BANK OF CANADA

MONETARY POLICY REPORT

– November 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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Monetary Policy Report

— November 1998 —

The international developments of the past year have affected our economy more than previously anticipated. And there is no doubt that those Canadian industries and regions that depend on the production of primary commodities are facing considerable difficulties. [However,] it is important to remember that, overall, our economy is still in good shape. This is, first and foremost, because some basic aspects of our economic situation have improved markedly in the last few years. We now have a low rate of inflation, a fiscal surplus, and a declining (though still high) public debt-to-GDP ratio. As well, Canadian businesses have undertaken major restructuring and investment initiatives to increase their productivity. Because of these fundamental strengths, we are now better positioned to weather sudden shocks.

— Gordon Thiessen

Speech to the St. John's Board of Trade
St. John's, Newfoundland
23 September 1998

Contents

Canada's Inflation-Control Strategy

Inflation control and the economy

- Inflation control is not an end in itself; it is the means whereby monetary policy contributes to solid economic performance.
- Low inflation allows the economy to function more effectively and thereby contributes to better growth over time.
- Inflation-control targets ensure that monetary policy works to moderate cyclical fluctuations in income and employment. These targets help the Bank to make more accurate judgments about the growth potential of the economy.

The monetary policy instrument

- The Bank of Canada uses its influence on short-term interest rates to achieve a rate of monetary expansion consistent with the inflation-control target range. The transmission mechanism is complex and involves long and variable lags—the impact on inflation from changes in monetary conditions is usually spread over six to eight quarters.

The targets

- In February 1991, the federal government and the Bank of Canada jointly announced a series of targets for reducing inflation to the midpoint of a range of 1 to 3 per cent by the end of 1995. In December 1993, this target range was extended to the end of 1998. In February 1998, it was extended again to the end of 2001.
- By the end of 2001, the government and the Bank plan to determine the long-run target for monetary policy consistent with price stability.

Monitoring inflation

- In the short run, there is a good deal of movement in the CPI caused by transitory fluctuations in the prices of food and energy, as well as by changes in indirect taxes. For this reason, the Bank focuses on the CPI excluding food, energy, and the effect of indirect taxes. This measure is referred to as the *core* CPI.
- Over longer periods, the measures of inflation based on the total CPI and the core CPI tend to follow similar paths. In the event of persistent differences between the trends of the two measures, the Bank would adjust its desired path for core CPI inflation so that total CPI inflation would come within the target range.

1. Introduction

During the past six months, global economic uncertainties have intensified . . .

During the past six months, global economic uncertainties have intensified, largely as a result of developments in emerging-market economies. The task for the Bank of Canada, as for monetary authorities in other industrial countries, has been twofold: to assess the implications of those developments for domestic economic activity and inflation, and thus for the stance of policy; and to address the volatility and nervousness in financial markets.

In our May *Monetary Policy Report,* we noted that a high degree of uncertainty existed because of the international environment. On the one hand, the adverse developments in Asia, particularly in Japan, were increasingly weighing on the Canadian economy. On the other hand, a buoyant U.S. economy was providing strong support for Canadian exports. In these circumstances, it was anticipated that the volatility in interest rates and exchange rates could be exacerbated. This in turn would likely cause monetary conditions to fluctuate over a relatively wide range.

. . . leading to increased volatility in financial markets.

In late summer, the turbulence in global markets intensified as a result of developments in Russia, particularly the decision by the Russian authorities to unilaterally declare a debt moratorium. This unanticipated action reverberated through financial markets around the globe. Many emerging-market economies were hit by large capital outflows and a sharp widening of interest rate spreads as nervous investors sought a safe haven, primarily in U.S. and European government bond markets. Similarly, there was a widening of spreads between private sector bonds and government bonds and a reduction in liquidity in markets for more risky instruments.

The past six months have thus been a period of coping with a high degree of uncertainty and volatility in global financial markets and of assessing the economic consequences of international developments for Canada. This *Report* reviews the actions taken by the Bank of Canada. It also gives our current assessment of the domestic and international factors at play, focusing on their implications for the economy and for future inflation relative to the Bank's inflation-control target range.

Given international uncertainties, the conditional nature of the outlook must be stressed.

Given current international uncertainties, we must stress the highly conditional nature of the outlook. However, it is also important not to lose sight of the positive elements supporting continued expansion of the Canadian economy—a declining public sector debt-to-GDP ratio, restructuring of the private sector, and low and stable inflation.

This report includes information received to 21 October 1998.

2. Recent Developments in Inflation

Over the past six months, 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.

Inflation and the target range

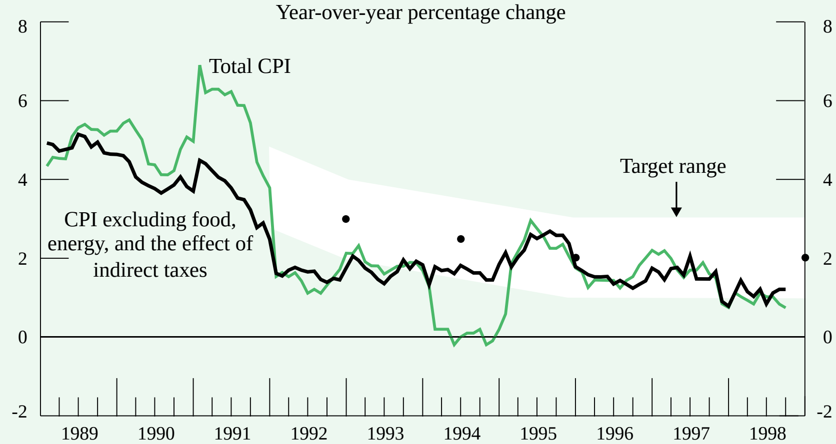
Since the last* Report*, core inflation has remained near the bottom of the Bank's target range . . .

The 12-month rate of increase in the core CPI was 1.2 per cent in September, unchanged from March and slightly lower than our expectations (Chart 1). Two other statistical measures of the trend rate of inflation (CPIX and CPIW)[1] have remained relatively stable at about the same level as core inflation (Chart 2).

Chart 1

Consumer Price Index

Year-over-year percentage change



• Midpoint of the inflation-control target range

. . . despite the depreciation of the Canadian dollar.

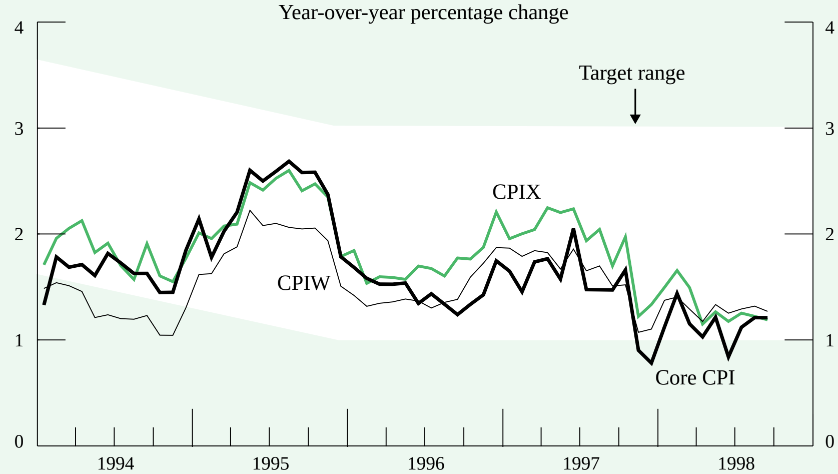
The fall in the external value of the Canadian dollar over the past year has pushed up prices in certain sectors. Although the depreciation of the Canadian dollar has contributed to a marked rise in the import prices of many non-energy consumer goods and services, only part of this effect has passed through to consumer prices, given the typical lags in this process. The depreciation has also contributed to increased demand for domestically produced goods and services and, hence, to price increases for such items as

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*.

hotel accommodation.[2] Overall, we estimate that the price-level effects of the depreciation account for 0.4 percentage points of September's core inflation rate. Another factor that may be putting upward pressure on core inflation is an expectation that, over the longer term, inflation will be higher than the current low levels.

