

# MONTHLY ECONOMIC INDICATORS

## November 1998

### HIGHLIGHTS

-  **Employment rises 57,000 in October, bringing total gains over the past two months to 130,000.**
-  **Job growth drives the unemployment rate down to 8.1%, the lowest since July 1990.**
-  **August's sharp rebound in Goods production reverses four months of output declines.**
-  **Strong export growth widens Canada's merchandise trade surplus.**
-  **Stability returns to the Canadian dollar and financial markets in October.**

### Key Monthly Economic Indicators

		% Change		
		since month	last year	
Real GDP (\$92 B)	710.2	0.7	2.0	Aug
Goods	236.2	1.7	1.2	Aug
Services	474.0	0.1	2.4	Aug
Composite Index	207.2	0.0	3.8	Sept
Employment (000's)	14,436	0.4	2.9	Oct
Full-time	11,729	0.7	3.2	Oct
Part-time	2,708	-1.0	1.6	Oct
Unemployment* (%)	8.1	8.3	9.1	Oct
Youth*	14.7	14.7	16.2	Oct
Adult*	6.8	7.1	7.8	Oct
CPI inflation*	0.7	0.8	1.6	Sept
Retail Sales (\$M)	20,705	-0.2	4.0	Aug
Housing Starts (000's)	135.4	-1.4	-8.0	Sept
Trade Balance* (\$B)	2,157	1,627	1,478	Aug
Exports	27,433	7.1	9.3	Aug
Imports	25,276	5.3	7.1	Aug
M&E	8,661	1.3	8.8	Aug
3-mth Corp. paper* (%)	5.19	5.38	3.91	Nov 4
Long bond yield* (%)	5.58	5.32	6.05	Nov 4
Canadian dollar* (US¢)	65.64	65.31	71.00	Nov 6

\*Data in levels only – % change not reported.

**This issue's Special Report:  
Recent Jumps in Patenting Activities in Canada and Abroad**

The "Monthly Economic Indicators" (MEI) provides a variety of economic analysis and data in a convenient format. The MEI does not interpret or evaluate government policies, and every attempt is made to present factual information in an informed and balanced manner consistent with generally accepted economic principles. It is available to all employees of Industry Canada in either hard or electronic copy, or can be accessed via the Internet at [http://strategis.ic.gc.ca/sc\\_ecnmy/mera/engdoc/03.html](http://strategis.ic.gc.ca/sc_ecnmy/mera/engdoc/03.html).



# MONTHLY ECONOMIC INDICATORS

## November 1998

### CONTENTS

	Page
<b>The Economy</b>	
<i>Real GDP by Industry</i> .....	3
<i>Consumer Spending and Attitudes</i> .....	4
<i>Business Investment in Plant and Equipment</i> .....	5
<i>Housing</i> .....	6
<i>Trade and Competitiveness</i> .....	7
 <b>Labour Market Trends</b>	
<i>Employment and Unemployment</i> .....	8
<i>Industry Overview</i> .....	9
<i>Provincial Overview</i> .....	10
 <b>Prices and Financial Markets</b>	
<i>Consumer and Commodity Prices</i> .....	11
<i>Exchange Rates and Stock Markets</i> .....	12
<i>Short-term and Long-term Interest Rates</i> .....	13
 <b>The United States Economy</b>	
<i>U.S. Economic Trends</i> .....	14
 <b>THIS ISSUE'S SPECIAL REPORT:</b>	
<b>Recent Jumps in Patenting Activities in Canada and Abroad</b> .....	15
 <b>Coming Up...</b>	
<i>Key Future Data Releases/Planned Events</i> .....	19

This report uses data available as of November 6, 1998. It has been prepared by Dave Dupuis, Joseph Macaluso, Stéfane Marion and Shane Williamson of the Micro-Economic Analysis Directorate. The special report in this issue is based on a research paper by Mohammed Rafiquzzaman and Lori Whewell. All information is taken from public sources, primarily Statistics Canada, the Bank of Canada and the Canada Mortgage and Housing Corporation. Please address comments to Shane Williamson at 613-954-3494 or through the Internet at [williamson.shane@ic.gc.ca](mailto:williamson.shane@ic.gc.ca).



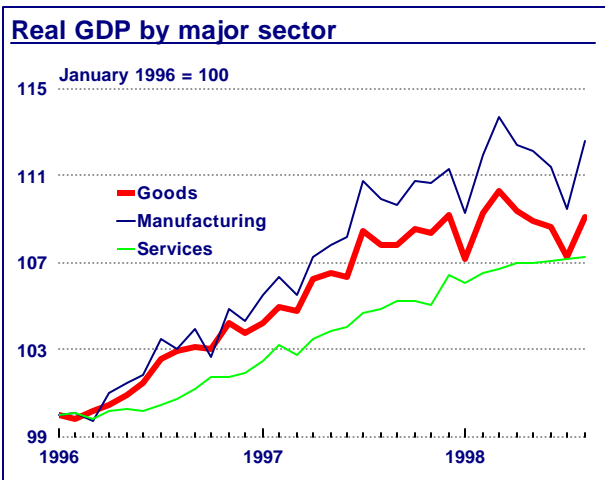
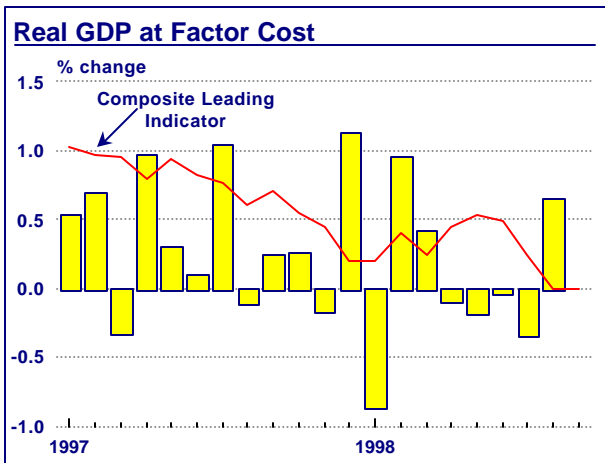
## Real GDP by Industry

### Output rebounds sharply in August...

- Real GDP increased 0.7% in August, bringing economic activity back to its peak level recorded in March. The August gain follows four consecutive monthly declines.

### ...as the end of several labour disputes boosts Goods production

- The Goods-producing sector posted a strong gain in August (+1.7%), largely due to the end of the G.M. strike in the U.S. and several construction labour disputes in southern Ontario. Manufacturing rose 2.8% on the strength of a 25.4% increase in the production of Motor Vehicles & Parts.
- Elsewhere in the Goods-producing industries, activity in the Mining industry fell for the ninth consecutive month. After losing ground for most of the year, Logging & Forestry posted a healthy gain in August.
- Output in the Service sector was up marginally in August, continuing the trend toward slower growth evident over the past four months. Notable gains were in Business Services, Transportation & Storage (boosted by the rebound in auto production), and Communications. These gains were partially offset by losses in Education, Finance & Insurance and Trade.



### Real GDP at Factor Cost (1992 dollars)

#### August 1998

	level	monthly change	% Change since last month	year
<b>Total Economy</b>	<b>710,173</b>	<b>4,612</b>	<b>0.7</b>	<b>2.0</b>
<b>Business sector</b>	<b>584,550</b>	<b>4,901</b>	<b>0.8</b>	<b>2.5</b>
<b>Goods</b>	<b>236,201</b>	<b>4,060</b>	<b>1.7</b>	<b>1.2</b>
Agriculture	12,020	9	0.1	-1.6
Fishing & Trapping	844	-43	-4.8	-2.8
Logging & Forestry	3,608	70	2.0	-14.2
Mining*	27,929	-218	-0.8	-2.6
Manufacturing	126,566	3,489	2.8	2.4
Construction	39,859	392	1.0	1.2
Other Utilities	25,375	361	1.4	4.3
<b>Services</b>	<b>473,972</b>	<b>552</b>	<b>0.1</b>	<b>2.4</b>
Transport & Storage	30,027	365	1.2	1.0
Communications	26,751	244	0.9	6.3
Wholesale Trade	42,769	-112	-0.3	6.2
Retail Trade	42,647	-80	-0.2	4.2
Finance & Insurance	36,264	-193	-0.5	-0.9
Real Estate & Ins. Agent	75,950	43	0.1	1.8
Business services	42,309	437	1.0	7.5
Government services	40,466	47	0.1	0.1
Education	40,120	-362	-0.9	-1.2
Health & Social Services	48,976	119	0.2	0.7
Accommodation & Food	19,089	32	0.2	2.4
Other	28,604	12	0.0	2.0

\*Includes Quarrying and Crude Petroleum & Natural Gas



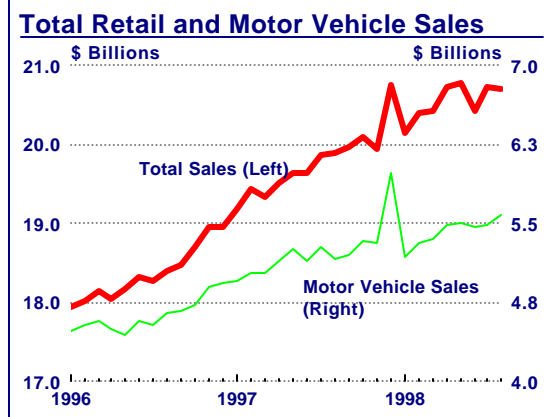
## Consumer Spending and Attitudes

### Surging consumer spending in the second quarter...

- Following a pause early in 1998, consumer spending surged 5.4% (annual rate) in the second quarter, growing at its fastest pace in 1½ years. About half of the second quarter gain was due to higher sales of new motor vehicles.

