MONETARY POLICY

It has been 15 years since Canada adopted an inflation-targeting framework to guide its monetary policy. During this time, consumer price index (CPI) inflation has been reduced to a low, stable, and predictable level of close to 2 per cent, real output has expanded at an average rate of 3 per cent per year, and the unemployment rate has fallen to 30-year lows.

Joint Statement of the Government of Canada and the Bank of Canada on the Renewal of the Inflation-Control Target
23 November 2006

Experience in Canada and elsewhere has shown that the best contribution monetary policy can make to the economic well-being of households and businesses is to follow a strategy aimed at delivering low, stable, and predictable inflation. This objective is pursued not as an end in itself, but as a means of promoting sustainable economic growth and stability. The inflation-targeting framework introduced in 1991 is designed to facilitate the achievement of this objective, and to improve the Bank of Canada's accountability, by specifying an explicit target for the annual rate of increase in the consumer price index (CPI). In November 2006, the Government of Canada and the Bank of Canada renewed Canada's inflation-control framework for a further five-year period, maintaining the inflation target at the 2 per cent midpoint of a 1 to 3 per cent control range.

Monetary policy in Canada was quite successful in 2006, but was not without significant challenges. Although CPI inflation remained within the inflation-control range for most of the year, and averaged 2 per cent, the macroeconomic environment required some adjustment of the Bank's primary monetary policy instrument: the overnight interest rate.

In 2006, as throughout the 2003–06 medium-term plan, the Bank analyzed economic and financial developments, undertook high-quality research, and communicated clearly and openly. Priorities over the duration of the plan and for 2006 included deepening the analysis of sectoral developments, enhancing the Bank's projection models, improving its understanding of external developments and their implications for the Canadian economy, and assessing Canada's experience with targeting inflation.

Meeting the Inflation Target

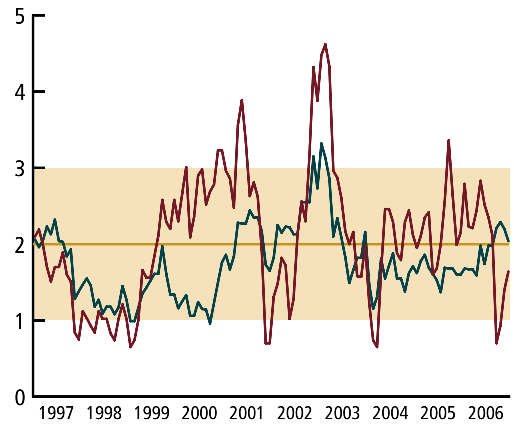
The major challenge for monetary policy during 2006 was to keep the macroeconomy in balance and CPI inflation close to the 2 per cent target, while facilitating the adjustment that was under way across many economic regions and sectors of the country. As the year began, the Canadian economy was judged to be operating close to its production capacity, and unemployment was hovering near 30-year lows. During the first five months of 2006, the overnight interest rate was raised on four successive occasions, withdrawing some of the monetary stimulus that had been introduced earlier to help the economy respond to external shocks.

Although the economy was judged to be operating with slight excess demand by mid-year, the Bank decided to leave the target overnight interest rate unchanged at 4.25 per cent at its July fixed announcement date and through the rest of the year. The Bank's baseline projections, incorporating a balanced view of the risks, suggested that this level of the overnight interest rate was consistent with achieving the 2 per cent inflation target over the medium term. In its annual examination of the Canadian economy, the IMF commented that "The Bank of Canada has adroitly balanced … competing risks, and has appropriately left rates on hold since May."[1]

Inflation, as measured by the 12-month growth rate of the CPI, was quite volatile over 2006, moving from a high of 2.8 per cent in January to a low of only 0.7 per cent in September, and then rebounding to an average rate of 1.5 per cent through the final months of the year (see chart). Most of the variability through this period was related to dramatic movements in oil and natural gas prices. But the sharp decline in inflation recorded in the second half of the year reflected the combined influence of a one-percentage-point reduction in the Goods and Services Tax that became effective in July and the spike in energy prices a year earlier in the wake of Hurricane Katrina.

Consumer Price Index

Year-over-year percentage change



* CPI excluding eight of the most volatile components and the effect of changes in indirect taxes on the remaining components

Core inflation, which excludes eight of the most volatile components of the CPI, as well as the effects of changes in indirect taxes, followed a very different track. It remained within a narrow range of 1.6 to 2.0 per cent during the first half of 2006, and then rose to a high of 2.2 per cent in the final quarter, in response to a strong economy and rising housing prices.

1. *Preliminary Conclusions of the IMF Mission*, 2007 Article IV Consultation with Canada, 7 December 2006

Achieving the Bank's objectives for the target overnight interest rate posed challenges in the spring, when there was strong downward pressure on the rate on overnight loans secured by government collateral. To reinforce its objectives for the overnight interest rate, the Bank undertook numerous sale and repurchase agreements (SRAs) and announced that it would typically leave the level of balances at zero and would not commit to neutralizing the effect of the SRAs. As the downward pressure on collateralized loan rates continued, the Bank occasionally left the level of settlement balances in the system in deficit after undertaking SRAs. These cost incentives encouraged market participants to trade overnight funds at levels closer to the target rate.