Chart 2

The Core CPI and Statistical Measures of the Trend Inflation Rate



Other developments have acted to offset some of these influences on core inflation. Most importantly, excess supply in the economy and pressures from Asian suppliers have continued to restrain price increases. Competition in the retail sector has remained particularly intense, although the considerable number of store closures in the first half of 1998 has reduced excess retail capacity. In the long-distance telephone market, deregulation has increased competition and reduced rates. In addition, computer prices have been falling at an accelerated rate owing to technological change, lower component costs due to currency depreciations in Asia, and excess world capacity in the microchip industry.

Total CPI inflation was held down by lower oil prices.

For the total CPI, the 12-month rate of increase was 0.7 per cent in September, compared with 0.9 per cent last March. Further reductions in crude oil prices caused retail energy prices to decline, which in turn held back the overall rise in total CPI inflation.

Economy-wide, the price level has remained virtually unchanged.

Economy-wide, the price level has remained virtually unchanged. Year-over-year inflation based on the chain price index for GDP—which is characterized by weights that adjust to

2. For a detailed discussion of the effect of exchange rate changes on consumer prices, see Laflèche (1996–1997).

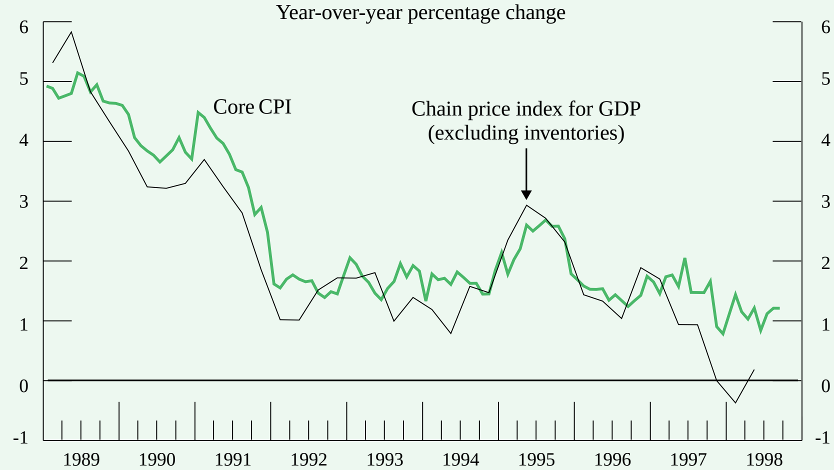
Price increases for consumer and investment goods were offset by lower commodity prices.

shifts in the composition of spending—was barely positive in the second quarter of 1998 (Chart 3). Moderate price increases for both consumer products and business fixed investment goods were offset by continuing reductions in the prices of commodity exports.

Chart 3

Chain Price Index for GDP and Core CPI

Year-over-year percentage change

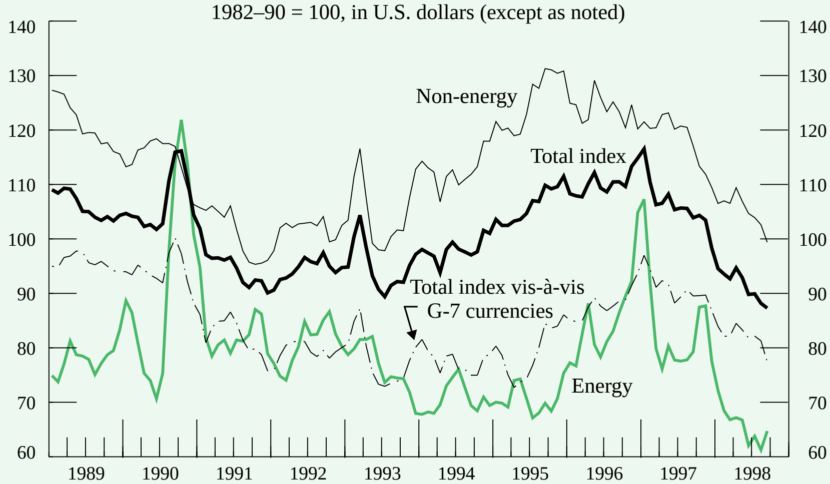


The declines in world commodity prices (Chart 4) reflected both demand and supply factors. Worldwide demand for commodities has fallen, primarily as a result of developments in Asia. Unusually large grain harvests and increased exports of metals, crude oil, and pulp from resource-rich countries were largely responsible for increased commodity supplies. There were also concerns that certain resource-rich countries that were having financial difficulties, such as Russia, might export more in the future.

Chart 4

Bank of Canada Commodity Price Index

1982–90 = 100, in U.S. dollars (except as noted)

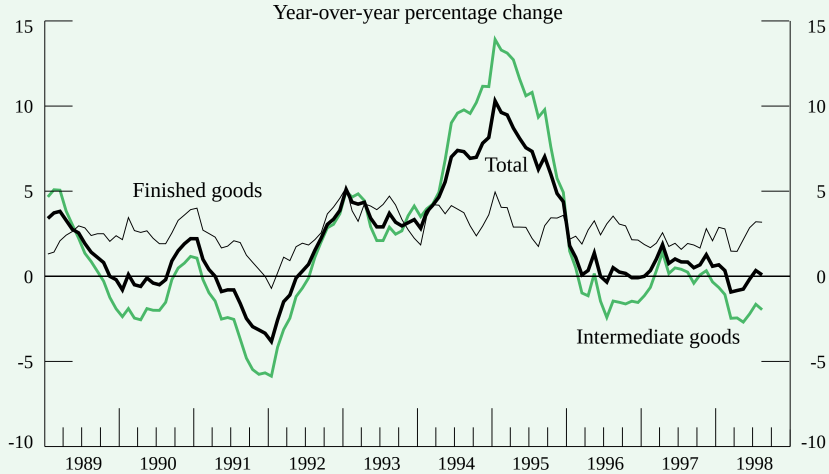


At the manufacturing level, the aggregate industrial product price index has changed little on a year-over-year basis (Chart 5). Prices of many finished exports with contracts in U.S. dollars, such as motor vehicles, increased appreciably following the depreciation of the Canadian dollar against the U.S. dollar. However, this has been largely offset by lower prices for most manufactured intermediate goods, which reflect weak commodity prices.

Chart 5

Industrial Product Price Index

Year-over-year percentage change



Factors at work on inflation

Aggregate demand and supply

Real GDP growth slowed in the first half of 1998.

Following robust growth during 1997, Canada's economic expansion slowed in the first half of 1998, as the effects of developments in Asia began to show through, particularly in the resource sector. In the first half of this year, real GDP rose at an annual rate of about 2 ½ per cent.[3] Information to date suggests that economic growth slowed somewhat further in the third quarter. The recovery from strikes in the fourth quarter of 1997 boosted activity in early 1998, while labour disruptions in the automotive, pulp and paper, housing, airline, and education sectors cut activity between June and September. However, when the first three quarters of 1998 are taken as a whole, these factors had little effect on growth.

Export growth, while still strong, moderated as a result of adverse developments in Asia and production disruptions in the auto industry.

Export volumes grew briskly in the first half of 1998 but eased from the vigorous pace of 1997. U.S. demand for machinery and equipment and intermediate goods continued to increase. However, exports of commodities (especially forest products) to Japan and other East Asian countries declined considerably (Technical Box 1). Exports of automotive products also fell sharply in June and July, mainly because of temporary shutdowns at General Motors, following labour disruptions at two U.S. parts plants. By early August, production had returned to normal.

Substantial employment growth contributed to continued marked gains in household expenditures.

