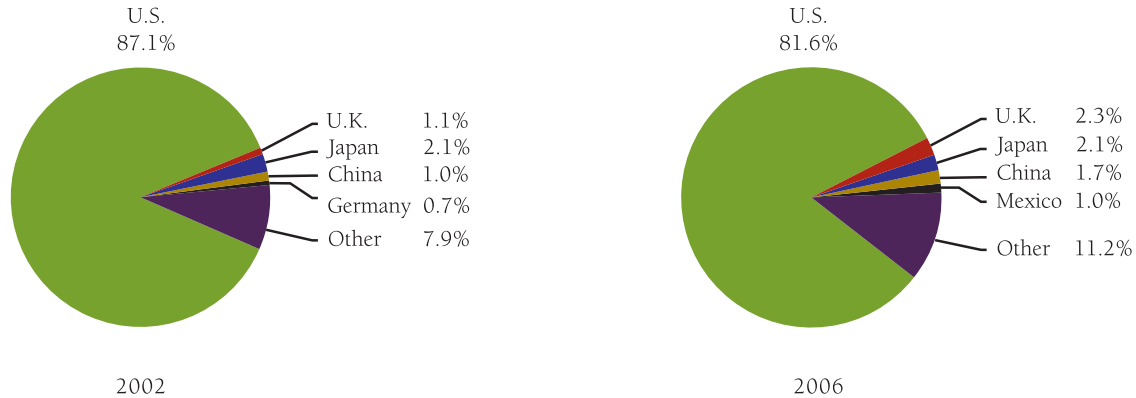
With respect to merchandise imports, the U.S., although still dominant, accounted for 54.9 per cent of Canadian merchandise imports in 2006. China and Mexico followed at 8.7 per cent and 4.0 per cent, respectively. Algeria was a newcomer among Canada's top-ten suppliers largely as a result of increased imports of mineral fuel and oil. In terms of growth, imports from Algeria (18.8 per cent), China (16.8 per cent) and Mexico (9.6 per cent)

TABLE 4-2:
Canada's merchandise exports and imports by area

Canada's merchandise export by area (\$ billion and %)				
Country	2005	2006	Share in 2006	% Change 2006/2005
World	436.2	440.2	100.0	0.9
U.S.	365.8	359.3	81.6	-1.8
U.K.	8.3	10.1	2.3	22.8
Japan	9.2	9.4	2.1	2.7
China	7.1	7.7	1.7	7.9
Mexico	3.4	4.4	1.0	30.3
Germany	3.2	3.9	0.9	19.8
Korea	2.8	3.3	0.7	15.8
Netherlands	2.2	3.1	0.7	40.2
France	2.5	2.9	0.7	13.8
Belgium	2.3	2.4	0.5	4.7
Memorandum				
EU-25	24.8	28.8	6.6	16.3
Canada's merchandise imports by area (\$ billion and %)				
Country	2005	2006	Share in 2006	% Change 2006/2005
World	380.8	396.5	100.0	4.1
U.S.	215.2	217.6	54.9	1.1
China	29.5	34.5	8.7	16.8
Mexico	14.6	16.0	4.0	9.6
Japan	14.8	15.3	3.9	3.7
Germany	10.3	11.1	2.8	8.4
U.K.	10.4	10.8	2.7	4.0
Korea, South	5.4	5.8	1.5	7.2
Norway	6.1	5.4	1.4	-10.2
France	5.0	5.2	1.3	3.7
Algeria	4.2	5.0	1.3	18.8
Memorandum				
EU-25	45.6	48.9	12.3	7.2

Source: Statistics Canada

FIGURE 4-9
Major Merchandise Export Markets in 2002 and 2006



witnessed the fastest growth among the top-ten sources in 2006.

Merchandise trade by sector with selected major trading partners

The United States

In 2006, Canada's total merchandise exports to the United States decreased by 1.8 per cent to \$359.3 billion, with the U.S. share in total merchandise exports falling 2.2 per cent to 81.6 per cent. Canadian merchandise exports to the U.S. remain concentrated in three trade categories, mineral fuel and oil (23.4 per cent); motor vehicles and parts (19.6 per cent); and machinery (7.2 per cent), together accounting for about 50.2 per cent of all merchandise exports to the U.S. The share of Canada's top 10 exports amounted

to 72.1 per cent of all exports to the U.S. or \$259.1 billion. All top ten exports to the U.S. declined in 2006, with the exception of aluminum and iron and steel products which went up by 25.1 per cent and 1.9 per cent, respectively.

Canadian merchandise imports from the U.S. edged up 1.1 per cent to \$217.6 billion in 2006. At 54.9 per cent of all merchandise imports, the US share was down 1.6 per cent from a year earlier. Motor vehicles and parts, and machinery and equipment — both mechanical and electrical — accounted for 46.7 per cent of all merchandise imports from the US in 2006. The combined top-10 merchandise imports at the HS 2-digit level

FIGURE 4-10A
Top-10 Merchandise Exports to the U.S., 2006

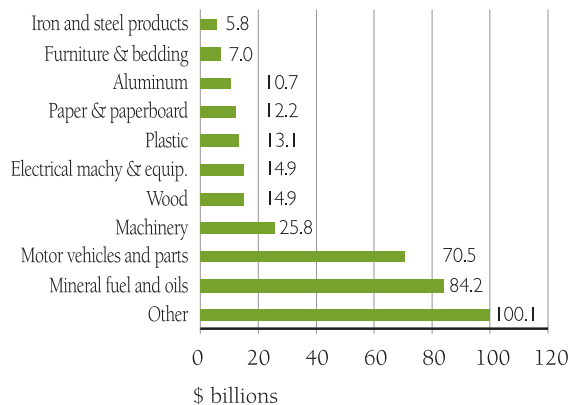
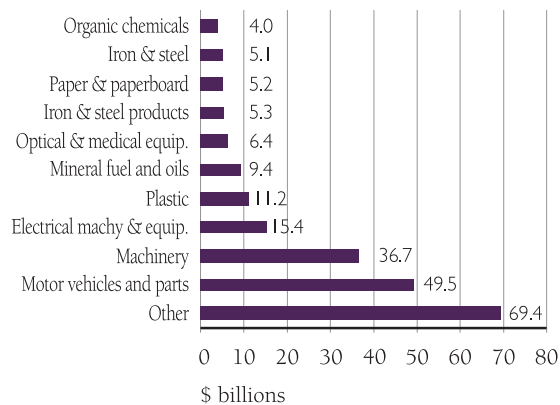


FIGURE 4-10B
Top-10 Merchandise Imports from the U.S., 2006



accounted for about 68.1 per cent of total merchandise imports from the US or \$148.1 billion.

As for exports, imports of iron and steel products saw the fastest increase in 2006, rising by 6.0 per cent whereas mineral fuel and oil (-6.0 per cent) and electrical machinery and equipment (-4.5 per cent) experienced the biggest decline.

The European Union

In 2006, Canadian merchandise exports to the EU-25 grew at a brisk pace of 16.3 per cent to \$28.8 billion, propelled by merchandise exports to the U.K. (mostly precious stones and metals). Exports of aircraft and spacecraft products more than doubled, rising by \$1.3 billion to \$2.6 billion. The top-10 products accounted for 70.0 per cent of all exports to the EU-25. Aircraft and spacecraft products (102.1 per cent), inorganic chemicals (45.1 per cent), precious stones (29.2 per cent) and articles of nickel (23.0 per cent) led the growth in exports to the EU-25, while wood pulp (-23.4 per cent) and mineral fuel and oil (-12.0 per cent) displayed the steepest decline in 2006.

Unlike the year before, Canadian merchandise imports from the EU grew at slower pace than Canadian exports to that trading partner, climbing by 7.2 per cent to \$48.9 billion in 2006. Mechanical machinery and equipment, mineral fuel and oil, pharmaceutical products, and motor vehicles accounted for 53.6 per cent of imports from the

EU. While increases in organic chemicals, pharmaceutical products, mineral fuel and oil, and motor vehicles accelerated with annual growth equal to 33.0, 19.5 per cent, 17.5 per cent and 12.3 per cent, respectively, iron and steel products declined by 7.9 per cent.

Japan

Canadian merchandise exports to Japan expanded by 2.7 per cent to \$9.4 billion in 2006. The ten most important products exported to Japan accounted for more than 75 per cent of total merchandise exports to that country. Five products alone – Wood, ores, mineral fuel and oil, grain seeds, and meat accounted for about 55per cent of all exports. The products behind the growth of exports to Japan were ores, mineral fuel and oil, aluminum and aerospace products. On the other side, agri-food products steeply declined.

Canadian merchandise imports from Japan advanced 3.7 per cent to \$15.3 billion in 2006, up from \$14.8 billion in 2005. Imports from Japan were characterized by concentration in only a few sectors, with the top ten accounting for 92.3 per cent and the top three for over three quarters of total merchandise imports from Japan. The largest sectors included motor vehicles (43.5 per cent), machinery and equipment (19.6 per cent) and electrical machinery and equipment (13.4 per cent). Aircraft and spacecraft (22.8 per cent) and iron and steel

FIGURE 4-11A
Top-10 Merchandise Exports to the EU, 2006

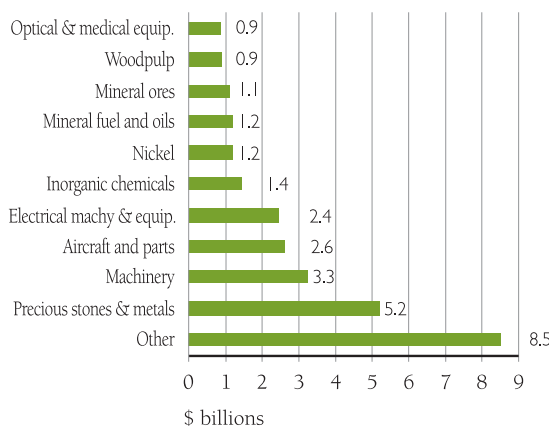


FIGURE 4-11B
Top-10 Merchandise Imports from the EU, 2006

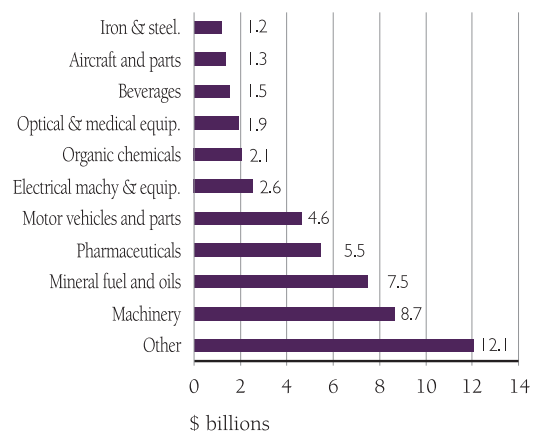
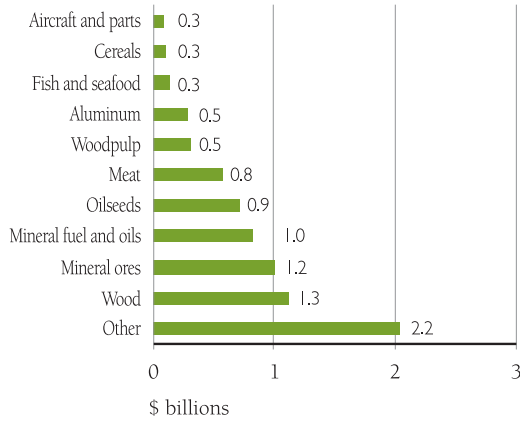


FIGURE 4-12A
Top-10 Merchandise Exports to Japan, 2006



products (20.6 per cent) experienced the fastest increases in 2006.

China

Canadian merchandise exports to China expanded by 7.9 per cent to \$7.7 billion in 2006, from \$7.1 billion the year before. The top-10 products accounted for more than 70 per cent of exports in 2006. For the first time, one category - wood pulp - broke the mark of one billion dollars of exports, followed by organic chemicals at \$881.0 million. While exports of nickel products, plastic, motor vehicles, and wood pulp were growing at a brisk pace of 160.6 per cent, 51.6 per cent, 33.0 per cent and 27.2 per cent respectively, fertilizers, and fish

FIGURE 4-13A
Top-10 Merchandise Exports to China, 2006

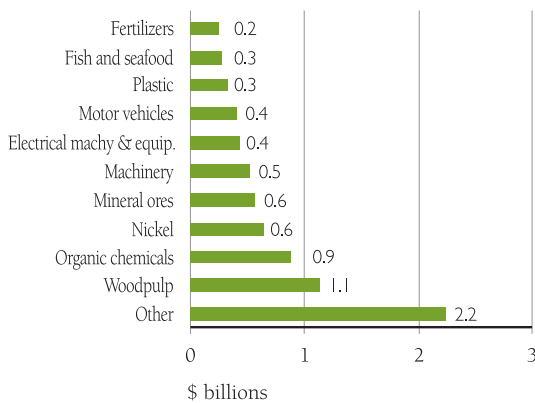
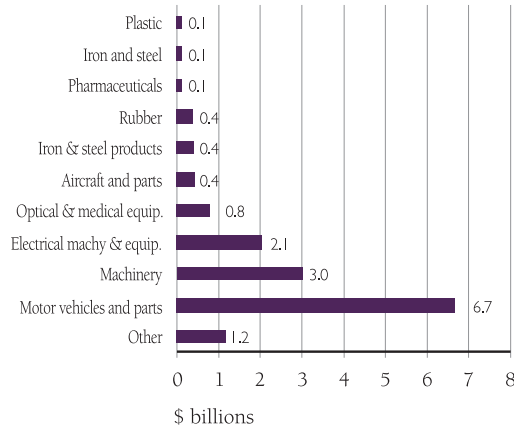


FIGURE 4-12B
Top-10 Merchandise Imports from Japan, 2006



and seafood saw their exports drop by 44.0 per cent and 13.1 per cent, respectively.

China is the second-largest single country source for Canadian imports. Increases in Canadian merchandise imports from China outpaced those in exports to that country by a wide margin, rising 16.8 per cent to \$34.5 billion in 2006. All the top ten imports witnessed double-digit growth rates, with the exception of optical and medical instruments. The major imports from China were comprised of mechanical machinery, electrical machinery and equipment, and toys and sports equipment. With respect to growth, iron and steel (22.1 per cent), electrical machinery (21.4 per cent) and knit apparel (20.6 per cent) were the leaders.

