

# SECTOR OUTLOOK

## 7.0 Sector Export Outlook

### Export Growth: Volumes and Prices

When forecasting the value of Canadian exports, two components have to be considered: volume and price. Volumes refer to the actual physical quantity of the goods being shipped while price is the dollar amount paid for those goods. The dollar value of the export is thus simply the volume multiplied by the price. For example, if volume growth is forecast at 5% while prices are projected to rise by 7%, the overall increase in value is 12%. Given the large relative changes in prices and volumes often seen for some goods, it is important to break down the contribution of each component to the overall growth in export value. This differentiation becomes particularly useful in the case of commodities and computer equipment, where prices can be particularly volatile.

### 7.1 Energy Sector

EDC Economics expects Canadian energy exports to record volume-induced increases of 5% in 2007 and 6% in 2008, but there remains upside price risk to this outlook. In particular, geopolitical risks could escalate or unplanned production declines occur, which along with generally tight demand and supply conditions, could boost the price of crude oil above our 2008 forecast level. Commodity price volatility remains elevated, particularly in the near term.

**Table 21: Energy Export Outlook by Sector**

Top Markets	CAD bn 2006	% Share of Energy Exports (2006)	Export Outlook (% growth)		
			2006	2007(f)	2008(f)
Petroleum*	53.3	61.2	18.3	7.1	5.0
Natural Gas	27.8	31.9	-22.6	2.0	5.7
Coal	3.5	4.0	1.7	-6.9	22.0
Electricity	2.5	2.9	-21.2	16.6	7.1
<b>Total Energy</b>	<b>87.2</b>	<b>100.0</b>	<b>-0.5</b>	<b>5.2</b>	<b>5.9</b>

Source: Statistics Canada, EDC Economics. 2006 actual, 2007 and 2008 are forecast.  
\*Includes crude petroleum and refined products.

For 2007, we expect the WTI price of **crude** to average US\$66/barrel before it falls to US\$64/barrel in 2008. This year has been a wild ride for crude with prices dropping to US\$50/barrel near the start of the year only to rise later to a record of more than US\$80/barrel in September. Indeed, this year there are solid fundamentals supporting high oil prices. OPEC spare capacity remains low at under 3 million barrels per day while the organization's production cutbacks since last fall have left its mark on the market. Although OPEC announced this fall an increase in production of 500,000 barrels per day, this will not show up in the market in the very near term. While we have not backed away from our story that high oil prices stimulate investment, new supply is taking longer and costing more, while at the same time, production by some existing suppliers (e.g. Mexico) is falling faster than was previously expected.

**Table 22: Price Forecast for Oil and Natural Gas**

	Long-term Average*	2005	2006	2007(f)	2008(f)
Petroleum, WTI - USD/bbl	26.4	56.57	66.09	66.00	64.00
Natural gas(HH) - USD/mmbtu	3.57	8.89	6.72	7.00	7.50

Source: Bloomberg, EDC Economics. 2005 and 2006 actual, 2007 and 2008 are forecast.  
\*Long-term averages cover 1983 to 2006 for oil and 1991 to 2006 for natural gas.

At US\$64/barrel for 2008, EDC Economics' outlook remains below that of many other forecasters. Here there are several things to consider. First, we suspect there remains a great deal of speculation tied up in crude markets given that its fundamentals look better than most industrial metals. Moreover, the recent liquidity crunch, if it continues to broaden, will show up in lower commodity prices across the board. Second, our global GDP outlook calls for a stronger growth deceleration than most forecasters, which results in a larger scaling back of our oil demand projections. Already in September the IEA cut its fourth quarter demand outlook by 250,000 barrels/day and suggested that more downside demand moves were probable. Third, OECD inventories are near the upper end of the 5-year average range, which introduces greater potential for downside price movements. Conversely, US crude inventories

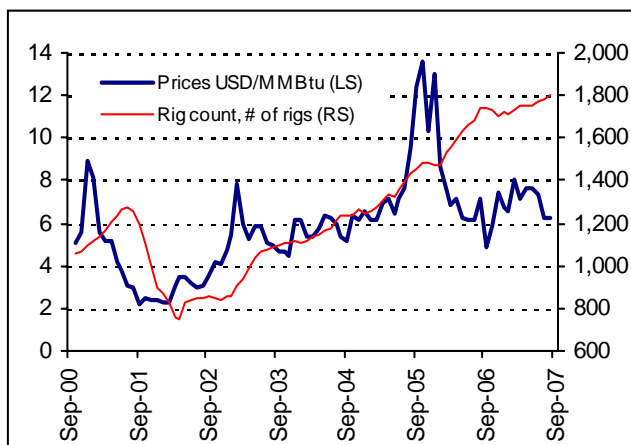
## SECTOR OUTLOOK

have been coming down, which has been supporting prices. But weaker economic growth, and the resulting slowdown in energy demand, will allow US oil supplies to build up again.

The Canadian supply story is almost exclusively good. There were significant increases in non-conventional crude production in 2007 and potentially stronger growth in 2008. Much of this expansion will come from Alberta, but other big producing provinces such as Saskatchewan and Newfoundland and Labrador also saw increases. There is a caveat however. Export growth could be hampered by pipeline capacity constraints, a concern recently pointed out by the National Energy Board.

The price for Henry Hub **natural gas** is forecast to average US\$7.0/Mmbtu in 2007 before increasing to US\$7.5/Mmbtu in 2008. Natural gas prices have been extremely volatile over the past 2 years with prices ranging from over \$15 to a low of \$3 to \$4. Through the next 12 to 18 months, US natural gas demand should grow at levels only slightly below trend despite the expected slowdown in that economy. Industrial demand, which accounts for 33% of total US consumption, should hold up reasonably well as the manufacturing sector gets support from steady export sales. With the rise in the price of crude, and recent fall in gas prices, a large wedge has opened up in the price of crude and gas when the two are measured in terms of energy content. This should help lift gas prices over the forecast period.

Figure 30: US Natural Gas Price and US Gas Rig Count



Source: Bloomberg.

Contrary to our earlier expectations, and despite a considerable drop in 2007 drilling activity, Canadian export volumes of natural gas are up through the first half of this year. EDC Economics expects lower drilling activity, already high US inventories and increased gas consumption in Canada will result in declining export volumes through the forecast horizon. Although we are calling for gas prices to rise in 2008, US underground storage at the time of writing was near the upper bound of normal inventory levels recorded over the past 5 years. We expect exports of natural gas to rise 2% in 2007, before higher prices lift export receipts by 6% in 2008.

Exports of **electricity** are up a robust 25% in the first half of 2007, driven by unusually high shipments in February and April. Price and volume gains will be solid this year with sizable increases recorded in both Quebec and British Columbia. For the year as a whole, electricity exports are on track to rise by an average 17%. Looking ahead, we expect export growth to soften as the US economy moderates. A modest increase in the price of electricity, along with slight growth in volumes and a weaker Canadian dollar, should boost electricity exports by 7% in 2008.

EDC projects a 7% drop in **coal** exports in 2007 before rising 22% in 2008. Canada's coal exports are almost exclusively metallurgical and therefore tied closely to the world's steel market. Although global steel production is moderating, and should continue to do so with our slowing GDP outlook, supply constraints in Australia are making the market for metallurgical coal very tight. Canadian volume shipments are up handily, and we expect this trend to continue through the forecast horizon. After falling in the early goings of 2007, we expect prices to rebound somewhat in 2008.

# SECTOR OUTLOOK

## 7.2 Metals Ores and Industrial Metals

Strong global demand with rapid growth in developing economies, particularly China, led to a sharp upswing in demand for most industrial metals in the past several years. Significant under-investment during the 1980s and 1990s has added pressure on prices, with producers simply unable to keep pace with surging demand. Against this bullish backdrop, strong buying opportunities arose for many investors, which were bolstered by loose credit conditions and low risk aversion. In fact, investment demand has become an increasingly powerful force in metal market developments, a force largely viewed as permanent (sustainable) by market participants.

Looking forward, Canadian businesses can expect metal prices to remain at fairly high levels, well above recent historical averages – however, expect further volatility across the base metals complex. Although fundamentals remain robust for metals, demand and supply are forecast to ease in 2008 and 2009. Global economic demand is forecast to moderate, led by the cyclical slowdown in the United States. Weaker US demand will spread to the developing economies, erasing as much as 1% growth from bottom line GDP. On the supply side, the lagged investment response will begin to

kick in, adding further upward pressure to metal stockpiles – already we have seen some LME inventories begin to trend up. EDC Economics is forecasting metal prices to decline somewhat toward the end of 2007 before pulling back in 2008 and more substantially in 2009. Our export forecast for metals and ores calls for growth of 20% in 2007 (vs. 13.4% in the Summer Outlook). Lower metal prices should induce a fall in export earnings of 15% in 2008 (to a still respectable estimated \$55 billion in export receipts).

Downside risks to the metals outlook are evident. Although not our baseline scenario, any substantial decline in Chinese industrial production (in response to the US economic slowdown) would weaken global demand growth and most likely hurt investor confidence. The other downside risk is the possibility (although small) of a more prolonged and deeper liquidity crunch. Given the recent liquidity

concerns experienced by investment funds in financial markets, metal prices are to some extent vulnerable to an outflow of investment fund capital. If there is flight to quality, a precipitous drop in prices could occur, albeit to levels still above historic norms.

While underlying stainless steel demand remains fairly solid, price-related substitution has clearly had an influence on **nickel** prices recently. From its historical high of US\$54,200 per tonne in May 2007, LME nickel was trading in the range of US\$26,000 to US\$30,000 per tonne by mid-September. The recent correction in LME nickel was initially triggered by a change in trading regulations on the LME, intervention taken against suspected hedge fund collusion. Looking forward, we expect supply and demand in the nickel market to roughly balance out through the

**Table 23: Canadian Metal Ores and Industrial Metal Export Outlook**

Top Markets	CAD bn 2006	% Share of Exports (2006)	Export Outlook (% growth)		
			2006	2007(f)	2008(f)
US	35.4	67.1	19.2	10.2	-14.6
United Kingdom	4.7	8.9	52.2	37.0	-10.1
Eurozone	2.6	4.8	15.5	58.3	-3.9
Other Western Europe	2.1	3.9	17.0	78.0	-2.2
Japan	2.2	4.1	30.0	7.9	-15.6
China	1.9	3.6	61.1	62.7	-7.3
Asian NIEs	1.6	3.0	50.4	25.8	-8.8
<b>Total Developing Markets</b>	<b>4.1</b>	<b>7.8</b>	<b>45.5</b>	<b>41.8</b>	<b>-8.0</b>
<b>Total Metals</b>	<b>52.8</b>	<b>100.0</b>	<b>24.1</b>	<b>20.4</b>	<b>-12.0</b>

Source: EDC Economics. 2006 is actual, 2007 and 2008 are forecast. Asian NIEs are Hong Kong, Singapore, South Korea and Taiwan.

