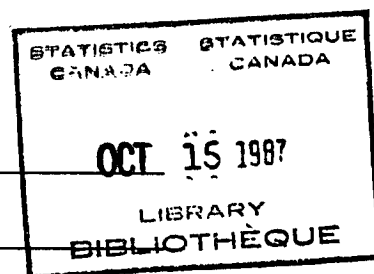


# The Daily

## Statistics Canada

Thursday, October 15, 1987



### Major Releases

#### Survey of Manufacturing Technology, June 1987

- Half of all manufacturing establishments surveyed used advanced technology in their operations.

2

#### Capacity Utilization in Canadian Manufacturing, Second Quarter 1987

- Capacity utilization edged up 0.3% from the preceding quarter to 80.0%.

3

#### University Finance Trend Analysis, 1976-77 to 1985-86

- University expenditures more than doubled during this period, reaching \$6.7 billion.

6

#### Sales of Natural Gas, August 1987

- Sales of natural gas in Canada rose 6.9% from the year-earlier level.

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### Data Availability Announcements

Electric Storage Batteries, August 1987

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Cement, August 1987

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Sawmills East of the Rockies, July 1987

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Exports by Commodity, August 1987

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Statistics Canada  
Statistique Canada

Canada

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## Major Releases

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### Survey of Manufacturing Technology

June 1987

A new Statistics Canada initiative, a survey of the current and planned use of advanced technologies in Canadian manufacturing, indicates that half of the manufacturing plants surveyed currently use at least one advanced technology in their factory operations. These manufacturers were responsible for about one-half of the value of 1986 manufacturing shipments.

Four industries (ranked by value of shipments from the industry) led the field in use of technology. These were transportation equipment, primary metals, electrical and electronic products, and machinery. These four industries were also the principal users of robots.

The survey of manufacturing technology was conducted in June as part of the monthly survey of shipments, inventories and orders. Eighteen advanced technologies were surveyed. They fell into five general categories: design and engineering; fabrication and assembly; automated material handling; computer-based inspection, sensor and testing

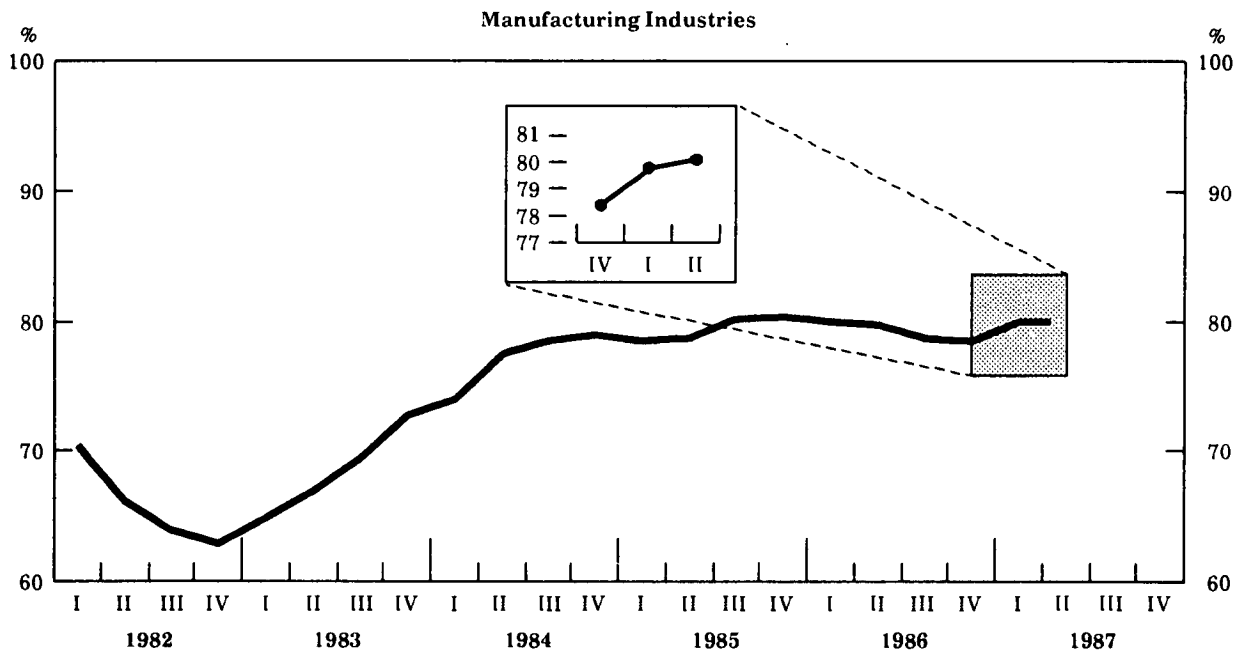
equipment; and communications and control. Of the 18 individual technologies, four led the field when ranked by the value of 1986 shipments from establishments using them. These were: programmable controllers; industrial computers used for control on the factory floor; computer-based inspection, sensor, and testing equipment applied to the production process; and computer-based inspection, sensor, and testing equipment applied to the final product.

