

Monetary Policy Decision Making at the Bank of Canada

John Murray, Deputy Governor

- Canada's monetary policy framework and the process that the Bank of Canada follows to make its decisions have evolved over time.
- The decision-making process is very information-intensive and collaborative, drawing on the expertise, judgment and analysis of many people.
- This article discusses monetary policy decision making at the Bank, focusing on how the process is organized; the key information that is collected, shared and interpreted as part of the process; and some common misconceptions about monetary policy and the factors affecting the decision-making process.

Canada weathered the financial crisis that erupted in 2007–08 better than most of its peers, thanks in part to the healthy condition of its banks, prudent regulation of the financial industry and the country's strong fiscal position, which allowed the government to implement aggressive countercyclical measures.

The Bank of Canada's monetary policy, guided by the inflation-targeting framework put in place over 20 years ago, also played a critical role in Canada's performance throughout the crisis and the recovery that followed. The Bank provided significant and timely monetary policy stimulus and, through its hard-earned credibility, helped to anchor household and business confidence during a turbulent time. The decision-making process underlying its monetary policy actions, in normal as well as exceptional periods such as the crisis, involves a great deal of consultation, research and analysis by Bank staff.

This article discusses monetary policy decision making at the Bank,¹ and touches on three related topics: (i) how the monetary policy decision-making process is organized; (ii) the information that is collected and interpreted as an important part of this process; and (iii) common misconceptions about both monetary policy and the factors affecting the decision-making process.

¹ This article updates and extends a May 2012 speech of the same title (Murray 2012). It also draws extensively from Macklem (2002).

A Brief Primer on Monetary Policy

Before describing the decision-making process, it will be helpful to provide some background information on monetary policy itself.

Monetary policy in Canada has one objective—achieving and maintaining a low, stable and predictable level of inflation. This objective was formalized in 1991 in an inflation-control agreement between the federal government and the Bank of Canada. The agreement identifies a specific target for the rate of inflation—the midpoint of an inflation-control range—as well as the price index that is to be used to measure inflation. Since 1995, the target level for the inflation rate has been 2 per cent (within a control range of 1 to 3 per cent), as measured by the 12-month rate of change in the total consumer price index.

Achieving a targeted inflation rate may seem like a rather narrow objective—a notion that will be revisited later—but experience has shown that this is the best contribution monetary policy can make to the economic well-being of Canadians. The greater certainty that low and stable inflation provides regarding the future path of prices allows households and businesses to make more-informed spending and investment decisions, and minimizes the inequitable impact of unexpected movements in the overall level of prices. Keeping inflation low, stable and predictable is a means to an end, not an end in itself.

Under normal circumstances, this objective is pursued using a single policy instrument or tool—changes to the overnight rate of interest.² The Bank sets the overnight rate, which determines the rates at which banks and other selected agents are able to borrow and lend at the shortest end of the yield curve. Movements in the overnight rate also set in motion a number of other changes throughout the economy that ultimately affect the rate of inflation.

The transmission mechanism

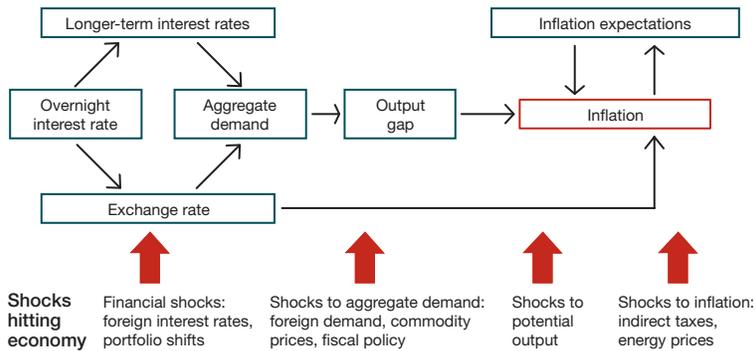
Through the monetary policy transmission mechanism (Figure 1), changes in the overnight interest rate influence the interest rates that the market sets on securities further out the yield curve, as well as rates on securities with different risk and liquidity characteristics (for example, bonds, equities and mortgages). These changes also influence the exchange rate—the external value of the Canadian dollar. The resulting movements in asset prices, in turn, affect aggregate demand in the Canadian economy by influencing the spending and investment decisions of both Canadians and foreigners.

