

# I·N·F·O·M·A·T

## A W E E K L Y R E V I E W

Friday, September 22, 1989

### OVERVIEW

#### ■ Advanced Manufacturing Technology

In March 1989, 48% of Canadian manufacturing plants used at least one advanced technology in their factory operations.

#### ■ Adoption of Technology in the Services Industries

A survey conducted in March 1989 shows that the more established office computerization technologies, such as personal computers, on-line terminals and mini-computers, have been widely adopted in the service industries.

#### ■ Consumer Price Index Rises at More Moderate Rate

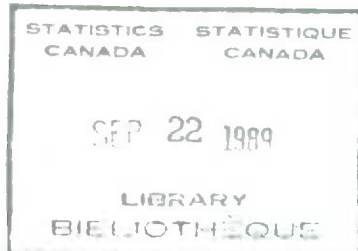
The CPI was up 0.1% in August, a much smaller increase than those registered in the preceding three months.

#### ■ Growth in Retail Trade Stalls

Retail sales were down 0.3% in July, the first decline since March 1989.

#### ■ Department Store Sales Slow

Department store sales were down for the second consecutive month in July.



### Advanced Manufacturing Technology

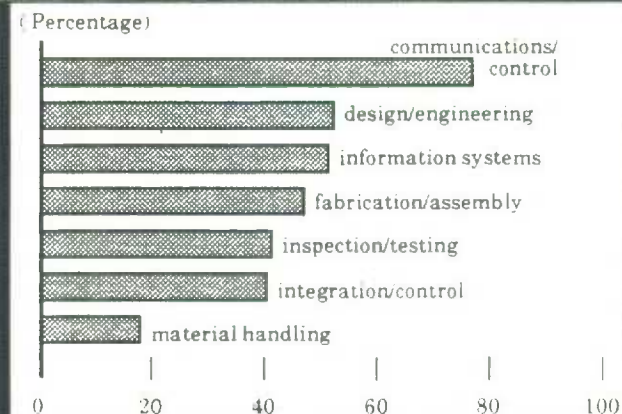
A survey of current and planned use of advanced manufacturing technologies conducted in March 1989 found that 48% of plants use at least one advanced technology in their factory operations. These same plants accounted for about 90% of the total value of manufacturing shipments.

Three industries (ranked by value of shipments) led in the use of technology: transportation equipment, primary metals, and electrical and electronic products industries. Of these three industries, transportation equipment, and electrical and electronic products industries were the principal users of robots.

Ranked by the value of shipments from the plants using them, programmable controllers, computers used for control on the factory floor, computer aided design (CAD) and/or computer aided engineering (CAE), and materials requirement planning (MRP) were the leading technologies used.

(continued on page 2)

#### Manufacturers Using Technology for:



### ... Advanced Manufacturing Technology

Using shipment ranking, the surveys taken in 1987 and in 1989 both identify the same three leading industries and two leading technologies. However, the surveys are not strictly comparable because of the dominance of larger plants in the 1987 survey. The influence of smaller plants, only surveyed in 1989, is illustrated by the lower percentage of plants using at least one of the 17 technologies in the present survey, compared to 1987.

The survey of manufacturing technology was conducted in March 1989 as part of the monthly survey of manufacturing. Data were collected on 22 advanced technologies, which fell into seven general categories: design and engineering; fabrication and assembly; automated material handling; computer-based inspection and/or testing equipment; communications and control; manufacturing information systems; and integration and control. Comparisons of the 1987 and 1989 surveys will be prepared on request.

*For further information, contact Science, Technology and Capital Stock Division at (613) 951-9921.*

### Adoption of Technology in the Service Industries

Statistics Canada conducted a survey of technology diffusion in the service industries. The purpose was to provide up-to-date information on the current and planned use of computer-based technologies and applications within establishments in Canada's service sector.

The survey was conducted in March 1989. Highlights include:

- The more established office computerization technologies such as personal computers, on-line terminals and mini-computers have been widely adopted in the service industries.
- Emphasis is being placed on relatively new technologies that are more oriented to networking. For example, local area networks, which allow office machines to communicate over limited distances, are used by 40% of all respondents and 17% more plan to introduce them within three years.
- New electronic messaging systems such as facsimile and private electronic mail are popular: 89% of respondents use facsimile, 30% use private electronic mail, and 14% are planning to introduce these services within three years.

