BANK OF CANADA

MONETARY POLICY REPORT

– May 2000 –

The 1998 sterling silver proof dollar featured on the cover was designed by Adeline Halvorson and commemorates the 125th anniversary of the founding of the North-West Mounted Police. At the time of Confederation in 1867, Canada consisted of only four eastern provinces. In 1870, the government acquired a huge expanse of land from the Hudson's Bay Company. Plans to open the region to settlement required the suppression of the whisky trade and the establishment of peaceful relations with the Native peoples. In May 1873, the North-West Mounted Police force was created to bring law, order, and Canadian authority to the western frontier. The reverse of the coin features a mounted member of that early force, which, in 1920, became the Royal Canadian Mounted Police. The obverse bears the effigy of Her Majesty Queen Elizabeth II by artist Dora de Pédery-Hunt.

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Monetary Policy Report

— May 2000 —

Up to now, our inflation performance has been somewhat better than we had expected . . . . This good inflation performance bodes well for the continued expansion of the Canadian economy. But what remains to be seen is whether this expansion will bring with it strong productivity gains for Canada similar to those witnessed in the United States. One thing is clear. The job of the Bank of Canada must be to keep inflation in Canada low and stable. Without that, we will be risking both the economic expansion and the potential productivity gains.

— Gordon Thiessen

The Conduct of Monetary Policy When You Live Next Door to a Large Neighbour

Remarks by Gordon Thiessen
Governor of the Bank of Canada
to the Canadian Society of New York
New York, U.S.A.
9 March 2000

Contents

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 and thereby contributes to better growth over time.

- Inflation-control targets ensure that monetary policy works to moderate cyclical fluctuations in income and employment. These targets help the Bank to make more accurate judgments about the growth potential of the economy.

The monetary policy instrument

- The Bank of Canada uses its influence on short-term interest rates to achieve a rate of monetary expansion consistent with the inflation-control target range. The transmission mechanism is complex and involves long and variable lags—the impact on inflation from changes in monetary conditions 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 inflation to the midpoint of a range of 1 to 3 per cent by the end of 1995. In December 1993, this target range was extended to the end of 1998. In February 1998, it was extended again to the end of 2001.

- By the end of 2001, the government and the Bank plan to determine the long-run target for monetary policy consistent with price stability.

Monitoring inflation

- In the short run, there is a good deal of movement in the CPI caused by transitory fluctuations in the prices of food and energy, as well as by changes in indirect taxes. For this reason, the Bank focuses on the CPI excluding food, energy, and the effect of indirect taxes. This measure is referred to as the *core* CPI.

- Over longer periods, the measures of inflation based on the total CPI and the core CPI tend to follow similar paths. In the event of persistent differences between the trends of the two measures, the Bank would adjust its desired path for core CPI inflation so that total CPI inflation would come within the target range.

1. Introduction

The global economy has shown greater strength than was anticipated at the time of the November *Report*. Growth in both the emerging-market and European economies has accelerated, and the pace of the economic expansion in the United States has increased even further. Japan, however, has not yet shared in this stepped-up activity.

The pace of global economic expansion has strengthened . . .

This strengthening pace of global economic expansion carries with it an increasing risk of potential inflation pressures. This is especially true for the United States, where there is mounting evidence that demand is pressing against supply, particularly in the labour market. In addition, because of the marked rise in world oil prices during the winter, the headline rate of consumer inflation increased sharply in most countries.

. . . bringing with it increased risk of potential inflation pressures.

Canada's economic performance over the past six months has also exceeded expectations. Growth has been stronger than projected, reflecting both the buoyancy of external demand and more vigorous domestic demand. The trend of inflation has been lower than expected, however, and has remained among the lowest in the major industrial countries. This low level of inflation is one of the main reasons why Canadian interest rates have stayed below comparable U.S. rates.

The Canadian economy has outperformed expectations.

These developments raise several key areas of uncertainty for the conduct of Canadian monetary policy in the period ahead. First, the momentum of demand in Canada from both international and domestic sources could continue to outpace expectations. Second, a possible buildup of inflationary pressures in the United States could have implications for Canada. Third, the capacity of the Canadian economy to produce goods and services without adding to inflationary pressures may be higher than previously thought.

This report includes information received to 1 May 2000.

2. Recent Developments in Inflation

The reduction in core inflation over the past six months was unexpected . . .

Since last autumn, core inflation (CPI excluding food, energy, and the effect of changes in indirect taxes) has moved down within the lower part of the Bank's inflation-control target range. This decline was not anticipated. At the time of the November 1999 *Report*, core inflation was expected to increase to the mid-point of the 1 to 3 per cent target range in the first quarter of 2000. The substantial jump in energy prices moved the rate of increase in the total CPI sharply higher to the upper end of the target range.

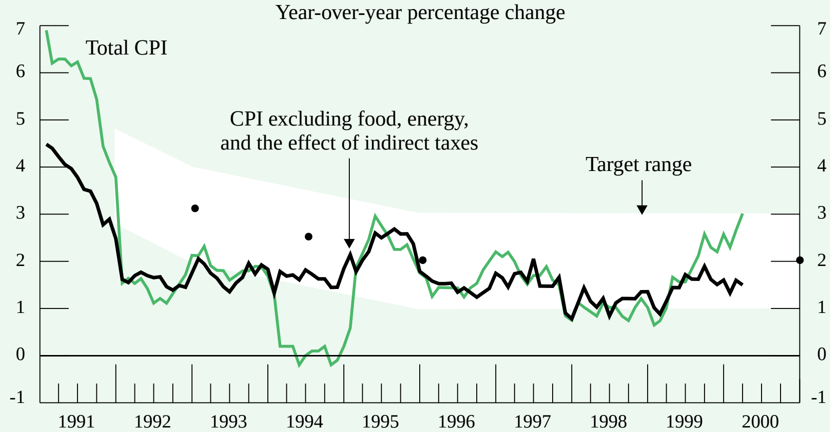
Inflation and the target range

The 12-month rate of increase in the core CPI was 1.5 per cent in March, compared with 1.9 per cent last September (Chart 1). Other statistical measures of the trend rate of inflation are around the level of core inflation (Chart 2).

Chart 1

Consumer Price Index

Year-over-year percentage change



• Midpoint of the inflation-control target range

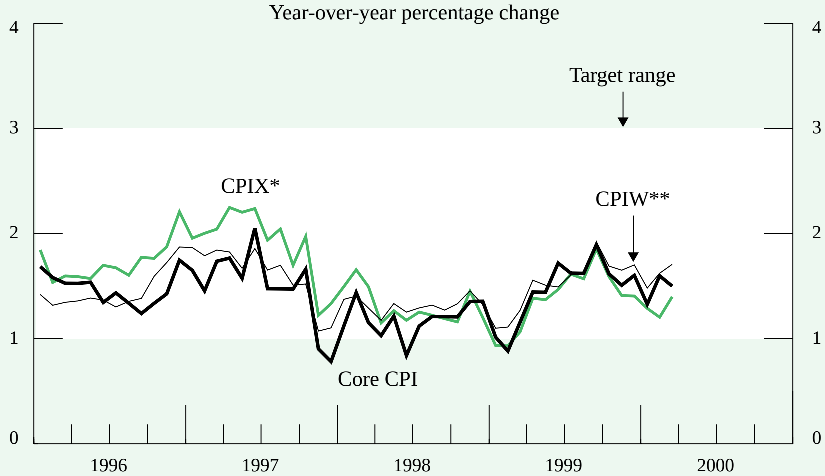
. . . and resulted from a number of factors.