Other highlights from this report are:

- Ontario led the provinces in advanced technology use, when ranked by value of shipments, followed by Saskatchewan, New Brunswick, and British Columbia.
- Half of the plants surveyed did not use any advanced manufacturing technology. However, these manufacturers were responsible for only 19% of the total value of 1986 shipments.

A summary report is available. A more extensive report is in preparation. Contact Fred Gault (613-951-3423), Classification Systems Branch.

## Capacity Utilization Rates



### Capacity Utilization in Canadian Manufacturing

Second Quarter 1987

Capacity utilization in the manufacturing industries edged up 0.3% to 80.0% in the second quarter of 1987 from 79.8% in the preceding quarter. A comparison of the utilization rates posted since the first quarter of 1982 shows that the rate recorded in this quarter is well above the average of 74.5% for the period and is only marginally less than the peak of 80.3% recorded in the fourth quarter of 1985.

Utilization rates in durable manufacturing industries increased by 0.5% in the second quarter of 1987 to 75.2% from 74.8% in the first quarter. In the non-durable sector, capacity utilization rates showed a marginal drop of 0.2% to 85.3% in the second quarter from 85.5%.

### Highlights (Second Quarter)

- Industries producing building materials showed mixed results in the changes to their levels of capacity utilization: wood industries decreased by 2.0%; non-metallic mineral products industries decreased 0.7% from their five-year peak of 80.1% recorded in the first quarter of 1987; and fabricated metal products industries increased 2.3%.
- Manufacturers of goods for use inside residential and non-residential structures also posted differing results: electrical and electronic products industries increased 9.4% to a new historical peak of 100.0%; textile products industries increased 1.3%; and furniture and fixture industries decreased 1.5%, mainly due to a drop in production of household furniture.

(continued on page 4)

- Industries that produce fabricated materials for further processing and/or inclusion in end products showed strong movements in both directions: primary textiles industries increased 4.8% to a new historical peak of 100.0%; chemicals and chemical products industries increased 4.3%, the third quarter in a row that higher rates have been recorded; plastics products industries increased 1.5%; primary metals industries decreased 0.3%; and rubber products industries decreased 5.9%.
- The two major manufacturing industries that produce goods for export posted lower levels of capacity utilization: the paper and allied industries rate decreased 1.7% (they still recorded the second highest rate for the last five years); and transportation equipment industries decreased 5.2%.
- Manufacturers of miscellaneous end products, mainly consumer goods, all showed small decreases: other manufacturing industries (which have been steadily dropping since the first quarter of 1986) -1.6%; food industries -1.2%; beverage industries -0.8%; clothing industries -0.3%; and tobacco industries -0.2%.

**Note to Users:**

In calculating the capacity utilization rates one of the measures used is the index of gross domestic product. This index was revised recently and the revisions affected both the trends and levels of the capacity utilization rates.

For the paper and allied industries the capacity utilization rates presented in this publication are a weighted average of a utilization rate calculated using Statistics Canada methodology and a rate calculated by the Canadian Pulp and Paper Manufacturing Association.

