BANK OF CANADA

Monetary Policy Report

– October 2002 –

This 1995 $200 gold coin, designed by artist John Mantha, celebrates the Canadian tradition of producing maple syrup. Canada's First Peoples taught the early colonists how to gather the sap from the sugar maple and boil it down to produce syrup and sugar. Sugaring off soon became a Canadian rite of spring, and the traditional family-operated sugar bush is still an important part of this unique agricultural industry.

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MONETARY POLICY REPORT

— October 2002 —

*This is a report of the Governing Council of the Bank of Canada:
David Dodge, Malcolm Knight, Charles Freedman, Paul Jenkins,
Sheryl Kennedy, and Pierre Duguay.*

Canada's recent strong performance isn't just good luck. It is the result of having a solid policy framework, both in terms of inflation and fiscal control. . . . We stuck to that framework during the recent economic turmoil, and we are now seeing a clear payback for the tremendous investment that Canadians made. . . . That framework holds and will continue to serve us well. If anyone still needs convincing of that, Canada's recent economic performance provides compelling evidence.

David Dodge

Governor, Bank of Canada
18 September 2002

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Canada's Inflation-Control Strategy

Inflation control and the economy

- Inflation control is not an end in itself; it is the means whereby monetary policy contributes to solid economic performance.
- Low inflation allows the economy to function more effectively. This contributes to better economic growth over time and works to moderate cyclical fluctuations in output and employment.

The monetary policy instrument

- Announcements regarding the Bank's policy instrument—the target overnight interest rate—take place, under normal circumstances, on eight prespecified dates during the year.
- In setting a target for the overnight rate, the Bank of Canada influences short-term interest rates to achieve a rate of monetary expansion consistent with the inflation-control target. The transmission mechanism is complex and involves long and variable lags—the impact on inflation from changes in policy rates is usually spread over six to eight quarters.

The targets

- In February 1991, the federal government and the Bank of Canada jointly announced a series of targets for reducing total CPI inflation to the midpoint of a range of 1 to 3 per cent by the end of 1995. That inflation-control target range was extended a number of times, most recently in May 2001. In this last case, the extension was to the end of 2006. Monetary policy will continue to aim at keeping future inflation at the 2 per cent target midpoint of the range, both to maximize the likelihood that inflation stays within the target range and to increase the predictability of inflation over the longer term (Crawford 2001).

Monitoring inflation

- In the short run, a good deal of movement in the CPI is caused by transitory fluctuations in the prices of such volatile components as fruit and gasoline, as well as by changes in indirect taxes. For this reason, the Bank focuses on a *core* measure of CPI inflation that excludes the eight most volatile components of the CPI and adjusts the remaining components to remove the effect of changes in indirect taxes. Core inflation also tends to be a better predictor of future changes in the total CPI than does the recent history of CPI inflation (Macklem 2001).

1. Introduction

The Canadian economy has expanded strongly through 2002 . . .

Over the past year, Canada's economy has outperformed the economies of virtually all the other major industrial countries. The Canadian economy has been expanding at a rate above its growth potential, with levels of activity now close to full production capacity, and there have been remarkable gains in employment. Core inflation has averaged somewhat higher than the Bank of Canada's 2 per cent target. In these circumstances, monetary policy has been directed towards reducing the substantial amount of monetary stimulus in a timely and measured way.

. . . while the global economic recovery has been proceeding at a slower pace.

While our domestic economy has enjoyed strong growth, the global economic recovery has been proceeding at a slower pace than anticipated. Since the last *Monetary Policy Report*, economic, financial, and geopolitical developments have contributed to a more moderate and less certain outlook for global economic growth. These developments include further adjustments in response to past excesses in capital spending, declines in equity prices, rising risk premiums, concerns about corporate governance and financial reporting, geopolitical developments in the Middle East, and concerns about the situation in several Latin American countries.

These developments can potentially affect the Canadian economy through a number of channels. Slower growth abroad would affect exports, those to the United States being the most important. Spending by corporations and households within Canada could also be affected through increases in the cost of capital, declines in wealth as a result of falling equity prices, and tighter credit conditions. Concerns about corporate governance and an unsettled geopolitical situation also increase uncertainty, which could cause households and corporations to postpone spending until a clearer picture emerges.

This* Report *considers the global and domestic factors shaping the Canadian economic outlook.

This *Report* presents a detailed assessment of the global and domestic factors that are shaping the outlook for the Canadian economy through 2003. As well, it discusses the factors that are expected to push core inflation higher over the coming few months. It remains the Bank's view that the underlying economic situation will require further reductions in the amount of monetary stimulus. The timing and extent of policy adjustments will depend on the Bank's ongoing assessment of global and domestic developments and their implications for pressures on capacity and inflation in the Canadian economy.

This report includes information received up to the fixed announcement date on 16 October 2002.

2. Recent Developments in Inflation

Since February 2002, core CPI inflation has been above the 2 per cent target midpoint of the Bank's 1 to 3 per cent inflation-control range. The rate of increase in the total CPI has moved up markedly to just above the core rate, reflecting the effects of a sharp increase in tobacco taxes and a marked rebound in crude oil prices.

Inflation and the target range

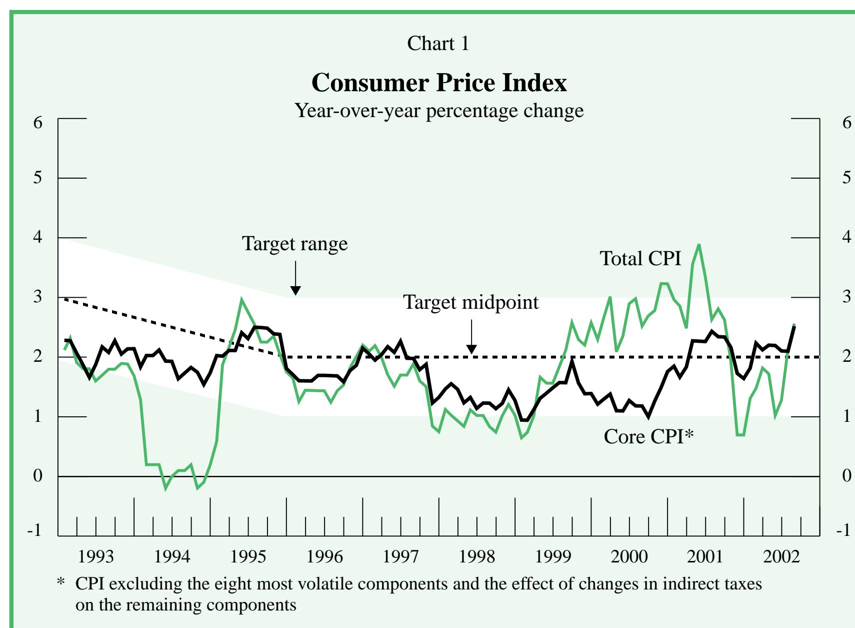
Since early 2002, core inflation has been above the 2 per cent target midpoint . . .

Core CPI inflation has been running above the level expected in the April *Report* (Chart 1).[1] Between February and July, core inflation was steady at around 2.2 per cent. In August, it rose to 2.5 per cent. Other measures of the trend rate of inflation have been lower than the core rate, but in August they were all above the 2 per cent target midpoint (Chart 2).

Chart 1

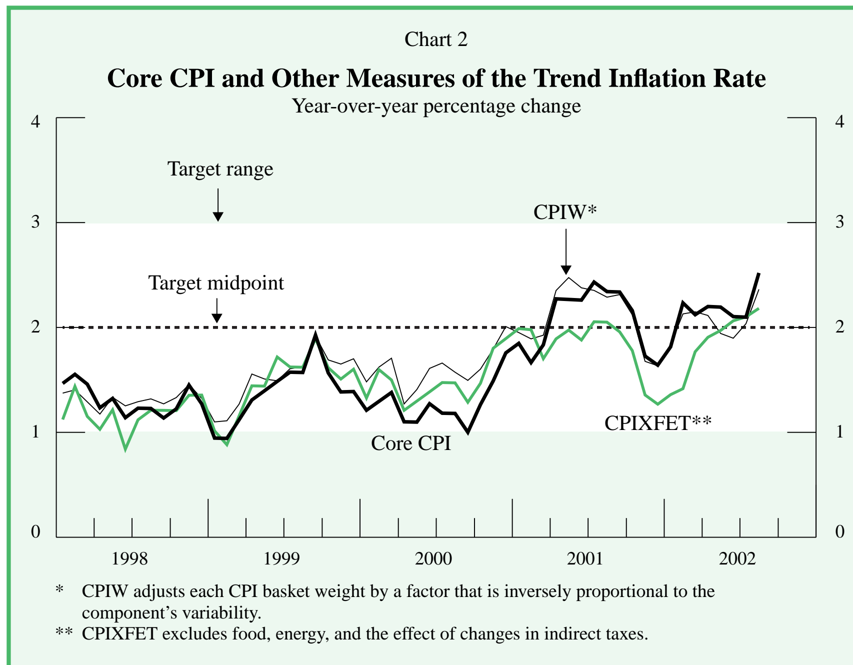
Consumer Price Index

Year-over-year percentage change



* CPI excluding the eight most volatile components and the effect of changes in indirect taxes on the remaining components

1. The core measure of CPI inflation that the Bank has been using since May 2001 excludes the eight most volatile components of the CPI and adjusts the remaining components to remove the effect of changes in indirect taxes. The eight most volatile components are fruit, vegetables, gasoline, fuel oil, natural gas, intercity transportation, tobacco, and mortgage-interest costs.



