



BANK OF CANADA

Monetary Policy Report

October 2003

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 pre-specified 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 to the end of 2006. Monetary policy will continue to aim at keeping future inflation at the 2 per cent target midpoint of this 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).

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MONETARY POLICY REPORT

— October 2003 —

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David Longworth, and Mark Carney.*

No one can predict what kind of shocks our economy will face in the future, but we know that shocks will occur. What's important is that we have a robust economic and financial framework that allows us to deal with those disturbances and to seize opportunities as they arise. It is that strong framework that gives businesses and investors the confidence to take risks and to innovate.

David Dodge

*Governor, Bank of Canada
10 September 2003*

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1. OVERVIEW

In the April *Monetary Policy Report*, the Bank noted that inflation was well above its 2 per cent target and that short-term inflation expectations had edged up. Although inflation was being pushed up by special factors, particularly insurance premiums and energy costs, there were also signs that strong domestic demand was working to broaden price pressures. In April, we projected that Canadian economic growth would average 2 1/2 per cent in the first three quarters of the year and that core inflation would fall to 2 per cent by early 2004.

As it turns out, growth has been weaker than expected and is now likely to average just over 1 1/2 per cent in the first three quarters of the year. So the Bank now estimates that there is more slack in the economy than was projected in April. Moreover, the decline in core inflation occurred earlier, and has been more pronounced, than we had projected. As well, virtually all measures of inflation expectations have decreased since April.

This drop in core inflation reflected several unforeseen developments over the last six months. These include broad-based weakness in the prices of goods, such as automobiles and clothing, substantial reductions in the prices of tourism-related services owing to the outbreak of severe acute respiratory syndrome (SARS), and a slightly faster easing of pressures from insurance premiums. The substantial fall in the value of the U.S. dollar added to the weakness in goods prices in Canada. The Canadian dollar has averaged 72 1/2 cents U.S. since the July *Monetary Policy Report Update*, a sharp increase from the 69-cent level reached at the time of the April *Report*.

It now appears that core inflation will stay below 2 per cent until mid-2005, reflecting the excess supply in the economy, more moderate rises in insurance premiums, and the remaining impact of the past appreciation of the Canadian dollar.

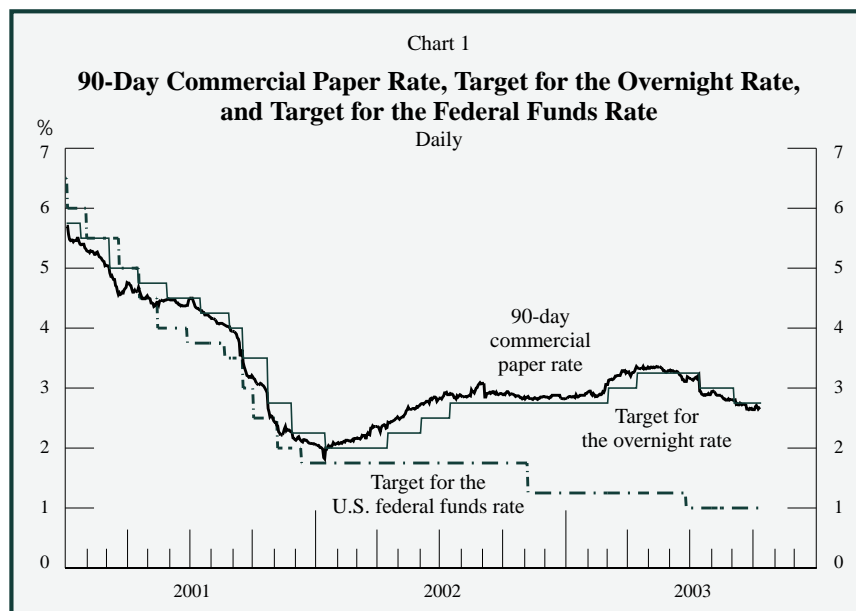
Against this background, the Bank has reduced its target for the overnight rate by a total of 50 basis points since the April *Report*, bringing it to 2.75 per cent (Chart 1). This action was taken to support a return to levels of economic activity consistent with an overall balance between supply and demand, with the aim of bringing inflation back to the 2 per cent target over the medium term.

Despite a weak second quarter and additional third-quarter shocks, such as the power blackout in Ontario, there have been a

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

- 3 June — no change
- 15 July — down 25 basis points to 3.00 per cent
- 3 Sept. — down 25 basis points to 2.75 per cent
- 15 Oct. — no change

This report includes information received up to the fixed announcement date on 15 October 2003.



number of encouraging developments. Growth in final domestic demand has remained robust, and the adverse effects of some of the recent shocks are beginning to dissipate. The inventory adjustment, which began earlier this year, is largely complete. Global economic conditions have improved since the *April Report*, and recent data indicate that the anticipated recovery in the United States is taking place earlier and will be stronger than previously expected. Financial conditions are also supportive of growth.

The Bank continues to expect growth in the Canadian economy to strengthen during the fourth quarter of 2003 and through 2004. On balance, this expansion should be above the rate of potential growth, relying primarily on solid household spending and increased business investment. Stronger economic growth abroad should also boost foreign demand for Canadian goods and services, but this source of strength will be dampened by the higher value of the Canadian dollar.

There are risks to this outlook related to the timing and magnitude of global demand, price, and exchange rate adjustments to economic imbalances. In particular, there is uncertainty both about the likely changes in key global exchange rates and about their effect on the Canadian economy. There is also uncertainty about the sustainability of U.S. growth beyond mid-2004. The Bank will closely monitor and assess the implications of all these global adjustments for output and inflation in Canada.

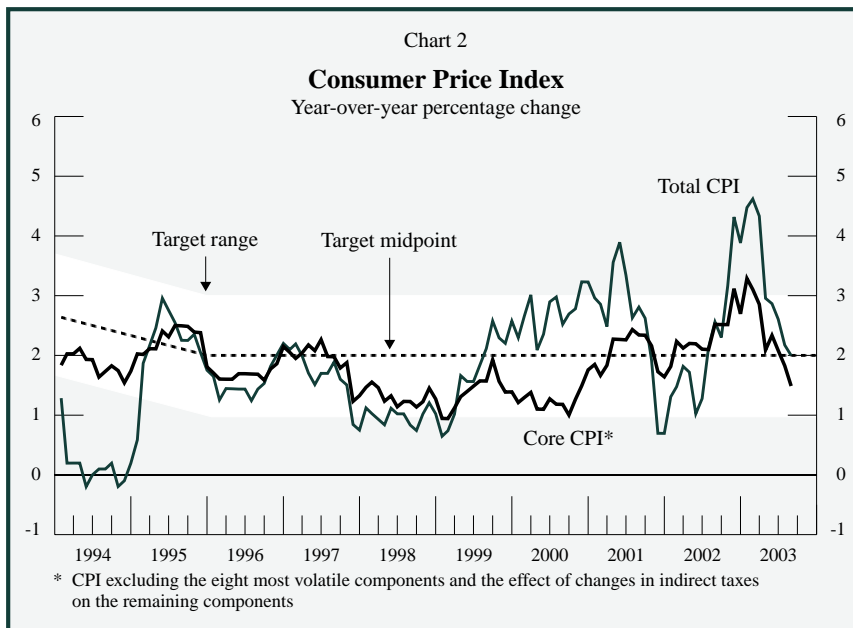
2. RECENT DEVELOPMENTS IN INFLATION

Core CPI inflation has decreased considerably since February and in August was below the Bank's 2 per cent inflation-control target. The rate of increase in the total CPI has fallen even more markedly, reflecting lower year-to-year increases in the prices of gasoline and fuel oil.