**Table 24: Industrial Metal Price Forecast**

	10-Year Average	2005	2006	2007(f)	2008(f)
<b>Aluminum (USD/tonne)</b>	1,630	1,902	2,573	2,570	2,240
<b>Copper (USD/tonne)</b>	2,552	3,682	6,731	7,075	5,560
<b>Nickel (USD/tonne)</b>	10,138	14,782	24,126	40,050	30,260
<b>Steel (hot-rolled, USD/ton)</b>	355	596	504	532	517
<b>Zinc (USD/tonne)</b>	1,274	1,382	3,266	3,425	2,650

Source: EDC Economics, Bloomberg. 2005 and 2006 actual, 2007 and 2008 are forecast.

## SECTOR OUTLOOK

remainder of 2007. In 2008, a supply surplus will gradually emerge, becoming more pronounced in 2009.

Market fundamentals remain fairly strong for **copper**. China and other fast-growing developing countries have ensured strong demand growth. Supply limitations among major copper producers have also supported copper prices, with supply disruptions causing several months of volatile trading on the LME. New refined copper supply on the market is expected going forward, but the timing is less clear. Even so, LME copper trading around US\$7,300 per tonne (mid-September) appears out of line with fundamentals, and we forecast the price of copper will pull back in 2008 and 2009.

The underlying economic conditions for **zinc** appear less supportive than a year ago. Higher Chinese exports coupled with less optimism among investment funds should result in substantial price declines through the next 18 to 24 months. Supply of refined zinc is expected to gradually catch up to demand during the remainder of this year and overtake demand next year, with a healthy surplus developing. As such, LME zinc is forecast to average around US\$2,600 m/t in 2008, compared to its recent high of just over US\$4600 m/t late last year.

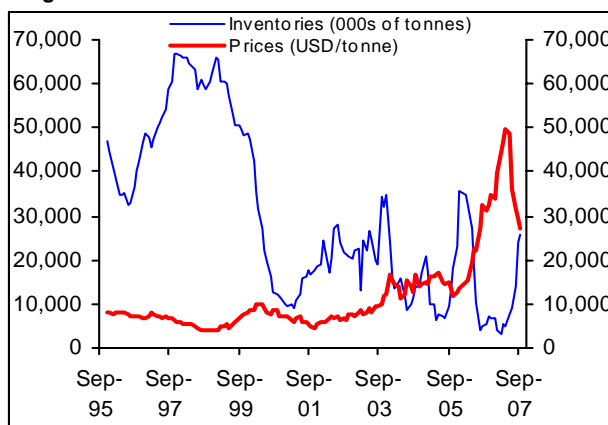
The environment for **aluminum** remains fairly strong, thanks mainly to rapid growth in Chinese demand. Despite slowing economic activity in the United States, Japan and Europe, LME aluminum prices are forecast to remain relatively high during the remainder of this year and next (average just over US\$2,200 per tonne in 2008, which is still off the past couple of years). However, inventories have been steadily increasing and troubles in the US economy and the associated squeeze in liquidity conditions have resulted in some investment selling activity. Together, these forces have put and are likely to place further downward pressure on prices over the very near term.

**Iron ore** producers have been unable to keep pace with global demand, resulting in rising ore prices. Asian **steel** demand and production are expected to remain fairly strong through the next 12 to 18 months, a major factor supporting the outlook for iron ore. Global steel consumption is expected to moderate somewhat going forward, but the market will remain in a reasonably tight supply-demand balance. High energy and metallic input costs will also act to support steel prices around current levels. Overall, steel prices are expected to average higher this year and next compared to levels recorded in 2006.

### 7.3 Forestry Products

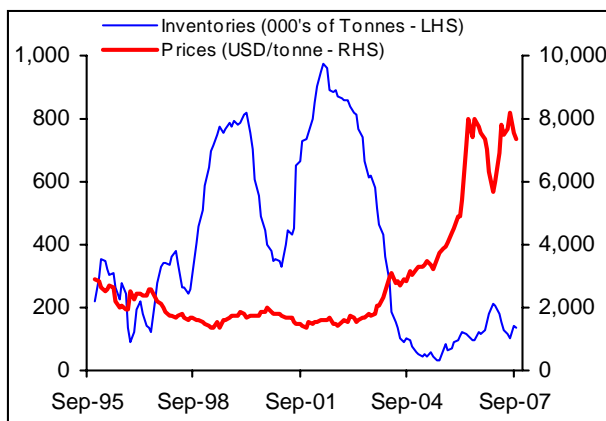
Prospects for the forestry sector are bearish for the remainder of 2007 and 2008 – weakness in the US housing market is expected to continue until the second half of next year, while the

Figure 31: LME Nickel Prices and Inventories



Source: Bloomberg.

Figure 32: LME Copper Prices and Inventories



Source: Bloomberg.

## SECTOR OUTLOOK

contraction of newsprint consumption in the US is not likely to improve anytime soon. The industry will continue to be pressed by the higher Canadian dollar, increased energy costs, greater international competition, lumber export barriers to the US, a weaker US consumer, and wood chip availability. While we maintain our 2007 export forecast of an 8% decline in forestry exports, we have raised slightly our export outlook for 2008. We now expect forestry exports to grow 3.5% next year, based largely on better than previously anticipated prices in the pulp and paper sector.

The main driver of **wood product** demand, US housing starts, continues to weaken as the sub-prime market collapse persists. Housing market woes will continue through much of 2008. Rising foreclosures will add to the supply of houses for sale, while tighter underwriting standards, higher mortgage rates and falling prices will dampen demand. We expect US housing starts to fall to 1.40 million units in 2007, a 22% decline from last year. Starts are forecast to bottom out in 2008Q2 and average 1.32 million units in 2008, down another 5%. As a result, lumber and oriented strand board (OSB) prices will remain weak until early 2008, falling by 12% and 22% respectively in 2007, the third year of double-digit decline in both cases. Demand will remain soft next year, but we expect curtailments and mill closures to limit further price declines. We expect lumber prices to gain 2% in 2008, while OSB prices will fall another 2%. With current market conditions, a number of OSB projects are being delayed or reconsidered, or may be shelved altogether. Less than one year since coming into effect, the Softwood Lumber Agreement is going to the international tribunal to settle differing interpretations of the calculation of export quotas, surge mechanisms and provincial programs. Overall, we expect wood product exports to decline 18% in 2007. A partial recovery is anticipated for 2008 with exports rising 7%.

The fundamentals are also bearish in **paper** markets, with the decline of newsprint consumption in North America, particularly by US dailies, a weaker pricing environment, increased competition from overseas, and higher costs for energy and pulp. Canadian producers have also had to deal with the higher dollar – a direct hit on their bottom line. As readers and advertisers turn to the Internet and other media, newsprint consumption in North America has declined 11% y/y,<sup>4</sup> while newspaper advertising spending has

**Table 25: Lumber and Wood Products Export Outlook by Region**

Top Markets	CAD bn 2006	% Share of Exports (2006)	Export Outlook (% growth)		
			2006	2007(f)	2008(f)
US	14.8	85.2	-16.4	-23.3	4.8
Japan	1.4	7.8	-2.5	-9.7	14.5
Eurozone	0.4	2.4	20.1	11.2	18.7
Asian NIEs	0.2	1.0	16.6	32.8	15.5
United Kingdom	0.1	0.7	2.0	63.3	18.7
<b>Total World</b>	<b>17.4</b>	<b>100.0</b>	<b>-14.0</b>	<b>-18.0</b>	<b>6.7</b>

Source: EDC Economics. 2006 actual, 2007 and 2008 are forecast.  
The Asian Newly Industrialized Economies (NIE's) are Hong Kong, Singapore, South Korea and Taiwan.

**Table 26: Lumber and OSB Price Outlook**

	Long-term Average*	2005	2006	2007(f)	2008(f)
Lumber, spf, 2x4 (USD/mbf)	306.2	353.1	296.5	260	266
OSB, 7/16" (USD/000 ft.)	232.7	318.2	211.1	165	162

Source: Bloomberg, EDC Economics. 2005 and 2006 actual, 2007 and 2008 are forecast.

\*Long-term average figures are for 1997 to 2006.

**Table 27: Market Pulp Export Outlook by Region**

Top Markets	CAD bn 2006	% Share of Exports (2006)	Export Outlook (% growth)		
			2006	2007(f)	2008(f)
US	2.7	42.1	-3.3	21.4	1.4
China	1.1	16.5	28.6	23.3	13.9
Eurozone	0.8	11.8	-24.6	-3.8	-3.7
Asian NIEs	0.6	9.1	18.6	19.1	6.6
Japan	0.5	7.8	13.9	5.3	0.4
<b>Total World</b>	<b>6.5</b>	<b>100.0</b>	<b>2.8</b>	<b>13.9</b>	<b>4.1</b>

Source: EDC Economics. 2006 actual, 2007 and 2008 are forecast.  
The Asian Newly Industrialized Economies (NIEs) are Hong Kong, Singapore, South Korea and Taiwan.

<sup>4</sup> Source: Pulp and Paper Council of Canada.

## SECTOR OUTLOOK

fallen by 8%<sup>5</sup> so far this year. Despite capacity shutdowns and mill conversions, the newsprint market remains oversupplied, as lower prices can attest. We also expect a further deterioration of fundamentals during the forecast period, driven by the weakening US economy and consumer demand, resulting in a further 4% price decline in 2008.

The collapse of the sub-prime housing market in the US will also affect the demand for newspaper advertising space, as 10% of US newspaper revenue comes from real estate classifieds. On the supply side, the Abitibi-Consolidated Bowater merger, once completed, should result in capacity reduction, partly offsetting shrinking demand and bringing some balance back into the market. So far this year, other paper and paperboard products have fared better, with less pronounced downward price pressures as markets are generally more balanced, thanks to continued curtailment, conversion, and capacity closure taken by producers.