- Electronic data interchange usage is relatively low at 19%, but 16% more plan to introduce this technology during the next three years.
- Widely used applications were computerized financial systems (used by 88% of respondents), computerized inventory control (56%), and computerized order entry (50%). Significant growth is expected within the next three years for desktop publishing, human resource management systems, computer assisted education, expert systems, electronic scanning systems, electronic funds transfer, and computer aided software engineering.
- Overall satisfaction with the technologies surveyed was very high. Over 90% of respondents felt their expectations had been met or exceeded.
- Establishments in communications, wholesale trade, finance and insurance, and business services were the most likely to have introduced computer-based technologies. Accommodation, food and beverage service industries and retail trade industries had the lowest incidence of technology use.

*For further information, contact Statistics Canada at (613) 951-9422, Communications Canada at (613) 990-4929, or Industry, Science and Technology Canada at (613) 954-3467.*

### Consumer Price Index Rises at More Moderate Rate

The Consumer Price Index (1981=100) was up 0.1% in August, a much smaller increase than those registered in the preceding three months. The slowdown was the result of declines in two out of seven major components: food and transportation. The other five continued to post increases.

The food component fell 0.6% in August, its first decline in eight months. This drop was largely due to a seasonal decrease in fresh vegetable prices. A decline in

#### Consumer Price Index

	Apr.	May	June	July	Aug.
	% change, previous month				
All-items	0.3	1.0	0.5	0.7	0.1
Food	0.4	0.6	0.7	0.9	-0.6
Transportation	0.4	1.1	1.5	1.2	-0.4

beef prices, attributable to promotional pricing by several supermarket chains, put additional downward pressure on the food index.

*(continued on page 3)*

The transportation component was down 0.4%, in contrast with the rising trend noted since January. The primary factors in the decline were lower automobile prices and airfares. The drop in automobile prices was largely attributable to heavy discounts as dealers attempted to reduce their inventories of 1989 models.

The year-over-year increase in the CPI also moderated in August, edging down to 5.2% from the 5.4% reported in the two preceding months.

For further information, order *The Consumer Price Index* (catalogue number 62-001) or contact Prices Division at (613) 951-9606.

## Growth in Retail Sales Stalls

Seasonally adjusted retail sales decreased 0.3% in July to \$14.4 billion. This was the first decline in retail sales since March 1989. Just under half of the major trade groups registered declines in the current month, but the overall drop was primarily due to lower automobile sales. Excluding new and used motor vehicle sales, retail trade rose 0.2% in July.

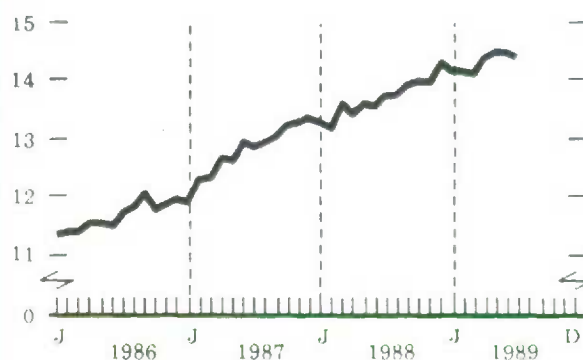
Motor vehicle dealers reported sales of \$3.0 billion in July, down 1.7% from June. Auto sales have slowed in recent months, declining in four of the last five months. In addition, furniture and department stores reported lower sales in July.

Grocery store sales rose 0.5%, to \$2.5 billion for the month. Grocery stores have generally reported steadily rising sales since March. Taken together, new car sales and grocery sales account for nearly 40% of total retail trade.

For further information, order *Retail Trade* (catalogue number 63-005) or contact Industry Division at (613) 951-3552.