### ...may not be sustained into the last half of the year

- The second-quarter rise in consumer spending was financed by lower personal savings and increased borrowing. Buoyant consumer spending is unlikely to be sustained without a pick-up in disposable income.
- A sharp fall in stock prices and the low value of the Canadian dollar led to a large drop in consumer confidence in the third quarter. However, financial markets have stabilized in September and October, with both share prices and the dollar recovering somewhat.
- Available data point to a slowdown in consumer spending. With a decline in August, the average level of retail sales in July and August was up only 0.4% compared to the second quarter. However, sources in the auto industry suggest that motor vehicle sales increased in September.



### Retail Sales and Consumer Credit

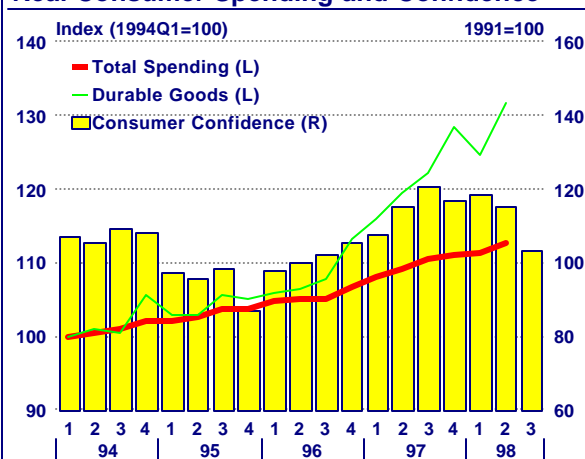
	\$ millions	% Change	
		in last month	last year
<b>Total Retail Sales</b>	20,705	-0.2	4.0
Food	4,789	-1.1	2.0
Drug Stores	1,110	-0.1	6.9
Clothing	1,176	0.1	3.7
Furniture	1,063	-0.7	7.1
Automotive	8,036	1.0	4.7
General Merch. Stores	2,304	-1.8	3.3
All other Stores	2,228	-0.2	4.2
Total ex. motor vehicles	15,122	-0.9	2.6
<b>Consumer Credit</b>	155,425	1.4	10.5

### Real Consumer Spending and Household Finances

	\$ Millions, SAAR (unless otherwise noted)			
	1996	1997	1998 Q1	1998 Q2
<b>Real Consumption (92\$)</b>	453,130	471,525	478,020	484,304
% change	2.3	4.1	0.3	5.4
Durable Goods	55,205	61,926	63,556	67,072
% change	4.1	12.2	-11.1	24.0
Semi-Durable Goods	42,661	44,485	46,516	46,512
% change	0.8	4.3	13.3	0.0
Non-Durable Goods	116,948	118,644	118,812	119,652
% change	1.7	1.5	0.9	2.9
Services	238,316	246,470	249,136	251,068
% change	2.5	3.4	0.8	3.1
<b>Disposable Income</b>	519,105	529,082	539,596	532,188
% change	1.5	1.9	5.7	0.4
<b>Saving Rate (%)</b>	5.4	2.2	1.9	0.1
<b>Debt-to-Income Ratio (%)</b>	94.1	97.3	98.6	99.8
<b>Consumer Attitudes*</b>	101.2	115.0	118.4	115.0

\*Conference Board of Canada

### Real Consumer Spending and Confidence





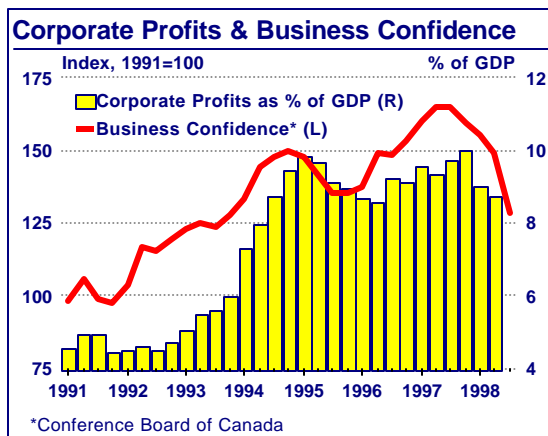
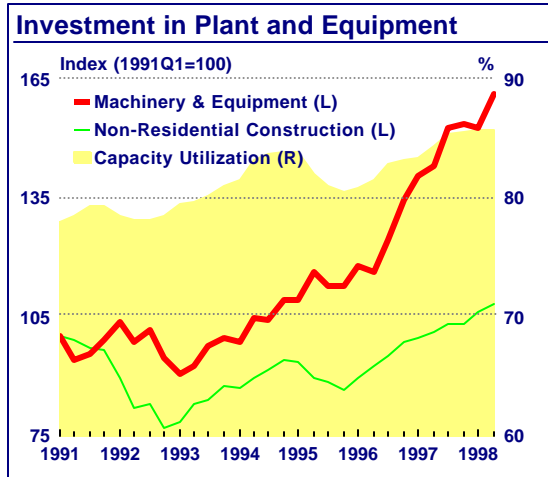
## Business Investment in Plant and Equipment

### Investment rebounds in the second quarter...

- Business investment in Machinery & Equipment (M&E) rose sharply in the second quarter, rebounding from a decline in the previous period. Growth in Non-residential Construction slowed in the second quarter, but nonetheless posted a strong result.

### ...and is poised for further gains in the third quarter

- Business confidence fell by a record amount in the third quarter. Profits have fallen sharply in the past two quarters, hit hard by low commodity prices and weak foreign demand.
- Despite the drop in business confidence and profits, available data point to continued growth in investment. Imports of M&E rose in August, adding to gains in the previous three months.
- Monthly GDP data indicate that the average level of activity in non-residential construction in July and August was 0.7% higher than in the second quarter.
- Despite a drop in September, the value of non-residential construction permits increased 3.7% in the third quarter, and was up sharply on the year.



### Business Investment and Corporate Finances

\$ Millions, SAAR (unless otherwise noted)

	1996	1997	1997 Q4	1998 Q1	1998 Q2	1998 Q3
<b>BUSINESS INVESTMENT</b>						
<b>Machinery &amp; Equipment</b>	47,722	57,057	59,420	59,120	62,288	
<i>(1997Q3)</i> <i>% change</i>	9.3	19.6	2.5	-2.0	23.2	
<b>Non-residential Construction</b>	33,608	36,433	36,864	38,056	38,732	
<i>(1997Q3)</i> <i>% change</i>	4.7	8.4	-1.8	13.6	7.3	
<b>Capacity Utilization (% Non-farm goods)</b>	82.1	84.6	85.5	85.7	85.6	
<i>Capacity Utilization (Mfg. sector)</i>	82.5	84.9	85.8	86.2	86.2	
<b>CORPORATE FINANCES &amp; ATTITUDES</b>						
<b>Corporate Operating Profits</b>	96,067	110,682	116,020	107,816	102,852	
<i>(1997Q3)</i> <i>% change</i>	-1.1	15.2	12.2	-25.4	-17.2	
Profits - Non-financial industries	71,871	82,218	84,760	79,676	73,896	
<i>% change</i>	-6.7	14.4	10.6	-21.9	-26.0	
Profits - Financial industries	24,194	28,462	31,260	28,140	28,956	
<i>% change</i>	20.5	17.6	16.8	-34.3	12.1	
<b>Business Credit</b>	570,832	621,442	648,182	662,032	674,918	692,903
<i>% change</i>	5.0	8.9	13.1	8.8	8.0	11.1
<b>Index of Business Confidence*</b>	147.0	162.3	159.2	155.0	148.9	128.6

\*Conference Board of Canada



## Housing

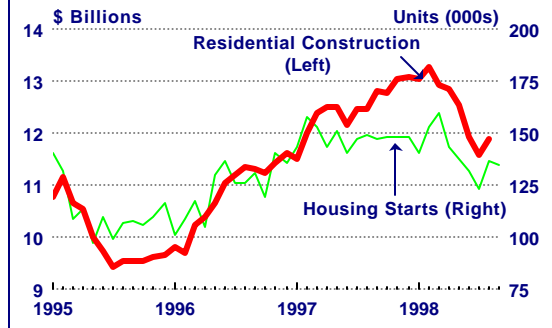
### Spending on housing is down in the second quarter...

- Spending on Residential Construction declined in the second quarter, marking the third time in the past four quarters that activity in this sector has fallen.

### ...and this weakness extends into the third quarter

- Housing starts rebounded in August and September due to the end of several building trades strikes in southern Ontario. However, third-quarter results are still 4.3% below the second-quarter average. Moreover, the total value of residential building permits dropped 1.6% in the third quarter.
- Sales of existing homes dropped slightly in September, most likely the result of falling consumer confidence.
- However, some market indicators remain encouraging – in particular, new housing prices are steady and mortgage rates are low.
  - These factors, combined with the recent surge in employment, could have a positive influence on construction activity.

