



Catalogue no. 11-621-MIE — No. 042

ISSN: 1707-0503

ISBN: 0-662-43369-6

Analytical Paper

Analysis in Brief

An Analysis of Consumer Prices in 2005

by Gerry O'Donnell and Marc Prud'homme

Prices Division
13th Floor, Jean Talon Building, Ottawa, K1A 0T6

Telephone: 1 800 263-1136



Statistics
Canada

Statistique
Canada

Canada



An Analysis of Consumer Prices in 2005

Gerry O'Donnell and Marc Prud'homme

- Review Committee:** George Beelen and John Flanders
- Special contribution:** Elda Allen, Clair Bromley White, Graham Burns, Tracey Capuano, Réjean Chauret, Lucie Cloutier, Monique Émond, John Mallon, Denis Montreuil, Sue Morris, Hugh Scobie, Sandra Shadlock, Randy Stearns and Larry Sweet
- Editor:** Christian Houle
- Managing Editor:** Yvan Gervais
- Production:** Debi Soucy

May 2006

Catalogue No: 11-621-MIE2006042
ISSN: 1707-0503
ISBN: 0-662-43369-6
Frequency: Occasional

How to obtain more information:
National inquiries line: 1 800 263-1136
E-Mail inquiries: analysisinbrief-analyseenbref@statcan.ca

Published by the authority of the Minister responsible for Statistics Canada
© Minister of Industry 2006
Ottawa

All rights reserved. The content of this electronic publication may be reproduced, in whole or in part, and by any means, without further permission from Statistics Canada, subject to the following conditions: that it be done solely for the purposes of private study, research, criticism, review or newspaper summary, and/or for non-commercial purposes; and that Statistics Canada be fully acknowledged as follows: Source (or "Adapted from", if appropriate): Statistics Canada, year of publication, name of product, catalogue number, volume and issue numbers, reference period and page(s). Otherwise, no part of this publication may be reproduced, stored in a retrieval system or transmitted in any form, by any means—electronic, mechanical or photocopy—or for any purposes without prior written permission of Licensing Services, Client Services Division, Statistics Canada, Ottawa, Ontario, Canada K1A 0T6.

Note of appreciation

Canada owes the success of its statistical system to a long-standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued cooperation and goodwill.

An Analysis of Consumer Prices in 2005

Gerry O'Donnell and Marc Prud'homme
Prices Division

Summary

Canadian consumers battled record high energy prices throughout 2005, whether it was filling up at the pump or paying home heating bills. Even so, the rate of inflation for the year, as measured by the Consumer Price Index (CPI), remained relatively stable.

The All-items CPI, which measures the price movements of a basket of consumer goods and services, was 2.2% higher in December 2005 than it was in the same month a year earlier. This was the third consecutive year in which the inflation rate, measured from December to December, remained at or near 2.0%. It was also the 15th consecutive year in which the increase was less than 4.0%.

The CPI excluding energy rose just 1.4% from December 2004 to December 2005, in line with increases of the two previous years, while the CPI excluding energy and food rose 1.3%, the smallest increase in eight years. These measures reveal a generally tame underlying inflation environment for consumers, with a balance of rising and falling prices.

Overall, energy prices rose 10.2% during 2005, more than four times the increase in the All-items CPI. It was the fourth year in a row in which energy prices outpaced the All-items CPI by a wide margin.

However, energy was just part of the picture. Between December 2004 and December 2005, prices rose in two of the four broad categories covered by the All-items CPI: services, where prices increased 2.1%, and non-durable goods (such as food and cigarettes), which were up 3.9%.

Consumers benefited from a 0.4% drop in prices for durable goods, and a 0.2% decline in semi-durable goods, both continuing a downward trend that began a few years ago. Consumers paid 0.9% less last year for clothing, which is considered semi-durable.

Among durable goods, prices for computer equipment and supplies continued their steep slide, while video equipment prices fell for the 12th consecutive year. Not all consumer durables showed price declines; for example, new car prices edged up 1.8%.

This study analyzes price changes for various goods and services measured by the Consumer Price Index throughout 2005.

Definitions and main data source

The special aggregate **energy** includes: electricity, natural gas, fuel oil, gasoline, and fuel parts and supplies for recreational vehicles.

The CPI **excluding the eight most volatile components**, as defined by the Bank of Canada, excludes: fruit, fruit preparations and nuts; vegetables and vegetable preparations; mortgage interest cost; natural gas; fuel oil and other fuel; gasoline; inter-city transportation; and tobacco products and smokers' supplies. In total these items accounted for about 16% of the CPI basket in 2001.

