

BANK OF CANADA

# MONETARY POLICY REPORT

*– May 1998 –*

*The silver dollar on the cover was issued in 1989 to mark the 200th anniversary of Sir Alexander Mackenzie's first voyage of discovery in the Canadian northwest. Mackenzie travelled from Fort Chipewyan along Great Slave Lake and down the river that bears his name to the Arctic Ocean. He found the route to the Pacific that he was searching for on his next great journey in 1793.*

*The design is the work of John Mardon.*

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— May 1998 —

“With low inflation and a sound fiscal position, we now have the foundation that should permit us to move towards full capacity and to explore what our economy can deliver in terms of sustained growth in output and employment and better standards of living . . . . this will require setting a course for monetary policy that will ensure that the Canadian economy reaches full capacity smoothly and then continues to grow over time at a non-inflationary, and therefore sustainable, pace.”

– Gordon Thiessen

*Speech to the Canadian Club of Winnipeg,  
Winnipeg, Manitoba  
25 March 1998*

# CONTENTS

<b>1. Introduction</b>	5
<b>2. Recent Developments in Inflation</b>	6
Inflation and the target range	6
Factors at work on inflation	11
<b>3. Achieving the Inflation-Control Targets</b>	17
<b>4. The Outlook for Inflation</b>	22
Aggregate demand and supply	22
Temporary factors affecting inflation	26
Cost control	26
Measures of inflation expectations	26
Monetary indicators	28
Inflation projection	30
<b>5. Conclusions</b>	31
<b>Appendix</b>	
<b>Inflation-Control Targets Extended</b>	33
<b>Bibliography</b>	35

# 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 focusses 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

Canada's inflation-control targets establish a specific medium-term objective for monetary policy. In February 1998, the target of holding consumer price inflation inside a range of 1 to 3 per cent was extended jointly by the Government of Canada and the Bank of Canada to the end of 2001. The Bank also indicated that there would be no change in the way in which policy was conducted under the targets (see the appendix, page 33).

Because of the lags between the Bank's policy actions and their ultimate effect on inflation, policy decisions have to be forward-looking. Consequently, these decisions are necessarily based on projections of an uncertain future and must respond to unexpected events, both economic and financial.

Since last November's *Monetary Policy Report*, a number of unanticipated developments have required reassessment and response by the Bank. The unfolding events in Asia and the sharp decline in primary commodity prices, which have had significant economic and financial market implications for Canada, were not readily predictable. At the same time, an unexpectedly strong U.S. economy has helped to partly offset the negative effects of the Asian crisis. Late last year, inflation temporarily dropped below 1 per cent (the lower bound of the Bank's target range). In addition, strikes by postal workers and by Ontario teachers in the fourth quarter of 1997, together with the January ice storm in eastern Canada, have had significant short-term effects on production and demand in the economy.

During this period of uncertainty and temporary setbacks, the Bank attempted to identify the more lasting influences on the economy and inflation. In addition, it had to address the volatility in financial markets associated with the uncertainty surrounding the shocks. This volatility was most clearly evident in several sharp declines in the external value of the Canadian dollar. Under these circumstances, the Bank raised short-term rates three times since the November *Report*, by a total of 125 basis points. These actions were prompted by two basic considerations. First, despite the fallout from the problems in Asia, the underlying momentum of the Canadian economy remained positive, and the persistent decline in the Canadian dollar was leading to an undesirable easing in monetary conditions, which were already stimulative. Second, at times, the speed of decline in the currency was such that, had it continued, there was a clear risk that investor confidence in Canadian dollar assets would have been undermined.

*The 1 to 3 per cent inflation-control target has been extended to the end of 2001.*

*Over the past six months, several unanticipated developments have required reassessment and response by the Bank.*

*To prevent an undesired easing of monetary conditions and to address financial market volatility, the Bank Rate was increased.*

*This report includes information received to 24 April 1998.*

*The solid expansion of the Canadian economy continues.*

Although there are continuing uncertainties and downside risks to the immediate outlook, stemming from the Asian situation, there have been signs that stability is returning to most of southeast Asia and Korea. On balance, the Bank feels that the economic expansion in Canada, supported by both external and internal factors, will remain solid through this year and into 1999, although not as strong as expected last autumn. The details of this outlook and the policy implications for maintaining inflation inside the Bank's target range are the subject of this *Report*.

## 2. RECENT DEVELOPMENTS IN INFLATION

Core inflation (CPI excluding food, energy, and the effect of indirect taxes) dropped temporarily below the Bank's 1 to 3 per cent target range late last year. On balance, however, it declined only slightly over the past six months. Contributing to the decline were intensifying competitive pressures in the retail market.

### **Inflation and the target range**

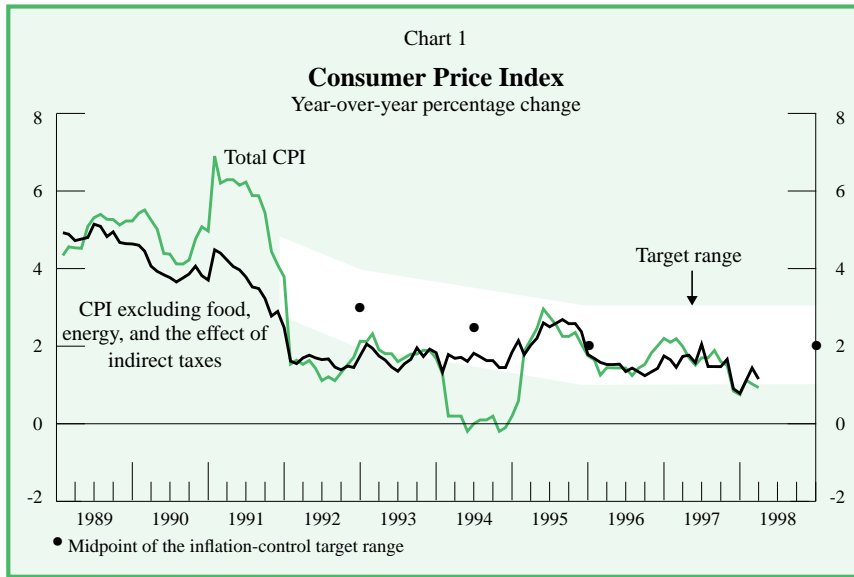
The 12-month rate of increase in the core CPI edged down from 1.5 per cent last September to 1.2 per cent in March (Chart 1). This decline was not anticipated in last November's *Report*.

It was noted at that time that retailers were trying to restore profit margins by raising prices. In fact, price discounting subsequently increased as competition among retailers to maintain or expand market share intensified. There still appears to be significant excess capacity in this sector, which will probably take quite some time to correct. Currency depreciations in Asia also intensified competition, particularly among motor vehicle producers. More fundamentally, the ongoing slack in product markets has continued to put downward pressure on inflation. The major offsetting factor working to hold inflation up appears to be expectations of inflation that remain close to the 2 per cent midpoint of the range.

*Core CPI inflation has been slightly lower than anticipated in the last Report . . .*

*. . . partly because of intensified competition in the retail market.*



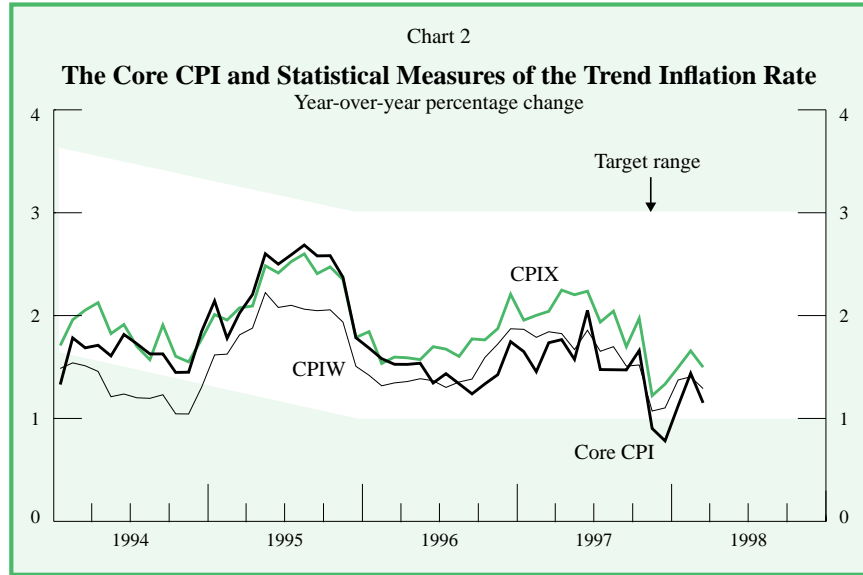


The brief fall of core CPI inflation below the target range last November and December was caused by transitory factors. These included increased automobile rebates, exceptionally heavy discounts on clothing, promotions of new cablevision channels, and an earlier-than-expected seasonal decline in hotel rates.