Household expenditures increased strongly in the first half of 1998, though at a slightly lower rate than in 1997. Spending on items other than durable goods and housing continued to expand at a fairly robust pace, moving the savings rate to a record postwar low. In the first quarter of 1998, further substantial employment gains (especially in paid, full-time jobs) helped keep consumer confidence relatively high. Subsequently, employment growth eased, and there were renewed concerns over job prospects towards mid-year (Charts 6 and 7). New residential construction in the second quarter was also slowed by a series of strikes in the Toronto area. With those strikes largely settled by early August, housing starts recovered towards pre-strike levels.

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3. This *Report* does not incorporate historical revisions to the National Accounts published by Statistics Canada on 30 October. As a result of these revisions, which extend back to 1993, real GDP growth in the first half of 1998 was revised down. However, upward revisions to earlier years raised the level of GDP in the second quarter of 1998 above the previous estimate.

Technical Box 1

Recent Changes in Export Volumes

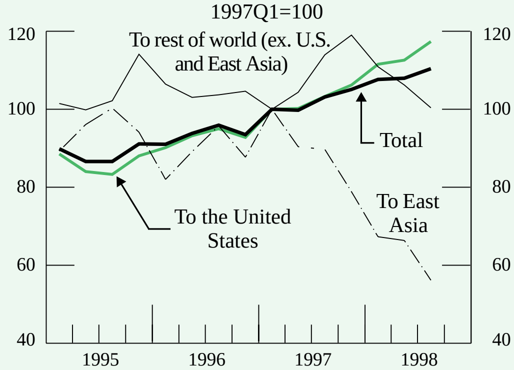
In 1998, Canadian export volumes (adjusted for the effects of the General Motors strike) have grown broadly in line with expectations. Exports have continued to rise considerably since the first half of 1997, chiefly because of the remarkable strength of U.S. domestic demand. However, overall export growth has been held back by the sharp fall in exports to East Asia,* owing to the significant weakening of economic activity in that region and the substantial appreciation of the Canadian dollar against Asian currencies.

Large gains in the sales of *finished goods* to the United States (such as machinery and equipment, automotive products, and other consumer goods) have driven the expansion in total exports since early 1997. Furthermore, exports of finished products have been affected only slightly by the worsening East Asian economic situation. These countries import relatively few finished goods from Canada. In addition, many Canadian exporters have existing medium-term contracts with U.S. importers.

Total exports of those *commodities most heavily traded with East Asia* (farm and fish products, lumber, pulp and paper, coal, metallic ores, aluminum, and organic chemicals)** have declined since the second quarter of 1997; Canadian producers appear to have reduced production and exports from high-cost facilities in response to the markedly lower selling prices for these commodities. The fall in exports to East Asia was partly counterbalanced by the strength of U.S. demand for intermediate goods. This strength, plus new Canadian capacity coming on stream, has also supported a significant rise in exports of *other commodities* since the second quarter of 1997.

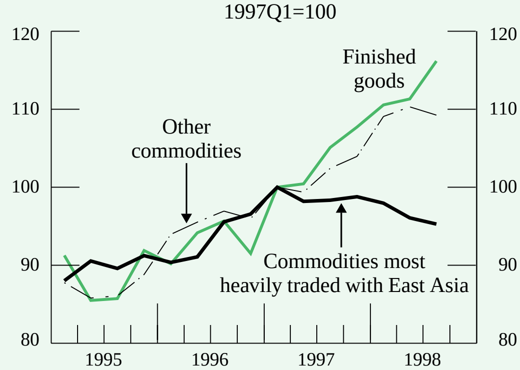
Estimated Canadian Export-Volume Indexes

1997Q1=100



Canadian Export-Volume Indexes

1997Q1=100



Note: Estimates for the third quarter of 1998 are based on July-August data.

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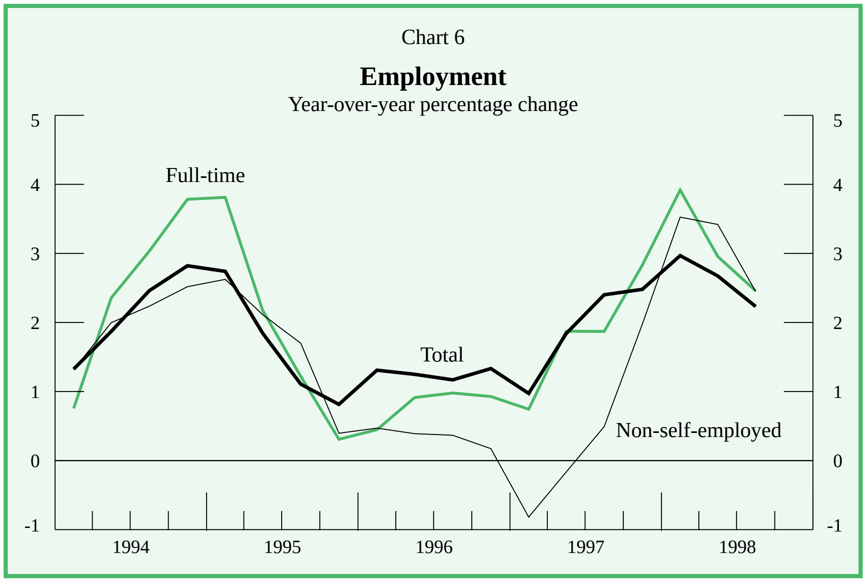
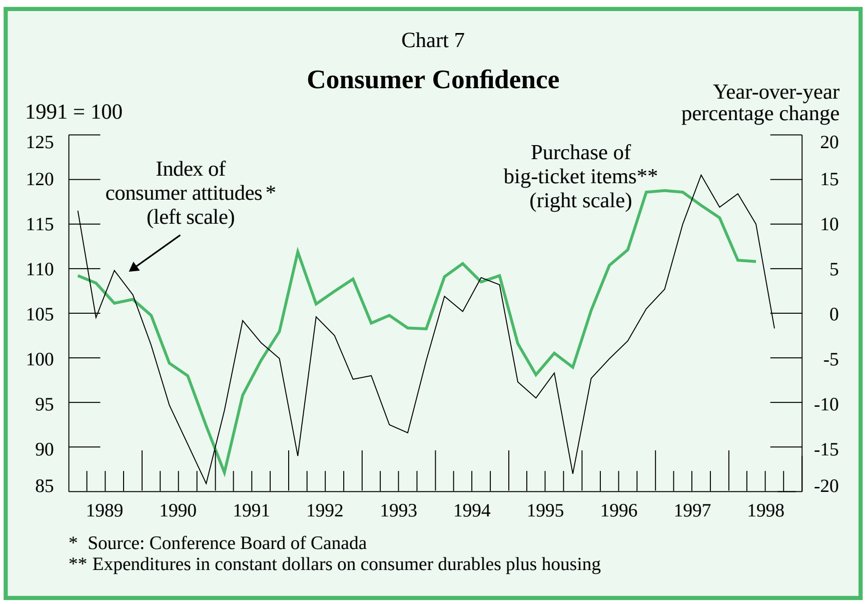
* For this discussion, East Asia comprises Japan, China, South Korea, Taiwan, Hong Kong, Singapore, Thailand, Indonesia, Malaysia, and the Philippines.

** About 20 per cent of Canada's exports of these commodities go to East Asia, representing more than two-thirds of our exports to this area. Shipments of these particular commodities also account for over 20 per cent of Canada's total exports worldwide.





The growth of business investment spending eased from the brisk pace of last year, and inventory investment fell considerably.

Business spending on capital goods grew less than last year, but was still substantial in the first half of 1998. Expenditures on structures rose at a faster rate than in 1997, while those on machinery and equipment slowed.

Inventory investment eased considerably, mainly in the wholesale and retail trade sectors. Department stores scaled back inventory levels to correct imbalances and as part of store closures.