This recent decline in core inflation can be explained largely by developments in several components of household spending. Over the past year, prices for most imported non-energy consumer goods and services declined as a result of the appreciation of the Canadian dollar and lower U.S. dollar prices for these items. Competitive pressures in the retail sector have also been intense, leading to discounts on semi-durable consumer goods such as clothing and footwear, and, to a lesser extent, on durables such as automobiles and household appliances. In addition, the possibility of less

Chart 2

Core CPI and Statistical Measures of the Trend Inflation Rate

Year-over-year percentage change



* CPIX excludes the eight most volatile components from the CPI as well as the effect of indirect taxes on the remaining components.

** CPIW adjusts each CPI basket weight by a factor that is inversely proportional to the component's variability.

pressure on capacity output than was previously expected appears to have played a role.

Despite the decline in core inflation, the 12-month rate of increase in the total CPI rose from 2.6 per cent in September to 3 per cent in March. This divergence reflects the impact of the dramatic rise in energy prices on the total CPI (Technical Box 1).

Higher energy prices explain the rise in the total CPI.

The hike in energy prices was caused primarily by the sharp run-up in crude oil prices over the past year that resulted from supply constraints by OPEC and several non-OPEC producers, and from rising global demand. Natural gas prices also rose, but less than oil prices. More recently, world prices for crude oil have fallen back somewhat from their first-quarter peak.

Prices for many other non-agricultural commodities—notably base metals and pulp—have also moved up substantially, largely because of strengthening global demand. These increases, combined with higher oil prices, have caused the average U.S. dollar price of the major primary commodities produced in Canada (as measured by the Bank of Canada's commodity price index) to rise by 32 per cent since the end of 1998 (Chart 3). This substantial recovery in the prices of Canada's commodity exports also accounts for the marked rise in 1999 of the chain price index for GDP (a broad price measure of the goods and services produced in Canada), relative to the core CPI (Chart 4).

Chart 3

Bank of Canada Commodity Price Index

1982–90 = 100, in U.S. dollars

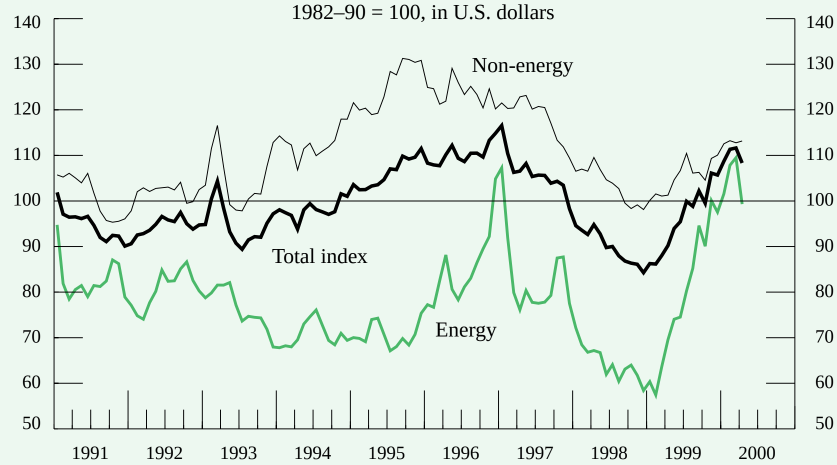
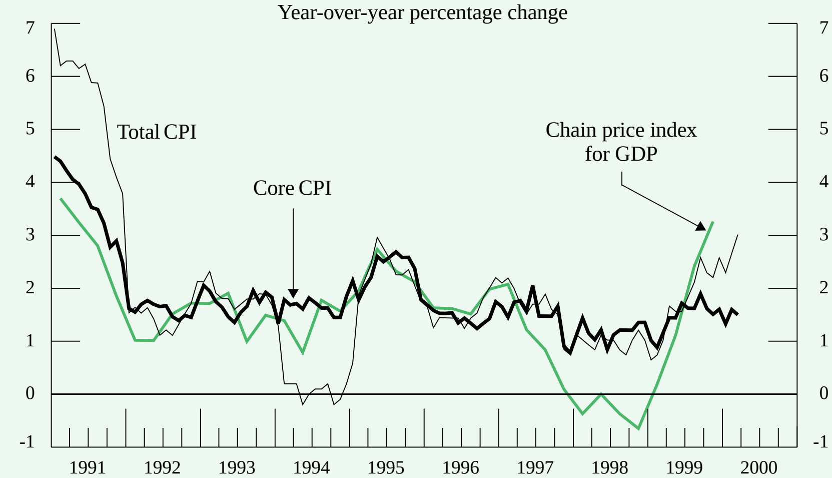


Chart 4

Chain Price Index for GDP, Core CPI, and Total CPI

Year-over-year percentage change



Technical Box 1

Rising Oil Prices: Implications for Inflation

The large swings in crude oil prices over the past two years and their effect on the total CPI underscore the importance of focusing monetary policy on a measure of core inflation that looks through such volatile factors. With major production cutbacks and stronger world demand, crude oil prices rose, on balance, by about 80 per cent from just over US$14 per barrel in October 1998 to about US$25 per barrel in early April 2000. This largely explains the substantial jump in both gasoline and fuel oil prices at the consumer level and, in turn, most of the recent rise in the rate of increase in the total CPI—from less than 1 per cent at the beginning of 1999 to 3 per cent currently.

Prices for gasoline and fuel oil are highly sensitive to fluctuations in the international supply of and demand for crude oil. Changes in these prices are the most important first-round effect on the CPI from variations in crude oil prices. Swings in crude oil prices can also have first-round effects on the core CPI because energy costs represent an important share of the total costs of activities such as air and truck transportation and the manufacture of plastic products. Along with such cost-based effects on the core CPI, there could be second-round influences on wages and other prices if these first-round effects feed into expectations of higher ongoing inflation.

To date, the first-round effects on the core CPI of the increase in crude oil prices appear to have been small. As of March, the estimated impact on the core CPI is less than 0.1 per cent (mainly air fares), because of such factors as long-term contracts, the continued intense degree of competition in the retail sector, and the difficulty of passing on higher costs in the form of price increases. This contrasts with the estimated long-run effect on the level of the core CPI of a permanent 80 per cent increase in oil prices (if there is full pass-through into consumer prices and no further major changes in oil prices) of 0.5 to 0.7 per cent. This longer-term effect would likely be spread over a period of more than one year. Moreover, in the current competitive environment, this long-run estimate should be considered an upper limit, since firms would be expected to achieve some cost savings through substitution towards cheaper sources of energy and by economizing on energy use.

By excluding energy prices from the core CPI, monetary authorities can better assess the underlying trend of inflation and, therefore, of future movements in inflation.[1] By focusing on a core inflation measure, the Bank has made it clear that it is prepared to accommodate the first-round effects of short-term movements in crude oil prices on the total CPI. Second-round effects, however, will not be accommodated. In the current circumstances, the impact of the sharp increase in crude oil prices on the total CPI appears to have been restricted to first-round effects. However, the Bank will be watching closely for significant evidence of broader second-round effects. If crude oil prices remain near $US25, or fall further, the Bank expects that the total CPI will start to move down towards the core rate during the second quarter of this year.

1. A similar principle of exclusion, or reduced weighting, of the more volatile CPI components is used to construct alternative statistical measures of trend inflation, such as CPIX and CPIW. Indeed, gasoline, fuel oil, and natural gas are three of the eight most volatile CPI components excluded from the CPIX measure. Also excluded from CPIX (but not from core CPI) is inter-city public transportation (mainly air fares), which is very sensitive to oil prices.

Factors at work on inflation

Aggregate demand

Canada's economic expansion strengthened in the second half of 1999 and into early 2000 . . .