*Temporary factors led core CPI inflation to drop below the target range for a short time.*

The levels of two other statistical measures of the trend rate of inflation (CPIX and CPIW) are currently very similar to that of core inflation (Chart 2).<sup>1</sup>

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

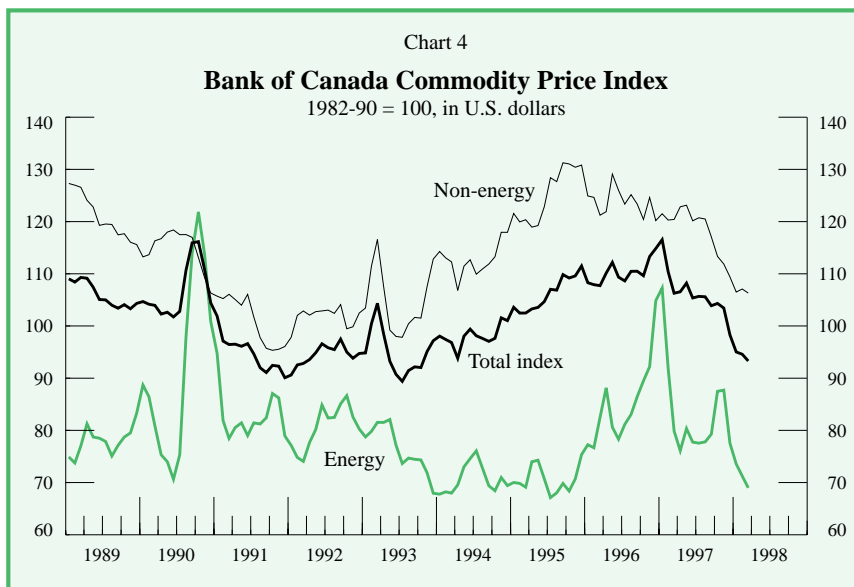
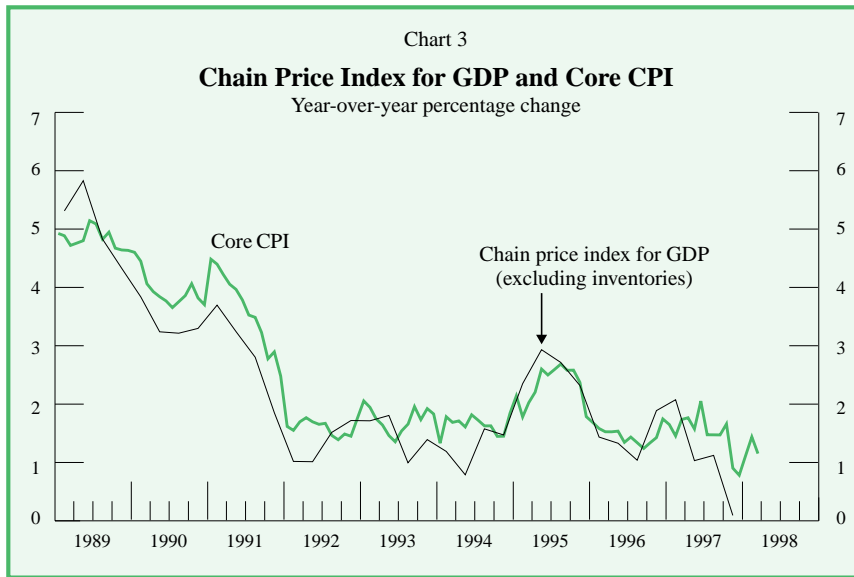


*Lower energy prices also contributed to the decline in total CPI inflation.*

*Broad inflation measures also eased, partly because of lower prices for primary commodities.*

The 12-month rate of increase in the total CPI was 0.9 per cent in March 1998, compared with 1.6 per cent in September 1997. This decline is mainly tied to falling energy prices stemming from lower prices for crude oil.

Broad inflation measures have also eased substantially since the last *Report*. The chain price index for GDP—a measure of price changes using weights that adjust to keep up with shifts in the composition of spending—showed no inflation at the end of 1997 from its level a year earlier, compared with a year-over-year rate of 1.0 per cent in the second quarter of 1997 (Chart 3). In addition to the factors lowering CPI inflation, the broad measures, which include the prices of exported products, have been directly affected by the considerable decline in the prices of primary commodity exports (Chart 4 and Technical Box 1).



For manufacturing, the aggregate industrial product price index has shown relatively modest increases on a year-over-year basis (Chart 5). These gains have mainly reflected the impact of the Canadian dollar depreciation on export prices for such products as motor vehicles and many manufactured commodities, where contracts are typically in U.S. dollars.

Technical Box 1

Recent Movements in Primary Commodity Prices

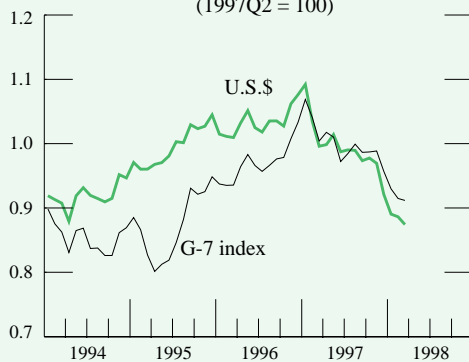
The Bank of Canada's primary commodity price index (measured in U.S. dollars) decreased by about 12 per cent between the second quarter of 1997 and the first quarter of 1998. Part of this decrease reflects the strength of the U.S. dollar against the currencies of other industrial countries. Measured in terms of G-7 currencies, the index fell by about 8 per cent over the same period. Price declines were particularly pronounced for base metals, lumber, livestock, and crude oil.

Prices for commodities were driven down by both demand and supply factors. Actual and anticipated reductions in worldwide demand, related primarily to developments in Asia, have led to lower prices for many commodities, including base metals. The oversupply of metals has been exacerbated by new mines coming into production as well as by additional supply from existing operations in countries such as Russia (nickel), Chile (copper), and China (zinc). Although U.S. housing demand remained strong, ongoing weakness in the Japanese housing market and increased U.S. lumber supplies contributed to a large drop in lumber prices over 1997 and the first quarter of 1998. Livestock prices, particularly for hogs, have also weakened, owing to greater global supply and lower demand from Asia.

Crude oil prices were pushed down by an increased supply from OPEC and non-OPEC countries, weaker Asian demand, and low North American demand because of mild weather. The price of crude oil fell 20 per cent in the first quarter of 1998, as Middle East tensions dissipated and the United Nations announced its intention to allow higher Iraqi exports under the oil-for-food program. At the end of the first quarter, prices recovered when OPEC and some other major producers announced plans to cut production for the balance of the year.

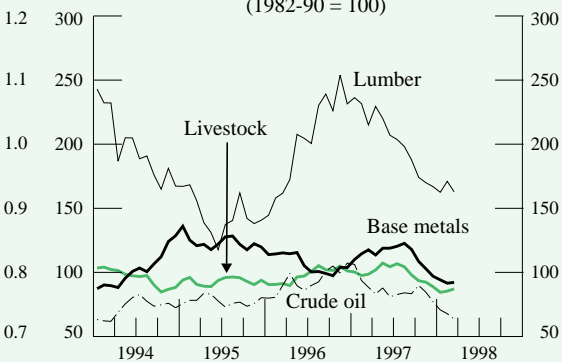
The full extent of the decline in commodity prices is difficult to explain using only fundamental demand and supply factors, especially given the continuing strength in world demand stemming from U.S., European, and Latin American growth. There seems to have been some overshooting on the downside—perhaps an overreaction to developments in Asia. The Bank's outlook therefore incorporates a gradual recovery of commodity prices in the second half of 1998 to more closely reflect the economic fundamentals. The speed of the recovery will depend in part on developments in Asia.

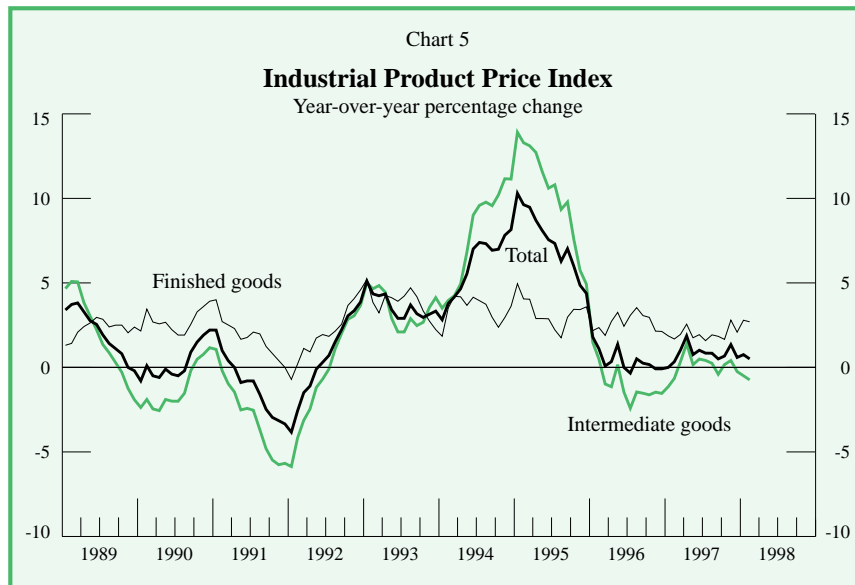
Bank of Canada's Commodity Price Index\*  
(1997Q2 = 100)



\* Weighted by Canadian production

Commodity Prices (U.S.\$)  
(1982-90 = 100)





## Factors at work on inflation

### Aggregate demand and supply

As expected, the Canadian economy expanded at a rapid pace during 1997, with real GDP increasing by 4.2 per cent (fourth quarter over fourth quarter). This expansion continued to be supported by accommodative monetary conditions and by strong growth in the U.S. economy. It was accompanied by marked gains in employment during the year. Over the second half of 1997, the underlying momentum of the economy remained robust. However, two major strikes (postal workers and Ontario teachers) shaved about 0.5 percentage points off GDP growth, which was recorded at 3.5 per cent.