### Housing Activity



### Monthly Housing Indicators

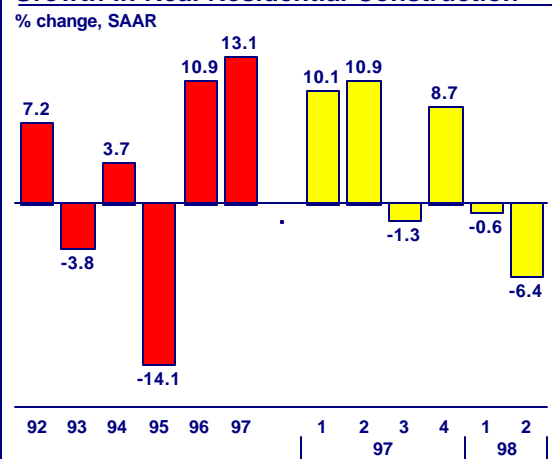
	levels	Change since	
		last month	last year
<b>Residential Construction</b> (1)	11,915	2.9%	-4.4%
(\$92M, factor cost basis)			
<b>Building Permits, \$M</b> (2)	1,446	-2.9%	-11.4%
<b>Sales of Existing Homes</b> (2)	18,547	-365	
(# of units)			
<b>Housing Starts, # of units</b> (3)	135,400	-1,900	-11,800
Newfoundland	1,200	-300	-200
Prince Edward Island	200	-300	0
Nova Scotia	3,200	-200	1,400
New Brunswick	1,200	-800	-800
Quebec	17,800	-1,200	-2,300
Ontario	47,700	-800	-1,400
Manitoba	2,300	800	100
Saskatchewan	2,900	800	200
Alberta	20,500	900	3,000
British Columbia	17,700	-800	-6,900

1 - August data; 2 - September data; 3 - September data.  
Sources: Statistics Canada, Canada Mortgage and Housing Corporation, Canadian Real Estate Association

### Real Investment in Residential Structures

\$92 Millions, SAAR (unless otherwise noted)	1996	1997	1998 Q1	1998 Q2
<b>Residential Construction</b>	38,056	43,038	43,880	43,164
% change	10.8	13.1	-0.4	-6.4
Construction by Business sector	37,928	42,912	43,732	43,020
% change	10.9	13.1	-0.6	-6.4
New Housing	18,536	21,967	23,028	21,744
% change	8.5	18.5	2.3	-20.5
Alterations & Improvements	12,126	13,471	14,176	14,140
% change	7.4	11.1	9.9	-1.0
Ownership & Transfer Costs	7,394	7,600	7,188	6,676
% change	23.6	2.8	-25.6	41.4

### Growth in Real Residential Construction





## Trade and Competitiveness

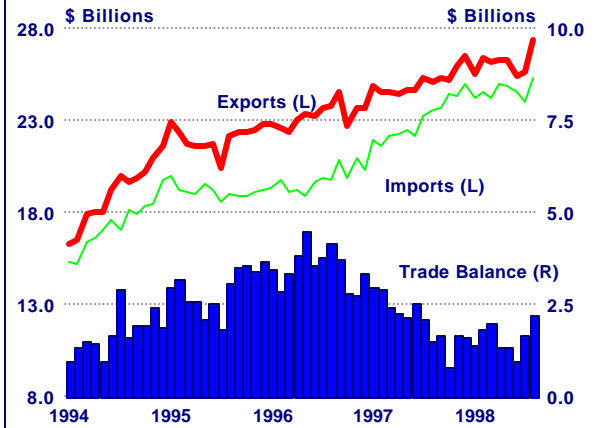
### A surge in exports in August...

- Exports surged 7.1 % in August to reach a new all-time high. All major groups posted gains, but most of the overall increase was due to a sharp rebound in exports of Automotive Products following the end of the G.M. strike in the U.S.
- Discounting the effects of the G.M. strike, exports to the U.S. have increased by 7% so far this year, while exports to all other countries have fallen 16%. As most exports to the U.S. are finished goods while those to other countries tend to be resource-intensive, this has led to a greater share for higher value-added exports.

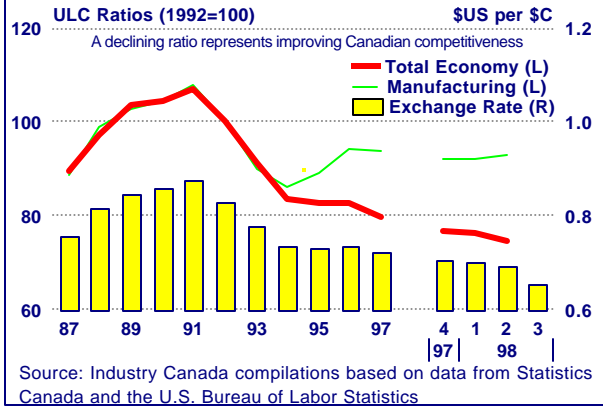
### ...leads to a sharp increase in the trade surplus

- Merchandise imports increased 5.3% in August, led by a significant rise in imports of Automotive Products. Imports of M&E also posted a healthy gain, with growth over the past four months approaching the fast pace set in 1997.
- With growth in exports outpacing that for imports, Canada's trade balance rose to \$2.2 billion in August – surpassing the \$2 billion mark for the first time since July 1997.

### Merchandise Trade Flows and Balance



### Canada-U.S. Unit Labour Cost Ratios



### Merchandise Trade

August 1998	Levels (\$ millions)		Year-to-date (\$ millions)		Change (\$M)	% Change	
	1998 July	1998 August	1997 Jan-Aug	1998 Jan-Aug		July to Aug 1998	July to Aug 1998
<b>Exports</b>	<b>25,625</b>	<b>27,433</b>	<b>198,086</b>	<b>209,210</b>	<b>1,808</b>	<b>7.1</b>	<b>9.3</b>
to United States	21,626	23,314	159,175	174,344	1,688	7.8	15.2
<b>Imports</b>	<b>23,998</b>	<b>25,276</b>	<b>179,457</b>	<b>196,727</b>	<b>1,278</b>	<b>5.3</b>	<b>7.1</b>
from United States	18,300	19,396	136,604	150,815	1,096	6.0	7.3
<b>Trade Balance</b>	<b>1,627</b>	<b>2,157</b>	<b>17,151</b>	<b>18,629</b>	<b>12,483</b>		
with United States	3,326	3,918	22,571	23,529	592		
<b>Exports by Commodity</b>							
Agriculture/Fishing Products	1,940	1,971	16,039	16,244	31	1.6	-5.5
Energy Products	2,131	2,136	18,055	16,102	5	0.2	-5.4
Forestry Products	2,887	2,988	23,336	23,307	101	3.5	5.2
Industrial Goods & Materials	4,836	4,900	36,621	38,523	64	1.3	7.0
Machinery & Equipment	6,804	6,826	44,126	51,582	22	0.3	22.2
Automotive Products	4,952	6,497	46,069	48,023	1,545	31.2	12.4
Other Consumer Goods	1,059	1,063	6,968	8,053	4	0.4	1.9
<b>Imports by Commodity</b>							
Agriculture/Fishing Products	1,452	1,481	10,194	11,369	29	2.0	12.7
Energy Products	614	688	7,054	5,863	74	8.8	-22.2
Forestry Products	208	205	1,558	1,636	-3	-1.4	2.7
Industrial Goods & Materials	5,051	5,047	35,246	39,530	-4	-0.1	9.7
Machinery & Equipment	8,474	8,611	58,963	65,913	137	1.6	8.8
Automotive Products	4,278	5,274	39,076	41,842	996	23.3	1.8
Other Consumer Goods	2,887	2,951	19,101	22,294	64	2.2	16.7



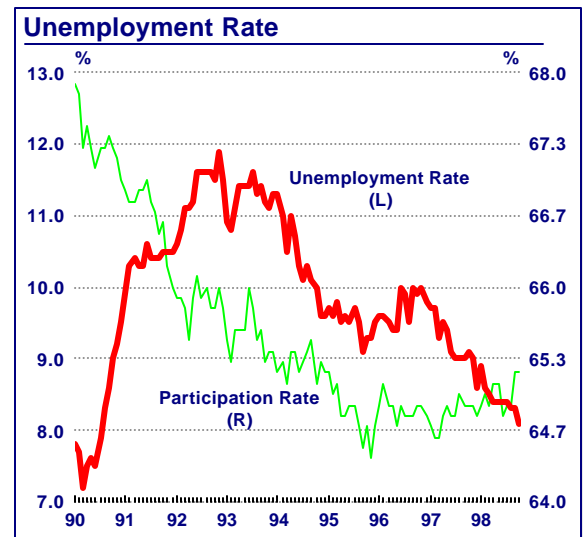
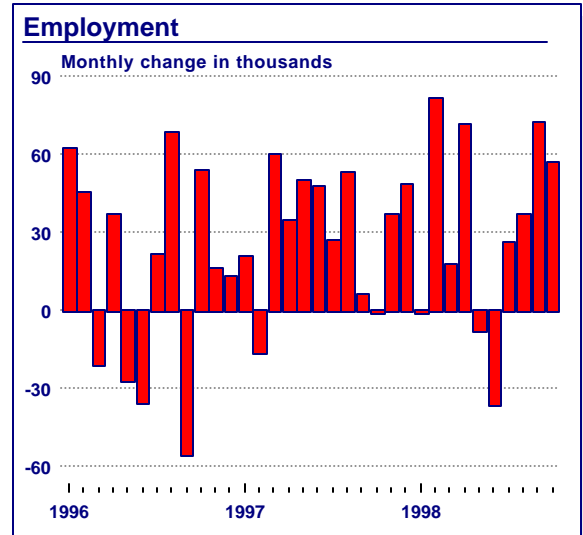
## Employment and Unemployment

### Employment is up sharply for the second straight month in October...

- Following an increase of 73,000 in September, employment advanced a further 57,000 in October. Net job gains since the beginning of the year now total 322,000.
- Unlike the previous month, October's gain was fuelled by a sharp rise in adult, full-time employment. The number of part-time jobs fell 27,000.
- Youth employment was down 15,000 in October, after growing strongly in the previous three months.

