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Manufacturing: The year 2005 in Review

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Manufacturing: The year 2005 in Review

**Russell Kowaluk,
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Summary

The shift in momentum to the West in Canada's manufacturing sector intensified in 2005 as Alberta and Saskatchewan led the growth in shipments for the second consecutive year on the strength of dramatic gains in resource-based industries.

Increases in manufacturing shipments from the two Prairie provinces far exceeded growth in the industrial heartland of central Canada.

Shipments rose only slightly in Ontario, due in part to a weaker auto sector. Factories in Quebec fared somewhat better as the aerospace industry continued to rebound and the province's petroleum refining and the chemical products industry made large gains.

Nationally, manufacturers closed the year with shipments hitting \$611.5 billion. This was a 3.0% gain from 2004 on the heels of the healthy 8.5% boost posted in the previous year. Newfoundland and Labrador was the only province to report a decline in shipments in 2005.

This year saw clear winners and losers in the manufacturing sector. Soaring industrial prices contributed to record high shipment values for most resource-based industries, such as petroleum products and primary metals. On the other hand, wood products and clothing manufacturing, coupled with the all-important motor vehicle industry, posted sharply lower shipment activity in 2005.

Alberta led all provinces with a 12.0% jump in shipments. Although resource-based industries contributed to the gain, the province's well-diversified manufacturing sector improved substantially overall, thanks to its general economic boom. Manufacturers in Saskatchewan came a close second with an 8.2% increase, also largely the result of resource-based industries.

Labour productivity in manufacturing increased 5.7% last year, but it came, in part, at the cost of jobs. On average, there were 85,000 (-3.7%) fewer jobs in manufacturing in 2005 than there were a year earlier. A 5.4% rebound in investment in plant and machinery partly contributed to this increased labour productivity.

Despite last year's gain in shipments, profits for manufacturing companies fell 6.9%, compared to an exceptional performance in 2004 (+34.8%). Factories faced myriad challenges on several fronts last year. Not the least was the Canadian dollar, which, relative to the US dollar, sailed past a 14-year high in December, hurting exporters of Canadian manufactured goods in particular. These challenges continued during the first part of 2006.

This study reviews trends in manufacturing in 2005. It focuses on shipments by industry and provinces. It also examines recent movements of other key variables such as employment, profits, capital investment, capacity utilization and productivity.

Note to readers

The Monthly Survey of Manufacturing (MSM) publishes statistical series for manufacturers—shipments, inventories, unfilled orders and new orders. Industries are classified according to the 1997 North American Industrial Classification System (NAICS).

Non-durable goods industries include food, beverage and tobacco products, textile mills, textile product mills, clothing, leather and allied products, paper, printing and related support activities, petroleum and coal products, chemicals, and plastics and rubber products.

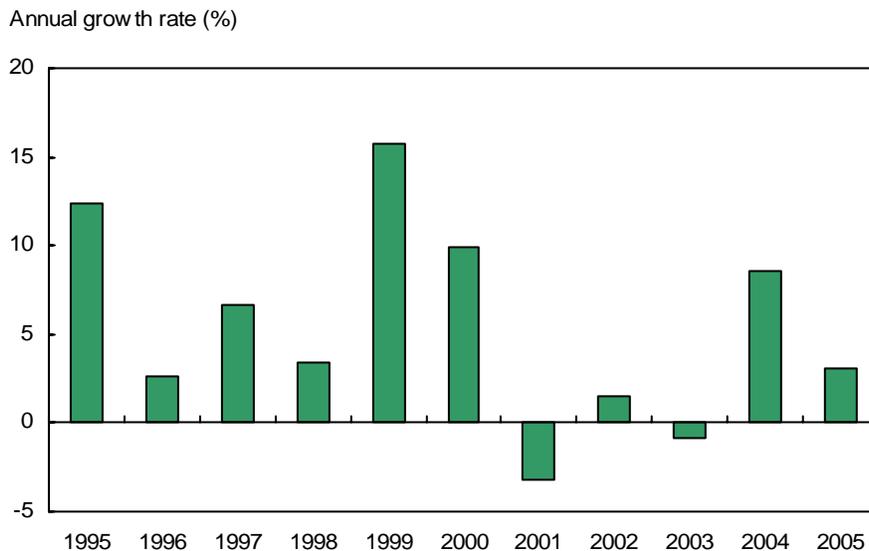
Durable goods industries include wood products, non-metallic mineral products, primary metals, fabricated metal products, machinery, computer and electronic products, electrical equipment, appliances and components, transportation equipment, furniture and related products and miscellaneous manufacturing.

