



The Daily

Statistics Canada

Monday, December 16, 2002

Released at 8:30 am Eastern time

MAJOR RELEASES

- **Productivity growth and prosperity, 1981 to 2000** 2
The improvement of the labour market situation during the late 1990s was a major factor in boosting average real incomes for Canadians.
-

OTHER RELEASES

Crude oil and natural gas, August 2002	5
Inter-corporate ownership, fourth quarter 2002	5
Restaurants, caterers and taverns, October 2002	6
Steel wire and specified wire products, October 2002	6
Coal and coke statistics, July and August 2002	6
Report on smoking, 1985 to 2001	6

NEW PRODUCTS



MAJOR RELEASES

Productivity growth and prosperity

1981 to 2000

The improvement of the labour market situation during the late 1990s was a major factor in boosting average real incomes for Canadians. The 1990s presented the longest period of continuous positive growth in multifactor productivity during the last 20 years.

This surge picked up during the mid-1990s and peaked in 2000. As a result, average real income from 1995 to 2000 grew at a substantial average of 2.8% a year, as measured by gross domestic product (GDP) per capita. When real income grows at this pace in a sustained way, it means that each generation experiences a doubling of its standard of living (that is, doubling every 25 years).

Trends in gross domestic product per capita, Canadian economy

	1981 to 2000	1981 to 1988	1988 to 2000	1988 to 1995	1995 to 2000
Average annual growth rate (%)					
GDP per capita	1.6	1.9	1.4	0.4	2.8
Labour productivity	1.2	1.2	1.3	1.2	1.3
Hours worked per capita	0.4	0.8	0.1	-0.8	1.5
Ratio of hours worked to employment	0.0	0.0	0.0	-0.3	0.3
Ratio of employment to population aged 15 and over	0.1	0.4	0.0	-0.7	0.8
Ratio of population aged 15 and over to overall population	0.2	0.3	0.2	0.1	0.3

Note: Numbers may not add up because of rounding.

The surge of the post-1995 period partly overcame a poor performance earlier in the decade. During the 1990s as a whole, real income advanced at an annual average rate of 1.4%, down from 1.9% during the 1980s. This slowdown was a reflection of slower growth in labour utilization (hours worked per capita). In the 1980s, labour utilization increased an average of 0.8% a year, whereas during the 1990s it increased an average of only 0.1%.

In contrast, growth in labour productivity remained virtually unchanged between these two periods. Productivity growth proceeded at much the same pace in the 1990s as it did in the 1980s. The overall decline in growth in GDP per capita in the early 1990s then is the result not of the productivity performance, but of developments and choices made in the Canadian labour market.

Note to readers

Labour productivity is the amount of output produced per unit of labour used. **Multifactor productivity** is the amount of output produced per unit of combined input of labour and capital such as buildings, machinery, equipment, and so on.

This release uses a simple relationship to illustrate just how important productivity growth is to prosperity. Prosperity is measured as gross domestic product per capita — a measure subject to a number of criticisms as a welfare indicator, but a meaningful and useful indicator nonetheless. This measure can be broken down into three components: labour productivity, average hours worked and the number of jobs per capita. The last two components are sometimes combined and referred to as the **rate of labour utilization**. This measures the extent to which the population is actively engaged in employment activity, that is, hours worked per head of population.

Productivity revival during late 1990s not confined to just one sector

The late 1990s brought a major turnaround in growth in Canada's prosperity.

Between the early 1990s and the late 1990s, the rate of growth in labour productivity increased from an annual average of 1.2% to 1.8%, largely a result of the revival in multifactor productivity.

Growth in multifactor productivity, a comprehensive measure of production efficiency, is measured by the increase in output minus the growth of combined inputs (labour and capital). It is an important determinant of the standard of living.

The same surge in productivity occurred in the United States. Owing to a surge in the intensity of information technology capital and growth in multifactor productivity, the rate of growth in labour productivity in the United States doubled from 1.4% to 2.8% between these two periods.

The revival in the growth of multifactor productivity in Canada during the late 1990s was not confined to only one sector. There was a strong productivity revival after 1995 in major sectors of the economy such as retail trade, communications and other utilities, and finance, insurance and real estate.