### ...driving the unemployment rate down 0.2 percentage points to 8.1%

- October's job gains lowered the national unemployment rate to 8.1%, a drop of 0.2 percentage points from September. This represents the lowest rate since July 1990.
- Employment growth was shared evenly between adult women and adult men. The unemployment rate for adult women fell 0.5 points to 6.6% as the labour force was little changed. However, the adult male unemployment rate edged down only 0.1 point to 7.0% due to a large increase in the number of new entrants in the labour force within this group.
- Youth job losses were matched by a declining labour force, leaving the unemployment rate unchanged at 14.7%.



### Labour Force Trends

(in thousands)	Levels			Change since			% Change since	
	1997 October	1998 September	1998 October	last month	last year	year-to- date	last month	last year
<b>Employment</b>	14,029.5	14,379.2	14,436.4	57.2	406.9	321.6	0.4	2.9
<b>Full-time</b>	11,364.5	11,644.9	11,728.8	83.9	364.3	227.2	0.7	3.2
<b>Part-time</b>	2,665.0	2,734.4	2,707.6	-26.8	42.6	94.4	-1.0	1.6
<b>Youth 15-24</b>	2,038.1	2,141.5	2,126.2	-15.3	88.1	87.0	-0.7	4.3
<b>Adult 25+</b>	11,991.5	12,237.7	12,310.2	72.5	318.7	234.6	0.6	2.7
<b>Self-employed</b>	2,496.8	2,577.3	2,592.9	15.6	96.1	116.9	0.6	3.8
<b>Unemployment</b>	1,402.8	1,301.2	1,265.0	-36.2	-137.8	-56.3	-2.8	-9.8
<b>Unemployment Rate</b>	9.1	8.3	8.1	-0.2	-1.0	-0.5		
<b>Youth 15-24</b>	16.2	14.7	14.7	0.0	-1.5	-1.1		
<b>Adult 25+</b>	7.8	7.1	6.8	-0.3	-1.0	-0.4		
<b>Labour Force</b>	15,432.3	15,680.5	15,701.5	21.0	269.2	265.4	0.1	1.7
<b>Participation Rate</b>	64.9	65.2	65.2	0.0	0.3	0.4		
<b>Employment Rate</b>	59.0	59.8	59.9	0.1	0.9	0.7		





## Industry Overview

### Employment in the Goods-producing sector rebounds in October...

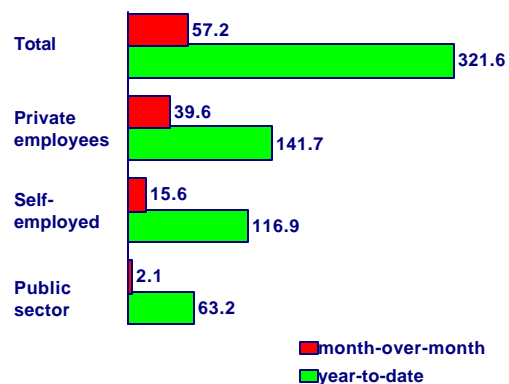
- Employment in the Goods-producing industries rose 38,000 in October. Manufacturing gained 43,000 jobs, rebounding from three consecutive sharp monthly declines. Still, the October increase only brought employment in Manufacturing back to its level at the start of the year.
- Construction gained 16,000 jobs in October, the fourth straight month of growth. However, Primary industries once again posted losses.
- Employment in Services advanced by 19,000 in October, boosted by gains in Transportation, Storage & Communication, Finance, Insurance & Real Estate and Health & Social Services. All other major industry groups reported job losses on the month.

### ...as the pace of job creation in the private sector picks up

- The number of paid employees in the private sector increased by 40,000 in October. Self-employment was also higher on the month.
- Public-sector employment was flat in October, but remains up on a year-to-date basis.

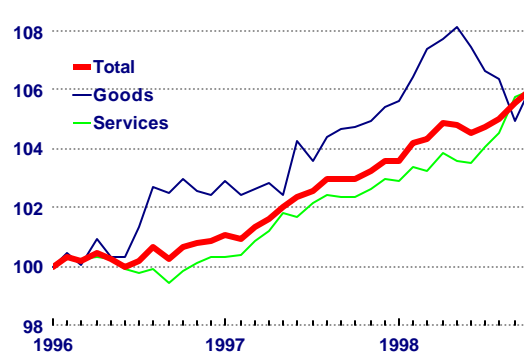
### Employment growth by worker category

October 1998 (thousands)



### Employment by major sector

January 1996 = 100



### Industrial Employment Trends

(in thousands)	Levels			Change since			% Change since	
	1997 October	1998 September	1998 October	last month	last year	year-to- date	last month	last year
<b>Total</b>	14,029.5	14,379.2	14,436.4	57.2	406.9	321.6	0.4	2.9
<b>Goods-producing</b>	3,802.9	3,810.7	3,848.6	37.9	45.7	19.4	1.0	1.2
Agriculture	411.1	446.4	438.8	-7.6	27.7	24.0	-1.7	6.7
Mining & Oil Wells	179.9	158.8	152.5	-6.3	-27.4	-28.7	-4.0	-15.2
Other Primary	113.9	106.8	101.1	-5.7	-12.8	-10.4	-5.3	-11.2
Utilities	148.0	134.7	133.4	-1.3	-14.6	-9.1	-1.0	-9.9
Manufacturing	2,204.4	2,189.0	2,231.7	42.7	27.3	1.1	2.0	1.2
Construction	745.6	775.1	791.2	16.1	45.6	42.7	2.1	6.1
<b>Service-producing</b>	10,226.7	10,568.5	10,587.9	19.4	361.2	302.3	0.2	3.5
TSCO*	914.4	916.9	960.6	43.7	46.2	37.9	4.8	5.1
Wholesale Trade	661.9	685.3	673.6	-11.7	11.7	6.6	-1.7	1.8
Retail Trade	1,741.3	1,777.3	1,758.5	-18.8	17.2	33.3	-1.1	1.0
FIRE*	802.0	785.1	811.8	26.7	9.8	5.3	3.4	1.2
Education	966.3	987.3	983.4	-3.9	17.1	16.0	-0.4	1.8
Health/Social Serv.	1,394.1	1,489.4	1,505.6	16.2	111.5	55.8	1.1	8.0
Bus. & Personal Serv.	2,966.3	3,140.4	3,112.5	-27.9	146.2	147.4	-0.9	4.9
Public Administration	780.4	786.8	781.8	-5.0	1.4	0.0	-0.6	0.2

\*TSCO: Transportation, storage and communication; FIRE: Finance, Insurance and Real Estate



## Provincial Overview

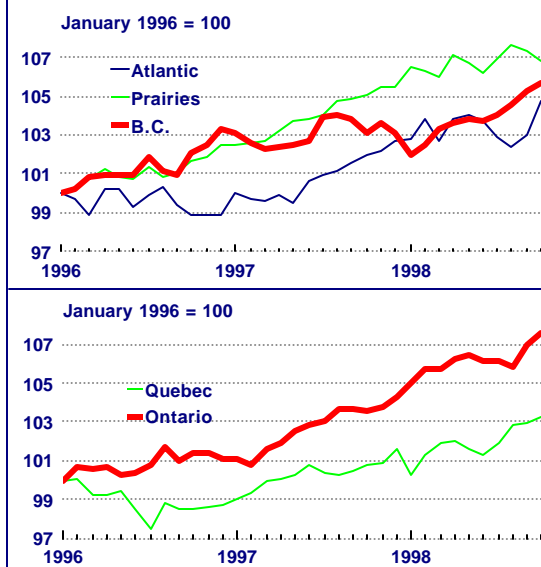
### Ontario leads October job gains...

- Employment rose by 33,000 in Ontario in October, building on an even bigger increase the previous month.
- Five other provinces posted net employment gains on the month. Of particular note were increases of 13,000 in Quebec and 10,000 in Newfoundland.
- Employment was down in Alberta, P.E.I., Manitoba and Saskatchewan.