All data about the CPI in this study can be found in Statistics Canada database, CANSIM, in the table 326-0001: Consumer price index (CPI), 2001 basket content, monthly (Index, 1992=100 unless otherwise noted).

Inflation in check despite robust growth in economy

Canada's inflationary environment was stable even though the economy grew by a robust 2.9% in 2005, as measured by real gross domestic product (GDP), a broad measure of economic activity adjusted for inflation. Much of this economic growth was the result of a 4.0% increase in consumer spending on goods and services, the largest gain since 2000.

The unemployment rate continued to decline, reaching 6.8% in 2005, down from 7.2% in 2004 and 7.6% in 2003.¹ Also, the growth in employment was 1.4% in 2005.

Tightening labour market conditions had a big impact on labour costs. Labour costs of businesses per unit of GDP surged 2.4% in 2005, more than double the 0.9% gain in 2004. This surge resulted from a strong 3.5% increase in hourly compensation last year, much faster than the 0.6% increase the year before.

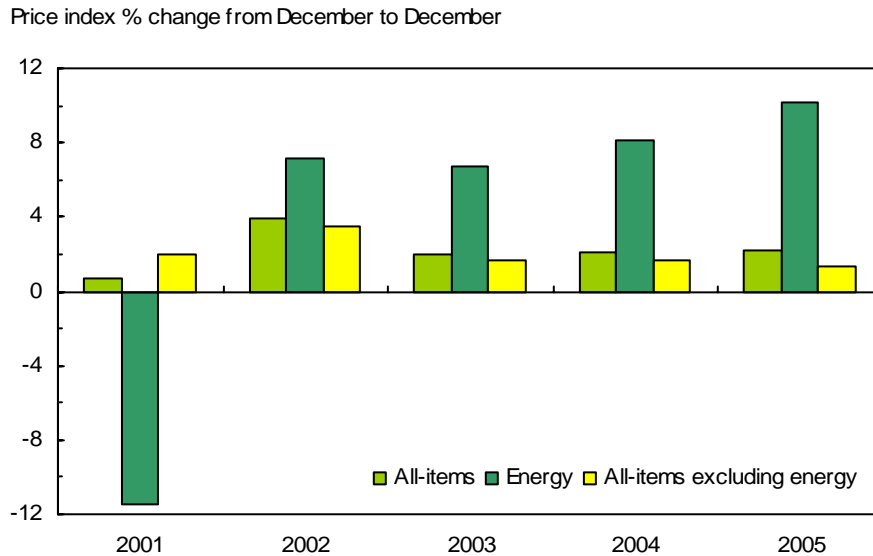
Capacity utilization rates for manufacturing, a measure of the intensity with which firms use their production capacity, grew from 81.5% at the start of 2004 to 84.7% by the third quarter of 2005. This approached the record level of 86.6% set in 1995, and provided evidence of increasing supply constraints.

In this environment, a growing percentage of Canadian firms expected higher price increases in 2005, according to independent surveys by the Bank of Canada and the Conference Board of Canada.²

1. See Statistics Canada, CANSIM, table 282-0002.

2. See Bank of Canada, "Indicators of Capacity and Inflation Pressures for Canada," <http://www.bankofcanada.ca/en/rates/indinf.html> (accessed May 2, 2006).

All-items Consumer Price Index low despite high energy price inflation



Source: Statistics Canada, CANSIM, table 326-0001.

But several factors kept a lid on inflation in the expanding economy. Interest rates moved up during 2005, as the Bank of Canada raised its influential Target for the Overnight Rate three times, from 2.50% at the start of the year to 3.25% at the end.³

This, in turn, prompted commercial banks to raise interest rates on loans to their customers: the prime business rate charged by chartered banks increased from 4.25% in January to 5.00% in December, the consumer loan rate went from 9.50% to 9.75%, and the five-year conventional mortgage rate rose from 6.05% to 6.30%.⁴

Another check on inflation was the Canadian dollar, which appreciated on currency markets for the third straight year. In 2005, the loonie rose 4.8% against the American dollar, 14% versus the UK pound, 16% against the euro, and 17% against the Japanese yen, helping to lower the cost of many imported items in Canada.⁵

Finally, labour productivity in the Canadian business sector rose 2.2% in 2005, after virtually no growth in 2003 and 2004. This helped keep the higher cost of labour from putting upward pressure on prices.