Several temporary influences also affected the pace of activity in the first quarter of 1998. The recovery from the fourth-quarter labour disruptions provided a boost to economic growth. In contrast, the January ice storm in eastern Canada, which has significantly affected the month-to-month changes in activity, is estimated to have lowered real GDP growth in the first quarter by about 0.2 percentage points. This should subsequently be more than made up as a result of the reconstruction effort. At the same time, the fallout from developments in Asia and lower commodity prices began to have a tempering effect on growth. When all the factors are considered, growth in the first quarter is estimated to have been in a range of about 3 to 3½ per cent (at an annual rate).

*The strong pace of economic expansion last year was largely as expected.*

***The buoyant U.S. economy continued to contribute to strong growth in Canada's exports.***

***Spending by businesses on capital goods continued to rise.***

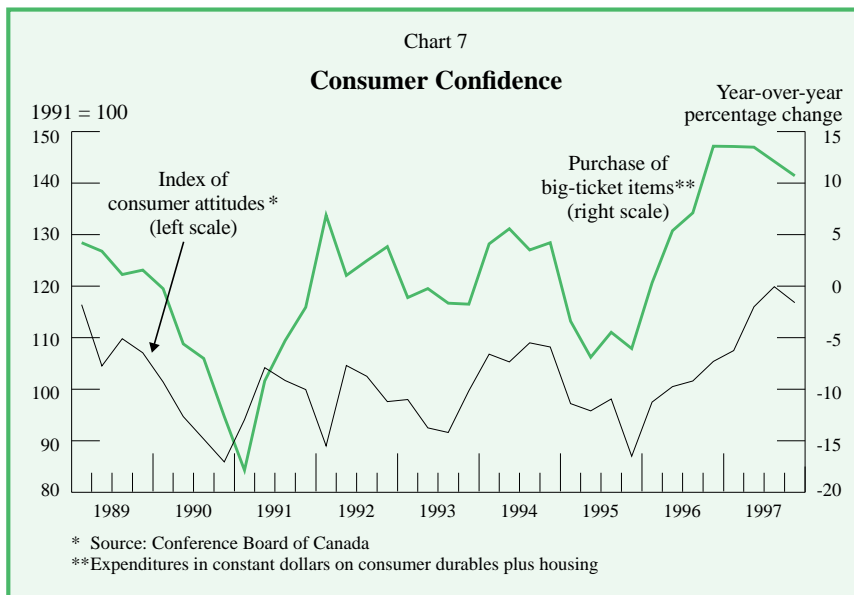
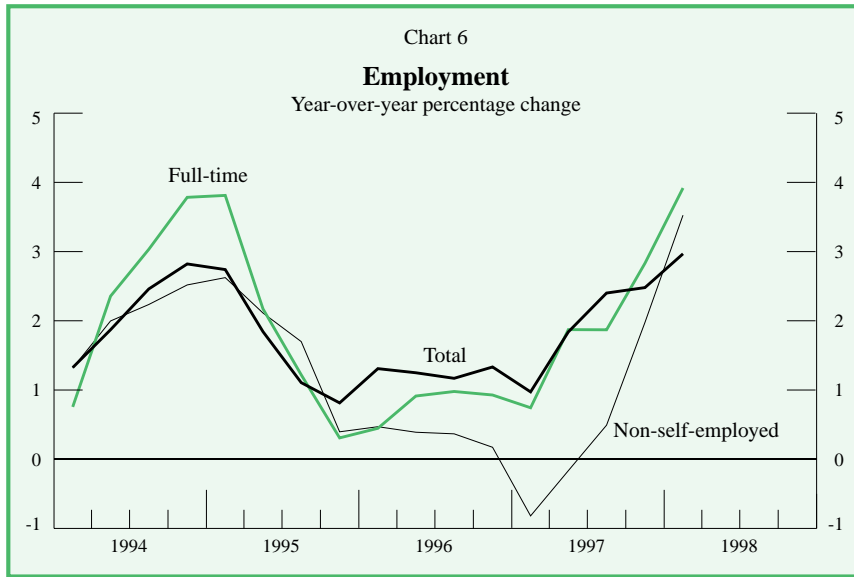
***Low interest rates and increased employment contributed to further gains in household spending.***

Export volumes rose briskly in the second half of 1997, partly because of strong U.S. demand for machinery and equipment and consumer durable goods. Exports of non-energy commodities also grew substantially in spite of price declines. But within this category, lumber exports fell markedly, following a sharp decline in housing demand in Japan. More generally, exports to Japan and other Asian countries declined over the period, but these account for only about 8 per cent of Canada's total merchandise exports.

In the last half of 1997, businesses continued to substantially increase their spending on capital goods, especially on machinery and equipment.

Investment in non-farm inventories also rose in this period, stimulated by continued strong growth in sales. At times, some inventory imbalances emerged in certain segments of the retail sector, such as motor vehicle dealerships and department stores. At year-end, inventories still appeared to be too high in some retail categories (such as department stores).

Household expenditures continued to rise strongly in the second half of 1997, although at a slightly lower rate than in the first half. Consumer spending on durable goods, particularly motor vehicles, grew at a healthy pace, as a result of low interest rates, pent-up demand, and continued marked gains in employment. The very substantial increases in both full-time jobs and hiring by firms (as opposed to self-employment) have kept consumer confidence high (Charts 6 and 7). It appears, however, that some spending on motor vehicles towards year-end was brought forward from the first quarter of 1998 in response to special financing incentives and rebates offered by North American producers. The growth of household spending on items other than consumer durable goods slowed somewhat, partly in response to the effect of the work stoppages on incomes.



Imports continued to increase substantially in the second half of 1997. This rise was especially pronounced because the growth in domestic spending came mainly from purchases of machinery and equipment and motor vehicles, a large portion of which tend to be imported. In addition, many of our highly manufactured exports have a very large import content. As Asian currencies depreciated, imports from these countries, which account for about 12 per cent of Canada's total merchandise imports, rose more strongly than total imports.

*Strong gains in domestic demand led to a considerable increase in imports . . .*

## Technical Box 2

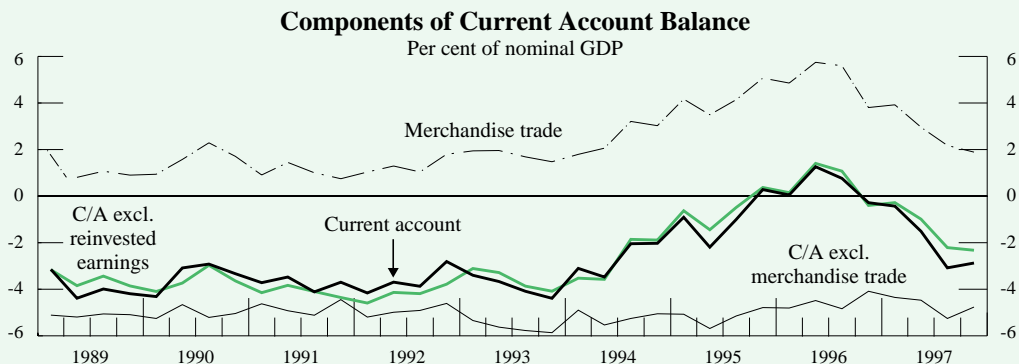
## Canada's Current Account

Canada's current account deficit widened by about 2.5 per cent of GDP through 1997. This resulted from a number of factors: vigorous growth in domestic demand, a shift in spending towards import-intensive goods, a fall in primary commodity prices, a substantial rise in the reinvested earnings of foreign-controlled corporations in Canada (which are recorded as payments to non-residents), and lower net exports to Asia. Loss of overall competitiveness was not a factor, since measures of costs relative to those of Canada's major trading partners improved markedly through the year as the Canadian dollar weakened and unit labour costs fell in domestic currency terms.

The widening of the current account deficit primarily reflected a pronounced narrowing of the merchandise trade surplus. The terms of trade for goods fell 3 per cent on a fixed-weight basis over the year, mainly because of a drop in the prices of those primary commodities of which Canada is a net exporter. Export volumes increased rapidly, reflecting robust growth in U.S. aggregate demand and our favourable competitive position. Import volumes rose even more strongly than exports, however, largely in response to a sharp increase in domestic demand for machinery and equipment and for consumer durables.

In the investment income account, the substantial increase in the reinvested earnings of foreign-controlled enterprises operating in Canada reflected a marked improvement in profits and higher levels of investment spending. The rollover of debt at lower interest rates helped restrain net interest payments on portfolio investment to a modest year-on-year increase in the fourth quarter of 1997.

Since it is affected by so many factors, the current account balance is very difficult to predict. There are, however, a number of developments that are likely to narrow the deficit during 1998: demand should become less heavily weighted towards import-intensive goods, commodity prices should strengthen, and the competitive position of Canadian producers should continue to stimulate gains in net export volumes. Moreover, new capacity coming on stream should provide impetus to certain export categories, such as natural gas. Finally, the rollover of long-term debt at lower interest rates will continue to help contain outflows of net investment income.