Shipments continued to grow but at a slower pace

Despite the rising value of the Canadian dollar against the US dollar, manufacturing shipments increased for a second year in a row in 2005 after three years of poor performance. There was, however, a marked slowdown, as the 2005 growth rate was less than half that of 2004.

Manufacturers closed 2005 with annual shipments of \$611.5 billion, a 3.0% gain compared to 2004, but well off the healthy 8.5% boost posted one year ago.

Manufacturing shipments increased for the second consecutive year, but at a slower pace

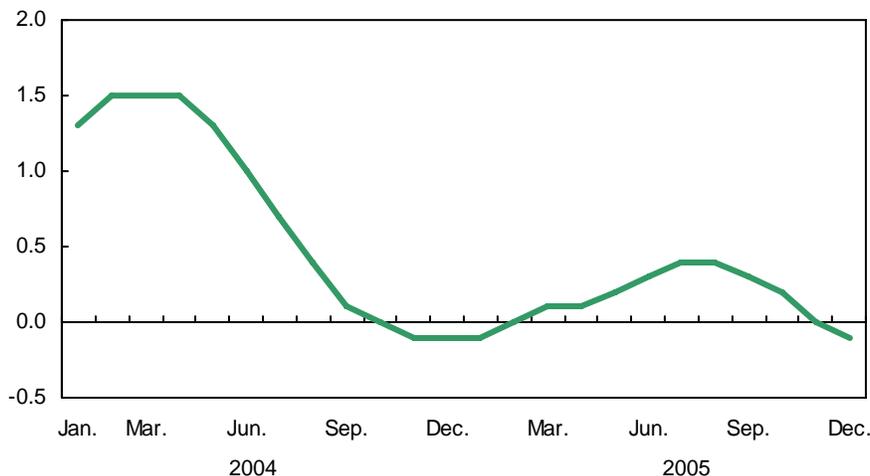


Source: Statistics Canada, CANSIM, table 304-0014.

Monthly shipments went on an erratic roller coaster ride last year, rising for six months of the year and falling for six. This was due in part to the volatility of the motor vehicles and parts industries, coupled with large price fluctuations in the petroleum products industry. The trend for shipments improved over the first six months of the year. But by late summer, this improvement began to slow.

Growth in shipments slowed down at the end of 2005

Monthly growth rate of the trend in shipments (%)



Source: Statistics Canada, special tabulation, Manufacturing, Construction and Energy Division.

Gainers: Resource-based manufacturing surges

The manufacturing sector had its clear gainers and losers last year. Soaring prices contributed to record shipment values for most resource-based industries, such as petroleum products and primary metals, where robust demand and price increases prevailed. Notable exceptions were the wood and paper industries where shipments dropped.

Canada's wealth in natural resources paid off handsomely as foreign demand strengthened for various primary metal products including gold, nickel, steel and aluminium products. As a result, the industrial price for primary metals has climbed substantially over the last two years.¹

A key business story last year was the world's insatiable demand for petroleum products. This was accompanied by political unrest in several major petroleum-producing regions, and back-to-back hurricanes along the US Gulf Coast. As the price of crude oil surpassed the US\$70 per barrel mark last September, the average annual price of petroleum and coal products surged almost 24% from 2004.²

1. Statistics Canada, CANISM, table 329-0044.

2. Statistics Canada, CANISM, table 329-0046.

Accordingly, Canada's petroleum industry posted gains in shipments of more than 20% for the second consecutive year. Shipments of petroleum and coal products reached a record \$54.8 billion, a 21.8% increase on the heels of a 22.2% surge in 2004.

Operating profits of petroleum manufacturers also soared, hitting \$11.7 billion in 2005.³ The petroleum and coal products industry, which is in the midst of a major expansion, has invested billions of dollars in northern Alberta's vast oil sands deposits.

Higher industrial prices also contributed to the widespread gains in the manufacture of chemical products. Chemical prices climbed 6.3% in 2005⁴, as shipments jumped 5.1% to \$47.9 billion.