FIGURE 4-13B
Top-10 Merchandise Imports from China, 2006

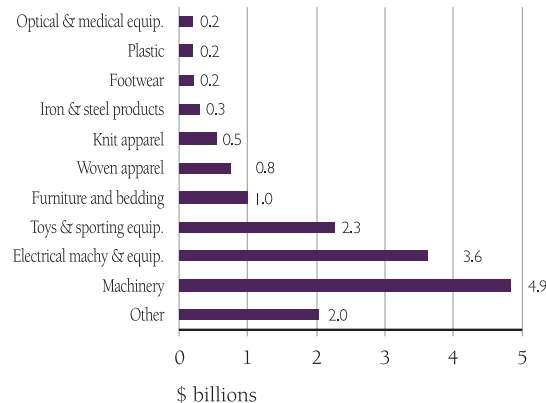


FIGURE 4-14A
Top-10 Merchandise Exports to Mexico, 2006

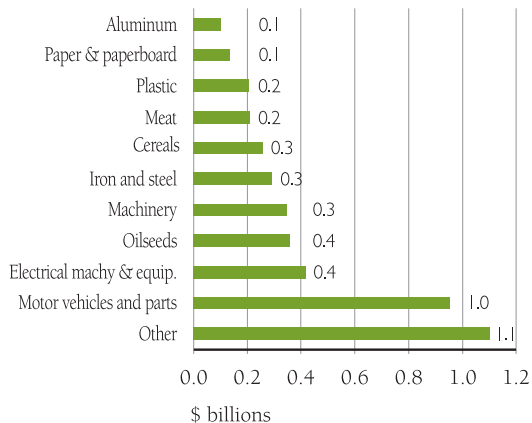
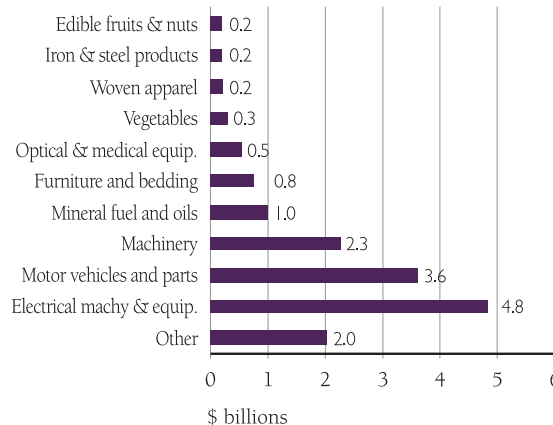


FIGURE 4-14B
Top-10 Merchandise Imports from Mexico, 2006



Mexico

On an individual country basis, Mexico is the Canada's fifth largest merchandise export market and third largest import market. Merchandise exports to Mexico advanced at a robust 30.3 per cent to \$4.4, from \$3.4 billion in 2005.⁵ The top ten exports to Mexico accounted for about three-quarters of all exports to Mexico, led by motor vehicles (21.8 per cent), electrical machinery (9.5 per cent) and oilseeds (8.2 per cent). Of the top ten exports to Mexico, three categories posted growth rate of over 100.0 per cent in 2006. They were plastic (122.8 per cent), iron and steel products (115.0 per cent) and electrical machinery (106.1 per cent).

Merchandise imports from Mexico grew 9.6 per cent to \$16.0 billion in 2006. In general, merchandise imports from Mexico are highly concentrated. The year 2006 was no exception as the top three imports made up 67.1 per cent, whereas the top ten imports captured about 87.2 per cent of all imports. Mineral fuel and oil (25.7 per cent), vegetables (13.5 per cent) and electrical machinery

(13.3 per cent) led the growth among major imports from Mexico in 2006.

Provincial trade performance

Four provinces and one territory – Ontario, British Columbia, New Brunswick, Nova Scotia and the Northwest Territories – saw their merchandise exports to the world fall. While Manitoba and Saskatchewan witnessed the highest increase in their merchandise exports, Nova Scotia was hardest hit (-12.2 per cent). The main exports from Manitoba were mineral fuel and oil, nickel products, motor vehicles and cereals while they were mineral fuel and oil, cereals, oilseeds and vegetables for Saskatchewan.

Of the Canadian provinces and territories, Ontario accounted for 45.1 per cent of all Canadian exports to the world in 2006, followed by Alberta at 18.9 per cent, Quebec at 16.6 per cent and the British Columbia at 7.9 per cent.

Imports from the world were also up for all provinces and territories in 2006, with the

⁵ As in previous years, discrepancies between Canadian and Mexican statistics were significant in 2006. Mexico's imports from Canada exceeded Canada's exports to Mexico by \$4.0 billion. Similarly, Canadian imports from Mexico were greater than Mexican exports to Canada by \$10.1 billion. Reconciliation studies between Canada and Mexico identified misallocation and export undercoverage as the major causes for discrepancies. Country misallocation is the attribution of trade to a country that is not the final destination of goods, resulting in the situation where the two countries credit trade to different countries. For example, Canada may ship goods through the United States to the final destination of Mexico. Undercoverage is a situation in which trade is not reported to the compiling country and is therefore missing entirely from its officially published statistics.

exception of New Brunswick and Prince Edward Island. In provinces which experienced the fastest growth – Saskatchewan, Alberta and British Columbia – similar products appear to have driven this growth in imports from the world. They were motor vehicles, mechanical and electrical machinery, iron and steel products. In addition, imports of mineral fuel and oil showed a strong growth in British Columbia.

By province, Ontario accounted for a bigger share of Canadian merchandise imports (58.9 per cent) than it did for exports, followed by Quebec (17.3 per cent) and British Columbia (9.8 per cent).

FIGURE 4-15
Share of Merchandise Exports by Province

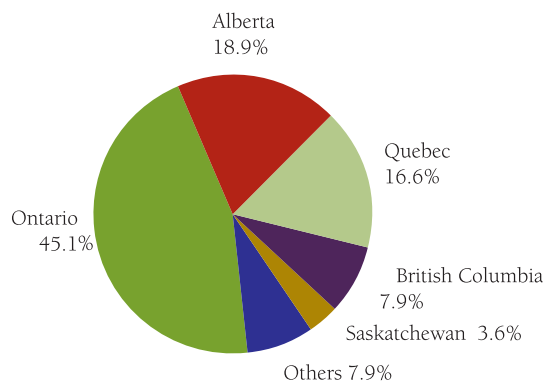


TABLE 4-3
Merchandise Exports by Province and Territory (\$million and %)

Province	2002	2003	2004	2005	2006	Share in 2006	2006/2005 Growth
All Provinces	396,381.3	381,071.4	412,294.4	436,225.9	440,156.6	100.0	0.9
Ontario	206,496.3	189,095.5	199,025.1	200,796.0	198,669.2	45.1	-1.1
Alberta	49,549.4	57,639.7	67,844.6	81,306.3	83,281.1	18.9	2.4
Quebec	68,454.2	64,190.9	68,488.6	71,020.5	73,168.7	16.6	3.0
British Columbia	30,067.4	29,334.6	32,244.8	35,510.1	34,825.1	7.9	-1.9
Saskatchewan	11,282.1	10,389.1	12,403.8	14,081.1	15,642.7	3.6	11.1
Manitoba	9,567.4	9,328.7	9,734.9	9,854.3	11,574.8	2.6	17.5
New Brunswick	8,269.1	8,573.7	9,479.9	10,723.4	10,408.7	2.4	-2.9
Nova Scotia	5,344.4	5,477.4	5,859.9	5,815.6	5,107.9	1.2	-12.2
Newfoundland	5,602.5	4,798.7	4,562.9	4,606.2	4,989.5	1.1	8.3
N. W. Territories	897.3	1,587.8	1,975.1	1,687.1	1,605.2	0.4	-4.9
P. E. Island	693.7	647.7	666.9	810.2	838.0	0.2	3.4
Yukon	5.9	4.8	4.8	11.4	39.7	0.0	247.8
Nunavut	151.7	2.9	3.2	3.6	5.9	0.0	65.2

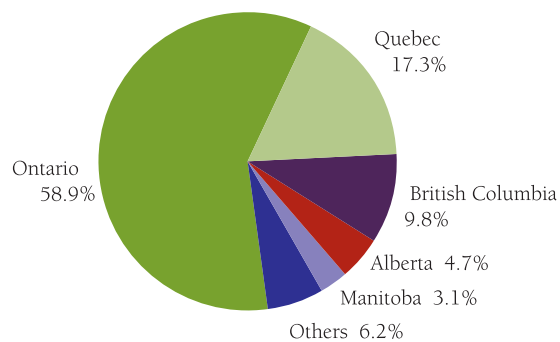
Source: Statistics Canada

TABLE 4-4
Merchandise Imports by Province and Territory (\$million and %)

Province	2002	2003	2004	2005	2006	Share in 2006	2006/2005 Growth
All Provinces	348,956.8	336,141.3	355,799.1	380,809.6	396,530.7	100.0	4.1
Ontario	224,752.5	210,191.8	220,593.0	228,594.9	233,475.1	58.9	2.1
Quebec	51,436.2	52,412.7	57,439.8	65,276.5	68,701.5	17.3	5.3
British Columbia	31,534.4	31,269.6	32,879.2	35,295.5	38,887.1	9.8	10.2
Alberta	12,958.1	13,257.6	13,638.6	16,451.7	18,482.9	4.7	12.4
Manitoba	11,339.7	10,398.6	10,565.1	11,795.1	12,425.0	3.1	5.3
New Brunswick	5,720.1	5,974.1	6,899.0	8,002.5	7,521.7	1.9	-6.0
Nova Scotia	5,140.1	5,816.3	6,377.3	6,991.6	7,491.4	1.9	7.2
Saskatchewan	4,145.8	4,151.7	4,668.9	5,596.2	6,497.5	1.6	16.1
Newfoundland	1,841.3	2,567.6	2,552.6	2,670.8	2,893.2	0.7	8.3
Yukon	62.8	75.2	85.4	76.9	86.2	0.0	12.1
P.E. Island	23.1	19.7	36.5	53.9	49.4	0.0	-8.3
Nunavut	0.6	2.9	0.0	2.9	16.0	0.0	449.0
N. W. Territories	2.0	3.5	63.6	1.1	3.7	0.0	229.5

Source: Statistics Canada

FIGURE 4-16
Share of Merchandise Imports by Province



Overview of Canada's investment performance

Global foreign direct investment inflows

There are a variety of methods by which external finance can enter a country; of these, Foreign Direct Investment (FDI) has the advantage of not creating debt, being comparatively non-volatile, and having returns which depend upon the performance of the projects financed. In addition, FDI can provide additional benefits through the transfer of knowledge, technology, and skills, as well as increased trade related to the investment.

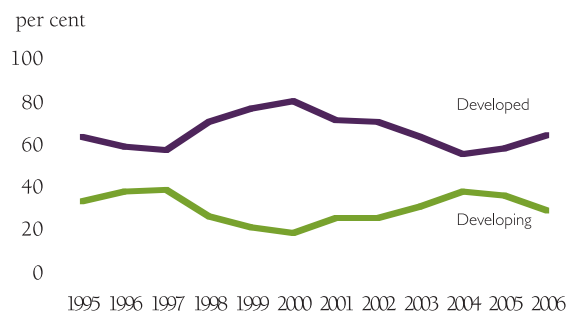
FDI has played a fundamental role in globalization. Global FDI inflows increased nearly 600 per cent between 1990 and 2000, rising from \$201.6 billion USD to \$1409.6 billion. The early 2000s witnessed an abrupt drop, reflecting the slowdown in the global economy as inflows fell to \$557.9 billion USD by 2003—less than half the 2000 level. But recent years suggest inflows are recovering, with growth over 2004-05 of 27-29 per cent and estimated growth for 2006 at 34.3 per cent, leaving global inflows at \$1230.4 billion by the end of 2006.

The rise in inward FDI flows largely reflects the strong economic growth that has continued in many parts of the world. But other factors also contributed, including the increases in corporate profits and subsequent higher stock prices, which boosted the cross-border mergers and acquisitions that form a substantial portion of FDI flows. Liberalization of trade and investment regimes also had an overall positive impact on flows as well, although certain countries in Africa and Latin America stand out as moving in the opposite direction.

This growth, however, was not evenly distributed, as developed countries took in more than double the flows to developing countries. FDI flows to developed countries rose by 47.7 per cent to US\$800.7 billion in 2006, exceeding the growth of the previous two years by a sizable margin. The U.S. regained its position as the top destination for FDI flows, having been usurped by the U.K. in 2005. France and Italy saw substantial growth in their FDI inflows, as did Poland with growth over 100 per cent, but Germany actually posted a decline in new inflows of 75.1 per cent. This may be a continuation of the repatriation by foreign firms of intra-company loans that drove negative growth in 2003-04. The intra-company loans component of FDI is usually more volatile and depends on such factors as tax rates, interest rate differentials, and exchange rate changes.

FDI inflows to developing countries, meanwhile, increased much more slowly, rising only 10 per cent in 2006 versus growth of 57.0 per cent and 21.5 per cent in 2004 and 2005 respectively.

FIGURE 5-1
Developed and Developing Economies: Share of World FDI Inflows



Data: UNCTAD Investment Brief 2007 No. 1 and UNCTAD World Investment Report 2006 annex tables.

TABLE 5-1
Global FDI inflows for selected regions and economies, 2002-2006
(billions US\$)

Host Region/economy	2002	2003	2004	2005	2006	Growth rate 2002-06 ^a
World	617.7	557.9	710.8	916.3	1230.4	18.8
Developed world	441.2	358.5	396.1	542.3	800.7	16.1
Canada ^b	22.1	7.6	1.5	33.8	66.6	31.7
United States	74.5	53.1	122.4	99.4	177.3	24.2
Europe	314.2	274.1	217.7	433.6	589.8	17.1
EU-25	307.1	253.7	213.7	421.9	549.0	15.6
France	49.0	42.5	31.4	63.6	88.4	15.9
Germany	53.5	29.2	-15.1	32.7	8.1	-37.6
Italy	14.5	16.4	16.8	20.0	30.0	19.8
Luxembourg	4.0	3.9	4.0	3.7	n/a	n/a
UK	24.0	16.8	56.2	164.5	169.8	63.1
Czech Republic	8.5	2.1	5.0	1.0	5.4	-10.7
Japan	9.2	6.3	7.8	2.8	-8.2	n/a
Developing economies	163.6	175.1	275.0	334.3	367.7	22.4
Africa	13.0	18.5	17.2	30.7	38.8	31.4
Latin America and the Caribbean	54.3	46.1	100.5	103.7	99.0	16.2
Brazil	16.6	10.1	18.1	15.1	14.8	-2.8
Chile	2.6	4.3	7.2	6.7	9.9	40.4
Mexico	18.3	14.2	18.7	18.1	16.5	-2.5
Asia and Oceania	96.2	110.5	157.3	200.0	229.9	24.3
China	52.7	53.5	60.6	72.4	70.0	7.3
Hong Kong	9.7	13.6	34.0	35.9	41.4	43.8
India	5.6	4.6	5.5	6.6	9.5	14.0
Korea	3.0	3.9	7.7	7.2	0.5 ^c	-36.3
Singapore	7.3	10.4	14.8	20.1	31.9	44.4
Russia	3.5	8.0	15.4	14.6	28.4	69.2

Source: UNCTAD Investment Brief 2007 No. 1 and UNCTAD World Investment Report 2006.

- a This is the compound annual average growth rate over the indicated period.
 b Since data for Canada is not available from UNCTAD for 2006, these data are from Statistics Canada, converted to US\$ using the annual average exchange rate of each year.
 c UNCTAD notes that this is likely an underestimation based on data released by the Bank of Korea.

Inflows to Africa reached a new high of \$38.8 billion in 2006, past the record high of 2005, with flows concentrated in West, North, and Central Africa. Continued high demand for commodities and high prices played a key role, especially for oil, which drew investment not only from developed countries but other developing countries as well.