3. The Bank of Canada's key monetary policy instrument to respond to price instability is the Target for the Overnight Rate for inter-institution loans and deposits.

4. See Statistics Canada, CANSIM, table 176-0043.

5. See Statistics Canada, CANSIM, table 176-0064.

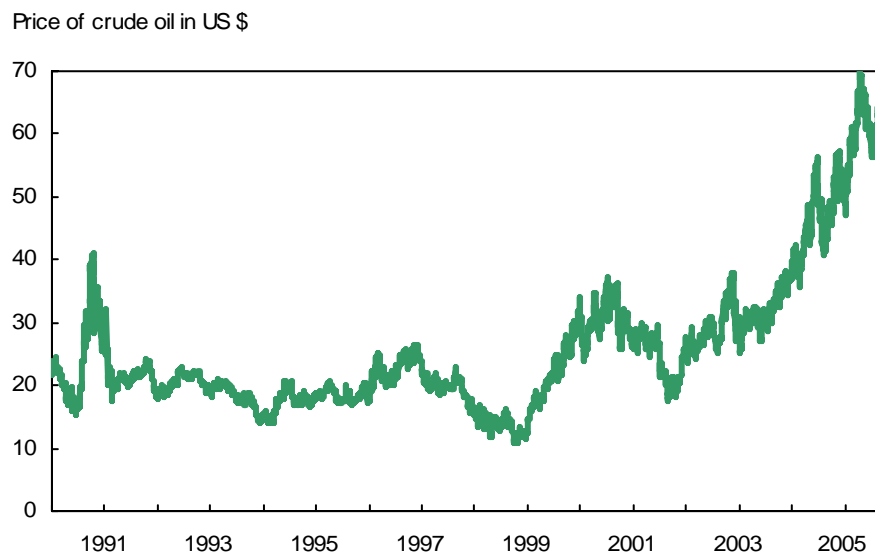
Crude oil: Prices to new highs

The steady supply of oil came under attack last year from several directions, including both political winds and hurricanes.

Political instability in oil-rich areas such as Iraq, Iran and Nigeria spread fears that short-term energy needs would not be met. By early July, the price of West Texas Intermediate crude oil passed the US \$60 per barrel mark.

When back-to-back hurricanes Katrina and Rita hit the Gulf Coast last August and September, they exposed North America's limited investment in oil refineries. Facilities responsible for more than 10% of American refining capacity were destroyed or temporarily shut down, pushing up crude oil prices to a peak of US \$69.91 on August 31.

Crude oil nears US\$70 a barrel



Source: U.S. Department of Energy, West Texas Intermediate.

As recently as December 1998, crude oil was below US \$11 per barrel. At the time, North American demand for oil appeared insatiable, as drivers sought power in trucks and sport utility vehicles instead of more economical passenger cars. By 2004, even with rising prices, Canadians consumed 41 million cubic metres of gasoline, up 10% over 1998 levels and 25% from 1991.⁶

The appetite for energy in developed countries spread around the world as well. China, the other countries of Asia, Latin American and Africa increased their share of global energy consumption from 23% in 1973 to 35% in 2003.⁷

6. See Statistics Canada, CANSIM, table 134-0004.

7. Adapted from International Energy Agency, "Key World Energy Statistics 2005," <http://www.iea.org> (accessed May 2, 2006).

Pump prices over a dollar per litre in major cities

When the hurricanes hit the Gulf of Mexico in late summer 2005, Canadians felt the pain of record high energy prices, both at the pump and in the home.

In September, gasoline prices at pumps surged past one dollar per litre in every major city, and stayed there in many regions until the end of the year. As a result, the gasoline index climbed 14.6% December-to-December.

For the year, Canadians consumed 0.4% less gasoline than in 2004. This was the first time since 1991 - a recession year – that gasoline consumption fell year-over-year.⁸

Rising gasoline prices impacted other areas of the economy as well. For example, to cover rising fuel prices, taxi fares shot up across Canada late in the year. Departure and per-mile charges rose in Saint John, Charlottetown, Truro, Halifax, Quebec, St. Catharines, Kitchener, Sudbury, Thompson, Saskatoon, Calgary, Red Deer and Edmonton.

In addition, local bus and subway fares continued to outpace the overall CPI as a result of higher fuel costs, among other factors. Local and commuter transportation prices rose 5.1% during the year.

Heating oil prices advanced much like gasoline prices did in 2005, peaking in October and then moderating somewhat. By the end of the year, consumers were paying 16.2% more for fuel oil to heat their home than they were a year earlier.