Healthy demand also contributed to a 4.0% advance in shipments of primary metal products to \$46.3 billion.

Most of the increase in shipments in the resource-based industries was due to price increases. In fact, shipments of non-durable goods in 1997 dollars were essentially flat (+0.1%) in 2005, despite the boom in industries such as petroleum and chemical products. This may be a sign of the limited production capacity of Canada's refineries, many of which operated at full-tilt during the year.

Losers: Slump in key manufacturing industries

Although the majority of manufacturing industries, 13 of 21, reported higher shipments in 2005, Canada's two largest industries, transportation equipment and food, posted year-over-year declines.

Shipments of motor vehicles fell 3.5% to \$69.8 billion last year compared with a 4.5% rise in 2004. The industry accounted for 11.4% of total manufacturing shipments in 2005, down from 15.3% in 1999. In addition, the motor vehicle parts industry posted a 1.8% decline to \$32.2 billion in 2005, following a 6.0% surge in 2004.

The auto industry has been subjected to changes in consumer demand, heightened competition from abroad and an oversupply of certain models of cars and trucks. Last year, the industry was hit by layoffs, temporary shutdowns of assembly lines, and permanent plant closures.

Despite these negative factors, the outlook for motor vehicle manufacturing in Canada is not entirely downbeat. Several of the world's biggest players have announced billions of dollars in new investment in Canada over the next few years.

3. Statistics Canada, CANSIM, table 187-0001.

4. Statistics Canada, CANISM, table 329-0048.

Consumers put the brakes on SUVs

The North American motor vehicle industry is in the midst of a major restructuring. Not long ago, the sport utility vehicle (SUV) had become a mainstay of North American households, and Canada was the manufacturing base for several popular models.

According to a Statistics Canada's study, "Since 1999, SUV production in Canada increased dramatically, even though overall automotive manufacturing had stalled. During 2004, SUV production surpassed the output of both minivans and pickup trucks in Canada."⁵ In 2003, SUV sales reached all-time highs in both Canada and the United States.

But market pressures for SUVs and other gas-guzzlers plunged last year in North America, the result in large part due to increased gasoline prices. Many energy-conscious consumers reassessed their need for large vehicles, and as a result, demand for such vehicles has fallen off. Various car manufacturers are in the midst of a major re-engineering of their product lines and production facilities.

In addition, competition from innovative, foreign-owned automakers contributed to a steady decline in the share of retail sales in Canada held by the three North American car makers—General Motors, Ford and DaimlerChrysler. In 2005, they accounted for about three quarters of Canadian auto assembly, down from 85% just five years ago.

Food shipments pared, wood shipments trimmed

Food, Canada's second largest manufacturing industry, reported a slight 0.2% decline to \$68.5 billion in 2005. The decline was attributable to labour strife in the meat products industry and a drop in shipments of grain and oilseed milling due to a drought-stricken harvest of 2004.

Overall, Canada's shipments of wood products fell 6.0% to \$35.4 billion last year. Subsiding demand and substantially lower prices for wood products further contributed to the lower production.

The average annual industrial price for lumber products fell 8.5% in 2005, although rebuilding efforts in the wake of the US hurricane season contributed to a late-year boost in prices.⁶

Paper manufacturing has been in the doldrums for a number of years, as shipments of paper fell 2.4% to \$32.3 billion in 2005, the lowest level since 1998. It was the fifth consecutive annual decline.

Softening newsprint demand, high energy costs and the strong Canadian dollar all contributed to weakness in the paper sector. Newsprint consumption has also been declining in recent years due to increased popularity of electronic media.⁷

5. See Erik Magnusson, "Sport Utility Vehicles: Driving Change," *Analysis in Brief*, Statistics Canada, Catalogue no. 11-621-MIE2005020, February 2005, <http://www.statcan.ca/english/research/11-621-MIE/11-621-MIE2005020.htm> (accessed June 13, 2006).

6. Statistics Canada, CANSIM, table 329-0042.

7. Statistics Canada, CANSIM, table 187-0001 and "Quarterly financial statistics for enterprises," *The Daily*, February 24, 2006, <http://www.statcan.ca/Daily/English/060224/td060224.htm> (accessed June 13, 2006).

Shift to resource-rich West

There was a definite shift in momentum of shipment activity to the resource-rich West, which counterbalanced more muted growth in the manufacturing-heavy central provinces.