Meanwhile, flows to Latin America and the Caribbean slowed by 4.5 per cent. This was partly a result of high commodity prices, which helped lead to appreciation in many countries' currencies. But the growing role of the state control in Bolivia, Ecuador, and Venezuela may also have contributed to lower FDI flows to the region, as less favourable

environments for investors were produced, and there continues to be uncertainty about future policies in those countries. Mexico and Brazil, however (the two largest recipient countries), were able to maintain inflows at roughly the same levels as the year prior, and Chile saw 48.4 per cent growth thanks to earnings from mining profits being reinvested into the country.

As with Africa, FDI flows to Asia and Oceania reached a record high in 2006, rising 15.0 per cent to \$229.9 billion US\$. China's flows dipped slightly, but continue to be the highest in the region at \$70.0 billion US\$, with investments in high-tech industries growing quickly, and Hong Kong at second attracted an additional \$41.4 billion, up 15.4 per cent. India, by comparison, while experiencing growth in FDI flows of 44.4 per cent, garnered a total of only \$9.5 billion. This was enough to surpass South Korea as the fourth most important recipient in the area, but UNCTAD notes that the current data for Korea is likely an underestimation of actual flows for that country. Singapore took the number three spot, experiencing quick growth of 58.8 per cent. Interestingly, outward FDI from the region is also rising, with China and India being important sources.

Oil-rich countries in the Gulf region of the Middle East, as well as Turkey, continue to attract substantial FDI inflows; FDI to Turkey grew 76.3 per cent, nearly doubling to \$17.1 billion. Gulf countries also increased their FDI outflows in 2006, led by the United Arab Emirates, primarily through mergers and acquisitions.

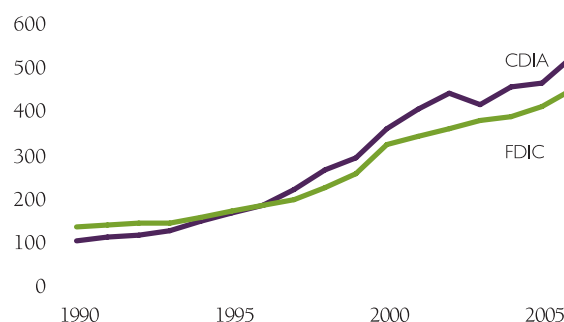
In Eastern Europe, FDI inflows to Russia rose 94.6 per cent, totalling \$28.4 billion USD by the end of 2006. But the future pace of this inflow may be affected by recent tightening of natural resource regulations and disputes which emerged in 2006 over such issues as environmental protection and extraction costs.

Canadian Inward and Outward FDI

The openness of the Canadian economy and the importance of international trade are reflected in the significant growth in total stocks of both inward and outward FDI Canada has experienced over the past 25 years. 2006 saw both Canadian direct investment abroad and FDI in Canada posting their highest percentage increases in six years—that is, the most since the technology boom of 2000. Canada's inward FDI stock grew by 10.1 per cent in 2006, to stand at \$448.9 billion by the end of the year. Canada's investments abroad also grew rapidly, advancing 13.8 per cent to \$523.3 billion in the same year. However, the primary reasons behind these increases differ. The increase in FDI stock in Canada was due mostly to foreign investors acquiring major Canadian firms. Meanwhile, roughly three quarters of the increase in Canadian direct investment abroad was due to changes in the value of capital transactions, as the Canadian dollar depreciated at the end of the year¹, and Canadian FDI abroad is denominated in foreign currencies.

Overall, Canada's net direct investment position² increased from \$52.0 billion in 2005 to \$74.4 billion by the end of 2006, such that Canada continued to

FIGURE 5-2
Canada's inward and outward FDI stock
(billions CAD)



Data: Statistics Canada.
Canadian Direct Investment Abroad (CDIA) = outward
Foreign Direct Investment in Canada (FDIC) = inward

¹ The value of foreign direct investment is calculated as of the last business day in December, and uses the exchange rates on that date.

² The net direct investment position is defined as the difference between Canadian direct investment abroad and foreign direct investment in Canada.

be a net exporter of direct investment. This increase was in large part as a result of valuation changes such as from exchange rates. Canada had a positive net direct investment position with the majority of its partners, including the Caribbean countries and the U.K.; however, it did post a negative position with several notable countries including the U.S. (-\$50.5 billion), France, the Netherlands, Switzerland, and Japan.

Foreign direct investment in Canada

The stock of FDI in Canada continues to be heavily dominated by the U.S., which was responsible for \$273.7 billion in 2006, or 61.0 per cent of the total. This was up \$14.7 billion from 2005, although the percentage accounted for was down slightly from 64.1 per cent in 2005. European countries (the

U.K., France, the Netherlands, and Switzerland) made up the next four largest investors, with direct investment from the U.K. rising 30 per cent due mostly to acquisitions in Canada. Also notable was the increase in FDI from Brazil, which more than tripled to \$9.4 billion, with acquisitions again being the driver. Of the top ten countries with investments in Canada, Brazil is also the one to have experienced the highest average annual growth rate over the past five years (2002-2006) at 86.7 per cent: its FDI in Canada has increased twelve-fold from \$774 million to \$9.4 billion.

Overall, 55 per cent of FDI in Canada was in goods industries at the end of 2006, down slightly from 59 per cent in 2000. The energy and metallic minerals industry continued its recent growth, increasing its share of FDI stocks in Canada from 25.2 per cent

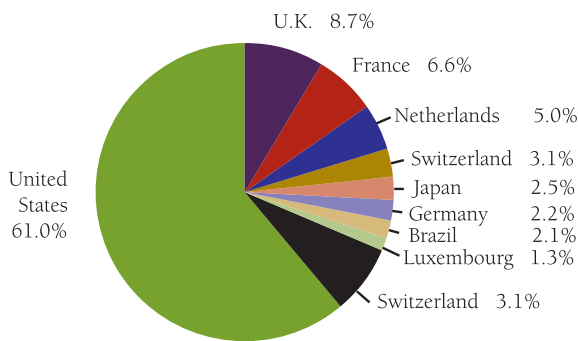
TABLE 5-2
Foreign Direct Investment in Canada by Region and by Top-10 Sources
(billions CAD)

Region	1995	2005	2006	Share in 1995	Share in 2006	per cent	
						Change 2006/2005	Growth ^a 1995-2006
World	168.2	407.6	448.9	100.0	100.0	10.1	9.3
North America	115.3	263.3	279.4	68.5	62.2	6.1	8.4
South and Central America	0.4	3.2	9.5	0.2	2.1	199.1	34.1
Europe	40.1	119.2	134.0	23.9	29.9	12.4	11.6
EU-25	35.9	104.4	118.4	21.3	26.4	25.6	11.5
Africa	0.0	1.2	1.6	0.0	0.3	25.3	44.6
Asia/Oceania	12.4	20.7	24.4	7.4	5.4	18.0	6.4
World	168.2	407.6	448.9	100.0	100.0	10.1	9.3
United States	112.9	259.0	273.7	67.2	61.0	5.7	8.4
United Kingdom	14.1	30.0	39.0	8.4	8.7	29.9	9.7
France	5.7	28.4	29.5	3.4	6.6	4.1	16.1
Netherlands	6.3	22.1	22.6	3.7	5.0	2.3	12.4
Switzerland	3.4	13.2	14.1	2.0	3.1	6.8	13.8
Japan	7.0	10.5	11.3	4.2	2.5	7.5	4.5
Germany	5.0	9.6	9.9	3.0	2.2	2.9	6.4
Hong Kong	2.8	6.0	n.a.	1.7	n.a.	n.a.	n.a.
Brazil	0.3	3.1	9.4	0.2	2.1	206.4	38.9
Luxembourg	0.1	3.7	5.8	0.1	1.3	58.1	40.5

Data: Statistics Canada, stocks.

a Growth refers to the compound average annual growth rate over the period indicated.

FIGURE 5-3
FDI stock in Canada by country



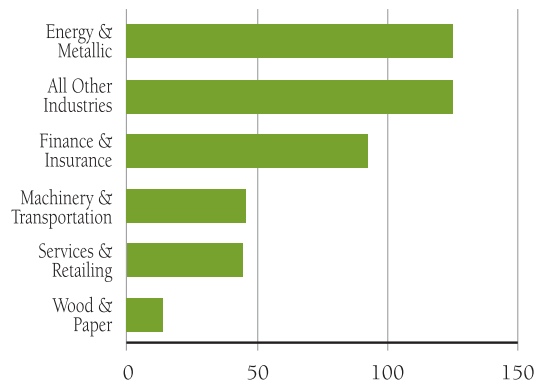
to 27.9 per cent. This is up from 17.5 per cent ten years ago (1997). A substantial portion of the FDI in Canada is also in finance and insurance, holding 20.7 per cent. Over the past five years (2002-06), energy and metallic minerals registered a strong (10.6 per cent) average annual growth rate, as did finance and insurance (9.2 per cent) but it was the services and retailing industry that posted the highest rate at 11.6 per cent over the period.

The FDI stock held by the U.S. is relatively broadly distributed, with energy and metallic minerals and the "all other" category both making up 27.6 per cent of the U.S.'s holdings, followed by finance and insurance (17.8 per cent) and machinery and transportation equipment (12.1 per cent).

Canadian direct investment abroad

In 2006, total Canadian holdings of direct investment abroad were up in all major destinations. For the U.S., this meant an increase of \$19.0 billion, primarily due to capital outflows from Canadian firms to existing operations in their U.S. affiliates. The U.S. continues to dominate as the most important destination for Canadian direct investment abroad, making up 42.7 per cent (\$223.6 billion) of Canada's outward FDI. On the other hand, 61.0 per cent of Canada's inward FDI has come from the United States. While the share held by the U.S. has

FIGURE 5-4
FDI stock in Canada by industry
(billions CAD)



remained fairly steady over the past 5 years, hovering between 41-46 per cent, over the longer term it becomes apparent that Canadian direct investment abroad has become increasingly diversified, with the focus on the U.S. down to 42.7 per cent from 50.6 per cent ten years ago, and 65.9 per cent twenty years ago.

The Canadian dollar had depreciated against both the euro and the pound sterling at year-end of 2006, which meant that Canadian assets in countries with these currencies had increased. European countries held 29 per cent of Canada's FDI at the end of 2006, up from 28 per cent in 2005. The U.K. continued to be the second-most attractive location for Canadian FDI, holding \$59.0 billion of said assets in 2006, while Ireland, France, and the Netherlands were also in the top ten.

Several Caribbean countries also warrant mention, as Canadians continue to increase their direct investment in such countries as the Cayman Islands, Bermuda, and Barbados, which holds the largest stock of Canadian FDI in the area at \$38.4 billion. 2006 saw substantial increases in Australia and Brazil as well, which both posted large increases in Canadian FDI of 19.2 per cent and 22.9 per cent respectively and placed them both in the top ten recipient countries.

FIGURE 5-5
CDIA stock by country

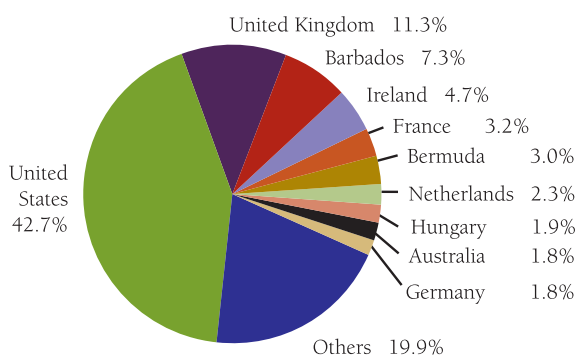


FIGURE 5-6
CDIA stock by industry

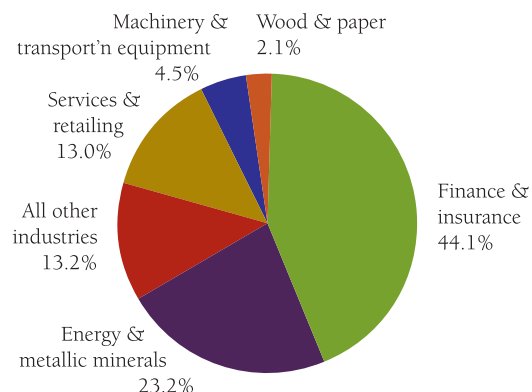


TABLE 5-3.
Canadian Foreign Direct Investment Abroad by Region and Top-10 Destinations
(billions CAD)

Region	1995	2005	2006	Share in 1995	Share in 2006	per cent	
						Change 2006/2005	Growth ^a 1995-2006
World	161.2	459.6	523.3	100.0	100.0	13.8	11.3
North America	98.8	276.6	307.7	61.3	58.8	11.2	10.9
South and Central America	7.9	20.8	23.1	4.9	4.4	10.9	10.3
Europe	37.2	128.3	154.0	23.0	29.4	20.1	13.8
EU-25	34.5	119.2	144.4	21.4	27.6	21.2	13.9
Africa	0.6	3.6	4.6	0.4	0.9	29.1	19.7
Asia/Oceania	16.8	30.4	33.9	10.4	6.5	11.5	6.6
World	161.2	459.6	523.3	100.0	100.0	13.8	11.3
United States	84.6	204.6	223.6	52.4	42.7	9.3	9.2
United Kingdom	16.4	48.9	59.0	10.2	11.3	20.7	12.3
Barbados	5.8	33.6	38.4	3.6	7.3	14.4	18.7
Ireland	5.9	19.9	24.7	3.7	4.7	23.9	13.9
France	2.5	14.5	16.9	1.6	3.2	16.7	18.9
Bermuda	3.0	12.8	15.6	1.9	3.0	21.4	16.1
Netherlands	2.3	10.6	12.1	1.4	2.3	14.2	16.5
Hungary	0.1	7.1	9.9	0.1	1.9	39.8	49.9
Australia	3.1	8.0	9.6	1.9	1.8	19.2	10.9
Germany	2.6	7.2	9.4	1.6	1.8	30.5	12.4

Data: Statistics Canada, stocks

a Growth refers to the compound average annual growth rate over the period indicated

While FDI in Canada is primarily in the goods industries, Canadian FDI abroad is predominantly in service industries, and this prevalence has increased since 2000, in which the share held by services was 55 per cent; in 2006 it was 61 per cent. Looking at individual industries, finance and insurance has by far the largest share, at nearly double the next nearest industry, and also experienced the highest growth in 2006 at 20.4 per cent. But Canada's investments in energy and metallic minerals have also been growing, averaging annual growth of 9.8 per cent over the past five years, versus finance and insurance's 5.2 per cent.

Canada's performance in the North American context

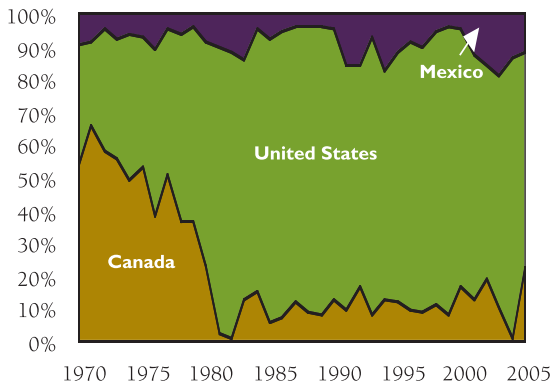
Although Canada's inward FDI flows have increased over the past decade in dollar terms, its share of the total flows coming into North America remained fairly stable, at 9.3 per cent in 1996 and 10.2 per cent in 2003, although 2005 witnessed an up-tick to 22.4 per cent. This raises questions about Canada's relative attractiveness as a location for investment. Between 1996 and 2005, Canada drew on average

11.9 per cent of North America's FDI inflows, down from a remarkable 49.7 per cent over the 1970s.