Prices for piped natural gas also reached a new peak in 2005. Natural gas prices stayed more or less horizontal from the mid-1980s to the mid-1990s, prompting many Canadians to convert to natural gas for heat. The use of natural gas for generating electricity also increased. Direct and utility sales rose steadily, from 50.5 billion cubic metres in 1985 to 67.2 billion cubic metres in 1996.⁹

After a decade of plentiful supplies, the increased demand coupled with concerns over finding new supplies caused the price of natural gas to rise faster than the price of heating oil. In just a few years the natural gas index more than doubled, rising from 109.4 at the end of 1996 to 240.0 by spring 2001.

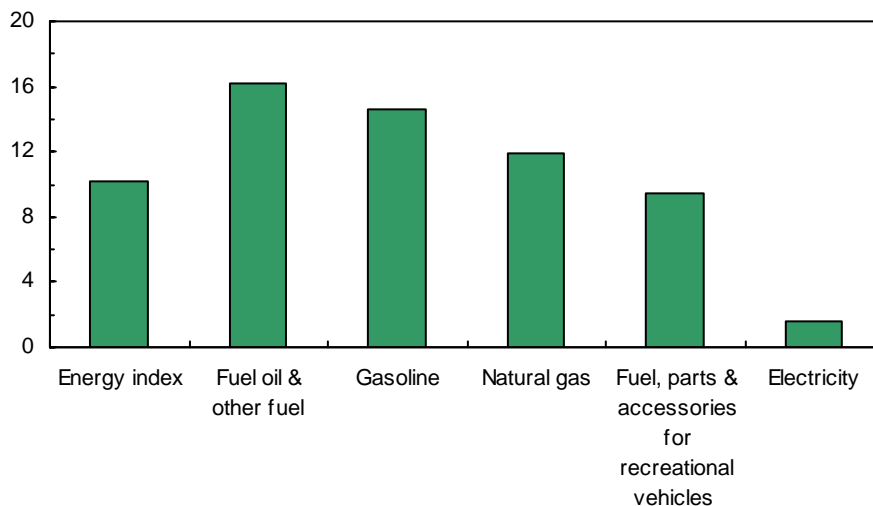
After the hurricanes crippled natural gas production in the Gulf of Mexico, the index reached a peak of 253.4, before settling at 238.0 in December. This put natural gas prices 11.9% higher at the end of 2005 than they were a year earlier.

8. See Statistics Canada, CANSIM, table 134-0004.

9. See Statistics Canada, CANSIM, table 131-0001.

Prices for most energy components up sharply

Price index % change from December 2004 to December 2005



Source: Statistics Canada, CANSIM, table 326-0001.

Core inflation drops for third year in row

Because of such drastic swings in prices for items like gasoline, attempts have been made to measure underlying long-term and persistent inflation trends. Core inflation indicators can be estimated typically by removing from the Consumer Price Index products that are subject to temporary supply shocks that lead to short-term price fluctuations.

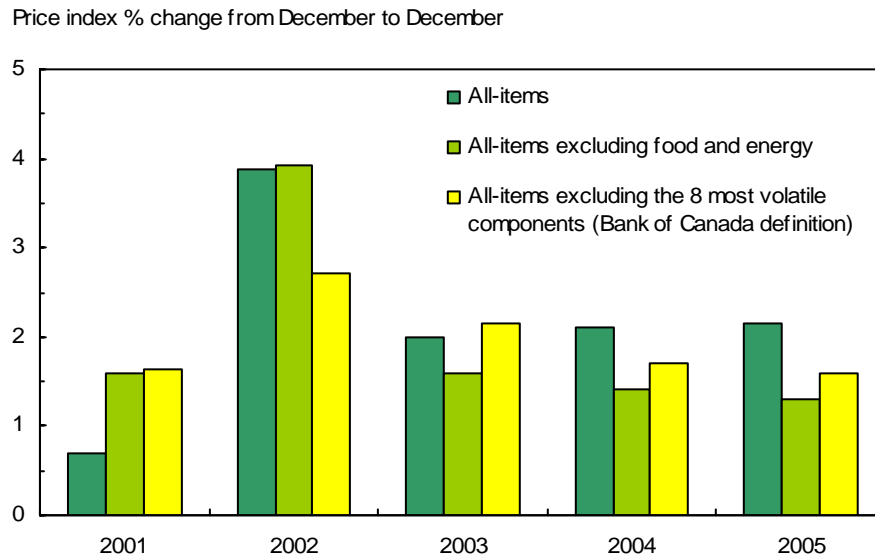
Currently, the CPI excluding food and energy, and the CPI excluding the eight most volatile items identified by the Bank of Canada, are two core inflation measures.