The pace of Canada's economic expansion continued to strengthen in the second half of 1999 and into early 2000, reflecting the extremely robust economic growth in the United States, further recovery in world commodity prices, and growing momentum in domestic demand. Real GDP in Canada rose at an annual rate of 5.0 per cent in the second half of 1999, after a gain of 4.3 per cent in the first half. For the first quarter of 2000, current information points to continued strong growth in a range of 4 to 5 per cent.

. . . led by faster export growth.

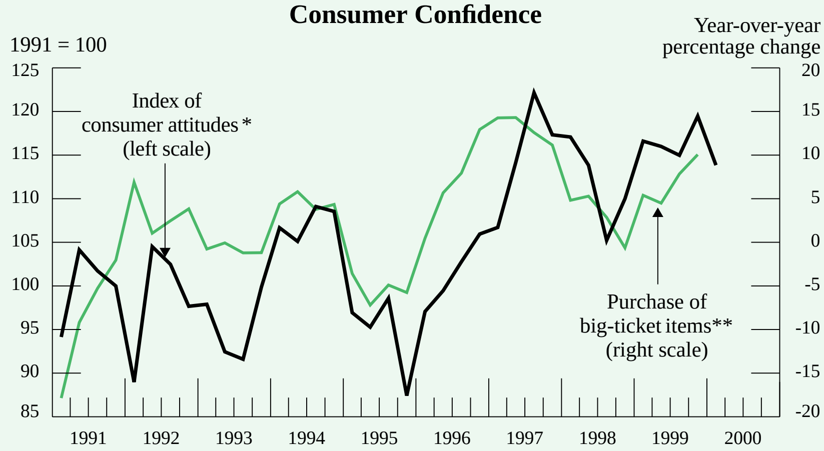
The vigorous expansion of U.S. aggregate demand and the highly competitive position of Canadian industry have contributed to increased growth in export volumes, especially exports of finished goods such as machinery and equipment and automotive products. In addition, the recovery in commodity prices led to a resumption of growth in the volume of commodity exports.

Household spending has also been buoyant . . .

The growth of household spending eased slightly in the second half of the year but, nevertheless, remained strong, reflecting increased consumer confidence and continued strong gains in real income (Chart 5). Indicators received to date also suggest that this momentum in household spending has carried forward into the first quarter of 2000. The substantial growth of real personal disposable income has largely reflected solid gains in employment, particularly for full-time positions (Chart 6). As a result, the unemployment rate has declined still further. Lower personal income tax rates and, to a smaller degree, the increase in personal wealth associated with the recent demutualization of Canadian life insurance companies, have also supported consumer confidence and household expenditures.

Chart 5

Consumer Confidence



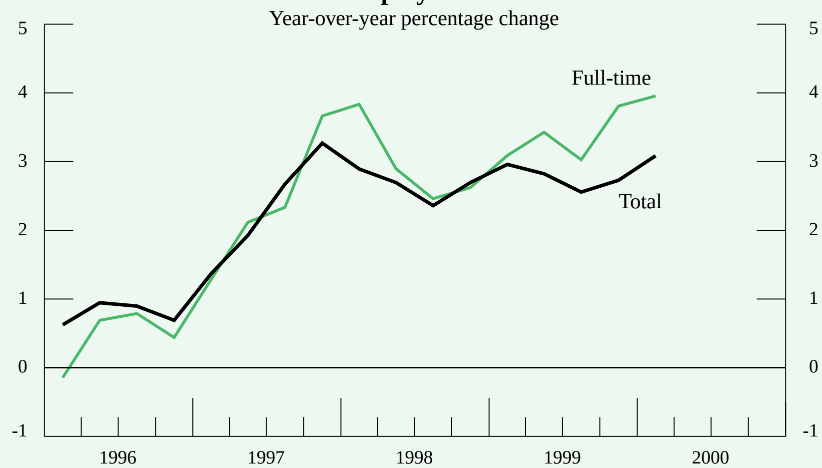
* Source: Conference Board of Canada

** Expenditures in constant dollars on consumer durables plus housing

Chart 6

Employment

Year-over-year percentage change



With Canadian firms feeling confident about the economy and about their own financial prospects, investment in capital goods continued to grow substantially in the second half of 1999. Expenditures on machinery and equipment, as well as on structures, remained high. In particular, spending by the oil and gas sector rebounded considerably in the second half of 1999, following the sharp gains in crude oil and natural gas prices. Early indicators point to continued strong investment growth in the first quarter of 2000.

. . . as has capital spending by businesses.

Import growth was extremely robust.

Imports continued to show strong growth in the last six months of 1999 and in early 2000, mainly reflecting the rapid advance in domestic demand for import-intensive items such as machinery and equipment and motor vehicles.

Canada's current account position (in dollar terms) continued to improve during the second half of 1999 and was virtually in balance in the third quarter before it fell back into a small deficit at the end of the year. The overall improvement reflected a recovery in the terms of trade, chiefly because of rising commodity prices. This price advantage partly offset a reduction in the merchandise trade surplus in volume terms as imports continued to grow more briskly than exports. Early information suggests that the current account position is likely to have moved back into surplus in the first quarter, following both a rebound in the real trade balance and a further increase in the terms of trade.

Cost control

Wage growth has been rising, but remains modest relative to productivity gains and inflation.

The Bank monitors a number of wage measures, each with its own limitations. Overall, these measures suggest that wage growth has accelerated somewhat but has remained at, or slightly below, what would be consistent with Canada's average rate of productivity gains and the recent performance of trend inflation.

The year-over-year increase in the average hourly wage (excluding overtime) for permanent workers, a relatively new addition to Statistics Canada's *Labour Force Information*, has shown a moderately accelerating trend since late 1998. The year-over-year increase in the first quarter of 2000 was 3.2 per cent, up from 3.0 per cent in the previous quarter. In contrast, another broad-based measure, the year-over-year increase in labour income per person-hour, was relatively stable in 1999—within a range of 1 to 2 per cent. According to wage-settlement data, which cover only about 20 per cent of non-agricultural paid employment, the average annual wage increase in the unionized private sector has been edging up since 1998, rising to 2.7 per cent in the last half of 1999 from 2.3 per cent in the first half, with most of that increase coming from settlements in the automobile industry. Thus far in 2000, private sector settlements have averaged 2.8 per cent (for January and February) (Chart 7). Finally, a compensation survey by the Conference Board of Canada conducted in August and September 1999 suggested that pay increases in 2000 would be somewhat lower than in 1999. Increases for the non-unionized private sector were projected to be 3.4 per cent compared with 3.6 per cent in 1999. These projections may be revised upwards, however, because of the unexpected strength in the economy since the survey was completed.

Output per person-hour recovered in 1999 from a very weak performance the previous year, rising by over 1 per cent from the fourth quarter of 1998 to the fourth quarter of 1999 (Chart 8). Combined with moderate increases in labour income per person-hour, this improvement in labour productivity resulted in a modest increase in unit labour costs of about 1 per cent in 1999—below the rate of core inflation. Spending by business in 1999 on machinery and equipment, especially computers, remained very strong, which bodes well for future productivity growth.

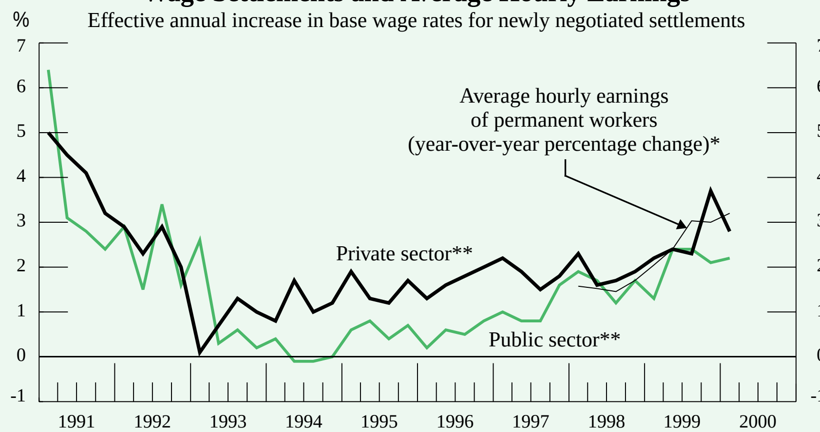
Labour productivity moved up gradually in 1999 . . .