At the same time, Canada's share of North American inward FDI stock—that is, all FDI held in North America rather than the yearly flows—has been declining over the past few decades as well, dropping from 40.0 per cent in 1980 to 12.6 per cent in 2001, but recent years have seen a slow increase, leaving Canada's share at 16.3 per cent in 2005. The decline, however, was mostly the result of the very high level of inflows Canada received in the 1960s and 70s rather than a reflection on recent performance.

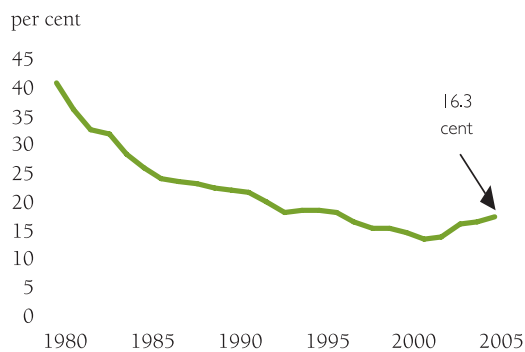
The ratio of inward FDI stock to GDP, an indicator of Canada's "openness" or orientation toward foreign investment was 31.6 per cent in 2005. Canada therefore ranks as the second most open country in the G-7 after the U.K. (37.1 per cent). Meanwhile, despite the large quantities of FDI flows it attracts, this ratio stood at only 13.0 per cent for the U.S., and 2.2 per cent for Japan, the lowest amongst the G-7 countries.

FIGURE 5-7
Distribution of inward FDI flows to North America



Data source: UNCTAD World Investment Report 2006 Annex Tables, with Mexico defined as being in North America.

FIGURE 5-8
Canada's share of North American Inward FDI stock



Data source: UNCTAD World Investment Report 2006 Annex Tables, with Mexico defined as being in North America.

VI Special Feature

The Rise of Global Value Chains

by Aaron Sydor¹

Introduction

There is a dramatic change occurring in the global economy that most Canadians are probably not aware of. The growing importance of large, low-wage countries, most notably India and China, is an important part of what is occurring, but is not the only change. The way that businesses are organizing themselves is also changing – to form vast global value chains. This has a lot to do with why countries like China and India are gaining in importance at this particular time. How Canada responds to this change could have significant implications for the future prosperity of all Canadians.

A *value chain* describes the full range of activities that are required to bring a good or service from its conception to its end use and beyond. This includes

activities such as design, production, marketing, distribution and support to the final consumer. The activities that comprise a value chain can be contained within a single firm or divided among different firms, and can be contained within a single geographic location or spread over wider areas. A *global value chain* describes the fragmentation of the value chain over geographic space and the linkages between firms and between parts of the same firm performing different stages of the value chain.²

Alan S. Blinder, former vice chairman of the Federal Reserve and economic advisor to U.S. President Clinton has called this phenomenon the third industrial revolution,³ the first being the shift from agriculture to manufacturing and the second from manufacturing to services. While that may be overstating the case somewhat, it highlights the potential

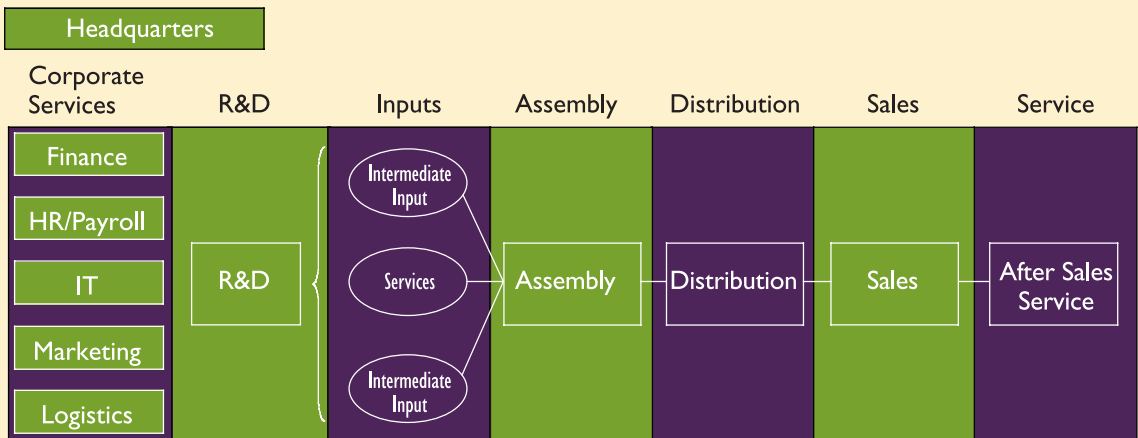
1 Aaron Sydor is Director of the Current and Structural Analysis Division within the Office of the Chief Economist at Foreign Affairs and International Trade Canada

2 For a more detailed description of the *global value chain* and how it relates to similar concepts, please refer to Appendix One.

3 Blinder, Alan S. (2006) "Offshoring: The Next Industrial Revolution?".

THE RISE OF GLOBAL VALUE CHAINS

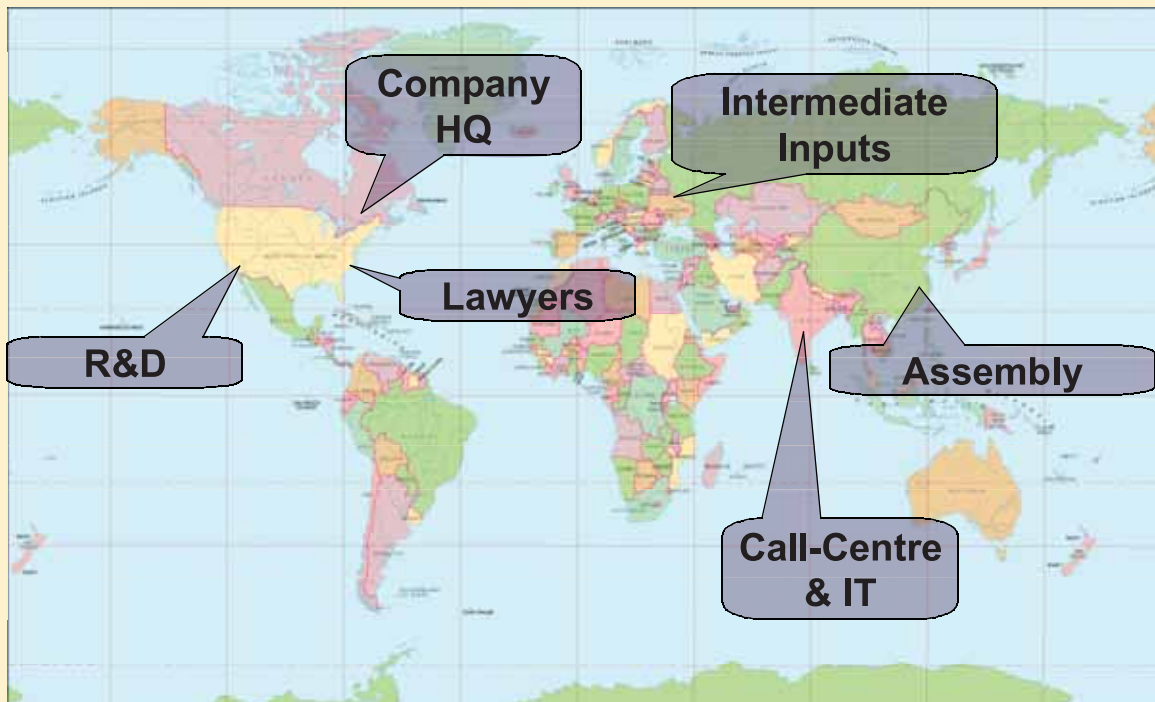
A Simplified Value Chain



impact that changing business practices can have on everyday life; on what we consume, the kinds of jobs that we have and the standard of living that we enjoy. What's more, it highlights how the global economy can change: quick take-up of new manufacturing techniques allowed Britain to dominate

the global economy for years after the first industrial revolution, while the U.S. was the leader of the second. The question that we now face is: who will dominate the third industrial revolution and how will Canada stack up?

A Globally Fragmented Value Chain



How Important are Global Value Chains?

Global value chains are not new. They have, to some extent, existed as long as there has been trade in intermediate inputs. The Hudson's Bay Company (1670)⁴ or the East India Company (1602)⁵ can be thought of as managing a global value chain; sourcing inputs from around the world to be processed in Europe and sold globally. But the importance of global value chains has been limited by barriers to trade and investment, by high transportation costs and a limited ability to communicate between far-flung operations. Far more common was the production of end products in one country for sale in another (traditional trade) or branch-plant production (products produced in many markets around the world largely for sale in those markets). But, this is now changing; the import content of exports is increasing in most countries, international trade is increasingly in the form of intermediate inputs, trade in services is becoming ever more important and investments are increasingly part of a regional or even global production networks forming vast global value chains. And, with a growing number of activities able to be traded and a growing share of the world's population actively taking part in this trade, the impact may be huge.

There is no one statistic available that can capture the extent to which global value chains exist or have increased in importance in recent years. The diagram below illustrates a hypothetical global value chain and illustrates this point. This diagram depicts a fictitious Canadian company; the firm's headquarters is located in Montréal, research and development (R&D) is conducted in California, the company's lawyers are located in New York, and call-centre and information technology (IT) services are provided from India. The final product is sold globally, including in Canada, while assembly is

based in China with intermediate inputs coming from Eastern Europe.

In this example, if we were only able to measure merchandise trade flows, all we would see is exports of intermediate inputs from Eastern Europe to China and then Chinese exports to countries across the globe. Canadian statistics would register only imports from China. When we add services trade, we would presumably see payments of services from the Canadian headquarters to R&D and lawyers in the U.S., the call-centre in India and management services from manufacturing operations in Eastern Europe and China. But all of this would depend on how the company is structured. There would also be the profits made in countries around the world that would be returned to the HQ in Montréal. Finally, adding foreign direct investment (FDI) we would expect to see outward flows of investment (also called Canadian direct investment abroad) as these facilities are established around the world and as new investments in machinery, equipment and so on are incurred. If portions of the value chain are outsourced to other companies, such as the IT

Growth in Global Value Chains

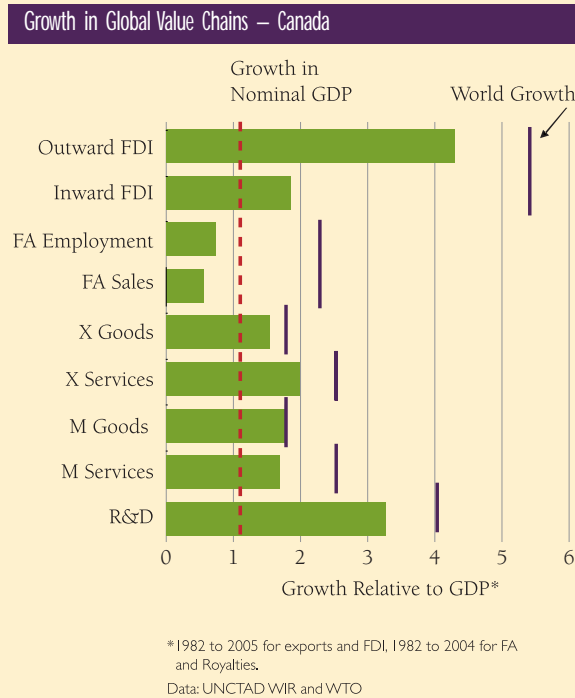


4 Establishment date from Encyclopaedia Britannica on-line.

5 Ibid

*1982 to 2005 for exports and FDI, 1982 to 2004 for FA and Royalties.

Data: UNCTAD VIR and WTO



services in India being provided by an Indian company rather than a Canadian one, we would expect to see payments for services from the Canadian headquarters to the contractor in India and we would not see any FDI flows between Canada and India.

It can therefore be extremely difficult to measure global value chains on a global level, but even more difficult to assess where (or how well) a country fits into these chains. It is therefore useful to employ a number of measures to capture the importance of global value chains to the economy. Where Canada fits into these global value chains and how Canada is fairing in terms each value chain activity will be discussed in more detail in later chapters.

The first chart employs a number of measures to illustrate the rising importance of global value chains world-wide. Taking global GDP growth as the basis – anything that is growing faster than GDP is, in effect, becoming more important to

the economy over time. Between 1982 and 2005, world-wide GDP grew by 310%; by contrast global exports grew by 553% and trade in commercial services increased by 779% - more than twice as fast as global GDP.⁶ Outward FDI stocks expanded at an astonishing 5.4 times the rate of GDP. A variety of measures of the output of foreign affiliates also increased at much faster pace than GDP showing the growing importance of foreign affiliates for the global economy and royalties & licence fees, a proxy for the internationalization of R&D and knowledge, grew by more than four times the rate of growth of GDP.⁷

Globally there were 37,000 multinational enterprises (MNEs) with at least 170,000 foreign affiliates in operation in 1990. In 2004, only 14 years later, the number of MNEs had nearly doubled to 70,000 and the number of foreign affiliates expanded four-fold to 690,000. Furthermore, more than one-quarter of parents and almost half of affiliates are now located in developing countries.

Similar indicators for Canada reveal that global value chains are increasingly important for Canada as well, with all indicators, except for the operations of foreign affiliates abroad, growing faster than Canadian nominal GDP. Goods exports, for example grew one and a half times as fast as GDP and services twice as fast while outward FDI stocks grew three times as fast as GDP. Consistently, however, global growth in these same indicators grew even faster, suggesting that while Canada is participating in global value chains, it is not participating to the same extent as other countries.

Even these measures do not fully capture the rise of global value chains. FDI can be both tariff-jumping branch plants or resources extraction as well as specialized plants integrated into a global production system. Trade can be both traditional; production in one country for sale to consumers in another, as

6 All figures in nominal US\$

7 Note that GDP growth figures are indexed independently for each factor to adjust for differences in years covered by each factor.

well as trade in intermediate inputs. Some of these issues will be addressed later in this paper while others will have to be left for another venue.

The Impact of Global Value Chains

In the popular press, much of the impact of the rise of global value chains has been focussed on the offshoring of jobs – ceasing an activity at a domestic location in order for it to be performed at a foreign location, often in a low-wage country.⁸ For some, the increasing possibility of these offshored activities being service sector jobs that would have been previously considered non-tradable has added to the concern.

