

BANK OF CANADA

# MONETARY POLICY REPORT

*– May 1999 –*

***Library of Parliament centennial silver dollar.*** *The reverse of the 1976 silver dollar was used to commemorate the 100th anniversary of the completion of the Library of Parliament. This attractive building was the only part of the original Centre Block of the Parliament Buildings that was saved during the disastrous fire of 1916. It is still in use and is a popular tourist attraction in Ottawa.*

*The design is the work of John Mardon.*

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# MONETARY POLICY REPORT

— May 1999 —

The volatility of bond and foreign exchange markets, which persists despite almost a decade of low inflation, can partly be attributed to lingering uncertainties with respect to future price movements. At the Bank of Canada, we have taken the position that these concerns are best confronted by making clear statements about the objective and strategy of monetary policy, by releasing our economic analysis to outside examination, and by publishing all relevant data.

– Gordon Thiessen

*The Tony Hampson Memorial Lecture*

*Speech to the C.D. Howe Institute  
Toronto, Ontario  
11 March 1999*

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# CANADA'S INFLATION-CONTROL STRATEGY

## **Inflation control and the economy**

- Inflation control is not an end in itself; it is the means whereby monetary policy contributes to solid economic performance.
- Low inflation allows the economy to function more effectively 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

Six months ago, at the time of the last *Monetary Policy Report*, the global economic and financial environment was volatile and highly uncertain because of the adverse situation in Asia and the fallout from the Russian debt moratorium. Many emerging-market economies, particularly in Latin America, were hit by large capital outflows. And, as nervous investors sought safe havens, interest rate spreads on emerging-market debt widened dramatically, as did those between corporate and government bonds in the industrial countries.

Since then, the situation in global financial markets has improved. Interest rate cuts by central banks in all major countries have helped to rebuild investor confidence. In Southeast Asia, financial markets have stabilized, progress is being made on structural reforms, and prospects are good for a gradual recovery through this year and next. In Brazil, the authorities have taken major steps to address their difficulties, including the move to a flexible exchange rate regime and a revised International Monetary Fund program linked to strong fiscal measures. And financial markets now seem to be better able to assess and differentiate among credit risks.

Nevertheless, there are still significant risks and uncertainties facing the global economy. Capital flows back into emerging-market economies are tentative, awaiting full implementation of announced policies in a number of key countries. At the same time, there is a marked divergence in economic performance among the G-7 countries. The Japanese economy remains in deep recession, and the latest indicators for Europe point to a slow-down in the pace of activity. The U.S. economy, in sharp contrast, continues to flourish, outperforming most expectations.

In Canada, the economy has regained momentum over the past six months, supported by the robust U.S. economy, accommodative monetary conditions, and recovery from several temporary production disruptions last summer. Over this period, core inflation has remained near the bottom of the Bank's target range of 1 to 3 per cent, at levels slightly lower than expected.

*Six months ago, the global financial environment was volatile and highly uncertain.*

*Since then, the situation has improved . . .*

*. . . but the global economy still faces significant risks and uncertainties.*

*In Canada, the economy has regained momentum, and inflation remains low.*

*This report includes information received to 5 May 1999.*

*The calmer international financial environment has allowed the Bank to refocus its attention on keeping inflation inside the target range.*

*The uncertainty surrounding estimates of the economy's production capacity is currently an important focus.*

*Since the last Report, core inflation has stayed close to the bottom of the Bank's target range . . .*

*. . . as slack in product markets and price cutting on telephone services and computer products continue to exert downward pressure.*

The calmer international financial environment has enabled the Bank to refocus its attention on keeping inflation inside the target range and to completely unwind the 100-basis-point increase in short-term interest rates that was necessary last August to address investor nervousness. The reduction was accomplished in four steps of 25 basis points each between September 1998 and March 1999. On 4 May, the Bank lowered short-term interest rates by an additional 25 basis points to support continued economic expansion and to keep the trend of inflation comfortably inside the target range next year.

Currently, an important issue for the Bank is the uncertainty surrounding estimates of the economy's capacity to produce goods and services. The large investments in technology in recent years, as well as various measures undertaken to improve product and labour markets, should have had a positive effect on the economy's production capacity. However, it is difficult to assess the magnitude of this effect. The *Report* examines this issue in the context of the outlook for inflation.

## 2. RECENT DEVELOPMENTS IN INFLATION

Core inflation (CPI excluding food, energy, and the effect of changes in indirect taxes) has remained near the bottom of the Bank's inflation-control target range over the past six months, at levels slightly lower than expected.

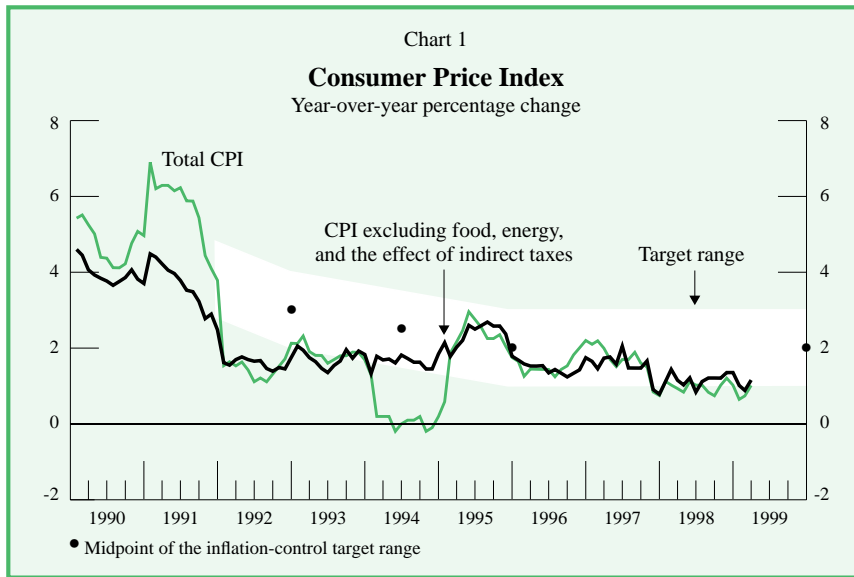
### Inflation and the target range

The 12-month rate of increase in the core CPI was 1.2 per cent in March, unchanged from last September (Chart 1). Two other statistical measures of the trend rate of inflation (CPIX and CPIW)<sup>1</sup> are close to the level of core inflation (Chart 2).

Several factors continue to put downward pressure on core inflation. Slack in product markets has been the principal influence, together with modest increases in unit labour costs. In addition, price cutting for long-distance telephone service and computer products has been particularly intense recently. This reflects technological change, deregulation in the telecommunications industry, and lower costs for imported computer components. The extent of this price cutting has been larger than anticipated.

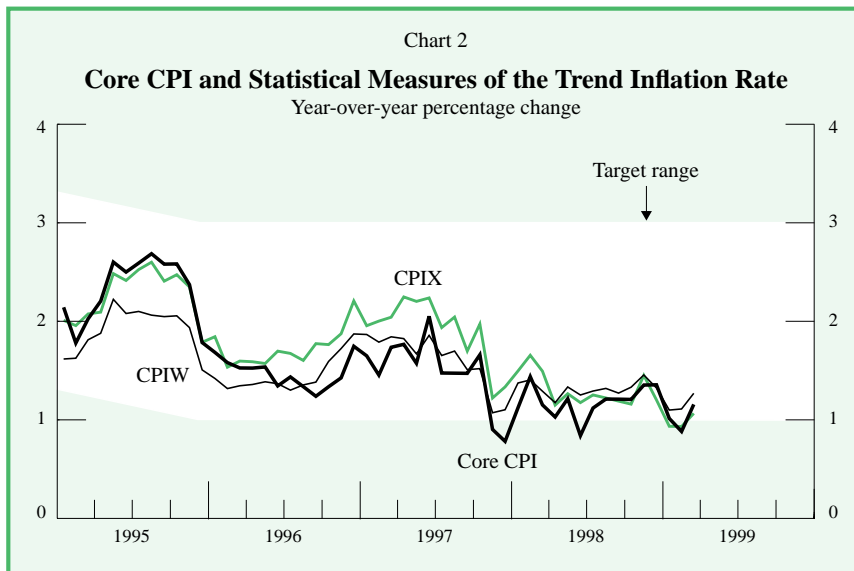
1. CPIX excludes the eight most volatile components from the CPI as well as the effect of indirect taxes on the remaining components. CPIW uses an additional adjustment to each CPI basket weight that is inversely proportional to the component's variability. For more details, see Technical Box 1 in the November 1997 *Report*.





At the same time, two factors offset the downward pressure on inflation. First, longer-term expectations of inflation close to the middle of the inflation-control target range helped to hold core inflation up. Second, the decline of about 10 per cent in the value of the Canadian dollar against the U.S. dollar from the autumn of 1997 to late 1998 resulted in higher import prices for most non-energy consumer goods and services over the past year. To date, however, these increases have had only a limited impact on consumer prices. This partly reflects the usual lags between changes in import prices and changes in consumer prices. In addition, possibly because of the keen competition in the retail sector, the pass-through from higher import prices to consumer prices has been slightly less than expected.

