



The Daily

Statistics Canada

Thursday, April 3, 2003

Released at 8:30 a.m. Eastern time

MAJOR RELEASES

There are no major releases today.

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OTHER RELEASES

Sources of the Canada–United States productivity growth gap

1981 to 2000

Much of the recent debate in Canada over productivity has focussed on the productivity growth gap between Canada and the United States. However, fewer efforts have been directed to tracing and quantifying its sources. The research paper *A frontier approach to Canada–United States multifactor productivity performance*, which attempts to fill the void, explores the sources of the gap between the two nations.

The paper uses an experimental method that benchmarks the multifactor productivity growth of various industries against an estimated "best practice" productivity frontier. This method is used to obtain additional insights into the sources of the Canada–United States productivity gap. This approach enables productivity growth to be decomposed into two components: technical efficiency and technical change.

The measure of technical efficiency shows whether production is getting closer (catching up) or further away from the best North American practice over time. This component quantifies the effectiveness of the technology diffusion. The measure of technical change captures the improvement in the best practice over time, a reflection of innovation.

It is important to know whether the Canada–United States productivity growth gap is the result of a slower rate of innovation or of the fact that technology improvements that are made by industry leaders diffuse only slowly to industry followers. If the gap occurs in technical change, best practice technology is not being brought to Canada. If it occurs on the technical efficiency side, best-practice technology is not being diffused once it arrives.

Using this method, this study finds that over the 1981–2000 period, productivity growth in the aggregate business sector in Canada was behind that of the United States, primarily because of the deterioration in technical efficiency in Canada. Thus, the primary problem was the slower rate of diffusion of best-practice technology in Canada.

The productivity growth gap that emerged in the second half of the 1980s was mostly due to the deterioration of efficiency in Canada. By 1992, Canada's efficiency was only 90% of the best practice, established by the United States. Canada's business sector efficiency improved after 1993, and by the end of the 1990s, it nearly caught up to the North American best practice.

Multifactor productivity trend and its components, Business sector

	Multifactor productivity		Technical change		Technical efficiency	
	Average annual growth in percentage					
	Canada	United States	Canada	United States	Canada	United States
1981 to 2000	0.60	0.88	0.76	0.88	-0.16	0.00
1981 to 1988	0.56	0.98	0.72	0.98	-0.16	0.00
1988 to 2000	0.63	0.83	0.78	0.83	-0.15	0.00
1995 to 2000	1.14	1.06	0.66	1.06	0.48	0.00

Over the 1995–2000 period, the productivity growth gap vanished, largely as a result of the remarkable improvement in Canada's efficiency, a reflection of a faster and more effective diffusion of technology within the Canadian business sector. But Canada still lagged behind in terms of technical change, or innovation.

The manufacturing sector presents a similar story. In this sector, the productivity growth gap in favour of the United States during the 1981–1997 period, much like its business sector counterpart, was a result of Canada's efficiency degradation compared with the United States. Both countries showed an almost identical pace of technical change over this period (7.5% for Canada and 7.6% for the United States).

Over the last two decades, an increasing number of manufacturing industries have moved away from the North American best practice in both Canada and United States, a reflection of an efficiency deterioration. This suggests that the technology diffusion is endemic in the North American manufacturing sector. In 1982, all of the 38 industries in this sector considered in this study had an efficiency score higher than 70%, compared with 17 industries in 1988, and only 6 industries in 1997.

A large proportion of Canadian industries improved their efficiency during the mid-1990s. In 1997, for example, almost one-half of the least technically efficient North American industries were Canadian. This was a sharp decline compared with 1988, when Canada had nearly two-thirds of the least technically efficient industries, but still high in comparison to the early 1980s.

The research paper *A frontier approach to Canada–United States multifactor productivity performance* (11F0027MIE2003010, free) is now available on Statistics Canada's website (www.statcan.ca). From the *Our products and services* page, under *Browse our Internet publications*, choose *Free*, then *National accounts*. Information on related papers on productivity is also available (www.statcan.ca/english/studies/eaupdate/prod.htm).