Estimates of the huge number of jobs that are potentially internationally mobile have grabbed the headlines: Blinder (2006), for example, estimated that as many as 41 million jobs in the U.S. are potentially offshorable. McKinsey Global Institute (2005) put the figure at 160 million world-wide. Van Welsum and Vivkery (2005) estimate that potentially affected occupations account for 18.1% of employment in the U.S., 19.2% in the EU-15 and 18.6% in Canada. Bardhan and Kroll (2003) put the figure at about 15 million service sector jobs for the U.S. (11.7% of total employment in 2003). Other estimates put the range at between 10-21% for the U.S. For an overview of these estimates see Kirkegaard (2007). Another way to read this is that these estimates represent the upper limit of the number of jobs that have or could potentially become tradable. They are usually based on what jobs require a physical presence such as; taxi drivers, waiters and doctors, and which do not such as; financial analysts and computer programmers. This has added to fears relating to offshoring as many of the jobs thought to be potentially offshorable are ones that had previously been believed

to be immobile. Furthermore, they tend to carry attractive salaries, and are either filled by members of the middle class that had previously been immune to the effects of offshoring or are filled from among those who had been displaced from manufacturing jobs that had migrated earlier.

But these fears seem largely unfounded. An update to an often cited study by Forester Research predicts that for the U.S. as many as 3.4 million service sector jobs may move offshore by 2015.⁹ A simple scaling and adjusting for differences in industrial structure would suggest that for Canada this would be about 240,000 service sector jobs. While this may seem like a large figure, this would represent about 2% of U.S. employment in the service sector in that year (and a similar amount for Canada).

Data from the U.S. Bureau of Labour Statistics show that 3.9% of mass-layoffs in a given year are from work moved offshore (not just services, but manufacturing as well). These 33,200 job losses are extremely small compared to the total 7.4 million jobs that were lost in that same year for a wide variety of reasons and even less when compared to the 8 million that were created. This is similar to an estimate for the EU which puts the figure at 4.5%.¹⁰ It is also important to note, that while the absolute number of lay-offs due to offshoring may be small, those that do lose their job for this reason are, on average, unemployed for a longer time and when they do find work it is more likely to be for lower pay.

Although the media have often highlighted the challenge associated with the rise of global value chains, namely the movement of jobs abroad through offshoring, the benefits have largely been ignored. It is a too simplistic view of the world to believe that a purchase of an activity from abroad is a loss of a

⁸ For a definition of offshoring and related terms as they are used in this study please refer to Appendix Two.

⁹ As reported in Levine (2004)

¹⁰ U.S. figure is from the Bureau of Labour Statistics Mass Layoff Program which captures job separations affecting 50 or more employees. Data from the EU is from The European Restructuring Monitor as reported in "Offshoring, Outsourcing, and Production Relocation – Labour Market Effects in the OECD Countries and Developing Asia" Kirkegaard (2007)

job for Canada. Rather, it must be thought of as an exchange and like any form of trade both parties will benefit.

As a company grows overseas it also often expands its activities at home. Evidence from the U.S. shows that expanded overseas activity by a country's multinationals leads to more employment in the home country as well.¹¹ While employment at U.S. affiliates outside of the U.S. expanded by over 2 million between 1997 and 2004, employment at their U.S. parents increased by 1.5 million. International growth also allows the company to spread its R&D costs over greater volume of sales and thus invest more in R&D. It exposes the company to the best in the world forcing the company to be more innovative and transfers some of that knowledge back to the domestic economy. Canadian multinationals, for example, have been shown to be more productive than are purely domestic companies.¹² And, Canadian multinationals repatriate profits back to their parent in Canada. In 2006, Canadian direct investments abroad generated \$30.6 billion that was returned to Canada, a nearly three-fold increase from ten years ago.

It is also important that Canadian firms, both large and small, link into global value chains. The extent to which this is already occurring is discussed in the manufacturing and services sections of this report, however, the benefits are clear. By sourcing intermediate inputs or services abroad, Canadian operations can become more efficient and survive, if not expand, in an increasingly competitive global environment. Amiti and Wei (2006), for example, find that services offshoring for the U.S. manufacturing sector contributed to 11% of productivity gains while having almost no impact on employment levels. A cost benefit analysis by McKinsey Global Institute (2003) found that the host country gains \$1.12 to \$1.14 for every dollar of activity offshored.

Thus, it is important that companies located in Canada not only have access to foreign markets in which they can sell their goods and services, but also be able to import intermediate inputs and services.

The Driving Forces

Understanding what is driving the globalization of value chains will help us to understand why global value chains are taking hold at this particular time; why there is an increased fear now that production will move to low-wage countries even though there have always been significant differences in cost structures among countries, and; whether or not these trends will continue. Three forces appear to be driving the growth in global value chains: 1) Declining costs of transportation; 2) Improvements in information and communication technologies (ICTs); 3) Reduced barriers to international trade and investment and the adoption of market oriented economic policies. We will expand on each of these themes in turn.

Declining Costs of Transportation

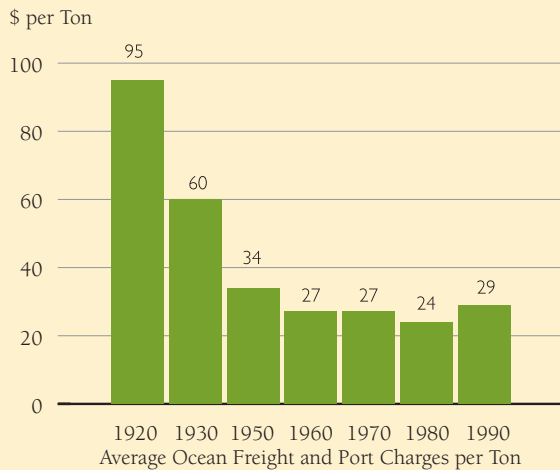
Declining costs of transportation allow goods or services to be transported greater distances without losing competitiveness relative to those produced locally. Some of the benefits of lower-cost production are lost in the cost of transporting intermediate products or final outputs to where they will be consumed. Transportation costs play an important role in agglomeration economies – why producers of intermediate inputs have a tendency to locate in close proximity to the user of those inputs. The automotive sector in Southern Ontario and the mid-Western/North-Eastern U.S. is a prime example. As transportation costs decline, all else being equal, there is less incentive to locate in close proximity to either suppliers or consumers and thus take advantage of the strengths of more distant locations.

For Canada, transportation and warehousing costs now account for 6.5% of the cost of inputs used to

¹¹ For a review of this evidence see Mankiw and Swagel (2006)

¹² Baldwin and Gu (2005)

Sea Freight Costs

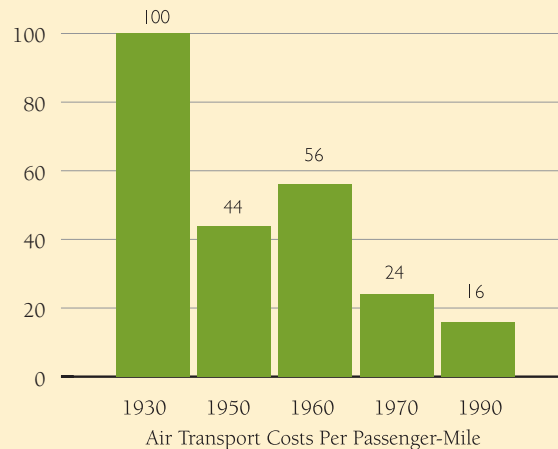


Source: IMF (1997)

make the goods and services that are produced in Canada. This is down from 10.3% in 1963.¹³ For goods, the size and weight of the product relative to its price impacts on the cost of transporting it and thus how far away from the customer it makes economic sense to produce the good. Small and light weight products can travel greater distances for the same cost of transportation than bulkier and heavier products. The electronics industry, for example, is one of the most globalized industries, in part, for this reason. But also important is the cost of transportation in terms of time. It costs money to stockpile and store products. Many products are also perishable, such as food which can spoil, but also electronic goods which are quickly overtaken by technological advances or clothing that is subject to rapidly changing fashion trends.¹⁴

Reduced costs of transportation is also important for the movement of people for the delivery of services, the management of distant business units, the meeting of R&D collaborators and the monitoring of suppliers or scouting for investments. When it comes to

Air Transport Cost



Source: IMF (1997) in Acocella (2005).

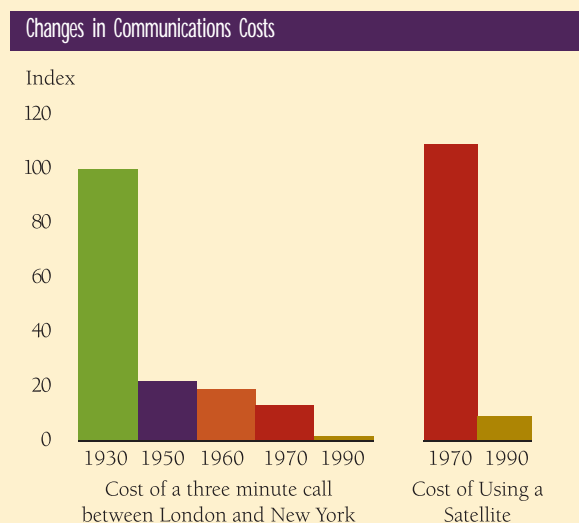
the movement of people, the over-all cost is important which includes the actual cost of the ticket, the time spent traveling, both in the air and on the ground, and the availability to travel when the need arises (the frequency of flights, for example).

Containerization is the most often cited advancement in international transportation of goods, but the evidence that this has led to a sustained reduction in the real cost of transportation is mixed. Direct measures of the cost of ocean transport show a rapid decline up to the 1960s but little movement, possibly even a slight increase, since then. The fact remains, however, that containerization has become the dominant form of marine trade and there must be a reason for this. As recently as 1980 containerized shipping accounted for only 21% of all marine shipping, but by 2000, this had increased to 70%.¹⁵ The answer appears not to be direct cost savings, but savings in terms of time of both the journey itself and the loading-unloading process. It is estimated that the average trip time of the ocean leg of an international journey has decreased by about half

¹³ Author's calculations based on Canadian input-output tables at the S-level of aggregation and exclude taxes, subsidies and labour input from the value of total inputs.

¹⁴ For more on time as a trade barrier see Hummels (2001)

¹⁵ Rodrigue, J-P et al. (2006) *The Geography of Transport Systems*, Hofstra University, Department of Economics & Geography, <http://people.hofstra.edu/geotrans>.



Source: IMF (1997) in Acocella (2005).

as a result of containerization and is thus this time savings that has contributed to the rising popularity of this mode of transport. The improvement of transit times alone is estimated to be the equivalent of reducing tariffs from 20% to 5.2%.¹⁶

Another significant improvement in international transportation has been in air transport. Air transport costs have declined considerably for both cargo as well as passenger travel, falling by about a third since the 1960s. Not captured by the declining costs but also important are more frequent flights and more direct flights. Although air transport is still significantly more expensive than marine transport, it is of course much quicker as well. Further demonstrating the importance of time as a trade cost is the rising use of air transport in trade. More than one-third of U.S. exports by value are now shipped by air and this figure jumps to more than half if exports to Canada and Mexico are excluded

(for which ground transport is particularly important).¹⁷ For Canada, 31% of exports to non-U.S. destinations are by air, roughly double the share only ten years ago.

In total, it is estimated that the advent of faster transportation (air shipping and faster ocean travel) is equivalent to reducing tariffs on manufactured goods from 32% to 9% between 1950 and 1998.¹⁸

Improvements in Information and Communication Technologies (ICTs)

Improvements to communications – lower costs, more reliable service, greater access of all forms of communications including voice, video and data – make it easier to control far-flung operations, make deals, access information and coordinate activities. In addition, improvements in ICTs make it possible to trade services that were once considered non-tradable such as computer programming, offering financial services or a radiologist reading an X-ray.

It has been calculated that the average cost of processing information fell from \$75 per million operations to less than one-one hundredth of a cent between 1960 and 1990. And, the cost of a three minute telephone call from New York to London fell from \$245 in 1930 to under \$50 in 1960 to \$3 in 1990 to about 35 cents in 1999 (all in 1990 prices).¹⁹

These figures only capture the tip of the iceberg in terms of the transformative effect that technological improvements have had on trade. For example, because of standardization of software formats, an engineer in Russia can collaborate on producing an engineering drawing with a colleague in Winnipeg, but there is no good statistics which can adequately capture this innovation.

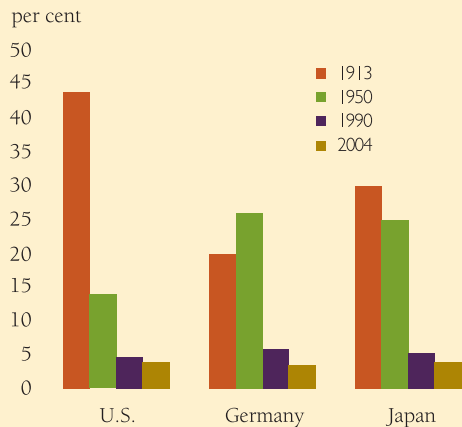
¹⁶ For a more detailed discussion on trends in international shipping rates see Hummels (1999)

¹⁷ Hummels (2001).

¹⁸ Ibid

¹⁹ UN "Human Development Report" 1999

Duties as a Percentage of the Value of Manufactured Goods



Source: UNCTAD (1994) and WTO (2004) in Acocella (2005).

Reduced Barriers to International Trade and Investment and the Adoption of Market Oriented Economic Policies

The GATT was set up by 23 countries in 1948 and had increased to 128 by the time it became the WTO in 1995 and has since grown to 150 members. There are now more than 300 bilateral and regional trade agreements in existence, up from only 120 in 1995. The number of bilateral investment treaties has increased even faster, from 385 in 1989 to 1,857 in 1999 and to more than 2,500 in 2006.²⁰ The average tariff rates among OECD countries have fallen from around 40% just after WWII to about 4% in 1993.²¹ But not all reductions in barriers to trade or movements of capital were done as part of joining the WTO or as a result of signing a bilateral free trade or investment agreement. Much, especially for many developing countries, was done unilaterally with the knowledge that such liberalizations would be good for their economies. By 1997 India had reduced its average tariff rate to 30%, from 82% in 1990, Brazil from 25% in 1991 to 12% and China from 43% in 1992 to 18%.²² And it has not only

been barriers to international trade and investment that have fallen but other pro-market reforms have been undertaken. For some it was the outright collapse of communism, others market reforms within a communist system and still others a shift from inward looking policies of import substitution to outward oriented growth policies.

Manufacturing

As of the end of 2006, the manufacturing sector employed just over 1.8 million Canadians, representing 12.8% of total Canadian employment. The manufacturing sector share of GDP was slightly higher at 15.9% reflecting higher productivity and wages in manufacturing than the national average. Salaries in the manufacturing sector averaged about \$45,000 compared to the average for all industries of about \$35,000. Manufacturing in Canada, as in most advanced countries, has been declining for a long time as a share of GDP and employment, although the value of manufacturing output has remained relatively stable. Some of the relative decline has been the result of outsourcing of services – services that were once considered part of manufacturing are now being done by separate companies and are thus classified as belonging to the services sector. Also, consumers in most advanced countries consume a greater share of services compared to manufacturing. The other main contributors have been productivity improvements in manufacturing that have allowed output to remain high while employing less people and finally the movement of manufacturing abroad.

Canada witnessed a short-lived rebound in the manufacturing share of the economy over the 1990s which peaked in 2000 at 19.0% as a result of the Canada-U.S. FTA and depreciating exchange rate.²³ More recently, the manufacturing sector in Canada

²⁰ UNCTAD, World Investment Report 2006

²¹ "The Road to Cancun" OECD in Washington No. 45, July 2003.