Despite some recent price increases for supercalendered, lightweight coated and coated paper grades, the latter largely related to the imposition of US countervailing and anti-dumping duties on imports from China, South Korea and Indonesia, few grades will see gains in 2007 and 2008. Overall, Canadian paper exports will decline 7% in 2007 and remain flat in 2008.

Meanwhile, Canadian pulp producers have faced a protracted bullish pricing environment, despite the introduction of large amounts of pulp capacity in Latin America and the reduction of paper capacity in North America and Europe. The global demand for pulp has been largely sustained by paper and paperboard capacity expansion in Asia, which is largely based on recycled fibre. However, new fibre is usually added to improve the overall paper quality. We expect new Latin America capacity to drive down the price of hardwood kraft pulp in the final months of 2007, creating a gap with softwood pulp prices and eventually driving those down as well. However, global pulp shipments have remained strong and inventories tight, for both hardwood and softwood kraft pulp (especially the latter).

The recent tightness in softwood pulp was also affected by the forest worker strike in BC, which has constrained wood chip availability, forcing local pulp producers to curtail production. This has delayed the expected cycle peak in pulp prices, which we now anticipate will occur in the first quarter of 2008 for both hardwood and softwood grades. While further paper capacity expansion will come on line in Asia during 2008, the new demand will be largely overshadowed by the

**Table 28: Pulp and Paper Price Outlook**

	Long-term average*	2005	2006	2007(f)	2008(f)
Market Pulp (USD/tonne)	571.5	611.0	674.6	768	765
Newsprint (USD/tonne)	560.4	581.0	634.1	561	540

Source: Bloomberg, EDC Economics. 2005 and 2006 actual, 2007 and 2008 are forecast.  
\*Long-term average figures are for 1997 to 2005.

**Table 29: Newsprint and Other Paper Export Outlook by Region**

Top Markets	CAD bn 2006	% Share of Exports (2006)	Export Outlook (% growth)		
			2006	2007(f)	2008(f)
US	13.4	85.1	-7.3	-9.9	-1.5
Eurozone	0.4	2.3	-24.3	23.2	-5.0
South America	0.3	1.7	14.0	11.3	12.3
United Kingdom	0.2	1.3	-28.8	48.7	-10.1
Asian NIEs	0.2	1.1	-7.7	-24.6	-4.0
<b>Total World</b>	<b>15.7</b>	<b>100.0</b>	<b>-7.1</b>	<b>-6.9</b>	<b>0.0</b>

Source: EDC Economics. 2006 actual, 2007 and 2008 are forecast.  
The Asian Newly Industrialized Economies (NIEs) are Hong Kong, Singapore, South Korea and Taiwan.

**Table 30: Forestry Exports Outlook by Sub-Sector**

Top Sectors	CAD bn 2006	% Share of Exports (2006)	Export Outlook (% growth)		
			2006	2007(f)	2008(f)
Lumber and wood products	17.4	43.9	-14.0	-18.0	6.7
Pulp	6.5	16.4	2.8	13.9	4.1
Newsprint and other paper products	15.7	39.7	-7.1	-6.9	0.0
<b>Total Forestry</b>	<b>39.6</b>	<b>100.0</b>	<b>-8.9</b>	<b>-8.3</b>	<b>3.5</b>

Source: EDC Economics. 2006 actual, 2007 and 2008 are forecast.

<sup>5</sup> Source: Newspaper Association of America.

# SECTOR OUTLOOK

massive amount of new pulp capacity being introduced to global markets next year. As a result, prices are forecast to decline by 1% and 5% in 2008 for softwood and hardwood pulp respectively. Following the 14% increase estimated for 2007, Canadian pulp exports are expected to make more modest gains in 2008, increasing by 4%.

## 7.4 Advanced Technology

Canadian exports of high-tech goods are on track to rise by 3 to 3.5% in 2007. Although the industry has been successful in lowering costs, thanks to a myriad of factors including outsourcing more production overseas, the global economic slowdown will impose a drag on Canada's technology exports, which are forecast to advance a modest 2% in 2008. These numbers may look weak on the surface, but when isolating the significant price declines currently experienced in the high-tech sector, we find solid growth in export volumes (9% in 2007 and 6% in 2008) – a notable accomplishment for Canadian tech companies given the run-up in the loonie and intense global competition in this sector.

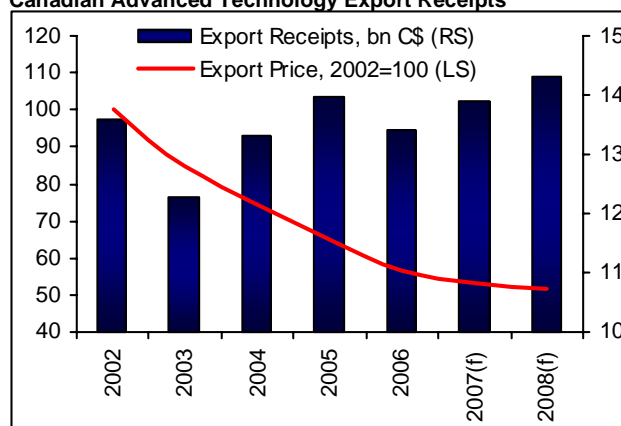
**Table 31: Advanced Technology Export Outlook by Region**

Top Markets	CAD bn 2006	% Share of Exports (2006)	Export Outlook (% growth)		
			2006	2007(f)	2008(f)
US	9.4	67.5	-9.4	4.4	2.0
United Kingdom	0.5	3.4	-6.3	-11.9	-6.2
Eurozone	1.0	7.5	23.3	8.0	7.3
Asian NIEs	0.5	3.6	-5.8	-11.0	-4.3
China	0.3	2.3	18.0	11.7	9.3
Japan	0.3	1.8	10.8	-1.5	-0.4
Middle East	0.2	1.5	3.7	-0.6	0.6
Mexico	0.2	1.2	51.9	-10.0	-1.4
Oceania	0.1	1.0	-6.5	-2.0	0.6
Central/Eastern Europe	0.1	1.0	9.4	0.4	1.5
<b>Total Developing Markets</b>	<b>1.5</b>	<b>10.6</b>	<b>15.7</b>	<b>4.9</b>	<b>4.9</b>
<b>Total World</b>	<b>13.4</b>	<b>100.0</b>	<b>-4.1</b>	<b>3.3</b>	<b>2.2</b>

Source: EDC Economics. 2006 actual, 2007 and 2008 are forecast.  
The Asian Newly Industrialized Economies (NIEs) are Hong Kong, Singapore, South Korea and Taiwan.

Robust profit gains and buoyant cash flows have served to encourage US business expenditure on high-tech equipment during the first 6 months of this year, unlike the lacklustre performance witnessed in the second half of 2006. To be sure, Canadian exports of advanced technology equipment to the US (70% of the total export market) performed rather well in 2007, rising an estimated 4.4% and representing a noticeable improvement over the export contraction observed in 2006. However, the ailing US housing market, a nervous US consumer and slower profit growth will have a negative impact on export growth in 2008. With tightening lending standards, consumer and business sentiment is expected to continue deteriorating, followed by slower growth in expenditure on high-tech products. Considering that a large portion of our advanced technology exports has been driven by the US market, waning confidence will serve as a bane for outbound shipments – the ramifications of which will become apparent in 2008 when growth in US-bound exports is expected to slow to 2%.

**Figure 33: Falling Export Prices Are Capping Growth in Canadian Advanced Technology Export Receipts**



Source: Statistics Canada, EDC Economics.

Exports of Canadian high-tech goods to non-US markets put in a mixed performance during 2007, and 2008 will bring more of the same. Shipments to Africa, Brazil, China, the Eurozone, India, Russia and South America grew strongly in 2007, and we expect exports to these markets will post decent growth again in 2008 (albeit at a slower pace). Salient growth from emerging markets such as Latin America and Asia; the recovery in Europe; and oil windfalls in the Middle

# SECTOR OUTLOOK

East are bolstering global tech sales. Likewise, the swift expansion of information technology (IT) industries and broadband in India and China is motivating purchases of computer hardware and equipment in these markets. On the negative side of the ledger, exports to Japan, East Asia (ex-China) and Mexico were down in 2007, and little recovery is projected for 2008.

## 7.5 Communications Equipment

Canadian manufacturers of communications equipment are having a challenging 2007, with export sales estimated to be down by 6% on the year. Next year should see exports stabilize, with modest growth of 1%. Shipments to most major markets are down in 2007, including the US, West Europe, Mexico, China and Japan. We expect to see some modest gains for these markets in 2008. On a more positive note, exports to Eastern Europe hit a record high in 2007, and further gains can be expected for the coming year. Shipments to Brazil and much of Africa also posted strong growth in 2007, a pattern forecast to continue through 2008, albeit at a more subdued pace.

The tepid outlook for telecom equipment is in contrast to the past 3 years, when exports posted solid gains. A strong Canadian dollar, increasing competition, downward price pressures, some rigidity in regulatory frameworks (especially in Europe and Japan) and a weaker US economy are driving the more subdued forecast. As industrialized

markets account for about 80% of the Canadian export market for telecom equipment, the softer performance in these countries will have a dampening impact on overall exports for the sector.

Canadian telecom exports to industrial countries are expected to finish off 2007 with a decline of 7.5%, before stabilizing in 2008. In contrast, shipments to the developing world are on track to rise by 3 to 4% in 2007 followed by a further rise of 5% in 2008. Over the longer term, we expect that better growth opportunities will be in developing markets due to their higher rates of economic growth and the corresponding need for communications infrastructure.