### Retail Trade

(billions of dollars, seasonally adjusted)



## Department Store Sales Slow

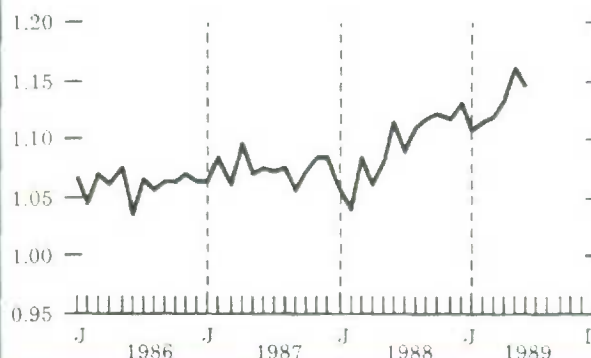
In July, seasonally adjusted department store sales were down 1.1% from June to reach a level of \$1.1 billion. This was the second consecutive decline following a four-month period of rising sales when the average growth rate was 1.1%.

Stocks totalled \$4.7 billion at month's end, up for the second month in a row. The ratio of stock to sales rose to 4.11:1 in July from an average of 4.02:1 in the three previous months.

For further information, order *Department Store Sales and Stocks* (catalogue number 63-002) or contact Industry Division at (613) 951-9682.

### Department Store Sales

(billions of dollars, seasonally adjusted)





# PUBLICATIONS RELEASED FROM SEPTEMBER 15 TO 21

## AGRICULTURE

**Cereals and Oilseeds Review**, June 1989. Catalogue number 22-007 (Canada: \$13.10/\$131; Other Countries: \$15.70/\$157).

## EDUCATION, CULTURE AND TOURISM

**Touriscope: International Travel - National and Provincial Counts**, April-June 1989. Catalogue number 66-001 (Canada: \$36.75/\$147; Other Countries: \$40.50/\$162).

## INDUSTRY

**Coal and Coke Statistics**, June 1989. Catalogue number 45-002 (Canada: \$9.50/\$95; Other Countries: \$11.40/\$114).

**Construction Type Plywood**, July 1989. Catalogue number 35-001 (Canada: \$4.70/\$47; Other Countries: \$5.60/\$56).

**Footwear Statistics**, July 1989. Catalogue number 33-002 (Canada: \$4.70/\$47; Other Countries: \$5.60/\$56).

**Industrial Chemicals and Synthetic Resins**, July 1989. Catalogue number 46-002 (Canada: \$5.30/\$53; Other Countries: \$6.40/\$64).

**Monthly Production of Soft Drinks**, August 1989. Catalogue number 32-001 (Canada: \$2.60/\$26; Other Countries: \$3.10/\$31).

**New Motor Vehicle Sales**, April 1989. Catalogue number 63-007 (Canada: \$13.70/\$137; Other Countries: \$16.40/\$164).

**Oil Pipe Line Transport**, 1988. Catalogue number 55-201 (Canada: \$21; Other Countries: \$25).

**Oils and Fats**, July 1989. Catalogue number 32-006 (Canada: \$4.70/\$47; Other Countries: \$5.60/\$56).

**Primary Iron and Steel**, July 1989. Catalogue number 41-001 (Canada: \$4.70/\$47; Other Countries: \$5.60/\$56).

**Production and Shipments of Blow-moulded Plastic Bottles**, Quarter Ended June 30, 1989. Catalogue number 47-006 (Canada: \$6.50/\$26; Other Countries: \$7.75/\$31).

**Production and Shipments of Steel Pipe and Tubing**, July 1989. Catalogue number 41-011 (Canada: \$4.70/\$47; Other Countries: \$5.60/\$56).

**Retail Trade**, March 1989. Catalogue number 63-005 (Canada: \$16.80/\$168; Other Countries: \$20.20/\$202).

**Retail Trade**, April 1989. Catalogue number 63-005 (Canada: \$16.80/\$168; Other Countries: \$20.20/\$202).

**Steel Wire and Specified Wire Products**, July 1989. Catalogue number 41-006 (Canada: \$4.70/\$47; Other Countries: \$5.60/\$56).

## INTERNATIONAL AND FINANCIAL ECONOMICS

**Canadian Economic Observer**, September 1989. Catalogue number 11-010 (Canada: \$21/\$210; Other Countries: \$25.20/\$252).

## INTERNATIONAL TRADE

**Imports by Commodity (H.S. Based)**, June 1989. Catalogue number 65-007 (Canada: \$52.50/\$525; Other Countries: \$63/\$630).