* CPIW adjusts each CPI basket weight by a factor that is inversely proportional to the component's variability.
** CPIXFET excludes food, energy, and the effect of changes in indirect taxes.

The higher-than-expected level of core inflation largely reflects unusual increases in both insurance premiums and electricity prices (Box 1). Premiums for home and, particularly, auto insurance have increased substantially, largely in response to an increase in the value of claims as well as recent low returns on portfolio investments by the insurance industry. Together, increases in home and automobile insurance costs contributed 0.7 percentage points to core inflation in August. As well, there was a recent weather-related jump in electricity prices in Ontario, which is expected to be largely reversed in coming months.[2] Core inflation has also been affected by strong demand for housing and furnishings, which has put upward pressure on the prices of these items. In addition, past increases in import costs arising from the depreciation of the Canadian dollar since early 2000 continued to put some upward pressure on prices.

. . . and the rate of increase in the total CPI has moved up markedly, to just above the core rate.

The 12-month rate of increase in the total CPI was 2.6 per cent in August, up markedly from 1.5 per cent in February. Total CPI inflation moved up earlier than had been expected at the time of the April *Report*, although the convergence of core and total CPI inflation had been foreseen. Crude oil prices rebounded sharply earlier this year, mainly reflecting fears of supply disruptions in the event

2. With changes in the structure of the market for electricity in Ontario, the base cost for electricity to consumers has risen. In addition, wholesale electricity prices have become more sensitive to demand conditions. Other cost components of the retail price of electricity, such as transmission and distribution, continue to be regulated.

Box 1

Core Inflation and Its Components

The higher-than-expected level of core inflation to date in 2002 has chiefly reflected unanticipated increases in certain service components of the core CPI. Typically, the prices of final services increase at a faster pace than the prices of final goods, chiefly owing to lower productivity growth in the service sectors than in the goods sectors. However, the divergence in yearly price increases between goods and services has widened considerably this year. Large increases in insurance costs for homes and, particularly, automobiles helped push the year-over-year increase in the prices of core services to 3.5 per cent in August. This rise in insurance costs mainly reflects a rise in the value of claims combined with recent low returns on portfolio investments. Core shelter costs have also risen faster this year, owing to increases in the cost of building new homes and strong demand for housing. The year-over-year rate of increase in Statistics Canada's new-housing-price index, which feeds into the shelter component of the core CPI, rose from 3.1 per cent in the first quarter of this year to 4.0 per cent in the second.

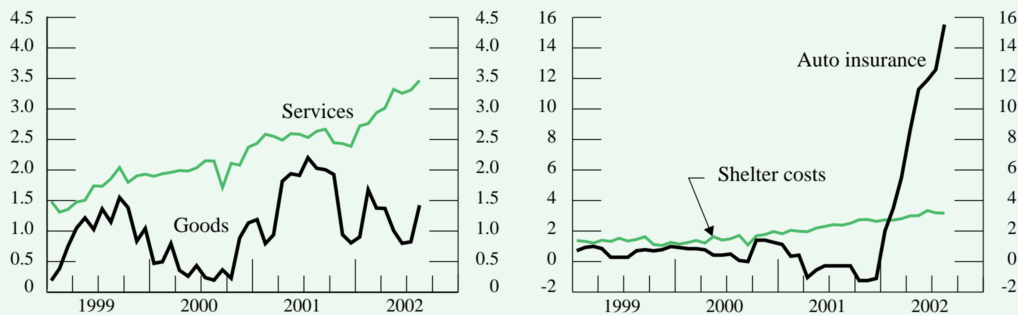
In contrast to the prices of services, the prices of the goods in the core CPI basket rose at a modest 1.4 per cent in August relative to a year earlier. This was the result of price reductions or only modest price increases for such items as automobiles, other durable goods, clothing, and footwear. Electricity prices, however, have increased considerably in Ontario. This reflects both higher base costs to consumers and the effects of weather-related demand pressures in July and August.

In the housing market, strong new home construction and an increase in new listings relative to sales have increased supply. As a result, the acceleration in the year-over-year rate of increase in housing prices appears to have abated, though the rate of increase remains high. If supply continues to catch up to demand, we can expect the rate of increase of new home prices and the shelter component of the core CPI to moderate slightly moving forward. It is even more difficult to foresee the pace of price increases for automobile insurance, although somewhat smaller month-to-month increases are expected. Nonetheless, since these increases in housing prices and automobile insurance premiums are not expected to be reversed in the coming months, these components are expected to keep the 12-month rate of increase in the core CPI relatively high well into 2003.

In contrast, the weather-related element of the increases in electricity prices in Ontario is expected to be reversed in the near term, and hence, its contribution to the 12-month rate of increase in the core CPI should diminish.

Components of Core Inflation

Year-over-year percentage change



of an outbreak of hostilities in the Middle East (Chart 3). Added pressure from substantial increases in tobacco taxes also exacerbated the rise in the total CPI.

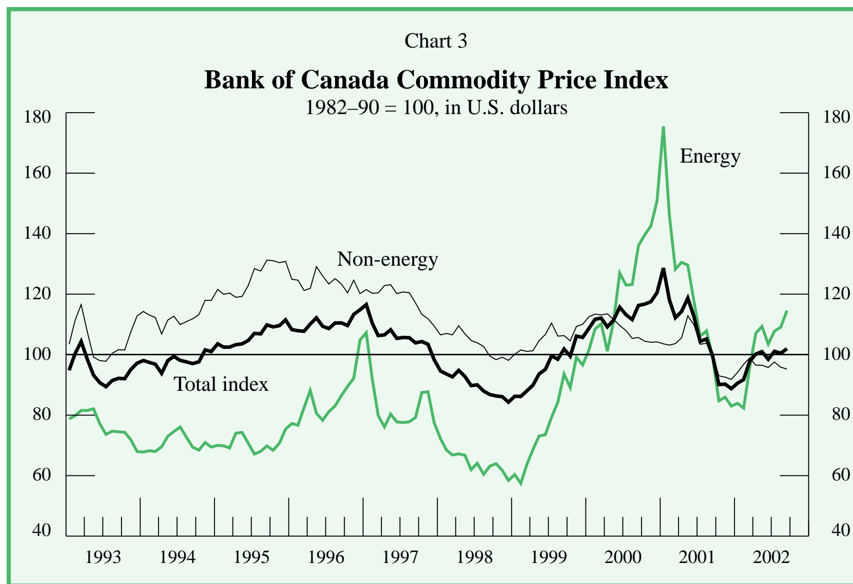
Overall, non-energy commodity prices have edged down since mid-April.

In contrast to recent energy-price developments, the prices of non-energy commodities, after picking up early this year with the recovery of global demand, have edged down since mid-April, as expectations of global economic growth have eased (Chart 3). In particular, the price of lumber fell considerably, partly because U.S. operators were using up stocks built up prior to confirmation by the U.S. government of duties on softwood lumber. Base metal prices also declined, though to a lesser extent, as demand softened. At the same time, higher supplies contributed to lower livestock prices. In contrast, grain prices rose considerably, chiefly reflecting the impact of the severe droughts in western Canada and elsewhere.

Chart 3

Bank of Canada Commodity Price Index

1982–90 = 100, in U.S. dollars

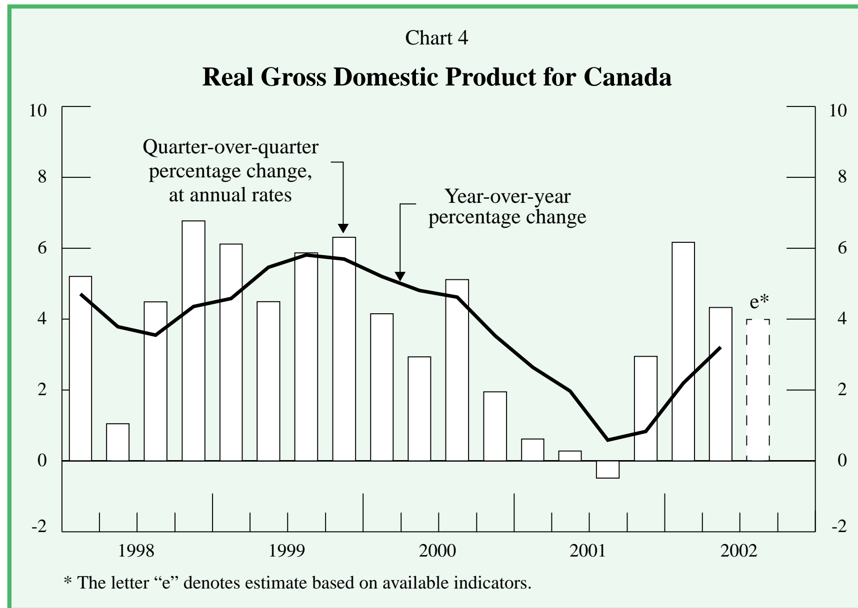


Factors at work on inflation

Aggregate demand

In the first three quarters of 2002, the Canadian economy grew faster than expected.