The slowdown in the demand for import-intensive items, such as machinery and equipment and motor vehicles, contributed to a pronounced reduction in the growth of import volumes.

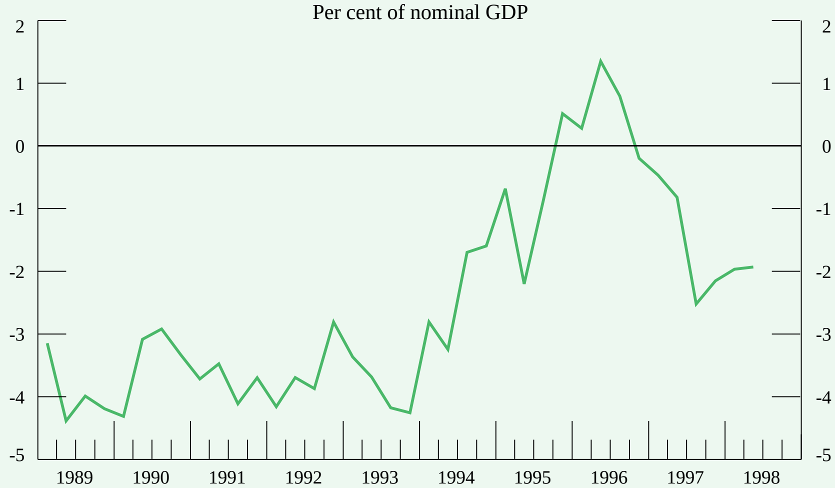
Domestic demand slowed, leading to reduced growth in import volumes.

The current account deficit narrowed marginally to just under 2 per cent of GDP at mid-year (Chart 8). An improvement in the real trade balance was largely offset by a further deterioration in the terms of trade arising from the continuing decline in commodity prices.

Chart 8

Current Account

Per cent of nominal GDP



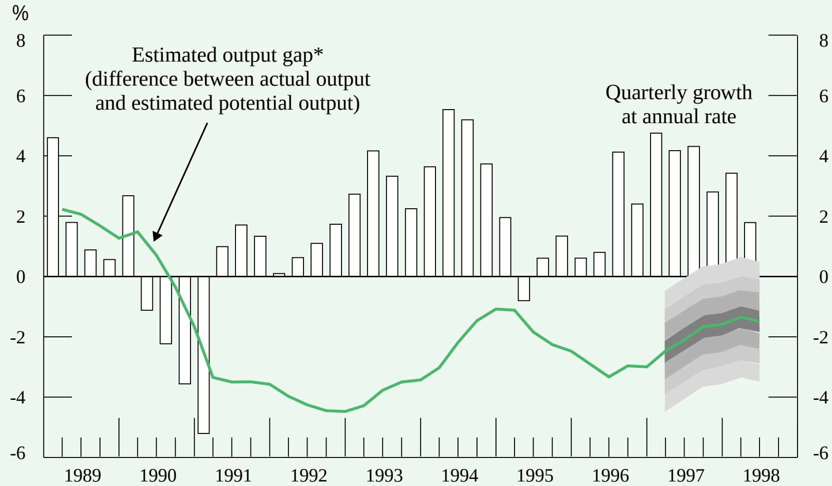
Overall, aggregate demand grew at about the same rate as the economy's capacity to produce in the first half of 1998. As a result, Bank staff estimate that the output gap—the amount of excess supply in the economy as a percentage of capacity output—was essentially unchanged from the end of 1997 (Chart 9).[4] Such estimates, it should be stressed, are highly imprecise and need to be viewed as points within a wide band of confidence in a statistical sense. Staff estimate that there is a 50 per cent probability that the output gap in the second quarter of 1998 was between ½ and 2½ per cent.

The amount of excess supply in the economy was almost unchanged.

4. The estimate of the output gap at the end of 1997 has been increased slightly to around 1½ per cent because of revisions by Statistics Canada to its estimates of real GDP for 1997, released with the first quarter 1998 National Accounts estimates.

Chart 9

Gross Domestic Product in Constant Dollars



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

Cost control

Wage increases remained moderate in the first half of 1998 . . .

Wages, the largest component of the total costs of producing goods and services, once again rose at a moderate pace. Annual wage settlements in the unionized private sector averaged 1.5 per cent in the first half of 1998, compared with 1.7 per cent in the second half of 1997 (Chart 10). Wage settlements in the public sector were a little higher, averaging 1.8 per cent in the first half of 1998. Based on these and other measures, the underlying wage increase in the total economy is estimated to have been close to 2 per cent. This is confirmed by wage data from Statistics Canada's *Labour Force Information*. For example, the year-over-year increase in the average hourly wage, excluding overtime, for permanent workers was 2.0 per cent in the third quarter of 1998.

. . . and unit labour costs rose only a little despite lower productivity growth.

Productivity growth moderated in the first half of 1998, mainly because of the slowdown in output growth. Even so, the year-over-year rise in unit labour costs remained very low because of moderate growth in labour income per person-hour (Chart 11). The growth of labour income per person-hour was unusually high in early 1997 because of the timing of irregular bonus payments.

Chart 10

Wage Settlements

Effective annual increase in base wage rates for newly negotiated settlements

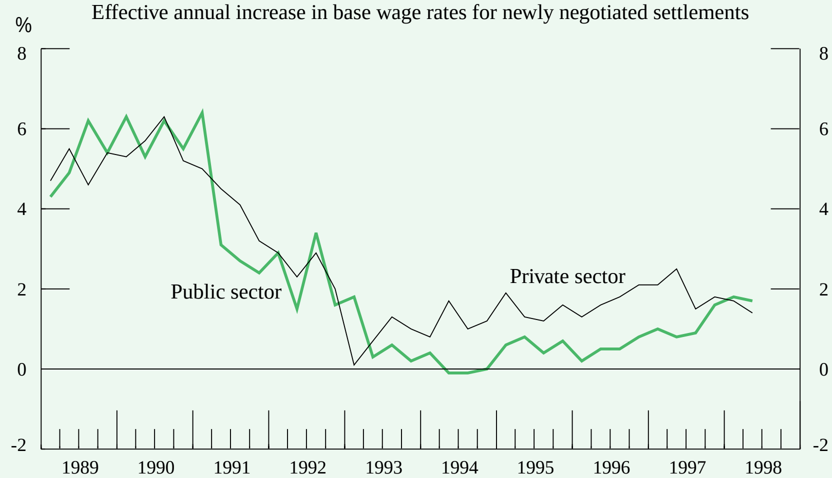
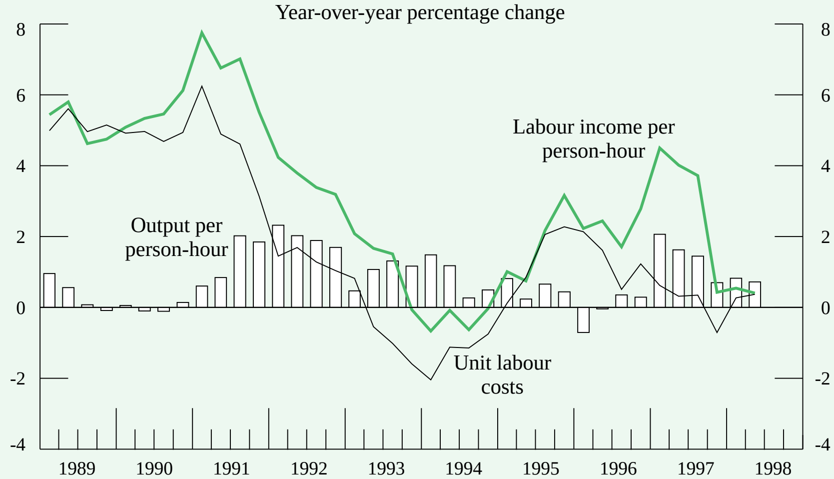


Chart 11

Unit Labour Costs and Labour Productivity

Year-over-year percentage change



3. Achieving the Inflation-Control Targets

Global economic uncertainties have led to turbulence in financial markets.