. . . and strong investment in machinery and equipment bodes well for further productivity gains.

Chart 7

Wage Settlements and Average Hourly Earnings

Effective annual increase in base wage rates for newly negotiated settlements

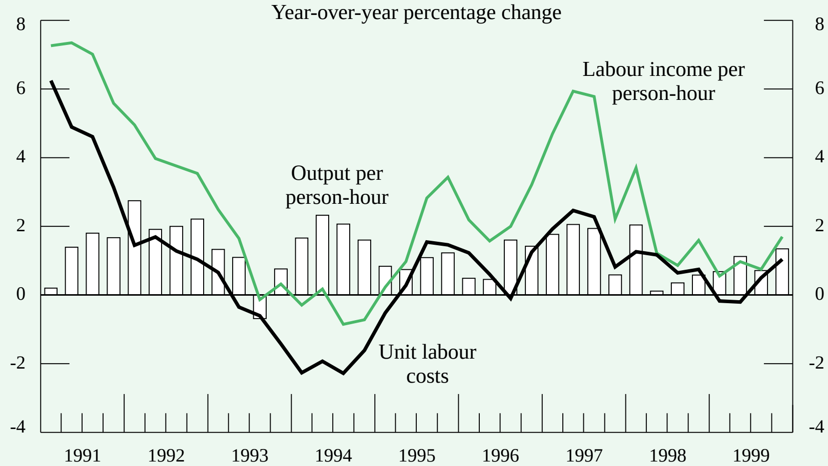


* Source: *Labour Force Information*
** Source: Human Resources Development Canada, last data point = January and February 2000

Chart 8

Unit Labour Costs and Labour Productivity

Year-over-year percentage change



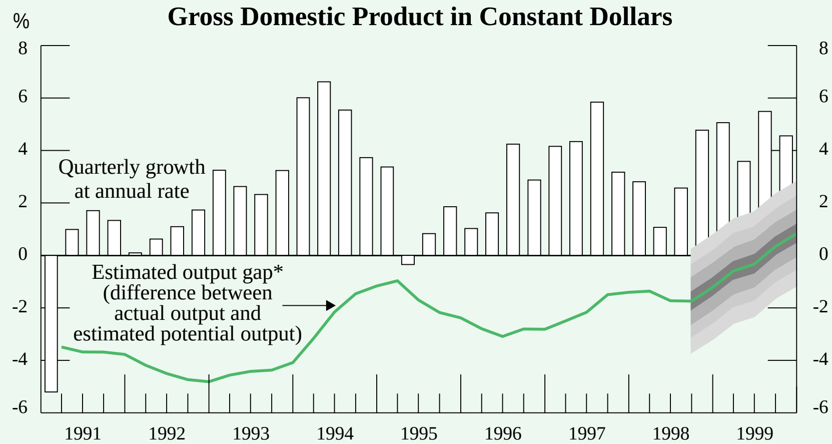
Estimated pressures on capacity

The Bank's conventional measure of capacity output suggests that the economy is in excess demand . . .

Based on the Bank's conventional measurement techniques, the Canadian economy was operating about one-half of one per cent below capacity in mid-1999. By year-end, these same techniques indicated that the economy was functioning close to three-quarters of one per cent above its production capacity.[1] There is always considerable uncertainty associated with the measurement of potential output, as can be seen by the wide confidence band around the estimated gap (Chart 9). Because of this uncertainty, and because the economy is operating at such high levels, the Bank has stressed the need to look at a range of indicators to assess the degree of pressure on productive capacity.

Chart 9

Gross Domestic Product in Constant Dollars



* The shading around the 1998 and 1999 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.

. . . but other indicators suggest that the conventional measure may be underestimating the amount of capacity.

A number of these other indicators suggest that the Bank's conventional measure of potential output has been underestimating the economy's ability to produce goods and services without adding to inflationary pressures. Most importantly, even with the unexpectedly rapid growth of the economy, core inflation in recent months has been lower than had been anticipated, and this cannot be fully explained by temporary special factors. In addition, despite the strong demand for exports, Statistics Canada's data on

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1. At the time of the November *Report*, the economy was estimated to have been operating at about one-quarter of one per cent below potential output in mid-1999. The historical estimates of the output gap were updated following Statistics Canada's upward revision to the level of GDP over the first half of 1999 as well as the stronger-than-expected growth in GDP over the second half of the year.

unfilled orders do not point to any significant bottlenecks in production. The inventory situation also appears to be close to balance. In labour markets, while there is some evidence that the rate of wage growth has accelerated, overall wage gains have thus far been modest relative to productivity growth and inflation, and participation rates have been rising. This suggests that labour markets are not as tight as would be indicated by the conventional measure of capacity output.

At the same time, several other indicators point to the rapid absorption of production capacity. Statistics Canada's measured rate of capacity utilization in the non-farm, goods-producing sector increased in the second half of 1999, reaching the peak level achieved during the latter part of the 1980s. In addition, the unemployment rate fell to a 24-year low of just under 7 per cent in early 2000, and reports of labour shortages have moved beyond the information technology sector to other occupations, including truck drivers and workers in the skilled manufacturing and construction trades.

On balance, the full range of indicators suggests that the Bank's conventional measure of capacity output has underestimated the amount of capacity in the Canadian economy. Therefore, the Bank's overall judgment is that, as of the end of 1999, the economy had not yet moved into excess demand, but that it was rapidly absorbing capacity.

3. Achieving the Inflation-Control Targets

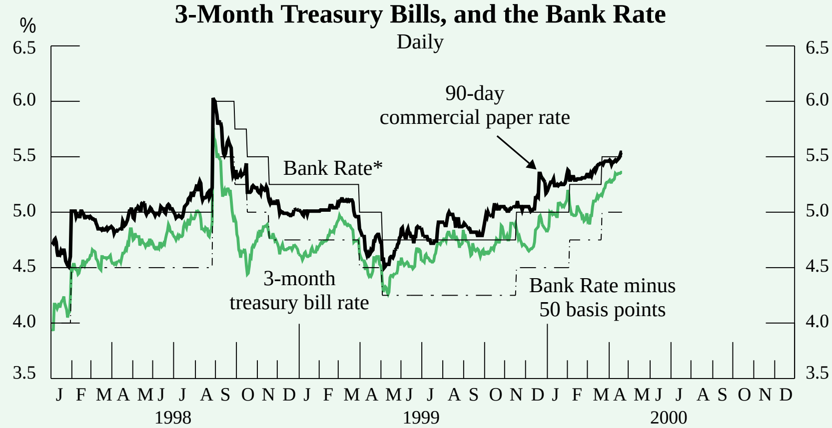
The Bank raised short-term interest rates twice to keep trend inflation within the 1 to 3 per cent target range.

The Bank of Canada raised the Bank Rate by 25 basis points (Chart 10) on both 3 February and 22 March, increasing the Bank Rate to 5.5 per cent and the target for the overnight interest rate to 5.25 per cent. This action was taken to keep the future trend of inflation inside the Bank's 1 to 3 per cent inflation-control range, so that the Canadian economy could continue to expand in a sustainable way.