*The decline of about 10 per cent in the Canadian dollar against the U.S. dollar from the autumn of 1997 to late 1998 exerted upward pressure on consumer prices over the past year.*



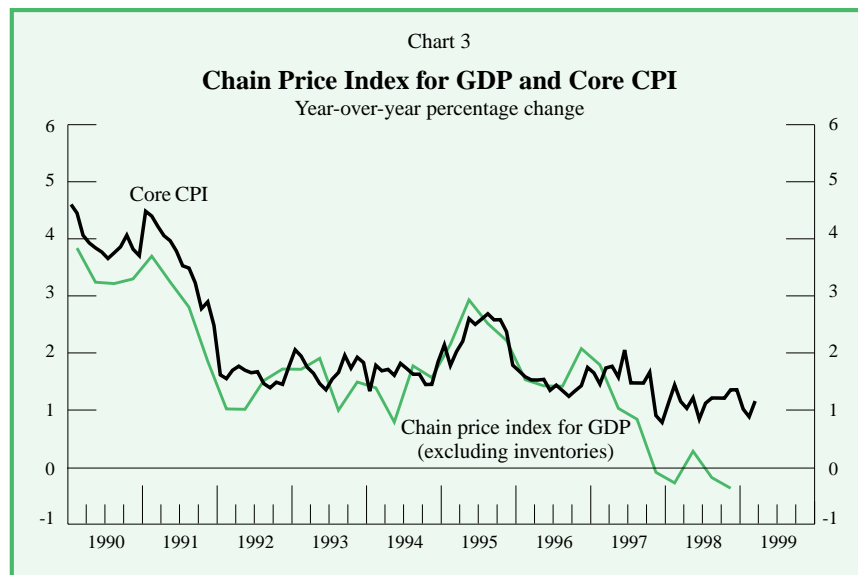
The 12-month rate of increase in the total CPI was 1.0 per cent in March, compared with 0.7 per cent in September. Retail energy prices have stopped declining (on a year-over-year basis) since crude oil prices have begun to rise.

*The chain price index for GDP has edged down over the past year...*

The chain price index for GDP, a broad measure of the price level of goods and services produced in Canada, has edged down over the past year (Chart 3). This partly reflected the effect of falling world prices for the commodities that Canada exports. The year-over-year increases in the chain price indexes for both consumer products and business fixed investment picked up a little in the second half of 1998 as a result of higher import costs from the depreciation of the Canadian dollar.

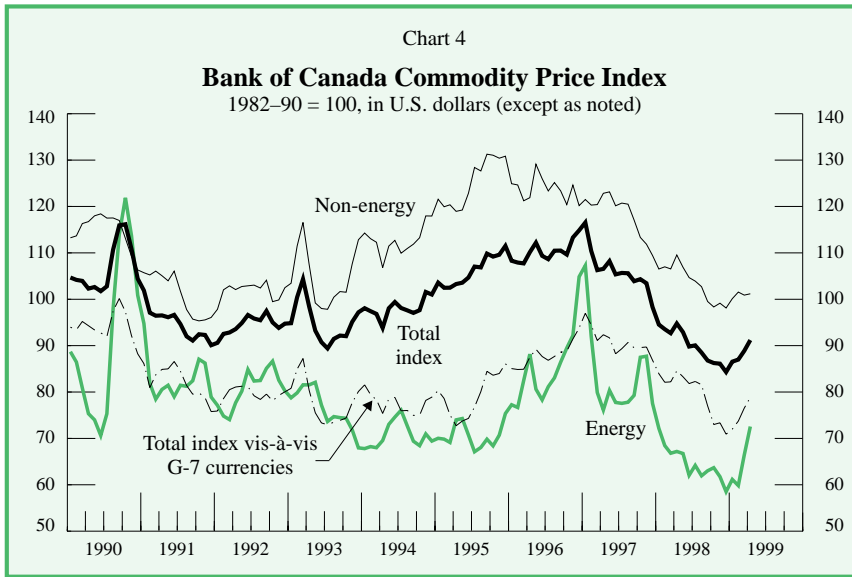
*... owing to much lower world commodity prices.*

Non-energy commodity prices continued to fall during the second half of 1998 (Chart 4), reflecting further weakness in global demand, primarily because of developments in Japan and in various emerging markets, as well as continued growth in supply. For example, larger-than-expected harvests contributed to lower grain prices, while increased supply led to a marked reduction in livestock prices. The excess-supply situation in metals markets (stemming from sharply reduced Asian and Russian demand) has been exacerbated by new mine capacity that has come on stream over the past two years. But, driven by strong U.S. demand and supply adjustments, prices for non-energy commodities have recovered somewhat since the end of 1998.

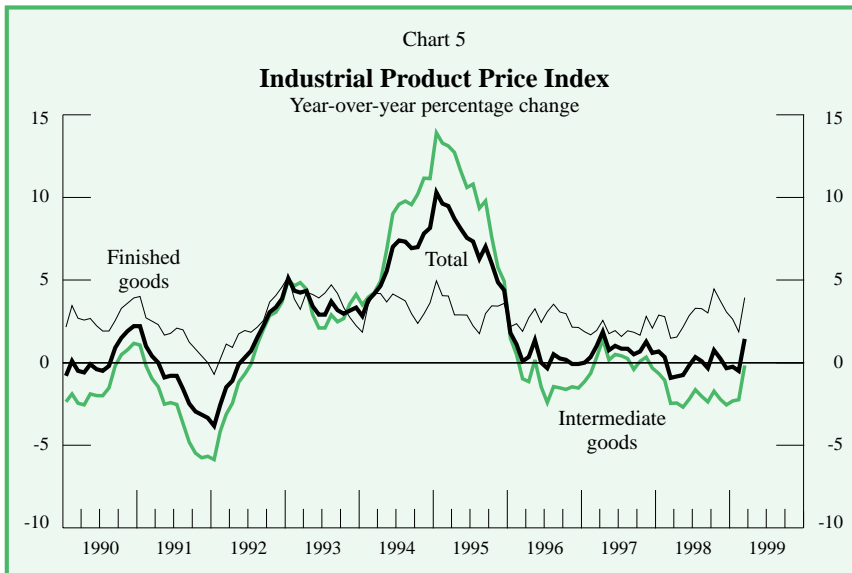


The inability of major oil producers to cut back oil production in the face of weak demand led to further marked decreases in crude oil prices through to the end of 1998. In March, however, oil

prices rebounded, following an agreement between OPEC and other producers to cap production.



The aggregate industrial product price index for the manufacturing sector has increased modestly over the past year (Chart 5). Falling commodity prices resulted in declines in the prices of most manufactured intermediate goods. In contrast, the Canadian dollar prices of many exports of finished goods with longer-term contracts in U.S. dollars rose with the Canadian dollar's depreciation against the U.S. dollar.



## Factors at work on inflation

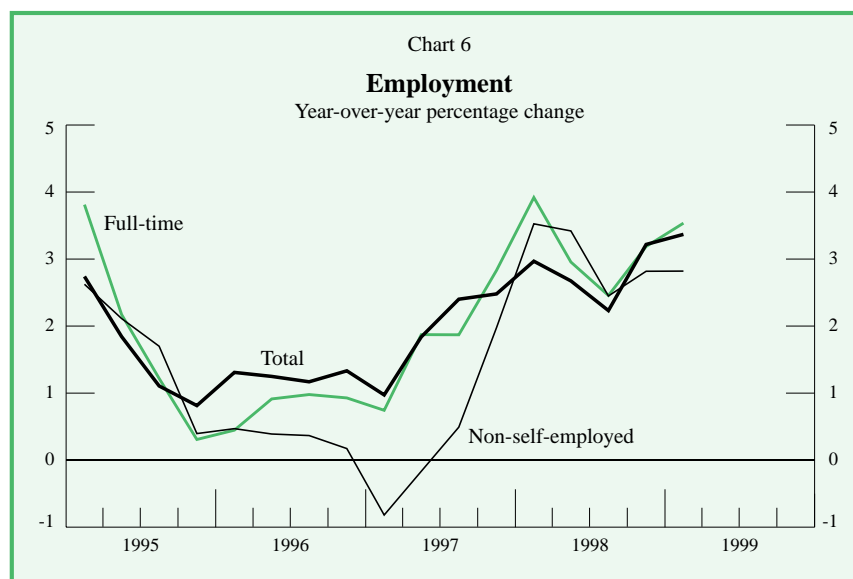
### Aggregate demand and supply

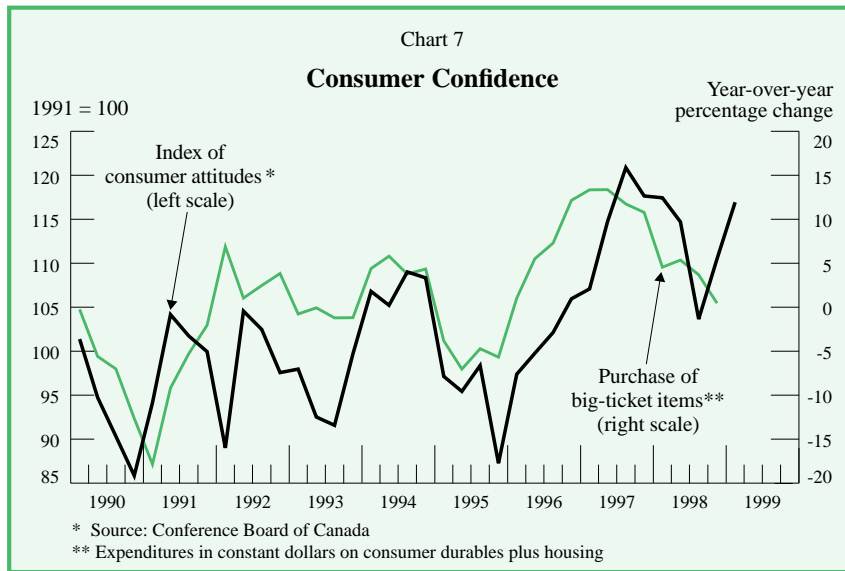
*The pace of economic expansion in Canada picked up substantially...*