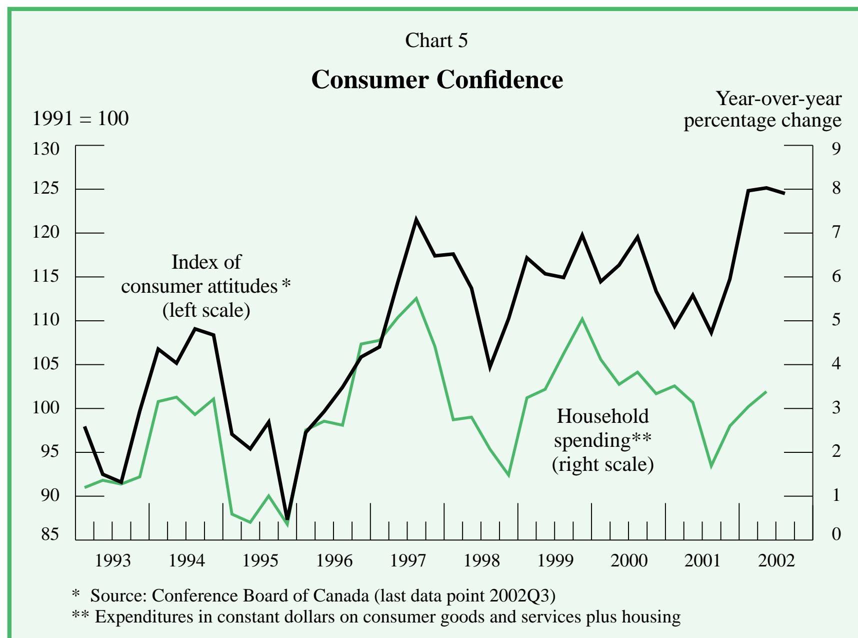
During the first three quarters of 2002, the Canadian economy grew at a somewhat faster pace than projected in the last *Report*. Real GDP surged at an annual rate of 5.2 per cent in the first half of this year, and the most recent indicators for spending and employment suggest that real GDP likely advanced at a pace of about 4 per cent in the third quarter (Chart 4). As a result, the economy has moved towards full production capacity more quickly than was expected in April.



Household spending in Canada has risen strongly . . .

. . . while export growth and the resumption of stock-building have also contributed to robust economic expansion.

The significant easing of monetary policy in 2001 contributed importantly to improved consumer confidence and to the strong growth of household spending to date in 2002, as did the substantial gains in employment and real incomes (Chart 5). Canada's exports have rebounded, reflecting renewed economic growth in the United States since the last quarter of 2001. Inventory accumulation resumed in the second quarter of 2002, and there has also been a significant recovery in investment in machinery and equipment. With buoyant growth in domestic demand, import volumes also increased substantially.



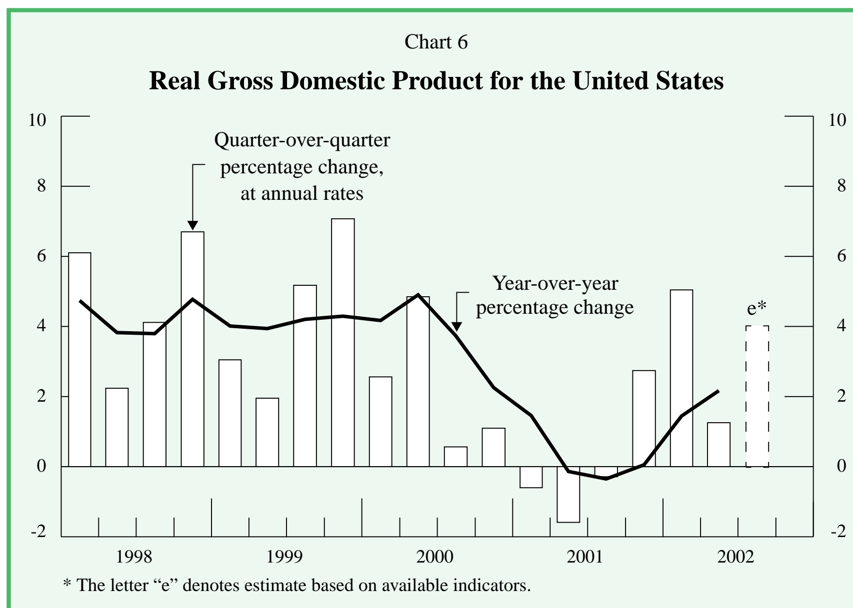
Following a robust first quarter, U.S. economic activity slowed markedly in the second quarter of this year, but available indicators suggest a rebound in the third quarter (Chart 6). On average over the first three quarters of 2002, the U.S. economy likely grew at a rate of about 3 1/2 per cent.

The U.S. economy is operating with more slack than previously expected.

Important historical revisions were recently made to U.S. national accounts data. Real GDP growth over the past two years was revised downwards, lengthening the recession of the U.S. economy in 2001. In the Bank's view, the revisions, together with the weaker-than-expected growth in U.S. activity in the second quarter, suggest that there is currently more slack in the U.S. economy than was previously believed.

Chart 6

Real Gross Domestic Product for the United States



* The letter "e" denotes estimate based on available indicators.

Estimated pressures on capacity

The amount of excess supply in the Canadian economy has diminished appreciably . . .

Current estimates of the Bank's conventional measures of potential output and the output gap indicate that economic slack had largely disappeared by the end of the summer (Chart 7).

Several other indicators, however, suggest less pressure on capacity than the conventional measures (Box 2). The strong increases in employment since the beginning of 2002 have been accompanied by a sharp rise in the labour-force participation rate. Some of the increased demand for labour has therefore been met out of an increase in the supply of labour. Indeed, it is likely that part of the increase in the participation rate reflects an upward shift in the trend rate. The most recent survey of firms conducted by the Bank's regional offices also suggests that pressures on capacity are not widespread. On balance, the Bank feels that the economy is currently operating with somewhat more slack than its conventional measure of the output gap would suggest.

. . . but some slack still remains.

Box 2

Alternative Indicators of Capacity Pressure

The Bank's conventional measures of potential output and the output gap suggest that the Canadian economy moved from a position of excess demand in 2000 to a position of excess supply in the second half of 2001.[1] Statistics Canada's measure of capacity utilization in the non-farm, goods-producing sector (CAPU) paints a similar picture. It moved below its 1987–2001 average level in the second half of last year. Moreover, both the output gap and CAPU suggest that the amount of excess supply diminished considerably in the first half of 2002, and both suggest that the economy was operating virtually at its productive capacity by the second quarter of this year.

Capacity pressures have been particularly evident in the housing market. The vacancy rate in residential accommodation is very low. This, together with stimulative monetary conditions, has spurred strong housing demand, which has reduced the stock of newly constructed but unoccupied dwellings and put upward pressure on the rate of increase in the prices of both new and existing homes. Nevertheless, an impressive supply response in the form of much stronger new home construction has kept prices from rising even faster.

Other indicators point to less pressure on capacity. The national unemployment rate rose by slightly more than half a percentage point between the second quarter of 2001 and the second quarter of 2002. Although employment has increased steadily since the beginning of 2002, growth in the supply of labour has also risen. Indeed, it is likely that part of the increase in the aggregate participation rate has reflected an upward shift in the trend participation rate, mainly as a result of the increased participation of women 25 years and over and men 55 years and over.[2] There is currently also less evidence of labour shortages than was the case in the first half of 2001, based on surveys conducted by the Bank's regional offices and by Statistics Canada. These indicators all suggest that there is still some slack in the labour market. The recent easing of increases in labour compensation, even with the relatively strong performance of productivity, is consistent with this assessment.

The ratio of unfilled orders to shipments in the manufacturing sector (excluding aerospace products and parts) is also still fairly low. The vacancy rate for office space has risen considerably since the end of 2001, and prices of non-residential property are only modestly above their levels of a year ago.

The positive surprises in core inflation relative to what was expected in the April *Report* have been caused mainly by factors unrelated to underlying pressure on the economy's productive capacity—particularly the unanticipated increases in automobile insurance premiums and electricity rates.