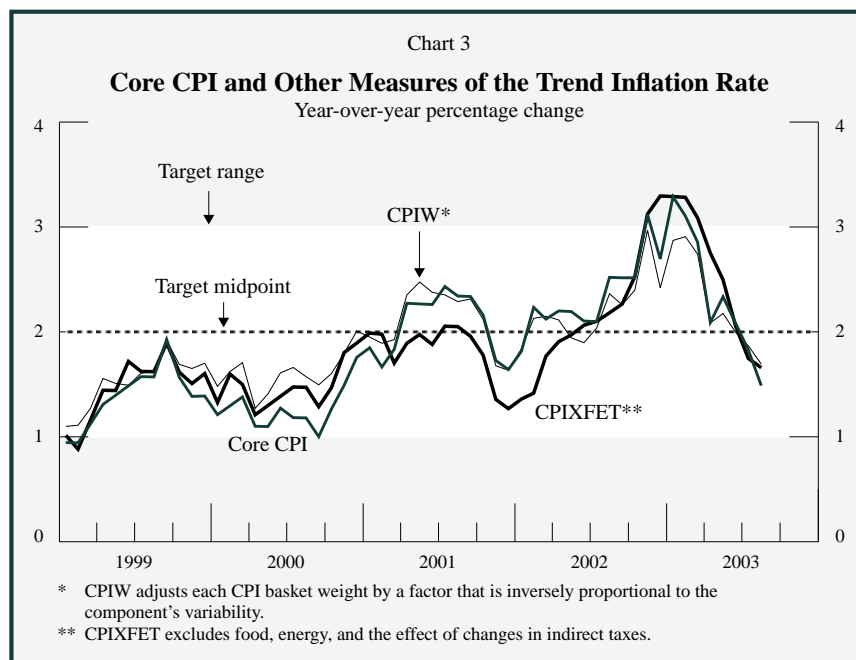
Inflation and the 2 per cent target

Core CPI inflation has come down faster than was projected in either the *April Report* or the *July Update* (Chart 2).¹ The core rate was 1.5 per cent in August, down from 3.1 per cent last February. Other measures of the trend rate of inflation that the Bank follows closely have also decreased considerably and in August were very close to the core rate (Chart 3).

Core inflation has decreased considerably since February . . .



1. The core measure of inflation 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.



At the time of the *April Report*, both core and total CPI inflation were well above the 2 per cent target. While one-off factors had contributed importantly to high inflation, there was evidence that some of the price pressures stemmed from robust domestic demand. The core rate of inflation was projected to remain above 2 per cent through 2003 and to move down to the 2 per cent target by early 2004, as the effect of one-off factors (such as the earlier large increases in insurance premiums) diminished. In fact, the core rate fell sooner and by more than anticipated.

This surprisingly early and sharp drop in core inflation has reflected a combination of unanticipated developments over the last six months: broad-based weakness in the prices of many goods, the adverse economic effects of an outbreak of severe acute respiratory syndrome (SARS) and of an isolated case of bovine spongiform encephalopathy (BSE), and a slightly faster-than-expected unwinding of the one-off factors.

The most important of these unexpected developments was the degree of weakness in the prices of many durable and semi-durable goods, such as automobiles and clothing. The relative importance of the various factors behind this weakness is not entirely clear. Part of the downward pressure on these prices came from discounting by retailers in an effort to reduce an undesired inventory buildup. The downward pressures on import prices arising from declining world prices for many goods and from a rising Canadian dollar were also stronger than expected.

Substantial reductions in tourist spending, exacerbated by a temporary outbreak of SARS in the Greater Toronto Area, contributed

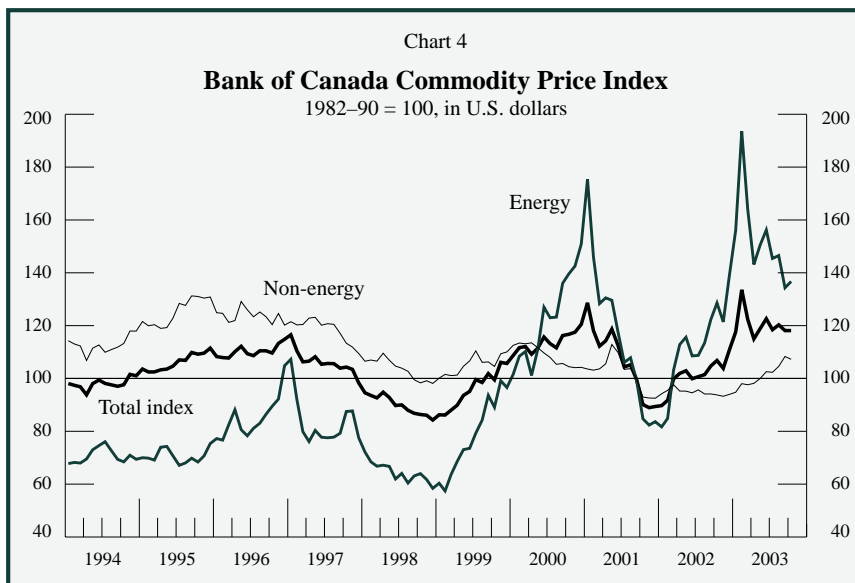
to considerable cutbacks in the prices of related services. As the adverse effects of SARS gradually unwind, these prices should return to more normal levels. Beef prices in Canada (at both the producer and consumer level) have also weakened in recent months with the buildup of supplies following the imposition of trade restrictions on Canadian beef by the United States and other countries.

Prominent among the one-off factors affecting core inflation have been substantial increases in the premiums for both automobile and home insurance. Over the past six months, increases in auto insurance premiums have been slightly lower than anticipated.

The 12-month rate of increase in the total CPI was 2.0 per cent in August, down from 4.6 per cent in February. In addition to the factors acting to reduce the core rate, year-to-year increases in the consumer prices of gasoline and fuel oil have eased considerably since February. On balance, crude oil prices have decreased since mid-March, although by less than we had expected in the last *Report*.

... as has the rate of increase in the total CPI.

In contrast, prices of non-energy commodities have continued to move up (Chart 4). Indications of robust Asian demand and strengthening U.S. economic growth contributed to gains in the prices of base metals, while a combination of production curtailments (exacerbated by the forest fires in British Columbia this summer) and continued strong housing demand helped to boost lumber prices.

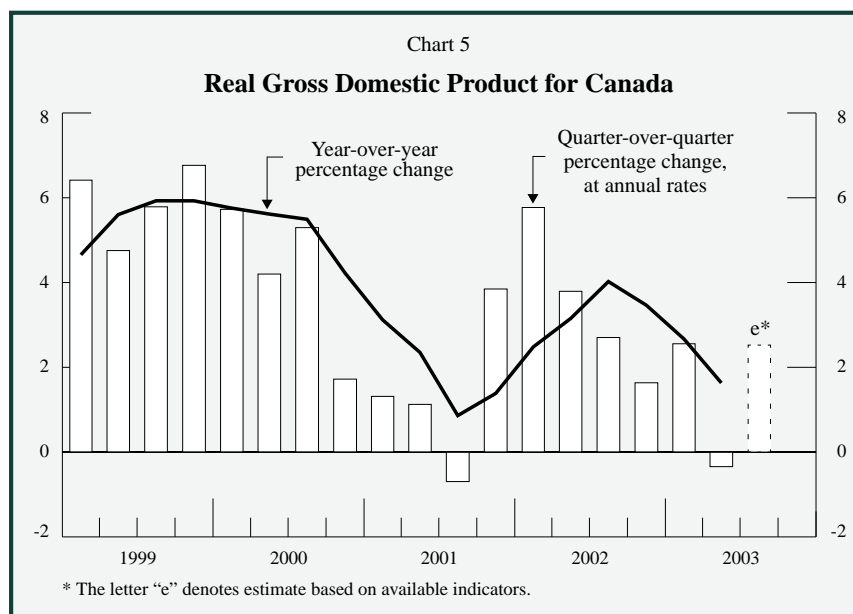


Factors at work on inflation

Aggregate demand

Canada's real GDP edged down in the second quarter . . .

Canada's real GDP advanced at a moderate pace in the first quarter of 2003 (Chart 5) but edged down at an annual rate of 0.3 per cent in the second quarter, a weaker result than had been expected in the last *Report*.² The most recent indicators for spending and activity suggest that economic growth resumed in the third quarter but remained slightly below potential at about 2 1/2 per cent.



. . . as firms sharply cut their rates of inventory investment.

An important factor behind the weakness of aggregate activity in the second quarter of 2003 was the unexpectedly sharp drop in inventory investment. After experiencing a considerable buildup of stocks early this year, retailers and wholesalers slashed their rates of inventory accumulation in the second quarter. A number of unusual shocks also acted to dampen economic activity in both the second and third quarters (Technical Box 1).

Nevertheless, a number of positive developments have provided underlying support to the economy. Growth in household spending has been robust, boosted by low interest rates (Chart 6). In particular, housing expenditures have remained strong, and housing prices have continued to increase. As well, capital spending by firms picked up in the first half of the year. A strengthening of the pace of economic expansion in the United States provided some support for Canada's exports.

2. Statistics Canada reported that there was more uncertainty than usual about the second-quarter estimate because of the difficulty of valuing trade flows amid the exchange rate volatility.