*... as a robust U.S. economy and the end of labour disruptions in the automotive sector boosted exports.*

The pace of economic activity in Canada picked up substantially in the fourth quarter of 1998 and early 1999 after being hampered by labour disruptions and international developments in mid-1998. Significant support came from stronger growth in the U.S. economy and from domestic monetary conditions that were generally accommodative over the last year. Together, these factors were enough to offset the drag from low commodity prices. In the second half of 1998, real GDP rose at an annual rate of about 3 per cent. Information to date suggests that it grew at a rate of about 4 per cent in the first quarter of 1999.

In the second half of 1998 and in early 1999, export volumes expanded strongly. Growth in exports of motor vehicles and parts was especially robust. This reflected a very high degree of U.S. demand, efforts to replenish U.S. automotive stocks following labour disruptions at General Motors, new Canadian production capacity coming on stream, and the end of some difficulties in rail transport. Continued vigorous growth in U.S. demand and a favourable competitive position also led to marked gains in Canada's exports of both lumber and machinery and equipment. However, exports of other commodities continued to fall as Asian demand remained weak, and unusually mild U.S. weather conditions in the fourth quarter curbed the demand for oil and natural gas.





Household expenditures rose at a more moderate pace in the second half of 1998, reflecting reduced employment growth between the first and third quarters of the year (Chart 6) as well as turbulent international and domestic financial markets in the late summer and early autumn. Both factors contributed to declining consumer confidence through the first three quarters of 1998 (Chart 7). Towards the end of the year, however, consumer confidence turned around, owing to a surge in job creation (which continued into early 1999), an associated reduction in unemployment despite higher labour force participation, and increased stability in financial markets. These factors have contributed to renewed growth in household spending in early 1999.

Growth of spending on capital goods by businesses also eased considerably in the last half of 1998 from the strong rates experienced over the previous year and a half. This reduction was partly caused by a drop in business confidence in the autumn, arising from volatile financial markets and other adverse international developments. The substantial drop in commodity prices reduced incentives to expand capacity and decreased cash flows to finance exploration and expansion. The oil and gas sector was particularly hard hit as were other resource-based industries, and their capital spending declined considerably last year.

Over the second half of 1998 (and therefore disregarding most of the swing associated with the GM strike), inventory investment continued to decline, with the decrease concentrated in several industries that manufacture durable goods. Part of the reduction in inventory accumulation may have resulted from unexpectedly strong exports of manufactured goods to the United States.

*Household expenditures rose more moderately in the second half of 1998 but picked up in early 1999.*

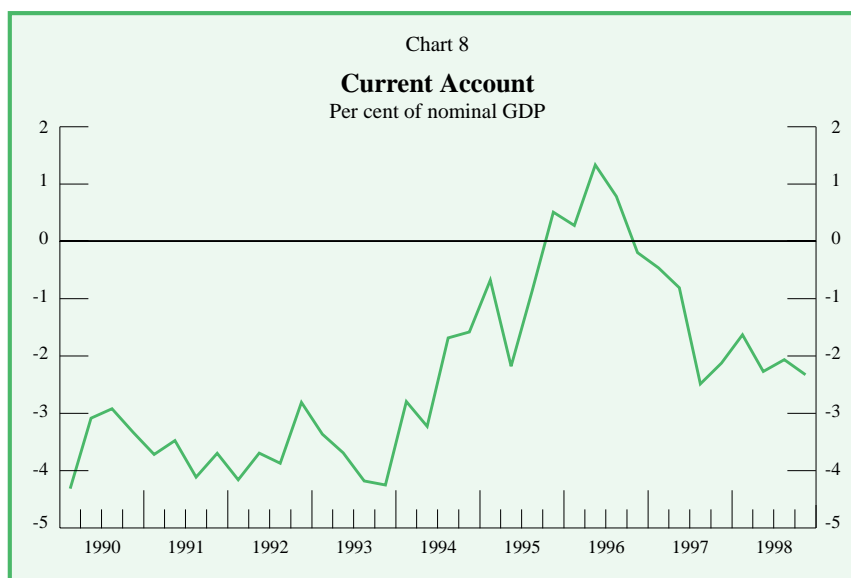
*The growth of business investment spending eased in the last half of 1998...*

*... and inventory investment continued to decline.*

*Imports grew only modestly, as domestic demand slowed.*

Continued slowing in domestic demand, particularly for import-intensive items such as machinery and equipment, restrained import growth over the final two quarters of 1998 relative to that experienced in 1997. The improved competitiveness of Canadian producers contributed to some substitution of domestic production for imports.

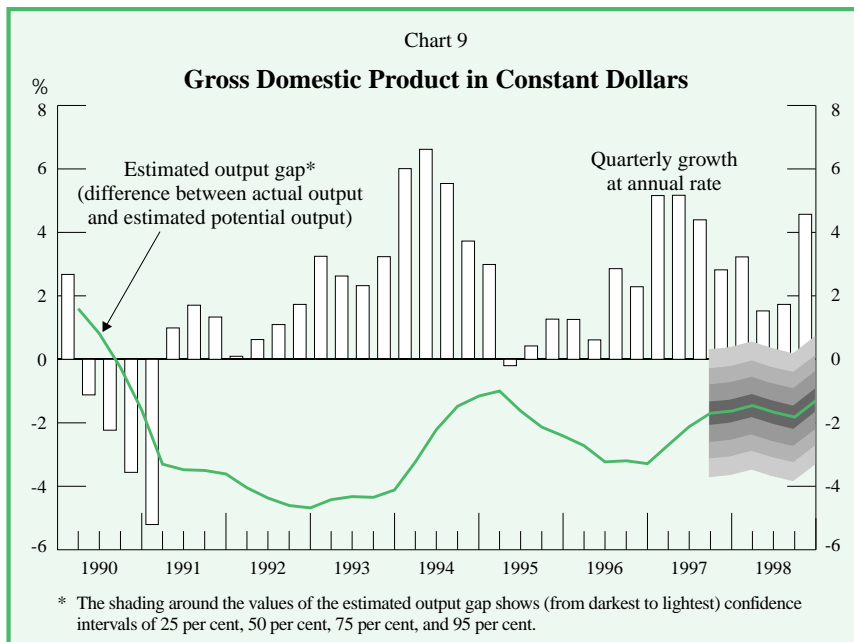
At 2.3 per cent of GDP, the current account deficit (in dollar terms) at the end of 1998 was essentially unchanged from a year earlier (Chart 8). In volume terms, the trade balance improved considerably. This was partly offset by a continuing decrease in the terms of trade as commodity prices fell further. Moreover, Canada's investment income account deteriorated as net dividend payments rose considerably, and interest payments on foreign-currency debt increased.



*The estimated amount of excess supply contracted somewhat in the second half of 1998.*

Overall, aggregate demand grew somewhat faster than the estimate of the economy's capacity to produce in the second half of 1998. Consequently, Bank staff estimate that the output gap narrowed from about 1.75 per cent at mid-year to about 1.25 per cent at the end of the year (Chart 9).<sup>2</sup> Estimates of the output gap continue to be highly imprecise, partly because of revisions as new data become available and partly because of restructuring, large investments in technology, and changes to the way the labour market functions, all of which should have improved the economy's capacity to produce.

2. At the time of the November *Report*, the output gap for mid-1998 had been estimated at about 1.5 per cent. Historical estimates of the output gap have been revised by Bank staff as a result of a general reassessment of the path of potential output. This included taking account of major changes to the national accounts estimates of real GDP.



### Cost control

Wage gains were again moderate in the second half of 1998. Annual wage settlements in the unionized private sector averaged 1.8 per cent, the same as in the first half of the year (Chart 10). Wage settlements in the public sector were marginally lower, averaging 1.4 per cent in the second half of 1998. Data from Statistics Canada's *Labour Force Information* suggest that the year-over-year increase in the average hourly wage (excluding overtime) for permanent workers was 1.9 per cent in the first quarter of 1999. Thus, the underlying wage increase in the total economy has remained close to 2 per cent.