Over the past six months, the conduct of monetary policy has been influenced by: the implications for the Canadian economy of the slowdown in world economic activity and the associated decline in commodity prices; intensified turbulence and uncertainty in global financial markets; the decline of the Canadian dollar in the context of these developments; and the effect of these factors on the outlook for inflation in Canada.

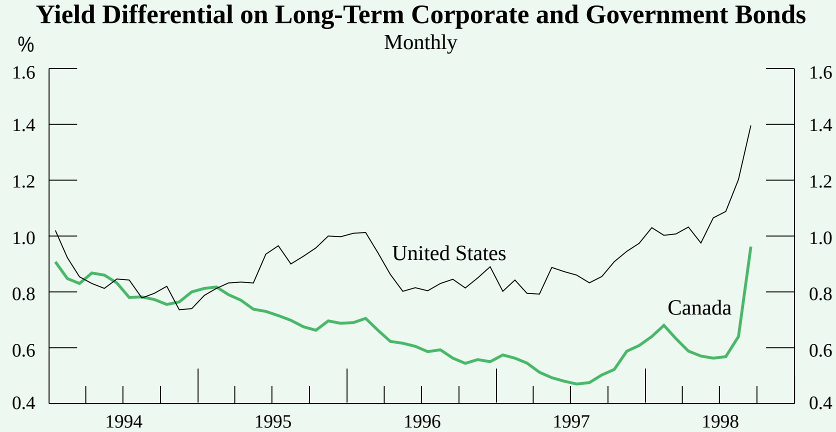
The crisis that began in Southeast Asia in 1997 spread to South Korea and worsened the problems already afflicting Japan, the world's second-largest economy. This summer, renewed political and economic turmoil in Russia further jolted confidence. Subsequently, some Latin American economies came under financial pressure. While there was an element of contagion in this chain of events, it is also the case that serious weaknesses in the emerging-market economies, particularly in their banking systems, played an important role. In several of these countries, as well as in Japan, it is not yet clear how quickly the necessary far-reaching reforms will be implemented.

The acute uncertainties have resulted in volatile prices for all types of financial assets around the world. A flight to quality has favoured government bond markets in the G-10 countries, while raising the premiums for credit risk in other markets. Thus, interest rates in emerging markets have risen dramatically, and yield spreads between corporate and government bonds in the United States and Canada have widened appreciably (Chart 12).

Chart 12

Yield Differential on Long-Term Corporate and Government Bonds

Monthly



Note: The Canadian differential is not strictly comparable to the U.S. differential because the quality of corporate bonds included in the calculation for the United States is not strictly comparable to the quality of those included in the calculation for Canada.

These developments have also directly affected the Canadian dollar. Because Canada's trade depends more on resources than that of our major trading partners, there was downward pressure on the Canadian dollar as commodity prices continued to fall. From May through the first weeks of August, the dollar declined fairly steadily, for a cumulative depreciation of about 4 per cent on the G-10 index and of more than 5 per cent against the U.S. dollar (Chart 13). In the second half of August, the pace of decline picked up, and it became increasingly difficult for the market to see where the currency might eventually settle. Extrapolative expectations began to take hold, especially as the value of the Canadian dollar in terms of the U.S. dollar broke new lows day after day.

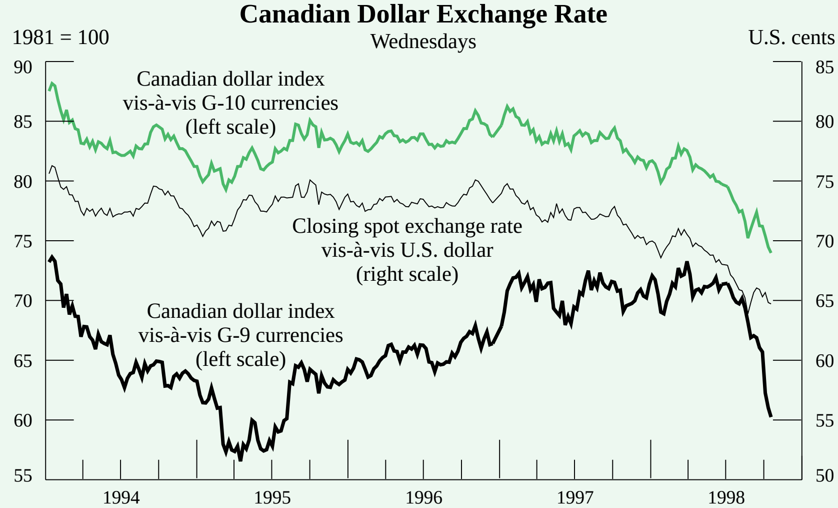
As the Canadian dollar came under sharp downward pressure . . .

. . . extrapolative expectations began to take hold . . .

Chart 13

Canadian Dollar Exchange Rate

Wednesdays



The increased risk premiums that emerged in Canadian interest rates became increasingly worrisome. Long-term interest rates were rising at a time when comparable rates in the United States were falling (Chart 14). Consequently, the long-term yield differential against the United States, which had been negative for a year, turned positive, and approached 50 basis points towards the end of August. Also, short-term interest rates rose (the 90-day commercial paper rate nearing 5 1/4 per cent), even though the Bank of Canada was holding the band for the overnight interest rate at 4.5 to 5.0 per cent (Chart 15).

. . . and higher risk premiums in Canadian interest rates emerged.

The intensification of the decline in the Canadian dollar and the rise in Canadian medium- and long-term interest rates signalled an undermining of the confidence of holders of Canadian dollar financial instruments. The Bank initially intervened heavily in the foreign exchange market, and then on 27 August raised the

The Bank raised the overnight rate by 100 basis points to counter a loss of confidence in financial markets.

Bank Rate by 1 percentage point to counter the negative pressures in financial markets.

Chart 14

Yields on Long-Term Federal Government Bonds

Daily

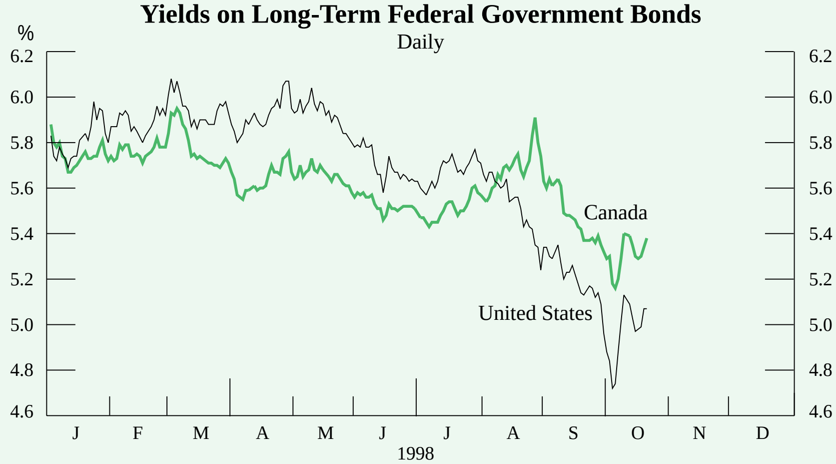
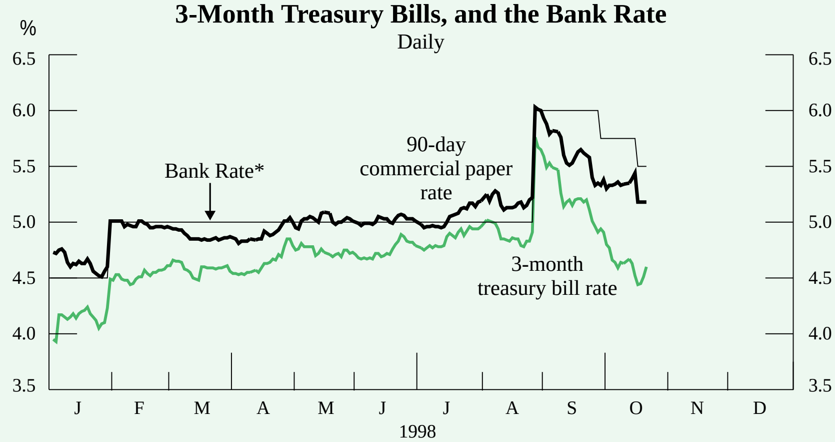