Technical Box 1

Estimated Economic Impact of Recent Unusual Shocks

Several unusual and temporary shocks have hit the Canadian economy since last February. These include SARS, bovine spongiform encephalopathy (BSE), the Ontario electricity blackout, and the severe forest fire situation in British Columbia. Overall, the Bank estimates that growth (expressed quarterly at an annual rate) was reduced by about 0.7 percentage points in the second quarter and by about 0.6 percentage points in the third quarter, as a result of the direct effects of these events. We have not tried to quantify the indirect effects. Given the temporary nature of these shocks, growth is expected to rebound in the fourth quarter.

Although the first documented case of SARS appeared in Canada on 23 February, the economic impact was most severe in the second quarter. Growing fear of the contagious and sometimes fatal disease contributed importantly to a decline in spending on tourism. Several sectors were seriously affected, such as air transportation, hotel and other accommodation, entertainment, bars and restaurants, and car rentals. Although expenditures by foreign tourists remain weak, domestic tourist spending has already shown signs of reviving.

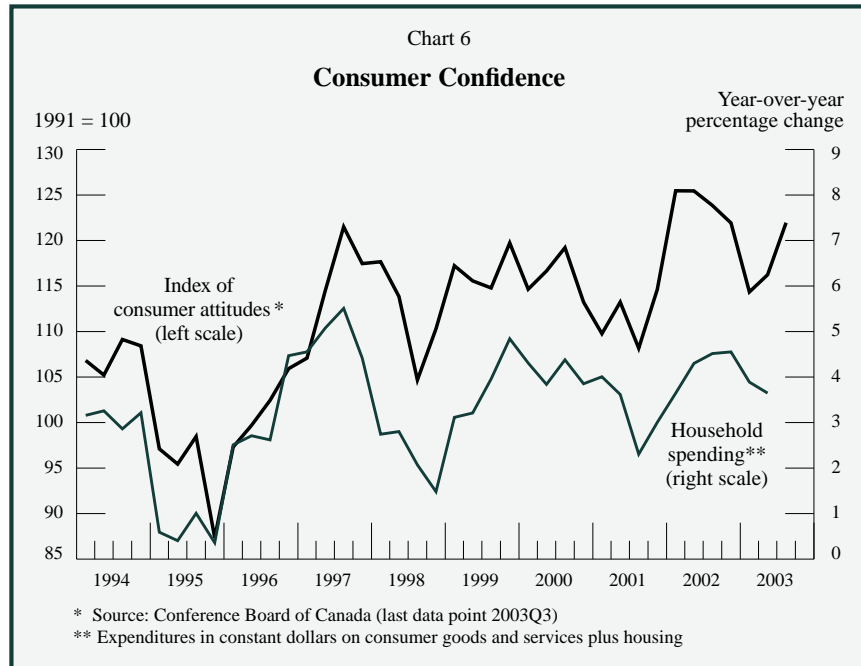
The discovery of one case of BSE in Alberta on 20 May precipitated the closure of international borders to imports of Canadian cattle, beef, and related products. The resulting sharp and immediate drop in beef slaughter, processing, and related activities, dampened GDP growth in the second and third quarters. The recent partial lifting of import bans on beef products should have a slight positive impact on growth in the fourth quarter, although the continued ban on international shipments of live cattle will likely have a more persistent adverse effect.

The blackout in Ontario on 14 August and the ensuing power restrictions through to 25 August caused a marked decline in production for a wide range of industries. The impact on GDP growth in the third quarter should be reversed in the fourth quarter, since production is expected to have returned to normal by then.

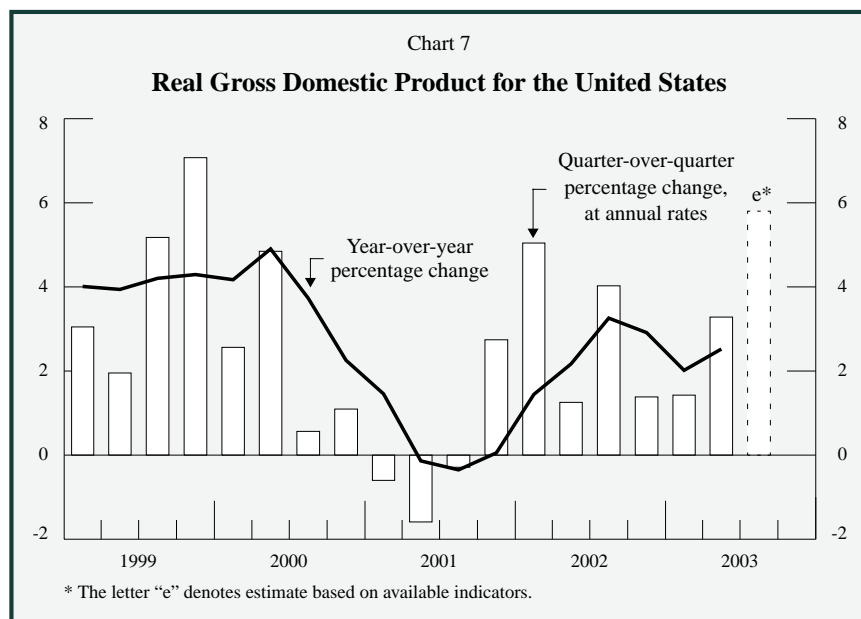
The recent forest fires in British Columbia have led to a drop in tourism spending and in logging and forestry activities in the region. In the near term, this should be roughly offset by increased government spending on fire fighting and reconstruction. However, there could be a small adverse effect on activity in British Columbia's forestry industry over the longer term as a result of the loss of timber resources.

The combined negative impact of the shocks would be larger if they were to seriously erode consumer and business confidence. To date, however, indicators suggest that there has been little change, overall, in confidence.

Estimated Impact on Real GDP Growth (Quarter-over-quarter percentage change at an annual rate)			
	2003Q2	2003Q3	2003Q4
SARS	-0.60	+0.15	+0.25
BSE	-0.10	-0.30	+0.10
Ontario power outage	-	-0.40	+0.40
Total	-0.70	-0.55	+0.75



Economic activity in the United States gathered momentum in the second quarter of this year owing to solid gains in household and business spending, as well as a sharp increase in federal defence outlays (Chart 7). Recent data suggest that both consumption and investment are continuing to rise at a robust pace, supported by the easing in monetary and fiscal policy and a reduction in uncertainty. Thus, the near-term outlook has improved substantially since the last *Report*. Real GDP growth is expected to be around 5 3/4 per cent in the third quarter.



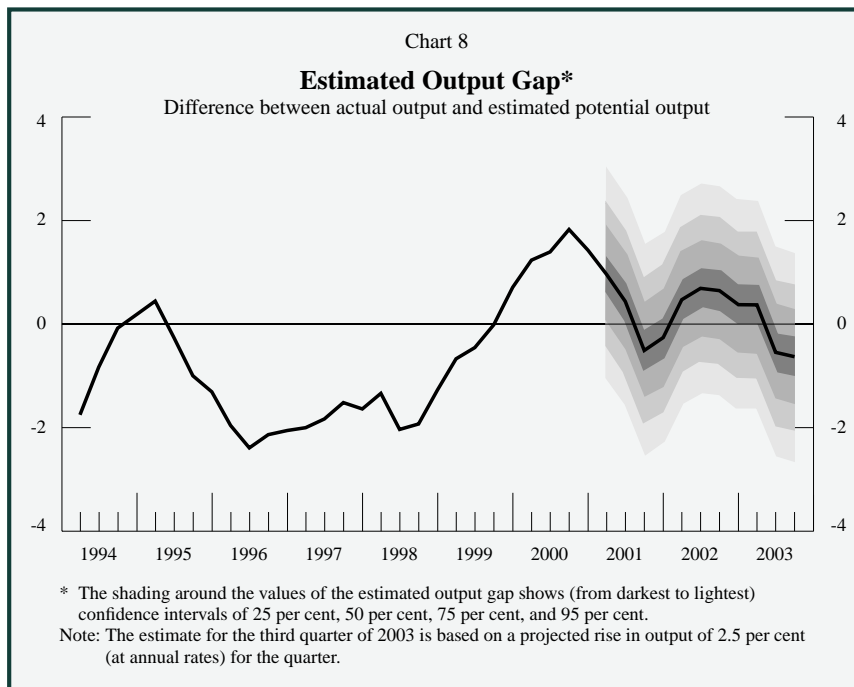
Estimated pressures on capacity

The Bank's conventional measures of potential output and the output gap indicate that the level of economic activity fell below production capacity in the second and third quarters of this year (Chart 8).

Several indicators are consistent with the view that slack has developed since early 2003. Capacity utilization in the non-farm, goods-producing sector eased in the second quarter of 2003. The unemployment rate has risen, and, in the regular survey conducted by the Bank's regional offices, the proportion of firms reporting labour shortages has fallen below its average of the last four years. The relatively low rates of wage increases are further evidence of excess supply in labour markets. And measures of the trend rate of inflation have been lower than expected.