Parallel to the gains, two major sectors, manufacturing and wholesale, experienced a deceleration in productivity in the late 1990s. Part of the success of some industries, such as retail trade and finance, insurance and real estate, is linked to information technology.

Sectoral sources of multifactor productivity revival, business sector

	1981 to 1995	1995 to 2000
	Average annual growth rate (%)	
Agricultural and related services	3.2	3.1
Fishing and trapping	-1.5	0.8
Logging and forestry	1.4	1.1
Mining, quarrying and oil wells	1.1	-3.5
Manufacturing	1.6	0.3
Construction	-1.1	-0.6
Transportation and storage	1.6	0.6
Communications and other utilities	0.4	2.6
Wholesale trade	2.2	1.6
Retail trade	-0.1	2.8
Finance, insurance and real estate	-0.8	1.2
Other services	-1.8	-1.2

The financial sector has been restructured to operate much more through information technology (for example, ATMs, Internet and phone banking) than through traditional face-to-face contacts.

Likewise, information technology played a part in the restructuring of retailing activities. Retailers were able to use bar code and scanning technology and inventory management systems as part of the process of transforming retailing from a storage-based to a fast flow-through operation. These two industries reported very strong growth of information technology capital during the late 1990s.

Trends in information technology capital for Canadian sectors

	1981 to 1995	1995 to 2000
	Average annual growth rate (%)	
Agricultural and related services	10.9	20.0
Fishing and trapping	1.3	10.8
Logging and forestry	9.8	-0.8
Mining, quarrying and oil wells	6.9	23.4
Manufacturing	43.6	16.7
Construction	20.6	18.7
Transportation and storage	14.2	15.8
Communications and other utilities	14.6	10.5
Wholesale trade	29.2	24.6
Retail trade	21.8	28.5
Finance, insurance and real estate	19.4	21.1
Other services	5.0	4.0

There may also be links between information technology and productivity at the firm level in other industries that, because of inter-firm differences in these and other factors, do not translate as readily into industry trends.

Updated data on industry productivity measures

An update of the annual data on the productivity indexes for industries in the business sector is now available. This update, which supplements the aggregate estimates for the business sector published in *The Daily* on July 12, covers the period from 1981 to 1997 for industries in detail and the period from 1981 to 2000 for 16 industry groups.

The estimates presented here on multifactor productivity — the growth of output minus the growth of the combined inputs — reflect major changes to the methods of measuring output and inputs. The output series take account of the capitalization of software expenditures adopted by the Canadian System of National Accounts on May 31, 2001. The new methodology for inputs recognizes that different asset classes and different types of workers have different productive characteristics.

As a result of these changes, the Canadian Productivity Accounts now use methods and concepts similar to those recommended by the productivity manual published in 2001 by the Organisation for Economic Co-operation and Development. This also helps to improve comparability with estimates published by the US Bureau of Labor Statistics.

The different methodology changes to the Canadian Productivity Accounts are described and illustrated in the 2002 edition of *Productivity growth in Canada*, the reference publication on productivity in Canada. Chapter 3 describes the new methodology for constructing the labour input, which incorporates substitution between various heterogeneous types of labour (for example, workers cross-classified by age, education and experience).

The new methodology for the capital input, described in Chapter 4, recognizes that tangible assets have different service lives, depreciation rates, tax treatments and, ultimately, different marginal products. Estimates of the capital input are based on a new methodology for estimating depreciation, described in Chapter 2. This methodology, recommended by international experts on the measurement of capital, is based on age-price profiles of individual assets.

Finally, chapters 1 and 5 illustrate the relevance of the concepts of unit labour cost and of the capital and labour inputs in analysing the economic performance of Canada compared with the United States.

In the business sector productivity framework, the growth in output is measured as real GDP — deliveries in constant chained dollars of final goods and services by the business sector to domestic households, investments, government and non-profit institutions, and net exports to other countries.

Multifactor productivity growth estimates at the industry level make use of different measures of output: real value added, gross output and sectoral output (or the net gross output of intra-industry transactions). The statistical series on real value added reflect the contribution of both capital and labour to the conversion of intermediate inputs to final products by industry. Gross output consists of sales and other income plus changes in inventory. Sectoral output is gross output net of intra-industry transactions.