Considering this broad range of indicators, it is the Bank's judgment that the pressure on aggregate productive capacity is currently somewhat less than that suggested by the conventional measure of the output gap.

---

1. The Bank's conventional measure of the output gap is constructed using a variant of the multivariate-filter measure described in Butler (1996), which infers the level of potential output from movements in certain observable variables, such as labour inputs, labour productivity, and inflation. (See Technical Box 1 in the May 1995 *Report*.)
2. While the conventional measure of potential output uses information on labour force participation, it will tend to recognize shifts in the trend participation rate only slowly. Hence, if the trend participation rate has risen, the conventional measure will tend to understate potential output until it fully recognizes the size of the shift.

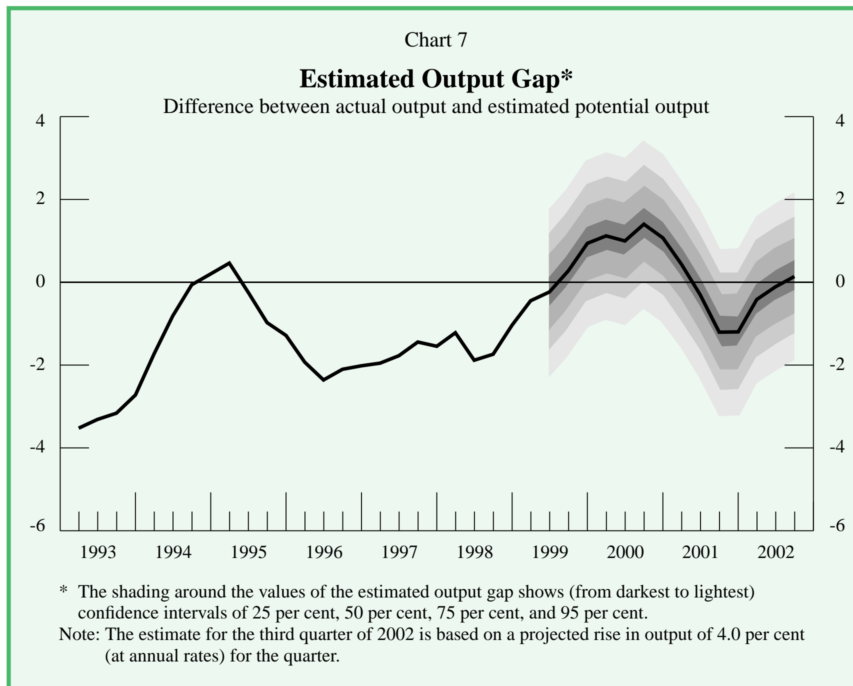


Chart 7

Estimated Output Gap*

Difference between actual output and estimated potential output

* The shading around the values of the estimated output gap shows (from darkest to lightest) confidence intervals of 25 per cent, 50 per cent, 75 per cent, and 95 per cent.

Note: The estimate for the third quarter of 2002 is based on a projected rise in output of 4.0 per cent (at annual rates) for the quarter.

Cost control

With a marked pickup in the growth of labour productivity, unit labour costs are below year-earlier levels.

Based on the average hourly earnings of permanent workers, the underlying rate of increase in average labour compensation seems to have eased to just below 3.0 per cent in the third quarter of 2002, compared with about 3.5 per cent early this year (Chart 8).

The year-over-year rise in labour compensation in the business sector has fallen appreciably since the end of 2000. Meanwhile, labour-productivity growth increased to 3 per cent in the first half of 2002 as the economy began to recover. With this marked pickup in productivity growth, unit labour costs in the business sector are below year-earlier levels (Chart 9).

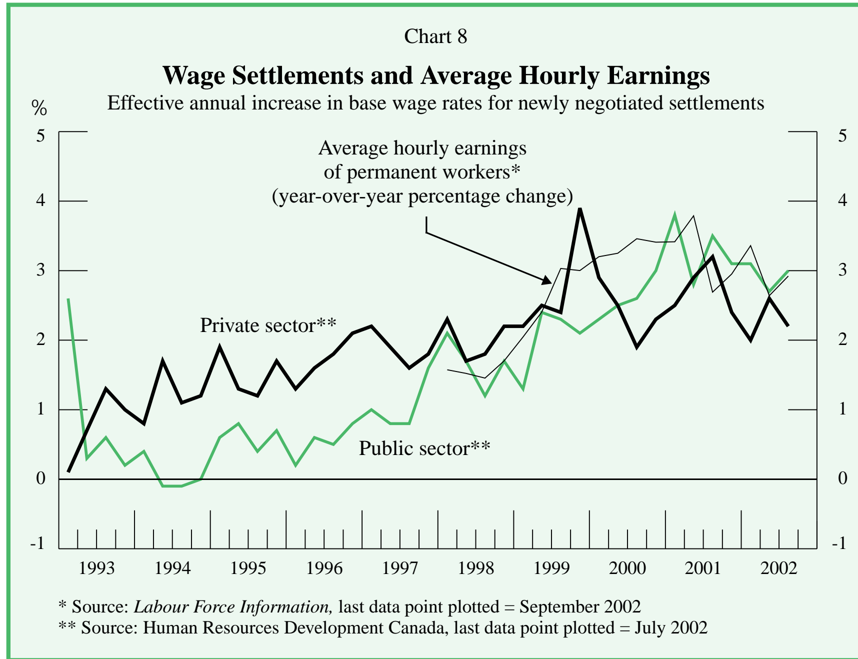


Chart 8
Wage Settlements and Average Hourly Earnings
Effective annual increase in base wage rates for newly negotiated settlements
%
Average hourly earnings
of permanent workers*
(year-over-year percentage change)
Private sector**
Public sector**
5
4
3
2
1
0
-1
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
* Source: Labour Force Information, last data point plotted = September 2002
** Source: Human Resources Development Canada, last data point plotted = July 2002

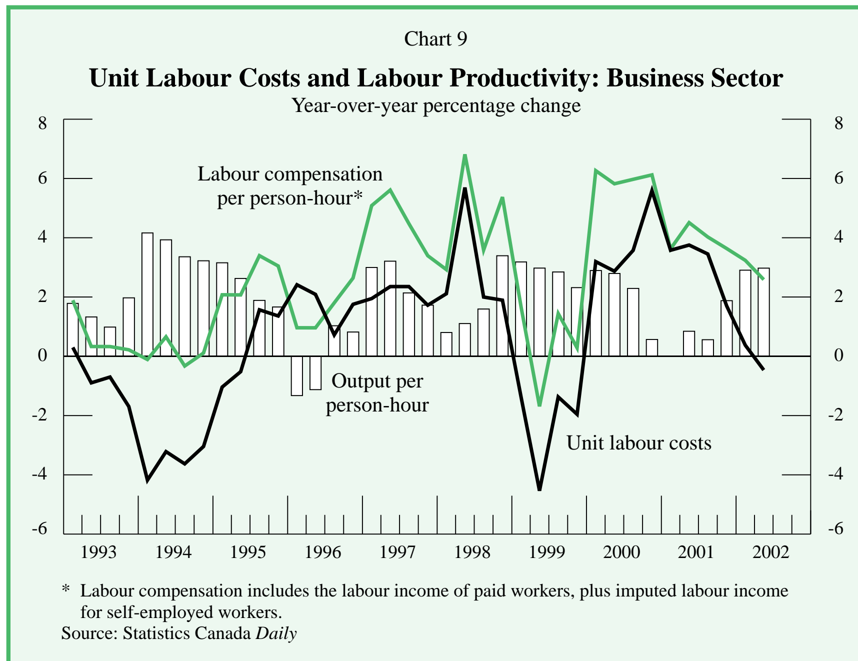


Chart 9
Unit Labour Costs and Labour Productivity: Business Sector
Year-over-year percentage change
Labour compensation
per person-hour*
Output per
person-hour
Unit labour costs
8
6
4
2
0
-2
-4
-6
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
* Labour compensation includes the labour income of paid workers, plus imputed labour income for self-employed workers.
Source: Statistics Canada Daily

3. Financial Developments

Uncertainties and financial market volatility have created downside risks for the global economy.

In recent months, global uncertainties and financial market volatility have given rise to downside risks for global economic activity. The potential effects of these developments on the real economy can work through a number of channels (Box 3). Higher risk premiums increase the cost of capital, and access to external financing can be curtailed if lenders are less willing or less able to supply funding. Declines in asset prices can affect spending through their impact on the net worth of firms and households, and generalized uncertainty can also lead to delays in spending.

When determining the appropriate path for policy interest rates, it is important to assess the degree to which such financial "headwinds" bear upon economic activity. In a number of countries, the existence of such headwinds has been one of the reasons why policy interest rates remain well below the rates traditionally considered neutral. The path by which the policy interest rates move back towards their neutral level will depend to a great extent on how quickly the headwinds dissipate.

Corporate and household financial conditions

North American businesses have faced deteriorating financial conditions over the last six months.