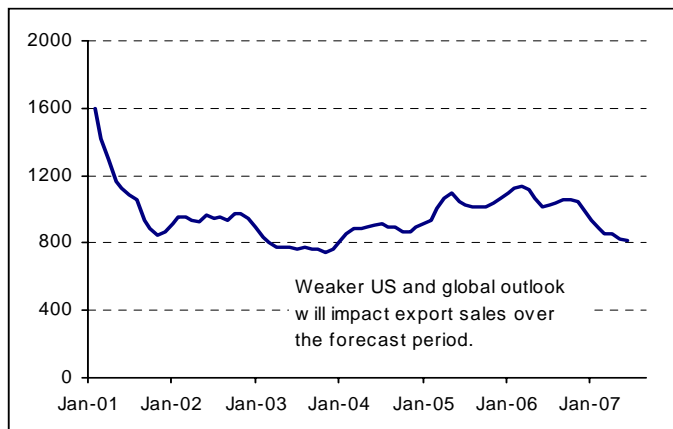
There are several reasons why emerging markets have such strong potential. First, corporations in these countries will continue updating their networks in search of further improvements in efficiency and productivity. This is true for companies in Eastern Europe, Russia, Latin America and increasingly among SMEs in Asia. Second, governments plan to continue investing in telecom infrastructure as part of their fiscal programs, especially in Latin America, Eastern Europe and Africa. Third, many emerging markets have already, or will soon be, launching 3G services and granting the

**Table 32: Communications Equipment Export Outlook**

Top Markets	CAD bn 2006	% Share of Exports (2006)	Export Outlook (% growth)		
			2006	2007(f)	2008(f)
US	4.5	63.9	-5.2	-6.0	1.0
Eurozone	0.7	9.7	39.6	-17.8	-4.0
United Kingdom	0.4	5.9	-15.0	-9.9	1.0
Asian NIEs	0.2	3.0	10.2	-6.9	-2.0
Oceania	0.2	2.9	77.3	-3.0	2.0
China	0.1	2.1	16.1	-8.9	3.0
Japan	0.1	1.6	-12.0	-5.0	-2.0
Mexico	0.1	1.9	54.5	-11.9	-2.5
<b>Total Developing Markets</b>	<b>0.8</b>	<b>12.0</b>	<b>19.4</b>	<b>3.5</b>	<b>5.1</b>
<b>Total World</b>	<b>7.0</b>	<b>100.0</b>	<b>1.8</b>	<b>-6.2</b>	<b>1.0</b>

Source: EDC Economics. 2006 actual, 2007 and 2008 are forecast.  
The Asian Newly Industrialized Economies (NIEs) are Hong Kong, Singapore, South Korea and Taiwan.

**Figure 34: Canadian Telecom Equipment Exports (Monthly, millions CAD, 3 months MA)**



Source: Statistics Canada, EDC Economics.



## SECTOR OUTLOOK

corresponding licenses. Taking those factors into account, good prospects exist for Canadian exports of telecom equipment to Eastern Europe, South America (especially Brazil), developing Asia and India.

Given the gradual convergence of the telecom and IT sectors around the world and the sustained growth in the mobile and broadband subscriber base, non-traditional exports of equipment such as mobile TVs, 3G mobile phones and related devices for internet telephony (VoIP) generally offer the better growth prospects for the next few years. On the other hand, manufacturers of traditional fixed-line phones and less modern mobile equipment will be hard pressed to grow their export sales. Successful exporters will be those able to reduce costs and innovate to face growing competition.

### 7.6 Industrial Machinery and Equipment

Canadian exports of machinery and equipment (M&E) are set to rise by 3% in 2007, followed by a projected gain of 4% in 2008. This year's performance is impressive given the run-up in the Canadian dollar, increased global competition and downward pressure on selling prices. Needless to say, profit margins for exporters have come under serious pressure. But it is also competition and a lack of industry pricing power which are boosting export sales for some M&E producers. Although economic growth is slowing, companies all over the world will continue to invest in new capital equipment to reduce costs and remain competitive.

Looking ahead through the next 12 to 18 months, the strongest growth for Canadian M&E

exporters will be for equipment used in the energy and mining sector, followed by agriculture and construction machinery. On a geographic basis, growth in exports to the developing world will continue to outpace sales to industrialized markets by a wide margin.

Exports of **mining and oil and gas M&E** are on pace to grow by 30 to 40% this year. A boom is underway in mining investment as prices of metals remain high. Energy prices also remain elevated, though there was some softening in natural gas at the time of writing. Although we expect a drop in commodity prices through 2008, prices will remain well above historical norms, supporting the economic viability of the majority of upstream mining/energy projects. Nearly one third of this year's export growth came from the large US market, but considerable strength was also seen in Russia, Central America, Eastern Europe, Brazil and Africa. We anticipate ongoing strength from these emerging markets in 2008. Overall, we expect exports to rise 34% in 2007, before slowing to growth of 12% in 2008.

Exports of **chemical and plastics M&E** should hit a new record in 2007, as exports to most major markets posted gains. Exports to the US (60% of the total) will experience only modest growth in 2008 despite a high capacity utilization rate for plastics manufacturing in that country. Chemicals and plastics manufacturing is a cyclical industry, and it is highly exposed to some key areas of anticipated weakness in the US economy in 2008, namely autos, consumer goods and housing. Markets like South America, and China in particular, will offer some reprieve but not enough to stop a deceleration in exports as growth moves from 12% in 2007 to only 1.6% in 2008.

**Table33: Machinery and Equipment Export Outlook by Region**

Top Markets	CAD bn 2006	% Share of Exports (2006)	Export Outlook (% growth)		
			2006	2007(f)	2008(f)
US	20.2	75.8	-0.9	2.6	2.4
Eurozone	1.6	5.8	14.0	-3.9	5.5
Middle East	0.6	2.2	18.2	1.8	8.4
China	0.4	1.7	12.5	25.2	6.1
United Kingdom	0.4	1.6	10.1	-3.1	14.2
South America	0.4	1.4	-1.7	9.0	15.1
Oceania	0.4	1.4	13.9	-14.1	12.4
Asian NIEs	0.3	1.1	-10.4	6.0	9.0
<b>Total Developing Markets</b>	<b>3.3</b>	<b>12.5</b>	<b>17.9</b>	<b>15.4</b>	<b>11.6</b>
<b>Total World</b>	<b>26.6</b>	<b>100.0</b>	<b>2.5</b>	<b>3.2</b>	<b>4.4</b>

Source: EDC Economics. 2006 actual, 2007 and 2008 are forecast.  
The Asian Newly Industrialized Economies (NIEs) are Hong Kong, Singapore, South Korea and Taiwan.

## SECTOR OUTLOOK

**Metal and woodworking machinery** experienced a 2% drop in exports during 2006. The lion's share of receipts in this category come from metal working equipment, which normally sees 80% of exports head to the US. Looking forward, weaker activity in the US economy means this sub-sector is expected to record a decline in exports in 2007. Further modest declines are forecast for 2008.

Canadian exports of **agriculture and construction machinery** showed limited growth in 2007, as demand for construction machinery in the US declined in line with the housing sector. At the same time, weaker farm income south of the border has limited agriculture machinery demand despite higher crop prices. However, stronger demand for both agriculture and construction machinery in emerging markets offset declining US demand in 2007, allowing exports to increase an estimated 3%. In 2008, a bottoming of the US housing sector, improved farm income, rising demand from emerging markets, and the weaker Canadian dollar should support a 12 to 15% increase in Canadian exports of agriculture and construction machinery.

### 7.7 Automotive Products

Canadian exporters of motor vehicles and parts saw their woes continue in 2007 with a decline of 5.6% YTD (January-July) in foreign shipments. While passenger vehicles (-6%) and medium/heavy-duty trucks (-28%) saw their exports fall, exports of automotive parts remained flat. Looking ahead, we see a continuation of this trend through the remainder of 2007, as auto sales in the US are expected to decline further and the Detroit Three continue to lose market share.

Although Canadian automotive exports are projected to fall 6.3% this year, exports will begin to stabilize in 2008 with a modest 1.5% gain as the US auto market is expected to recover modestly at the end of 2008 and the restructuring of the Detroit Three nears completion. Risks to the export sector include renewed strength of the Canadian dollar, a marked slowdown in the US economy and production disruptions arising from current contract negotiations between the UAW and the Detroit Three. At the time of writing, EDC Economics' baseline forecast assumed there would be no significant production disruptions arising from labour disputes.

**Table 34: Automotive Exports by Product**

Market Segments	CAD bn 2006	% Share of Total Exports (2006)	Export Outlook (% growth)		
			2006	2007(f)	2008(f)
Passenger Vehicles	50.0	66.0	-7.5	-6.2	0.8
Automotive Parts	20.1	26.6	-8.4	-1.4	1.9
Medium/Heavy Duty Trucks	5.6	7.4	11.9	-25.7	8.2
<b>Total Automotive</b>	<b>75.7</b>	<b>100.0</b>	<b>-6.6</b>	<b>-6.3</b>	<b>1.5</b>

Source: EDC Economics. 2006 actual, 2007 and 2008 are forecast.

In the largest auto market of the world and Canada's main export destination, US passenger car and light truck sales have fallen 2.8% YTD (January-August) and are expected to descend to a 9-year low of 16.1 million units in 2007, down from 16.5 million units in 2006. The downturn in the US housing sector has directly affected sales of light trucks.

This is reflected by the recent announcement of GM to cut output to two shifts from three at the Oshawa plant, which makes the Chevrolet Silverado and GMC Sierra pick-up trucks. In addition, the correction in the US housing market will indirectly affect sales of passenger cars and light trucks through the wealth effect. Finally, consumer indebtedness triggered by rising adjustable rate mortgages (ARMs) and incentive-based forward

**Table 35: Automotive Export Outlook by Region**

Top Markets	CAD bn 2006	% Share of Total Exports (2006)	Export Outlook (% growth)		
			2006	2007(f)	2008(f)
US	73.7	97.4	-6.7	-6.8	1.5
Eurozone	0.4	0.5	13.1	12.0	-19.5
UK	0.1	0.1	-9.1	7.8	-9.3
Oceania	0.1	0.1	-67.5	12.2	-6.9
Japan	0.0	0.1	-47.7	25.1	-10.7
<b>Total Developing Markets</b>	<b>1.4</b>	<b>1.9</b>	<b>9.5</b>	<b>11.2</b>	<b>9.5</b>
<b>Total World</b>	<b>75.7</b>	<b>100.0</b>	<b>-6.6</b>	<b>-6.3</b>	<b>1.5</b>

Source: EDC Economics. 2006 actual, 2007 and 2008 are forecast.

buying in recent years will also impact sales in 2007 and 2008. Although late 2007 should signal

## SECTOR OUTLOOK

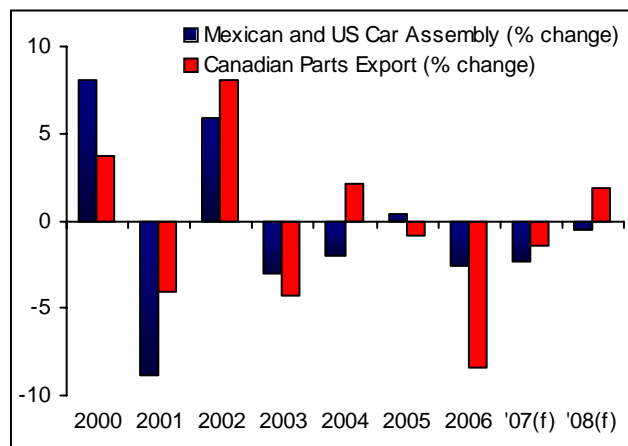
the bottom of the current cycle, passenger and light truck sales are forecast to show only a modest increase in 2008 at 16.2 million units. Given this backdrop, Canadian **passenger vehicle** exports are forecast to decline 6.2% in 2007 and increase by 0.8% in 2008.