The CPI excluding food and energy increased just 1.3% in 2005, the smallest annual price increase recorded by this measure of core inflation since 1997. Compared with the 2.7% rise in 2002, this variant of core inflation points to a milder inflation environment.

In addition, the All-items CPI excluding the eight most volatile items, used by the Bank of Canada for monitoring inflation and setting monetary policy, rose 1.6% in 2005, its smallest increase since 1999.

Both measures of core inflation, which strip away the effects of soaring energy prices in 2005, suggest that many consumer prices are increasing at a very moderate rate by historical standards and that the effects of higher energy prices have not led to a general inflation spiral.

Core inflation held in check



Source: Statistics Canada, CANSIM, table 326-0001.

Some volatile items offset each other in 2005

Apart from energy, other historically volatile indexes were generally flat in 2005.

The price index for fruit, fruit preparations and nuts dropped 0.3%, while the index for vegetables and vegetable preparations fell 3.9%. Prices for some fresh foods were very volatile, but in 2005 the increases and decreases largely offset each other.

For example, in 2005 the indexes for tomatoes and lettuce plummeted 39.7% and 19.9%. In 2004, hurricanes in Florida, muddy fields in Arizona and California, and pests in Mexico had restricted supplies of both lettuce and tomatoes. In 2005, weather conditions were less imposing, and prices returned to more typical levels.

Offsetting these declines, the potato index surged 33.6% in 2005, as Canadian growers sought to reverse two years of falling prices by planting 34,800 or 8.0% fewer acres of potatoes in 2005 than the year before.¹⁰

The mortgage interest cost index rose fractionally, up 0.1% in 2005, as Canadian mortgage rates continued to edge higher. Increases in this index have been lower than the All-items inflation rate in each of the last five years.

Cigarette prices posted a 2.7% increase in 2005 after rising 3.5% in 2004. The rate of increase is down from earlier in the decade, when federal and provincial taxation strategies caused the

10. See *Canadian Potato Production*, Vol. 3, No. 3, January 2006, Statistics Canada, Catalogue no. 22-008-XIE, <http://www.statcan.ca/bsolc/english/bsolc?catno=22-008-X&CHROPG=1> (accessed May 2, 2006).

cigarette index to jump by 78% from March 2001 to December 2003.¹¹ Annual unit sales of cigarettes tumbled 17% from 2000 to 2003, and fell a further 9.0% by 2005 as measured tax increases and occasional price hikes from tobacco manufacturers pushed up the price of cigarettes.¹²

Non-durable goods prices up again

The non-durable goods index, which includes items such as food, gasoline, natural gas, oil, electricity and cigarettes, rose 3.9% in 2005. Since 1998, producers and suppliers of these commodities have been passing on average price increases of 3.9% per year—the highest rate of inflation for any of the goods or services groupings.

Besides energy-related items and cigarettes, non-durables such as dairy goods outpaced the All-items CPI in 2005. Prices for dairy goods shot up early in the year after the Canadian Dairy Commission increased the floor prices it paid for skim milk powder 6.2% and butter 9.1% to help producers cover costs and recover from the financial effects of the mad cow crisis.¹³ Provincial marketing boards followed suit, adjusting their minimum and maximum prices, and for the year, the butter index was up 9.2%, cheese prices increased 6.6%, and fresh milk prices were up 4.4%.

Other foods held non-durable prices down: fish and seafood prices dropped 0.8%, fresh fruit prices fell 0.5%, and meat and poultry prices fell fractionally, down 0.1% in 2005.