Business financial conditions in North America have, on balance, deteriorated across a range of markets since the April *Report*. Higher-risk corporate borrowers are facing increased costs for capital and reduced access to external financing as a result of wider corporate bond spreads, lower equity prices, and a reduced supply of bank loans. In contrast, borrowing costs remain low for low-risk borrowers.

Spreads between the yields on corporate bonds and government bonds have increased across most investment grades (Chart 10). Despite increased spreads, the rate of interest on corporate debt for higher-rated firms has declined as a result of the decrease in government bond rates.

Over the last six months, rates on medium- and long-term government bonds have fallen sharply in both Canada and the United States (Chart 11). Investors' reduced tolerance for risk, leading to a portfolio shift out of equities into the bonds of low-risk borrowers, has been an important contributing factor. Adjustment of market expectations about future policy rates also likely explains some of this decrease.

Box 3

Business-Financing Conditions and Aggregate Demand

The linkages between financial developments and aggregate demand work partly through their effects on business-financing conditions. Developments that adversely affect the financial situations of borrowers or reduce the willingness or ability of lenders to supply funds lead to increased risk premiums in bond spreads, lower stock prices, and more restrictive terms and conditions on loans. Increases in the cost of financing or reductions in its availability restrain business investment and weaken aggregate demand.

Business credit can be restricted because of a deterioration in the financial positions of borrowers. For example, a perceived reduction in the ability of borrowers to generate income to repay their loans can cause lending to be curtailed. As well, a decline in asset values can erode the value of collateral and, hence, reduce the amount of credit granted. Uncertainty about a borrower's future stream of profits or collateral values, perhaps arising from a loss of confidence in corporate accounting practices, will have a similar effect.

Changes in the financial health of lenders or in their attitudes towards risk can also lead to tighter financing conditions. For example, a deterioration in bank balance sheets can lead to tighter credit conditions; banks tighten the standards and terms of their loans to mitigate risk or charge higher interest rates to take on risk. Banks may also cut back on loans to certain sectors or certain types of borrowers to increase the diversification of their portfolios or to limit their exposure. In the early 1990s, for example, U.S. banks suffered losses in their real estate portfolios, which affected their financial health. The result was tighter credit conditions and reduced access to credit for a wide variety of borrowers for some time.

In bond markets, changes in lenders' perception of riskiness or in their appetite for risk would be reflected in increased spreads between corporate and government interest rates—particularly for lower-grade corporate borrowers—and in reduced access to commercial paper markets. At the time of the Russian debt default and the near collapse of Long-Term Capital Management in 1998, risk premiums increased dramatically for higher-risk investments. Bond spreads on investment-grade issues also widened, as investors sought the liquidity of U.S. Treasuries.

Stock market developments obviously affect the cost of equity financing. Declines in equity prices and increases in volatility make it more difficult and costly to raise funds.

Finally, there may be connections between reduced financing from one source and the ability to obtain funds from another. For example, if banks cut off access to backup lines of credit, investors in the corporate paper market will be unwilling to purchase such paper. Changes in the credit rating of a firm's debt may violate the conditions of a bank loan, forcing its renegotiation or cancellation. Such events result in an increase in the cost of external financing, making investment more expensive.

Chart 10

Yield Spread between Corporate Bonds and Government Bonds

Daily

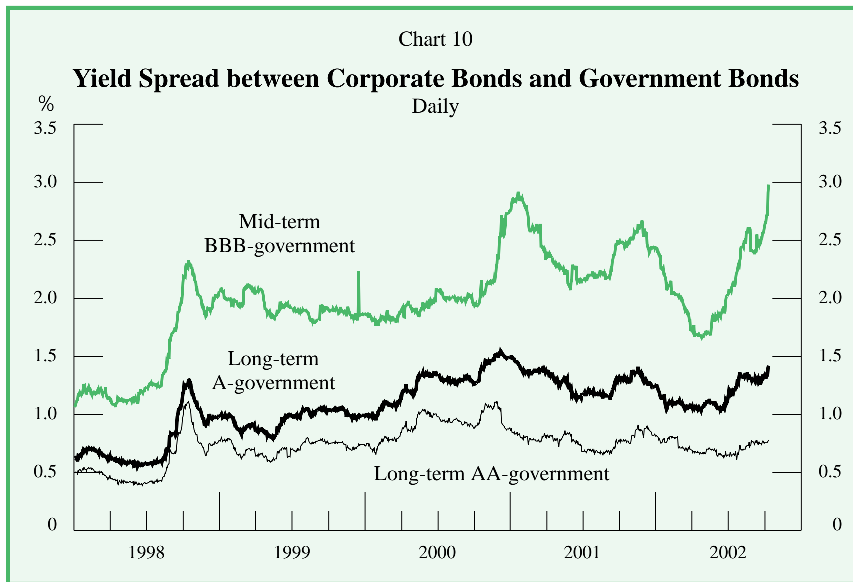
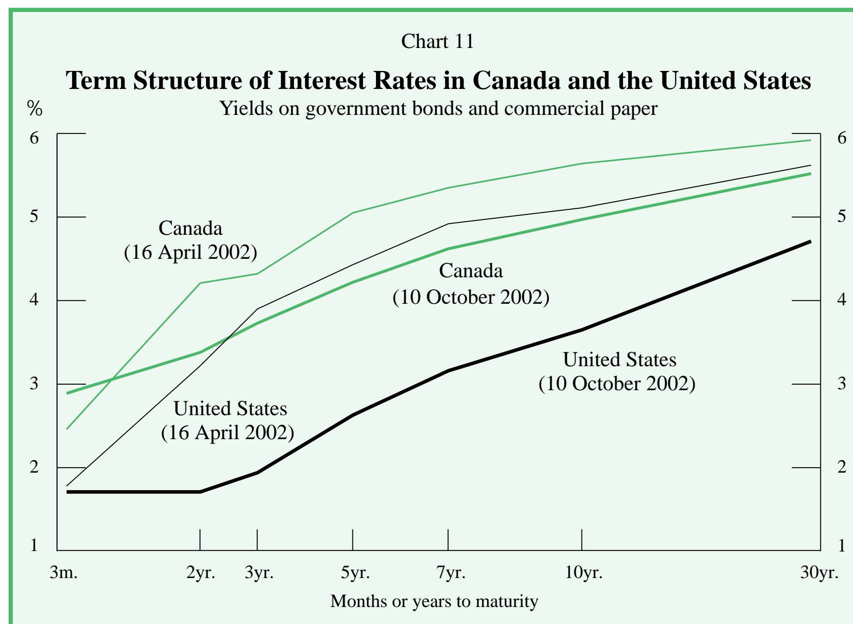


Chart 11

Term Structure of Interest Rates in Canada and the United States

Yields on government bonds and commercial paper



Global equity markets have exhibited considerable weakness, sustaining significant losses and experiencing periods of heightened volatility. From the beginning of the year to early October, the S&P 500 had fallen close to 25 per cent, and in Canada the TSX had fallen by about 20 per cent.

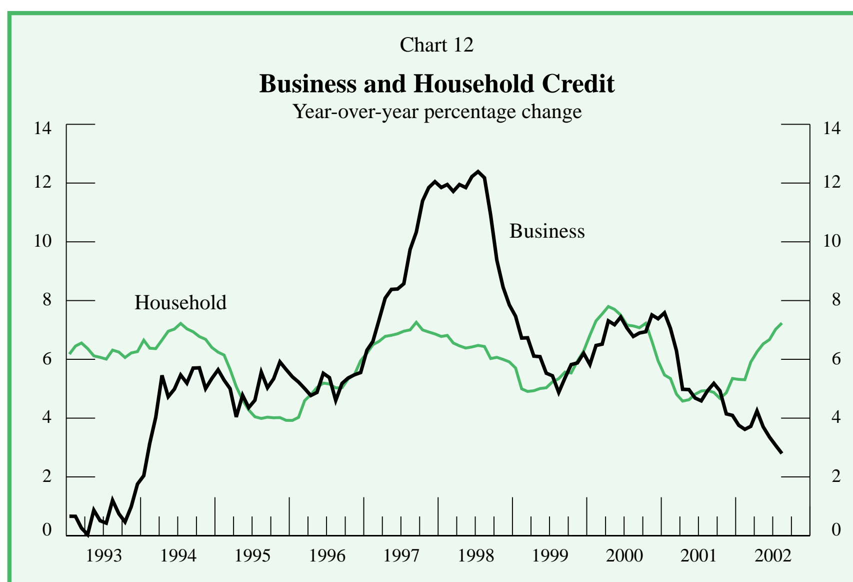
Canadian banks remain cautious in their lending, while U.S. banks continue to tighten terms and conditions.

Canadian banks remain cautious in their lending, as higher loan-loss provisions and weak revenues from capital market sources continue. In the United States, banks continue to tighten terms and conditions on loans as a result of the poorer economic outlook, sectoral concerns, and a reduced tolerance for risk.