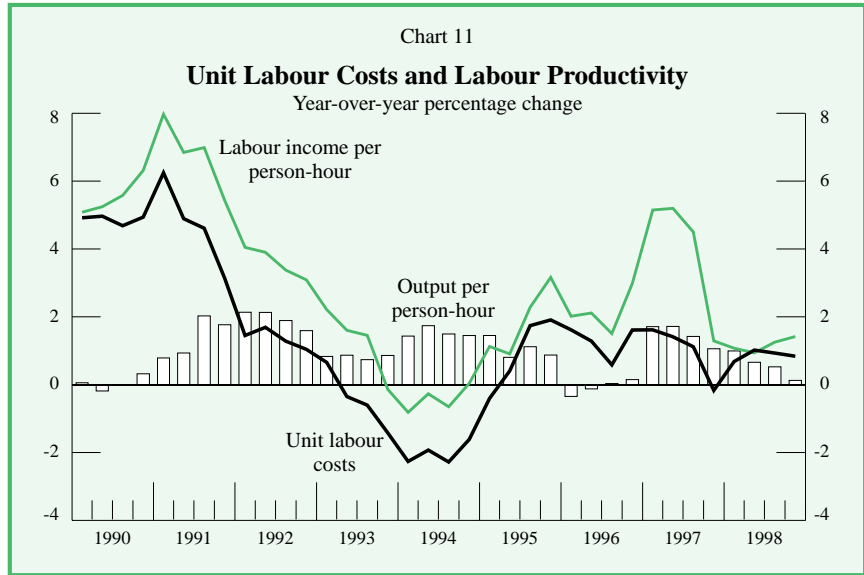
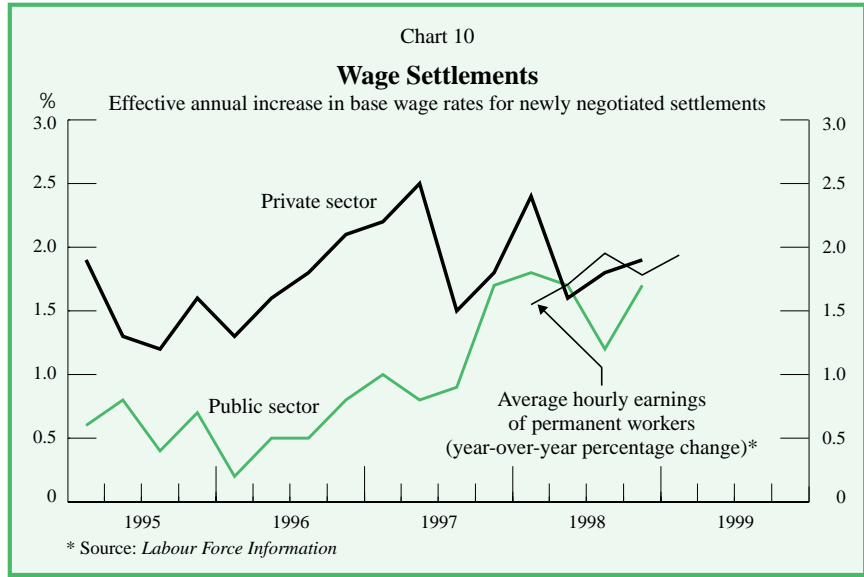
Current data indicate that labour productivity was largely unchanged through 1998, which is surprising in light of the robust output growth.<sup>3</sup> However, the continuation of moderate growth in labour income per person-hour meant that the year-over-year rise in unit labour costs also remained relatively modest (Chart 11).<sup>4</sup>

*Wage increases were again moderate in the second half of 1998 . . .*

*. . . unit labour costs rose only modestly.*

3. Note, however, that recent data are subject to revision. This short-term development adds little to the current debate over what has been happening to the trend in productivity growth.

4. Historical revisions to the national accounts data have resulted in upward revisions to the year-over-year growth of both labour income per person-hour and unit labour costs in 1997 and the first half of 1998, compared with information published in the last *Report*.



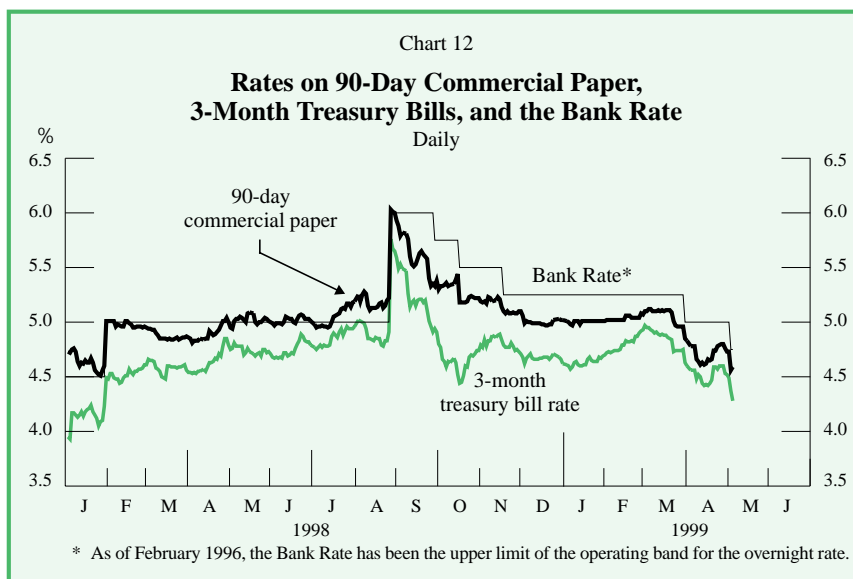


### 3. ACHIEVING THE INFLATION-CONTROL TARGETS

Since last autumn, the Bank reduced the Bank Rate by 25 basis points on three occasions (18 November, 31 March, and 4 May). This brought the operating band for the overnight interest rate to  $4\frac{1}{4}$  –  $4\frac{3}{4}$  per cent. The first two of these cuts (together with two earlier ones in September and October 1998) fully reversed the one-percentage-point increase prompted by the financial turbulence last August. The most recent cut was designed to support continued economic expansion and to keep the trend of inflation comfortably inside the Bank's inflation-control target range next year.

The decline in the Bank Rate and other short-term interest rates occurred in the context of a series of interest rate cuts by central banks in all major countries and an improved environment in financial markets, including those for assets denominated in Canadian dollars. Investors have become less anxious and, as a result, risk and liquidity premiums have declined from the unusually high levels reached last autumn (Technical Box 1). In the Canadian money market, this is evident in the narrower yield spread between commercial paper and treasury bills (Chart 12).

*As foreign interest rates declined and market confidence improved, the Bank reduced the band for the overnight rate.*



Since the start of the year, both the Canadian and U.S. dollars have risen quite strongly against the newly introduced euro and other overseas currencies. This reflects the divergent economic developments between North America and the major overseas

*The Canadian dollar has strengthened.*

Technical Box 1

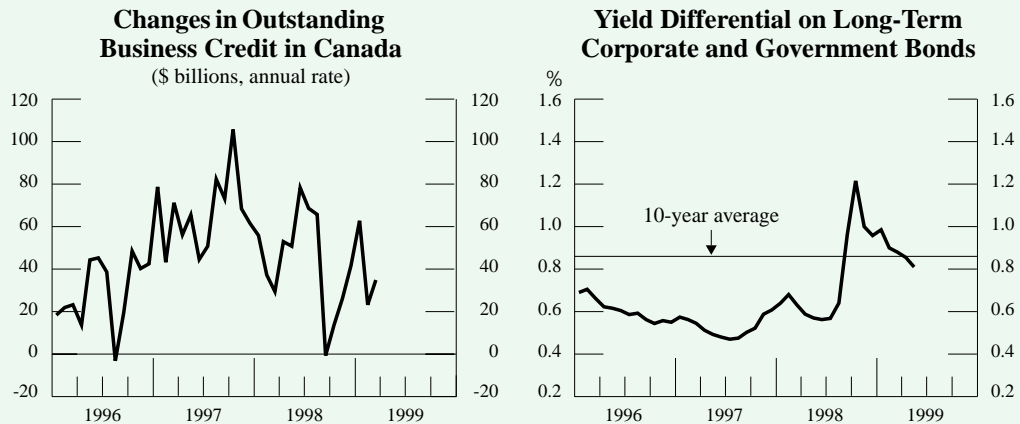
**Credit Availability During and After the Financial Crisis**

In the autumn of 1998, the turbulence afflicting international financial markets raised questions about the health of financial institutions worldwide and the liquidity of a broad range of securities. The difficulties of the large hedge fund “Long-Term Capital Management” brought such concerns to a head. Nervous investors turned towards the most liquid U.S. and European government securities as a safe shelter for their funds. Consequently, yield spreads between private and government sector debt widened sharply, and corporate financing costs increased. At the same time, banks and other lenders, particularly in the United States, became more selective in their loan allocations. As a result, worries were expressed about a possible credit shortage in North American markets.