With imports rising more strongly than exports and commodity prices declining, there was a further deterioration in the current account deficit to almost 3 per cent of GDP at year-end (Technical Box 2).

In the first quarter of 1998, the recovery from the two major strikes gave a boost to household spending on items other than motor vehicles and energy. Consumer expenditures were also supported by continued strong employment growth in the private sector. On balance, however, the underlying pace of expansion moderated somewhat. Lower shipments of energy commodities and a reduction in the growth of automotive product exports led to slower export growth than in the second half of 1997, and the rate of increase in business investment slowed from last year's robust pace. Because of the reduced demand for energy (reflecting the relatively mild winter) and a decline in motor vehicle sales, imports were little changed.

With aggregate spending during the last half of 1997 and early this year continuing to expand at a rate greater than the growth of potential output, slack in the economy continued to be taken up. Bank staff estimate that the output gap narrowed to about 1¼ per cent at the end of 1997, down from 1¾ per cent at mid-1997 (Chart 8).

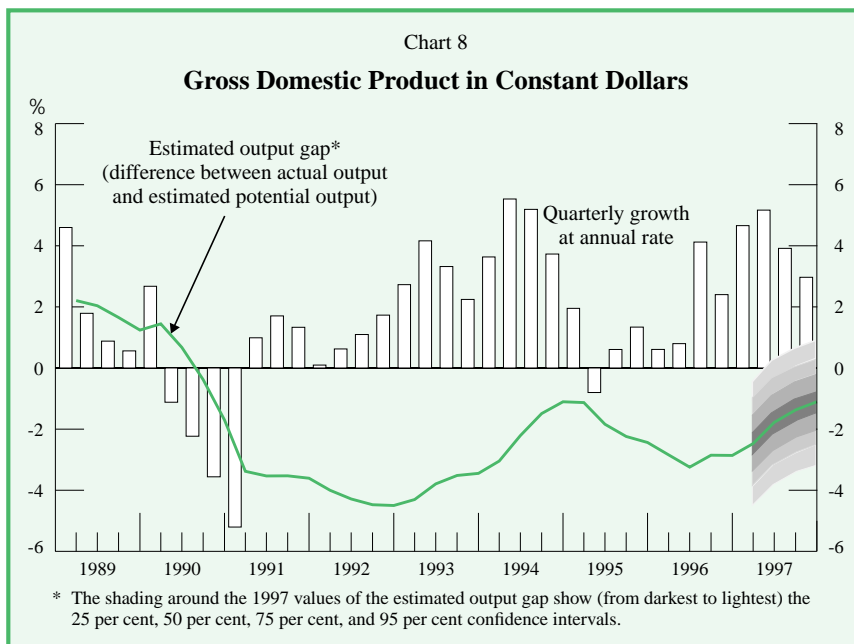
There is considerable uncertainty about the measurement of the output gap. Nonetheless, it is useful for policy purposes to make provisional point estimates of its most likely value. These estimates are reviewed as new data come in.

*... and, together with a decrease in commodity prices, contributed to a further deterioration in Canada's current account position.*

*Growth in the first quarter of 1998 was led by household spending.*

*The amount of excess capacity continued to diminish ...*

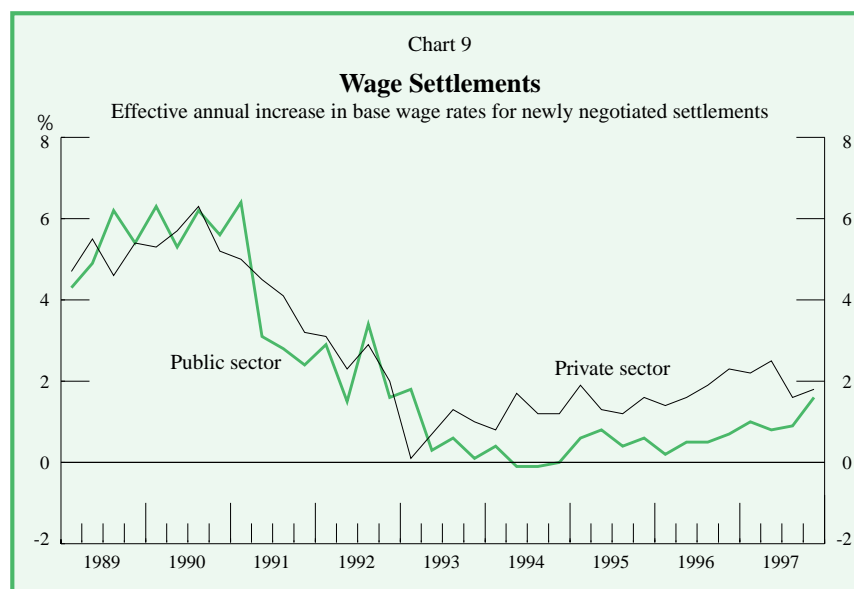
*... but there is considerable uncertainty about the size of the output gap.*



## Cost control

*Wage gains in the second half of 1997 were moderate ...*

Wage increases remained moderate in the second half of 1997. Annual wage settlements in the unionized private sector averaged 1.7 per cent, compared with 2.4 per cent in the first half (Chart 9).<sup>2</sup> Wage settlements in the public sector edged up, averaging 1.4 per cent in the second half of 1997. The average pay increase for non-unionized employees was 2.6 per cent in 1997, based on the Conference Board of Canada's compensation outlook survey. Thus, the average underlying wage increase in the total economy is estimated to have been close to 2 per cent on a year-over-year basis. This is confirmed by a new source of wage data from Statistics Canada. For instance, in the first quarter of 1998, the year-over-year increase in the average hourly wage, excluding overtime, was 1.5 per cent for all permanent employees and 2.4 per cent for permanent full-time employees.



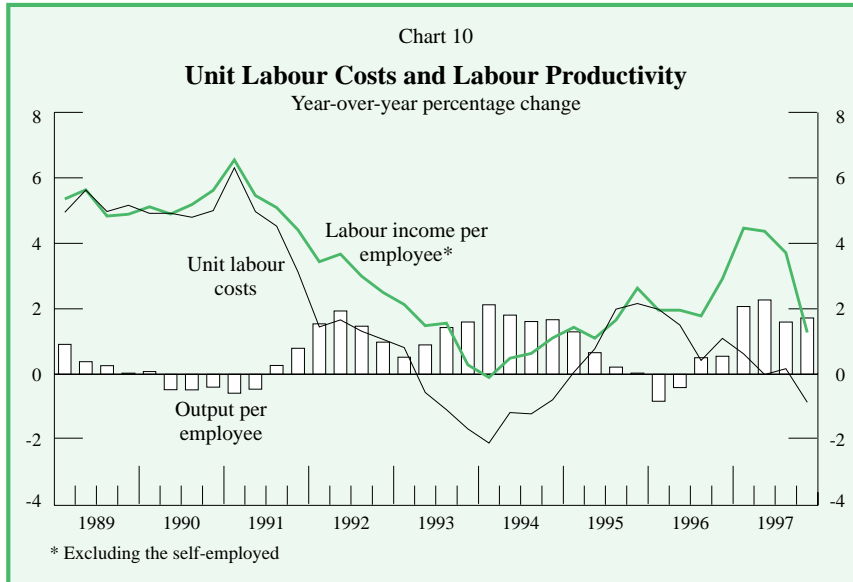
*... and productivity increased, so that unit labour costs edged down.*

Productivity growth increased last year, partly because of the cyclical pickup in output.<sup>3</sup> As a result, unit labour costs edged down by year-end (Chart 10). The growth of labour income per

2. The reduction in average private sector wage settlements in the second half of 1997 mainly reflected a large increase in the proportion of settlements in the service sector. Wage increases in the service sector have recently been lower than those in the goods-producing sector.

3. Productivity is measured as output per employee because of concerns that the volatility of recent data on the average work week may be distorting the underlying picture of productivity growth measured as output per person-hour.

employee had been unexpectedly high early in 1997 because of larger-than-normal bonus payments that were associated in part with the productivity gains.



### 3. ACHIEVING THE INFLATION-CONTROL TARGETS

The Bank aims at directing monetary conditions along a path that will move the trend rate of inflation towards the centre of the target range over time. In making its judgment about this desired path, the Bank uses information from many sources on developments that will influence the trend of inflation. Most important is the expected trend in the level of aggregate demand relative to the economy's potential supply. Since there is considerable uncertainty about the future evolution of these variables, the desired level of monetary conditions at any time is not precise, but rather is a range within which the Bank is comfortable. New information and changing views of the probable profile of spending and its implications for future inflation may change the desired path for monetary conditions. At times, there may be considerable uncertainty regarding the effects on the Canadian economy of external or domestic shocks. In these circumstances, it may be appropriate for the Bank to wait for more information before deciding on any change in the path for monetary conditions. In the meantime,

*The Bank adjusts monetary conditions to achieve its inflation-control target.*

*The desired level of monetary conditions at any time is not precise but is a range within which the Bank is comfortable . . .*

*... and may change with new information.*

*Several factors, including developments in Asia, have affected desired monetary conditions.*

*Monetary conditions have fluctuated widely and, on balance, have been somewhat less stimulative over the period.*

monetary conditions may fluctuate over quite a wide range without drawing a response from the Bank.