Persistently high gasoline prices are also changing the mix of vehicles sold in the US market, with sales of light trucks declining sharply in recent months. The Detroit Three are modifying their ways in the face of demand for fuel-efficient vehicles and pressure by governments (the US Senate recently approved an energy package that would require higher fuel efficiency standards by 2020). GM announced that hybrid technology will be introduced in its Chevrolet Silverado and GMC Sierra pick-up trucks to be built in Oshawa and made available in 2008. Ford will assemble hybrid versions of the new Edge and Lincoln MKX vehicles by 2010 in its Oakville assembly plant. These announcements are critical for Canadian auto exports, as the market for hybrid vehicles is expected to increase significantly in the long term. A further boost to the longer term outlook for Canadian auto exports is the significant investment announcements made by all the OEMs in Canada, including GM, Ford, Chrysler, Toyota and Honda.

Canada's **automotive parts** sector faces no less of a challenging outlook than the passenger vehicle sector. EDC expects auto parts exports to fall a further 1.4% in 2007 before increasing modestly by 1.9% in 2008. The forecast is based on two factors. First, the market share of the Detroit Three will continue to shrink over the forecast period and, hence, further erode the demand for Canadian auto parts. Second, North American automotive assembly companies will increasingly make use of non-traditional auto parts suppliers such as China and India. The major reason why Canadian exports of auto parts are expected to do somewhat better than passenger cars is due to the fact that Canadian auto parts exporters have, to some extent, been able to diversify into Chinese, Indian and European vehicle production. Areas where we see the strongest growth are in the higher valued-added and technologically advanced components, which are less vulnerable to competition than more commoditized parts.

As expected, Canadian exports of **heavy-duty trucks** were hit hard in 2007 by the significant pre-buying in the United States the year prior. The pre-buying was brought about by new US emission standards. The outlook is not as grim as pent-up demand for heavy trucks will outweigh the dampening effect of a slowing US economy. On balance, EDC expects to see Canadian exports rebound in 2008 with a growth rate of 8.2%, although this still leaves the value of export sales well below the levels recorded in 2005 and 2006. Most of the risk for truck exports is on the downside as the outlook for the US economy calls for slowing growth through the next 3 to 4 quarters. Persistently high gasoline prices are another important issue that the trucking industry must contend with. It drives the demand for fuel-efficient vehicles both in terms of aero-dynamics and efficiency of engines. New hydraulic hybrid drive systems are targeted at medium and heavy-duty trucks, such as public buses and waste trucks, allowing for more fuel-efficient stop-and-go driving. Dual-mode, diesel-electric hybrid engines are being developed for long-haul, heavy-duty trucks. The trend toward more fuel-efficient technology will continue into the near future based on demand and government regulation.

Figure 35: Canadian Auto Parts Exports



Source: Statistics Canada, EDC Economics, CSM Automotive.

# SECTOR OUTLOOK

## 7.8 Aerospace

Following a year of no growth, Canadian exporters of aerospace products had a much better year in 2007, with export sales rising an estimated 11 to 12%. This bullishness will persist into 2008, when exports are projected to grow a further 5%. In the past few years, the Canadian aerospace industry moved along two tracks – while the regional jet (RJ) industry experienced waning demand, the rest of the sector saw robust conditions. The situation is now starting to look up for the former, however.

Indeed, the shift in interest to higher seating capacity RJs has spurred the creation of new models that are now fueling demand. The 100-seat CRJ 1000, for instance, garnered 38 orders so far this year, bringing the total new orders for RJs in the first half of 2007 to 131, up from 78 in all of 2006. Furthermore, the resurrection of talks about the 110 to 130 seat C-series family reflects increasing interest in higher capacity RJs and is a very positive development for the longer term outlook (first deliveries are expected around 2013). Although these aircraft will be partly assembled in China in partnership with AVIC I, this new family will bolster Bombardier's backlog, with notable spillover effects on the broader Canadian aerospace industry.

While demand for RJs is firming up, the other segments of the industry will continue to perform solidly. High fuel prices will pressure cost-conscious airlines to look toward new turboprops to replace aging aircraft or small RJs on short-medium routes. At the same time, 5 years of strong corporate profits and the increasing hassle factor at commercial airports will again buttress demand for business jets through 2008. However, the slowing US and global economy will dampen the pace of growth in the business jet market through the next 12 to 18 months.

Prospects for parts suppliers remain bright, bolstered by a cyclical upturn in the commercial segment as well as defence-related spending. Boeing and Airbus continue to register record levels of new orders for their new generation models, as airlines are seeking to replace aging fleets with more fuel-efficient aircraft. Also, the expansion of hub networks and rising traffic in emerging markets are adding to growth in demand. On the defence side, security and counter-terrorist efforts, as well as rising geopolitical uncertainties, will continue to spur military spending.

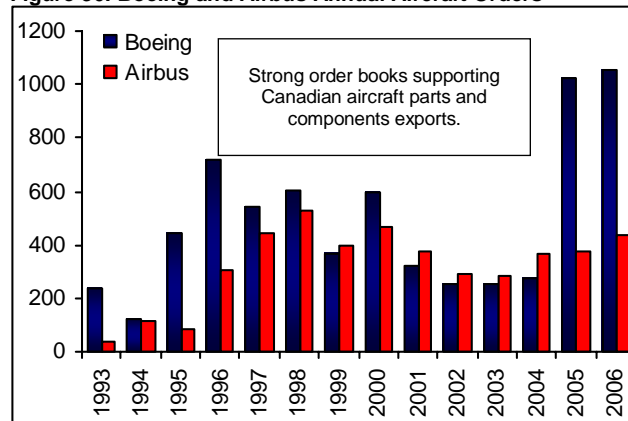
Meanwhile, strong product investment by some of Canada's leading names will also boost exports. To cite but a few, Pratt & Whitney Canada is seeing increased demand for its new super light engine, while Bell Textron Helicopter's sizable order backlog of its new MAPL chopper will keep it operating at full capacity over the next decade. The success of the helicopter maker will have significant ripple down effects for the whole Canadian aerospace industry, benefiting Pratt &

**Table 36: Aerospace Export Outlook by Region**

Top Markets	CAD bn 2006	% Share of Total Exports (2006)	Export Outlook (% growth)		
			2006	2007(f)	2008(f)
US	6.2	60.3	-20.7	23.2	6.1
Eurozone	1.9	18.3	82.5	4.0	3.0
UK	0.6	5.5	80.1	6.1	4.5
Oceania	0.3	2.8	367.6	-36.4	5.0
Japan	0.3	2.5	15.0	-27.3	2.0
<b>Total Developing Markets</b>	<b>0.7</b>	<b>7.0</b>	<b>2.5</b>	<b>0.9</b>	<b>5.7</b>
<b>Total World</b>	<b>10.2</b>	<b>100.0</b>	<b>0.3</b>	<b>11.3</b>	<b>5.2</b>

Source: EDC Economics. 2006 actual, 2007 and 2008 are forecast.

**Figure 36: Boeing and Airbus Annual Aircraft Orders**



Source: Bloomberg.

# SECTOR OUTLOOK

Whitney Canada and Mecaer among others, which will be producing their engines and landing gear.

On a geographic basis, exports to the US should continue to fare well through 2008, thanks to sustained demand for business jets and important military contracts with some key Canadian aerospace players. In Europe, rising traffic and improving airline profitability should support Canadian exports to the region. Asian demand will remain very healthy, with China and India displaying strong growth thanks to expanding traffic and a mushrooming of new hubs; however, Japanese and Australian demand will soften.

There is some upside risk to our aerospace outlook for 2008 as Canadian companies continue to win new contracts, particularly in Asia and Europe. New product development also has the potential to further boost next year's export sales.

## 7.9 Rail and Other Transportation Equipment

In 2006, rail and other transportation equipment exports climbed 2.8%, led by sales of railroad rolling stock. Growth continued at a moderate pace this year, but is expected to pull back in 2008. While the sector's exports are forecast to grow by 4% in 2007, it is the "other transportation equipment" segment that will account for all of the gains. Heading into 2008, sputtering global growth and slowing international trade will negatively impact worldwide transportation networks, leading to a slight contraction in exports.

The railcars and related rail equipment segment is notoriously volatile, tracking the impulses of global shipping activity and fleet lifecycles. In 2006, Canadian exporters benefited from solid global economic growth, record commodity prices, and increased spending on transportation infrastructure. This year, however, exports of rail transport equipment are posting losses. Still-buoyant commodity prices are encouraging new investments in emerging giants like Brazil and China, while transportation companies in the UK and the Netherlands are working to upgrade their networks. But Canadian suppliers cannot elude ever-weakening US sales – a trend we expect to persist through the forecast horizon.