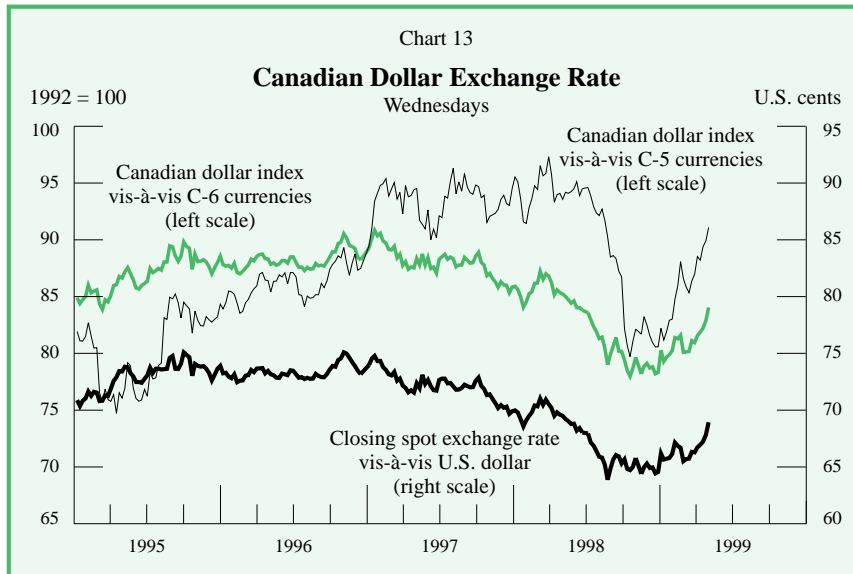
In Canada, at the height of the crisis, credit market pressures were felt primarily in financing costs, and relatively few borrowers were denied credit. Nonetheless, the market became less receptive to certain issuers. In September and October, when uncertainty peaked, there was a sharp decline in issues of commercial paper and a marked slowdown in share issues. Bank lending also slowed, so that growth in total business credit stalled briefly.

Since the autumn, interest rate cuts by the major central banks have helped to calm financial markets. In the improved environment, credit market conditions have eased, and the growth of credit to the business sector has gradually recovered. For example, in Canada, over the three months ending in March, such credit increased at an annual rate of 5.9 per cent. In the bond market, corporate/federal government yield spreads have returned to their long-run average. (They appear high only when viewed against the exceptionally low levels of the previous two years.)

Any negative effects on Canadian economic activity from the reduced supply of credit would have been confined to the third and fourth quarters of 1998. Credit availability does not appear to be a material economic risk in the first half of 1999.



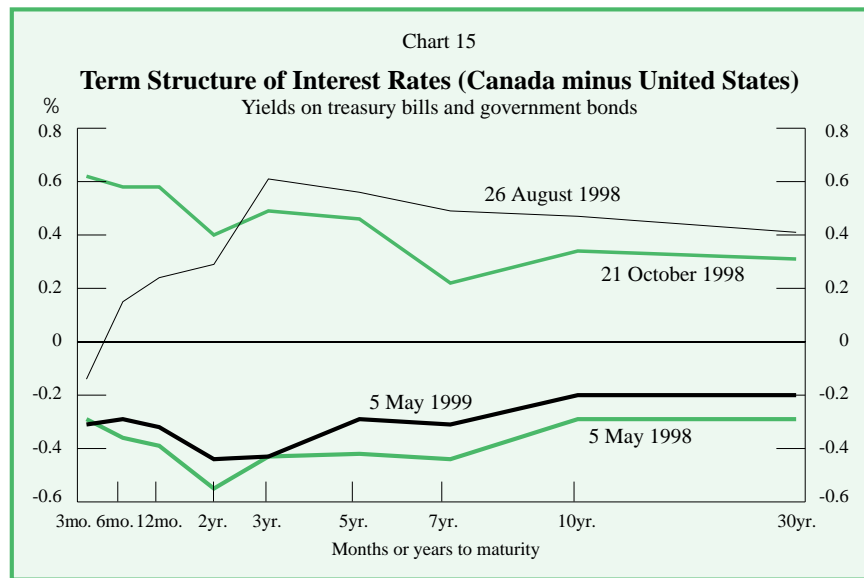
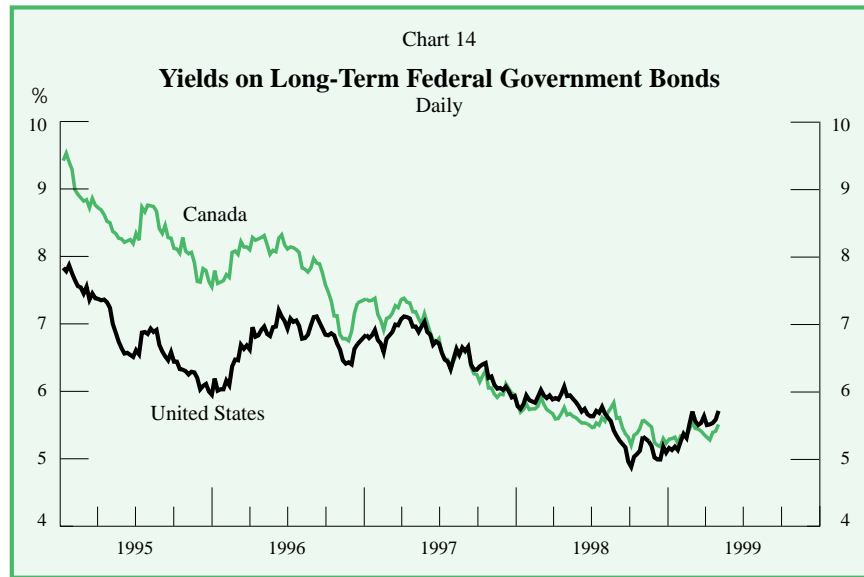
countries. With the bilateral Canada/U.S. exchange rate also stronger, the Bank's C-6 trade-weighted index for the Canadian dollar has risen (Chart 13).<sup>5</sup>



Canadian bond yields, after spiking at the time of the Russian crisis last August, have fallen to levels that are very low historically (Chart 14). In the United States, however, Treasury bond yields have risen from the lows reached last autumn. This reflects two important factors: first, the reversal of capital inflows from investors seeking the safe haven of U.S. government securities; and second, the unexpected strength of the U.S. economy in the fourth quarter of 1998 and the first quarter of 1999. Despite the recent increase in yields, U.S. interest rates at all maturities are still below those of a year ago. Partly as a result of this development, U.S. equity prices have shown renewed vigour and have reached new record highs.

*Canadian bond yields have fallen . . .*

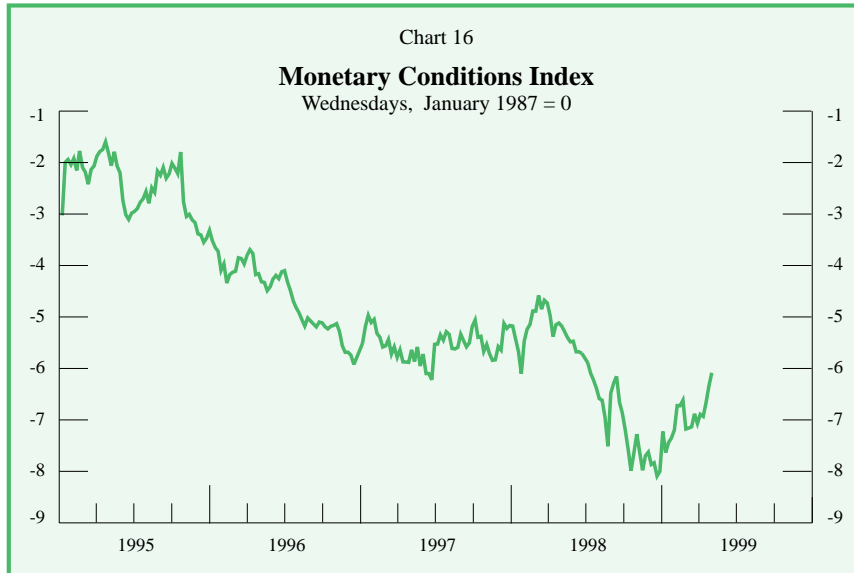
5. With the advent of the euro, the Bank has replaced its G-10 index with the C-6 trade-weighted currency index. The six foreign currencies in the new index are the U.S. dollar, the euro, the yen, the U.K. pound, the Swedish krona, and the Swiss franc. The C-5 index excludes the U.S. dollar. A technical note in the winter 1998–1999 issue of the *Bank of Canada Review* provides more detail.



*... and negative  
 Canada/U.S. differentials  
 have been re-established.*

Canada/U.S. bond differentials have declined markedly over the most recent period. Negative differentials have been re-established as last summer's sharp increase in risk premiums has unwound (Chart 15). The sustained low inflation rate in Canada has underpinned the decline in yield spreads. Money market interest rates have also fallen to levels below those in the United States.

As anticipated in the November 1998 *Report*, the monetary conditions index (MCI) has continued to be volatile (Chart 16), primarily because of fluctuations in the trade-weighted exchange value of the Canadian dollar. For the most part, the MCI has ranged between -8 and -7, as currency appreciation and interest rate declines worked in opposite directions. With the strengthening trend in the dollar, the index has recently risen to close to the -6 mark.