By far, the majority of Canadian manufacturing activity remained east of the Ontario-Manitoba border. Even so, for the fourth consecutive year, Quebec and Ontario saw a slight erosion in their share of total manufacturing shipments compared to the rest of the country.

Combined, Quebec and Ontario accounted for 74.6% of total Canadian shipments in 2005, down from 77.4% in 2000. At the same time, the share of the four western provinces edged up from 18.5% to 20.6%. The share of the Atlantic provinces held steady in the range of 4% to 5%.

Over the last couple of years, the western provinces have done particularly well, largely the result of their rich, natural resources, coupled with strong domestic and globally-based demand for these resources.

Manufacturers in Alberta shipped \$59.3 billion worth of goods last year, a 12.0% increase. Saskatchewan's resource-based industries also supplemented the province's 8.2% gain in shipments, which rose to \$10.4 billion. This followed a big resource-based 21.8% surge in 2004.

In Manitoba, manufacturers recorded an increase of 3.3%, virtually on par with the national average, while in British Columbia, the increase was a more subdued 1.6%.

Manitoba companies had a volatile year in terms of month-to-month shipments in 2005. However, strong growth in Manitoba's primary metals and fabricated metal products industries contributed to its overall increase.

In British Columbia, a sharp drop in the average price of lumber products last year offset improvements for food and fabricated metal products manufacturing. As a result, last year's modest 1.6% gain in shipments overall was far below the 13.7% surge in 2004 that was based on wood products.

So-so year for the manufacturing heartland of central Canada

In central Canada, the hub of manufacturing activity, the export-dependent sector was hit hard by the strengthened Canadian dollar against the US dollar and soaring energy costs, as well as increased global competition.

Shipments in Ontario edged up just 0.7% to \$312.4 billion. A downturn in motor vehicle manufacturing, which comprised more than one-fifth of the province's total shipments last year, largely overshadowed good performances by several industries, including machinery and computer manufacturing.

Quebec fared somewhat better with a 4.5% rise in shipments to \$144.0 billion. The province's aerospace industry continued to rebound, coupled with big gains in petroleum refining and the chemical products industry.

Healthy gains in Atlantic Canada, except for Newfoundland and Labrador

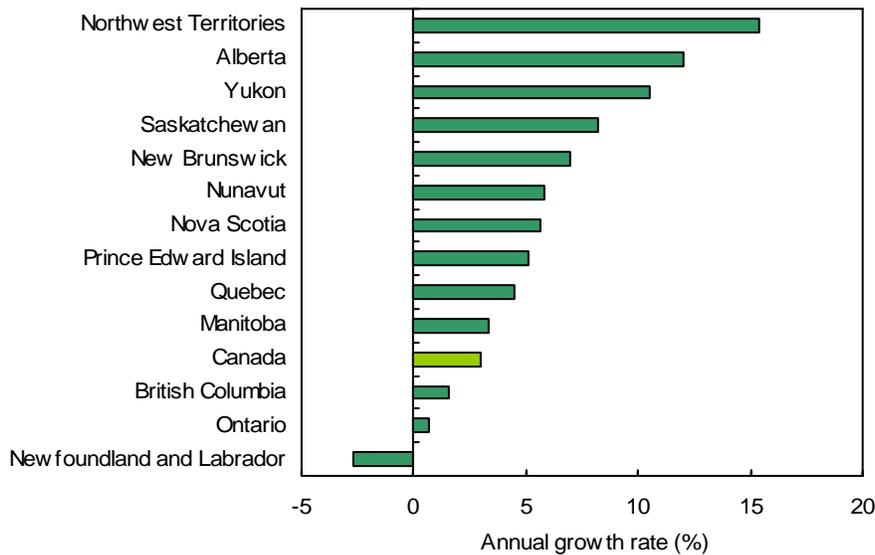
Overall, activity in Atlantic Canada improved in 2005, due to strength in the nondurable goods sector.

Three of the four Atlantic provinces saw increases above the national average: New Brunswick (+7.0%), Nova Scotia (+5.6%) and Prince Edward Island (+5.1%).

The only decline occurred in Newfoundland and Labrador, where shipments fell 2.7%. Key industries fell back following the completion of some major projects.