Chart 10

Rates on 90-Day Commercial Paper, 3-Month Treasury Bills, and the Bank Rate

Daily



* As of February 1996, the Bank Rate has been the upper limit of the 50-basis-point operating band for the overnight rate.

The Bank's actions took into account the implications for Canada of increases in the U.S. Federal Reserve's policy rates and of the strong demand pressures in the United States spilling over into Canada. In its policy announcement, the Federal Reserve underlined the risks of heightened inflation pressures in the United States in the foreseeable future as a result of unsustainably strong demand. Although cyclical conditions in Canada bear important similarities to those in the United States, there are some significant differences, and the Bank of Canada's target for the overnight rate remains 75 basis points below the U.S. target rate for federal funds.

Interest rate increases in both countries had been widely expected in financial markets. Indeed, it was thought that in the United States, monetary conditions would have been tightened somewhat earlier had it not been for the temporary provision of liquidity in anticipation of the year-2000 date change. In fact, short-term market interest rates in Canada and the United States, having already risen in anticipation of the policy actions, were virtually unaffected by the rate announcements themselves.

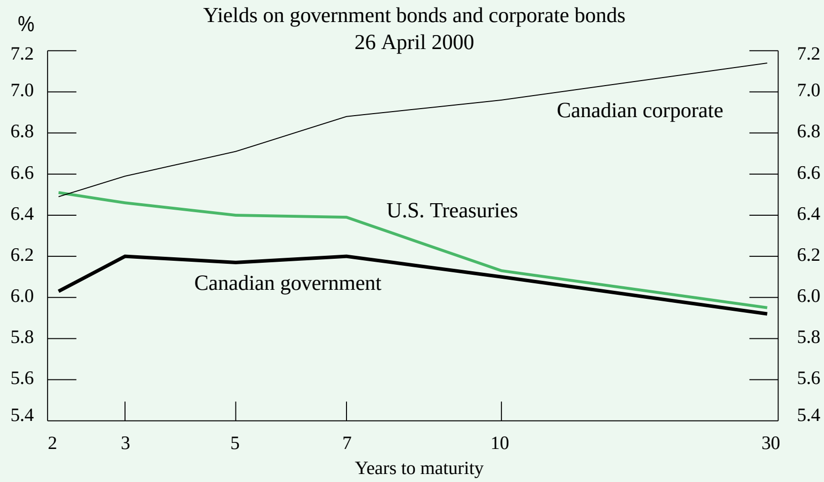
Long-term government bond yields fell because of technical factors.

The yield curve has flattened considerably over the past six months, as medium- and, especially, long-term interest rates have fallen (Chart 11). Decreases in government borrowing requirements have been an important reason for the decline in bond yields. Government bond markets in both Canada and the United States have been affected by actual and anticipated reductions in long-term government debt. This has resulted in thin markets, especially for the 30-year maturities, with occasional unusual price movements. The Government of Canada yield curve has developed a hump, with yields on maturities at 3 to 10 years above the 30-year yield. In the United States, the Treasury yield curve has inverted since November, and now has a negative slope. In contrast, the yield curve for Canadian corporate bonds, which has been less affected by unusual supply factors, and which is indicative of the cost of borrowing in the private sector, has a normal positive slope. Even so, the overall strength of the fixed-income markets is underpinned by a high degree of confidence in long-term price stability.

Chart 11

Term Structure of Interest Rates in Canada and the United States

Yields on government bonds and corporate bonds
26 April 2000



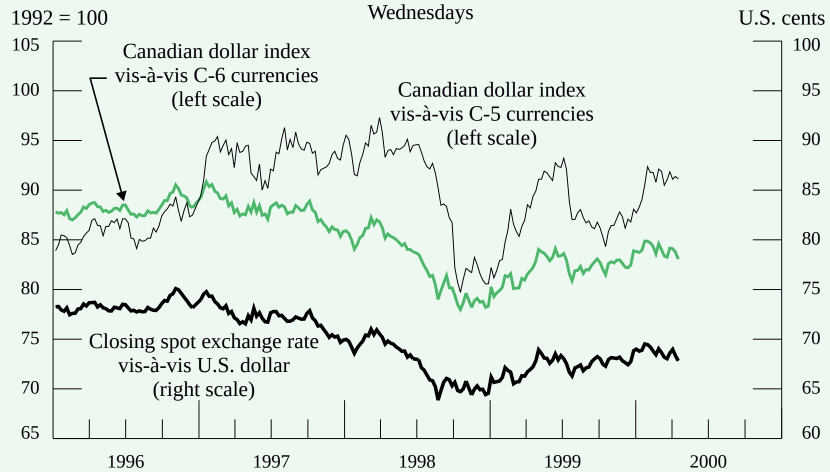
The trade-weighted value of the Canadian dollar has remained relatively firm, reflecting positive fundamentals.

Demand for Canadian dollar assets has been evident in the exchange market as well as in the bond market. This is reflected in the relative firmness of the trade-weighted value of the Canadian dollar since November (Chart 12). This firmness stems from the recovery in natural resource markets, an improvement in the current account of the balance of payments, and growing expectations of a sustained period of strong economic expansion. While the Canadian dollar has not strengthened vis-à-vis the buoyant U.S. dollar, it has risen sharply against overseas currencies.

Chart 12

Canadian Dollar Exchange Rate

Wednesdays

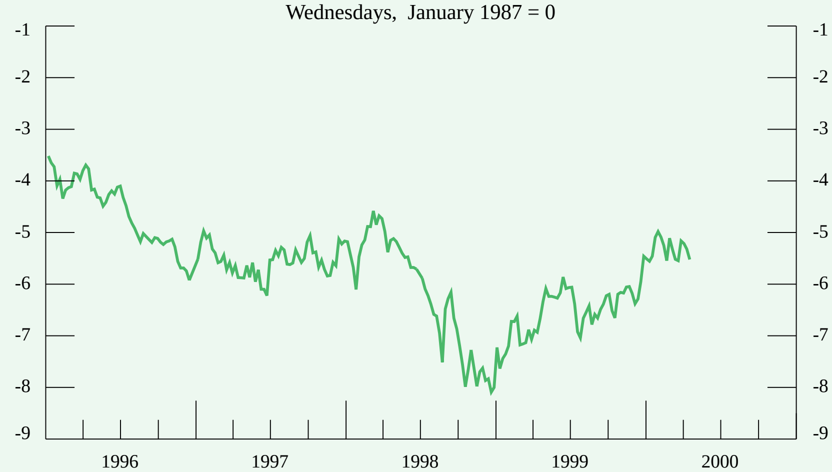


Reflecting the rise in short-term market rates, the Bank's monetary conditions index increased from a range of -7.0 to -6.0 in the second half of 1999 to -5.5 to -5.0 recently (Chart 13).

Chart 13

Monetary Conditions Index

Wednesdays, January 1987 = 0



4. The Outlook for Inflation

In our analysis, the balance of forces continues to point to upward pressure on the core rate of inflation. However, several key uncertainties continue to surround this projection.

International background

Prospects are good for continued recovery in emerging-market economies.

The global economy has gained further momentum, with current growth rates in many parts of the world exceeding earlier expectations.[2] Emerging-market economies have contributed significantly to this stronger-than-expected growth, and prospects for this group are generally bright in 2000. The Asian economies that were at the centre of the 1997–98 financial crisis continue to solidify their recovery. Although growth in the Latin American economies other than Mexico was weak in 1999, it is expected to improve substantially this year.

Solid output growth is expected in both the euro zone and the United Kingdom.