If strong aggregate demand pressures appeared likely to push output above the economy's capacity limits and lift inflation above the 2 per cent target, the Bank would respond by raising the overnight rate. This would put upward pressure on other interest rates and the exchange rate, all other things being equal, dampening aggregate demand and stabilizing inflation at the 2 per cent target. The process would be reversed if demand were too weak and inflation seemed likely to fall below 2 per cent. The overnight rate would be lowered, boosting aggregate demand and increasing inflation. It is important to note that the Bank takes a symmetric approach to the pursuit of its monetary policy objective; it is as concerned about undershooting

◀ *Achieving a targeted inflation rate is the best contribution monetary policy can make to the economic well-being of Canadians*

² In exceptional circumstances, central banks have several other, unconventional monetary policy tools at their disposal, including quantitative easing, credit easing and conditional commitments concerning the path of future interest rates (sometimes referred to as “guidance”). These tools have been used by a number of central banks in the past five years as a means of providing additional monetary policy stimulus once the overnight interest rate approached zero and hit its effective lower bound. For more information, see Bank of Canada (2009) and Santor and Suchanek (2013).

Figure 1: The monetary policy transmission mechanism



the 2 per cent target as overshooting it. Keeping actual output at or near potential is the only way that inflation can be maintained at a low, stable and predictable level.

Establishing an explicit inflation target and consistently achieving it helps to build credibility, anchor the inflation expectations of businesses and households, and make monetary policy more effective. An explicit inflation target improves the transparency and effectiveness of the Bank’s communications and also provides a direct means by which the Bank’s performance can be judged, thereby improving accountability.

The Bank’s job would be easy if, having achieved the target rate of inflation, it could simply leave the overnight rate of interest where it was and allow the economy to run. In reality, this is impossible. The economy is constantly being buffeted by shocks of varying size and duration from both internal and external sources. By their very nature, these shocks are difficult to anticipate. Indeed, it is often difficult to identify the nature and potential intensity of a shock until well after it has occurred. Moreover, monetary policy affects the economy with long and variable lags. Adjustments to the policy rate made now would typically take four to six quarters to have their full effect on economic activity, and six to eight quarters to have their full effect on inflation (essentially, two years). Policy therefore has to be forward looking, and policy-makers must make their decisions in conditions of considerable uncertainty.

◀ *Policy has to be forward looking, and policy-makers must make their decisions in conditions of considerable uncertainty*

Fixed announcement dates

Before December 2000, the Bank had no fixed or pre-announced schedule for its interest rate decisions. Instead, it stood ready to move whenever action was deemed appropriate. While this approach may appear sensible, and certainly allowed for a great deal of flexibility, experience in Canada and elsewhere showed that it also added uncertainty to what was already a very unpredictable operating environment. Businesses, households and market participants never knew when the Bank was going to move rates. The unscheduled approach also made coordinating the Bank’s forecasting and policy decision-making activities difficult.

To avoid these problems and make the process more predictable, the Bank moved to a system of fixed announcement dates (FADs). The Bank now makes its interest rate decisions on eight pre-announced dates throughout the year, with an interval of six to seven weeks between each one. In exceptional circumstances, the Bank reserves the right to change the policy rate on dates that fall outside this schedule. This has occurred on only two

occasions over the past 13 years—on 17 September 2001, following the terrorist attacks in the United States, and on 8 October 2008, as part of a synchronized policy easing with other central banks during the financial crisis.

The timing of the FADs corresponds to the release of key economic information used for the Bank's forecasting and monitoring exercises. Four of the FADs occur shortly after the publication by Statistics Canada of the quarterly National Accounts, which report on Canada's gross domestic product and its various subcomponents. The other four FADs occur midway between these dates and are also timed to coincide with the availability of important economic information.

Decision-makers at the Bank of Canada

The major participants in the decision-making process are the Governing Council, the Monetary Policy Review Committee (MPRC) and the four economics departments at the Bank.³

The Governing Council, which is responsible for making the interest rate decision, includes the Governor, the Senior Deputy Governor and four Deputy Governors. The MPRC, which plays an important role in the discussions leading up to the decision, consists of the Governing Council plus five or six advisers—often supplemented by one or two special advisers—as well as the chiefs of the four economics departments, the heads of the Montréal and Toronto regional offices, and other senior personnel.

The four economics departments are Canadian Economic Analysis; International Economic Analysis; Financial Stability, which focuses largely on the activities of Canadian and foreign financial institutions; and Financial Markets, which concentrates on domestic and foreign financial markets.