The data in this release, which are based on the 1980 Standard Industrial Classification, will be replaced in the fall of 2003 by revised estimates based on the new North American Industry Classification System.

Available on CANSIM: table 383-0001.

Information on methods and data quality available in the Integrated Meta Data Base: survey number 1402.

The 2002 edition of *Productivity growth in Canada* (15-204-XIE, \$35) is now available. The paper version (15-204-XPE, \$46) will be available in January 2003. See *How to order products*.

For more information, contact Tarek M. Harchaoui (613-951-9856; fax: 613-951-5403; harctar@statcan.ca), Micro-economic Analysis Division. ■

OTHER RELEASES

Crude oil and natural gas

August 2002 (preliminary)

Crude oil and equivalent hydrocarbon production totalled 11 572 600 cubic metres in August, up 6.1% from August 2001. Exports, which accounted for 61.5% of total production, increased 12.8% from August 2001.

The year-to-date production of crude oil and equivalent hydrocarbons at the end of August increased 5.9% from the same period of 2001, and crude oil exports grew 4.4%.

Crude oil and natural gas

	Aug. 2001	Aug. 2002	Aug. 2001 to Aug. 2002 % change
Thousands of cubic metres			
Crude oil and equivalent hydrocarbons¹			
Production	10 908.9	11 572.6	6.1
Exports	6 307.8	7 113.1	12.8
Imports ²	4 378.6	4 636.9	5.9
Refinery receipts	8 869.8	8 906.6	0.4
Millions of cubic metres			
Natural gas³			
Marketable production	14 241.4	14 091.4	-1.1
Exports	9 515.1	9 093.7	-4.4
Domestic sales ⁴	3 917.2	3 838.4	-2.0
Jan. to Aug. 2001 Jan. to Aug. 2002 Jan.-Aug. 2001 to Jan.-Aug. 2002			
Thousands of cubic metres			
Crude oil and equivalent hydrocarbons¹			
Production	85 625.7	90 705.1	5.9
Exports	53 239.4	55 557.1	4.4
Imports ²	37 087.5	33 614.9	-9.4
Refinery receipts	69 830.8	68 146.4	-2.4
Millions of cubic metres			
Natural gas³			
Marketable production	114 260.9	113 992.3	-0.2
Exports	73 366.4	70 521.2	-3.9
Domestic sales ⁴	44 575.1	46 350.6	4.0

¹ Disposition may differ from production because of inventory change, industry own-use, etc.

² Crude oil received by Canadian refineries from foreign countries for processing. Data may differ from International Trade Division (ITD) estimates because of timing differences and the inclusion of crude oil landed in Canada for future re-export in the ITD data.

³ Disposition may differ from production because of inventory change, usage as pipeline fuel, pipeline losses, line-pack fluctuations, etc.

⁴ Includes direct sales.

Marketable natural gas production decreased 1.1% from August 2001, and domestic sales dropped 2.0%.

Natural gas exports, which accounted for 64.5% of total marketable production, fell 4.4% from August 2001.

Year-to-date domestic sales grew 4.0%, but exports of natural gas (-3.9%) and marketable production of natural gas (-0.2%) both fell.

Available on CANSIM: tables 126-0001 and 131-0001.

Data relating to this release are available on CANSIM at the national level only to August 2002. Provincial data are available to March 2002. Additional provincial data will become available in January 2003.

For more information, or to enquire about the concepts, methods or data quality of this release, contact the dissemination officer (1-866-873-8789; 613-951-9497; energ@statcan.ca), Manufacturing, Construction and Energy Division. ■

Inter-corporate ownership

Fourth quarter 2002

There are over 1 million incorporated businesses in Canada. Currently, the *Inter-corporate ownership* database tracks the ownership of 87,614 of the largest of these corporations resident in Canada. The majority (84.5%) of these corporations are Canadian-controlled. Among foreign-controlled corporations, the United States leads the way, accounting for just over half of the 13,538 large corporations that are under foreign control. Next come the United Kingdom and Germany, but together they account for less than 20% of large foreign-controlled corporations.