On balance, it is the Bank's view that the economy is currently operating with somewhat more slack than its conventional measure of the output gap would suggest. In particular, with the actual labour force participation rate continuing to rise through September, it is likely that the trend component of the participation rate is higher than assumed by the conventional measure. With this revised assessment of potential and the unexpected interruption in economic growth in the second quarter, the estimated amount of slack in the economy at mid-year is larger than was projected in the last *Report*.

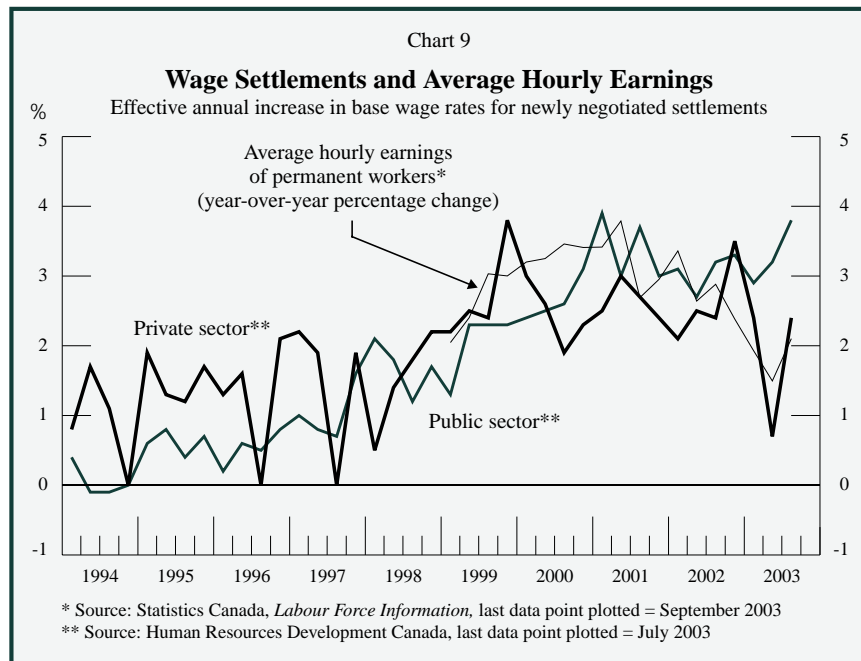
The level of economic activity in Canada fell below capacity in the second and third quarters by more than expected.



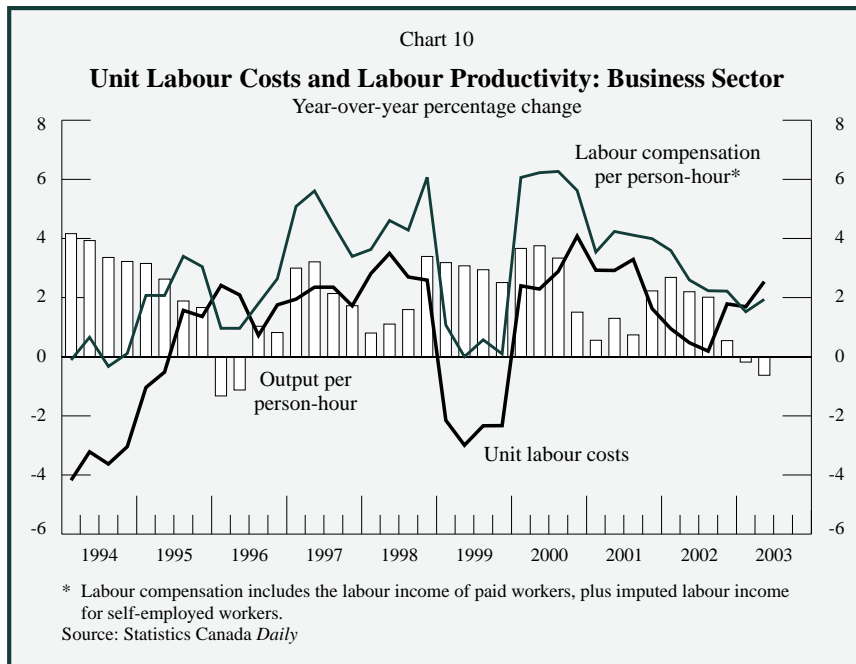
Costs and productivity

With a decrease in labour productivity, unit labour costs at mid-2003 were about 2.5 per cent higher than year-earlier levels.

Two broad-based measures of average labour compensation—the average hourly earnings of permanent workers and hourly labour compensation in the business sector—both indicate that the underlying rate of increase in wages has been in a range of 1.75 per cent to 2.25 per cent since late 2002 (Charts 9 and 10).³ However, with a decrease in productivity over the last year, unit labour costs in the business sector in the second quarter of 2003 were about 2.5 per cent higher than year-earlier levels (Chart 10).



3. The marked reduction in the average annual wage increase in the unionized private sector in the second quarter of 2003 chiefly reflected the impact of Air Canada contracts that contained wage freezes and some wage reductions. The average annual wage increase in the unionized public sector in July 2003 was relatively high, but the number of employees covered by the new contracts was much lower than normal.



3. FINANCIAL DEVELOPMENTS

Financial conditions have improved . . .

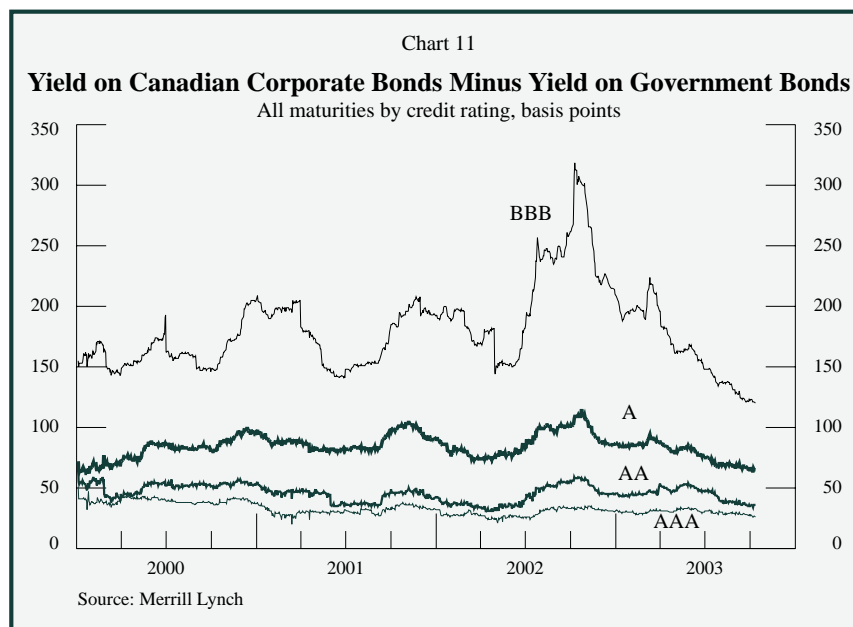
Financial conditions have generally improved since the April *Report*. Stock markets have rallied, corporate bond spreads have narrowed further, and the yield curve has steepened. The financial situations and profitability of banks in Canada have improved, a positive sign for future credit conditions. These developments provide a favourable environment for future economic growth. At the same time, prices in some markets have been quite volatile, reflecting changing views about global growth and uncertainty about the resolution of growing global imbalances.

. . . as stock markets have rallied . . .

Stock markets in Canada and the United States have been lifted by a combination of positive earnings and increasing confidence in a strong recovery. Volatility in these markets has remained low. Even with these improvements, equity issuance by non-financial firms in Canada is still low, but the issuance of income trusts has been strong and has become an important alternative source of financing for firms (King 2003).