Trend adjustments were made for the plastics products industries.

(see table on page 5)

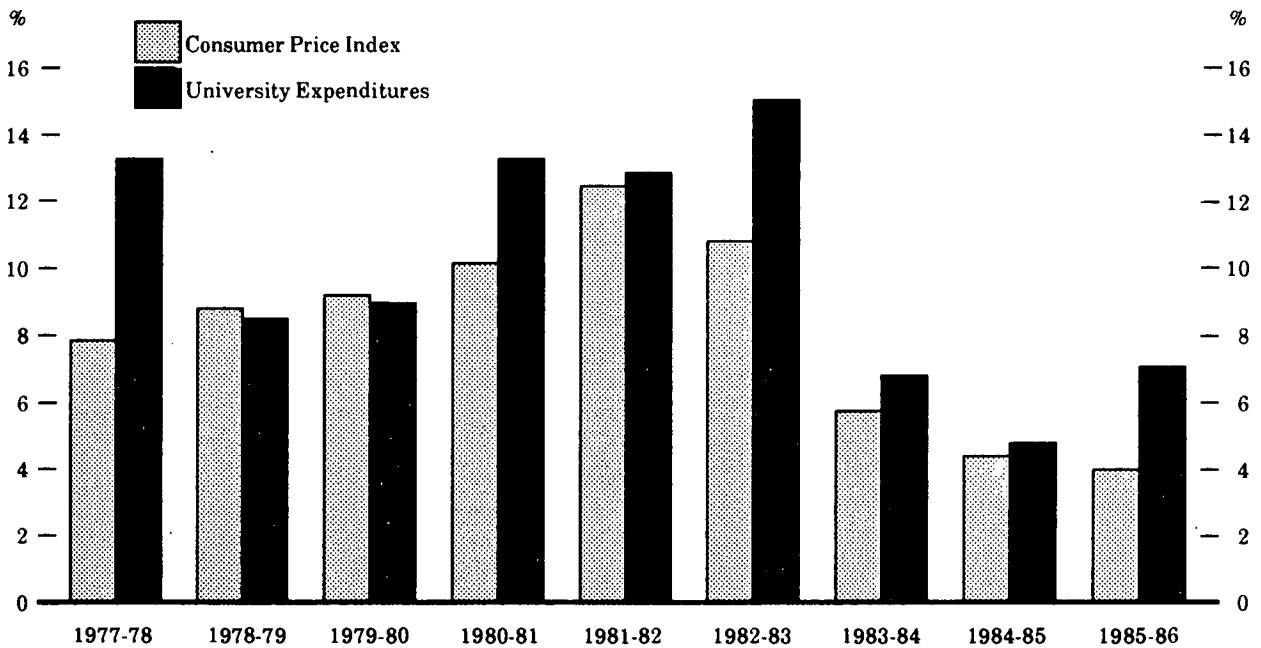
Available on CANSIM: matrix 3540.

Contact D. Wallace (613-951-9685) or R. Landry (613-951-2579), Science, Technology and Capital Stock Division.