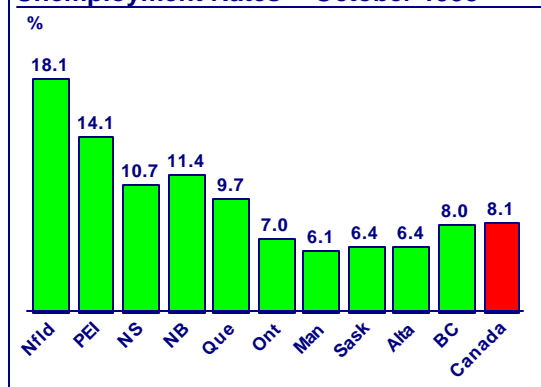
### ...but unemployment rates fall more sharply in Nova Scotia, Quebec and Newfoundland

- Solid job gains coupled with weak and negative labour force growth respectively led to lower unemployment rates in Nova Scotia (down 0.7 points to 10.7%) and Quebec (-0.5 points to 9.7%).
- In Newfoundland, strong employment growth more than offset a healthy rise in the labour force, lowering its unemployment rate 0.5 points to 18.1%. Ontario's unemployment rate dropped 0.1 points to 7.0%.
- Job losses resulted in slightly higher unemployment rates in Alberta and Saskatchewan.

### Regional employment patterns

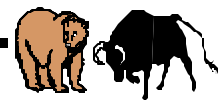


### Unemployment Rates -- October 1998



### Provincial Employment and Unemployment Trends

	Employment (thousands)					Unemployment rate (%)		
	Levels	Change since last month		Change since last year		Levels	Change since	
	1998 October	(000's)	%	(000's)	%		last month	last year
Canada	14,436.4	57.2	0.4	406.9	2.9	8.1	-0.2	-1.0
Newfoundland	204.5	9.9	5.1	9.6	4.9	18.1	-0.5	0.5
P.E.I.	59.9	-1.2	-2.0	-1.0	-1.6	14.1	0.0	1.0
Nova Scotia	404.0	3.7	0.9	8.5	2.1	10.7	-0.7	-0.8
New Brunswick	328.5	4.2	1.3	8.8	2.8	11.4	-0.2	-0.7
Quebec	3,355.1	12.5	0.4	79.7	2.4	9.7	-0.5	-1.5
Ontario	5,667.2	32.6	0.6	214.4	3.9	7.0	-0.1	-1.4
Manitoba	546.2	-1.1	-0.2	7.6	1.4	6.1	0.0	-0.5
Saskatchewan	475.9	-0.5	-0.1	0.1	0.0	6.4	0.2	0.1
Alberta	1,512.2	-10.4	-0.7	34.1	2.3	6.4	0.2	0.7
B.C.	1,882.9	7.5	0.4	45.0	2.4	8.0	-0.3	-0.9



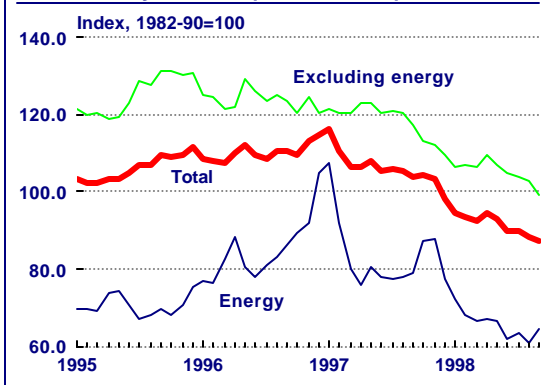
### Inflation edges down to 0.7% in September...

- The year-over-year rate of CPI inflation was 0.7% in September, matching the recent low recorded in December 1997. The last time a lower annual increase in the all-items CPI was recorded was in May 1962 – discounting for the effects of the tobacco tax reduction in 1994.
- September's low rate of inflation was due in part to year-over-year price declines for gasoline, computers and electricity, as well as lower mortgage interest costs. Notable price increases on the year were for natural gas, university tuition, cigarettes and travel tours.
- Inflation excluding the volatile Food and Energy components as well as indirect taxes was 1.2% in September, within the bottom half of the official 1% to 3% target range.
- Underlying inflationary pressures remain subdued. Commodity prices continue to trend lower and producer prices are down from their year-ago levels.

### ...as prices fall in Atlantic Canada

- All Atlantic provinces experienced year-over-year price declines in September, ranging from -1.0% in Newfoundland to -0.3% in New Brunswick. Prices were unchanged in British Columbia, while elsewhere, inflation ranged from 0.8% in Ontario to 1.5% in Manitoba.

### Commodity Prices (\$U.S. basis)



### Consumer Prices

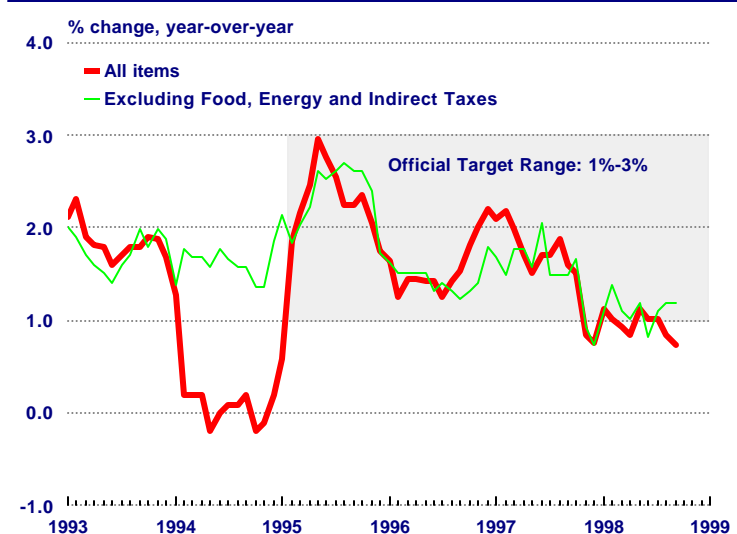
September 1998

	Index (1992=100)	% Change	
		since month	last year
<b>All items CPI</b>	108.6	-0.2	0.7
Food	108.3	-0.8	1.3
Shelter	103.6	-0.1	0.5
Household operations	108.5	0.6	1.5
Clothing & Footwear	104.4	-0.3	1.0
Transportation	119.9	-0.2	-1.9
Health & Personal Care	108.5	0.1	2.5
Recreation, Educ. & Reading	119.0	-0.3	1.5
Alcohol & Tobacco	93.2	0.2	4.0
<b>Excl. Food/Energy/Indirect Taxes</b>	110.6	0.1	1.2
Energy	102.6	-1.3	-6.7

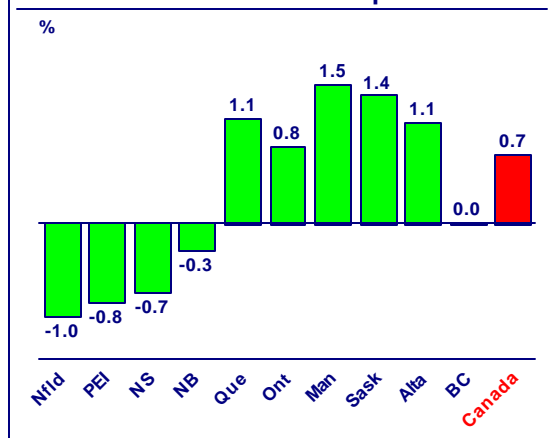
### Commodity Prices (September)

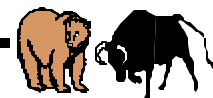
Index, 1982-90=100	87.3	-1.0	-16.0
Excluding Energy	99.4	-3.1	-15.1
Energy	64.7	5.7	-18.4

### Consumer Price Index



### Provincial CPI Inflation -- September 1998



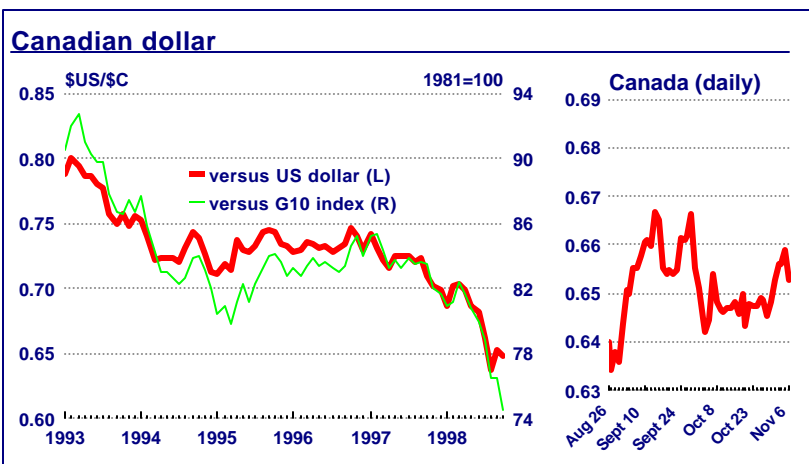


### The Canadian dollar rallies...

- After hovering below US65¢ for most of October, the Canadian dollar rallied in early November, rising nearly a cent to close at US65.64¢ on November 6.
- Interest rates cuts in European countries and recent reports pointing to an improved outlook for the global economy have provided some stability and underlying strength to the Canadian dollar.