Chart 15

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

Daily



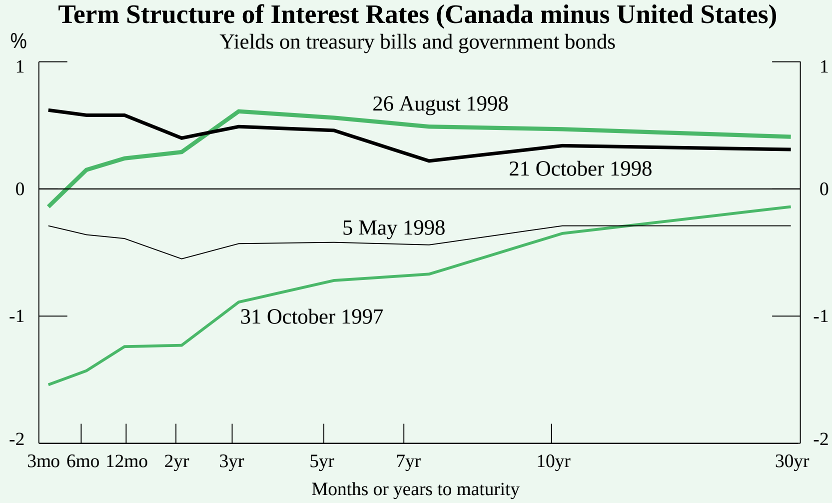
* As of February 1996, the Bank Rate has been the upper limit of the operating band for the overnight rate.

International financial markets remained nervous, and considerable volatility continued in global and Canadian financial markets. However, the Canadian dollar rallied after the Bank Rate increase, and the medium- and long-term yield spread vis-à-vis the United States narrowed (Chart 16). Indeed, as U.S. treasury yields continued to decline, Canadian medium- and long-term rates fell to new lows. In turn, this allowed mortgage lenders to reduce their rates. The improvement in Canadian financial markets stemmed largely from the improved confidence engendered by the Bank Rate increase and growing expectations of lower U.S. rates. When the Federal Reserve lowered its target federal funds rate by 1/4 of a percentage point on 29 September, the Bank of Canada followed suit, reducing the Bank Rate to 5 3/4 per cent. The Federal Reserve again reduced the federal funds rate by 1/4 of a percentage point on 15 October. The next day the Bank lowered the Bank Rate by a similar amount, to 5 1/2 per cent.

Chart 16

Term Structure of Interest Rates (Canada minus United States)

Yields on treasury bills and government bonds



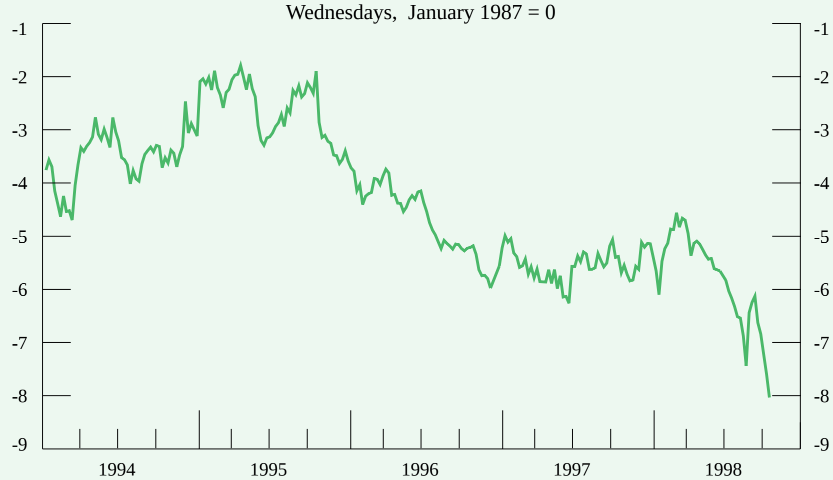
Monetary conditions have fluctuated widely and, on balance, have eased considerably.

In summary, heightened uncertainties and a slowing economy over the past six months have affected the conduct of monetary policy in two important respects. First, the Bank has had to place particular emphasis on calming financial markets, so that participants could focus on economic fundamentals, thus helping to restore confidence. Second, as anticipated in the May *Report*, monetary conditions have fluctuated widely but, with the sizable decline in the dollar over the period, have, on balance, eased considerably (Chart 17).

Chart 17

Monetary Conditions Index

Wednesdays, January 1987 = 0



4. The Outlook for Inflation

When analyzing the outlook for inflation over the next two years, the Bank pays particular attention to the main 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. When undertaking its analysis of economic prospects, the Bank is well aware of the uncertainty inevitably associated with its projections. It therefore also considers projections by other organizations, as well as alternative scenarios that assess the implications of important risks to the assumptions underlying the outlook.

Aggregate demand and supply

The economic and financial upheavals that began in Asia continue to adversely affect our economy.

The situation in various Asian economies and recent developments in other emerging-market economies (such as Russia and some Latin American countries) have resulted in a downward revision to estimates of global economic growth this year and next. However, growth is expected to be reasonably well sustained in North America, continental Europe, and the United Kingdom, given the underlying momentum in domestic demand in these economies. Among the G-7 countries, Japan is the main exception, reflecting weakness in both macroeconomic conditions and in the banking sector. Indeed, most of the downward revision to economic growth among industrial countries in the latest

World Economic Outlook (WEO) of the International Monetary Fund is the result of a much weaker outlook for Japan.[5]

The U.S. expansion is expected to continue, although at a slower pace . . .

In the United States, the pace of economic expansion once again exceeded the growth in potential output during the first half of 1998. However, the rate of increase in real GDP is expected to ease as a result of the international economic slowdown and the fallout from financial market nervousness.

U.S. core inflation (which excludes food and energy prices) has remained between 2 and 2.5 per cent. It is expected to change little over the next year, since the past appreciation of the U.S. dollar and declines in commodity prices should offset any upward pressures arising from excess demand in labour markets.

In response to the economic consequences of international developments, unsettled conditions in financial markets generally, as well as a concern about credit availability resulting from cautious behaviour by lenders, the Federal Reserve lowered short-term interest rates in late September and again in mid-October. In the context of contained inflation, these actions are designed to sustain economic growth in the United States. Financial markets have built in expectations of further interest rate cuts.

. . . while the solid rate of expansion in Europe should persist.

Although the pace of recovery in the major European countries, particularly Germany, appears to have moderated around mid-year, economic growth is expected to be well sustained through the end of 1999. In the United Kingdom, where capacity constraints have been a concern, the economic expansion has begun to slow. In response to domestic developments and unsettled international financial markets, the Bank of England lowered its official rate by 25 basis points to 7 1/4 per cent on 8 October.

Economic recovery in Japan, however, will be slow.

The Japanese economy contracted substantially during the first half of 1998. Further contraction is anticipated in the second half of the year, given worsening labour market conditions, falling domestic and foreign demand, and increasingly difficult financing conditions for firms. On the assumptions that monetary conditions will remain accommodative, that progress will be made on banking sector reform, and that additional fiscal policy stimulus will be undertaken, a modest recovery is expected in Japan in 1999.