**Capacity Utilization Rates in Canadian Manufacturing**  
Second Quarter 1987 and Quarterly Percentage Changes

| Industry                                    | II<br>1987  | QII '87/<br>QI '87 | I<br>1987   | QI '87/<br>QIV '86 | IV<br>1986  | QIV '86/<br>QIII '86 | III<br>1986 |
|---|-------------|--------------------|-------------|--------------------|-------------|----------------------|-------------|
| <b>Total manufacturing</b>                  | <b>80.0</b> | <b>0.3</b>         | <b>79.8</b> | <b>1.8</b>         | <b>78.4</b> | <b>-0.4</b>          | <b>78.7</b> |
| <b>Durable manufacturing industries</b>     | <b>75.2</b> | <b>0.5</b>         | <b>74.8</b> | <b>1.6</b>         | <b>73.6</b> | <b>0.3</b>           | <b>73.4</b> |
| Wood industries                             | 86.8        | -2.0               | 88.6        | 10.8               | 80.0        | -0.2                 | 80.2        |
| Furniture and fixture                       | 73.8        | -1.5               | 74.9        | 0.1                | 74.8        | -0.5                 | 75.2        |
| Primary metal                               | 72.3        | -0.3               | 72.5        | 0.3                | 72.3        | 6.5                  | 67.9        |
| Fabricated metal products                   | 74.6        | 2.3                | 72.9        | 1.5                | 71.8        | -1.8                 | 73.1        |
| Machinery                                   | 58.1        | -1.5               | 59.0        | 1.7                | 58.0        | -4.8                 | 60.9        |
| Transportation equipment                    | 62.3        | -5.2               | 65.7        | -3.5               | 68.1        | -2.4                 | 69.8        |
| Electrical and electronic products          | 100.0       | 9.4                | 91.4        | 1.9                | 89.7        | 3.5                  | 86.7        |
| Non-metallic mineral products               | 79.5        | -0.7               | 80.1        | 6.2                | 75.4        | 3.0                  | 73.2        |
| Other manufacturing industries              | 72.6        | -1.6               | 73.8        | -1.5               | 74.9        | -4.5                 | 78.4        |
| <b>Non-durable manufacturing industries</b> | <b>85.3</b> | <b>-0.2</b>        | <b>85.5</b> | <b>2.3</b>         | <b>83.6</b> | <b>-1.2</b>          | <b>84.6</b> |
| Food  | 79.3        | -1.2               | 80.3        | 0.4                | 80.0        | -0.1                 | 80.1        |
| Beverage                                    | 61.4        | -0.8               | 61.9        | 1.1                | 61.2        | -0.5                 | 61.5        |
| Tobacco products                            | 60.4        | -0.2               | 60.5        | -0.2               | 60.6        | -3.7                 | 62.9        |
| Rubber products                             | 82.0        | -5.9               | 87.1        | 3.8                | 83.9        | 1.1                  | 83.0        |
| Plastics products                           | 96.3        | 1.5                | 94.9        | -0.1               | 95.0        | 0.7                  | 94.3        |
| Leather and allied products                 | 90.9        | -3.0               | 93.7        | -3.9               | 97.5        | 1.9                  | 95.7        |
| Primary textile                             | 100.0       | 4.8                | 95.4        | 8.2                | 88.2        | -4.5                 | 92.4        |
| Textile products                            | 98.8        | 1.3                | 97.5        | 3.1                | 94.6        | 0.2                  | 94.4        |
| Clothing                                    | 96.9        | -0.3               | 97.2        | 3.4                | 94.0        | -3.3                 | 97.2        |
| Paper and allied products                   | 92.5        | -1.7               | 94.1        | 4.3                | 90.2        | 0.4                  | 89.8        |
| Printing, publishing and allied industries  | 97.2        | -0.5               | 97.7        | 0.3                | 97.4        | -1.5                 | 98.9        |
| Refined petroleum and coal products         | 79.5        | -1.4               | 80.6        | 8.0                | 74.6        | -6.8                 | 80.0        |
| Chemical and chemical products              | 73.5        | 4.3                | 70.5        | 1.7                | 69.3        | -3.2                 | 71.6        |

# Annual Percentage Variation of University Expenditures and the Consumer Price Index, Canada, 1977-78 to 1985-86



## University Finance Trend Analysis 1976-77 to 1985-86

University expenditures more than doubled over the 10-year period from 1976-77 to 1985-86, reaching \$6.7 billion. On an annual basis, increases averaged 10% compared to 8% for the Consumer Price Index. However, as a percentage of Gross National Product, university expenditures remained relatively stable during the 10-year period, slipping slightly to 1.4% in 1985-86 from a peak of 1.5% in 1982-83.

The provincial governments' share of university operating revenues declined steadily to 78.9% in 1984-85 from 82.8% in 1976-77, but rebounded slightly to 79.3% in 1985-86. The proportion of funding accruing from student fees increased to 16.1% in 1985-86 from 13.5% in 1976-77.

During the period from 1976-77 to 1985-86, the largest increase in university expenditures was recorded in Alberta where spending almost tripled, reaching a level of \$732 million. This

relatively large rise (12.7% annually on average) was mainly due to significant expenditure increases on research and capital.