With firms postponing their investment plans because of a more uncertain outlook, the demand for external financing in the United States and Canada has also been declining. In addition, some Canadian firms, which have had generally healthier profits than their U.S. counterparts, may have relied on internal funds to finance expenditures.

The growth of total business credit in Canada has slowed considerably since April . . .

As a result of these supply and demand factors, financing activity in both Canada and the United States has weakened. Bond issuance has slowed markedly since last April, and bank credit has declined, as has the outstanding amount of commercial paper. In Canada, this has resulted in a considerable slowing in the growth of total business credit since the last *Report* (Chart 12).



. . . while the growth in household credit has remained strong.

In contrast to business credit, growth in household credit has remained strong. This reflects a marked growth in household spending, particularly in the housing market, and favourable credit conditions, including low mortgage rates and ready access to loans. The continued accumulation of household debt has been largely matched by increases in assets. Moreover, households appear to be well positioned to finance this debt, with the share of personal income going to debt service remaining well below historical averages.

Household wealth has been adversely affected by declines in equity prices, but the effect was partly offset by the increasing value of real estate. There is some evidence that consumer spending is less sensitive to changes in equity prices than to changes in house prices.

Policy actions

The Bank raised the target overnight interest rate 25 basis points to 2.50 per cent on 4 June and again, by the same amount, on 16 July to 2.75 per cent in response to evidence that a robust recovery was underway in Canada (Chart 13).

Against the background of weaker near-term prospects for growth in the United States and major overseas economies, global financial market volatility, and the unsettled geopolitical situation, the Bank left the target rate unchanged at 2.75 per cent on 4 September and on 16 October.

In the United States, the Federal Reserve has left the federal funds rate unchanged this year at 1.75 per cent, after having lowered it by a total of 475 basis points in 2001. At its March meeting, the Federal Open Market Committee (FOMC) decided that the risks between higher inflation and slower growth were balanced. Increasing concerns through the summer about the implications of financial market developments for economic growth, however, led the FOMC to conclude at its August meeting that the balance of risks had tilted towards economic weakness.

Interest rate expectations embodied in futures contracts have adjusted downwards in the United States in recent months. At the time of the April *Report*, futures contracts for federal funds (an indication of the expected federal funds target) suggested that markets were expecting the FOMC to raise rates in 2002, while recent levels have indicated that markets are now anticipating that rates will be stable or perhaps even move down by the end of the year. In Canada, prices in the futures market have also declined, but still suggest a possible rise in short-term interest rates before year-end.

Developments in the target for the overnight rate since the April *Report*:

4 June—up 25 basis points to 2.50 per cent

16 July—up 25 basis points to 2.75 per cent

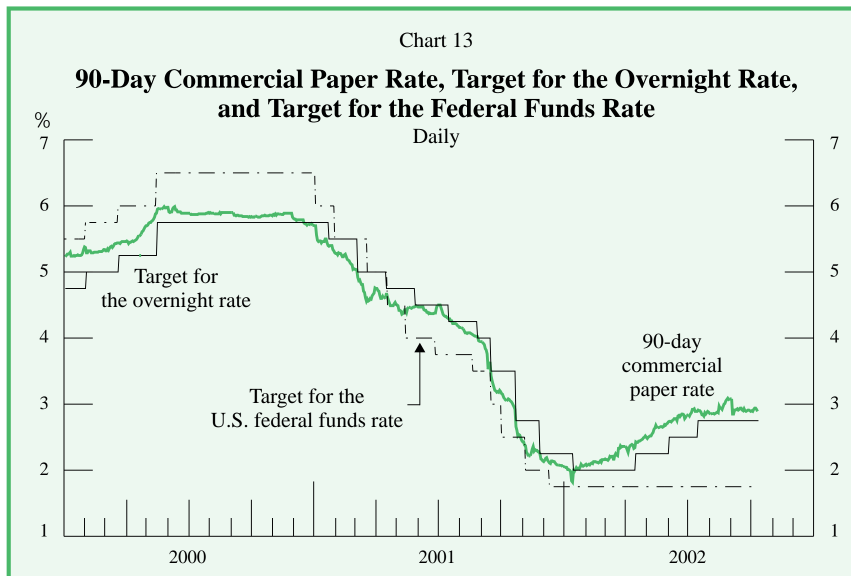
4 September—no change

16 October—no change

Chart 13

90-Day Commercial Paper Rate, Target for the Overnight Rate, and Target for the Federal Funds Rate

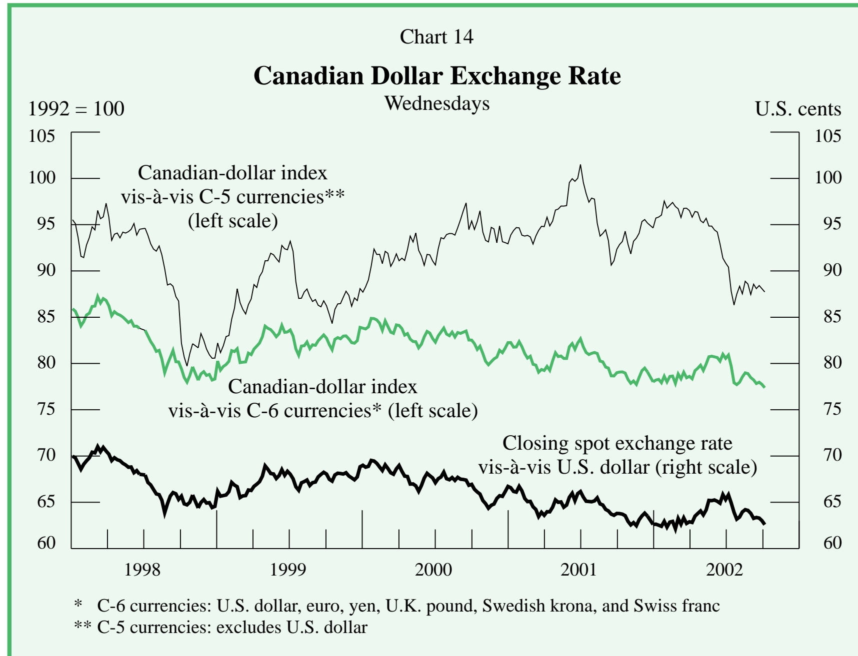
Daily

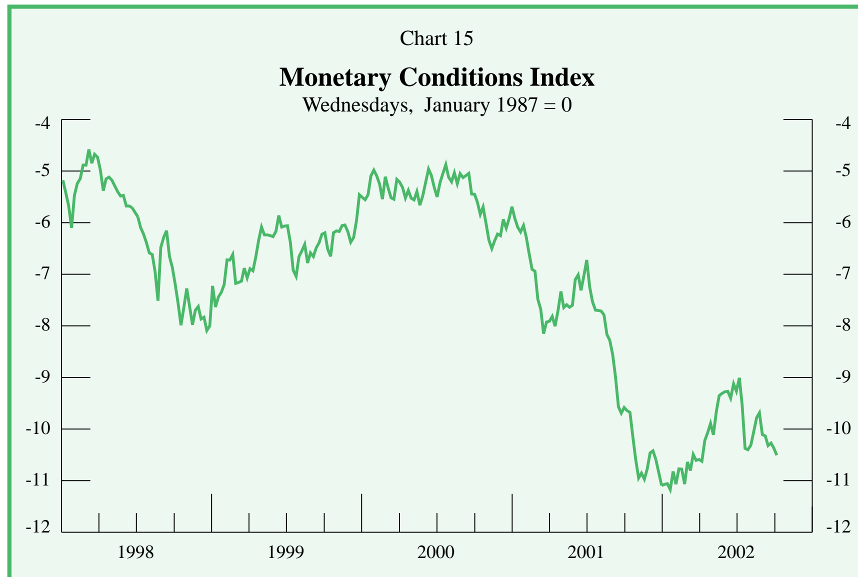


Exchange rate and monetary conditions

On a trade-weighted basis, the Canadian dollar is down slightly relative to last April (Chart 14). Through the spring, the dollar strengthened in response to positive Canadian economic data, but these gains were lost in early summer, reflecting the heightened volatility in global financial markets and uncertainty about the strength of the global expansion.

The Bank's monetary conditions index (MCI) is largely unchanged from last April (Chart 15).





4. The Outlook for Inflation

International background

The global economy continues to expand, but at a slower pace.

The global economy continues to expand, but at a somewhat slower pace than was expected in the April *Report*. Concerns about recent geopolitical tensions have added to the uncertainty in the world economy. The economic outlook presented in this *Report* assumes that there will be no further major escalation of these tensions.

Financial developments are dampening the pace of economic activity in the United States.