Country of control

	Corporations	
	Number	%
Canada	74,076	84.5
United States	7,143	8.2
United Kingdom	1,286	1.5
Germany	914	1.0
France	684	0.8
Japan	552	0.6
Hong Kong	445	0.5
Switzerland	419	0.5
Netherlands	384	0.4
Australia	207	0.2
Italy	135	0.2
Other foreign countries	1,369	1.6
Total	87,614	100.0

The overwhelming majority of US-controlled corporations (58.3%) are resident in Ontario. Quebec is a distant second at 13.5%, followed by Alberta at 10.6% and British Columbia at 9.0%.

Province of residence, United States corporations

Province	Corporations	
	Number	%
Ontario	4,164	58.3
Quebec	964	13.5
Alberta	758	10.6
British Columbia	642	9.0
Nova Scotia	265	3.7
Other Provinces	350	4.9
Total	7,143	100.0

The *Inter-corporate ownership* database provides up-to-date information reflecting recent corporate mergers and takeovers and other substantial changes for the largest Canadian corporations. Ultimate corporate control is determined through a careful study of holdings by corporations, the effects of options, insider holdings, convertible shares and interlocking directorships. This information is based on non-confidential returns filed by Canadian corporations under the *Corporations Returns Act*. This is a unique database of "who owns whom" in Canada. It contains legal corporate name(s), the country of control, the Standard Industrial Classification code, the province of the head office, the enterprise parent name and the percentage of voting rights owned. Users can search, sort, evaluate and download data by company name, company types, industry, province, country of control, and more. It also allows the user to cross-tabulate a search by selecting a number of companies in a particular industry and then cross-tabulating by the province of residence or country of control, and so forth.

Information on methods and data quality available in the Integrated Meta Data Base: survey number 2503.

The fourth quarter 2002 issue of *Inter-corporate ownership* on CD-ROM (61-517-XCB, \$350/\$995) is now available. See *How to order products*.

For general information or to order data, contact Jeannine D'Angelo (613-951-2604; jeannine.dangelo@statcan.ca). To enquire about the concepts, methods or data quality of this release, contact David Sabourin (613-951-3735; sabodav@statcan.ca), Industrial Organization and Finance Division. ■

Restaurants, caterers and taverns

October 2002

Total receipts of restaurants, caterers and taverns in October were an estimated \$2.81 billion, up 5.2% from the October 2001 estimate.

Available on CANSIM: table 355-0001.

The October 2002 issue of *Restaurant, caterer and tavern statistics* (63-011-XIE, \$6/\$55) will be available soon. See *How to order products*.

For more information, or to enquire about the concepts, methods or data quality of this release, contact Bill Birbeck (613-951-3506), Services Industries Division. ■

Steel wire and specified wire products

October 2002

Data on steel wire and specified wire products production for October are now available.

Available on CANSIM: table: 303-0010.

Information on methods and data quality available in the Integrated Meta Data Base: survey number 2106.

The October 2002 issue of *Steel wire and specified wire products*, Vol. 57, no. 10 (41-006-XIB, \$5/\$47), is now available. See *How to order products*.

For more information, or to enquire about the concepts, methods or data quality of this release, contact the dissemination officer (1-866-873-8789; 613-951-9497; manufact@statcan.ca), Manufacturing, Construction and Energy Division. ■

Coal and coke statistics

July and August 2002

Data on coal and coke statistics for July and August are now available.

Available on CANSIM: table 303-0016.

For more information or to order data, contact the dissemination officer (1-866-873-8789; 613-951-9497; energ@statcan.ca). ■

Report on smoking

1985 to 2001

The working paper, *Report on smoking in Canada*, the second in a series, analyses the comparability of surveys conducted by Statistics Canada on smoking prevalence and daily cigarette consumption from 1985 to 2001. It

also examines the statistical significance and changes in the data among these survey years.

From 1985 to 2001, Statistics Canada conducted 15 surveys that asked questions about smoking. Most of the surveys had questions on smoking that are comparable, although caution should be used when comparing results from some of these surveys.

From 1985 to 1991, prevalence of current smoking, that is, daily smokers and occasional smokers, declined overall, for both sexes and all age groups except those aged 15 to 24. Larger declines occurred from 1991 to 2001.

Although current smoking prevalence for youths did not significantly change from 1985 to 1994/95, there was a significant decrease from 28.5% in 1994/95 to 22.5% in 2001.