## 4. THE OUTLOOK FOR INFLATION

The Bank analyzes the outlook for inflation over the coming two years by focusing on the principal factors that influence aggregate excess supply or demand, both current and projected. It also examines measures of inflation expectations and the pace of monetary expansion. The Bank is well aware of the uncertainty involved in any projection. For this reason, it looks at alternative scenarios that assess risks to the assumptions underlying the outlook and at a range of projections by other organizations.

### International background

*Improved circumstances in emerging-market economies . . .*

*. . . have contributed to a calmer environment in financial markets.*

*Strong growth in the U.S. economy stands in marked contrast to growth in Japan and Europe.*

The situation in emerging-market economies, while still fragile, has improved over the past six months. This has been most evident in Southeast Asia, where there have been signs of significant progress towards economic stabilization. In Brazil, the financial situation worsened towards the end of 1998, owing to growing investor concern about its budget and current account deficits. More recently, circumstances there have improved considerably as a result of tight fiscal policy and a new IMF program approved in March. Other Latin American countries have been affected by the Brazilian situation, and growth prospects for this region in 1999 have consequently been revised downwards.

The emerging-market economies as a group have been making progress in addressing their problems through appropriate domestic policies, and this has contributed to a calmer climate in international financial markets. This is apparent in risk premiums in interest rates, which rose sharply last autumn and have since declined. They remain relatively high, however, and the situation in some of these countries is still a source of anxiety for investors. The IMF expects that the improvement in financial markets will lead to an increase in net private capital flows to emerging markets in 1999 (Technical Box 2).

The global economic environment is still uncertain, however. A key risk revolves around the very divergent economic performances of the major industrial countries. The Japanese economy remains in recession, and the major European economies have been weakening. In striking contrast, the U.S. economy has shown surprising strength.

The Japanese economy contracted substantially throughout 1998 and is expected to remain in recession through most of 1999, despite additional fiscal and monetary stimulus. Even though an appreciation of the yen relative to the U.S. dollar since last August and a rise in long-term interest rates more recently will

## Technical Box 2

**Capital Flows to Emerging Markets**

Between the periods 1984–89 and 1990–96, net private capital flows to emerging markets increased more than tenfold as rapid economic growth and possibilities for diversification across financial markets attracted investors to these markets. Many large capital projects, however, lacked a sound economic basis. In addition, official exchange rate commitments and other implicit government guarantees, as well as the prospect of emergency assistance from international agencies such as the International Monetary Fund (IMF), reduced the incentives for investors to assess risks appropriately. The financial crisis in Asia resulted in a massive reversal of capital flows. In contrast to 1996, when emerging markets in Asia attracted net private capital of over US\$100 billion, in 1998 outflows amounted to almost US\$50 billion.

Some countries are still experiencing serious difficulties raising capital. But bond yields in secondary markets show that investors are differentiating among countries. For example, in Latin America the largest increases in bond yields have been in Brazil and Venezuela, while interest rates in Argentina and Mexico have been relatively stable. The South Korean debt market has been volatile, but bond yields are now much lower than before the devaluation of the rouble.

In 1999, countries that are reasonable credit risks should be able to access international capital markets. Foreign capital has been available to certain emerging-market countries (e.g., Mexico, Argentina, South Korea, and the Philippines have successfully issued external debt recently), albeit at higher interest rate spreads against U.S. government securities than a year ago.

The IMF predicts that net private capital inflows to all emerging markets will increase in 1999 but will remain well below their 1990–96 average because of continuing heavy capital outflows from Asia.

**Net Private Capital Flows to Emerging Markets**

(US\$ billions)

	1984–89 Average	1990–96 Average	1996	1997	1998 Estimate	1999 Forecast
Asia	9.9	58.3	108.1	-15.1	-49.5	-38.1
The Americas	-0.2	46.1	81.7	88.3	73.6	75.3
Other	2.9	37.2	25.0	44.6	45.4	52.5
Total	12.5	141.7	214.8	117.8	69.5	89.7

Source: IMF, *World Economic Outlook and International Capital Markets*

act to restrain aggregate demand somewhat, a modest recovery is possible next year, particularly if progress continues on banking sector reform.

The pace of recovery in the major European countries, particularly Germany and the United Kingdom, has slowed markedly since mid-1998. Forecasts of growth in the euro area for 1999 have been revised to below potential, reflecting weaker prospects both for exports to emerging markets and for spending by businesses, which have become more pessimistic. In light of low current and projected inflation, the European Central Bank cut interest rates by 50 basis points in early April. This action should provide some support for the euro area over the coming year.

In spite of the rapid pace of economic expansion in the United States, where the level of output exceeds most estimates of potential capacity, there has been no sign of intensifying inflationary pressures. The Federal Reserve lowered short-term interest rates between September and mid-November in reaction to tightening domestic credit conditions and to concerns over the implications of the global situation for the U.S. economy. However, after the surprising sharp expansion of final sales in the fourth quarter of last year and the first quarter of this year, most analysts have raised their forecasts for 1999. The rate of increase in real GDP, although it should remain fairly robust, is still expected to slow as spending on housing, consumer durables, and producers' equipment moderates to bring holdings of these assets more in line with underlying trends in income and output. Exports also fell back in the first quarter after very strong growth in the fourth quarter of 1998.

U.S. core inflation (which excludes food and energy prices) has been contained between 2 and 2.5 per cent. It is not expected to change significantly during 1999, since the past appreciation of the U.S. dollar and past declines in commodity prices should offset any upward pressures from excess demand in labour and product markets.

On balance, world commodity prices are expected to edge up during 1999, as excess global supplies gradually diminish.

### **Aggregate demand and supply in Canada**

The anticipated U.S. slowdown and sluggish growth overseas will tend to limit the potential for growth in Canadian exports in 1999. In addition, Canadian shipments of commodities from high-cost sites may be cut back further until commodity prices recover significantly. Nonetheless, total export volumes should continue to register solid gains because of Canada's improved competitiveness.

*U.S. output growth is expected to ease . . .*

*. . . with U.S. core inflation remaining largely unchanged.*

*Commodity prices should edge up.*

*Exports by Canadian producers should register solid gains.*



This improved competitive position should also prompt Canadian businesses and consumers to substitute domestic products for their foreign counterparts. This, combined with the small projected increase in spending on import-intensive components of domestic demand, should cause import growth to decline.

Indeed, in the past, persistent movements in the real exchange rate have generally led to considerable change in real net exports, though with variable lags. Thus, the substantial depreciation of the Canadian dollar against the U.S. dollar since late 1997, combined with Canada's good price and cost performance relative to its trading partners, augurs well for significant gains in real net exports in 1999 (Technical Box 3).

Business investment is expected to grow modestly during 1999. The latest survey of investment intentions, conducted by Statistics Canada in late 1998 and early 1999, calls for a small decline in business investment this year. Oil and gas firms, pressed by a sharp reduction in cash flow caused by the downturn in energy prices, were planning further cuts in capital spending. Initial investment intentions, however, are often substantially revised later in the year. This could quite likely happen this year, given that the survey was begun in October when global financial markets were still very turbulent. As well, recent measures of business confidence have rebounded strongly. There is also some question about the impact of measures to resolve the year-2000 problem. Firms are likely to have undertaken most of their planned investment in computerized machinery and equipment in the first half of this year.

Early in 1999, growth in household spending showed signs of recovery from its sluggish year-end pace. This is expected to continue, given gains in employment, further improvement in consumer confidence, and lower income tax rates by mid-year. These effects may be tempered, however, by efforts to rebuild savings. Domestic demand should also be boosted this year by the provisions of the February 1999 federal budget, which suggest a marked pickup in health-related government spending.

Overall, in this period of relative uncertainty, any forecasts of economic growth have been subject to significant and frequent revision. Recently, most forecasters have upgraded their outlook for Canadian economic growth in 1999 in reaction to the momentum in the U.S. economy, rising domestic full-time employment, and a calmer international financial climate. The latest consensus among private sector forecasters for the growth of real GDP (on an annual average basis) is 2.8 per cent in 1999. The Bank, for

*Import growth should slow.*

*Business investment is expected to moderate . . .*

*. . . while household spending should continue to recover.*

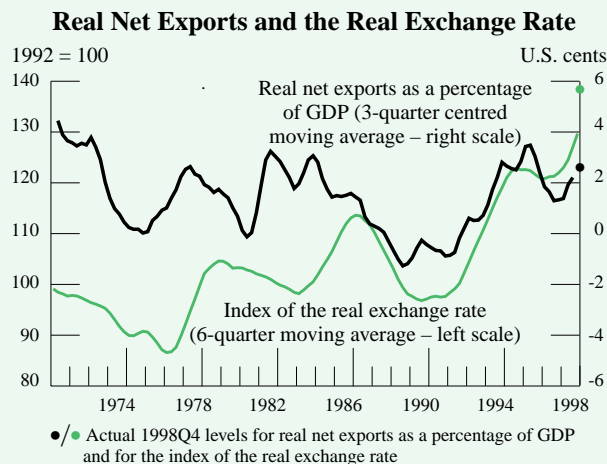
## Technical Box 3

**Real Net Exports and Growth**

The real trade balance (the difference between the volumes of exports and imports) evolves in response to two main factors: differences in the cyclical positions of trading partners and changes in cost or price competitiveness (i.e., the real exchange rate). In 1998, as through much of the 1990s, a higher rate of economic activity in the United States than in Canada stimulated real net exports to the United States. In contrast, stronger growth in Canada than in East Asia has contributed to a sharp increase in real net imports from this region since 1997.