**Imports by Country (H.S. Based)**, January-June 1989. Catalogue number 65-006 (Canada: \$78.75/\$315; Other Countries: \$94.50/\$378).

## LABOUR

**Employment, Earnings and Hours**, June 1989. Catalogue number 72-002 (Canada: \$38.50/\$385; Other Countries: \$46.20/\$462).

**The Labour Force**, August 1989. Catalogue number 71-001 (Canada: \$17/\$170; Other Countries: \$20.40/\$204).

**Unemployment Insurance Statistics**, June 1989. Catalogue number 73-001 (Canada: \$13.70/\$137; Other Countries: \$16.40/\$164).

## SCIENCE, TECHNOLOGY AND CAPITAL STOCK

**Building Permits**, March 1989. Catalogue number 64-001 (Canada: \$21/\$210; Other Countries: \$25.20/\$252).

**Science Statistics Service Bulletin**, Vol. 13, No. 8, Federal Government Personnel Engaged in Scientific and Technological (S&T) Activities, 1981-82 to 1989-90. Catalogue number 88-001 (Canada: \$6.80/\$68; Other Countries: \$8.20/\$82).

## SERVICES

**Restaurant, Caterer and Tavern Statistics**, April 1989. Catalogue number 63-011 (Canada: \$5.80/\$58; Other Countries: \$7/\$70).

## TRANSPORT

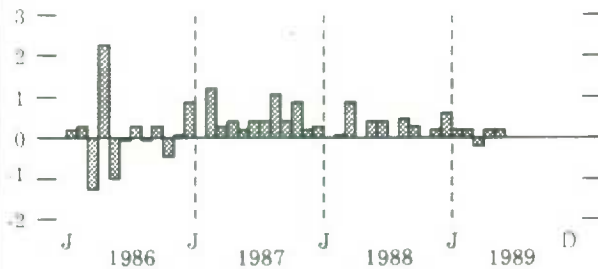
**Railway Operating Statistics**, June 1989. Catalogue number 52-003 (Canada: \$10/\$100; Other Countries: \$12/\$120).

**Passenger Bus and Urban Transit Statistics**, July 1989. Catalogue number 53-003 (Canada: \$6.80/\$68; Other Countries: \$8.20/\$82).

## CURRENT TRENDS\*

### Gross Domestic Product

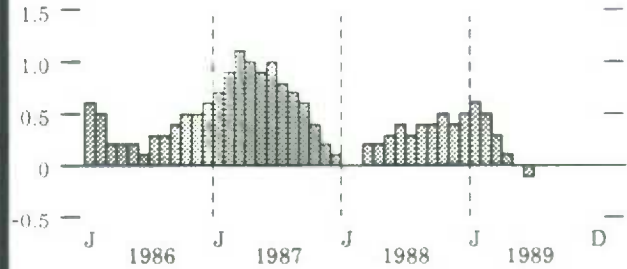
(% change, previous month)



Real gross domestic product was flat in June, after two consecutive gains of 0.2%.

### Composite Leading Indicator

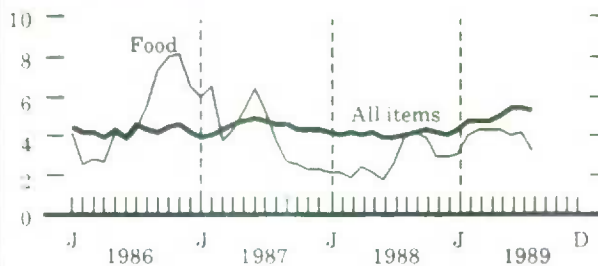
(% change, previous month)



The composite leading indicator edged down 0.1% in June, its first decrease since September 1984.

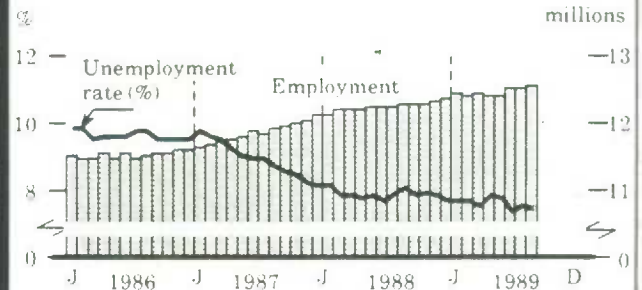
### Consumer Price Index

(% change, previous year)



The CPI was up 0.1% in August, a much smaller increase than those registered in the preceding three months.