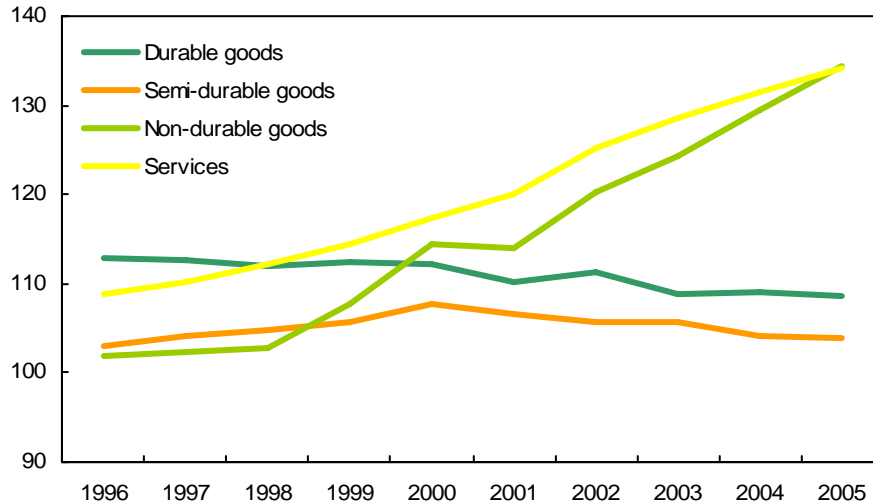
11. The tax increases were part of “a comprehensive strategy to improve the health of Canadians by reducing tobacco use”, announced April 5, 2001 by the Health Minister, the Finance Minister and the Solicitor General. See www.fin.gc.ca/news01/01-039e.html (accessed May 2, 2006).

12. See Statistics Canada, CANSIM, tables 303-0007 and 303-0062.

13. For information on support prices set by Canadian Dairy Commission, see <http://www.cdc.ca> (accessed May 2, 2006).

Services and non-durable goods prices up, semi-durable and durable goods prices down

Consumer Price Index, December, 1992=100



Source: Statistics Canada, CANSIM, table 326-0001.

Services in strong demand

Prices for consumer services rose a steady 2.1% in 2005, marking the 12th time in the last 14 years the increase was between 1.8% and 2.7%. The services index includes several items (such as homeowners' replacement costs, property taxes, table-service restaurant meals, homeowners' and mortgage insurance, and cable television) whose price increases have been above that of the overall rate of inflation for many years. Heavy demand has been putting pressure on these indexes.

For example, prices for cablevision and satellite services outpaced the All-items index for the eighth year in a row, rising 4.5% in 2005. Following deregulation of the cable industry by the Canadian Radio-television and Telecommunications Commission (CRTC), from 2001 to 2004 revenues for cable operators rose by 24% and for wireless operators by 99% with strong consumer demand for regular and premium services.¹⁴

The homeowners' replacement cost index, which estimates the value loss of a house as it ages (i.e., physical depreciation) and depends on the new house price index for its calculation, advanced 5.0% in 2005, marking the fourth consecutive year this index increased by 5.0% or more. Western provinces led the way again as Alberta's index soared 11.7% and Manitoba's index surged 7.2% following a 7.9% gain in 2004.

Alberta's booming economy and high population growth pushed up 2005 housing starts to over 40,800 in that province alone. According to Canada Mortgage and Housing Corporation (CMHC), across the country, there were around 225,500 housing starts, marking the fourth time in as many

14. See "Cable, satellite and multipoint distribution systems, 2004", *Service Bulletin, Broadcasting and Telecommunications*, Vol. 35, no. 4, October 2005, Statistics Canada, Catalogue no. 56-001-XIE, <http://www.statcan.ca/cgi-bin/downpub/listpub.cgi?catno=56-001-XIE2005004> (accessed May 2, 2006).

years that housing starts were above the 200,000 unit level. Rising material and labour costs contributed to the index's advance in 2005.

In another sign of strong demand, prices for table-service restaurant meals edged up 3.1% in 2005, marking the seventh time in the last nine years this index outpaced the All-items CPI. The restaurant industry in Ontario showed particular strength and pricing power in 2005, as restaurant owners were able to pass on price increases which were higher than the national average for the first time in three years.

Just a few years ago, Ontario was reeling from the effects of severe acute respiratory syndrome (SARS). In 2003, its restaurants faced declining sales, and recorded the lowest profit margins in the country at 2.2%.¹⁵ Resurgent restaurant spending has allowed restaurant owners to pass on increased costs for ingredients and other operating expenses such as salaries, rent, utilities and printing.

Other services are heavily or entirely regulated, and prices are set less by market forces than by government planning. For example, after showing little increase for 11 years, the index for driver's licences jumped 15.2% in 2004 and a further 16.9% in 2005 as several provincial governments increased the cost of obtaining and renewing a driver's licence.

Similarly, after rising at a 1.5% annual rate for a decade, the index for property taxes rose 3.2% in 2005 following gains of 2.8% in 2003 and 4.3% in 2004. New Brunswick posted the highest increase (+7.3%), with rises in all surveyed municipalities due to higher property value re-assessments along with increases in the general tax rate in some regions or sewer tax rate in others.