Trade flows respond fairly quickly to changes in economic activity. However, the speed of their response to changes in the real exchange rate depends on how long firms expect these changes to last. Changes in the value of the Canadian dollar that are expected to persist encourage firms to incur the costs necessary to create or adapt products, increase capacity, and develop new markets in the hope of profitably expanding exports or displacing imports. Since 1971, considerable changes in real net exports have followed broad movements in the real trade-weighted exchange rate,<sup>1</sup> although the length of the lags and the size of the overall response have varied. Thus, the decline in the Canadian dollar over the past 18 months in response to weakness in world commodity prices, together with expectations that this movement is unlikely to reverse completely for some time, bodes well for significant gains in real net exports in 1999.

The rate of capacity utilization in the tradables sector could, in principle, affect the speed of the response to changes in the real exchange rate. New capacity has recently been coming on stream in the manufacturing sector, especially in the automotive industry, accompanied by substantial gains in employment. Thus, there appears to be room for a continuing expansion in production and net exports.



1. A weighted average of the GDP deflators in the G-7 countries (excluding Canada) relative to the GDP deflator in Canada, all expressed in the same currency. A rise in the index of the real exchange rate indicates an improvement in Canadian price competitiveness.

similar reasons, has also raised its projection by one-half of a percentage point to a range of  $2\frac{3}{4}$  to  $3\frac{3}{4}$  per cent.<sup>6</sup> The strength of this projection, relative to the consensus outlook, depends primarily on a stronger response of net exports (i.e., higher exports and lower imports) to current levels of competitiveness than is incorporated in most private sector forecasts. In 2000, the Bank expects the economy to expand at a similar pace to that of 1999, whereas, the latest consensus forecast calls for growth of only 2.3 per cent.

In the Bank's projection, increases in aggregate demand would imply that the margin of unused capacity (estimated by the Bank using its traditional techniques) would be absorbed over the next four to six quarters. However, because of the uncertainties surrounding these current estimates (Technical Box 4), the Bank will need to place increasing weight on a number of other indicators of pressures on production capacity and inflation.

### Temporary factors affecting inflation

Variations in the value of the Canadian dollar affect consumer prices with lags that depend partly upon market conditions. Thus, past exchange rate movements are expected to continue to put some upward pressure on consumer prices this year. At the same time, the exceptional rate of price declines for long-distance telephone service and computer products should soon slow. These developments should result in slight upward pressure on core inflation through 1999.

The most recent marked gains in crude oil prices are also expected to put upward pressure on the total CPI in coming months.

### Cost control

Wage increases are likely to be moderate through 1999, owing to both low price inflation and continued excess supply in the labour market. Since productivity gains are expected to pick up somewhat, the rate of increase in unit labour costs should be quite low.

*Output growth of  $2\frac{3}{4}$  to  $3\frac{3}{4}$  per cent is expected for 1999.*

*Price-level effects from the depreciation of the Canadian dollar will temporarily add to measured inflation . . .*

*. . . while increases in unit labour costs should be low.*

6. Last November, the private sector consensus forecast for real growth in 1999 was 2.2 per cent, while the Bank projected a range of  $2\frac{1}{4}$  to  $3\frac{1}{4}$  per cent.

## Technical Box 4

**Uncertainty in Estimating the Output Gap: Implications for Monetary Policy**

The output gap—the difference between the observed level of demand and the economy’s potential to produce—has an important influence on inflation. When using the output gap to predict future inflation, however, two problems must be kept in mind: first, potential output cannot be measured directly and, second, assessing the effects of various influences on its evolution is correspondingly difficult.

Potential output is the level of goods and services that can be produced without adding to inflation pressures. It is not directly observable. Movements in its level can be inferred, however, from the movements of certain variables that are directly observable, such as labour force participation rates, labour productivity, and inflation. Because this inference is imprecise, estimates of potential output are subject to regular review as additional data become available, or as existing data are revised. For example, the lower-than-expected labour force participation rate in recent years suggests that past estimates of potential output and, hence, the level of excess supply, may have been overstated. Statistics Canada’s recent revisions to its estimates of gross domestic product could also be interpreted as suggesting somewhat lower levels of excess supply.

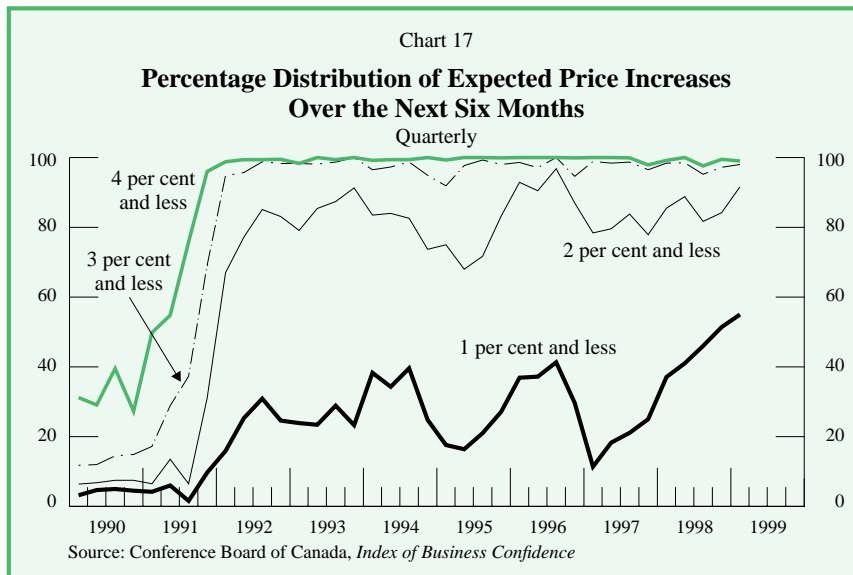
Canada’s recent inflation performance, however, does not support these interpretations. This raises the possibility that potential output may be larger than had been estimated. Factors that may have affected the estimates include the sustained period of low inflation; the large investments in technology and in machinery and equipment; and various policy measures that increased flexibility in product and labour markets (such as reforms to employment insurance, the end to large increases in overall payroll taxes, and deregulation of markets). With these changes, the economy appears to be better able to sustain higher levels of employment without increased inflation or rising inflation expectations. While these factors are probably increasing the level of potential output—our estimate has been adjusted slightly—the timing and magnitude of the increases are difficult to gauge.

Because of such uncertainties, point estimates of the level of potential output and of the output gap should be viewed cautiously. This has particular significance when the output gap is believed to be narrow and when inflation expectations are adequately anchored. In this situation, to keep inflation in the target range, policy-makers may have more success by placing greater weight on the economy’s inflation performance relative to expectations and less on the point estimate of the output gap. If excess supply is thought to be diminishing, but underlying inflation remains low relative to the target and to expectations, policy-makers may not need to react as quickly as in the past to surprise increases in aggregate demand. In addition, all useful indicators of pressures on capacity and on inflation should be monitored to see if potential output is higher than anticipated. These would include prices, costs, monetary aggregates, and credit aggregates, as well as information on bottlenecks affecting supply.

## Measures of inflation expectations

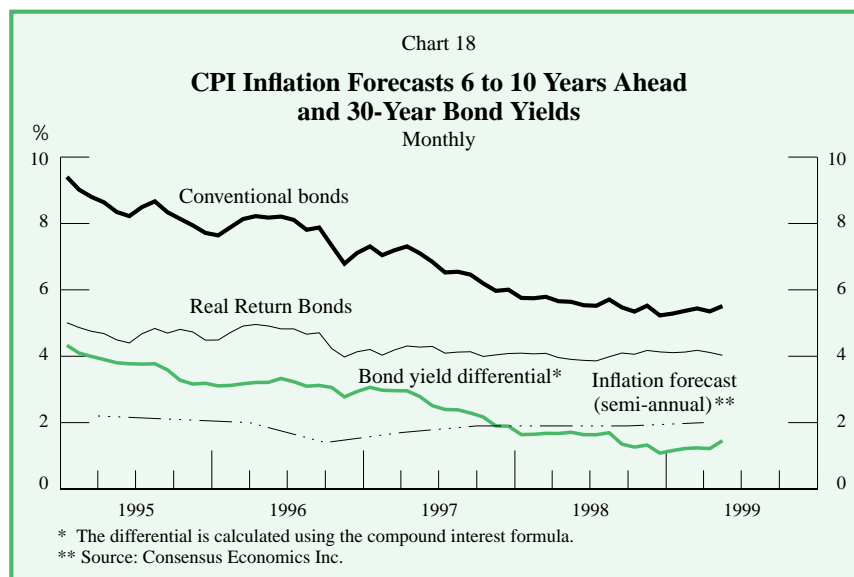
Expectations of inflation are influenced both by recent developments in inflation and by the credibility of the Bank's inflation-control strategy. In the regular survey reported in the Conference Board's spring *Index of Business Confidence*, 92 per cent of respondents expected inflation to be 2 per cent or less over the near term (Chart 17). Over the last two years, an increasing percentage of respondents have been looking for inflation of 1 per cent or less. The average private sector forecast for CPI inflation, as reported by Consensus Economics Inc., is 1.1 per cent in 1999 and 1.6 per cent in 2000. Forecasts of long-term inflation are at the midpoint of the inflation-control target range (Chart 18).