During the same period, university spending in the other provinces grew between 9% and 11% annually on average:

|                        |        |
|------------------------|--------|
| • Newfoundland         | 9.2%;  |
| • Prince Edward Island | 10.8%; |
| • Nova Scotia          | 10.6%; |
| • New Brunswick        | 9.3%;  |
| • Quebec               | 10.1%; |
| • Ontario              | 9.6%;  |
| • Manitoba             | 9.2%;  |
| • Saskatchewan         | 10.2%; |
| • Alberta              | 12.7%; |
| • British Columbia     | 9.4%.  |

Order *University Finance Trend Analysis, 1976-77 to 1985-86* (81-260, \$35), now available. Contact François Gendron (613-951-1509), Education, Culture and Tourism Division.

## Sales of Natural Gas

August 1987

Sales of natural gas in Canada during August 1987 totalled 2 437 396 thousand cubic metres (including direct sales), a 6.9% increase from the level recorded the previous year.

On the basis of rate structure information, sales in August 1987 were broken down as follows, with the percentage changes from August 1986 in brackets: residential sales, 309 628 thousand cubic metres (+1.1); commercial sales, 273 361 thousand cubic metres (-0.3) and industrial sales (including direct sales) 1 854 407 thousand cubic metres (+9.2).

Year-to-date figures for the first eight months of 1987 indicate that sales of natural gas amounted to 31 086 368 thousand cubic

metres, a 4.3% decrease from the level recorded during the same period of 1986.

On the basis of rate structure information, year-to-date sales were broken down as follows, with the percentage changes from the corresponding period in 1986 in brackets: residential sales, 7 683 714 thousand cubic metres (-6.2); commercial sales, 6 409 933 thousand cubic metres (-6.5) and industrial sales (including direct sales) 16 992 721 thousand cubic metres (-2.5).

Order the August 1987 issue of *Gas Utilities* (55-002, \$10/\$100), available the third week of November. Contact Gary Smalldridge (613-951-3567), Energy Section, Industry Division.

## Natural Gas Sales

August 1987

|                                 | Rate structure   |                  |                   |                |                   |
|---------------------------------|------------------|------------------|-------------------|----------------|-------------------|
|                                 | Residential      | Commercial       | Industrial        | Direct         | Total             |
| (thousands of cubic metres)     |                  |                  |                   |                |                   |
| New Brunswick                   | 7                | 25               | -                 | -              | 32                |
| Quebec                          | 12 949           | 32 350           | 221 470           | 29 792         | 296 561           |
| Ontario                         | 134 986          | 100 821          | 559 609           | 74 460         | 869 876           |
| Manitoba                        | 14 001           | 11 957           | 35 041            | -              | 60 999            |
| Saskatchewan                    | 22 995           | 13 646           | 79 573            | -              | 116 214           |
| Alberta                         | 83 870           | 72 749           | 717 790           | -              | 874 409           |
| British Columbia                | 40 820           | 41 813           | 136 672           | -              | 219 305           |
| <b>Canada August 1987</b>       | <b>309 628</b>   | <b>273 361</b>   | <b>1 750 155</b>  | <b>104 252</b> | <b>2 437 396</b>  |
| Canada August 1986              | 306 301          | 274 172          | 1 633 266         | 65 563         | 2 279 302         |
| % change                        | 1.1              | -0.3             |                   | 9.2            | 6.9               |
| <b>Year-to-date Canada 1987</b> | <b>7 683 714</b> | <b>6 409 933</b> | <b>16 247 779</b> | <b>744 942</b> | <b>31 086 368</b> |
| Year-to-date Canada 1986        | 8 191 799        | 6 852 479        | 17 133 306        | 302 119        | 32 479 703        |
| % change                        | -6.2             | -6.5             |                   | -2.5           | -4.3              |

Note: Revised figures will be available in the "Gas Utilities" publication (55-002) as well as on CANSIM.

- Nil.