And after rising 41.0% from 2001 to 2003, the index for public and private automotive insurance premiums dropped 0.9% in 2005 following a 1.7% decrease in 2004. All provinces but Quebec and Manitoba registered declines in 2005, one year after the insurance industry announced record profits of \$4.2 billion.¹⁶

Deflation for semi-durable and durable goods

The prices of durable and semi-durable goods continued their downward trend in 2005, as the stronger Canadian dollar, intense global competition and aggressive retailing continued to keep overall prices in check.

After rising moderately in the late 1990s and peaking in early 2001, the price index for clothing fell steadily, declining 0.9% in 2005. In addition to a strong Canadian dollar, consumers reaped the benefits of World Trade Organization agreements which reduced international quotas on clothing in four stages over the last decade, culminating in the elimination of all quotas in January 2005.

15. See Statistics Canada, CANSIM, table 355-0005.

16. The indexes for Whitehorse and Yellowknife also posted increases. For more information on financial results, see Insurance Bureau of Canada, "IBC announces 2004 financial results for auto, home and business insurance companies", media release on February 18 2005, <http://www.ibc.ca/story.asp?sindex=181&return=30> (accessed May 9, 2006).

Retailers increasingly turned to low-cost China and India to supply Canadian needs over this period: China's share of Canada's clothing imports jumped from 20% in 1992 to 36% in 2004, while India's share reached 7%.¹⁷ Aggressive competition from global retailers and large grocery stores with efficient supply chains and purchasing clout also kept a lid on prices.

Prices for computer equipment and supplies continued their steep slide, falling 18.1% in 2005. Canadian spending on computer hardware and software managed to increase by 2.7%, as consumers were attracted to budget computers in 2005.¹⁸ Complete desktop systems and even some laptops were priced below \$1,000.

Some large computer sellers saw revenues flatten or even decline for the year in this extremely competitive market, and competition intensified in the printer market where computer manufacturers and traditional photographic companies stepped up their efforts to take on established printer manufacturers.

The video equipment index posted its 12th straight annual decline, falling 9.0% in 2005 as large retailers aggressively marketed their competitive prices to lure shoppers into television and audio-visual showrooms. Even with plummeting prices, Canadians spent 5.8% more on televisions and audio and video equipment in 2005 than they did a year earlier.¹⁹

The household tools index, which measures price changes for items like hand tools and lawn and garden equipment, fell 3.3% in 2005, the third straight decrease after more than a decade of price stability. Discounted prices have been more regular at large retailers in recent years as manufacturers of leading brands shift production to locations like Mexico in an effort to lower costs.

Of course, not all consumer durables showed price declines. New car prices nudged up 1.8% in 2005, marking the sixth time in seven years that increases in this index were lower than that of the All-items CPI. A higher Canadian dollar and aggressive competition among manufacturers resulted in a slowing of price increases from 2.6% in 2004.

The automotive industry saw solid but unspectacular growth in 2005, as unit sales of passenger cars rose by 3.1% and trucks by 4.0%. All told, dealers sold over 1,630,000 new motor vehicles in 2005, a drop of more than 103,000 units from 2002 levels.²⁰

Energy costs push up prices in east

For the third time in four years, inflation in Prince Edward Island, Nova Scotia and New Brunswick was above the Canadian average. The main reason is rising energy costs in 2005.

Since the Maritime Provinces rely mainly on fuel oil for heating, the run-up in oil prices in 2002, 2004 and 2005 hit these provinces particularly hard.

17. See Diana Wyman, "Stretching or Shrinking? The Textile and Clothing Industries in Canada," *Analysis in Brief*, March 2005, Statistics Canada, Catalogue no. 11-621-MIE2005022, <http://www.statcan.ca/english/research/11-621-MIE/11-621-MIE2005022.htm> (accessed May 2, 2006).