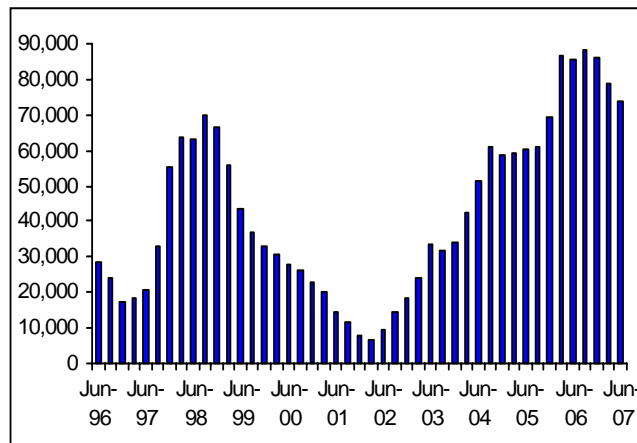
Current rail traffic volumes reflect a global economy in retreat. After a record-setting 2006, total volume on US railroads was down 2.3% y/y in the first 8 months of 2007. US freight railcar deliveries continue to slide from their 2006Q2 peak; down 17.1% y/y in 2007Q2, versus growth of 8.7% a year earlier. Looking ahead, US freight car orders are down 58.0% y/y so far this year, with the backlog for US railcar orders down 11.4% in the same period. The trend has already

**Table 37: Rail and Other Transportation Equipment Export Outlook**

Top Sectors	CAD bn 2006	% Share of Exports (2006)	Export Outlook (% growth)		
			2006	2007(f)	2008(f)
Rail and Transport Equipment	0.7	34.1	4.0	-7.8	5.4
Other Transportation Equipment	1.3	65.9	2.1	10.5	-2.9
<b>Total Rail and Other Trans.</b>	<b>2.0</b>	<b>100.0</b>	<b>2.8</b>	<b>4.3</b>	<b>-0.4</b>

Source: EDC Economics. 2006 actual, 2007 and 2008 are forecast.

**Figure 37: Backlog Orders for US Freight Cars Have Levelled Off, Suggesting Lower Exports of Canadian Rail Equipment**



Source: Railway Supply Institute.

## SECTOR OUTLOOK

begun hitting Canadian suppliers, portending an 8% decline in exports this year, before rebounding 5% in 2008.

Export receipts earned from **ship/boat building and repair** are showing signs of strength this year, as the Baltic Dry Index continues to reach new heights. While we expect the Index to pull back going forward, it should remain at historically elevated levels through 2008. Further, ongoing offshore oil and gas exploration in the Barents Sea has helped power sales to Russia and Norway. The coming into force of new Sulphur Emission Control Areas (SECA) in the Baltic Sea, the North Sea and Channel Islands is also supporting new contracts for Canadian companies in some non-traditional markets. But heading into 2008, the global slowdown should ease many of the capacity shortages that bolstered the industry over the past few years.

Exports of all **other transportation equipment** took off in the years following the September 11th attacks, but have since begun to cool. While armoured vehicle sales to major markets like the US and Saudi Arabia were up in 2006, they paled in comparison to their 2004 peaks. However, this year's troop surge in Iraq and ongoing efforts in Afghanistan are causing both traditional and non-traditional buyers to ramp up purchases, a trend likely to continue through the 2008 US presidential elections. Slowing consumer demand south of the border, however, will likely reduce recreational vehicle exports going forward.

### 7.10 Consumer Goods

Canadian exports of consumer goods are expected to continue the trend of falling foreign shipments. After 4 years of consecutive declines, consumer exports are forecast to fall further – by 8.3% in 2007 and 7.0% in 2008. Although the Canadian dollar is expected to depreciate modestly versus the currencies of most of its major trading partners during 2008, increased foreign competition, particularly from Asia, and a slowing US economy will lower export volumes and more than off-set any gains from a lower exchange rate.

Since 88% of Canadian consumer goods exports are destined for the United States, the spending behaviour of the US consumer takes on critical importance. The fall-out of the US housing downturn will have a direct impact on the consumption of durable goods, especially of furniture, household fixtures and appliances.

However, the weakness in consumer goods exports to the US will not be limited to this segment. The wealth effect resulting from falling real estate prices will reverberate to spending that is not necessarily tied to housing markets. Reduced household wealth will have an impact on borrowing, in particular, home-equity refinancing, which has been an important source of funds (and spending) for US households in recent years. A

tight labour market remains the primary support to wage growth and, thus, consumer spending. However, as the US economy slows, so will wage and employment growth.

Despite an expected depreciation of the Canadian dollar vis-à-vis the US dollar, exports to the US market are forecast to further decline by 8% in 2008, continuing the 10% drop estimated for 2007. Canada's three largest export sub-sectors of consumer goods – furniture, wood kitchen cabinets and major appliances – have already experienced persistent declines in US sales, and the downturn in US housing will only add to their woes. We believe the US housing market has yet to reach bottom, and it will probably be late 2008 or early 2009 before a meaningful recovery sets in. As a consequence, these sub-sectors will be challenged to find new foreign markets to compensate for export losses to the United States. Canadian exports of consumer goods have not performed much better in other major foreign markets. However, there are some highlights

**Table 38: Consumer Goods Export Outlook by Region**

Top Markets	CAD bn 2006	% Share of Total Exports (2006)	Export Outlook (% growth)		
			2006	2007(f)	2008(f)
US	8.5	88.5	-7.4	-10.1	-8.1
Eurozone	0.4	3.8	-0.1	1.0	-4.1
United Kingdom	0.2	1.6	-17.0	11.1	-9.1
Japan	0.1	0.6	-16.8	-9.1	11.1
Oceania	0.0	0.4	2.9	1.0	1.0
<b>Total Developing Markets</b>	<b>0.3</b>	<b>3.3</b>	<b>9.8</b>	<b>16.6</b>	<b>8.7</b>
<b>Total World</b>	<b>9.6</b>	<b>100.0</b>	<b>-6.5</b>	<b>-8.3</b>	<b>-7.0</b>

Source: EDC Economics. 2006 actual. 2007 and 2008 are forecast.

## SECTOR OUTLOOK

including significant increases in exports of major appliances to Mexico and of jewellery to the UK, Belgium, Germany and Chile.

Most sub-sectors of Canada's consumer goods industry have experienced declining exports during the past 5 years, some even at an accelerating rate. The only exceptions have been the export of jewellery and medical equipment. While jewellery exports have been able to sustain the momentum of 2006 into the first half of 2007, growth in medical equipment exports is slowing from a strong 5-year average. Nevertheless, we expect these two sub-sectors to continue to outperform the other larger sub-sectors. Exporters of clothing and apparel, in particular, experienced a contraction in exports this year, and this trend is likely to continue. To succeed, Canadian exporters of consumer goods need to produce merchandise that will distinguish themselves from the competition through either superior quality and/or a distinctive Canadian label.

### 7.11 Agri-Food

Canadian farmers are having a good year, as prices for many agri-food products made staggering gains in 2007. Fueled by the expansion of biofuels, adverse weather conditions and strong demand from emerging markets, grains, oilseeds, and specialty crops have displayed year-over-year price accelerations above 20% while live animal via rising feed costs have witnessed price gains greater than 10%. In sum, these factors boosted Canadian agri-food exports by an estimated 15% in 2007. Many of the favourable factors that supported export growth in 2007 should remain in place, lifting exports by a further 11% in 2008.

Much of this year's growth in Canada's agri-food exports has been to the developing world, with exports expected to finish 2007 with a gain of 41%. A further increase of 26% is projected for developing markets in 2008. Export sales to industrialized markets are also up in 2007, but at a more subdued pace of around 7%. A similar gain of 6% is forecast for 2008.

Although export growth opportunities are to be found in many developing markets, Sub-Saharan Africa, Brazil and Egypt warrant attention as destinations for wheat, while for coarse grains the markets to follow are China, Mexico, the Middle East and Southeast Asia. The strength in exports, though, should be interpreted with caution as the advance has generally been driven by the upward trend in global crop and grain prices. This becomes more evident in the slower

pace of export growth we expect for 2008, when agricultural commodity prices are forecast to

**Table 39: Agri-food Export Outlook by Product**

Top Sector	CAD bn 2006	% Share of Total Agri- food Exports (2006)	Export Outlook (% growth)		
			2006	2007(f)	2008(f)
Food and Beverage Manufacturing	8.6	27.0	1.0	4.8	8.5
Meat Products	4.8	15.2	-15.2	5.2	6.8
Fish Products	4.1	12.9	-5.2	-0.7	-2.7
Oilseeds and Pulse	5.0	15.7	15.8	23.1	9.5
Wheat Farming	4.1	12.9	30.8	55.5	31.4
Other Crop Farming	2.1	6.6	6.1	9.8	6.3
Live Animals	2.4	7.4	33.0	10.7	12.0
Coarse Grains	0.8	2.4	3.7	13.1	10.7
<b>Total Agri-Food</b>	<b>31.9</b>	<b>100.0</b>	<b>4.5</b>	<b>14.5</b>	<b>11.3</b>

Source: EDC Economics. 2006 actual, 2007 and 2008 are forecast.

**Table 40: Agri-Food Export Outlook by Region**

Top Markets	CAD bn 2006	% Share of Total Exports (2006)	Export Outlook (% growth)		
			2006	2007(f)	2008(f)
US	18.6	58.3	1.0	9.2	7.1
Japan	2.7	8.5	7.5	7.4	-0.1
Eurozone	1.7	5.4	20.0	-22.6	-9.4
Asian NIEs	1.1	3.6	-6.2	8.5	11.2
China	0.9	3.0	-22.0	27.0	22.4
<b>Total Developing Markets</b>	<b>6.8</b>	<b>21.3</b>	<b>23.4</b>	<b>41.0</b>	<b>25.8</b>
<b>Total World</b>	<b>31.9</b>	<b>100.0</b>	<b>4.5</b>	<b>14.5</b>	<b>11.3</b>

Source: EDC Economics. 2006 actual, 2007 and 2008 are forecast.

## SECTOR OUTLOOK

moderate. A moderation in US and global economic growth will also dampen agricultural export growth in 2008.

**Wheat and coarse grain** prices should continue to make impressive gains for the remainder of 2007, thereafter moderating in 2008. World demand for grain has been quite high while supply has been curtailed due to erratic weather patterns that have left major exporters with significant crop damage, resulting in the lowest level of global stocks since the early 1970s. At the same time, strong economic growth in emerging markets will keep demand for agricultural commodities high. In addition, population growth and greater urbanization is motivating diet diversification, which is in turn stimulating demand for meat products and, by default, feed grains. Overall, exports of major **grains** are expected to average 37% growth in 2007. The pace will moderate in 2008 with exports forecast to rise by 20%.