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## Data Availability Announcements

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### Electric Storage Batteries

August 1987

Canadian manufacturers sold 209,336 automotive replacement batteries in August 1987, a decrease of 3.5% from the 216,850<sup>r</sup> batteries sold a year earlier.

Year-to-date sales amounted to 1,262,620 automotive replacement batteries in August 1987, down 6.4% from 1,349,091<sup>r</sup> for the same period in 1986.

Information on sales of other types of storage batteries is also available.

Order the August 1987 issue of *Factory Sales of Electric Storage Batteries* (43-005, \$4/\$40), available the week of October 19. Contact J.P. Beauparlant (613-951-3526), Industry Division.

### Cement

August 1987

Manufacturers shipped 1 243 678 tonnes of cement in August 1987, an increase of 9.0% from the 1 141 093 tonnes shipped a year earlier but a decrease of 7.7% from the 1 347 995 tonnes shipped in July 1987.

January to August 1987 shipments reached 7 705 337 tonnes, up 18.1% from the 6 524 735 tonnes shipped during the first eight months of 1986.

Available on CANSIM: matrices 92 and 122 (series 13).

Order the August 1987 issue of *Cement* (44-001, \$4/\$40), available the week of October 26. Contact Suzette Desrosiers (613-951-3520), Industry Division.

### Sawmills East of the Rockies

July 1987

Production of lumber in sawmills east of the Rockies decreased 1.5% to 1 738 968 cubic metres (736,933,000 feet board measure) in July 1987 from 1 764 681 cubic metres (747,830,000 feet board measure) after revisions in July 1986.

Stocks on hand at the end of July 1987 totalled 1 885 035 cubic metres (798,833,000 feet board measure), a decrease of 4.8% compared to 1 980 748 cubic metres (839,394,000 feet board measure) in July 1986.

Year-to-date production in 1987 amounted to 13 364 705 cubic metres (5,917,663,000 feet board measure) after revisions, an increase of 4.1% compared to 13 411 315 cubic metres (5,683,394,000 feet board measure) after revisions for the same period in 1986.

Available on CANSIM: matrices 53 (except series 1.2) and 122 (series 2).

Order the July 1987 issue of *Production, Shipments and Stocks on Hand of Sawmills East of the Rockies* (35-002, \$8/\$80), to be released the week of October 26. Contact Jacques Lepage (613-951-3516), Industry Division.

### Exports by Commodity

August 1987

Commodity-country export trade statistics for August 1987 are now available on microfiche, computer printouts or magnetic tapes in advance of the monthly publication.

Available on CANSIM (for selected information): matrices 3686-3713 and 3719.

Order the August 1987 issue of *Exports by Commodity* (65-004, \$50/\$500), available the last week of October. Contact G. L. Blaney (613-951-9647), International Trade Division.



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## Publications Released

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**Inventories, Shipments and Orders in Manufacturing Industries, June 1987.**  
**Catalogue number 31-001**  
(Canada: \$15/\$150; Other Countries: \$16/\$160).

**Consumer Price Index, September 1987.**  
**Catalogue number 62-001**  
(Canada: \$8/\$80; Other Countries: \$9/\$90).  
Available October 16 at 7:00 a.m.

**University Finance Trend Analysis, 1976-77 to 1985-86.**  
**Catalogue number 81-260**  
(Canada: \$35; Other Countries: \$36).

*Statistics Canada publications may be purchased by mail order from Publication Sales, Room 1710, Main Building, Statistics Canada, Ottawa K1A 0T6 or phone 613-951-7276.*

*Please enclose cheque or money order payable to the Receiver General for Canada/Publications and provide full information on publications required (catalogue number, title, issue).*

*Publications may also be ordered through Statistics Canada's offices in St. John's, Halifax, Montreal, Ottawa, Sturgeon Falls, Toronto, Winnipeg, Regina, Edmonton and Vancouver, or from authorized bookstore agents or other booksellers.*

*A national toll-free telephone order service is now in operation in Central Inquiries Services. The toll-free line (1-800-267-6677) is to be used exclusively for the ordering of Statistics Canada products and services.*

**The  
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