In the *Report* issued last November, the Bank drew attention to the anticipated closing of the output gap over the coming quarters and to the implied need for some reduction, over the medium term, in the degree of monetary stimulus being provided to the economy. The November *Report* also recognized the unfolding situation in Asia, noting that close attention would have to be paid to the implications for the Canadian economy.

As the crisis in southeast Asia deepened and spread to Korea (see Technical Box 3), there was a tendency for financial markets and commentators to assume a “worst-case scenario.” Pessimistic views about the impact of the Asian crisis on the evolution of commodity markets and on the Canadian economy, together with a worldwide flight to U.S. assets by investors, resulted in a reduction in the relative attractiveness of Canadian dollar instruments. This was exacerbated by the occasional recurrence of nervousness about political developments in Quebec. In addition, there was some uncertainty in the markets about the likely reaction of monetary policy to all these developments. Together, these factors led to volatility in Canadian financial markets and several episodes of sharp downward pressure on the Canadian dollar. The extent of the resulting depreciation was seen by the Bank as an inappropriate easing of monetary conditions. Some important positive developments for the Canadian economy appeared to have been overlooked by markets, particularly the persistent strength of the U.S. economy, as well as the significant declines in medium- and long-term interest rates. Under the circumstances, the Bank raised the Bank Rate on three occasions, by a total of 125 basis points. These actions were intended both to counter the undesired easing in monetary conditions and to forestall a potential loss of confidence in Canadian dollar assets.

The forces at play resulted in considerable volatility in monetary conditions over the past six months, and the Bank’s monetary conditions index (MCI) has fluctuated over a relatively wide range (Chart 11). A low of -6.2 was reached near the end of January. Since then, the MCI has varied between -4.5 and -5.5. This means that, following the increases in short-term interest rates, monetary conditions have been somewhat less stimulative compared with the very accommodative range of -5.0 to -6.0 that had prevailed for much of 1997.

### Technical Box 3 The Asian Crisis

The turmoil in Asia can be explained largely by underlying structural weaknesses and the emergence of significant macroeconomic and financial imbalances. The five countries most adversely affected have been Korea, Indonesia, Malaysia, the Philippines, and Thailand. Since mid-1997, the exchange rate in Indonesia has fallen by roughly 70 per cent against the U.S. dollar, while those of the other affected countries have declined by between 30 and 35 per cent. Stock markets in the region have fallen by 20 per cent or more in local currency terms over the same period. After years of very rapid growth, economic activity in the region is expected to slow significantly in 1998. Over the longer term, if measures are taken to strengthen financial sectors, improve governance, and enhance the role of market incentives, these economies should again be among the fastest-growing in the world.

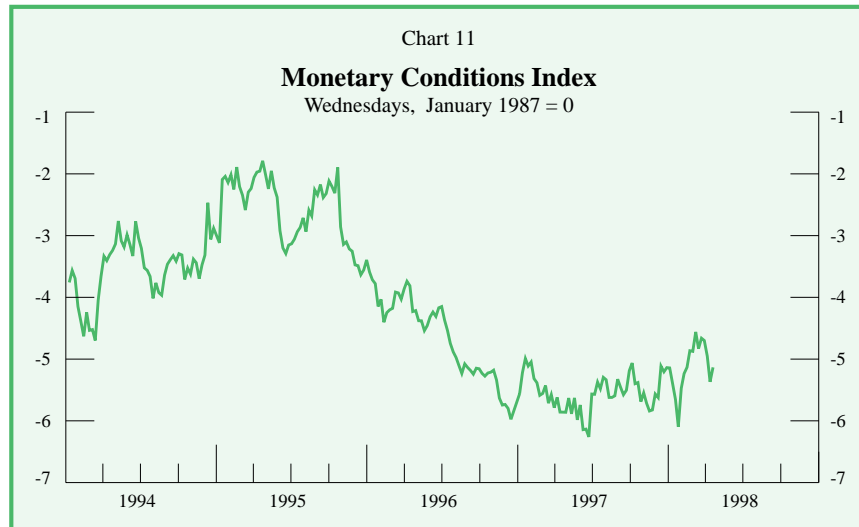
The Asian crisis is expected to affect industrialized economies in a number of ways. The decline in economic activity in the Asian countries and the depreciation of their exchange rates will reduce their demand for imports. In addition, the improved competitive position of Asian exporters is likely to lead to some displacement of domestically produced goods in the industrialized world. The crisis is also contributing to lower world commodity prices, as Asian countries reduce their demand for imports while boosting domestic production. This in turn is feeding into lower actual and expected trend inflation worldwide.

For 1998, the latest *World Economic Outlook* of the IMF suggests that world economic growth will be 1.2 percentage points lower than forecast in September 1997. The largest downward revisions are for Japan and the newly industrialized economies of Asia. The negative effect of the Asian crisis will be partly offset by positive developments, such as the ongoing momentum of the U.S. economy. Growth in G-7 countries in 1998 is expected to be down only 0.2 percentage points compared with expectations before the Asian crisis.

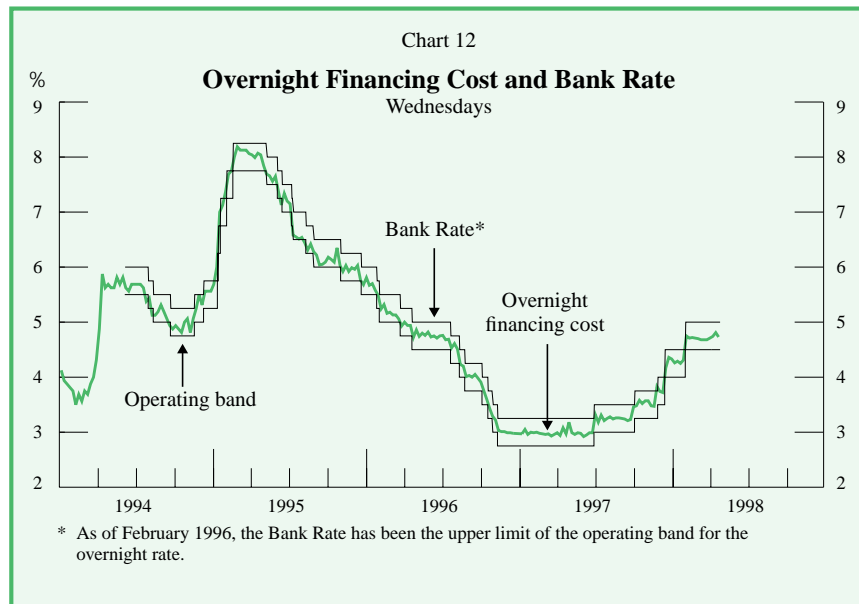
#### Real GDP Growth Forecasts for 1998

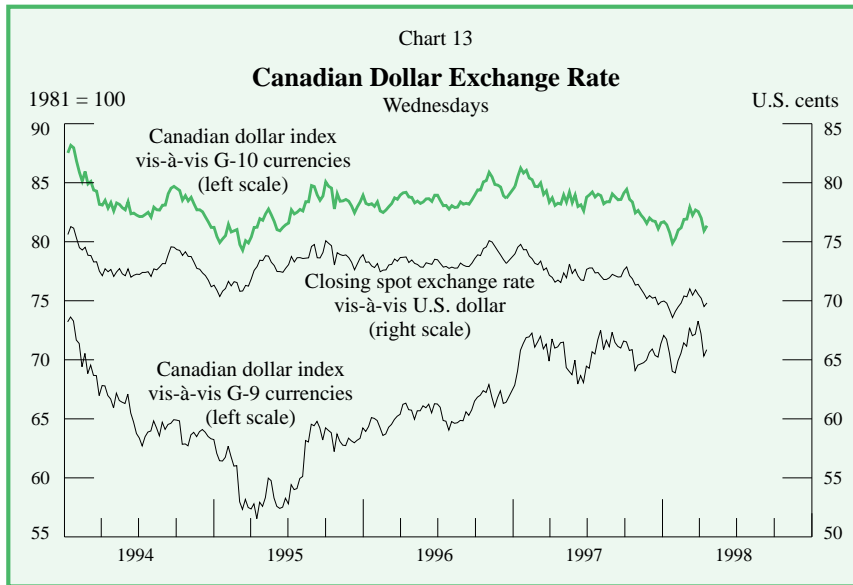
	Forecast made September 1997	Forecast made April 1998
United States	2.6	2.9
Japan	2.1	0.0
Germany	2.8	2.5
G-7 countries	2.5	2.3
Newly industrialized Asian economies*	6.0	1.8
Developing Asian economies**	7.4	4.4
World	4.3	3.1

Source: IMF *World Economic Outlook* published October 1997 and May 1998  
 \* Hong Kong, Korea, Singapore, and Taiwan  
 \*\* Asia, excluding Japan and newly industrialized Asian economies



As a result of the three changes, the Bank Rate increased from 3.75 per cent to 5 per cent (Chart 12). The increase on 25 November was 25 basis points, while those on 12 December and 30 January were 50 basis points each. Short-term yields rose in step with these increases. With little change in short-term rates in the United States, three-month differentials have narrowed, but Canadian short-term rates are still some 60 to 70 basis points below those in the United States.