These participants share their information, analysis, experience and judgment with members of the Governing Council, who make the final decision. The Bank makes every effort to minimize the inherent uncertainty and risk associated with policy-making by drawing on useful information and insights that are available both inside and outside the Bank. External information includes data series from agencies such as Statistics Canada; current analysis and forecasts from other central banks, governments, international financial institutions and private sector economists; information obtained through the Bank's *Business Outlook Survey* of firms and our *Senior Loan Officer Survey* of banks; and academic research. All of this external information is combined with the contributions of Bank staff.

The information that flows from all of these sources is comprehensive and diverse and contributes, at each stage of the process, to the final decision on monetary policy.

A Five-Stage Decision-Making Process

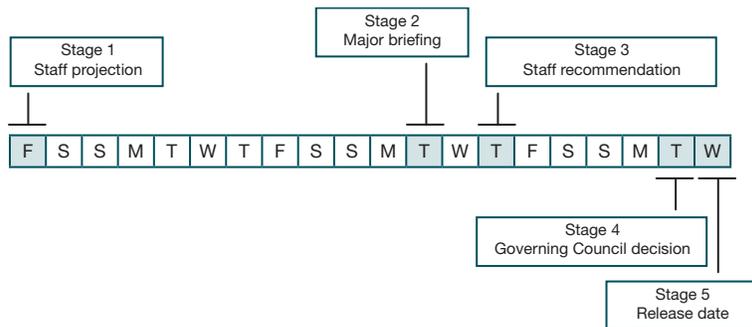
The monetary policy decision-making process comprises five key stages (Figure 2).

Stage 1. The presentation of the staff projection to the Governing Council occurs approximately two and a half weeks before the interest rate decision. This projection has at its centre the Bank's latest forecasting and policy

◀ *The Bank makes every effort to minimize the inherent uncertainty and risk associated with policy-making by drawing on useful information and insights from both inside and outside the Bank*

³ The exact process varies among FADs. The process described here relates to the quarterly FADs, for which a full projection exercise is conducted, following the release of Canada's National Accounts. The four FADs that occur between these projections involve fewer participants and follow a more condensed schedule.

Figure 2: The five-stage monetary policy decision-making process



simulation model, ToTEM II.⁴ Results from this model are supplemented by information drawn from a number of other sources and alternative models, which examine a specific sector in greater detail (a satellite model) or view the economy using a different paradigm or set of data.⁵

ToTEM II and many of the other models used by the Canadian Economic Analysis Department rely critically on inputs provided by the International Economic Analysis Department and its global macroeconomic model, GMUSE, again supplemented by many other pieces of information and alternative models.⁶ Since Canada is an open economy, international developments, such as movements in commodity prices, growth in Asian demand and prospects for the U.S. economy, play a major role in determining the path of the Canadian projection.

The combined output of all of these models and analyses is blended with judgment to produce a base-case or most likely scenario, which is presented at this first meeting with the Governing Council. A number of key risks and alternative scenarios are also identified at this meeting. Staff then work on these scenarios in preparation for Stage 2, the major briefing.

Stage 2. While Stage 1 involves mainly the Canadian Economic Analysis and International Economic Analysis departments, the major briefing, which occurs approximately one and a half weeks later, draws importantly on all four economics departments. There are six key inputs to this meeting:

- (i) an updated monitoring of economic developments and risks;
- (ii) the *Business Outlook Survey*, compiled by the Bank's five regional offices;
- (iii) a report focusing on capacity pressures and alternative indicators of inflation;
- (iv) an analysis of money and credit conditions;

⁴ The acronym stands for Terms-of-Trade Economic Model, version II. For more information on ToTEM and ToTEM II, see Fenton and Murchison (2006); Murchison and Rennison (2006); Dorich, Mendes and Zhang (2011); and Dorich et al. (2013).

⁵ For descriptions of alternative models that the Bank uses in its analysis of current economic conditions, see Binette and Chang (2013) and Granziera, Luu and St-Amant (2013).

⁶ GMUSE has been the main projection model used in the International Economics Analysis Department since 2011. It is a macroeconomic model comprising blocs for the United States, the euro area, Japan, China and the rest of the world. See Blaggrave, Godbout and Lalonde (forthcoming) for a discussion of GMUSE, and Barnett and Guérin (2013) for a description of other models used for monitoring key foreign economies.

- (v) the Bank's *Senior Loan Officer Survey*; and
- (vi) an overview of financial market conditions and monetary policy expectations in Canada, the United States and the rest of the world.