5. The following table compares economic growth rates of the latest WEO with those (in parentheses) from last spring's WEO.

	1998	1999
World output	2.0 (3.1)	2.5 (3.7)
Industrial countries	2.3 (2.4)	2.0 (2.4)
Japan	-2.5 (0.0)	0.5 (1.3)
Industrial countries excluding Japan	3.1 (2.8)	2.3 (2.6)

Excess commodity supplies worldwide should gradually diminish. Thus, world commodity prices are expected to begin a gradual recovery next year.

Improved competitiveness will support further growth of exports . . .

Turning to Canada, we note that developments in Japan and in many of the emerging economies, together with the anticipated slowdown in the growth of the U.S. economy, will tend to restrain the growth of Canadian exports over the next year. As well, Canadian shipments of commodities from high-cost sites may be further cut back until commodity prices recover significantly. Overall, however, total export volumes should continue to expand because of improved Canadian competitiveness, arising from the recent currency depreciation and from Canada's good price and cost performance relative to its trading partners (Technical Box 2). Exports of automotive products have already recovered, following the end of labour disruptions that had adversely affected operations at General Motors' Canadian facilities.

. . . and will encourage Canadians to switch from foreign to domestic products.

Canada's improved competitiveness is also expected to lead to more switching by Canadian business and consumers from foreign to domestic products, resulting in a further decrease in the growth of imports.

Growth of business investment and household expenditures is expected to slow.

The growth of business investment is expected to slow through to the end of 1999, with the extent of the slowdown a function of the state of business confidence. A reduction in cash flow arising from the downturn in commodity prices will likely cause resource-based firms to spend less. Capital spending on electrical utilities in eastern Canada is also likely to fall back after being raised temporarily this year by the rebuilding of electrical transmission and distribution networks following last winter's ice storm. Inventory investment may also be reduced further in 1999 as some firms correct stock imbalances.

The effects of international developments are also evident in the labour market and in the recent measures of consumer confidence. While total employment has continued to expand, job gains have been concentrated in the service sector and in part-time employment, with jobs in the primary sector and in related manufacturing processing down sharply. These developments in the labour market, together with the recent financial market turmoil, have led to a decline in consumer confidence. If confidence does not recover quickly, an expected slowdown in household demand would likely persist through the balance of this year and well into 1999.

Technical Box 2

Measuring International Competitiveness

Competitiveness has many dimensions. One is the evolution of a country's prices or costs relative to a weighted average of those of its main competitors, expressed in the same currency. This is usually referred to as the *real exchange rate*. International organizations such as the International Monetary Fund (IMF), the Organisation for Economic Co-operation and Development (OECD), and the Bank for International Settlements (BIS) regularly publish real exchange rate indexes for Canada and other countries. These indexes differ in terms of the price series that are compared across countries, in the number of countries that are considered as potential competitors, and in the weights used.

Over time, there may be appreciable differences in the evolution of the various indexes. Our research shows that, for Canada, observed differences are caused more by the different evolution of the price series used than by the set of competitor countries or the weights applied. Chart 1 compares the evolution of Canada's consumer prices (CPI), adjusted for exchange rate movements, to those of the United States, the G-10 countries, and 42 industrial and emerging-market countries. It shows that broadening the set of countries does not significantly affect the measurement of the real exchange rate.

Chart 2 compares measures based on three different price series. The J.P. Morgan index compares the evolution of Canada's producer prices (PPI) with those of 44 industrial and emerging-market countries. The IMF series compares Canada's unit labour costs (ULC) in the manufacturing sector with those of 16 industrial countries. The BIS series reflects the evolution of Canada's CPI relative to prices in 25 mainly industrial countries. Of the three price measures, the CPI is probably the most familiar. However, it includes a large number of non-traded goods and imports. Producer prices cover a narrower range of goods, most of which are tradable. But the homogeneous nature of these goods makes it unlikely that large price differences would be observed between countries. Unit labour costs in manufacturing are considered by some to give a better picture of a country's competitive position, although they are subject to problems of measuring productivity. Their strength is that they compare an important component of costs in a sector that is highly exposed to international trade. Nevertheless, their omission of other costs and of the competitive position of other sectors means that they are not comprehensive.

Chart 1

Real CPI-Based Exchange Rate Measures: Country Coverage

January 1993=100

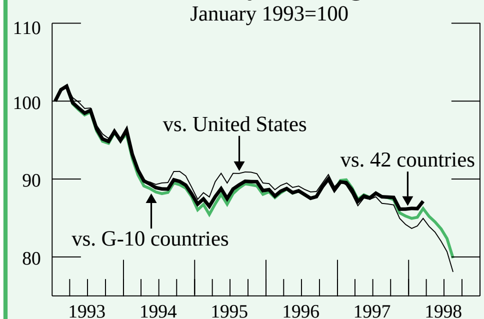
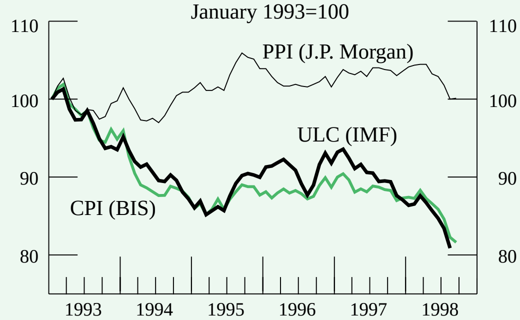


Chart 2

Real Exchange Rate Measures: Selected Price Indexes

January 1993=100



The latest consensus among private sector forecasters for the growth of real GDP (on an annual average basis) is 2.9 per cent this year and 2.2 per cent in 1999.[6] In June, the consensus forecast was 3.4 per cent and 2.8 per cent for 1998 and 1999, respectively. As already noted, it is important to stress the conditional nature of economic projections at this time because of the degree of international uncertainty. On the assumption that domestic demand in the United States and in Europe remains on an expansionary track (as is generally anticipated), the Bank would expect GDP growth to be within a range around the consensus rate of just under 3 per cent this year. For 1999, there are two key uncertainties—volatility in global financial markets and the policy thrust in Japan. With progress expected to be made on both these fronts, the Bank sees growth in Canada next year in the range of 2 1/4 to 3 1/4 per cent. The latest IMF and OECD projections for economic growth in Canada next year are just above the lower end of this range. Projections at the upper end of the range depend primarily on a stronger response of net exports (i.e., higher exports and lower imports) to current levels of competitiveness than incorporated in most private sector forecasts.

Temporary factors affecting inflation

The price-level effects from the depreciation of the Canadian dollar will temporarily add to inflation pressures . . .

The depreciation of the Canadian dollar against the U.S. dollar should continue to put upward pressure on the prices of many imported goods and services over the next year or so. Price discounting might decrease over the next year and a half, as restructuring results in less excess capacity in the retail sector. At the same time, currency depreciations and weak economic conditions in several Asian countries may lead to greater price cutting on items such as clothing and durable goods, as retailers take advantage of cheaper foreign sources of supply. On balance, these transitory factors should put slight upward pressure on core inflation through 1999.

For the total CPI, exchange rate effects on food prices are expected to put upward pressure on the year-over-year rate of increase through the fall and winter of 1998–99.

Cost control

. . . while increases in unit labour costs should remain low.

Wage increases are likely to be moderate over the remainder of 1998 and through 1999, owing to both low price inflation and continued excess supply in the labour market. To the extent that

6. Department of Finance (1998).

productivity gains continue to be comparatively modest, the rate of increase in unit labour costs may rise slightly but should remain low.