Following the interest rate increases, the Canadian dollar recovered from the record low of 68.10 U.S. cents on 29 January (Chart 13). Nevertheless, over the past six months the Canadian dollar fell in value by about 1½ per cent against the U.S. dollar. The U.S. dollar's persistent strength against all major currencies over the period stemmed from the U.S. economy's strong performance. It also reflected a shift by investors towards the world's most liquid financial market in response to the turbulence in Asia. As a result, when measured against the currencies of all the G-10 countries, the Canadian dollar has declined less than against the U.S. dollar alone.<sup>4</sup>

Bond markets in many countries in the G-10 area, including Canada, have been buoyant, partly because of an improved inflation outlook, and partly because of the flight of capital from Asian countries. In spite of the increases in domestic short-term interest rates, Canadian bond yields have declined to new lows. Moreover, the negative long-term differential against the United States has persisted despite the safe-haven attraction of U.S. dollar investments.

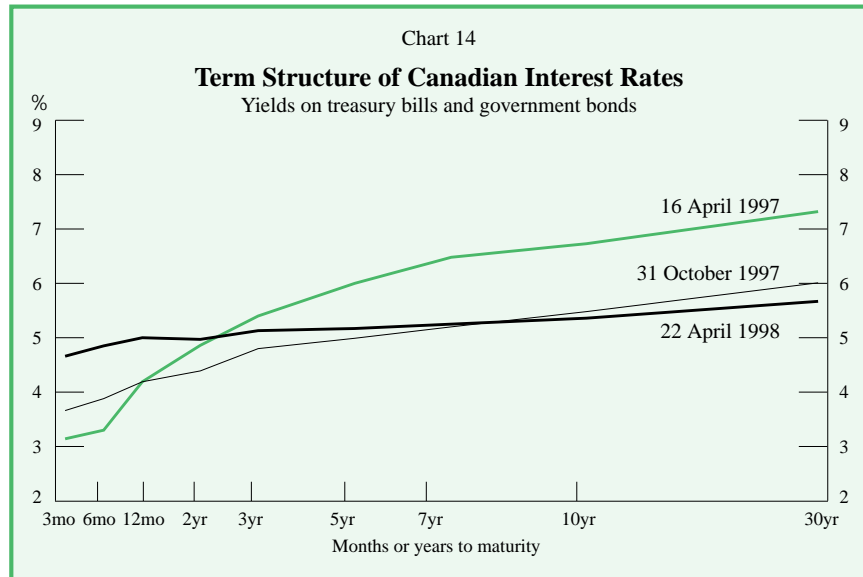
*The Canadian dollar had a mixed six months, depreciating against the U.S. dollar while appreciating against overseas currencies.*

*Long-term interest rates continued their decline ...*

4. While the Canadian dollar has risen steeply against the currencies of southeast Asia and Korea, the effect of that movement will, to a significant extent, be offset because inflation in most of these countries has increased appreciably. Moreover, our trade with these countries is relatively modest. As a result, when account is taken of inflation differences between Canada and other countries, movements in the exchange value of the Canadian dollar on a trade-weighted basis are broadly similar, whether we use the G-10 index or a broader index that includes a number of Asian and Latin American currencies. The additional countries included in the broader index are Australia, Norway, China, Hong Kong, Korea, Malaysia, Singapore, Thailand, Indonesia, Taiwan, Argentina, Brazil, Chile, and Mexico.

*... with lower risk premiums providing important stimulus to economic activity.*

The rise in short-term rates and the decline in long-term rates has caused the yield curve to pivot, and to have a progressively flatter slope (Chart 14). In the past, the slope of the yield curve has been a good predictor of changes in output, and such a flattening has often been followed by slower output growth. However, the declines in bond yields over the past couple of years have largely resulted from lower expectations of inflation and lower risk premiums. These lower risk premiums provide a stimulus to economic activity (see Technical Box 4).



## 4. THE OUTLOOK FOR INFLATION

When assessing the likely path of inflation over the next two years, the Bank looks closely at the current and anticipated amount of aggregate excess supply or demand, measures of inflation expectations, and the rate of monetary expansion. The Bank reviews all important factors, both external and internal, that could influence the evolution of aggregate demand and supply.

### Aggregate demand and supply

*Robust expansion should continue as the negative shock from Asia is partly offset by other positive developments.*

The effect of the Asian crisis on the world economy and the sharp declines in commodity prices, stemming from the crisis and from other sources, represent a significant negative external shock for the Canadian economy. However, the effects of this shock are being partly offset by positive developments elsewhere. In response to the Asian crisis and to an improved inflation outlook,



Technical Box 4

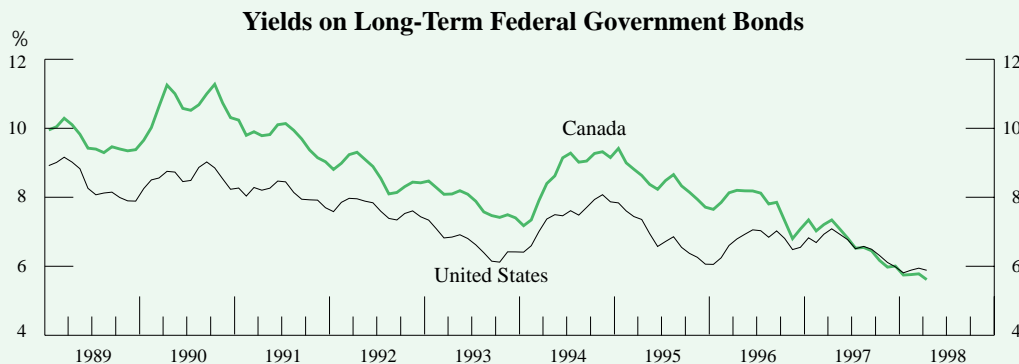
**The Decline in Long-Term Interest Rates**

Canadian long-term interest rates have declined remarkably. Since the start of 1995, the yield on Government of Canada long-term bonds, shown in the chart below, has fallen from over 9 per cent to about 5 3/4 per cent, the lowest rate since the 1960s. Yields in the United States and other advanced economies have also declined, although more moderately. The persistent, negative Canada-U.S. spread that emerged last year is unprecedented.

Two factors have been essential to the improved spread. First, a lengthening period of low inflation has strengthened confidence in the long-run value of Canadian dollar assets. The explicit monetary policy target gives bondholders a formal commitment to continued low inflation. Second, the rapid elimination of deficits by Canadian governments has alleviated some deep uncertainties. Large deficits over many years, and the prospect of their continuation, had created concerns about the level and incidence of taxes; the diversion of savings from more productive uses; the buildup of external liabilities, which was likely to undermine the exchange rate; and the risk that a future government might adopt inflationary policies to lighten its debt load. The rapid fiscal improvement thus played a major role in the extent and timing of the fall in domestic bond yields. Even though the stock of debt and the associated interest payments remain very high, maintenance of the current fiscal position would imply a steady decline in the ratio of government debt to GDP and, hence, in the burden of debt service.

Some respite from the uncertainty about the political future of Quebec over much of the period since the 1995 referendum also contributed to the strength of the Canadian bond market.

The decline in long-term borrowing costs brings pervasive benefits to Canada. Investment in long-lived assets is encouraged; asset values rise; and government interest payments are reduced. Because of the sizable net foreign debt, national income improves as external interest payments decline. In an environment of sound monetary and fiscal policies, long-term interest rates should remain low, even at times when short-term rates rise. Indeed, the further decline in bond yields since November has occurred in the face of such an increase.



medium- and long-term interest rates have declined in the major industrial countries, including Canada. These declines in rates have also helped to boost the value of equities. Recent financial market developments are thus working to help sustain demand in many industrial countries. In addition, and perhaps most importantly, the U.S. economy has continued to outperform expectations.

*U.S. economic growth is expected to slow to a more sustainable rate . . .*

The expansion of aggregate demand in the United States was surprisingly strong throughout 1997 and outstripped the estimated growth of capacity. Although the momentum of the U.S. economy continued to be greater than expected into the first quarter of 1998, the growth of real GDP should slow to a more sustainable rate this year as net exports decline in response to a loss of competitiveness and weak Asian demand. An anticipated inventory correction should also moderate growth somewhat.

U.S. inflation, as measured by the CPI excluding food and energy prices, has been stable at around 2.2 per cent since last September. Although the strong U.S. dollar is expected to put further modest downward pressure on inflation over the remainder of this year, the recent rise in wage pressures could push inflation up in 1999.

Monetary conditions in the United States have continued to tighten since mid-1997, owing to the appreciation of the U.S. dollar. The low inflation rate and the anticipated impact of the Asian crisis on the U.S. economy have helped to keep short-term rates steady. However, unless the Asian crisis has a significant dampening effect on the U.S. economy over the longer term, the Federal Reserve may be faced with the need to raise interest rates to counter a buildup of inflation pressures.

Developments in Mexico have also been positive. Growth in 1997 averaged 7 per cent and is expected to remain robust this year.

*. . . while economic expansion is expected to strengthen in Europe . . .*

In the major European countries, the situation has been mixed. Growth in the United Kingdom has begun to slow in response to past tightening in monetary conditions and increased fiscal restraint. Domestic demand in France and Italy has strengthened, while in Germany it has remained relatively weak. With growth in the continental European economies expected to pick up in the first half of 1998, the overall outlook for Europe in 1998 is bright.