Stage 3. The final policy recommendations of staff are typically presented on a Thursday, two days after the major briefing. A senior member of the Canadian Economic Analysis Department or International Economic Analysis Department summarizes and updates the outlook and risks that have been presented in stages 1 and 2, and provides a recommendation regarding any policy action to be taken. The overview and recommendation serve as the starting point for an extensive discussion by the entire MPRC. Tactical and communications issues associated with various policy options are then reviewed, based on a note prepared by the Financial Markets Department. The meeting concludes with each member of the MPRC, except for the six Governing Council members, providing a policy recommendation.

Stage 4. The Governing Council decision-making process begins on Thursday afternoon, immediately after the Stage 3 discussions, and resumes on the following Monday. Members of the Governing Council review the information and recommendations that they have received, exchange views, and explore any outstanding issues and differences in opinion. Further discussions are held on Tuesday, a decision is reached by consensus, and a press release is drafted and approved.

Stage 5. The final stage of the process focuses on the publication of the press release at 10 a.m. on Wednesday, announcing the Bank's decision and explaining the reasons behind it. Four times a year, this message is reinforced and expanded on with the synchronous release of the *Monetary Policy Report*, which provides a more detailed account of Canadian and global economic developments, the Bank's projections, and the major upside and downside risks that could affect the inflation outlook.

In addition to the *Monetary Policy Report*, two other publications are released four times a year, approximately one week before the interest rate decision. The *Business Outlook Survey* summarizes the results of the quarterly interviews that the Bank's five regional offices conduct with a representative sample of businesses across the country. This survey is an important complement to the other material that the MPRC and the Governing Council rely on and serves as a "reality check" on regional economic developments. The second publication is the *Senior Loan Officer Survey*, which is based on interviews conducted with major banks and financial institutions in Canada to determine whether lending conditions for businesses have eased or tightened in the previous three months.⁷

The final elements of the Bank's communication effort around the four issues of the *Monetary Policy Report* are a press conference by the Governor and the Senior Deputy Governor, as well as their appearances before the House of Commons Standing Committee on Finance and the Senate Standing Committee on Banking, Trade and Commerce.

The Bank places a great deal of importance on communication. It is a critical part of our accountability to Canadians and enhances the effectiveness of monetary policy by increasing the public's understanding of the economy and our actions.

⁷ These publications are part of the information presented at the major briefing. See the key inputs to Stage 2.

Five Common Misconceptions About Monetary Policy

Despite the Bank's emphasis on communication and the considerable time that is devoted to these activities, there is often some confusion about the objectives that underlie the Bank's decision-making process and about the constraints that some observers mistakenly assume limit the Bank's scope for independent action. Following are five of the most common misconceptions and the Bank's response to them.

Misconception 1: Monetary policy in Canada is essentially determined in the United States by the Federal Reserve. As a relatively small open economy, highly dependent on trade with its southern neighbour, Canada has no choice but to follow the Federal Reserve's lead.

The Bank pursues an independent monetary policy that is tailored to the conditions prevailing in the Canadian economy in order to achieve the 2 per cent inflation-control target. This independence is possible because Canada has a separate currency and a flexible exchange rate. If we had a common currency and/or a fixed exchange rate, this would not be the case. There have been notable differences in Canadian and U.S. interest rates over time, reflecting the varying economic circumstances in each country and differences in the appropriate monetary policy settings.

◀ *The Bank pursues an independent monetary policy that is tailored to the conditions prevailing in the Canadian economy in order to achieve the 2 per cent inflation-control target*

Misconception 2: Monetary policy in Canada is largely guided by exchange rate considerations.

The level and variability of the exchange rate can have important effects on an open economy such as Canada's. However, the exchange rate is one of many variables that the Bank considers when it sets monetary policy. Most critical from the Bank's perspective is the combined influence of all of these variables on the outlook for economic activity and what this implies for meeting the 2 per cent inflation-control target. The Bank does not have a target for the exchange rate. Our only monetary policy objective is low, stable and predictable inflation.

Misconception 3: The Bank's narrow focus on inflation ignores more important objectives such as full employment and a rising standard of living.

Experience has shown that price stability is the most important contribution that the Bank can make to the economic welfare of Canadians. Since the introduction of inflation targeting in 1991, the low and stable inflation environment has allowed consumers and businesses to manage their finances with greater certainty about the future purchasing power of their savings and income. Interest rates have also been lower, in both nominal and real terms, across a range of maturities. Low, stable and predictable inflation has helped to encourage more-stable economic growth in Canada, as well as lower and less-variable unemployment.

◀ *Low, stable and predictable inflation has helped to encourage more-stable economic growth in Canada, as well as lower and less-variable unemployment*

Misconception 4: Focusing on price stability limits the Bank's ability to pursue its other major objective, financial stability.