*Expectations for longer-term inflation are still well within the target range.*



The yield differential between conventional long-term government bonds and Real Return Bonds has been declining for four years and recently hit a record low of 1 per cent (Chart 18). This indicates a high level of confidence among long-term investors that inflation will remain low.<sup>7</sup>

7. The yield differential between conventional long-term government bonds and Real Return Bonds should not be taken as a precise estimate of the expected rate of inflation because it is also affected by differences in secondary market liquidity and by shifting portfolio needs and investor preferences.



## Monetary indicators

*After moderate growth in the fourth quarter, M1 increased strongly in early 1999.*

Narrow money growth slowed in the fourth quarter of 1998 (Chart 19).<sup>8</sup> This resulted partly from the higher interest rates on other assets, which would have attracted funds from transactions-type balances. Also, with the increased aversion to risk in credit markets last autumn, credit extended to businesses slowed. Some firms, facing a reduced supply of credit, may have been obliged to run down existing stocks of cash balances to finance their outlays. As interest rates settled down and conditions in the financial sector stabilized, the growth of both business credit and M1 picked up in the first quarter of 1999.

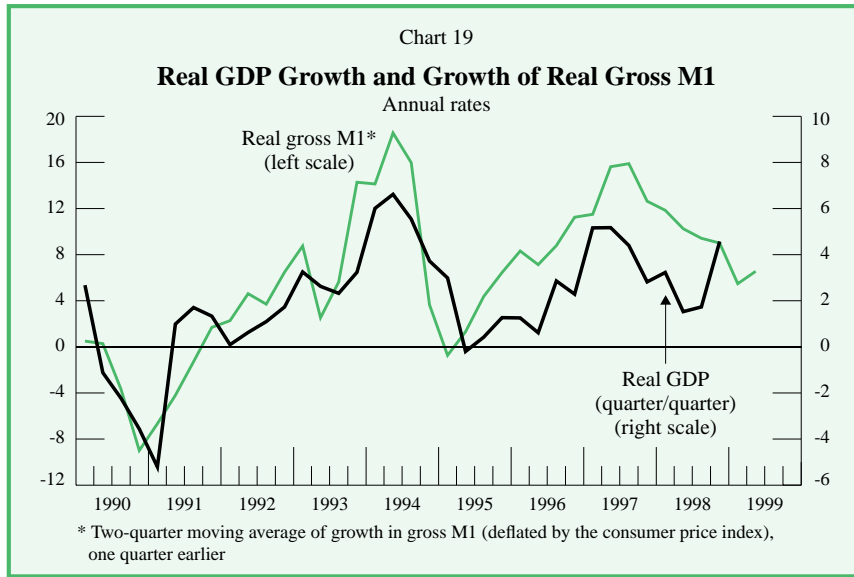
On the basis of historical relationships, the recent rates of increase in M1 imply a growth rate of economic activity in the first half of 1999 of about 3 1/2 per cent.

*Growth of the broad monetary aggregates is consistent with inflation remaining low.*

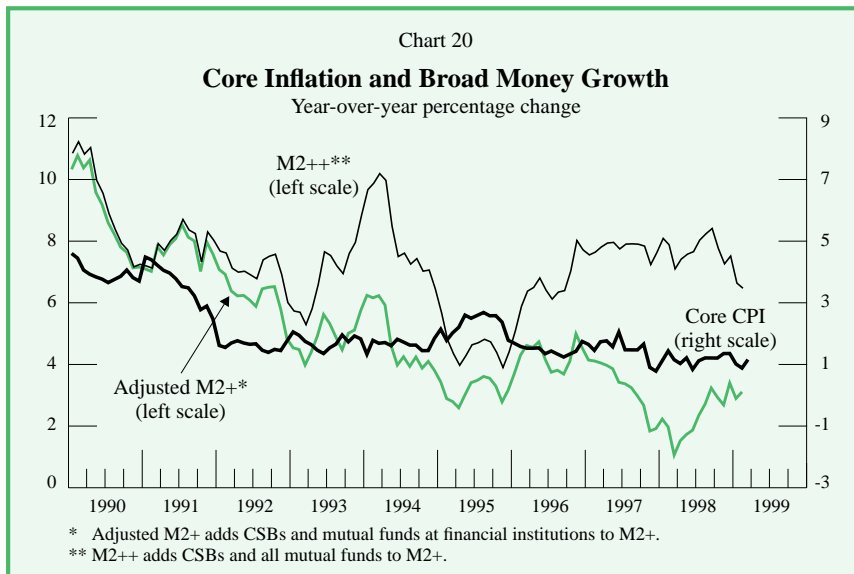
The Bank's preferred measure of broad money, or holdings of liquid assets, is M2+.<sup>9</sup> This very inclusive aggregate internalizes movements between deposits and mutual funds. These movements, which have been substantial over the past few years, have made the previous measures of broad money more difficult to

8. A technical note in the spring issue of the *Bank of Canada Review* describes new measures of transactions balances, M1+ and M1++. Recent changes in these aggregates parallel those in M1. In the same issue of the *Review*, Joseph Atta-Mensah and Loretta Nott discuss developments in the monetary aggregates more thoroughly.

9. This series is now regularly published in the *Bank of Canada Review*.



interpret. In particular, the huge shift from deposits into equity and bond mutual funds causes aggregates such as M2 and M2+ to understate the expansion of holdings of liquid assets. M2++ continues to grow at a rate between 7 and 8 per cent—a rate that has been maintained for several years (Chart 20). This is consistent with inflation remaining low in 1999.



## Inflation projection

*Core inflation is expected to increase over the next 18 months . . .*

Although inflation has been slightly lower than the Bank projected last November, over the next 18 months three factors are expected to continue to contribute to an increase in core inflation. First, temporary factors that have recently contributed to keeping core inflation low are expected to abate. In particular, the rapid decline in long-distance telephone rates and computer prices experienced over the past year is expected to slow. Second, the pass-through of the past depreciation of the Canadian dollar against the U.S. dollar will tend to raise prices, thus adding temporarily to the measure of inflation. And third, as activity in the economy approaches production capacity, inflation should move towards longer-term expectations.

*. . . but remain in the lower half of the target range.*

Nevertheless, the increase in core inflation is expected to occur only gradually for several reasons: slack in product and labour markets will be taken up slowly; increases in unit labour costs should remain low; expectations for inflation are slightly below 2 per cent; and competition may remain intense in many markets.

In summary, on the basis of a growth rate of GDP in the middle of the range of  $2\frac{3}{4}$  to  $3\frac{3}{4}$  per cent and assuming that the Bank's estimates of the output gap are broadly correct, core inflation should rise gradually over the course of the next 18 months but remain in the lower half of the target range.



## 5. CONCLUSIONS

During the past six months, the outlook for the world economy and for Canada has become more positive. The turbulence that characterized international markets last autumn has subsided, investor confidence is being restored, and the U.S. economy has been remarkably robust.

Hence, most projections for the Canadian economy have been revised upwards. The Bank is now looking for a rate of economic expansion between  $2\frac{3}{4}$  and  $3\frac{3}{4}$  per cent in 1999 and a similar pace in 2000. This projection implies that the *estimated* margin of unused capacity would be absorbed during this period, with growth at the upper end of the range moving the economy towards its production capacity at a faster rate.

Based on this projection, the Bank anticipates that core inflation in Canada will gradually move up over the next year and a half, but remain in the lower half of the Bank's inflation-control target range.

The risks to this outlook for the economy and inflation appear to be balanced. The conditional nature of the projection must still be stressed, however, since significant uncertainties remain. A leading risk to the world economic outlook revolves around the divergent economic performances of the major industrial countries.

On the domestic side, there is the uncertainty regarding estimates of the capacity of the Canadian economy to produce goods and services and thus of the margin of unused capacity. This means that the Bank must place increasing weight on a range of indicators to assess the degree of pressure on the economy's production capacity. These indicators would include inflation relative to expectations, the growth of money and credit, wage settlements, evidence of supply bottlenecks, and information provided by the Bank's regional representatives.

*This is a report of the Governing Council of the Bank of Canada:  
Gordon Thiessen, Bernard Bonin, Charles Freedman, Paul Jenkins,  
Tim Noël, and Sheryl Kennedy.*

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