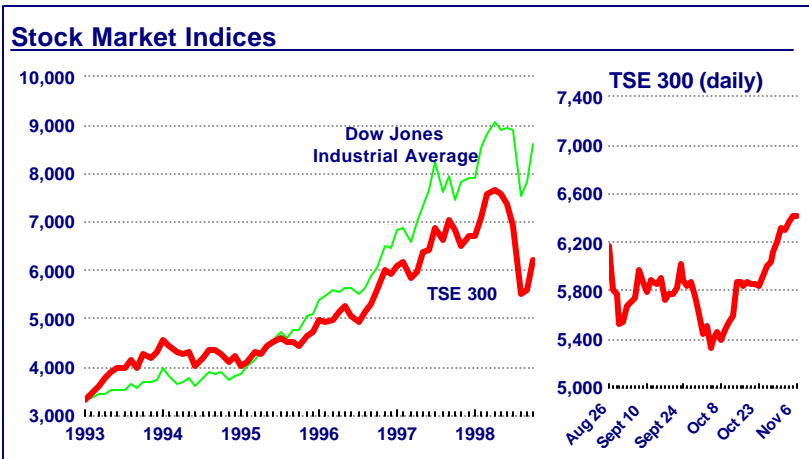
### ...and stock markets recoup some of their earlier losses

- North American equity markets staged a massive rally on October 16 on the news of an unexpected interest rate cut by the U.S. Federal Reserve. The TSE 300 index soared 268 points (or 4.8%) – its biggest one-day increase in eleven years – while the Dow Jones Industrial Average gained more than 330 points (or 4.2%).
- Following these large gains, Canadian stock prices continued to trend up through the rest of October, with the TSE 300 registering its best monthly performance in 14 years. As of November 6, the TSE stood at 6418, its highest level in 2½ months but still 17% below its recent peak in May.



### The Canadian Dollar

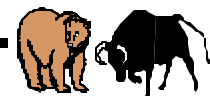
(close)	\$US vs. \$Cdn	index vs. G-10 (81=100)	DM vs. \$Cdn	yen vs. \$Cdn
1996	0.7296	84.00	1.139	83.64
1997	0.6991	81.62	1.247	90.87
1998	0.6863	80.83	1.228	93.37
May	0.6813	79.96	1.223	95.71
June	0.6614	78.82	1.208	94.69
July	0.6376	76.50	1.164	94.15
Aug	0.6531	76.48	1.117	88.38
Sept	0.6481	74.58	1.060	78.10
Oct				
Nov 6	0.6564			



### Key Stock Market Indexes

	October Close	% change from	
		last month	last year
<b>TSE 300</b>	<b>6,208</b>	<b>10.6</b>	<b>-9.3</b>
Oil & Gas	5,434	3.6	-29.0
Metals & Minerals	3,096	5.5	-26.1
Utilities	6,733	15.4	22.0
Paper & Forest	3,569	6.4	-22.1
Merchandising	5,111	-0.4	-10.7
Financial	7,735	15.8	-3.4
Gold	6,717	2.7	-11.1
Price-Earnings Ratio*	25.3	1.4	2.6
<b>S&amp;P 500</b>	<b>1,099</b>	<b>8.0</b>	<b>20.1</b>
<b>Dow Jones</b>	<b>8,592</b>	<b>9.6</b>	<b>15.5</b>

\*columns 2 & 3 reflect change in levels

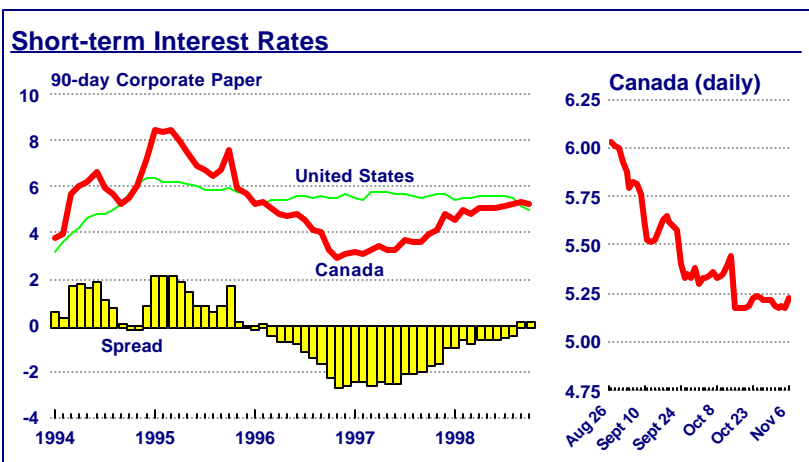


### The Bank of Canada lowers its Bank Rate for the second time in three weeks...

- On September 29, the Bank of Canada lowered its trend-setting Bank Rate 25 basis points to 5.75%. The Bank Rate was reduced a further 25 points on October 16, matching an unexpected rate cut by the U.S. Federal Reserve.
- These two reductions have offset half of the one percentage point rise in the Bank Rate engineered late in August to support the Canadian dollar. Financial market analysts widely expect further U.S. rate cuts, which would permit additional easing in Canada as well.

### ...prompting commercial banks to lower their prime rate

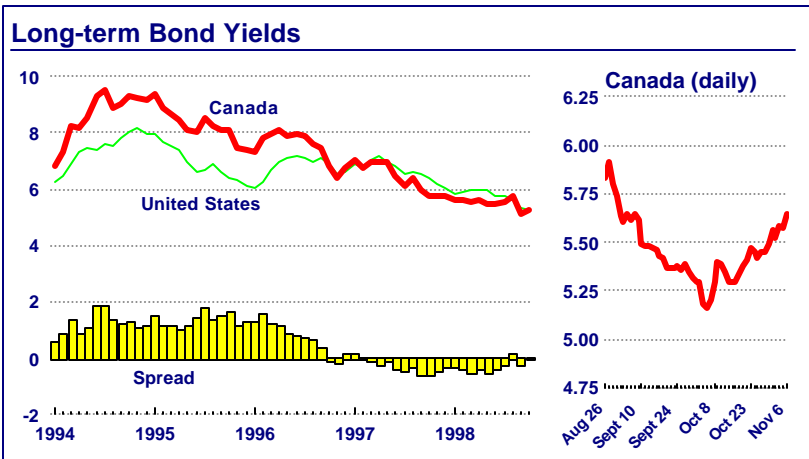
- In response to the two reductions in the Bank Rate, commercial banks reduced their prime lending rates – the benchmark for many consumer and commercial loans – from 7.5% late in August to the current 7.0%.
- Although short rates trended down in October, long-term interest rates rose steadily after posting very low rates early in the month. Bond yields have been driven up by the recent rebound in stock markets, which has prompted investors to buy stocks and dump bonds – a reversal of the "flight to safety" that had occurred previously when stock prices fell sharply.



### Key Money Market Rates

(end of period)	90-day Corporate Paper	spread against U.S.	Long Bond Yield	spread against U.S.
1996	3.13	-2.55	7.09	0.50
1997	4.80	-0.85	5.95	0.02
1998	5.04	-0.53	5.61	-0.22
May	5.06	-0.52	5.52	-0.14
June	5.14	-0.44	5.61	-0.16
July	5.22	-0.33	5.83	0.39
Aug	5.38	0.19	5.32	0.34
Sept	5.22	0.19	5.45	0.32
Oct	5.19	0.09	5.58	0.24

A positive spread indicates that Canadian rates are above their U.S. counterparts.