In the Territories, manufacturers experienced a good year, as overall shipments jumped 14.3% to \$99.3 million. The Northwest Territories recorded a 15.4% gain, the Yukon 10.5% and Nunavut 5.8%.

Shipments increased in all provinces except in Newfoundland and Labrador in 2005



Source: Statistics Canada, CANSIM, table 304-0015.

Manufacturing employment drops

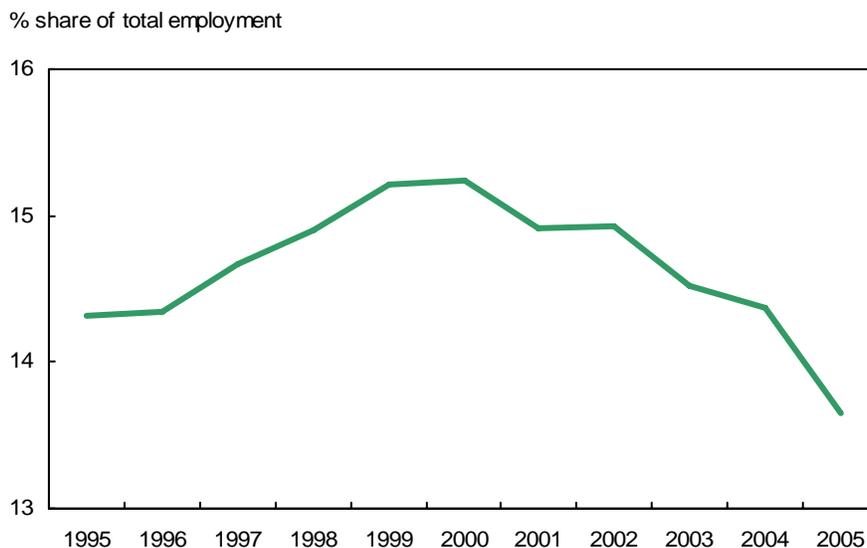
Over the last year, job losses on the factory floor have been at the forefront as Canadian manufacturers strive to reduce cost flows and boost productivity.

On average in 2005, the manufacturing payroll was 3.7% smaller compared to 2004 (-85,000 jobs). This marked the largest annual average decline in manufacturing employment since 1992, a year in the midst of a recession.⁸

8. Statistics Canada, CANSIM, table 282-0094.

Manufacturing employment as a share of total employment for all industries fell to 13.7%, the lowest level since at least 1976.⁹ A sizeable portion of those job losses were in central Canada.

Major drop in the share of total employment for manufacturing industries



Source: Statistics Canada, CANSIM, table 282-0094.

Slide in manufacturing profits

Operating profits for manufacturers fell 7.0% last year, compared with an exceptional gain of 36.6% in 2004. Canadian manufacturing companies earned \$42.0 billion in profits in 2005.

This was in sharp contrast to Canadian corporations overall, which earned record high operating profits (+11.1%), due in part to the oil and gas industry and healthy consumer demand.¹⁰

Many manufacturers were hit hard by the soaring Canadian dollar which surpassed a 14-year high against the US dollar in December. About one-half of Canadian-made goods are shipped abroad. A stronger dollar makes these products more expensive, and cuts into profit margins.

A recent study showed that the higher Canadian dollar is an important factor in explaining why American manufacturing shipments and profits outperformed those for Canada in 2004 and 2005.¹¹

Other factors that cut manufacturers' profitability included substantial increases in overhead costs for energy and raw materials, and Canada's steep labour costs relative to some countries.

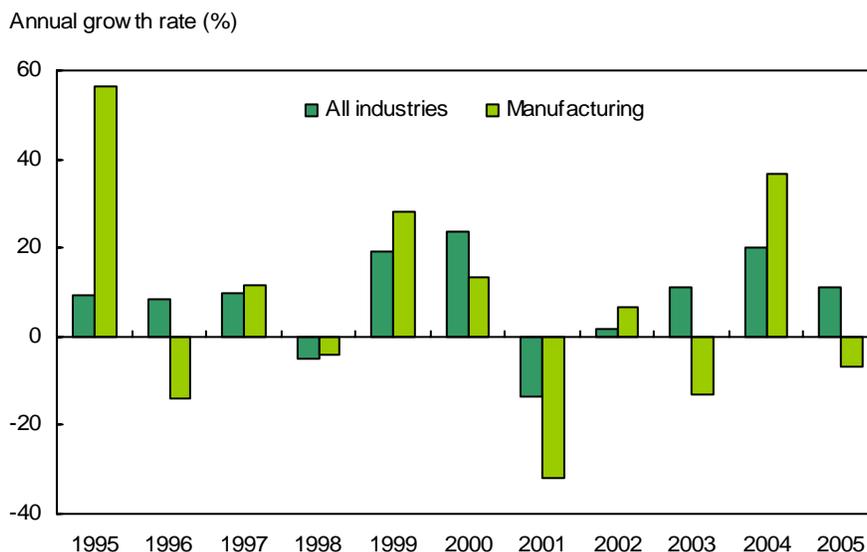
9. Statistics Canada, CANSIM, tables 282-0007 and 282-0009.