18. See Statistics Canada, CANSIM, table 080-0018.

19. *Ibid.*

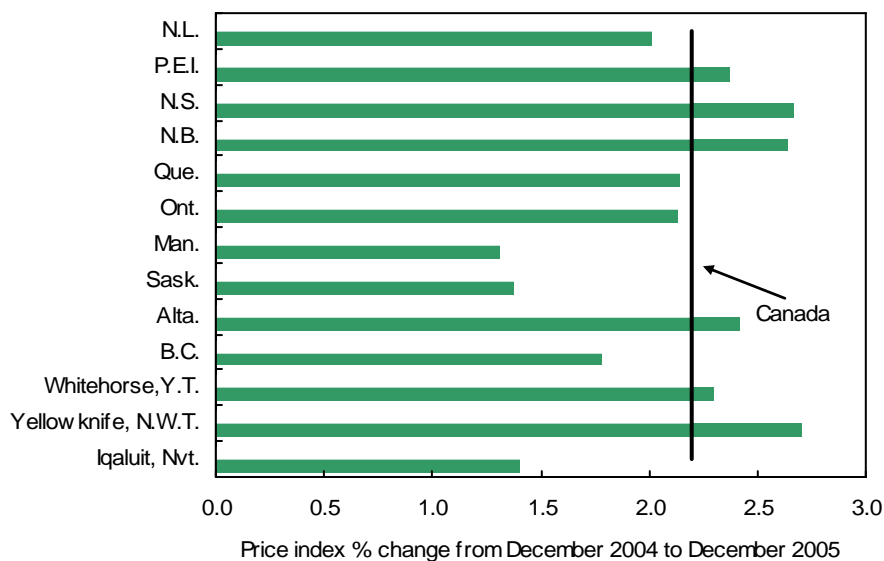
20. Statistics Canada, CANSIM, table 079-0001.

Gasoline prices also rose at a faster rate in Central and Eastern Canada in 2005. Nova Scotia, New Brunswick, Quebec and Ontario all saw the provincial gasoline index rise more than 15.6%; no other province in Canada suffered an increase more than 12.3%.

Accelerating electricity prices, up 6.1% in Nova Scotia and 6.0% in New Brunswick versus 1.6% for Canada as a whole, also pushed up prices in the East.

After recording the second highest rate of inflation in 2004, Manitoba's 2005 CPI increase of 1.3% ranked the lowest in Canada.

Inflation highest in East and North, lowest in Prairies



Source: Statistics Canada, CANSIM, table 326-0001.

Prices rising faster in United States

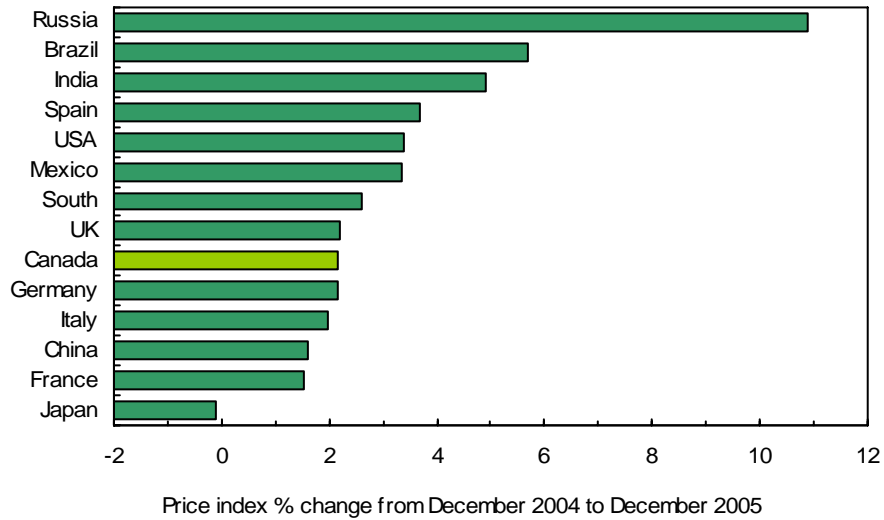
Canada's inflation rate of 2.2% placed it in the middle of the pack among the world's largest economies for the second year in a row. Meanwhile, the United States, with a 3.4% increase in 2005, experienced somewhat higher inflation than in Canada.²¹

Canada's CPI increase was equal to or slightly higher than the inflation rates posted by Europe's biggest economies in 2005. Prices climbed 2.2% in the United Kingdom, 2.1% in Germany, 2.0% in Italy and 1.5% in France.

In Asia, booming China limited its rate of inflation to 1.6%, and Japan again experienced slight overall price deflation, posting a 0.1% price decline.

21. For this paper, rankings of the world's largest economies, as measured by 2004 Gross Domestic Product adjusted for Purchasing Power Parity, come from the International Monetary Fund.

Among world's 14 largest economies, Canada's inflation rate in middle of pack



Source: Multiple sources. For details, contact author at analysisinbrief-analyseenbref@statcan.ca.