### Key Lending Rates

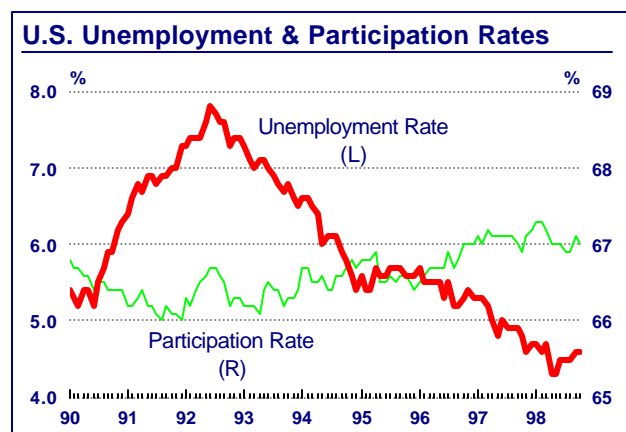
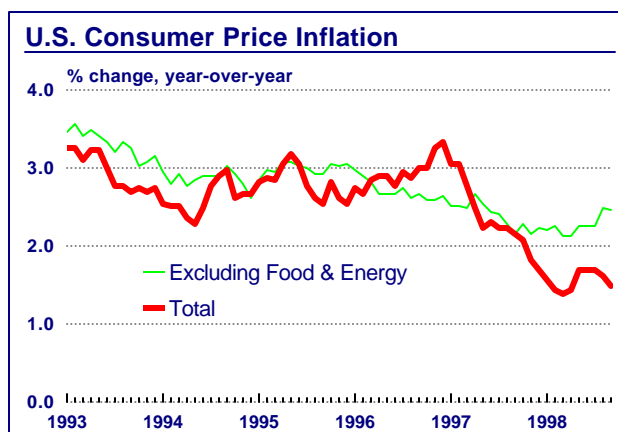
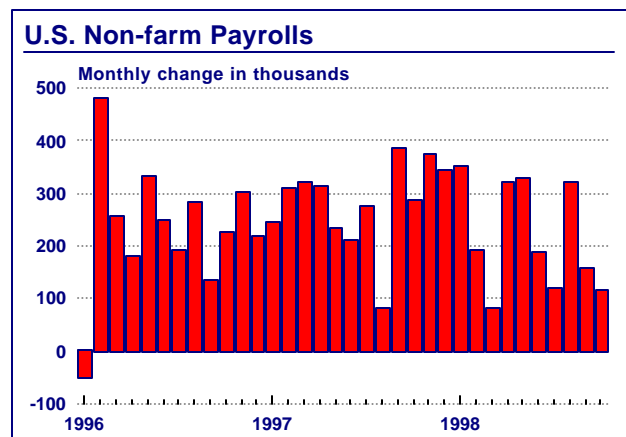
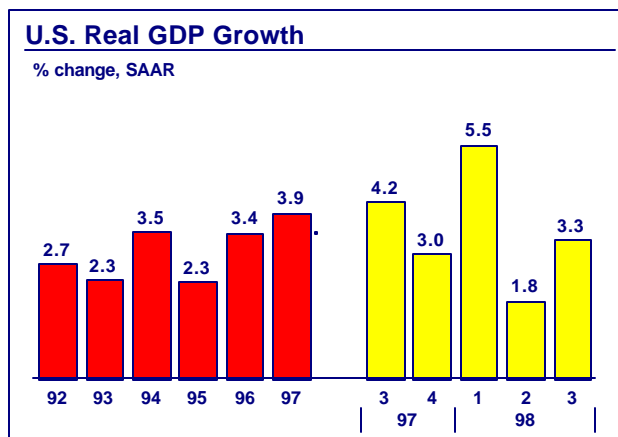
(end of period)	Bank Rate	Prime Lending Rate	Mortgage Rate 1 year	Mortgage Rate 5 year
1996	3.25	4.75	5.20	6.95
1997	4.50	6.00	6.65	7.05
1998	5.00	6.50	6.55	6.95
May	5.00	6.50	6.55	6.95
June	5.00	6.50	6.55	6.95
July	6.00	7.50	7.45	7.55
Aug	5.75	7.25	6.75	7.15
Sept	5.50	7.00	6.50	6.75
Oct	5.50	7.00	6.50	6.75
Nov 4	5.50	7.00	6.50	6.75

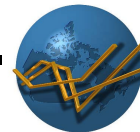


## U.S. Economic Trends

### *The U.S. economy grows strongly in the third quarter, but could be poised for a slowdown*

- Advance estimates show that the U.S. economy expanded at an annual pace of 3.3% in the third quarter, up from 1.8% in the second quarter. Robust consumer spending and a sharp jump in non-farm inventories accounted for virtually all of the increase in GDP. The third-quarter outcome surprised market analysts as it was well above the consensus forecast of about 2.0% growth.
- A number of signs, however, suggest that the U.S. economy may be poised for a slowdown. Non-residential business investment declined in the third quarter for the first time since the last recession, reflecting tighter lending conditions, declining profit growth, slowing production, and increased capacity. Available data for the fourth quarter are also consistent with a weakening economy. Payroll employment rose 116,000 in October, the smallest gain in seven months, while the Federal Reserve's survey of regional economic conditions revealed that the pace of economic expansion moderated in September and October.
- Less than three weeks after the last rate cut, the Federal Reserve unexpectedly announced an additional 25 basis-point reduction in short-term interest rates on October 15. This latest move – the first time in more than four years that the Fed changed interest rates between official policy meetings – was prompted by growing concern over the risks posed to the near-term economic outlook by volatile financial markets and tighter lending conditions. The widespread view among market analysts is that the Federal Reserve will further reduce interest rates before year-end.





**Recent Jumps in Patenting Activities in Canada and Abroad**

**Patenting activities have increased substantially in Canada...**

- Canadians are filing patent applications at an increasing rate, both at home and abroad. As patenting activity is one measure of innovative performance, this suggests an increase in inventive activity in Canada.

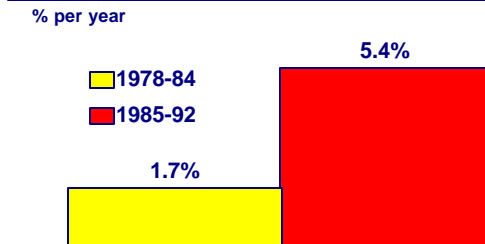
**...including a sharp rise in domestic patent applications**

- Over the 1978-84 period, domestic patent applications increased by 1.7% per year. Over the 1985-92 period, however, domestic patent applications increased by 5.4% per year.
- Among the G-7 countries, only the United States has experienced a faster acceleration in the growth of domestic filing of patents (an increase of 5.1 percentage points – from 0.2% per year in the 1978-84 period to 5.3% in 1985-92.
  - In every other G-7 country except France, the growth rate of domestic patent applications has fallen between these two periods.

**Science-based industries account for a large share of manufacturing patent applications**

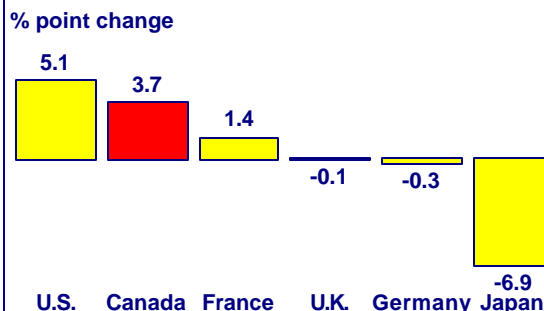
- Based on a classification developed by the OECD (and slightly modified by Statistics Canada), Manufacturing can be divided into five major sectors — natural resource-based, labour-intensive, scale-based, product-differentiated, and science-based.
- Despite being the smallest of the five sectors examined, science-based industries are the largest filer of patent applications, accounting for 35.4% of all applications in 1990. Product-differentiated manufacturing industries were responsible for an additional 30.0%.
  - Major contributors within the science-based sector include Scientific & Professional Equipment, Communication & Other Electronic Equipment and Pharmaceuticals & Medicine.

**Growth of Domestic Patent Applications in Canada**



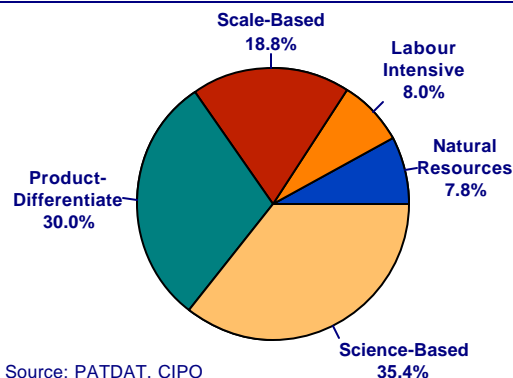
Source: OECD Basic Science and Technology Statistics

**Change in Growth of Domestic Patents 1978-84 versus 1985-92**



Source: OECD Basic Science and Technology Statistics

**Share of Patent Applications in the Manufacturing Sector in Canada, 1990 by Industrial Sector**



Source: PATDAT, CIPO

*This special report is based on the findings in "Recent Jumps in Patenting Activities: Comparative Innovative Performance of Major Industrial Countries, Patterns and Explanations", by Mohammed Rafiqzaman and Lori Whewell, Industry Canada (1998).*



**Recent Jumps in Patenting Activities in Canada and Abroad**

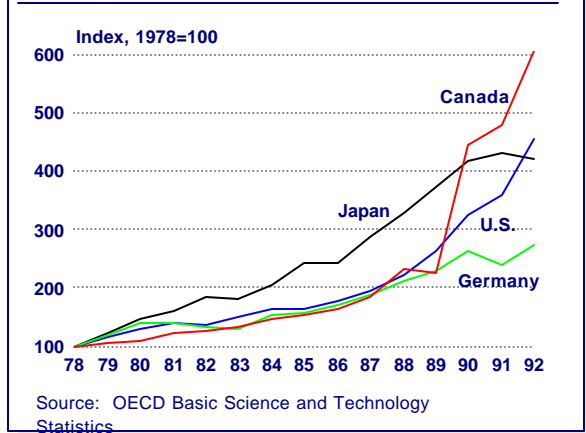
**Canada has also increased its patenting activities abroad...**

- Patent applications abroad by Canadians have been rising rapidly – 22.5% per year over the 1985-1992 period (see Table 1).
  - This is up sharply from an average annual growth rate of 6.4% over the 1978-84 period.
  - The 22.5% growth rate from 1985 to 1992 also compares favourably to average growth of 5.4% in domestic patent filings by Canadians over the same period.