10. Statistics Canada, "Quarterly financial statistics for enterprises," *The Daily*, February 24, 2006, <http://www.statcan.ca/Daily/English/060224/td060224.htm> (accessed June 13, 2006).

11. See Jennie Wang, "Is Canada's manufacturing lagging compared with the US?" *Canadian Economic Observer*, Statistics Canada Catalogue no. 11-010, December 2005

Competition from foreign, low-cost producers was also a challenge. China and other Asian countries have become major players in the manufacturing world, with their huge populations, heavy demand and abundant, inexpensive labour.

Manufacturers' profits dropped in 2005 after a strong performance in 2004



Source: Statistics Canada, CANSIM, table 187-0001.

Rebound in investment in plant and equipment

Manufacturing investment has seen lacklustre increases for several years but this trend appears to have reversed last year, the result of steadily high rates of capacity utilization and slow rates of machinery replacement in the early 2000s.

Manufacturing investment increased by 6.7% in 2005 and is expected to rise by another 3.4% in 2006. However, last year's levels were still 10.7% lower than the most recent peak in 2000.¹²

Capacity utilization rates kept rising last year in the manufacturing sector, reaching 84.4%. This level was last recorded in 2000 when capital investments were booming.¹³

A strong-valued dollar should be advantageous for Canadian manufacturers who purchase much of their new equipment and technology from abroad. But the strengthened dollar also squeezed profits, which are a key determinant of investment.

12. Statistics Canada, CANSIM, table 029-0005.

13. Statistics Canada, CANSIM, table 028-0002.

Labour productivity on upswing

Labour productivity, as measured by real gross domestic product (GDP) per hour worked, is a primary determinant of improvements to the standard of living in the long run. It is also the main source of economic growth.

Productivity in the manufacturing sector increased 5.7% last year, as the number of hours worked fell and output improved.¹⁴ This followed a 3.5% increase in productivity in 2004.

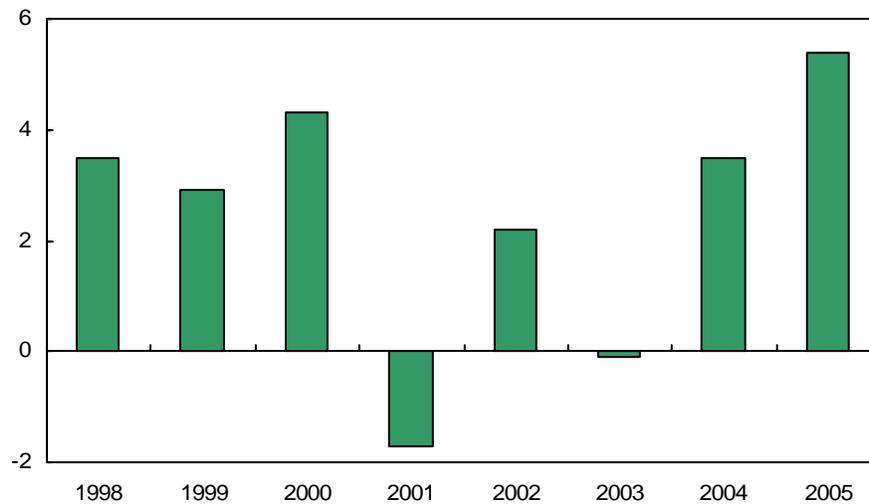
These productivity gains are key to Canadian plants' competitiveness.