Economic growth in both the euro area and the United Kingdom accelerated in the second half of 1999 to about 3.5 per cent. Although a slightly slower pace of expansion is expected through 2000, activity should remain solid. Headline inflation has risen in both areas, although higher energy prices (together with rising mortgage costs in the United Kingdom) appear to account for much of the recent increase. The European Central Bank (ECB) and the Bank of England have raised policy interest rates to counter the inflation risks from stronger demand and, in the case of the ECB, the decline in the external value of the euro.

Stimulative fiscal policy should continue to help the Japanese economy.

The outlook remains far more uncertain for Japan, where weak final domestic demand led to a second consecutive quarterly decline in real GDP in the fourth quarter of 1999. More recent indicators suggest that, despite the yen's continued strength against other currencies, growth can be expected to improve in the first half of 2000, supported by the fiscal-stimulus package announced by the government last November. It is not yet clear, however, when a self-sustaining recovery based on private sector demand will take hold.

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2. The IMF, in its spring *World Economic Outlook*, anticipates global economic growth of 4.2 per cent in 2000 (following 3.3 per cent in 1999), 0.8 percentage points higher than projected in its previous *Outlook* (October 1999).

Although U.S. economic growth is expected to moderate . . .

In the United States, growth in real GDP has continued to outstrip expectations, rising at an annual rate of over 7 per cent in the final quarter of 1999 and averaging 4.6 per cent through the year. This strong momentum has carried into the first part of 2000. (Preliminary data indicate first-quarter growth of 5.4 per cent.) Nevertheless, some slowing in the pace of expansion is expected over the course of this year and in 2001, as the growth of consumer expenditures weakens in response to low personal savings rates and to recent and prospective increases in interest rates. Volatility in the equity market may also dampen consumer optimism. U.S. core inflation (which excludes food and energy prices) has moved above 2 per cent. Strong productivity gains, however, have helped to contain overall cost and price pressures.

. . . there is some risk of an increase in core inflation.

Despite this generally favourable performance, the high level of resource utilization and the rapid pace of aggregate demand growth in excess of the growth of potential output continue to pose a potential inflation risk. Consequently, U.S. monetary authorities have gradually raised official interest rates. While the expansion of the U.S. economy is expected to slow from the current unsustainable rates, it is uncertain how quickly this will occur. What seems clear, however, is the need for the pace of U.S. economic expansion to slow to rates close to, or below, growth in potential output.

Another imbalance in the U.S. economy, reflecting the unsustainably high levels and growth of demand relative to supply, is the large current account deficit. Some narrowing of the current account deficit can be expected as the U.S. economy slows and overseas economies continue to recover, but a significant reduction is unlikely without a depreciation of the U.S. dollar over the medium term.

Non-energy commodity prices should continue their recovery.

Crude oil prices rose sharply through the first quarter of 2000. They then fell back following announced production increases by OPEC in April. Oil prices are expected to stabilize, or even drop slightly further, during the course of this year. In contrast, prices for non-energy commodities should continue to firm as a result of the vigorous growth in global demand.

Aggregate demand and supply in Canada

While U.S. economic growth is projected to slow this year from its recent torrid pace, it is still expected to remain relatively robust at around 4 per cent (fourth quarter over fourth quarter). This, together with the considerable strengthening of commodity prices and strong domestic demand, augurs well for vigorous economic growth in Canada this year. With economic activity in the United States at levels already high relative to capacity, the Bank expects the U.S. economy to slow further in 2001 to below potential growth (currently estimated by Bank staff to be about 3.25 per cent) in order to address the imbalances highlighted above. This projected profile for U.S. growth contributes importantly to a slowing of the Canadian economy in 2001.

Canadian export growth should ease this year, as should import growth.

The expected deceleration of the U.S. economy, in addition to reduced stimulus from the earlier depreciation of the Canadian dollar, should begin to ease export growth some time this year. Stronger activity in many of Canada's other trading partners and higher commodity prices should offset this effect somewhat. Import growth is also expected to moderate this year, as domestic demand for import-intensive goods slows.

Growth in household spending should remain robust . . .

Further gains in employment, federal pay-equity settlements, and reductions in personal income taxes are expected to support a high level of consumer confidence and strong growth in household spending. Recent equity market volatility, however, may add an element of caution to consumer spending plans.

. . . and business investment is expected to remain at high levels.

After a strong advance in 1999 that was partly driven by concerns about year-2000 readiness, business investment is expected to remain at high levels this year, given expectations of solid growth in external and domestic demand and substantial cash flows from commodity production. Moreover, investment could continue to advance rapidly since resources that were devoted to dealing with year-2000 concerns can now be redirected towards adding to capacity.

The February 2000 federal budgetary expenditures are slightly more expansionary than the fiscal outlook presented in the November 1999 *Economic and Fiscal Update*. The additional spending is expected to be spread out over 2000 and 2001.

The latest consensus among private sector forecasters for real GDP growth (on an average annual basis) has been revised upwards considerably—to 4.1 per cent for 2000, from 2.9 per cent at the time of the November *Report*. For 2001, the latest consensus forecast calls for real GDP growth of 3.1 per cent.

Output growth of about 4 to 4.5 per cent is expected in 2000 . . .

Taking into account the upward revision to growth in 1999 as well as recent data, the Bank projects output growth in Canada in 2000 of about 4 to 4.5 per cent.[3] This projection, together with a growth in potential output, based on the Bank's conventional estimate, in a range of 2.5 to 3.0 per cent, implies the likely emergence of excess demand pressures in the Canadian economy in 2000. Thus, to avoid a buildup of inflationary pressures, economic growth will need to slow to a rate close to that of potential output in 2001. Such an outcome would entail a combination of a slowdown in the U.S. economy and some moderation in domestic spending growth in Canada.

. . . but it will need to slow to close to potential in 2001.

In projecting demand pressures in 2001, the Bank must consider not only the issue of the current *level* of potential output, but also the uncertainty regarding the *growth rate* of capacity output going forward. The increased intensity of private and public sector restructuring in the 1990s, the recent high levels of investment in machinery and equipment, and the potential for the marked acceleration in U.S. labour productivity to spill over into Canada, all suggest a possible rise in the future rate of productivity growth in Canada. However, the size and timing of any such increase is even more uncertain than estimates of the current level of capacity (Technical Box 2). The Bank will therefore be carefully monitoring all possible indicators of capacity and the degree of pressure on capacity to see whether there is evidence of a higher growth of potential output. But until such evidence is available, the Bank will be taking a prudent approach to projecting potential output.

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3. In the Bank's February *Update*, real GDP growth this year was expected to be near the top of the 2.75 to 3.75 per cent range projected in the November *Report*.

Technical Box 2

Productivity in Canada and the U.S. Experience

Since 1995, annual growth in real activity in the United States has averaged about 4 per cent, while inflation has remained low. Observers have noted that this exceptional performance was accompanied by a rebound in the growth of labour productivity, which has helped to restrain costs. Over this period, output per hour in the business sector rose by about 2.5 per cent per year, almost twice the rate registered over the preceding 20 years. In contrast, the average annual rate of growth in output per hour in Canada's business sector has been slightly less than 1 per cent since 1995—little changed since the mid-1970s.