In the United States, recent financial market developments have negatively affected business and consumer confidence and are working to dampen the pace of economic activity. To help offset these influences, monetary policy has remained very accommodative, with the U.S. authorities holding rates unchanged. Given the stance of policy, including fiscal policy, real GDP in the United States over the fourth quarter of 2002 and the first two quarters of 2003 is expected to average close to 3 per cent—slightly lower than the economy's growth potential. Assuming that the headwinds from the recent financial developments dissipate in the second half of 2003, U.S. economic growth is expected to pick up to a rate above its growth potential. On an annual average basis in 2002, U.S. economic growth would thus be about 2 1/2 per cent, as was expected in the April *Report,* but slightly weaker than projected in the last *Update*. In 2003, U.S. economic activity should increase at an annual average rate of close to 3 1/4 per cent, slightly less than was expected in the April *Report* and the last *Update*.

In other countries, a gradual recovery is expected.

A gradual recovery should also continue to unfold in other industrialized countries. In the major European economies, growth is expected to be close to 1 per cent on an average annual basis in 2002 and to rise to about 2 1/2 per cent in 2003—which is weaker than our April projection. In Japan, ongoing structural difficulties will continue to weigh on economic growth for some time, with a contraction of about 1 per cent expected in 2002 and modest growth of only about 1/2 per cent foreseen in 2003.

Growth prospects for a number of emerging-market economies have improved, particularly in the Southeast Asian countries. The situation in Latin America, however, remains weak.

The U.S.-dollar price of non-energy commodities is expected to increase by the end of 2003 as the global economic recovery continues. Although energy prices are expected to show little change over the next few months, the possibility of an escalation of tensions in the Middle East makes these projections, particularly those for crude oil, subject to an unusually high level of uncertainty.

Aggregate demand and supply in Canada

Over the next three quarters, growth in Canada is expected to be slightly less than the economy's 3 per cent growth potential.

Economic growth in Canada is expected to slow somewhat in the fourth quarter of this year and in the first half of 2003. Over these three quarters, growth is expected to average slightly less than the economy's 3 per cent growth potential. This is somewhat lower than was projected in the April *Report* and the July *Update.* Several factors account for this change in outlook.

While the global economy is recovering, the pace is slower than previously thought. Most importantly for Canada, the level of economic activity in the United States is somewhat weaker than was projected six months ago, and the outlook for U.S. growth has been revised down slightly. The projected growth in Canadian export volumes to the United States is therefore expected to be more moderate.

Growth of spending on fixed capital is also expected to be marginally lower than previously projected. Increased uncertainty related to global geopolitical tensions and the resolution of corporate reporting and governance issues are likely to cause some businesses to delay major capital expenditures. Increases in the cost of capital related to the declines and volatility in equity markets and to increased risk premiums on lending to corporations are also expected to dampen business investment relative to earlier projections. Nonetheless, with the Canadian economy operating close to capacity, investment spending on machinery and equipment is projected to be solid. Moreover, capital outlays in the oil and natural gas sector are likely to strengthen if crude oil and natural gas prices remain at, or move above, recent high levels.

Household spending is still expected to grow at a healthy rate through to the end of 2003, although spending on housing and related items is likely to decline from the recent high levels. With the U.S. economy projected to gain momentum through 2003 and global financial conditions assumed to improve, export volumes and investment should both pick up in the second half of 2003. This is expected to boost GDP growth above the growth rate of potential output in the second half of 2003.

Growth is then expected to rise above potential in the second half of 2003.

Such an outlook would imply real GDP growth, on an annual average basis, of about 3 1/2 per cent in 2002 and in a range of 2 3/4 to 3 3/4 per cent in 2003. The midpoint of this range for growth in 2003 is slightly below the latest average private sector consensus forecast.

This outlook suggests that, with monetary stimulus being removed from the economy in a timely and measured way, Canadian output will remain close to capacity. With the modest downward revision to the growth outlook through to mid-2003, the Bank's best judgment is for a small amount of excess supply in the near term, which will be taken up as output growth moves above capacity growth in the second half of 2003. But with the output gap expected to remain small, judgments about the degree of slack will need to be carefully reassessed as developments unfold.

The current small amount of excess supply should be taken up as growth moves above that of capacity in the second half of 2003.

Measures of inflation expectations

In the regular survey reported in the Conference Board of Canada's autumn *Index of Business Confidence*, 21 per cent of respondents expected prices, in general, to rise over the next six months at a rate of 1 per cent or less, and 75 per cent expected a rate of 2 per cent or less (Chart 16). Although both the latest survey of firms conducted by the Bank's regional offices and the average private sector forecast for the rate of increase in the total CPI suggest that inflation expectations over the near term are in the upper half of the Bank's inflation-control target range, typical forecasts of inflation for 2004 and beyond continue to be centred tightly around 2 per cent (Chart 17).

Longer-term inflation expectations are clustered tightly around 2 per cent.

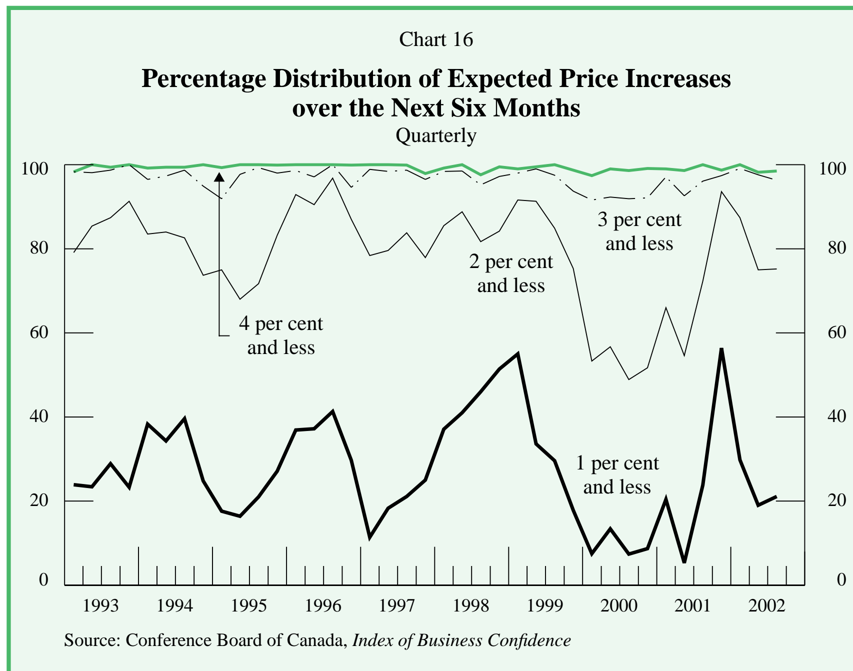
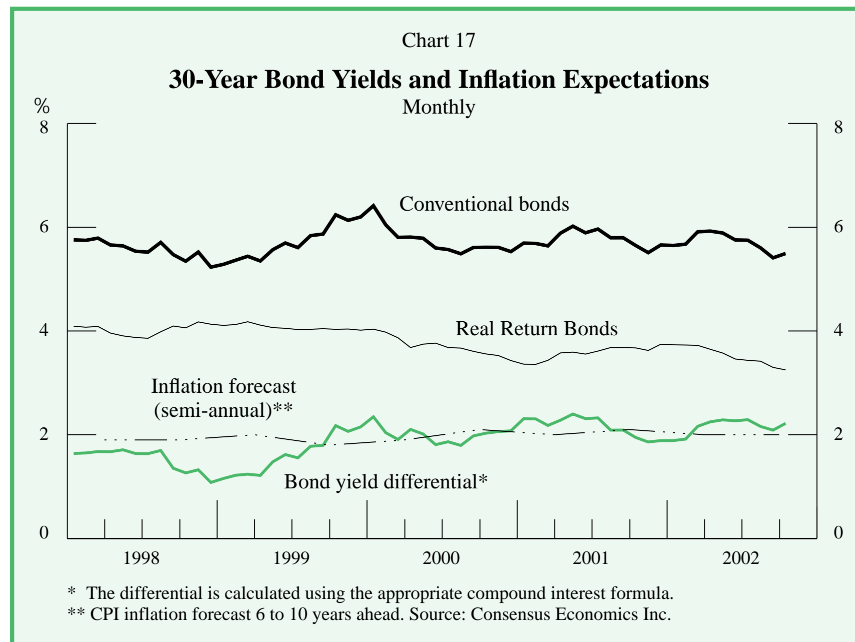


Chart 16

Percentage Distribution of Expected Price Increases over the Next Six Months

Quarterly

Source: Conference Board of Canada, *Index of Business Confidence*



Other factors affecting inflation

Core inflation will continue to be affected by a number of "one-off" factors until the second half of 2003.

A number of special or "one-off" factors will continue to affect the outlook for core inflation until the second half of 2003. The effect of the recent substantial increases in insurance premiums is expected to persist, diminishing only gradually through 2003. The effect of the earlier depreciation of the Canadian dollar should also lessen next year, since import prices for consumer goods have recently stabilized.