Last year's increase came largely at the expense of fewer workers on the factory floor. Employment dropped by 3.7% (-85,000) in 2005; the number of hours worked fell by 3.5%, compared with a modest 0.9% gain for all industries.¹⁵ Increased capital investments might also have contributed to higher labour productivity. Industrial restructuring may also have led to closures of low productivity plants.

Interestingly, all manufacturing industries reported fewer hours worked in 2005. Some industries that reported the largest declines in hours worked were also among those that had weaker shipment activity. Transportation equipment, wood products and paper manufacturing reported steep declines in both shipments and hours worked last year.

Strong growth in labour productivity for manufacturing in 2005

Annual growth rate (%)



Source: Statistics Canada, CANSIM, table 383-0012.

14. Statistics Canada, CANSIM, table 029-0005.

15. Statistics Canada, CANSIM, table 383-0012.

Manufacturers increasingly concerned about prospects for 2006

During the first four months of 2006, manufacturing shipments have increased only once, in March, when the gain was 1.6%.

Despite the relatively wide scope of March's improvements, manufacturers face challenges which will test their productive abilities this year. The stronger Canadian dollar, rising input costs and skilled labour shortages particularly in Western Canada, are critical, though unavoidable, obstacles for many factories.

According to Statistics Canada's Business Conditions Survey (BCS) for April 2006, manufacturers are growing increasingly concerned about their prospects over the next few months.¹⁶

One key impediment to production identified by the BCS was the shortage of both skilled and unskilled labour, which has been particularly apparent in the West. Should central Canada's manufacturing sector continue to slow, more workers may head westward.

Table 1 Manufacturing shipments, by industry

	2004	2005	Change, 2004 to 2005	Share, 2005
	\$ millions		%	
Food	68,637	68,493	-0.2	11.2
Beverage and Tobacco Products	11,880	11,910	0.3	1.9
Textile Mills	3,398	3,211	-5.5	0.5
Textile Product Mills	2,282	2,239	-1.9	0.4
Clothing	6,421	5,565	-13.3	0.9
Leather and Allied Products	627	519	-17.2	0.1
Paper	33,070	32,264	-2.4	5.3
Printing and Related Support Activities	11,796	12,194	3.4	2.0
Petroleum and Coal Products	44,988	54,804	21.8	9.0
Chemicals	45,661	47,851	4.8	7.8
Plastics and Rubber Products	26,531	27,495	3.6	4.5
Wood Products	37,700	35,429	-6.0	5.8
Non-metallic Mineral Products	12,693	13,497	6.3	2.2
Primary Metals	44,575	46,348	4.0	7.6
Fabricated Metal Products	34,844	36,683	5.3	6.0
Machinery	28,435	31,313	10.1	5.1
Computer and Electronic Products	20,243	22,118	9.3	3.6
Electrical Equipment, Appliance and Components	10,470	10,744	2.6	1.8
Transportation Equipment	127,047	125,448	-1.3	20.5
Furniture and Related Products	14,530	15,485	6.6	2.5
Miscellaneous	7,626	7,881	3.3	1.3
Total	593,452	611,491	3.0	100.0

Source: Statistics Canada, CANSIM, table 304-0014.

16. Statistics Canada, "Business Conditions Survey: Manufacturing industries," *The Daily*, April 27, 2006, <http://www.statcan.ca/Daily/English/060427/td060427.htm> (accessed June 13, 2006).

Table 2 Manufacturing shipments, by province and territory

	2004	2005	Change, 2004 to 2005	Share, 2005
	\$ millions		%	
Newfoundland and Labrador	3,069	2,987	-2.7	0.5
Prince Edward Island	1,414	1,487	5.1	0.2
Nova Scotia	9,281	9,797	5.6	1.6
New Brunswick	14,072	15,053	7.0	2.5
Quebec	137,786	143,947	4.5	23.5
Ontario	310,294	312,422	0.7	51.1
Manitoba	12,528	12,943	3.3	2.1
Saskatchewan	9,611	10,399	8.2	1.7
Alberta	52,966	59,348	12.0	9.7
British Columbia	42,344	43,010	1.6	7.0
Yukon	15	16	10.5	0.0
Northwest Territories	69	80	15.4	0.0
Nunavut	3	3	5.8	0.0
Canada	593,452	611,491	3.0	100.00

Source: Statistics Canada, CANSIM, table 304-0015.