One explanation for this recent difference in productivity performance is that economic activity in the United States has been operating near capacity for considerably longer than it has here in Canada, and this has led to stronger investment in machinery and equipment in the United States. A second explanation is that innovations in information technology are being introduced more quickly in the United States than here. A third explanation is that much of the higher productivity growth in the United States has been concentrated in the high-technology electrical and electronic products and industrial machinery industries, and these particular industries account for a considerably larger share of aggregate output in the United States than in Canada. Finally, the recent treatment of all software purchases as investment in U.S. GDP (but not in the Canadian data) accounts for some of the difference in productivity growth between the two countries.[1]

There is, nonetheless, room for optimism that productivity and hence output growth in Canada will increase. As the benefits of advances in information technology in U.S. industry diffuse to other industrial countries, Canadian firms should share in the widespread efficiency gains associated with the exploitation of these new technologies. The likelihood of a rise in productivity growth in Canada is increased by the strong gains in business investment in machinery and equipment in recent years, since new equipment tends to incorporate technological advances. In addition, with labour and product markets tightening, the return in terms of higher productivity from the private and public sector restructuring undertaken in the past decade may become more evident.[2]

However, the size and timing of a rise in productivity growth in Canada are highly uncertain. Given the usual volatility in aggregate productivity statistics, it may be several years before it can be said with some confidence that there has been a rise in the trend rate of productivity growth in Canada. In the meantime, the Bank will monitor the behaviour of inflation and other indicators to gauge the degree of pressure on capacity.

Growth of Output per Person-Hour: Non-Farm Business Sector

(Average annual percentage change)

	1961–73	1973–88	1988–95	1995–99
Canada	3.13	1.12	0.92	0.77
United States	2.99	1.42	1.40	2.61

Source: Statistics Canada, U.S. Bureau of Labor Statistics

1. Various price-measurement problems could affect the calculation of productivity growth, especially in a number of service industries (Maclean 1996). It is not, however, at all clear whether these measurement problems are more severe in Canada than in the United States.
2. See Kuszczak and Dion (1997–1998).

Measures of inflation expectations

Longer-term inflation expectations are near the midpoint of the target range.

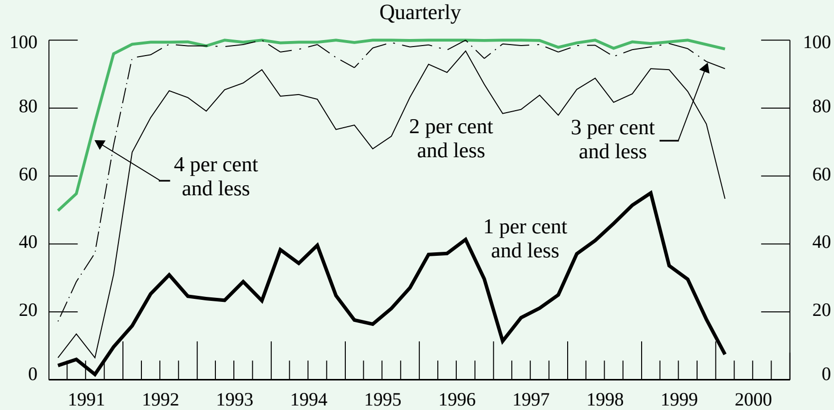
In the regular survey reported in the Conference Board's spring *Index of Business Confidence*, 53 per cent of respondents reported that they expect prices, in general, will increase over the next six months at a rate of 2 per cent or less, and 92 per cent expected a rate of 3 per cent or less (Chart 14). The proportion of respondents expecting 2 per cent or less is down considerably from last autumn, likely reflecting the recent impact of higher world oil prices on the total CPI. As well, some 92 per cent of the firms surveyed in March by the Bank of Canada's regional representatives expect CPI inflation to remain in the 1 to 3 per cent range this year. The average private sector forecast for the rate of increase in the total CPI is 2.3 per cent in 2000 (up from 2.0 per cent last autumn) and 2.1 per cent for 2001. These upward revisions largely reflect higher energy prices. Typical forecasts of longer-term inflation are between 1.7 and 1.9 per cent, depending on the horizon (Chart 15).

Over the past half-year, the yield differential between conventional bonds and Real Return Bonds has tended to vary with the fluctuations in nominal yields but has remained near 2 per cent (with the yield on Real Return Bonds being relatively stable). For various reasons, it cannot be inferred that long-term inflation expectations are exactly at this level, but, nevertheless, it is reassuring that the differential has stabilized near the centre of the inflation-control target range.

Chart 14

Percentage Distribution of Expected Price Increases Over the Next Six Months

Quarterly

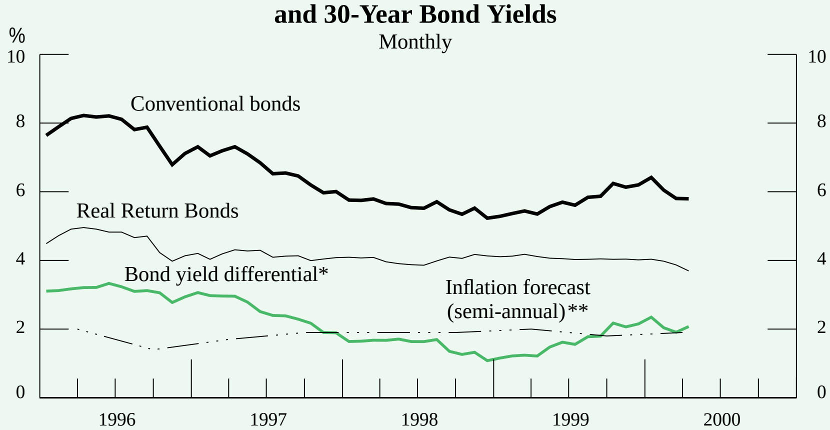


Source: Conference Board of Canada, *Index of Business Confidence*

Chart 15

CPI Inflation Forecasts 6 to 10 Years Ahead and 30-Year Bond Yields

Monthly



* The differential is calculated using the compound interest formula.
** Source: Consensus Economics Inc.

Other factors affecting inflation

Higher energy prices are not expected to significantly affect core inflation.

The first-quarter run-up in crude oil prices (which was partially reversed in April) is not expected to significantly affect the core CPI. To date, only air fares have reacted to the rise in energy prices, but we may still see some evidence of pass-through in other components of core inflation (see Technical Box 1). The size of these first-round effects will depend on how long high oil prices persist as well as on overall market conditions in the economy.

Wage increases will likely stabilize at around 3 per cent this year, consistent with the expectations reported by a number of national compensation surveys. With the strong investment in machinery and equipment experienced through 1999 and increasingly tight labour markets, productivity growth is expected to rise in 2000. As a result, unit labour costs should continue to rise only modestly (excluding the one-time effect of the federal pay-equity settlements on labour income).

The appreciation of the Canadian dollar since early 1999 should help to restrain inflation.

The appreciation of the Canadian dollar since the beginning of 1999 should help to restrain inflation during 2000.

Other indicators of inflation pressures

With record sales, the year-over-year rise in prices for existing housing (based on the Royal LePage index) gained momentum during 1999, reaching 6.1 per cent in the fourth quarter. The year-over-year increase in new home prices, while still moderate at

2.1 per cent in February, has also picked up significantly since last autumn as a result of higher costs for construction materials. These indicators, as well as the declining apartment vacancy rate, suggest that some tightness is emerging in the housing market.

Monetary and credit indicators

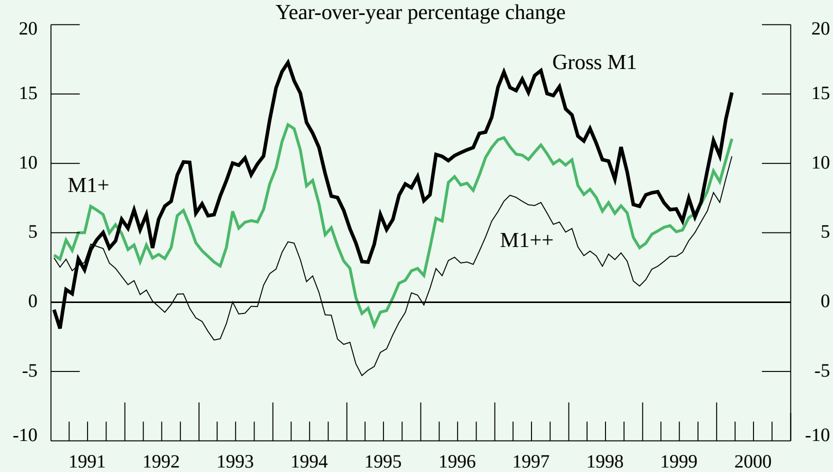
Narrow money growth has accelerated, indicating a robust economy . . .