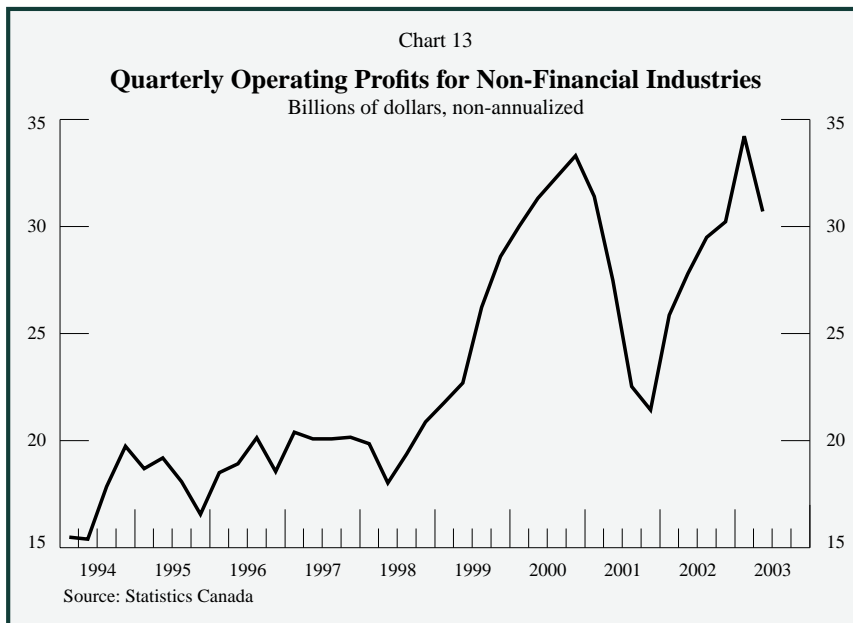
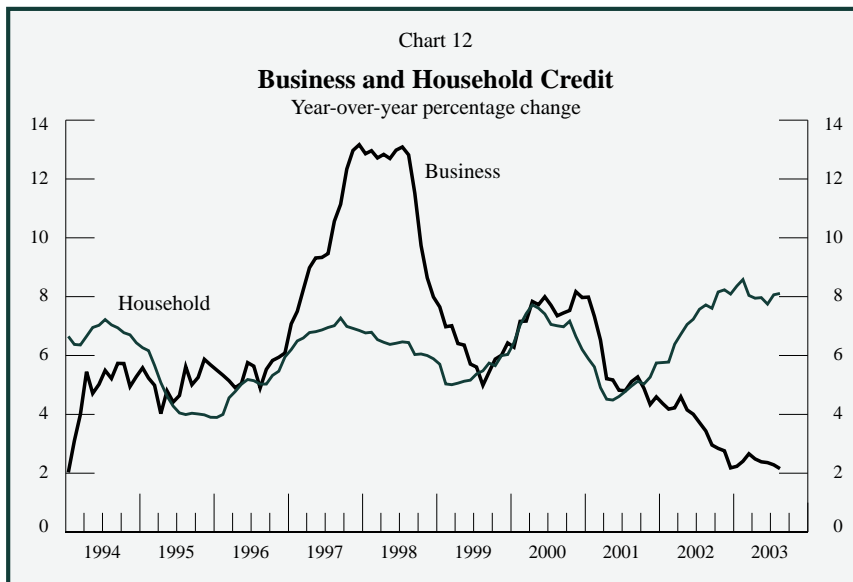
. . . and corporate bond spreads have narrowed further.

In the bond market, improving financial conditions have been reflected in a decline in the spread between the yields on corporate and government bonds for both investment-grade (Chart 11) and non-investment-grade firms. Measures of credit quality, such as the downgrade/upgrade ratio, have also improved, reflecting the efforts of firms to restructure their balance sheets and reduce debt. The markets were receptive to new bond issuance, which has been strong since the last *Report*.



Despite easier access to credit, growth in total business credit continues to be sluggish, reflecting weak demand (Chart 12). First, firms are waiting for clearer signs regarding the strength and sustainability of the recovery in the United States, and in the global economy generally, before undertaking major investment projects. Second, some firms are relying on internal funds to finance expenditures, since corporate profits have remained healthy despite the recent retreat from the record high level seen in the first quarter (Chart 13). Third, as firms have reduced inventories, short-term credit demand has fallen sharply.

Growth in business credit has remained sluggish . . .



... but growth in household credit has remained strong.

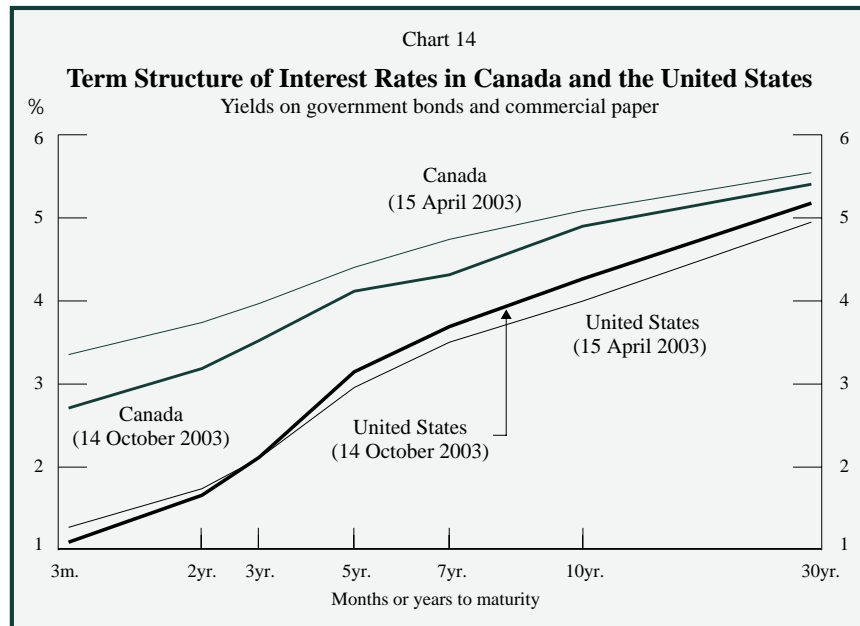
Interest rates across the term structure have fallen ...

... and the Canadian dollar has risen further.

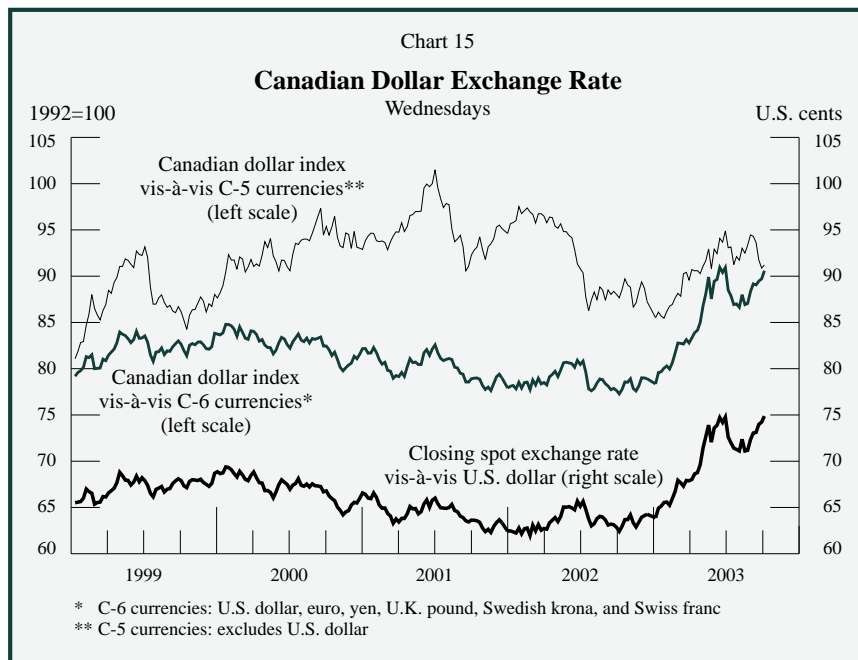
In contrast to business credit, growth in household credit, particularly mortgage credit, has remained strong. This reflects favourable credit conditions (particularly low mortgage rates) in addition to sustained, albeit more modest, income growth. Despite recent increases in mortgage rates, the estimated debt-service ratio remains below its average over the last decade. Furthermore, although households continue to accumulate debt, their balance sheets are still healthy, supported mainly by strong gains in housing prices.

Interest rates across the term structure have fallen in Canada since April, with a larger decline for short-term instruments, leading to a steepening of the yield curve (Chart 14). The lower level of short-term market interest rates reflects not only the lower policy rate, but also market expectations that short-term rates will stay low and stable for some time. Over the same period, medium- and longer-term yields have been subject to sharp swings, falling abruptly between April and June and rebounding as the outlook for global growth improved, led by increasing confidence in the U.S. economic recovery (Technical Box 2). These movements in bond yields have been a global phenomenon, most pronounced in the U.S. and Japanese markets.

Since reaching a three-year high of approximately 69 cents U.S. at the time of the last *Report*, the Canadian dollar has continued its sharp appreciation, rising above 75 cents in October (Chart 15). Like many currencies, the Canadian dollar was influenced by the broad-based weakness in the U.S. dollar over the period.



The Canadian dollar was further supported by rising commodity prices and the smaller amount of excess capacity in the Canadian economy than in the U.S. economy.