*. . . but little improvement is expected in the Japanese economy.*

The Japanese economy failed to recover significantly in the second half of 1997, after contracting sharply in the second quarter. The government has taken important actions to recapitalize financial institutions, and further fiscal measures are planned. Despite these initiatives, little economic improvement is expected this year, owing to the adverse impact of the Asian crisis, the fragility of the financial sector, and the low level of consumer and

business confidence. Increasingly, the Japanese economy is becoming the major source of uncertainty for the world economy.

International commodity prices are expected to recover somewhat in the second half of 1998. The anticipated reduction in global excess capacity, together with a correction for some possible overshooting of commodity markets on the downside, should contribute to a firming in the prices of industrial materials.

Overall, the growth of Canadian exports is expected to ease this year, as developments in Asia and an anticipated moderation in U.S. economic growth more than offset the stimulus of the recent exchange rate depreciation. The recent decreases in commodity prices are likely to lead to further cutbacks in production at high-cost sites. This could adversely affect the volume of commodity exports over the near term, until the expected rise in commodity prices occurs.

On the domestic front, business investment, supported by low medium- and long-term interest rates, is expected to remain relatively strong in 1998. Capital outlays will also be boosted by the rebuilding of electrical transmission and distribution networks made necessary by the ice storm in eastern Canada. Overall, however, the increase in business investment will likely be less than the strong gains in both 1996 and 1997, as some resource-based projects will be held back by past decreases in commodity prices. Inventory investment is likely to be reduced somewhat as some retailers correct stock imbalances.

Continued gains in full-time employment, low interest rates, and rising private sector wealth should support robust growth in household demand, including housing. But there is some risk that consumer outlays will be less buoyant, to the extent that much of the pent-up demand for consumer durables and housing has already been met.

On the basis of the evidence currently available, the Bank anticipates growth of about 3½ per cent (at annual rates) through to the fourth quarter of 1998 and into the first half of 1999. On an annual average basis, the implied growth for 1998 is also 3½ per cent. This is somewhat stronger than the most recent average of private sector forecasts, which has edged down to 3.3 per cent. In the Bank's view, the economy should reach a level close to the current estimate of full capacity during the course of 1999. Since estimates of full capacity are inexact, the Bank will closely monitor all the indicators that could provide information on the capacity of the economy. Throughout the remainder of this year, however, slack in goods and labour markets should continue to put downward pressure on inflation.

*Recent declines in commodity prices are likely to moderate the growth of both exports ...*

*... and business investment this year.*

*Continued employment gains and low interest rates should, however, support robust growth in household demand.*

*The Bank anticipates average growth of about 3½ per cent to the middle of 1999.*

## Temporary factors affecting inflation

*Temporary factors should have little net effect on core inflation over the next few months.*

While a number of structural changes are still under way in the retail sector, the recent degree of price discounting could lessen somewhat through the rest of 1998. Recent Asian currency movements, however, may contribute to some price cutting—particularly for motor vehicles, other durable goods, clothing and footwear—as retailers turn to cheaper sources of supply. In contrast, the recent depreciation of the Canadian dollar against the U.S. dollar will put upward pressure on the prices of many imported goods over the next year or two. On balance, these temporary factors should have little net effect on the core CPI in the next few months. More upward pressure on prices is likely, however, towards the end of this year and into 1999, as the lagged effects from the recent depreciation of the Canadian dollar against the U.S. dollar become increasingly important.

## Cost control

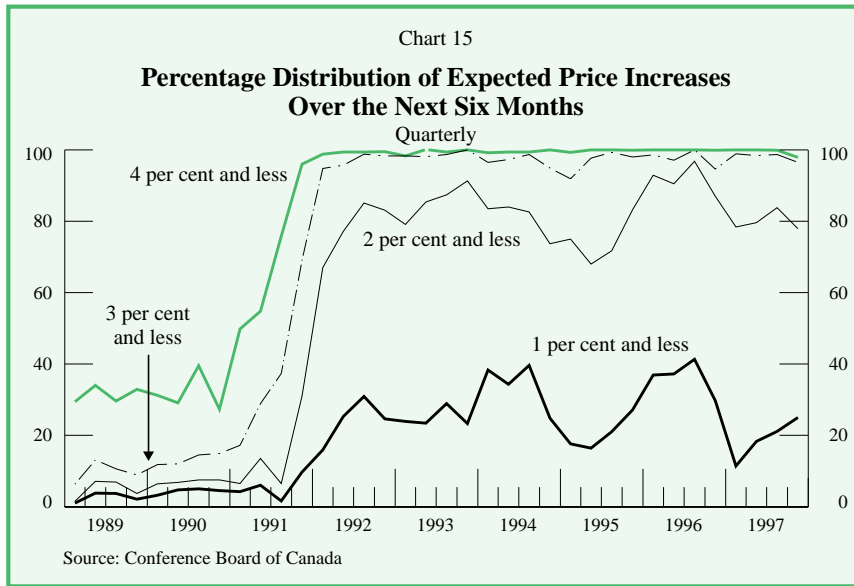
*The anticipated modest rise in unit labour costs would be consistent with core inflation remaining in the bottom half of the target range this year.*

Wage rates are expected to rise at a moderate rate through 1998 because of low price inflation and continued excess supply in the labour market. Productivity growth may edge down this year along with output growth, so unit labour costs may increase, but only modestly. Such an outlook for labour costs would be consistent with core inflation remaining in the lower half of the target range this year.

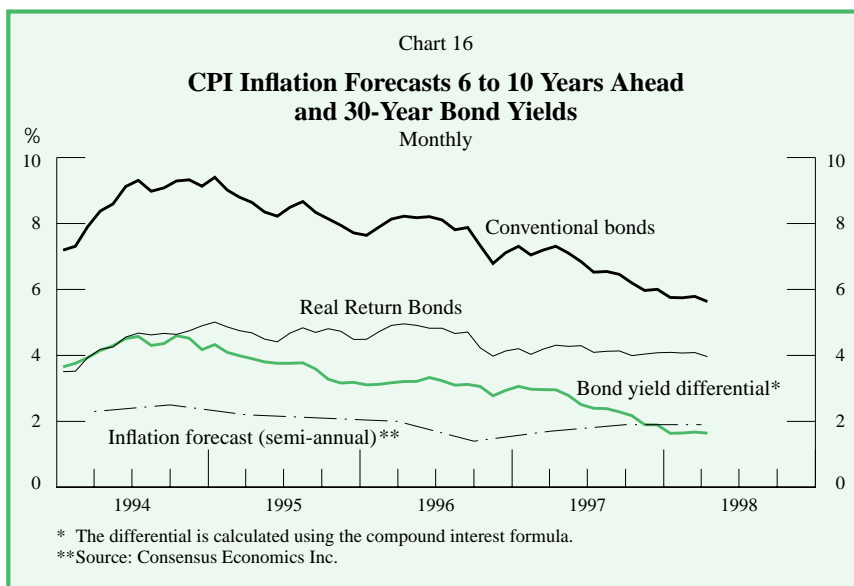
## Measures of inflation expectations

*Inflation expectations are still consistent with the inflation-control target range.*

In the regular survey reported in the Conference Board's December *Index of Business Confidence*, 78 per cent of respondents continued to expect inflation to be 2 per cent or less over the near term. This is down slightly from 84 per cent in the September survey (Chart 15). A survey of private forecasters by the Department of Finance in February showed CPI inflation averaging 1.5 per cent this year and 1.7 per cent in 1999. More recent projections for 1998 average 1.3 per cent. Over the past six months, forecasters have revised their near-term projections downwards (2 per cent had been predicted for 1998 last September) in response to the unexpected decline in inflation observed in November and December and expectations that slack in the economy would take longer to be absorbed. Long-term inflation forecasts gathered by Consensus Economics Inc. are very close to the midpoint of the target range (Chart 16).



As the yield on conventional bonds has continued to decline, so has the differential between the yields on nominal and Real Return Bonds (Chart 16). Since November, this spread has fallen below 2 per cent, the midpoint of the current inflation-control target range. This should not be taken as a precise estimate of the expected rate of inflation because the yield spread is also affected by differences in secondary market liquidity and by the shifting portfolio needs and preferences of investors. Nevertheless, the decline in the nominal-real interest differential is clear evidence that the financial markets have increasing confidence in low inflation over a long horizon.