Canadian exports of **processed food and beverage** products are on track to rise by 5% in 2007. The coming year should see exports grow by 8%, largely the result of stronger prices. It is thought that food prices will remain high as larger amounts of cereals and crops are allocated to the production of biofuels. In terms of factors affecting export volumes,

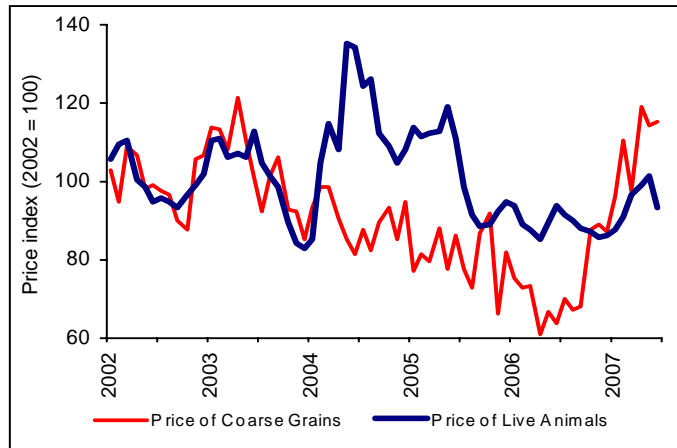
we should mention the increasing tendency to consume fresh and locally produced food, fruits and vegetables in Europe and the US. Many countries are promoting the consumption of local products in their domestic markets. If we take into account that about 84% of Canadian food exports go to the US, UK and the Eurozone, this has the potential to impact the bottom line of Canadian exporters. However, it serves as an opportunity for exports of organic and functional foods, given the increasing tendency of consumers to buy goods that support a healthier lifestyle. Finally, a weaker US consumer will spend less on processed foods and beverages, particularly luxury foods, making the environment even more challenging.

**Live animal** exports have grown by 14% from January to June this year in comparison with the same period of 2006. **Cattle** exports to the US have been particularly strong, growing by 18.3% during the same period. We expect that exports of live animals will finish 2007 with growth of 11%, before rising by 12% in 2008. Several factors affect our forecast through the next 12 to 18 months. These include China's ban on pork and poultry imports from the US, which has increased supplies of these products in the US market, and led to the knock-on effect of reducing US import demand. In addition, the spread of the avian flu into relatively important export destinations (Europe) may encourage stringent export restrictions limiting market penetration for new products. Increasing costs in livestock and meat production will result in lower slaughter weights for cattle and pork, introducing further upward pressures on already high prices. On the upside, the US government's recent announcement allowing imports of older Canadian cattle and beef products could provide an additional boost to Canadian exports.

### Seafood and Fishing

Challenges facing Canadian seafood companies include the strong dollar, high energy costs and in some cases labour shortages – all of which are squeezing industry margins. In 2008, we expect the Canadian dollar to depreciate against the USD and Japanese yen, and energy prices to moderate, offering some reprieve. However, sluggish US and Japanese consumer spending

Figure 38: Grain Prices and Feed Costs Boosted by Global Shortages, Increased Consumption and Rising Biofuel Demand



Source: Statistics Canada, EDC Economics.



## SECTOR OUTLOOK

will crimp Canadian seafood exports. A bright spot for the industry is crab, whose exports have been boosted by solid price gains (up 20 to 30% in the first half of 2007). Lobster exports should drop slightly in 2007 on slightly lower catches, but we expect early weakness in Nova Scotia to dissipate through the rest of 2007. PEI exports will fall as catches returned to normal this year following a very successful 2006 – landings in that year were the highest in over a decade.

For 2008, we anticipate slightly lower prices for crab, lobster and salmon but shrimp should remain steady. With respect to the latter, exports to Europe should prove strong as the autonomous tariff rate quota for that market was increased from 10,000 tons to 20,000 tons in July 2007. For salmon, 2008 is expected to see a slight increase in export volume, but shipments to the US market will face pressure from increased capacity in Chile. Overall, EDC Economics estimates that exports of seafood will end 2007 with a 1% drop. Modest price declines are expected to result in a 3% drop during 2008.

### 7.12 Fertilizers

Canadian fertilizer producers are going through a period of strong expansion, as surging prices and demand for agricultural crops continue to feed the demand for fertilizers. This expansion has largely been linked to the rapid development of the biofuel industry and greater purchasing power from consumers in emerging economies. Since the current capacity build-up of the biofuel industry is largely based on some of the most fertilizer-intensive crops (sugarcane in Brazil, corn in the US and palm oil in Southeast Asia), we expect the global demand for fertilizer to maintain a high pace of growth while energy prices remain at elevated levels. Although the high global price for wheat, which is currently more than double last year's level, is not related to the biofuel expansion but to droughts and weather-related events in key producing regions, it will nonetheless contribute to greater fertilizer demand next year, as farmers rebuild depleted grain inventories. As a result, farmers are increasing their fertilizer use in search of higher crop yield to maximize their profits.

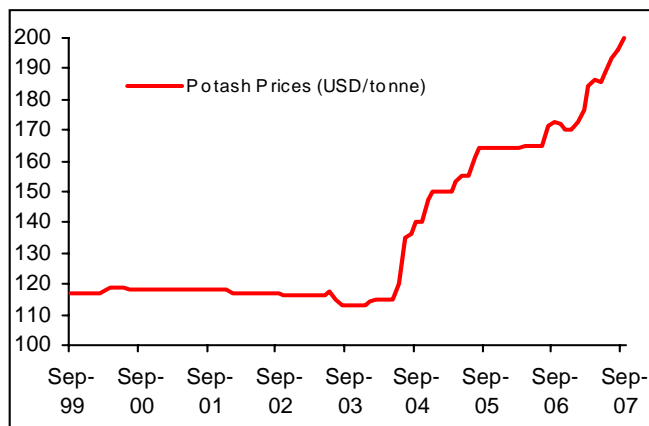
Fertilizer prices have also increased rapidly, with potash prices up 18% since January, while granular urea prices rose to a high of US\$364/tonne in April, greatly improving the bottom line of major Canadian fertilizer producers. In their latest quarter, both Alberta-based Agrium and Saskatchewan's PotashCorp announced record earnings. The outlook for fertilizer demand is promising, although short-term supply will remain constrained as a number of major urea capacity expansion projects across the globe have hit cost overruns, while the opening of new potash mines can take up to several years. With such strong fundamentals

**Table 41: Fertilizers Export Outlook by Region**

Top Markets	CAD mn 2006	% Share of Total Exports (2006)	Export Outlook (% growth)		
			2006	2007(f)	2008(f)
US	2,915.5	73.5	-7.5	16.6	9.6
China	244.6	6.2	-44.0	90.7	18.6
ASEAN-4	233.5	5.9	6.0	26.4	14.4
Brazil	216.3	5.5	1.4	58.0	3.9
India	118.6	3.0	-14.7	90.7	13.3
<b>Total World</b>	<b>3,966.1</b>	<b>100.0</b>	<b>-9.4</b>	<b>25.9</b>	<b>10.5</b>

Source: EDC Economics. 2006 actual. 2007 and 2008 are forecast.

**Figure 39: Potash Prices**



Source: Bloomberg.

## SECTOR OUTLOOK

in the outlook, Agrium has announced the construction of a US\$1.2 billion urea production facility in Egypt, due to be completed in 2010, while PotashCorp has announced the opening of a new potash mine in Sussex, New Brunswick, a \$1.6 billion project due to be completed in 2011.

Over the next 2 years, the demand for Canadian fertilizers will continue to be driven by key events in the agricultural markets and the development of the biofuel industry. Demand is expected to be strong in North America, China, Brazil and India, but also in other emerging Asian nations such as Malaysia, Indonesia, Vietnam and Pakistan. As a result of greater demand and prices, Canadian fertilizer exports are on track to increase 26% in 2007 and by another 11% in 2008. One downside risk to this outlook would be the collapse of energy prices, which would quickly shelve biofuel expansion plans and reduce the profitability of existing ones.

### 7.13 Chemicals and Plastics

Exports of chemicals and plastics are expected to rise 9% this year before dropping 1% in 2008. The big mover in 2007 was chemicals, which are expected to grow 13% this year before falling 1.4% in 2008. This year, a rise in prices will completely offset a large reduction in export volumes. The price gain is due mostly to a significant rise in prices of inorganic chemicals.

The increase in chemical exports during 2007 is coming from the catch all category “**other inorganic chemicals**” and **pharmaceuticals**, whose exports are up 120% and nearly 140% respectively through the first half of 2007.<sup>6</sup> Pharmaceuticals have been an export growth machine for Canada since the early 1990’s. Exports rose nearly 30% in 2006 and have advanced 20% annually in the last 10 years. In

contrast, **organic chemical** exports are expected to be down this year on some plant closures, but with no large-scale plant closures/expansions planned for 2008, we anticipate little change in export volumes next year. Organic chemical producers will find their margins squeezed through the forecast horizon as feedstock costs remain high, prompting some price increases in 2008. Canadian capacity utilization in chemicals is currently running at high rates (hitting a 3-year high in 2007Q1). As such, there is little upside for increased volume exports in 2008, not only for inorganics but also for chemicals as a whole.

On the **plastics and rubber** front we expect exports to fall 4% in 2007, and then rise a modest 2% in 2008. Sector exports fell 4% last year and have not grown by more than 3% in over 4 years. Moreover, capacity utilization rates here in Canada are low at just over 70%, down from recent highs of 84%. Looking to the US, which accounts for fully 93% of total Canadian exports for the sector, demand conditions are not great. First, the US housing market is in a free fall, and new home starts on the order of 1.3 million units or lower are expected for 2008. Second, US auto production and purchases will slow. Third, although US consumption will grow in 2008, it will decelerate considerably from its trend of the past several years. In this environment, it will be difficult for Canadian plastics and rubber manufacturers to pass along higher prices should strong

**Table 42: Chemicals and Plastics Outlook by Sector and Region**

Top Sectors	CAD bn (2006)	% Share of Exports (2006)	Export Outlook		
			2006	2007(f)	2008(f)
Chemicals	26.0	72.2	7.7	13.2	-1.4
Rubber and Plastics	10.0	27.8	-3.5	-3.9	1.9
<b>Total Chemicals and Plastics</b>	<b>36.1</b>	<b>100.0</b>	<b>4.3</b>	<b>8.5</b>	<b>-0.6</b>
<b>Total Chemicals, Rubber and Plastics by Market</b>					
US	29.7	82.3	3.5	4.9	-1.2
Eurozone	14.8	41.2	5.1	35.4	1.0
China	1.4	3.9	5.4	9.6	3.1
Asian NIEs	0.5	1.3	-8.3	3.2	2.2
<b>Total Developing Markets</b>	<b>2.8</b>	<b>7.9</b>	<b>12.8</b>	<b>9.8</b>	<b>3.0</b>
<b>Total World</b>	<b>36.1</b>	<b>100.0</b>	<b>4.3</b>	<b>8.5</b>	<b>-0.6</b>

Source: EDC Economics. 2006 actual, 2007 and 2008 are forecast.  
The Asian Newly Industrialized Economies (NIEs) are Hong Kong, Singapore, South Korea and Taiwan.