Technical Box 2

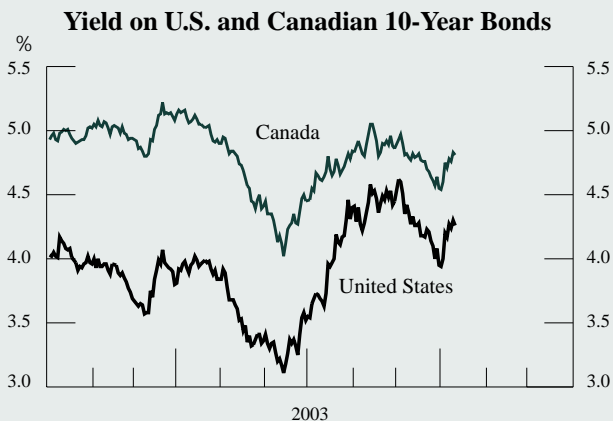
Recent Developments in Long-Term Interest Rates

Yields on longer-term bonds in Canada have been unusually volatile since April 2003, first falling to near-historic lows and then returning rapidly to previous levels. This movement followed that in other major markets, notably the U.S. Treasury market (see chart).

The decline in bond yields from April to June was caused mainly by three fundamental developments in the U.S. Treasury market: increasing concern about a continued fall in inflation, rising uncertainty surrounding the recovery of the U.S. economy, and growing speculation that the Federal Reserve would resort to direct intervention in the bond market. These influences caused yields on longer-term U.S. bonds to fall dramatically, reaching historic lows on 13 June. Given the relatively close linkages between G-7 debt markets, yields in other bond markets followed. Technical factors also played a role. The rapid decline in interest rates generated a large amount of mortgage refinancing. Holders of mortgage-backed securities then implemented hedging strategies that resulted in higher demand for government bonds and, hence, lower yields. To mitigate the appreciation of their currencies in this climate, some foreign central banks purchased substantial amounts of U.S.-dollar reserves, investing them in U.S. government debt.

A key factor in reversing this downward trend in bond yields came on 25 June, when the FOMC lowered the target for the federal funds rate by 25 basis points rather than the 50 basis points that the market had expected. Markets interpreted the accompanying press release as relatively optimistic for the U.S. economic outlook, reducing the likelihood of any unorthodox policy. Yields on longer-term bonds began to rise sharply, and some of the same technical factors that had exacerbated the decline in yields now worked in the opposite direction, leading yields to overshoot on the up side. Broadly improving economic circumstances in the United States and Japan, as well as the increase in expected U.S. government budget deficits, signalled in the 15 July Budget Review, also pushed government bond yields higher. Yields have subsequently moved back towards the levels that prevailed in early 2003.

In Canada, signs of slowing economic activity and lower policy rates over the summer have tempered the rise in yields on longer-term bonds, leading to a substantial tightening in Canada-U.S. interest rate spreads. The difference between yields on Canadian and U.S. 10-year bonds contracted from approximately 130 basis points in mid-May to about 55 basis points in mid-October, which is now well within the normal historical range.



Source: Bloomberg

4. THE OUTLOOK FOR INFLATION

International background

Global economic conditions have brightened since the April *Report*, supported by monetary and fiscal stimulus. While geopolitical uncertainty has waned, growing imbalances in the global economy pose their own challenges.

In the United States, economic prospects have improved since the July *Update*, and short-term risks to the outlook for growth now seem better balanced. U.S. economic activity is projected to increase at a rate significantly above the economy's growth potential in the second half of the year, boosted by tax rebates to households and an upswing in business spending. Continued stimulative monetary and fiscal policies and the past depreciation of the U.S. dollar should support the economic expansion into 2004. Sustained domestic demand should encourage business to restock. On an average annual basis, real GDP is projected to increase by about 2 3/4 per cent in 2003. This is more than was projected in both the last *Update* and the April *Report* and reflects the apparent revival in business confidence and spending. The Bank expects that U.S. economic activity will pick up to a rate of about 4 per cent in 2004, which is similar to expectations at the time of the April *Report* and July *Update*, and assumes in its base case that output will continue to grow above the rate of growth of potential in 2005. The projection for 2003 is slightly higher than the most recent average private sector consensus forecast, while that for 2004 is similar.

In the euro area, domestic demand remains weak. On an average annual basis, the Bank projects economic growth in the euro area of about 1/2 per cent in 2003, rising to about 1 1/2 per cent in 2004.

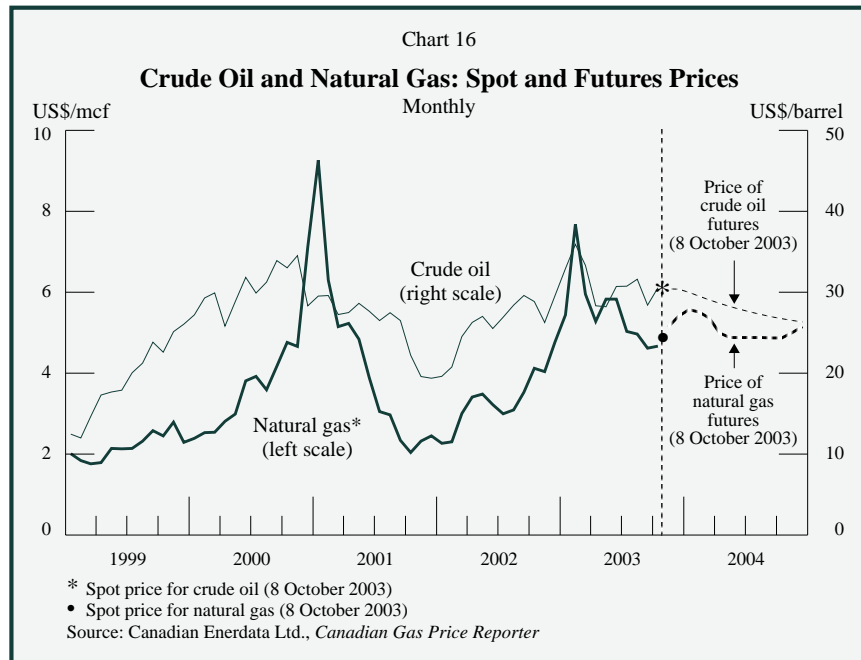
Led by robust growth in China and India, the emerging Asian economies are expected to register the fastest rate of expansion of any world region this year and next. Although the SARS outbreak has affected many countries in the area, its economic impact was limited, and local activity is returning to normal. In Japan, economic momentum appears to be picking up more rapidly than was assumed, as strengthening demand in the rest of Asia provides a boost to Japanese exports. Structural difficulties persist, however, and this suggests that growth will likely remain moderate over the near term. A 2 3/4 per cent expansion in the Japanese economy is projected in 2003, followed by growth of about 1 1/2 per cent in 2004.

Global economic conditions have brightened . . .

. . . and short-term risks to the U.S. outlook now seem better balanced.

U.S. growth is expected to average about 2 3/4 per cent in 2003 and pick up to about 4 per cent in 2004.

The expected strengthening in the pace of global economic expansion and robust demand in a number of Asian economies should contribute to further increases in the U.S.-dollar price of non-energy commodities in 2004. Crude oil prices, on the other hand, are assumed to ease to about US\$27 per barrel next year and remain there in 2005, based on the assumption of a continued gradual recovery in Iraqi oil production. Natural gas prices are expected to remain near their current levels in coming months. These assumptions are close to current market expectations (Chart 16).



Global imbalances

Risks associated with global imbalances remain.

Although a global economic recovery appears to be underway, some risks associated with global imbalances remain.

Because of various factors, including stronger growth in the United States than elsewhere in recent years, external imbalances have widened. The correction of these imbalances will require a relative slowing of domestic demand in the United States and a strengthening of demand elsewhere. And this will require some further significant adjustments in real exchange rates among currencies in industrial and emerging-market countries. In view of the amount of excess supply in the global economy, such correction must take place alongside a strengthening of global demand.

Meanwhile, growing fiscal indebtedness in many countries is absorbing an increasing portion of global savings. At some point in the medium term, this could lead to higher-than-normal real interest rates, which would crowd out private investment. Eventually, fiscal consolidation will be required to ensure fiscal sustainability. This will be especially important in industrial countries where an aging population will affect longer-term fiscal positions.

Aggregate demand and supply in Canada

Current conditions bode well for stronger growth in the Canadian economy. The economic rebound in the United States appears to be stronger than previously anticipated, and recent indicators of Canadian household spending have also been more buoyant than expected. Overall, economic growth is projected to average close to 3 1/4 per cent in the second half of this year. This outlook also incorporates expectations of a gradual improvement in the level of travel to Canada by foreigners, as well as the effect of a partial lifting of the ban on exports of Canadian beef products. Some rebound in activity is therefore expected in industries that have been adversely affected by SARS and BSE (Technical Box 1).