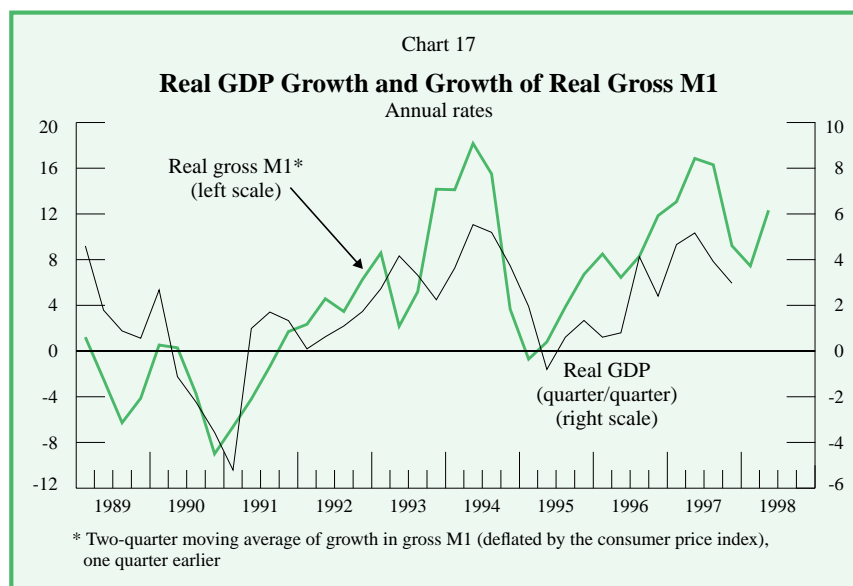


## Monetary indicators

*The monetary aggregates indicate robust output growth in 1998 and continued low inflation.*

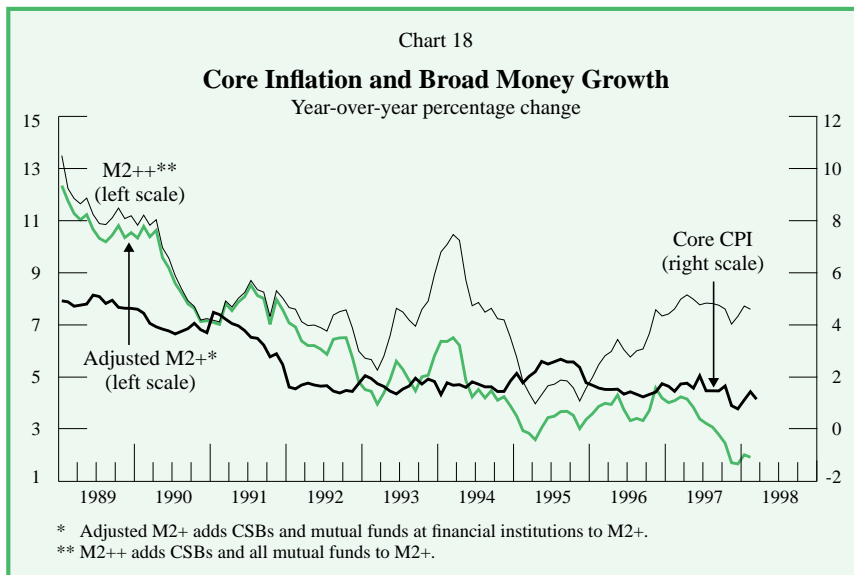
After slowing in the second half of 1997, the year-over-year growth of narrow money, M1, picked up in the first quarter of 1998.<sup>5</sup> However, slowing is expected to resume in the second half of 1998 and to continue into 1999. An appreciable part of the surge since 1996 has been due to the introduction of more attractive interest rates paid on demand deposits and to the decline of other short-term interest rates in recent years. The portfolio shifts occasioned by these developments should now be almost complete. The Bank estimates that a long-run rate of increase in M1 of about 2 to 5 per cent would be consistent with inflation within the target range and growth at potential.

The current rate of M1 increase remains high enough to support robust growth of output, and declining excess capacity, in the first half of 1998 (Chart 17). As the chart shows, there has been a fairly close correspondence over the business cycle between changes in the real value of M1 and those in GDP about two quarters later.



5. An article in the spring 1998 issue of the *Bank of Canada Review* provides a more detailed review of the developments in the monetary aggregates.

Broad money represents a liquid store of value. The Canadian broad aggregates consist mainly of liquid assets held by the personal sector, and their behaviour may carry information about the value of planned outlays by households. In fact, broad money has, in the past, been a good indicator of short-term nominal spending and core inflation. But the enormous shift from deposits to mutual funds has rendered the previously accepted definitions obsolete. For the time being, we can only estimate a range for the underlying growth. An adjusted M2+ aggregate, which contains only mutual funds sponsored by deposit-taking financial institutions, provides a lower bound; the corresponding upper bound can be derived from a very broad aggregate M2++, which includes all mutual fund holdings. On this basis, underlying broad money growth over the past year is estimated at between 1 and 7 per cent (Chart 18). The Bank is engaged in research to provide a more precise measure within this band. As matters stand, the rates of increase recently experienced seem to be in line with continued low inflation.



## Inflation projection

*Core inflation is expected to remain in the lower half of the inflation-control target range.*

Three factors should put some upward pressure on core inflation. First, inflation expectations appear to be above the current rate of inflation. Second, some of the effect of the intense competitive pressures in the retail sector that has been putting downward pressure on inflation should wear off in coming months. Third, the recent depreciation of the Canadian dollar will tend to raise prices slightly.

At the same time, there are factors that lead us to expect core inflation to remain below the 2 per cent midpoint: slack in product and labour markets; continued growth in productivity that will limit rises in unit labour costs; and downward pressure on the prices of imports from East Asia.

Overall, we expect our measure of core CPI inflation to increase slightly over the balance of 1998. Our projection for the end of the year and the first half of 1999 is between 1½ and 2 per cent. None of the factors at work imply a persistent rise in the trend rate of inflation.



## 5. CONCLUSIONS

In last November's *Report*, it was concluded, based on the strength of the economic outlook at that time, that measured steps to moderate the degree of monetary stimulus would be required over the medium term to preserve low inflation and bring about a long-lasting expansion.

This *Report* continues to present the view that the underlying momentum of the Canadian economy is strong. However, in light of the impact of the Asian situation and lower commodity prices, the outlook is not quite as strong as had been expected. On the basis of the evidence currently available, the average annual rate of economic expansion through to the middle of 1999 is projected to be about 3½ per cent.

Prospects for inflation are little changed. For the balance of 1998 and the first half of 1999, our measure of core CPI inflation is expected to rise slightly but to stay in the lower half of the inflation-control target range.

While the uncertainty surrounding the outlook is much greater than usual, the risks associated with it appear balanced. The main downside risks relate to developments in Asia and commodity prices. Offsetting these is evidence, particularly from the continuing strength of the U.S. economy and from the expansion of the narrow monetary aggregate, M1, in Canada, that the underlying momentum of the economy might be stronger than we expect.

When all these factors are considered, it is the Bank's judgment that between now and the next *Report*, monetary conditions in the recent range would be broadly appropriate in the absence of further shocks. This would be consistent with the above outlook of robust aggregate demand, the economy continuing to take up slack, and inflation inside the target range. Given the degree of uncertainty that is likely to persist over this period, monetary conditions may continue to fluctuate over a relatively wide range. Subsequently, if the underlying momentum of activity remains as strong as is currently expected, less-stimulative monetary conditions would be called for as the economy approaches and achieves full capacity.

*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.*



## APPENDIX

### **Inflation-Control Targets Extended\***

#### **Joint statement of the Government of Canada and the Bank of Canada**

The objective of Canadian monetary policy is to contribute to sustainable economic expansion, high levels of employment, and rising standards of living. The best contribution monetary policy can make to these goals is through preserving confidence in the value of money by providing an environment of stable average prices. Accordingly, the Government of Canada and the Bank of Canada today reaffirmed that monetary policy in Canada will continue to be oriented towards achieving and maintaining price stability and announced that the current inflation-control targets will be extended until the end of 2001.

Targets for reducing inflation were adopted in February 1991. In December 1993, the government and the Bank of Canada agreed to extend the targets from the end of 1995 to the end of 1998 with the objective of holding inflation inside the range of 1 to 3 per cent. It was also agreed that the targets would be re-examined by the end of 1998 and that a new long-term target range consistent with price stability would be set at that time.

Since the initial adoption of these targets, considerable progress has been made in reducing inflation and maintaining it at a low level. Economic decisions are increasingly being made on expectations of a continuation of low inflation, and Canadians are beginning to experience the benefits from such an environment. For example, low inflation, together with the progress made by all levels of government in Canada to restore fiscal balance, has resulted in a substantial decline in interest rates, with medium- and long-term interest rates near their lowest level in decades. However, over the past several years, the Canadian economy has been through a difficult period of private and public sector restructuring, and the full benefits for economic performance from low inflation have yet to be realized.

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\* Press release, 24 February 1998

It would be helpful to have a longer period of time in which the economy demonstrated more fully its ability to perform well under conditions of low inflation before determining the appropriate long-run target consistent with price stability. Consequently, the Government of Canada and the Bank of Canada have agreed to extend the existing inflation-control targets, which are to hold inflation inside the range of 1 to 3 per cent, to the end of 2001. The government and the Bank plan to determine the long-run target for monetary policy before the end of 2001. Providing Canadians with such a long-term commitment will help to secure the benefits that a stable price environment can bring to the growth of incomes and employment in Canada.

### **Implementation of policy under the targets**

The Bank will continue the current approach to implementing the targets, as set out in 1991 and developed over the years. This will include the following elements.

- The target will continue to be defined in terms of the 12-month rate of increase in the total CPI, and the operational guide for policy will continue to be the CPI excluding food and energy prices and adjusted for the effects of indirect tax changes, as before.
- Monetary policy actions will continue to focus on countering persistent upward or downward pressures on the trend rate of inflation, not temporary pressures that are expected to reverse, or one-off price level changes.
- In the case of large unforeseen shifts in supply or demand, inflation may temporarily move outside the target range. Monetary policy actions would then be directed to bringing the trend rate of inflation back towards the centre of the range over a period of about two years.
- More generally, since monetary actions have their effects on economic activity and inflation with long lags, policy actions must always be directed to responding to expected developments in inflation six to eight quarters in the future.
- The Bank of Canada will continue to report in its semi-annual *Monetary Policy Report* on inflation developments, actions to achieve the targets, and its assessment of the outlook for inflation in light of economic trends.

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