²² United Nations, Human Development report 1999 "Globalization With A Human Face"

²³ For more on this, see Curtis and Sydor (2005)

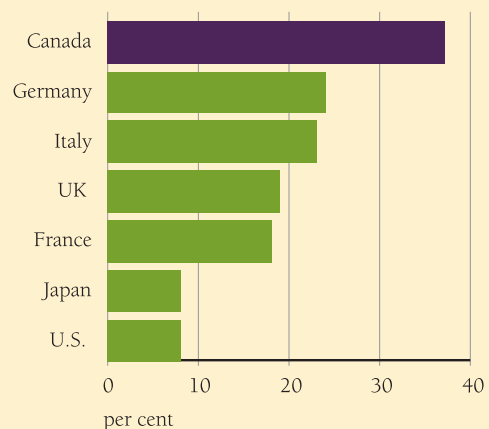
has had some difficult years. Canadian manufacturing employment has declined by 11.8% (244,000 jobs) since its peak in November 2000 although real output is down by much less; declining only 2.7% between 2000 and 2006. Over that same period, Canadian manufacturing exports fell by \$3.6 billion in nominal terms while imports rose by \$22.4 billion. Factors affecting this shift from exports to imports include a significant appreciation of the Canadian dollar (it rose from US\$0.64 in 2002 to US\$0.88 in 2006 – an increase of 38.5%) and restructuring in the automotive sector. Canadian exports of cars and parts were down \$13.4 billion, thus manufacturing exports excluding this sector would have been up by \$9.8 billion. But, as a result of the manufacturing boom over the 1990s, the current decline in manufacturing still gives Canada a higher share of manufacturing in GDP than many developed economies (and thus a lower share of services, but more on that later).

Although some of this decline may be due to manufacturing production moving offshore, it is likely a very small contributor. In 2003, the latest year for which data is available, the trade deficit in manufacturing amounted to only two-tenths of one percent of Canadian manufacturing output. So even though the trade deficit more than doubled by 2006, it still remained extremely small compared to the total output of the industry. Moreover, a recent survey by Canadian Manufacturers and Exporters identified a lack of skilled workers as one of the most important issues facing manufacturers.²⁴ This would suggest that not only are the high-skilled manufacturing jobs not leaving Canada, but quite the opposite, there currently appears to be excess demand.

Are Canadian Manufacturers Sourcing Internationally?

One concern that has been raised is that Canadian companies are not taking advantage of the rise of

Ratio of Imported to Domestic Outsourcing of Inputs (G7 Countries)



Source: OECD 2006

global value chains by sourcing internationally. It is argued that by sourcing some intermediate inputs internationally will allow Canadian manufacturers to become more competitive and expand other higher-valued activities in Canada.

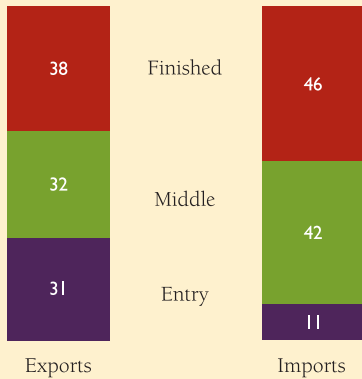
In support of the view that Canadian companies are not sourcing from abroad, in 2002, the most recent year for which comparable data is available, there were about 44,500 establishments that exported goods abroad, but nearly 64,200 that imported goods – almost 50% more. But, many of these importers are retailers or wholesalers that would be importing final goods, only 16,700 were manufacturers that would be much more likely to be importing intermediate inputs. This compares to roughly 20,800 manufacturing exporters.

On the other hand, 37% of intermediate inputs used in Canada in 2003 were imported. That places Canada among the top third of OECD countries and the highest for a G7 country for the ratio of imported to domestic outsourcing of inputs.²⁵ This is supported by the findings of Baldwin and Gu (2007) which show that over the period of 1961

24 20/20 Magazine, May/June 2007.

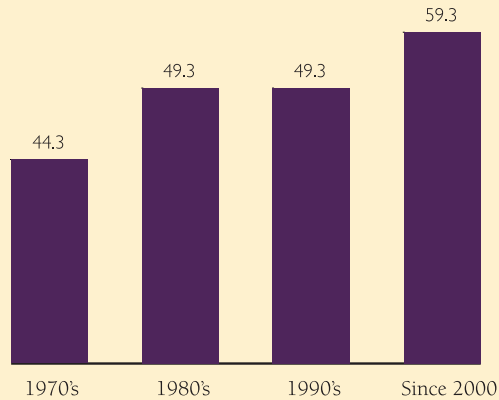
25 OECD "Draft Synthesis Report on Global Value Chains" (2006)

Stage of Canadian Trade from the Importer's Perspective* (per cent)



* top 25 traded goods in 2005, excludes price effects
 Source: "Canada's Changing Role in Global Supply Chains",
 Conference Board of Canada, March 2007.

Average Share of Vertically integrated Trade with the U.S.



Source: "The Extent and Significance of Intra-Industry Trade in
 Canada-U.S. Merchandise Trade" Seventh Annual Report on
 Canada's State of Trade: Trade Update 2006.

and 2003, the foreign component of material inputs in Canada almost doubled. One may conclude then, that while Canadian-based companies are taking advantage of international sourcing opportunities in order to remain competitive, smaller firms may not be participating as much as larger Canadian and foreign owned companies operating in Canada.

Where do Canadian Manufacturers Fit in Global Value Chains?

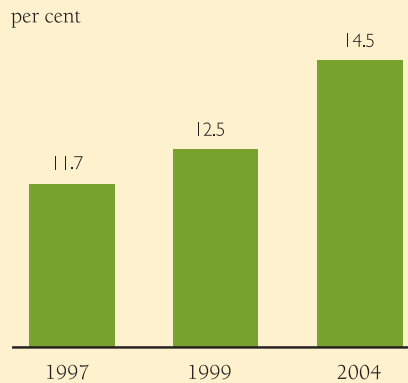
One way to answer this question is to look at what Canada is importing and exporting from the point of view of the other country. Not surprisingly, a high share of Canada's exports are in entry-level goods; unprocessed goods such as resources and resource-based goods. If entry level goods are excluded, Canada has a somewhat higher proportion of the remaining exports in finished products as opposed to intermediate goods. For imports, entry level goods account for a relatively small share of imports while finished goods account for only a slightly higher share of imports than intermediate goods. With about half of Canada's non-entry level trade (exports and imports) in finished products it is difficult to know whether this is high compared to

other countries and thus potentially signifying that Canada is, or is not, participating in global value chains. Also, the interpretation of this evidence is unclear as an increasing share of world trade is in differentiated products meaning that it is not unexpected that Canada might import car parts and then export cars, but also import cars of other brands. It is also difficult to tell from this information if Canada is specializing in the production of intermediate inputs or in the assembly of finished products.

A possibly more revealing measure of this same trend is to look at vertically integrated trade, trade that occurs within the same industry but is at different stages of production such as the importation of automotive parts and the exportation of completed vehicles. The proportion of Canada's trade with the U.S. that is of the vertically integrated type has been on the rise for the past two decades and now accounts for more than half of Canada's trade, meaning that Canada is either importing intermediate goods and then exporting something more finished or vice-versa. This provides strong support for Canada actively participating in global value

25 OECD "Draft Synthesis Report on Global Value Chains" (2006)

Canadian Share of U.S. Manufacturing Affiliate Assts



Data: U.S. BEA

chains as well as the increasing importance of global value chains for the Canadian economy.²⁶

It has also been argued that the reliance of Canadian exports, especially manufacturing, on the U.S. market is overstated due to Canadian exporters selling to a U.S. multinational which in-turn exports to many more destinations. There is no data available on what share of Canadian exports to the U.S. are sales to U.S. multinationals which may then be shipped back to Canada or to overseas markets. However, we do know that 34% of Canada-U.S. trade is intra-firm – between parts of the same company operating on both sides of the border. Also, US\$58.9 billion worth of U.S. goods imports are from U.S. foreign affiliates operating in Canada selling to their parent company. Applying the same ratio of purchases by U.S. parents from their affiliates in Canada to their total purchases (i.e., including non-affiliated purchases) suggests that another US\$70 billion of U.S. goods imports from Canada are purchases by U.S. multinationals sourcing from unaffiliated companies in Canada – basically half of U.S. imports from Canada are either U.S. affiliates operating in Canada shipping goods back to their

parent company (accounts for 45.6%) or unaffiliated Canadian companies shipping goods to a U.S. multinational (54.4%).²⁷

Canada as an Internationally Competitive Location for Manufacturing

As will be argued throughout this report, the greatest impact of the rise of global value chains for Canada will be the challenge of attracting and retaining high valued activities in Canada. As functions become more internationally mobile, competition from others to attract them will increase and small differences in economic environment may become increasingly important.

For the manufacturing sector the story is mixed. As noted already, Canada continues to have a higher share of the economy in manufacturing than most other advanced countries but not as much as some, such as Germany. And while the Canadian manufacturing sector grew as a share of the economy of the 1990s based on the impact of the Canada-U.S. FTA, NAFTA and a declining dollar, the sector has been struggling in recent years.

Trade surpluses or deficits can provide an indication of where a country possesses a comparative advantage. Canada has generally maintained a small deficit in manufacturing over the 1990s and into 2000, posting surpluses only in 1995 and 1996. Since 2002, as the Canadian dollar began to appreciate, Canada's trade deficit in manufacturing has generally been increasing. In 2006 it reached a recent peak of \$27.8 billion or just under 9% of manufacturing exports. But this hides a lot of detail. Canada possesses sizable trade surpluses in a large number of industries within manufacturing, some related to the processing of resources but others in high-tech manufacturing.

Canada has traditionally been very successful in attracting manufacturing facilities from abroad.

26 "The Extent and Significance of Intra-Industry Trade in Canada-U.S. Merchandise Trade", Box B, Seventh Annual Report on Canada's State of Trade, trade update 2007. Foreign Affairs and International Trade Canada

27 These are very rough calculations and should be used with caution.

Roughly one-half of the sector, by assets or revenue, consists of foreign producers. Canada has also been attracting ever more investment from the U.S., our most important investor. Canada's share of the manufacturing capabilities of U.S. multinationals, as measured by assets, has increased from 11.7% in 1997 to 14.5% in 2004 which would suggest that Canada continues to be an attractive location for manufacturing investment.

Services

For many, the greatest concern about the rise of global value chains is the offshoring of services. While manufacturing has long been considered tradable, it was often claimed that any lost jobs in manufacturing would be more than made up for with better, cleaner and higher-paying service sector jobs. But where will the jobs come from now if those same jobs can be done from a low-cost country as well?

As noted in an earlier section of this study, estimates of the number of service sector jobs that are potentially offshorable vary widely but can be quite considerable. Another concern is that a sizable number of those occupations that are thought to be newly offshorable are considered to be well paying and moderately to high-skilled.

A central concern is the potential for emerging markets, with much lower wage rates, to compete for these jobs. One study puts the number of young professionals in developing countries at 33 million.²⁸ This is compared to about 15 million in high wage countries. If support staff, doctors and nurses of all tenure groups is included, this figure jumps to 392.8 million in low wage countries and 181.3 million in high wage countries.²⁹ But not all skilled workers are of the same quality. Another estimate suggests that only around 13% of these are of suitable quality to

work for a global MNE in their field of specialty. Using a broader measure of those holding university degrees puts the number of potential skilled workers at 930 thousand in China and 750 thousand in India alone compared to 1.5 million in the EU, 1.3 million in the U.S. and 129 thousand in Canada.³⁰

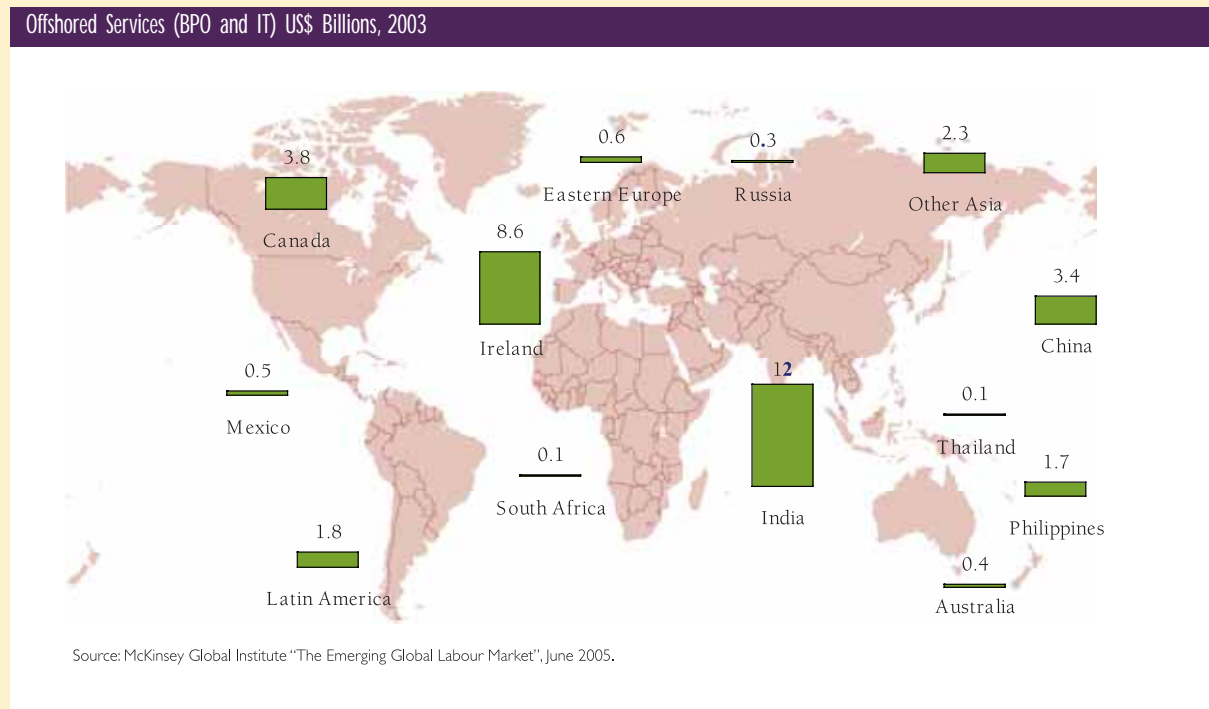
To What Extent is Services Offshoring Occurring in Canada?

Canada currently has a sizable trade deficit in commercial services which, to some extent, can be viewed as offshoring of services. However, similar to manufacturing, as a share of total output of the sector this deficit is tiny, suggesting that offshoring of services to date has had only a minimal impact on Canadian jobs. In 2005, Canada exported \$35.1 billion in commercial services and imported \$37.9 billion for a trade deficit in commercial services of \$2.8 billion. Canada had small surpluses in computer and information services (\$1.6 billion) and management services (\$0.2 billion), the two categories of commercial services most closely associated with offshoring. And, 88% of Canada's commercial service imports were from rich countries – Canada had a sizable trade surplus of \$3.1 billion in 2004, the latest year for which data was available, with low-wage countries. Canada's commercial services trade with India, accounted for only one-fifth of one per cent of Canada's total commercial service imports. Moreover, Canada had a trade surplus of \$37 million with India, representing nearly half of imports in 2004. About all that can be said is that Canadian commercial service imports from India have grown fast in the past number of years; more than tripling since 1999 and growing by 73% between 2003 to 2004 alone. A recent study by Morissette and Johnson (2007) supports this view. They find that, with the exception of clerical employment, there is no evidence that occupations

28 Young professionals include engineers, finance, accounting, analysts, life science research and professional generalists with a university education and up to seven years of experience.