<sup>6</sup> Definition of Other Inorganic Chemicals – A broad range of chemicals derived from mineral inputs (metals, sulfur, silica etc.) rather than carbon based inputs (crude, coal, natural gas or related products).

## SECTOR OUTLOOK

feedstock prices lift the costs of resins. Canada's mostly small and medium-sized plastics and rubber manufacturers will therefore face an uphill battle. If there is any good news for this sector it is that US capacity utilization remains quite high at 85.4%. This, along with Canada's low current capacity utilization rate, will allow for a very modest increase in plastics and rubber exports in 2008. As with any sector so exposed to the US, there is room for sizable downside risk given the uncertain outlook for US economic growth.

### 7.14 Canada's Services Export Sector

Canadian service exports came under pressure in 2006 as a strong dollar impacted travel and tourism. And 2007 brought more of the same, with service exports expected to rise by just 1.1% on the year. All three major sectors – commercial services, transportation and travel – are expected to improve modestly upon their 2006 performance. Areas of weakness in 2007 were concentrated in business travel, insurance, engineering, communication and engineering services. In contrast, transportation, financial services, management and R&D services are performing fairly well.

Looking forward, 2008 should see service exports increase by 1.8% as the Canadian dollar depreciates vis-à-vis the US dollar. Much of the modest upturn forecast for 2008 comes from tourism, transportation, finance, insurance, R&D and audio-visual services. Given the tepid

**Table 43: Canadian Services Export Outlook**

	2002	2003	2004	2005	2006	2007(f)	2008(f)
<b>Total Service Exports (C\$ mn)</b>	<b>63,482</b>	<b>61,781</b>	<b>64,690</b>	<b>66,980</b>	<b>67,229</b>	<b>67,995</b>	<b>69,217</b>
-- annual % change	5.69	-2.68	4.71	3.54	0.37	1.1	1.8
<b>Commercial Services (C\$ mn)</b>	<b>34,246</b>	<b>35,512</b>	<b>35,319</b>	<b>36,888</b>	<b>36,708</b>	<b>36,654</b>	<b>37,002</b>
-- annual % change	8.56	3.70	-0.54	4.44	-0.49	-0.1	0.9
<b>Transport Services (C\$ mn)</b>	<b>11,061</b>	<b>9,942</b>	<b>11,039</b>	<b>11,750</b>	<b>12,130</b>	<b>12,952</b>	<b>13,497</b>
-- annual % change	4.10	-10.12	11.03	6.44	3.23	6.8	4.2
<b>Travel Services (C\$ mn)</b>	<b>16,741</b>	<b>14,776</b>	<b>16,746</b>	<b>16,674</b>	<b>16,598</b>	<b>16,541</b>	<b>16,815</b>
-- annual % change	1.86	-11.74	13.33	-0.43	-0.46	-0.3	1.7
<b>Government Services (C\$ mn)</b>	<b>1,436</b>	<b>1,550</b>	<b>1,588</b>	<b>1,666</b>	<b>1,794</b>	<b>1,848</b>	<b>1,903</b>
-- annual % change	-1.44	7.94	2.45	4.91	7.68	3.0	3.0

Source: Statistics Canada, EDC Economics. 2002 to 2006 are actual, 2007 and 2008 are forecast.

outlook for the US consumer, we do not expect to see tourism improve until later in 2008. Engineering, construction and business travel are likely to remain weak through 2008. Downside risks include a US recession and continued strength in the Canadian dollar.

### Travel Services

The US Western Hemisphere Travel Initiative (WHTI) was introduced January 23, 2007. The WHTI essentially requires citizens of the Americas – including US citizens – to carry a passport prior to entering or re-entering the United States. Before the introduction of the WHTI, 29% of US citizens who traveled to Canada by air or sea did not have a US passport. As a consequence, the WHTI has had a negative impact on Canada's travel industry. Business travel service exports were down 2.5% YTD (January-July), while personal travel services exports exhibited a modest increase of 0.5% YTD – mainly due to a rise in non-US travelers.

**Table 44: Canadian Travel Services – Export Outlook**

	2005	2006	2007(f)	2008(f)
<b>Total Receipts (C\$ mn)</b>	<b>16,674</b>	<b>16,598</b>	<b>16,541</b>	<b>16,815</b>
<b>% change</b>	<b>3.54</b>	<b>0.37</b>	<b>1.1</b>	<b>1.8</b>
Business Travel (C\$ mn)	2,789	2,890	2,832	2,832
% change	4.89	3.62	-2.0	0.0
Personal Travel (C\$ mn)	13,886	13,709	13,709	13,983
% change	-1.42	-1.27	0.0	2.0

Source: Statistics Canada, EDC Economics. 2006 actual, 2007 and 2008 are forecast.

## SECTOR OUTLOOK

Given that the US Department of State had difficulties keeping up with the demand for US passports, it announced on June 8, 2007 that US citizens traveling to Canada who have applied for, but not yet received passports, could re-enter the United States by air without a passport. This passport holiday, however, expired at the end of September 2007.

Business travel has been more negatively affected by the WHTI than personal travel, as business exhibits a higher proportion of air travel. Given that there are no passport requirements to enter the United States by land until 2008, the WHTI has affected personal travel less. As such, EDC Economics expects business travel to fall by 2% in 2007 and personal travel (i.e. tourism) to remain stable. Looking ahead, business travel receipts are expected to remain flat in 2008 given the slowing US economy, while personal travel receipts are expected to increase by 2%. The latter will benefit from a depreciating Canadian dollar – making Canada a more attractive US tourist destination. However, we expect it will be the latter half of 2008 before any improvement in tourism is seen.

### Transportation Services

Export receipts for transportation services will continue to see positive growth during the forecast period. Exports are expected to increase by 6.8% in 2007 before moderating to growth of 4.2% in 2008. Water transport will continue to be the main contributor to transportation services growth. The strong growth in water transport reflects the demand for transportation related to Canada's booming resource sector. Looking further ahead, growth in water transport exports is expected to moderate in 2008 (but remain at healthy levels), in line with slower growth in world trade and economic output.

**Table 45: Canadian Transportation Services – Export Outlook**

	2005	2006	2007(f)	2008(f)
<b>Total Receipts</b>	<b>11,750</b>	<b>12,130</b>	<b>12,952</b>	<b>13,497</b>
<b>% change</b>	<b>6.44</b>	<b>3.23</b>	<b>6.8</b>	<b>4.2</b>
Water Transport	3,350	3,812	4,613	5,074
% change	15.28	13.79	21.0	10.0
Air Transport	4,888	4,834	4,786	4,834
% change	4.67	-1.10	-1.0	1.0
Land and Other Transport	3,513	3,484	3,554	3,589
% change	1.41	-0.83	2.0	1.0

Source: Statistics Canada, EDC Economics. 2006 actual, 2007 and 2008 are forecast.

Passengers traveling by air account for 60% of total air transport exports. As such, air transport receipts are heavily affected by passenger travel. Given the significant impact of the US WHTI (see travel services), EDC Economics expects air transport exports to fall by 1% in 2007 and to increase by just 1% in 2008.

Over 50% of Canadian merchandise exports to the US are transported by road, while another 20% are transported by rail. The major products shipped by road from Canada to the US include autos, transport equipment, M&E, plastic and chemical products, and base metals. Together, these products account for almost 80% of exports by road. Given the slowdown forecast for the US economy through the next 12 months, export receipts earned by road and rail carriers are set to lose momentum as well. EDC Economics expects land transport exports to rise by 1% in 2008, down from this year's estimated increase of 2%.

### Commercial Services

Commercial services account for over 50% of total Canadian service exports. Hence, the performance of this sub-sector has a significant impact on total service receipts. Commercial service exports are not expected to make a turnaround over the forecast period, with little to no growth expected in 2007, followed by a modest 0.9% increase in 2008. Although the US dollar is expected to appreciate against the Canadian dollar, this positive effect will be offset by the slowing US economy.

## SECTOR OUTLOOK

Construction service exports declined significantly in the first half of 2007. Given the continued weakness in the US housing sector, we expect construction, engineering and architectural service exports to continue to underperform in the remainder of 2007 and 2008. The only commercial services sub-sector that is on pace with its 5-year annual average growth is research and development. Canada's export performance of commercial services remains subdued compared to global commercial service exports, which have grown at an average annual rate of 15% through the past 5 years, compared with an average of 3% for Canada.

**Table 46: Commercial Service Export Outlook by Sub-Sector**

Commercial Service Exports	CAD bn 2006	% Share of Exports (2006)	Export Outlook (% growth)		
			2006	2007(f)	2008(f)
Communication Services	2,611	7.1	-0.7	-2.0	1.0
Insurance	3,920	10.7	0.8	-2.0	2.0
Other Financial Services	2,149	5.9	11.8	1.0	5.0
Computer and Information Services	4,575	12.5	-3.8	0.0	2.0
Royalties and License Fees	3,679	10.0	6.8	0.0	1.0
Management Services	4,978	13.6	-2.9	0.0	-2.0
Research and Development	3,185	8.7	13.4	5.0	3.0
Architectural, Engineering, and Other Technical	4,609	12.6	-1.6	-3.0	-3.0
Miscellaneous Services to Business	4,186	11.4	-14.3	3.0	3.0
Audio-Visual Services	2,590	7.1	2.7	0.0	1.0
Construction Services	225	0.6	1.4	-40.0	-10.0
<b>Total Commercial Services</b>	<b>36,708</b>	<b>100.0</b>	<b>-0.5</b>	<b>-0.1</b>	<b>0.9</b>

Source: Statistics Canada, EDC Economics. 2006 actual, 2007 and 2008 are forecast.