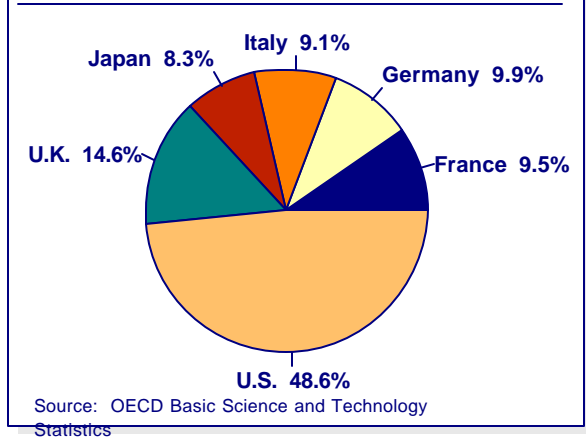
**...with just under half of all applications filed in other G-7 countries headed for the U.S.**

- Although its share has declined over the years, the U.S. is still the recipient of just under half of patent applications filed by Canadians in other G-7 countries.
  - This compares to a share of 62% for the U.S. in 1978 (Table 2).

**Patenting Abroad by Country**



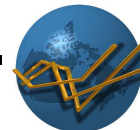
**Share of Total Patent Applications Filed by Canadians in other G-7 countries, 1992**



**Table 1. Growth Rates of Patenting Activities between 1978-1984 and 1985-1992**

Average annual growth (%)	<u>Domestic patents</u>		<u>Patenting abroad</u>		<u>Patents from Abroad</u>	
	1978-84	1985-92	1978-84	1985-92	1978-84	1985-92
Canada	1.7	5.4	6.4	22.5	1.4	6.6
United States	0.2	5.3	8.6	14.0	4.9	7.5
Japan	10.4	3.6	13.0	9.7	3.6	5.4
Germany	1.1	0.9	7.7	7.8	5.7	5.3
France	-0.0	1.3	7.6	8.7	6.2	6.0
United Kingdom	-0.1	-0.2	7.4	13.6	5.3	5.5
Italy	--	--	7.9	11.3	--	--





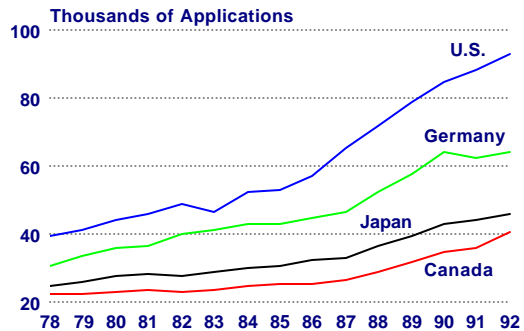
**Patent applications in Canada by non-residents are growing quickly...**

- Patent applications abroad by residents of all G-7 countries have increased.
  - The growing importance of trade in high-tech products and the transfer of technology has prompted a greater number of requests for protection of intellectual property abroad by technology-producing firms.
- Consistent with this global trend, patent applications by non-residents in Canada are growing more quickly than before. However, the growth is less rapid than that of patenting abroad.
  - Over the 1985-92 period, patent applications in Canada by non-residents rose 6.6% per year on average. This compares to an annual increase of only 1.4% over the 1978-84 period (Table 1).

**... and are sourced mainly from the U.S. as opposed to other G-7 countries**

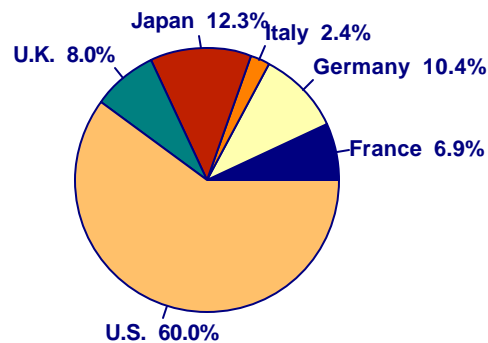
- Patent applications from U.S. residents accounted for 60% of foreign patent applications in Canada by residents of other G-7 countries in 1992.
- However, the U.S. share has fallen from 69% in 1978, suggesting that Canada is becoming a more attractive place for nationals from G-7 countries other than the U.S. in which to seek protection for their innovations.

**Non-Resident Patent Applications by Host Country**



Source: OECD Basic Science and Technology Statistics

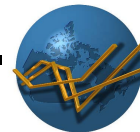
**Share of Patent Applications in Canada Filed by G-7 countries, 1992**



Source: OECD Basic Science and Technology Statistics

**Table 2. G-7 Dimensions of Patenting Activity in Canada**

(%)	<u>Share of Patent Applications filed in other G-7 countries by Canadians</u>		<u>Share of Patent Applications filed in Canada by Residents of other G-7 countries</u>	
	1978	1992	1978	1992
United States	62.4	48.6	68.5	60.0
Japan	6.9	8.3	8.1	12.3
Germany	7.6	9.9	9.1	10.4
France	6.1	9.5	5.8	6.9
United Kingdom	17.0	14.6	6.6	8.0
Italy	0.1	9.1	1.9	2.4



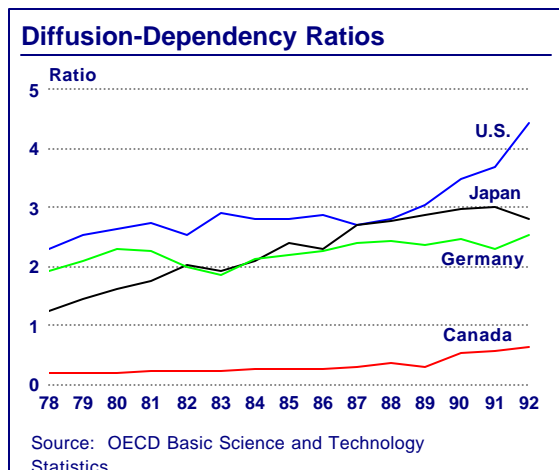
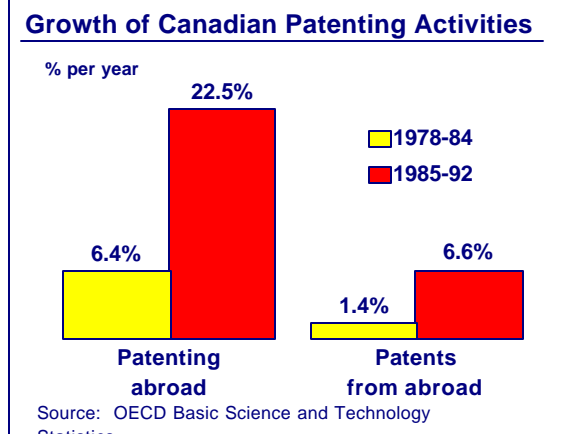
**Recent Jumps in Patenting Activities in Canada and Abroad**

**Canada's diffusion-dependency ratio is rising**

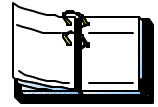
- The "diffusion-dependency" ratio is defined as the ratio of the patent applications flowing out of the country relative to the inflow of patent applications from non-residents.
- Patent applications abroad by Canadians are growing at a faster rate than applications from non-residents in Canada. Consequently, the "diffusion-dependency" ratio has increased over time.
  - The rising diffusion-dependency ratio suggests that Canadians are becoming more innovative than in the past.

**The growth in patenting activity can be traced to institutional changes and advancing technology.**

- Two main hypotheses have been put forward to explain recent increases in patenting activities:
  - The pro-patent hypothesis holds that higher patenting activity has been driven by changes in the legal environment for patent holders. For example, Canada has modernized and improved its system of patent protection, including a change from a "first-to-invent" system to a "first-to-file" system in 1989.
  - The fertile technology hypothesis attributes increased patenting activity to the accelerating pace of technological change and innovation. Moreover, the application of advanced technologies to the discovery process itself could have increased the productivity of R&D, and at the same time a shift in R&D facilities to more applied activities may also have increased the yield of patentable inventions.
- Though both effects are at work in Canada, the recent increase in patenting activity appears to be more strongly related to the fertile technology hypothesis. For more details, consult Rafiqzaman and Whewell (1998).



## COMING UP



### Key Future Data Releases and Planned Events

---

#### CANADA

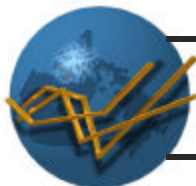
Survey of Manufacturing -- September .....	November 17
International Trade -- September .....	November 18
Consumer Price Index -- October .....	November 19
Financial Statistics for Enterprises, 3rd Quarter, 1998 .....	November 20
National Economic & Financial Accounts, 3rd Quarter, 1998 .....	November 30
Balance of International Payments, 3rd Quarter, 1998 .....	November 30
GDP at factor cost -- September .....	November 30
Monetary Policy Report (Bank of Canada) .....	November 16
Labour Force Survey -- November .....	December 4
Industrial Capacity Utilization Rates, 3rd Quarter, 1998 .....	December 7

#### UNITED STATES

Federal Open Market Committee meeting .....	November 17
Consumer Price Index -- October .....	November 17
International Trade -- September .....	November 18
GDP -- 3rd Quarter 1998, preliminary .....	November 24
Employment Situation -- November .....	December 4

Note: the November MEI uses data available as of November 6, 1998

The Special Report scheduled for the December MEI is entitled  
"1998: Year-End Review"



---

***Micro Economic Policy Analysis***  
***Analyse de la politique micro-économique***

---