29 Sample of 28 low-wage countries and 8 high-wage countries. "The Emerging Global Labour Market" McKinsey Global Institute, 2005.

30 U.S. National Science Foundation 2007.



that are most subject to offshoring witnessed weaker employment growth. "Between 2000 and 2006, employment in occupations potentially affected by service offshoring grew 1.8 per cent per year, on average. Employment in other occupations grew at the same rate".³¹ In the case of clerical employment, the authors conclude that these losses occurred too early and in industries that are unlikely to be subject to offshoring and are thus probably not related to the offshoring phenomenon.

Baldwin and Gu (2007) find that between 1961 and 2003, there has been a trend of increased outsourcing of services (replacing what was once done inside the firm toward arms-length purchases – outsourcing) by the manufacturing sector, but even more so for the service sector itself. Furthermore, an increasing share of these purchases were from outside of the country (offshoring). The share of imports in

service inputs almost tripled over the period. They also find that services offshoring is associated with a shift to higher value-added activities being performed in Canada but has not had a detrimental impact on service employment.

As with manufacturing, there is also a concern that Canadian companies are not taking full advantage of the opportunities raised by the ability to move some work to lower-cost locations. It has been found, for example, that a one percentage point increase in offshoring in the services sector leads to a 0.43 to 0.57 percentage point increase in labour productivity.³² Outsourcing, as expected has had a positive impact on the wages of non-production workers, on the wages of skilled workers and on employment of skilled labour.³³

31 Morissette and Johnson (2007).

32 Amity and Wei (2004b)

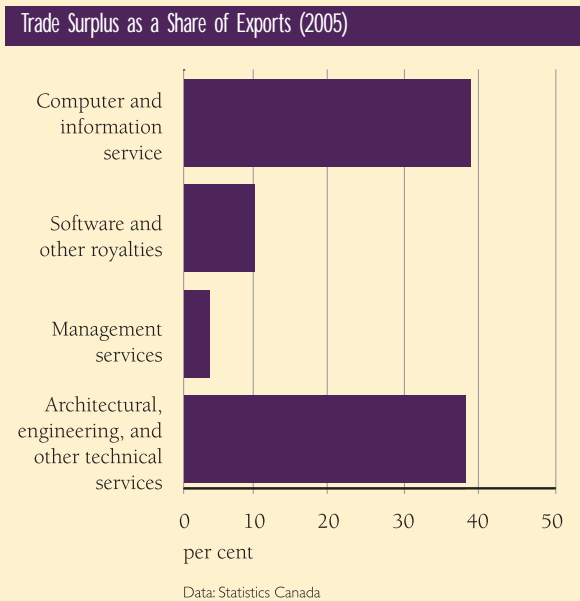
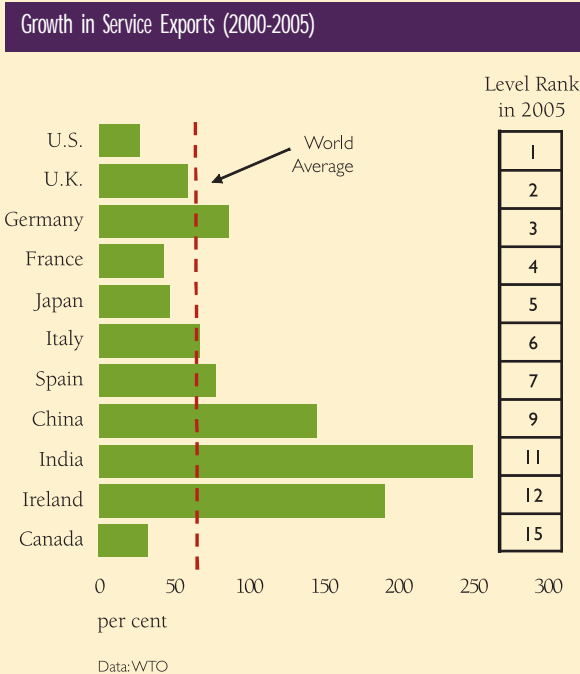
33 Feenstra and Hanson (1999), Hijzen, Gorg and Hine (2003) and Egger and Egger (2001) respectively.

Canada as a Services Offshoring (inshoring) Destination

Canada, it has been claimed, is a net beneficiary of services offshoring. A study by McKinsey Global Institute (2005) ranked Canada third in the world behind India and Ireland in terms of locations for offshored services. But, most of this seems to be lower-end call-centres rather than high-skilled IT services. While Canada accounted for 11% of new call centres Canada only accounted for 2% of high value-added information technology centres.³⁴ Contrary to this, and again using trade balances as an indication of comparative advantage, Canada has sizable trade surpluses in many of the categories of commercial services that are most closely associated with services offshoring. For example, in 2005, Canada exported nearly 40% more computer and information services, and architectural, engineering and other technical services than were imported.

But, Canada seems to be lagging in terms of moving to a service based economy more generally. Services as a share of the total economy is among the lowest of the G7. And although Canada ranks 9th in the world in terms of merchandise exports, as of 2005, Canada ranked 15th in the world for service exports. This was well below many much smaller countries such as the Netherlands, Ireland, Belgium and Austria and represented the second worst growth rate among the top 15, meaning that Canada will fall even further behind if that trend continues. Canada also attracts less investment in skilled services relative to the size of the sector. While foreign controlled firms account for more than 50% of assets in the manufacturing sector, they account for only 15.5% in professional, scientific and technical services.

Summing up, offshoring of high wage services to low wage countries is not currently an issue for Canada and while this phenomenon is growing quickly it will remain small for some time to come.



The bigger issue for Canada may be why Canada is not a more important global player in high-value and high-knowledge service industries and how

34 Treffer (2006-01)

Canada can become a location of choice from which to supply these services to a global market.

Research and Development (R&D)

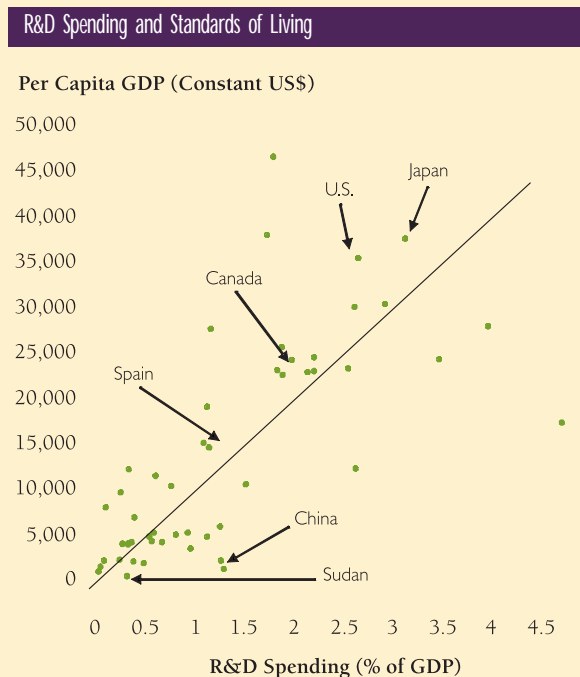
Research and Development (R&D) is one of the most sought-after activities. Innovation is the only method by which a country can achieve higher standards of living for its citizens over the long run. While it is possible, to put more people to work, have them work longer hours or give them more machinery to work with, that can only take a country so far. It is only through finding new methods of working, making improvements to machinery and human knowledge and by making breakthroughs in everything from home electronics, to life-saving drugs and environmental technologies that a society can continuously improve its living standards.

Furthermore, jobs in R&D are seen as being relatively well paid, employing highly skilled people and having spill-overs to the surrounding community encouraging even more R&D to take place. Ottawa, for example, not only benefits from the government research facilities and large companies that have chosen to locate their R&D there, but

also all of the small, and not-so-small, companies that have been fostered by that initial investment. According to Research Infosource, 27 of the Top 100 corporate R&D spenders in Canada are based in Ottawa and 27 per cent of the total R&D expenditures from those top 100 companies is spent in Ottawa. Also, by undertaking R&D and creating new products or services, a company has greater pricing power allowing them to return profits to the local economy rather than simply competing on price. This issue will become increasingly important as ever more activities are commoditized.

All countries are recognizing the importance of conducting R&D for maintaining and growing their standards of living. It is therefore not surprising that countries are increasingly in competition to attract R&D activities. And like many activities, emerging markets are increasingly participating as well.

But just as other stages of the value chain are becoming increasingly footloose, so to are R&D activities. While once these functions would be located in close proximity to the corporate headquarters due to the complex and tactile nature of R&D and the need for researchers to have face-to-face contact, this is becoming less necessary. This has happened for a variety of reasons, some of which are the same factors that are affecting other functions, such as technological improvements that make it easier to communicate over distances and at lower costs. The Internet after all was first adopted by researchers to communicate and coordinate their work. Standardized software allows an engineer to read and modify a file produced by a colleague on the other side of the planet, potentially allowing for 24 hour R&D. Even seemingly unrelated advances, such as more liberalized air travel resulting in more direct flights and at lower costs, again facilitate communication and control. But also as firms face greater competition they must look at methods for improving efficiency and value in all of their functions, including R&D, driving them to consider



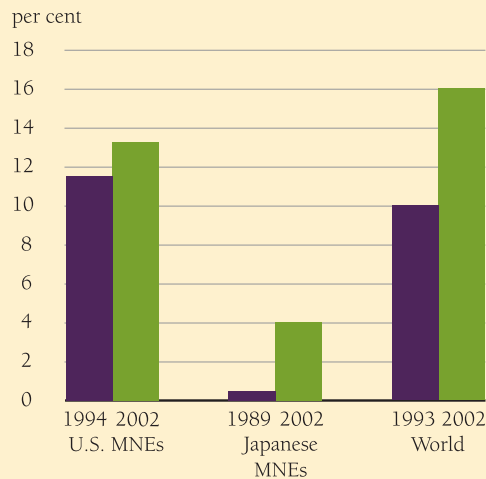
moving these functions to access specialized skills, lower costs or for other reasons.

German multinational enterprises, for example, established more R&D units outside of Germany in the 1990s than in the preceding 50 years combined.³⁵ Multinationals are spending more on R&D in both their home country and abroad, but spending outside of their home country has been increasing twice as fast as spending at home. On average, 16% of all R&D spending by multinational enterprises was spent outside their home country in 2002; this is up from only 10% in 1993. Spending on R&D outside of the U.S. by U.S. multinationals increased from 11.5% in 1994 to 13.3% in 2002. While this change, only 1.8 percentage points, may seem small, it is equivalent to US\$2.9 billion or roughly one-third of total Canadian business sector spending on R&D in that year.

Canada's over-all R&D performance is poor. R&D as a share of GDP in Canada has risen from 1.7% in 1995 to 2.0% in 2006, but still below the OECD average of 2.3%. And, much of this increase has been a result of increased government spending on R&D. In particular, higher-education's share of R&D spending in Canada rose by 10 percentage points to 37% of R&D spending in Canada while the federal government and business sector shares both declined. Taking only business sector spending (removing government as well as quasi government such as health care and universities) Canada's spending as a share of GDP is only 1.0% of GDP, roughly two-thirds of the OECD average and well below top performers such as Finland and Japan (each at 2.4%).

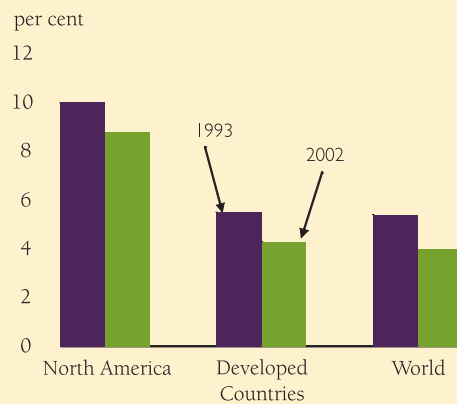
Canadian exports of R&D services grew by 316% between 1990 and 2005 and account for 8% of Canada's commercial service exports. Payments for royalties and license fees exploded by over 3300% since 1990 and accounted for 12% of commercial service exports in 2005. However, while Canada

Foreign Spending on R&D as a Share of Total by MNEs



Source: Foreign Affairs and International Trade Canada calculations based on data from UNCTAD, World Investment Report 2005.

Canada's Share of R&D Expenditures by MNEs Outside of their Home Country

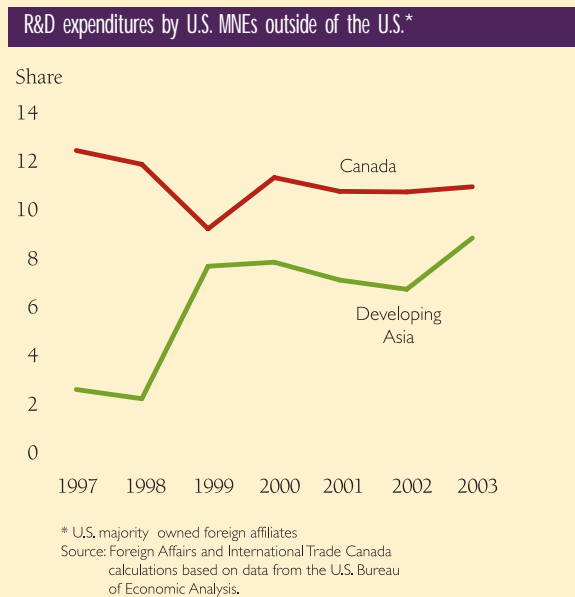


Source: Foreign Affairs and International Trade Canada calculations based on data from UNCTAD, World Investment Report 2005.

maintains a sizable trade surplus in R&D services, the reverse is true for royalties and license fees.

Interestingly though, while two-thirds of Canada's R&D exports were with affiliated companies since 2000, the reverse was true over the 1990s. Thus, while it has been multinational companies undertaking much of the R&D for export more recently, this has not always been the case. Although, it is difficult

35 UNCTAD, World Investment Report 2005.



to confirm, it may be that smaller Canadian companies have lost some of their attractiveness for internationally contracted R&D activities in recent years.

Foreign affiliates (foreign-owned firms operating in Canada) account for more than one-third of business sector R&D spending in Canada (roughly their share of the Canadian economy) and another 5% is performed by Canadian firms but funded from foreign sources. This means that nearly 40 cents out of every dollar of business sector R&D spending in Canada has some involvement of a foreign source. This is not surprising as the 700 largest R&D spenders accounted for 69% of the world's business spending on R&D and only a small number of these are Canadian. Siemens alone, for example, spends more on R&D than either Brazil or Russia.³⁶

But on direct measures of Canada's attractiveness as a location for foreign multinationals to locate their R&D activities, Canada is not performing well. Canada's share of North American (Canada and the U.S. only), all developed countries and even

the world have all fallen. This means that Canada is not losing share only because there are new competitors on the scene, such as China, or India, but also against developed countries, which includes the EU and Japan, and probably most importantly the U.S. – our primary competitor in North America. U.S.-based multinationals are particularly important for Canada, yet here too Canada's performance has not been strong. Canada's share has declined modestly from 12.5% in 1997 to 11.0% in 2003. But just this 1.5 percentage point decline is roughly the same value as all of the R&D spending by U.S. multinationals in Australia.