Among the provinces, Newfoundland and Labrador, Nova Scotia, Quebec, Ontario, Saskatchewan, Alberta

and British Columbia experienced most of their declines in current smoking prevalence from 1994/95 onwards. All provinces experienced some level of declines over the entire period from 1985 to 2001.

Information on methods and data quality available in the Integrated Meta Data Base: survey number 4440.

The paper *Report on smoking in Canada, 1985 to 2001*, (82F0077XIE, free), is now available free on Statistics Canada's website (www.statcan.ca). From the *Products and services* page, under *Browse our Internet publications*, choose *Free*, then *Health*.

For more information, or to enquire about concepts, methods or data quality of this release, contact Jason Gilmore (613-951-7118; jason.gilmore@statcan.ca), Health Statistics Division. ■

NEW PRODUCTS

Productivity growth in Canada, 1981–2000
Catalogue number 15-204-XIE (\$35).

Steel wire and specified wire products, October 2002,
Vol. 57, no. 10
Catalogue number 41-006-XIB (\$5/\$47).

Inter-corporate ownership, Fourth quarter 2002
Catalogue number 61-517-XCB (\$350/\$995).

Report on smoking prevalence in Canada, 1985–2001
Catalogue number 82F0077XIE
(free).

Science statistics, Vol. 26, no. 8
Catalogue number 88-001-XIB (\$6/\$59).

All prices are in Canadian dollars and exclude sales tax. Additional shipping charges apply for delivery outside Canada.

Catalogue numbers with an -XIB or an -XIE extension are Internet versions; those with -XMB or -XME are microfiche; -XPB or -XPE are paper versions; -XDB are electronic versions on diskette and -XCB are electronic versions on compact disc.

How to order products

Order products by phone:

Please refer to the • Title • Catalogue number • Volume number • Issue number • Your VISA or MasterCard number.

In Canada and the United States call:

1-800-267-6677

From other countries call:

1-613-951-7277

To fax your order:

1-877-287-4369

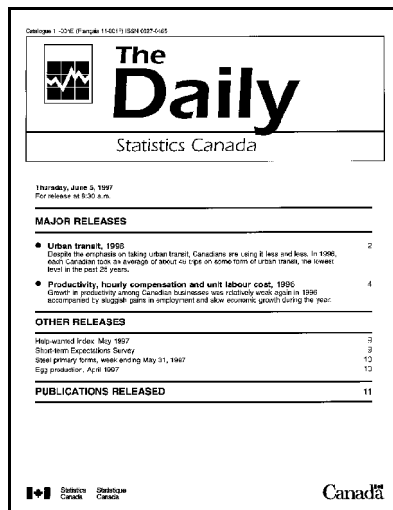
Address changes or account inquiries:

1-800-700-1033

To order a product by mail write: Statistics Canada, Circulation Management, Dissemination Division, Ottawa, K1A 0T6. Include a cheque or money order payable to **Receiver General of Canada/Publications**. Canadian customers add 7% GST and applicable PST.

To order by Internet: write to order@statcan.ca or download an electronic version by accessing Statistics Canada's Web site (www.statcan.ca) under the headings *Our products and services* and *Publications for sale* (\$).

Authorized agents and bookstores also carry Statistics Canada's catalogued publications.



Statistics Canada's official release bulletin

Catalogue 11-001-XIE.

Published each working day by the Communications Division, Statistics Canada, 10-H, R.H. Coats Bldg., Tunney's Pasture, Ottawa, Ontario K1A 0T6.

To access *The Daily* on the Internet, visit our site at <http://www.statcan.ca>. To receive *The Daily* each morning by e-mail, send an e-mail message to listproc@statcan.ca. Leave the subject line blank. In the body of the message, type "subscribe daily firstname lastname".

Published by authority of the Minister responsible for Statistics Canada. © Minister of Industry, 2002. Citation in newspaper, magazine, radio, and television reporting is permitted subject to the requirement that Statistics Canada is acknowledged as the source. Any other reproduction is permitted subject to the requirement that Statistics Canada is acknowledged as the source on all copies as follows: Statistics Canada, *The Daily*, catalogue 11-001-XIE, along with date and page references.