Measures of inflation expectations

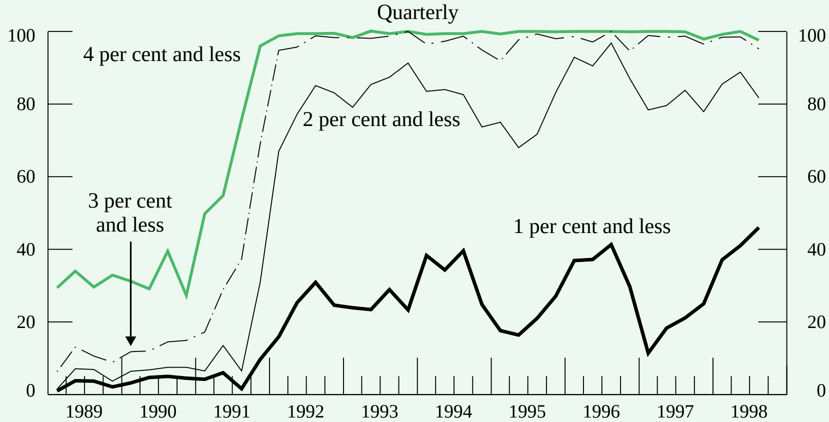
Longer-term inflation expectations are still well within the inflation-control target range.

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 September *Index of Business Confidence*, 82 per cent of respondents (compared with 86 per cent in the March 1998 survey) expected inflation to be 2 per cent or less over the near term (Chart 18). The average private sector forecast for CPI inflation is 1.2 per cent this year and 1.6 per cent in 1999. Longer-term inflation forecasts, as reported by Consensus Economics Inc., also continue to be slightly below the midpoint of the inflation-control target range (Chart 19).

Chart 18

Percentage Distribution of Expected Price Increases Over the Next Six Months

Quarterly



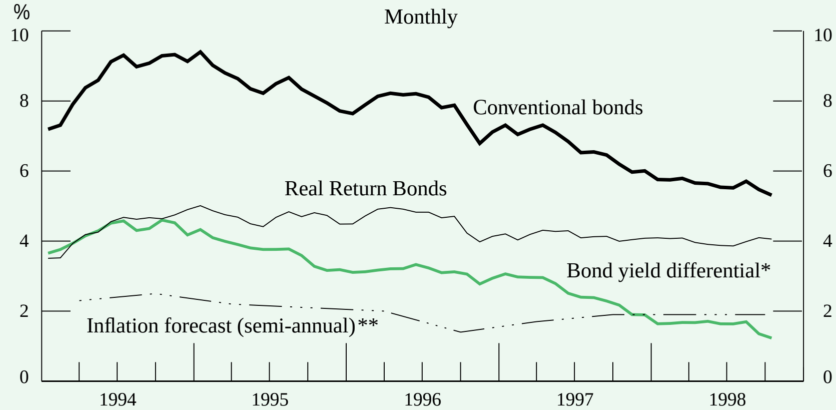
Source: Conference Board of Canada, *Index of Business Confidence*

The differential between the yield on conventional bonds and Real Return Bonds has declined further (Chart 19). While this differential is affected by market liquidity and portfolio preferences, its steady decline to less than 1 1/2 per cent is evidence that investors are increasingly confident that inflation will remain low over the long run.

Chart 19

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

Monthly



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

Monetary indicators

Monetary aggregates indicate steady output growth and low inflation.

M1 growth has moderated. This is attributable in part to the rise in short-term interest rates since mid-1997. However, evolving structural factors have continued to influence M1 developments over time. The distinction between transactions balances included in M1 and other deposits has become less marked since the phasing-out of reserve requirements. This has permitted a shift back to current accounts, which now pay market-related rates of interest on tiered balances. At the same time, other innovations such as debit cards, ATMs, and telephone or personal-computer banking allow non-M1 accounts to be accessed more easily for transactions purposes, which may be reducing M1 balances.

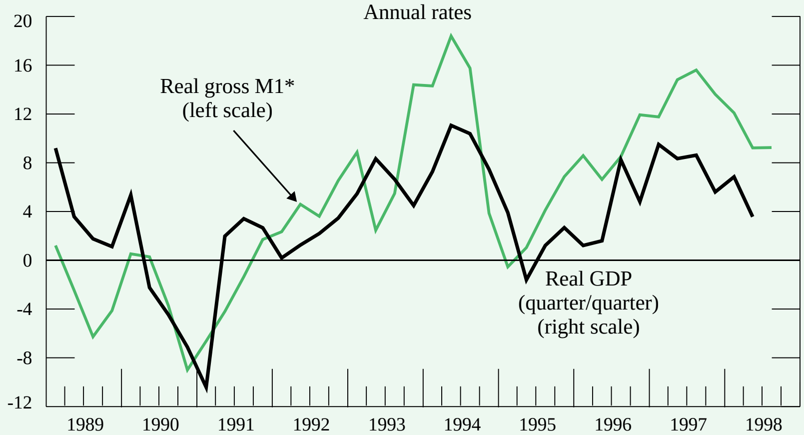
Real M1 (adjusted for inflation) has been a good leading indicator for output (Chart 20), and recent research suggests that M1 might also help predict longer-term developments in price levels. Its recent growth suggests that output should continue to grow at a rate near potential and that inflation will remain inside the target range, although the innovations affecting M1, discussed in the preceding paragraph, make these projections more uncertain than before. Over the longer run, M1 is expected to slow considerably from its recent growth rates, unless there are further significant structural developments that would make M1 balances more attractive.

Broad money has been an indicator of short-term movements in output and the core CPI (Chart 21). Given the enormous shift from deposits to mutual funds in the 1990s, it is probably most informative for this purpose to look at the very broad aggregate M2++, which includes all mutual funds sold in Canada. (The adjusted M2+ aggregate includes only those funds sponsored by the deposit-taking institutions.) M2++ has been growing fairly steadily at a rate of about 8 per cent, which appears consistent with continued low inflation.

Chart 20

Real GDP Growth and Growth of Real Gross M1

Annual rates



* Two-quarter moving average of growth in gross M1 (deflated by the consumer price index), one quarter earlier

Chart 21

Core Inflation and Broad Money Growth

Year-over-year percentage change

* Adjusted M2+ adds CSBs and mutual funds at financial institutions to M2+.

** M2++ adds CSBs and all mutual funds to M2+.

Inflation projection

Core inflation is expected to rise a little more . . .

Three factors should contribute to some further modest increase in core inflation to the end of 1999. First, longer-term inflation expectations are somewhat above actual inflation. Second, some of the downward pressure on prices arising from intense competition in the retail sector should ease over the period. Finally, the recent depreciation of the Canadian dollar against the U.S. dollar will tend to raise prices.

. . . but remain in the lower half of the inflation-control target range.

Several influences, however, will work to keep core inflation below the 2 per cent midpoint of the target range: slack in product and labour markets; low increases in unit labour costs; and reductions in the price of imports from Japan and various emerging-market economies in Asia.

In summary, the Bank expects core inflation to rise to about $1\frac{1}{2}$ per cent at the end of 1998 and then to be fairly steady in a range between $1\frac{1}{4}$ and $1\frac{3}{4}$ per cent over the course of 1999.

5. Conclusions

Over the past six months, economic projections for Canada have been lowered significantly because of the adverse consequences of international developments. Moreover, the ongoing uncertainties associated with these developments have placed a wider-than-usual confidence band around all projections.

Based on a view of sustained domestic demand in the United States and accommodative monetary conditions in Canada, the Bank expects that both external and domestic demand will continue to contribute to an expanding Canadian economy over the next year. However, given the importance of financial stability for underpinning household and business confidence, the extent to which growth will take up slack over this period will depend on how quickly international and domestic financial markets stabilize.

An important consideration for the Bank over the near term will therefore be to help preserve confidence among investors in Canadian financial markets.

Over the medium term, the fundamental focus of monetary policy remains on keeping the trend of inflation inside the Bank's target range of 1 to 3 per cent. As described in the *Report*, we expect inflation over the period to the end of 1999 to remain in the lower half of the target range.

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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