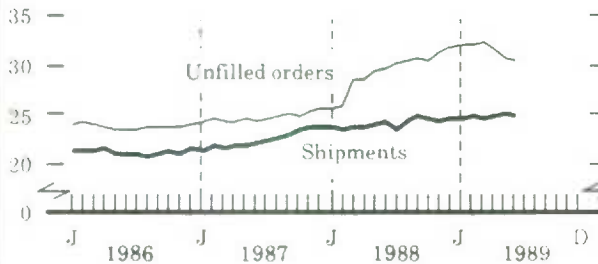
### Unemployment Rate and Employment



In August, the level of employment posted a significant advance for the third time in four months.

### Manufacturing

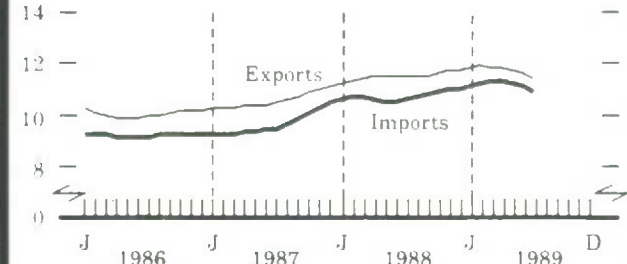
(billions of dollars)



In June, the value of manufacturing shipments fell for the first time in three months.

### Merchandise Trade

(billions of dollars, short-term trend)



Exports and imports both declined in July, but the drop in imports was much sharper.

\* All series are seasonally adjusted except the consumer price index.



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## LATEST MONTHLY STATISTICS

	Period	Level	Change Previous Period	Change Previous Year
<b>GENERAL</b>				
Gross Domestic Product (\$ billion, 1981)	June	410	0.0%	2.4%
Composite Leading Indicator (1981 = 100)	June	145.0	-0.1%	4.3%
Profits of Industrial Corporations (\$ billion)	2nd Q	8.4	-11.9%	3.3%
<b>DOMESTIC DEMAND</b>				
Retail Trade (\$ billion)	July*	14.4	-0.3%	5.1%
New Motor Vehicle Sales ('000 units)	July	121	0.0%	-7.4%
Housing Starts ('000, annual rates)	July	208	1.0%	-3.2%
<b>LABOUR</b>				
Employment (millions)	Aug.	12.6	0.6%	2.4%
Unemployment Rate (%)	Aug.	7.4	-0.1	-0.5
Participation Rate (%)	Aug.	67.2	0.2	0.4
Labour Income (\$ billion)	June	30.2	1.7%	9.4%
Average Weekly Earnings (\$)	June	489.02	1.4%	5.2%
<b>INTERNATIONAL TRADE</b>				
Merchandise Exports (\$ billion)	July	11.0	-1.0%	1.8%
Merchandise Imports (\$ billion)	July	10.0	-8.4%	6.9%
Merchandise Trade Balance (\$ billion)	July	1.0	0.8	-0.4
<b>MANUFACTURING</b>				
Shipments (\$ billion)	June	24.8	-0.6%	2.5%
New Orders (\$ billion)	June	24.3	-0.3%	-0.3%
Unfilled Orders (\$ billion)	June	30.3	-1.8%	2.6%
Inventory/ Shipments Ratio	June	1.55	0.0	0.03
Capacity Utilization (%)	2nd Q	82.2	-0.5	-1.5
<b>PRICES</b>				
Consumer Price Index (1981 = 100)	Aug.*	152.4	0.1%	5.2%
Industrial Product Price Index (1981 = 100)	July	131.1	-0.2%	1.9%
Raw Materials Price Index (1981 = 100)	July	101.7	-0.3%	4.5%
New Housing Price Index (1981 = 100)	July	150.1	0.4%	14.1%

**Note:** All series are seasonally adjusted with the exception of average weekly earnings and the price indexes.

\* New this week.

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## A Weekly Review

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