Renewing the Inflation-Control Target

On 23 November, the Bank of Canada and the Government of Canada renewed Canada's inflation-targeting framework for another five years. While the main elements of the inflation-targeting framework remain unchanged, research was undertaken on several related issues in anticipation of the renewal, with a view to strengthening and clarifying the manner in which the framework is applied. Three issues received special attention: the role of core inflation measures; the time horizon over which policy-makers should aim to return inflation to target following a shock; and the recognition that should be given to asset prices in the context of inflation targeting.

The background document published by the Bank of Canada at the time of the renewal also indicated the need for further research on the type of policy framework that would best contribute to the economic well-being of Canadians in the decades ahead. Two issues were highlighted. The first was, what are the costs and benefits of an inflation target lower than 2 per cent? The second was, what are the costs and benefits of replacing the current inflation target with a longer-term, price-level target? Over the next three years, the Bank plans to lead a concerted research effort focused on these broad questions. Other researchers are invited to join in this effort. The goal is to complete this research before 2011 to ensure enough time for discussion of the results and their implications.

Assessing International and Domestic Developments

The formulation and implementation of monetary policy requires comprehensive and detailed monitoring of international and domestic developments, as well as longer-term research. Information is drawn from Statistics Canada and from many international sources, as well as from outreach programs and frequent meetings with representatives of Canadian industry and labour. This is combined with the Bank's own work, including surveys conducted by the five regional offices, to get a clearer view of current economic conditions in Canada and the world and of their likely future paths.

Staff projections and the Bank's short-term monitoring of the Canadian economy also rely on econometric models. The most important of these is ToTEM (Terms-of-Trade Economic Model), the Bank's new dynamic stochastic general-equilibrium model, which came into

***Regional outreach**: Peter Kinley (left), President of Lunenburg Industrial Foundry & Engineering, shows Deputy Governor Tiff Macklem (centre) and Senior Regional Representative David Amirault around the company's shipyard in Lunenburg, Nova Scotia, June 2006.*

full use at the start of 2006.[2] ToTEM is used for forecasting, risk assessments, and policy simulations of the Canadian economy. Two other large models, MUSE and GEM, provide information on the evolution of the U.S. and global economies.[3]

Issues that received particular attention in 2006 include the macroeconomic risks associated with changing distributions of household debt; the determinants of potential output and productivity growth; the linkages between the financial and real sectors of the economy; the responsiveness of exports and imports to exchange rate movements and income growth; and the determinants and consequences of sectoral and regional adjustment in Canada.

2. See the article "ToTEM: The Bank of Canada's New Projection and Policy-Analysis Model," in the autumn 2006 issue of the *Bank of Canada Review*, for more information.
3. MUSE stands for Model of the U.S. Economy, and GEM stands for Global Economy Model.

Carrying Out Longer-Term Research

Not all of the Bank's analytic resources are devoted to monitoring and forecasting activities. Longer-term research is equally important. It improves our understanding of how economies operate and how they are likely to respond to various policy initiatives.

Over the period of the 2003–06 medium-term plan, these research activities have focused on such important topics as determinants of price and wage behaviour in Canada; the effects of productivity growth and shifting demographic trends on potential output; and sectoral adjustments to external shocks. Much of the research effort through 2005 and 2006, however, was directed towards identifying possible

Bank of Canada Fellowship Program

Launched in 2002, the Bank's Fellowship Program is designed to recognize and encourage leading-edge research in areas critical to the Bank's mandate: macroeconomics, monetary economics, international finance, and the economics of financial markets and institutions (including issues related to financial stability). Successful candidates receive an annual stipend for a renewable five-year period, together with additional funds for research assistance and related expenses.

The 2006 Fellowship was awarded to Professor Gregor Smith, who is recognized internationally for his work in empirical macroeconomics, open-economy macroeconomics, and economic history. With this appointment, there are now five Fellows participating in the program.

Fellowship award for 2006 *(left to right): Senior Deputy Governor Paul Jenkins, Governor David Dodge, Professor Gregor Smith of Queen's University (Fellowship recipient), and Dr. David Barnard, Director and Chair of the Nominating Committee*

improvements to the Bank's inflation-targeting framework and related issues, in anticipation of the target renewal. These and other areas of interest are described in greater detail on the Bank's website at <www.bankofcanada.ca/en/fellowship/highlights_res_06.html>.

The Bank's research efforts benefit from outside commentary and insights, and from partnerships with external authors. This infusion of ideas and the active debate that it sometimes generates, have been aided by an ambitious program of external publications and the active participation of Bank staff in numerous conferences, seminars, and workshops. Some of these have been organized by the Bank, others were hosted by universities, research institutes, and other outside bodies. During 2006, Bank staff published 21 papers in refereed journals and books, 49 working papers, made 167 external presentations, and hosted 11 conferences and workshops at the Bank of Canada.