The rate of economic growth is projected to remain above that of production capacity through 2004 such that the slack that developed in the economy this year will be absorbed by early 2005. Because the boost to Canadian exports from the anticipated continuing recovery in the U.S. economy will be dampened by the earlier appreciation of the Canadian dollar (Technical Box 3), much of the growth in aggregate demand will have to come from domestic sources. Household spending is expected to rise at a moderate pace, supported by continued monetary stimulus. Business investment should grow strongly with the evidence of a strengthening U.S. economy, the recent improvement in financial conditions, the recovery in business confidence, and the lower costs of imported machinery and equipment arising from the increased value of the Canadian dollar against the U.S. dollar.

This outlook implies real GDP growth, on an average annual basis, of about 2 per cent in 2003 and 3 1/4 per cent in 2004. While lower than that shown in the *April Report*, the projection for 2003 is the same as that in the *July Update*. The projections for both 2003 and 2004 are roughly similar to the most recent average private sector consensus forecasts.

This economic outlook is consistent with modest increases in employment to the end of 2004, given a likely robust pickup in labour productivity growth over this period.

Conditions are in place for stronger economic growth in Canada.

Growth is expected to average about 2 per cent in 2003 and to outpace the economy's production potential during 2004.

Technical Box 3

The Sectoral Impacts of an Appreciating Canadian Dollar

Canada's floating exchange rate is an important mechanism that allows the Canadian economy to adjust to economic developments. These can include movements in relative world prices, changes in capital flows, or divergent economic conditions across countries. The overall effect on the aggregate economy of a change in the exchange rate will depend on the underlying forces behind the movement, and on the persistence of the change. Although it is difficult to assess with certainty, the recent appreciation of the Canadian dollar likely reflects a number of factors. Among them are the broader multilateral adjustment in the U.S. real exchange rate, the rise in commodity prices, and the relative cyclical positions of the Canadian and U.S. economies.

Everything else held equal, an appreciation of the Canadian dollar reduces the demand for Canadian-produced traded goods and services. The extent of this impact varies across sectors, depending on exposures to international trade. Industries that are highly export oriented or that face strong foreign competition in their domestic markets would tend to be most affected by the appreciation. In contrast, industries that rely on imported inputs would benefit from lower production costs. The use of currency hedging, supply agreements, and sales contracts, together with the extent to which firms absorb the effect of the appreciation in their profit margins, may temporarily lessen the effects on trade.

Dion (1999-2000) computes the net exposures of various sectors to international trade. That exposure is calculated by adding the proportion of production that is exported and the extent of import competition, and subtracting the share of imported inputs in production.¹ He finds that net exposures to trade vary considerably across industries. It is relatively high in primary sectors, such as mining, crude oil, natural gas, and forest products, as well as in high-tech manufacturing industries, such as machinery, electrical, and electronic products. On the other hand, it is relatively low in several other primary industries, in construction, in services, and in certain manufacturing industries, such as food, beverages, tobacco, printing and publishing, and refined petroleum products.

Thus, the recent appreciation of the Canadian dollar will have a dampening effect on exports of Canadian goods and services and will shift activity towards domestic demand.

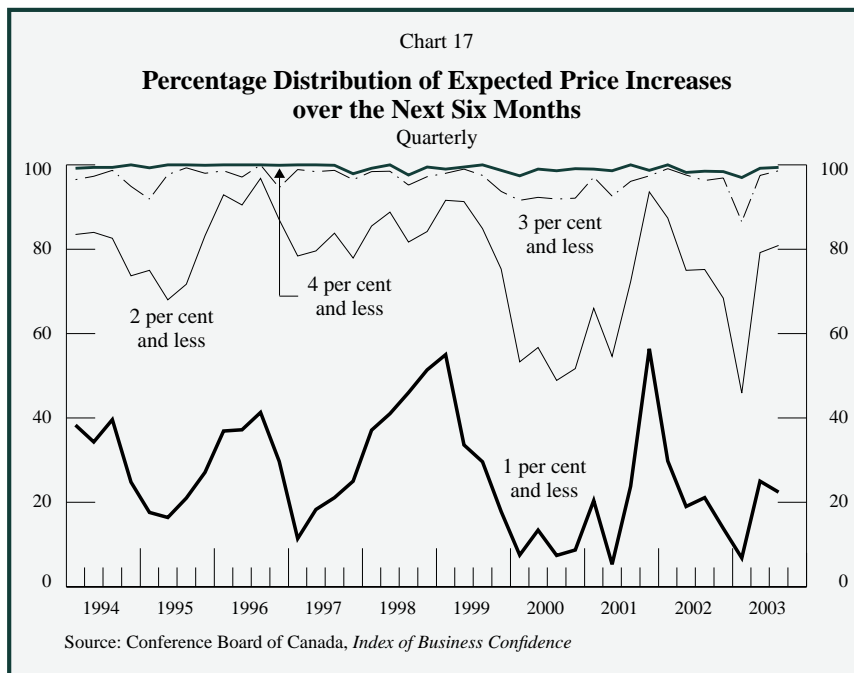
Estimates of Trade Exposures for Selected Industries				
Industry (1996)	Export orientation (1)	Imported inputs in production (2)	Import competition (3)	Exposure (1) - (2) + (3)
Crude oil and natural gas	0.57	0.03	0.37	0.91
Paper	0.62	0.08	0.22	0.76
Machinery	0.77	0.27	0.86	1.36
Transportation equipment	0.84	0.43	0.37	0.78
Electrical products	0.76	0.29	0.78	1.25
Refined petroleum products	0.22	0.36	0.13	-0.01
Construction	0	0.12	0	-0.12

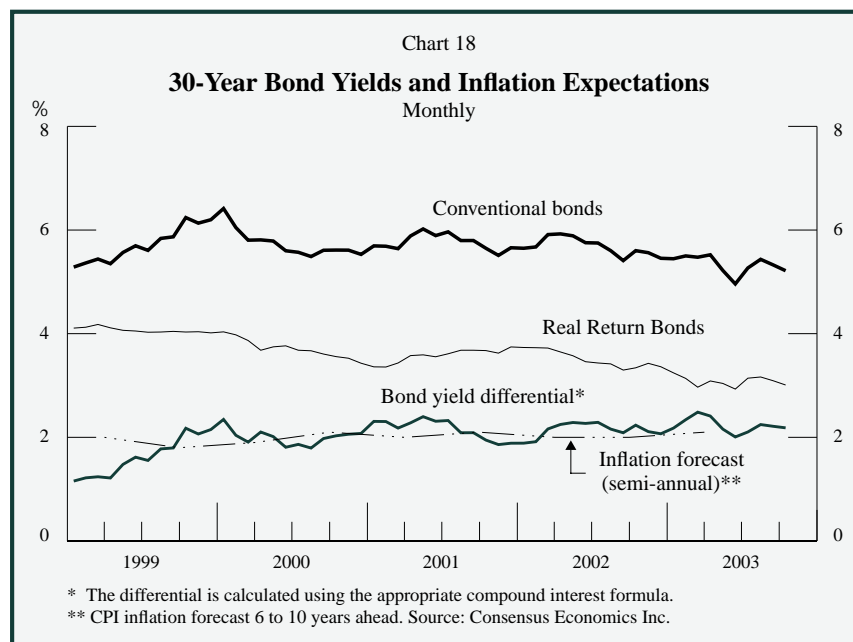
1. Dion uses input-output data in current dollars produced by Statistics Canada for 33 sectors over the 1961-96 period. Net exposure is calculated using the following operational definition of exposure: $EX_i = (X_i/O_i) - (M_i^1/O_i) + (M_i^c/C_i)$, where EX represents exposure, x is exports, o is gross output, M^1 is imported inputs, M^c is imports of competing core products, and c is apparent domestic consumption of core products.

Measures of inflation expectations

Virtually all of the measures of inflation expectations that the Bank follows have decreased since mid-April, and all the medium- and longer-term measures are now close to 2 per cent. In the regular survey reported in the Conference Board of Canada's autumn *Index of Business Confidence*, 81 per cent of respondents expected prices, in general, to rise over the next six months at a rate of 2 per cent or less (Chart 17). This proportion is up from 46 per cent last spring. In addition, the percentage of firms in the Bank's regional survey that expect CPI inflation to exceed 3 per cent on average over the next two years has fallen to 4 per cent in the most recent survey, compared with 26 per cent in the survey conducted near the start of 2003. While the average private sector forecast for total CPI inflation in 2004 has edged down to 1.7 per cent, typical forecasts of longer-term inflation continue to be very close to 2 per cent. As well, the yield differential between 30-year conventional and Real Return bonds has, on balance, remained close to 2 per cent (Chart 18).