Near-term movements in core inflation will also be importantly affected by the fallout from the extraordinary events of September 2001. In the wake of the terrorist attacks in the United States, expectations of a substantially weaker economy led to unusually aggressive price discounting in the fourth quarter of 2001. With the strong recovery in the first quarter of 2002, the amount of price discounting diminished appreciably. Since core inflation is measured as the 12-month rate of increase in the core CPI, last year's price discounting will result in a temporary rise in core inflation in the fourth quarter of 2002. This echo effect is expected to boost core inflation by about 0.4 percentage points. This effect should disappear by the end of the first quarter of 2003.

Wage gains are expected to edge up.

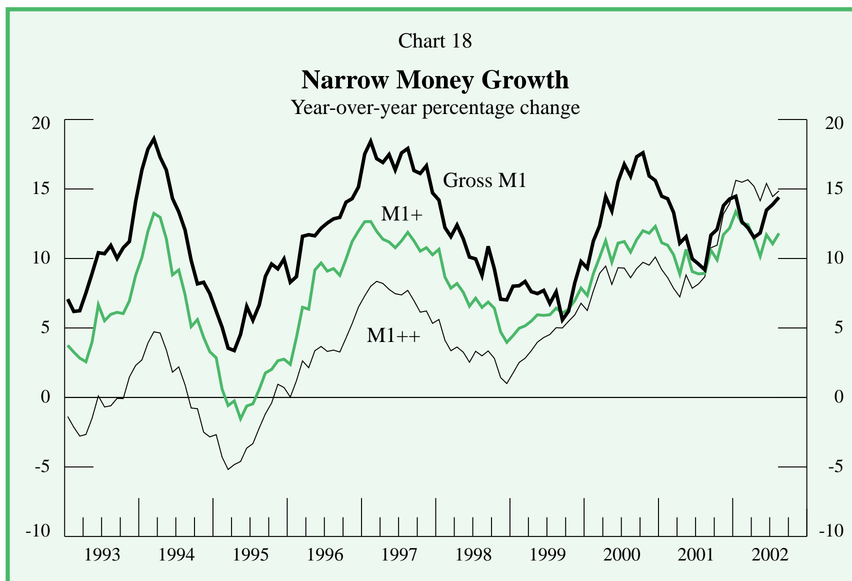
Wage gains are expected to edge up towards the end of 2003, given the likelihood of further improvement in labour market conditions. Indeed, the Bank's latest survey of businesses shows that more firms expect larger wage increases over the next 12 months

than anticipate smaller wage gains. With productivity growth expected to steady out at around 2 per cent, growth in unit labour costs should move up towards 2 per cent through 2003.

Implications of money growth for inflation

Strong growth in M1 signals a desire to hold precautionary balances in the face of uncertain financial markets.

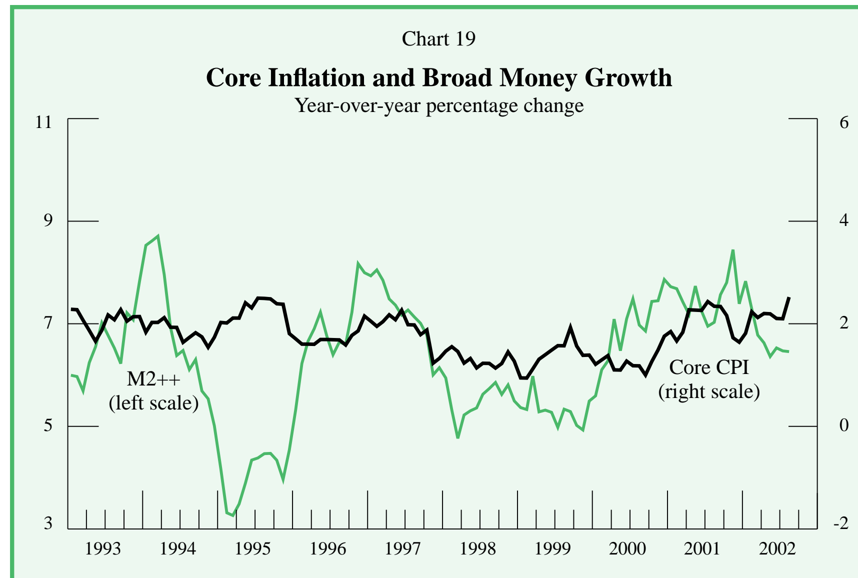
During most of the first half of 2002, growth in the narrow monetary aggregates, M1, M1+, M1++, slowed from the recent peak levels reached at the end of 2001 (Chart 18). Since May, however, growth rates of M1+ and M1++ have stabilized at levels that are still very strong, while the growth rate of M1 has surged upwards again. This resurgence of the growth in M1 has been relatively widespread across households and firms and signals a desire to hold more liquid money or precautionary balances in the face of uncertain financial markets. This growth has occurred despite increases in short-term interest rates since the beginning of the year.



Increased uncertainty is evident in the net outflows from equity mutual funds in June, July, and August, as well as in the increased growth of fixed-term deposits (GICs) since July. Overall, growth in M2++ has been relatively flat over the last few months, after having declined during the first part of the year (Chart 19).

High levels of narrow money growth have traditionally implied higher future inflation. However, to the extent that this recent growth represents a buildup of precautionary balances in the face of uncertainty, a high rate of money growth is not inconsistent with future inflation of around 2 per cent. In the coming

months, households and businesses are likely to rebalance their portfolios, causing the growth rates of narrow money to decline to more moderate levels. There is still a risk of increased inflation, however, if liquid balances are spent on goods and services rather than being shifted into other financial assets.



Inflation projection

While core inflation is expected to rise in the near term as a result of several one-off factors . . .

With the Canadian economy currently operating close to its production capacity and output growth expected to be close to the rate of growth of potential output, capacity pressures are not expected to exert significant upward or downward pressure on core inflation. Nonetheless, in the near term, core inflation is expected to rise, reflecting a combination of one-off factors.

The echo effect of the unusual price discounting in the fourth quarter of 2001 is expected to push core inflation up in the fourth quarter of 2002. The sharply higher insurance premiums are expected to hold up the 12-month rate of change of the core CPI until the second half of 2003. And the effects of the drought in western Canada and elsewhere may result in higher prices for some food components of the core CPI in coming quarters.

. . . it should move back close to 2 per cent in the second half of 2003.

The overall effect of these one-off factors is expected to peak in the fourth quarter of this year, pushing core inflation to about 3 per cent by year-end. Through 2003, these effects are expected to diminish, so that in the second half of the year, core inflation should return to its 2 per cent target. With economy-wide demand

expected to be roughly in line with supply, core inflation should then remain close to 2 per cent.

The outlook for total CPI inflation depends importantly on the behaviour of oil prices.

The outlook for the 12-month rate of increase in the total CPI depends importantly on the behaviour of oil prices, and oil prices are particularly difficult to forecast because of the current geopolitical tensions. If the risk premium in current oil prices abates, and oil prices average about US$25 per barrel in coming months, total CPI inflation is expected to peak at about 3.5 per cent at the end of 2002. Alternatively, if average oil prices remain near their recent high levels of about US$30 per barrel, total CPI inflation could rise to about 4 per cent by the end of 2002.

In 2003, total CPI inflation is expected to move back in line with core inflation. The pace of this movement will depend on the behaviour of oil prices.

Recent experience suggests that the pass-through of temporary oil-price movements to prices of other goods and services is relatively small. Thus, while the behaviour of total CPI inflation could be dramatically affected by the near-term behaviour of oil prices, volatile oil prices are not expected to have much of an effect on core inflation.

5. Conclusions

The Canadian economy has expanded strongly through 2002 and is now operating close to full production capacity. At the same time, core and total CPI inflation have risen above the Bank's 2 per cent target for inflation control. As discussed in this *Report*, the recent and projected near-term increases in inflation are largely explained by relative price developments in the areas of insurance premiums, energy, and tobacco taxes. For monetary policy, what is important is that these effects not feed into price and wage inflation, but remain one-off influences on specific prices.

Last spring, against the background of a strengthening economy, the Bank began to remove the substantial amount of monetary stimulus provided in 2001.

This stimulus is fuelling strong domestic demand growth. At the same time, we are experiencing an uncertain global economy and a reduced tolerance for risk in global financial markets. These uncertainties and the weaker global outlook are likely to dampen growth in aggregate demand for Canadian output over the near term. The Bank therefore decided on 4 September and 16 October to leave the target for the overnight rate of interest unchanged.

It remains the Bank's view, going forward, that further removal of monetary stimulus will be required to achieve the inflation target over the medium term. The timing and extent of policy tightening will depend on unfolding economic, financial, and geopolitical developments and on their implications for pressures on capacity and inflation in Canada.

Two risks will have to be watched closely over the period ahead. First, external economic, financial, and geopolitical developments may have a more persistent dampening influence on the Canadian economy than assumed in this *Report*. Second, with the economy operating close to capacity and with inflation expected to rise further in the near term, inflation trends and expectations will need to be carefully monitored against the projection that core inflation will return to the 2 per cent target in the second half of 2003.

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