While at times there may appear to be tensions between these objectives, they are inextricably linked; it is impossible to achieve one without maintaining the other. Although other policy levers, such as bank regulation and macroprudential tools, are typically the first lines of defence in promoting financial stability, monetary policy can, in exceptional circumstances, play a complementary role in achieving this end. Fortunately, there is sufficient

flexibility in the current monetary policy framework to promote financial stability while also meeting our inflation target over the medium term. One is not sacrificed for the benefit of the other.⁸

Misconception 5: If the Canadian economy is operating close to capacity (i.e., near full employment) and inflation is at, or close to, the 2 per cent target, interest rates have to be close to their “normal” or “neutral” levels.

If there were no forces acting on the economy to push it away from this desired state, the statement would be true. However, this is seldom the case. Headwinds and tailwinds are often present, threatening to push economic activity and inflation higher or lower.⁹ Monetary policy needs to lean against these forces with opposing pressure from higher or lower interest rates to stabilize the economy and keep inflation on target. Monetary policy is seldom static; it must respond as these forces ease or escalate.

◀ *There is sufficient flexibility in the current monetary policy framework to promote financial stability while also meeting our inflation target over the medium term*

Conclusion

Canada’s monetary policy framework and the process that the Bank follows to make its decisions have evolved. The move to inflation targeting in 1991 and the adoption of fixed announcement dates in 2000 are certainly the most noteworthy changes, but there have been many other refinements in the way policy is formulated and implemented. The process for decision making is information-intensive and collaborative. It has also proven to be very effective. Without doubt, there will be further refinements as the Bank learns from new experiences. The effort to improve the decision-making process is ongoing.

⁸ This flexibility would involve adjusting, as appropriate, the time horizon over which the 2 per cent target is achieved. For more information on the Bank’s inflation-control framework, see Bank of Canada (2011a).

⁹ An example of a headwind would be a persistent reduction in the demand for Canadian exports. An example of a tailwind would be a persistent financial shock resulting in unusually narrow risk spreads. For more information, see Bank of Canada (2011b).

Literature Cited

- Bank of Canada. 2009. “Annex: Framework for Conducting Monetary Policy at Low Interest Rates.” *Monetary Policy Report* (April): 25–27.
- . 2011a. “Renewal of the Inflation-Control Target: Background Information—November 2011.” Available at http://www.bankofcanada.ca/wp-content/uploads/2011/11/background_nov11.pdf.
- . 2011b. “Technical Box 2: Headwinds, Tailwinds and the Policy Rate.” *Monetary Policy Report* (July): 28–29.
- Barnett, R. and P. Guérin. 2013. “Monitoring Short-Term Economic Developments in Foreign Economies.” *Bank of Canada Review* (Summer): 22–31.
- Binette, A. and J. Chang. 2013. “CSI: A Model for Tracking Short-Term Growth in Canadian Real GDP.” *Bank of Canada Review* (Summer): 3–12.

- Blagrave, P., C. Godbout and R. Lalonde. "GMUSE: The Bank of Canada Projection Model for the Global Economy." Bank of Canada Technical Report (forthcoming).
- Dorich, J., M. K. Johnston, R. R. Mendes, S. Murchison and Y. Zhang. 2013. "TOTEM II: An Updated Version of the Bank of Canada's Quarterly Projection Model." Bank of Canada Technical Report No. 100.
- Dorich, J., R. R. Mendes and Y. Zhang. 2011. "Introducing Multiple Interest Rates in ToTEM." *Bank of Canada Review* (Summer): 3–10.
- Fenton, P. and S. Murchison. 2006. "ToTEM: The Bank of Canada's New Projection and Policy-Analysis Model." *Bank of Canada Review* (Autumn): 5–18.
- Granziera, E., C. Luu and P. St-Amant. 2013. "The Accuracy of Short-Term Forecast Combinations." *Bank of Canada Review* (Summer): 13–21.
- Macklem, T. 2002. "Information and Analysis for Monetary Policy: Coming to a Decision." *Bank of Canada Review* (Summer): 11–18.
- Murchison, S. and A. Rennison. 2006. "ToTEM: The Bank of Canada's New Quarterly Projection Model." Bank of Canada Technical Report No. 97.
- Murray, J. 2012. "Monetary Policy Decision-Making at the Bank of Canada." Speech to the Mortgage Brokers Association of B.C., Vancouver, British Columbia, 7 May.
- Santor, E. and L. Suchanek. 2013. "Unconventional Monetary Policies: Evolving Practices, Their Effects and Potential Costs." *Bank of Canada Review* (Spring): 1–15.