The importance of new competitors is extremely evident. The developing economies of Asia accounted for less than three per cent of R&D spending by U.S. multinationals outside of the U.S. as recently as 1998 but accelerated sharply thereafter and as of 2003 stood at nearly 9% – a more than three-fold increase in only five years. In the section relating to manufacturing, we discussed the total number of low-skilled labourers that China alone could potentially add to the global economy. But potentially more important for Canada in attracting and retaining high-valued activities such as R&D is the number of skilled people. While estimates of the number of science and engineering graduates in these emerging economies vary widely we will pick one; the U.S. National Science Foundation 2006 report which gives the number persons holding first degrees in science and engineering as of 2002, or the most recent year available, lists 534 thousand for China, 176 for India, 60 thousand for Canada and 416 thousand for the U.S.³⁷ In addition to the wide range of estimates of the number of science and engineering graduates, the quality of their education is also questionable. McKinsey came to the conclusion that only 10% of Chinese engineers and 25% of Indian engineers were of sufficient

³⁶ Ibid

³⁷ U.S. National Science Foundation 2006 appendix table 2-37.

quality to be employed by a multinational.³⁸ Even so, this would suggest that emerging markets will be increasingly capable competitors for highly sought-after internationally mobile R&D activities.

Headquarters

Corporate headquarters often contain many of the highest paying positions in a company such as management, finance, legal, accounting, human resources and so on. These are often called 'headquarter functions', but as with other stages of the value chain, their links to a specific location or to other functions are weakening. They too are becoming increasingly mobile. Indeed, much of the fear surrounding offshore outsourcing is the potential loss of these high-paying and high-skilled activities to low-wage locations. And, even more so than R&D, corporate headquarters (HQs) can have an impact on the local and in some cases even the national economy well beyond the impact of their direct employment – banks are worried about losing their customers, stock exchanges their listings and auditors and lawyers their clients. Furthermore, the headquarter embodies the decision making power of the firm, provides the top management positions for all members of the firm to aspire to, is often associated with local philanthropy, and can act as a national champion. It is for these reasons that corporate headquarters, and their associated functions, are among the most sought-after activities. This may be best illustrated by some high-profile headquarter movements in recent years. In 2001 Boeing relocated its headquarters from Seattle to Chicago and is expected to employ about 500 people. One of the reasons cited for the move was the generous incentives offered by the State of Illinois and the City of Chicago estimated at about US\$62 million in tax breaks, grants and

other benefits. That puts a value of about US\$124 thousand per employee.

Canadians in particular have been worried about the state of their head offices. In the late 1990s and into the early part of this decade, there was a concern that the low value of the Canadian dollar was contributing to an acceleration of takeovers of Canadian companies by foreign raiders at 'fire-sale prices' and resulting in a 'hollowing out' of corporate Canada. More recently, this fear has been renewed with the large number of foreign acquisitions of Canadian companies that have taken place in recent years even as the dollar has appreciated. Some of Canada's most recognizable corporate names have been acquired by foreigners including; Hudson's Bay Co., Falconbridge, Inco, Dofasco, Algoma Steel and Four Seasons Hotels. Royal Bank CEO Gordon Nixon noted that "Over the past year, 116 Canadian public companies were acquired by foreign interests, more than any other major country including much bigger economies such as the United States, the United Kingdom, France and all of the Nordic countries combined".³⁹

This raises two questions:

- 1) What has happened to the number of head offices in Canada?
- 2) Does it matter if these head offices are foreign owned?

On the first account, the total number of head offices in Canada has actually increased, rising to 4,161 in 2005 from 4,061 in 1999 while head office employment increased by even more, rising by 17 thousand to reach 175 thousand in 2005.⁴⁰ As for the second question; foreign controlled firms accounted for all of the gains in the number of headquarters in Canada over this period and for 6 out of 10 net new headquarter jobs. It was also

38 McKinsey Global Institute "The Emerging Global Labour Market: Part 2- the Supply of Offshore Talent in Services" June 2005.

39 Reported in the Toronto Star "Target Canada" April 21, 2007.

40 Statistics Canada Daily Thursday July 12, 2006. "Head Office Employment in Canada"

found that “As a result of foreign takeovers, more new head offices were created than lost and employment in head offices was as high after the takeovers had occurred than before.”⁴¹ Although this evidence does not cover the most recent wave of M&A activity, over a significant period that was characterized by fears of ‘hollowing out’ the number of head offices and head office jobs not only did not decrease but actually increased and foreign acquisitions may have even improved the situation.

Looking at another source, the annual list published by Fortune Magazine of 500 largest companies in the world, the number of Canadian companies listed nearly tripled from 5 in 1995 to 14 in 2006.⁴² At fourteen, Canadian companies account for 2.8% of the listings – a slightly higher share of Canada in global GDP (2.5%). UNCTAD produces an annual list of the world’s largest transnational companies which also takes into account, not only the size of the company, but the proportion of revenues and assets that are located outside of the home country. In the 2005 ranking, the most recent available, there were three Canadian companies listed – again, a slightly higher share than Canada had in global GDP suggesting that Canada is doing about as well as one might expect.

Although Canada seems to be performing reasonably well, we must recognize that this can change quickly as head offices, like other functions, are increasingly mobile. Beckstead and Brown (2006) found that over the six-year period between 1999 and 2005, more than one-third of Canadian head offices disappeared (closed down or left Canada). The only reason that there was a net increase in head offices over this period as previously noted was that even more companies began operations

or moved into Canada. There was a roughly similar amount of turnover in head office employment.⁴³ Data for the U.S. confirms this finding. Roughly 5% of head offices relocate in a given year (which would imply roughly one-third over six years as in the Canadian case).⁴⁴

Although Canada’s performance in attracting, retaining and growing headquarters can generally be characterised as good, some countries are doing better. Using the Global 500 list as the basis and scaled by GDP to take into account the size of the economy, some countries are performing much better. The global leader is Switzerland, with an economy about one third the size of Canada, has 12 of the world’s 500 largest companies. The Netherlands, France, the U.K. and South Korea all perform significantly better than does Canada.

Also, Canadian companies are not generally global companies. Although there were 14 Canadian companies among the world’s 500 largest, they largely ranked toward the bottom of the list. Thus, if one were to sum up the revenues of the global 500, the share of Canadian companies would constitute far less than Canada’s share of GDP. Also, as Moore and Rugmen (2003) point out, Canadian companies tend to be regional players rather than global with most of their revenues coming from within North America. Only a small number of the Canadian companies listed make a significant portion of their revenues from outside of North America.⁴⁵ It is well known that the U.S. accounts for a large share of Canadian exports; 75.9% in 2006. But this does not take into account the operations of Canadian foreign affiliates abroad which are much more geographically diversified than are exports.⁴⁶ But here too, Canadian companies do not have the global

41 Beckstead and Brown (2006)

42 Fortune Magazine, annual global list of the world’s 500 largest companies.

43 “Head Office Employment in Canada, 1999 to 2005” Beckstead and Brown.

44 Strauss-Kahn and Vives (2005)

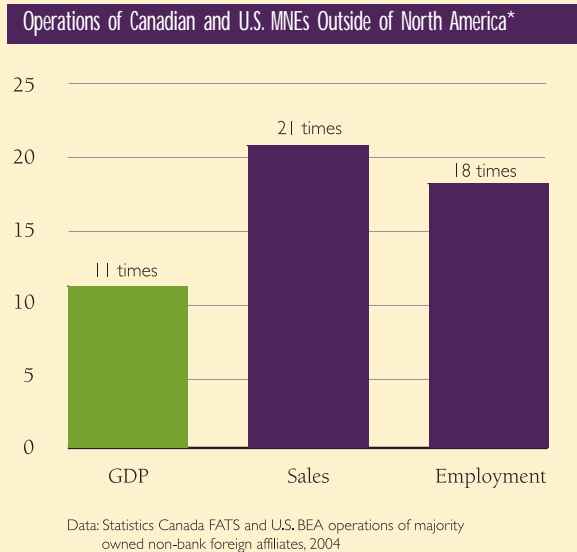
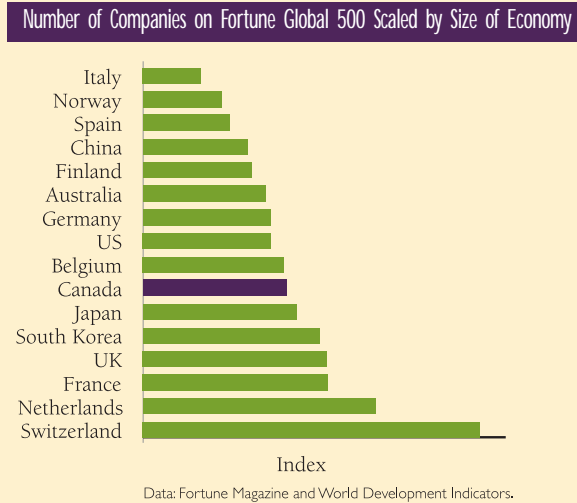
45 Karl Moore and Alan Rugman, Policy Options 2003.

46 See box of “Foreign Affiliate Trade Statistics (FTAS)”

presence of the multinationals of other countries. U.S. multinational enterprises (MNEs) have 21 times the value of sales outside of North America compared to Canadian MNEs and 18 times the number of employees. With U.S. GDP roughly 11 times that of Canada, this suggests that U.S. firms have about twice the international presence of Canadian firms even scaled by the size of the economy. But this may be changing. In the 1980s, 69.3% of Canadian outward FDI flows went to the U.S., in the 1990 and thus far in this decade, the share has been 48.9%.

Ontario's Institute for Competitiveness and Prosperity identified 72 Canadian-based global leaders; companies that claimed top-five status in a market niche. This was more than double the 33 they were able to identify in 1985 confirming the good performance that we noted earlier. It again must be emphasized that if this good performance is to continue Canada needs to have an environment that is conducive to attracting and retaining existing multinationals (both Canadian and foreign) as well as to grow new Canadian companies. The same study noted that only 16 of the 72 companies making the current list were also on the list in 1985.⁴⁷ Thus the turnover is considerable and picking winners is difficult. Similar research for the U.S. arrives at generally the same conclusions; there is a high degree of turnover in corporate headquarters of which smaller firms growing to become the corporate champions of tomorrow constitutes an important part.⁴⁸

With the growth of China, India and others, Canada will account for an ever-smaller slice of the global economy. At the same time, companies will have a larger pie in which to do business and the average size of global players will likely increase. But the rise of global value chains may benefit Canada if we can attract the headquarters of these growing companies. Improvements to communications and



transportation will lessen the need for companies to cluster their location. Thus it may be less likely that a few cities like New York, London, and Shanghai will host all of the world major companies and smaller locations in Canada can compete if they are able to offer an attractive location. The growth of other countries not only does not hurt Canada but is beneficial. The challenge for Canada is thus

47 Institute for Competitiveness and Prosperity 2007 Annual Report

48 "Location trends of large company headquarters during the 1990s" Klier and Testa.

not to maintain a certain number of corporate head offices but for Canadian multinationals to grow to world class levels.

Conclusions and Implications

The rise of global value chains means that activities can increasingly be located anywhere in the world based on where it is most efficient to undertake that activity. As well, technological advances are allowing for a greater number of activities to become internationally mobile including many high-skilled service jobs that were once considered non-tradable. And all of this is occurring within an environment where international competition for the highest valued of these activities is increasing. Not only are emerging competitors such as China and India quickly moving up the value chain, but traditional competitors are not standing still either.

Fear of lost jobs due to offshoring has dominated much of the debate to date, but as we have shown, this concern is largely misplaced. Not only have the headline figures for the number of jobs that are potentially offshorable greatly overstated the impact thus far, but they fail to capture the potential benefits. The real challenge presented by the rise of global value chains is to make Canada the location of choice for those high-value activities that are essential for maintaining an improving the standard of living of Canadians. In this respect, small differences in economic environments between jurisdictions will play an increasingly important role on

what activities are done in each country, province or city. Therefore crafting those environments has gained a renewed importance.

As Blinder (2006) points out “Just as the first industrial revolution did not banish agriculture from rich countries, and the second industrial revolution has not banished manufacturing, so the third industrial revolution will not drive all impersonal services offshore”. It is also useful to note that the first two industrial revolutions required adjustments but also produced immeasurable benefits and so too will the third. But, also based on experience from the past, those who are better prepared and can adapt the quickest will also be those that benefit the most.

Appendix One: Defining 'Global Value Chains'

In some respects, the term 'global value chains' can be thought of as a noun - a state of the world in which different stages of the value chain are scattered across the globe and inter-connected through complex production networks. This is in contrast to 'traditional trade' which is often thought of as a good being produced in one location to be sold to another. Or, multinationals operating global networks of branch plants which largely produce and sell in the same market.

In the same vein, 'offshoring' and 'outsourcing' can be thought of as verbs - as they imply the movement of activities from one location to another. But, this is only one method by which global value chains can be formed. A growing firm, for example, could simply create a new function in a location outside of its home country providing service to the rest of the organization, but without having moved any work. It is also important to note that it is not a zero-sum process; that one location's gain does not necessarily come at another's loss. As that growing firm begins production at one location, evidence suggests that it is also very likely to expand production at other locations as well. This helps to reconcile why measures of offshoring show so few job losses at the same time that companies are expanding employment abroad.

Appendix Two: Glossary of Terms

An entire lexicon of new terminology has been created around the global value chain phenomena. Below are descriptions of how these terms have been used in this report and a framework for how all of these concepts potentially link to global value chains.

Outsourcing - movement of activity outside of the firm. Often associated with services. An example would be of a firm that used to maintain its own janitorial staff now contracts out those duties to an external firm.

Offshoring - movement of activities outside of national boundaries. Can be within or outside the firm. Often associated with the relocation of an activity - total or partial closure of facilities or stopping a particular type of activity at a domestic location only to be replaced with a foreign location. For example a firm closes its domestic call centre and opens one in a foreign jurisdiction.

Offshore Outsourcing - Movement of activities outside of the firm and across national boundaries. Often associated with services. A combination of the above two phenomena. An example would be closing a domestic call centre and contracting those services to be performed by another company at a foreign location.

Inshoring - The receiving of offshored activity. Can be within or outside of the firm. For example, a call centre is closed at a foreign location and that activity is moved to a domestic location.

Nearshoring. Offshoring (outward) or Inshoring (inward) but to/from a location that is in close geographic proximity.

Activity or Function - is used to describe the stage of the value chain that is moving. Each stage of the value chain is an activity or function.

Global Supply Chains – All of the inputs required to produce a product. Often associated with a specific company and generally refers only to goods production. For example, a global supply chain would consist of all of a firm's sources for products (in the case of a seller of those products, such as a retail firm) or intermediate inputs (in the case of a producer).

Integrative Trade – The observation of growing trade in intermediate inputs and/or intra-industry trade and may be the outcome of the formation of global value chains. Often refers only to goods.

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