For more information, or to enquire about the concepts, methods or data quality of this release, contact Tarek M. Harchaoui (613-951-9856; fax: 613-951-5403; harctar@statcan.ca), Micro-economic Analysis Division. ■

Steel primary forms — weekly data

Week ending March 29, 2003 (preliminary)

Steel primary forms production for the week ending March 29 totalled 330 546 metric tonnes, up 1.7% from 324 899 tonnes a week earlier, but down 0.6% from 332 663 tonnes in the same week of 2002.

The year-to-date total as of March 29 was 3 832 233 tonnes, down 4.0% from 3 990 833 tonnes in the same period of 2002.

Information on methods and data quality available in the Integrated Meta Data Base: survey number 2131.

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. ■

Construction type plywood

January 2003

Data on construction type plywood are now available for January.

Available on CANSIM: table 303-0005.

Information on methods and data quality available in the Integrated Meta Data Base: survey number 2138.

The January 2003 issue of *Construction type plywood*, Vol. 51, no. 1 (35-001-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. ■

For-hire motor carriers of freight, top carriers

Fourth quarter 2002

The top 82 for-hire motor carriers of freight (Canada-based trucking companies earning \$25 million or more annually) generated operating revenues of \$1.8 billion and expenses of \$1.7 billion in the fourth quarter. Average per-carrier revenue increased by a little more than 2% from the fourth quarter of 2001, reaching \$21.9 million. Average per-carrier expenses increased 3% to 20.9 million.

The top for-hire carriers' operating ratio (operating expenses divided by operating revenues) deteriorated to 0.95 in the fourth quarter from 0.94 in the fourth quarter of 2001. A ratio of greater than 1.00 represents an operating loss.

Information on methods and data quality available in the Integrated Meta Data Base: survey number 2748.

For more information, or to enquire about the concepts, methods or data quality of this release, contact Jean-Robert Larocque (613-951-2486; fax: 613-951-0579; laroque@statcan.ca) or Denis Pilon (613-951-2707; denis.pilon@statcan.ca), Transportation Division. ■

Monthly railway carloadings

December 2002

The freight loaded by railways in Canada in December totalled 18.6 million metric tonnes (excluding intermodal traffic), up 1.5% from December 2001. The intermodal tonnage, represented by containers on flat cars and trailers on flat cars, rose 9.6% from December 2001 to 2.1 million tonnes.

Available on CANSIM: table 404-0002.

Information on methods and data quality available in the Integrated Meta Data Base: survey number 2732.

The December 2002 issue of *Monthly railway carloadings*, Vol. 79, no. 12 (52-001-XIE, \$8/\$77) 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 Jean-Robert Larocque (1-866-500-8400; fax: 613-951-0009; transportationstatistics@statcan.ca), Transportation Division. ■

NEW PRODUCTS

Gross domestic product by industry, January 2003,
Vol. 17, no. 1
Catalogue number 15-001-XIE (\$11/\$110).

Construction type plywood, January 2003, Vol. 51,
no. 1
Catalogue number 35-001-XIB (\$5/\$47).

Monthly railway carloadings, December 2002,
Vol. 79, no. 12
Catalogue number 52-001-XIE (\$8/\$77).

Industry price indexes, January 2003, Vol. 29, no. 1
Catalogue number 62-011-XIE (\$17/\$163).

Industry price indexes, January 2003, Vol. 29, no. 1
Catalogue number 62-011-XPE (\$22/\$217).

Labour force information, week ending
March 15, 2003
Catalogue number 71-001-XIE (\$8/\$78).
Available at 7 a.m. Friday, April 4

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.

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Statistics Canada

Thursday, June 5, 1997
For release at 8:30 a.m.

MAJOR RELEASES

- **Urban transit, 1996** 2
Despite the emphasis on taking urban transit, Canadians are using it less and less. In 1996, each Canadian took an average of about six trips on some form of urban transit, the lowest level in the past 25 years.
- **Productivity, hourly compensation and unit labour cost, 1996** 4
Growth in productivity among Canadian businesses was noticeably weak again in 1996, accompanied by sluggish gains in employment and slow economic growth during the year.

OTHER RELEASES

- Map-warmed index, May 1997 3
- Short-term Expectations Survey 8
- Steel primary forms, week ending May 31, 1997 12
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