The growth of the narrow monetary aggregates has accelerated since November (Chart 16).[4] This robust expansion would indicate a buoyant trend in total spending, since these aggregates have been good indicators of real GDP (Chart 17). Their recent growth would suggest increases in real GDP at a 4 to 5 per cent rate in the first half of 2000. This estimate is based on the view that part of the recent increase in investment dealer accounts, which has boosted narrow money growth, will not translate into stronger real GDP growth.

Chart 16

Narrow Money Growth

Year-over-year percentage change



. . . and the possibility of inflation pressures.

Although narrow money is not expected to continue growing at its recent rapid pace, the current surge in money growth raises the possibility that core inflation might move into the upper half of the Bank's target range next year.

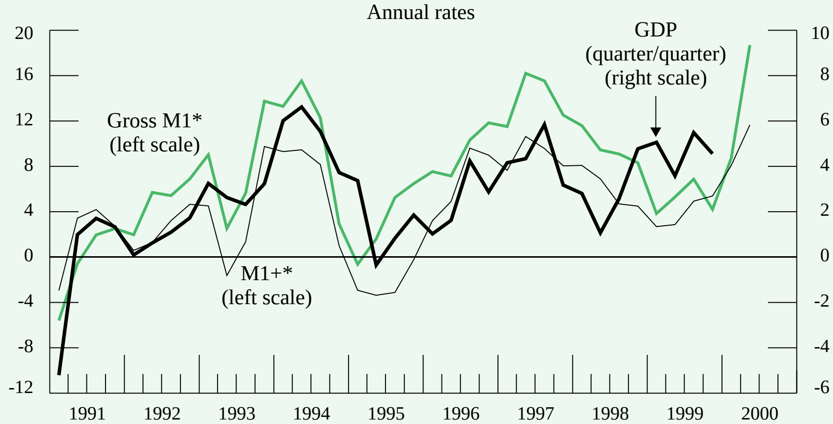
Another indicator of the trend of inflation is the very broad aggregate M2++. Despite some acceleration in the second half of 1999, this aggregate has remained on a fairly steady growth path over the past several years, one that is historically in line with

4. For more information on 1999 developments in monetary aggregates, see the article by Joseph Atta-Mensah in the spring 2000 issue of the *Bank of Canada Review.*

Chart 17

Real GDP Growth and Growth of Real Gross M1 and M1+

Annual rates

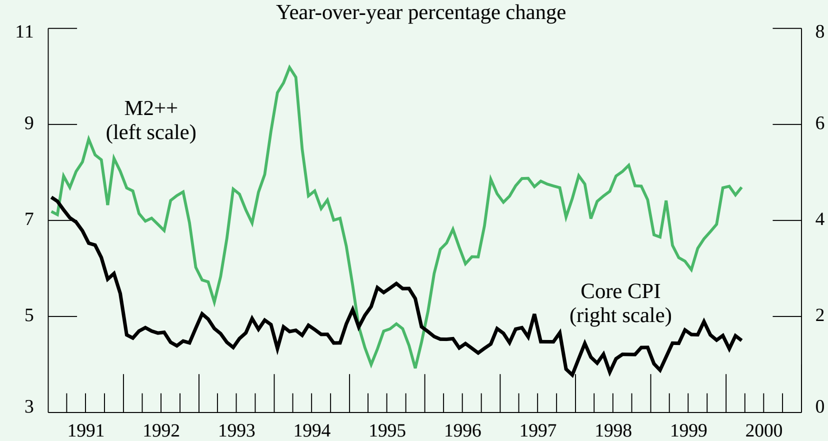


* Two-quarter moving average of growth in gross M1, M1+ (deflated by the core CPI), one quarter earlier

Chart 18

Core Inflation and Broad Money Growth

Year-over-year percentage change



inflation remaining in the 1 to 3 per cent range (Chart 18). For example, during the 1990s, broad money often grew at similar, or even higher, rates with no inflationary consequences.

Household and business credit exhibit contrasting patterns. The growth of household credit has expanded steadily at a rate of 6 to 7 per cent for some years. On the other hand, growth in business borrowing declined in 1998 and 1999—from a double-digit rate to about 5 per cent. Although investment outlays are strong, businesses have ample funding from retained earnings and, hence, there is no strong demand for external financing.

Household credit is expanding steadily, while businesses currently have no significant demand for external financing.

The behaviour of money and credit aggregates thus suggests an ample supply of liquidity which, for the time being, may still be appropriate, but which must be carefully assessed in the period ahead.

Inflation projection

Overall, two fundamental factors are expected to put upward pressure on core inflation over the next 18 months. First, longer-term inflation expectations are close to 2 per cent—about 0.5 per cent above the current level of core inflation. Second, with output growth projected to be about 4 to 4.5 per cent in 2000, capacity pressures in product and labour markets are expected to emerge. Mitigating these upward pressures on the core CPI will be the pass-through effects from the recent appreciation of the Canadian dollar to lower import prices and the modest expected increases in unit labour costs.

On balance, with some demand pressures emerging this year, the Bank sees core inflation rising gradually towards the mid-point of the inflation-control range. As noted previously, for the core rate of inflation to remain close to the midpoint in 2001, some deceleration in the growth of overall aggregate demand in Canada relative to production potential will be required.

Total CPI inflation is expected to decline towards the rate of core inflation.

The rate of increase in the total CPI is expected to move down towards core inflation, but how quickly this happens will depend importantly on movements in crude oil prices. If crude oil prices remain near $US25, the increase in the CPI should start to move towards the core rate during the second quarter of this year.

5. Conclusions

During the past six months, the Canadian economy outperformed expectations. Aggregate demand, output, and employment grew more rapidly than expected, while core inflation remained low, below projected levels. This combination of developments has led the Bank to conclude that at the end of 1999 the productive capacity of the Canadian economy was higher than conventional estimation techniques had been suggesting and that the economy was not yet in excess demand.

At the same time, however, the robust pace of expansion through the second half of 1999 and into 2000 was rapidly absorbing productive capacity, and some early signs of pressures on capacity limits had begun to emerge.

Given this strong momentum of demand, the Bank has raised its projection of economic growth this year to a range of 4 to 4.5 per cent. At this pace, capacity pressures will intensify. This, in turn, is expected to raise the core rate of inflation to close to the midpoint of the Bank's 1 to 3 per cent inflation-control target range. For the core inflation rate to remain steady near 2 per cent during 2001, some deceleration in the overall pace of economic expansion in Canada or a more rapid expansion of productivity and of production capacity would be required.

The main risks to this outcome are the possibility of stronger-than-expected momentum of aggregate demand from both U.S. and domestic sources as well as the possibility of a potential increase in inflation pressures in the United States. While capacity output in Canada may be higher than expected over this projection period, the Bank is inclined to take a cautious approach to projecting a permanently higher rate of potential growth.

The challenge for monetary policy will be to carefully assess the balance between aggregate demand and supply in these circumstances of strong growth and high levels of activity, and to adjust monetary conditions in a timely manner in order to preserve the low trend of inflation that has been benefiting the Canadian economy.

This is a report of the Governing Council of the Bank of Canada: Gordon Thiessen, Malcolm Knight, Charles Freedman, Paul Jenkins, Tim Noël, Sheryl Kennedy, and Pierre Duguay.

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