Virtually all measures of inflation expectations have decreased since mid-April.





Other factors affecting inflation

The effect of earlier large increases in insurance premiums on core inflation should continue to diminish.

The impact of earlier large increases in insurance premiums on core inflation is expected to continue diminishing into early 2004. Indeed, there is a strong possibility that auto insurance premiums will decrease markedly in a number of provinces in coming months, reflecting either legislated or proposed provincial government initiatives.

Price discounting in industries adversely affected by SARS should diminish in coming months as activity returns to more normal levels. Similarly, price discounting of goods should also diminish as retailers complete their inventory adjustment.

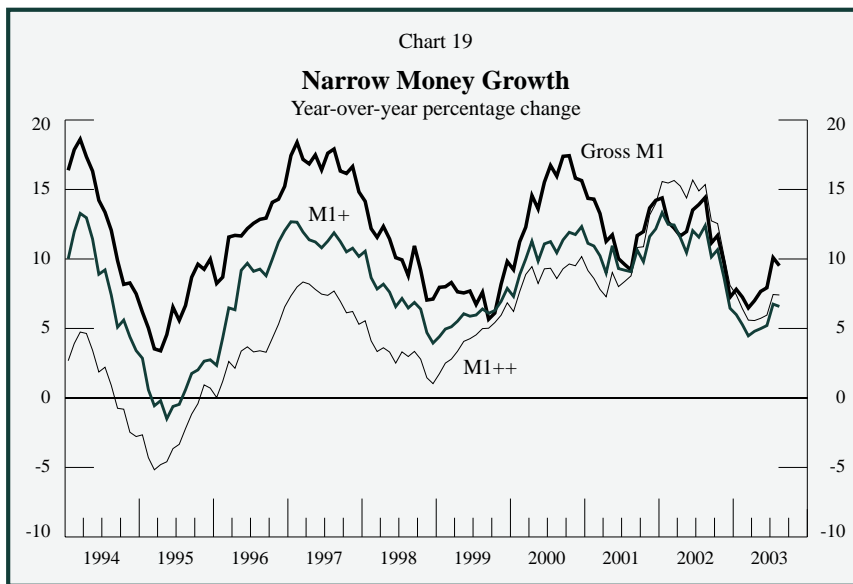
However, the recent substantial appreciation of the Canadian dollar is likely to be a continuing source of downward pressure on core inflation until the end of 2004—although there is considerable uncertainty about the extent of the pass-through of exchange rate movements to consumer prices. The effect is expected to be larger on total CPI inflation than on the core rate and is expected to be in the nature of a one-off price-level movement.

Increases in labour compensation are expected to move up slightly in 2004.

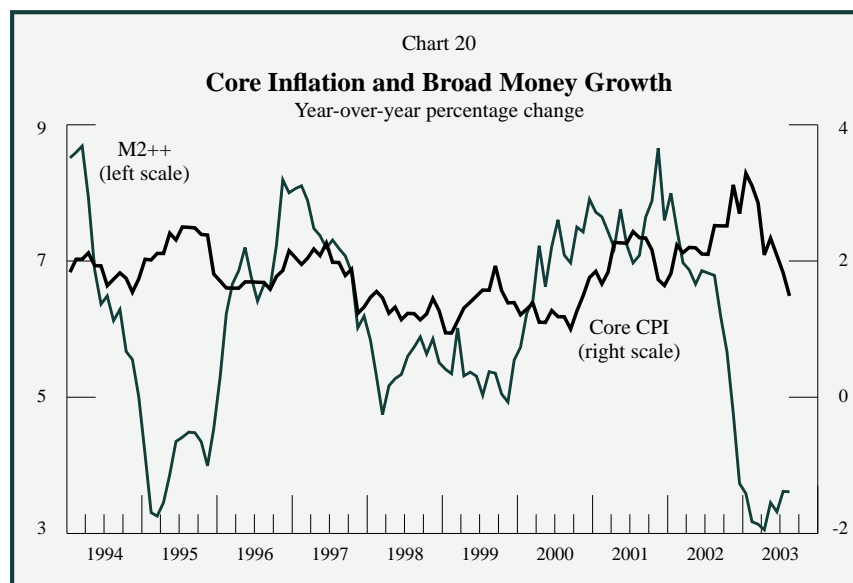
Increases in labour compensation are expected to move up slightly through 2004, as labour market conditions improve. Nevertheless, with labour-productivity growth likely to resume over this period, growth in unit labour costs is expected to move down somewhat below 2 per cent through 2004.

Implications of money growth for inflation

Growth in the narrow monetary aggregates—gross M1, M1+, M1++—has picked up appreciably since the last *Report*, following a temporary but pronounced slowdown earlier this year (Chart 19). This reflects a return in the demand for money from abnormally weak levels to levels that are consistent with the current low interest rate environment. Earlier this year, both households and firms were drawing down the precautionary balances amassed in 2002 in the face of weak equity prices, increasing financial turbulence, and rising geopolitical uncertainty.



Households continue to redistribute their investment portfolios, shifting from holdings of money-market and equity-based mutual funds towards fixed-term deposits and fixed-income mutual funds. The shift out of financial holdings and into real assets is also continuing, evidenced by the strength of the housing market over the last year. Despite this development, the growth rate of M2++ has picked up somewhat since the last *Report*, owing largely to the faster growth of the narrow money aggregates (Chart 20). With growth in M2++ firming, one downside risk to the inflation outlook has lessened.



Inflation projection

The amount of slack in the economy should be a source of some downward pressure on inflation over the projection horizon. The effect on core inflation of the earlier hikes in insurance premiums should continue to diminish. And the earlier substantial appreciation of the Canadian dollar should continue to put downward pressure on the core rate over the remainder of 2003 and through 2004.

On the other hand, the recent price discounting in a number of industries (e.g., tourism-related) and retail sectors is likely to moderate in coming months, as activity in these industries and retail inventories return to more normal levels.

On balance, the core rate of inflation is expected to be just over 1 1/2 per cent over the remainder of 2003.⁴ As the effects of earlier large increases in insurance premiums fully dissipate, core inflation is projected to fall to just above 1 per cent in early 2004, before moving back towards the 2 per cent target. Core inflation is expected to return to 2 per cent by mid-2005 (Table 1). The downward pressure on inflation arising from slack in the economy should diminish as this slack is gradually absorbed through 2004.

Core inflation could be somewhat lower than projected over the next several quarters if some of the increases in auto insurance

Core inflation is expected to trough at just above 1 per cent in early 2004 . . .

. . . before moving back to about 2 per cent by mid-2005.

4. Both core and total CPI inflation are expected to rise temporarily in December 2003 as a result of an echo effect associated with the first rebate on Ontario electricity prices in December 2002.

premiums are reversed. Indeed, if all the changes that have been publicly discussed were implemented soon, the core rate projected between the fourth quarter of 2003 and the third quarter of 2004 would be lower than in the base-case scenario shown in Table 1, by 0.2 to 0.3 percentage points. It should be noted that there is considerable uncertainty regarding the timing and magnitude of these possible reversals. These effects are essentially one-off shocks and, if seen as such, should have little effect on inflation expectations and the outlook for inflation in 2005.

Table 1 Projection for Core and Total CPI Inflation Year-over-year percentage change							
	2003		2004			2005	
	Q3	Q4	Q1	Q2	H2	H1	H2
Core inflation	1.6 (2.5)	1.6 (2.4)	1.2 (2.0)	1.6 (2.0)	1.7 (2.0)	1.9 (2.0)	2.0
Total CPI	2.1 (2.8)	1.7 (2.4)	0.9 (1.2)	1.4 (1.5)	1.5 (1.8)	1.8 (2.0)	2.0
Assumption for the Price of West Texas Intermediate Crude Oil (US\$ per barrel)							
WTI (level)	30 (27)	30 (25)	28 (25)	27 (25)	27 (25)	27 (25)	27

Figures in brackets are from the April Report.

Developments in the markets for crude oil will continue to have an important impact on the outlook for the 12-month rate of increase in the total CPI (Chart 16). On the assumption that oil prices will ease to about US\$27 per barrel next year and remain there in 2005, total CPI inflation is projected to fall below core inflation in 2004 and to return to 2 per cent by mid-2005.

Total CPI inflation is likely to move below the core rate in 2004.

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