



BANK OF CANADA  
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## **Fine-Tuning the Framework for the Bank's Market Operations**

### **Introduction**

Good afternoon. Thank you, Geoff, for that kind introduction. And I want to thank as well the CFA Society for the invitation to speak here. It's great to be among fellow charter holders. Like you, I made it through the three-year grind to achieve this designation. In fact, my topic today—the Bank's market operations—may be an opportunity for some of you to revisit the fixed-income basics that we all studied.

Many of you invest, raise funds or analyze markets, so I'm sure you follow the Bank of Canada's monetary policy rate announcements. I spent many years during my career in a trading room and witnessed first-hand how quickly markets react and adjust to changes in the policy stance or target rate. As they do so, they help the Bank of Canada fulfill its two main responsibilities: the implementation of monetary policy and the promotion of the stability and efficiency of the Canadian financial system.

Today, as a deputy governor at the Bank, observing how quickly and smoothly markets adjust confirms for me that the framework guiding the Bank's operations is working well.

But markets are dynamic and the financial ecosystem is always in flux. Like living ecosystems, it is constantly evolving and adapting to change. It's important for us to be alert to shifts in its structure in order to help support its smooth and effective functioning. We aim to be proactive and respond to its evolution in a considered and calibrated fashion.

In my remarks, I'll discuss some of the shifts we are seeing in financial markets and highlight the changes we are proposing to fine-tune our operations.

We recently posted on our website a consultation paper that discusses in greater detail the proposed adjustments that I will outline today. We are consulting market participants to ensure that the changes meet our intended objectives and

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are implemented seamlessly. A second consultation paper on modifications that we are proposing to support financial stability has also been posted.<sup>1</sup> Both were discussed in a speech by my colleague, Senior Deputy Governor Carolyn Wilkins, last week in Montréal.<sup>2</sup>

I should also say here, just to be clear, that no inferences should be drawn from this speech and the proposals in the consultation papers about the current or future stance of monetary policy.

## **Shifts in the Financial System**

As I briefly touched on, the behaviour of market participants and the financial system are evolving. This is the result, in part, of lessons learned during the global crisis. Those lessons prompted regulatory changes to address the weaknesses that were identified. As a result, financial institutions have adjusted their operations, including how they manage their liquidity needs.

In Canada, liquidity across the system has typically been distributed by the major banks and dealers. At present, there are 15 participating financial institutions in Canada's large-value payment system. These firms have accounts at the Bank of Canada and execute payments with each other throughout the day. But primary dealers are the main counterparties to the Bank in its market operations. They can access and redistribute central bank liquidity more broadly over the normal course of business.

Over the past few years, we have observed that financial institutions have become somewhat less willing to borrow extra liquidity through our operations and redistribute it to others. It appears that they have become more focused on meeting their own liquidity needs.

In addition, with the new Basel III regulations requiring institutions to hold high-quality liquid assets to better withstand liquidity shocks, demand for these assets has also increased. And many banks are rationalizing the use of their balance sheets, moving away from balance-sheet-intensive and low-margin business lines.

Given these changes, we have been reviewing our operating framework to assess its effectiveness. Let me describe how it works.

## **The Bank's Framework for Market Operations**

The Bank undertakes a range of financial market operations in the course of fulfilling our monetary policy and financial system responsibilities. Our operations include transactions to reinforce the target for the overnight rate, provide liquidity to financial system participants, acquire and manage assets on the Bank's balance sheet, and lend a portion of the securities we hold.<sup>3</sup> Overall, our market

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<sup>1</sup> The consultation papers are available at [www.bankofcanada.ca/2015/05/public-consultations-bank-canada-framework-financial-market-operations/](http://www.bankofcanada.ca/2015/05/public-consultations-bank-canada-framework-financial-market-operations/).

<sup>2</sup> C. Wilkins, "Liquid Markets for a Solid Economy" (speech to the Chambre de commerce du Montréal métropolitain, Montréal, 5 May 2015).

<sup>3</sup> The Bank of Canada Act and the Payment Clearing and Settlement Act (PCSA) together give the Bank the power to make secured loans or advances to members of the Canadian Payments

operations framework is intended to achieve our policy objectives while minimizing our “footprint” in markets.

As you may know, we announce our policy rate decisions on fixed dates, eight times a year.<sup>4</sup> The policy rate, in combination with expectations about our future policy stance and other factors, influences pricing along the entire yield curve, as well as a range of other asset prices. These, in turn, have a material impact on the economic decisions of households and businesses.<sup>5</sup>

Ideally, we prefer the overnight market to clear on its own at close to the target rate through market forces rather than through our operations. We encourage this with an interest rate corridor, which is reinforced by standing deposit and lending facilities available to the participants in the payment system.<sup>6</sup> The corridor helps drive them to clear at the midpoint, which is the target rate.

That’s the theory, and it works well in practice. However, there can be frictions.

For example, sometimes the interest rate that is transacted in the overnight market starts to move off target during the day. The Bank typically intervenes if it judges that the deviation is the result of generalized pressures on liquidity in the overnight market, rather than because of firm-specific reasons.

For such intraday frictions, the Bank can use repurchase or repo transactions called special purchase and resale agreements (SPRAs) or sale and repurchase agreements (SRAs) to add or withdraw intraday liquidity to or from the system to offset these pressures.

So how can we reduce the frictions and help enhance the flow of liquidity?

## **Proposals for the Overnight Market**

We are proposing to adjust the format of these SPRA (and SRA) operations from offering primary dealers a fixed amount at the target rate, to a competitive and discriminatory price auction at market rates. We will also increase both the aggregate amount of each SPRA and SRA operation and the limit for each counterparty. These changes will allow firms that need liquidity to bid for a higher amount in any given round. We expect that this will help distribute liquidity more efficiently to those that need it most.

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Association and operators of financial market infrastructures designated for oversight under the PCSA. The Bank can also purchase debt securities from any counterparty for the purposes of conducting monetary policy or promoting the stability of the financial system, subject to the policies established by the Bank.

<sup>4</sup> The Bank also retains the option of taking action between fixed announcement dates, although it would exercise this option only in extraordinary circumstances.

<sup>5</sup> Setting the overnight rate is the first stage of a long transmission mechanism by which monetary policy decisions ultimately affect inflation. [www.bankofcanada.ca/wp-content/uploads/2010/11/how\\_monetary\\_policy\\_works.pdf](http://www.bankofcanada.ca/wp-content/uploads/2010/11/how_monetary_policy_works.pdf)

<sup>6</sup> The corridor is one-half of a percentage point wide and has the target for the overnight rate at its centre. See “A Primer on Canada’s Large Value Transfer System,” available at [www.bankofcanada.ca/wp-content/uploads/2010/05/lvts\\_neville.pdf](http://www.bankofcanada.ca/wp-content/uploads/2010/05/lvts_neville.pdf), and “A Primer on the Implementation of Monetary Policy in the LVTS Environment,” available at [www.bankofcanada.ca/wp-content/uploads/2010/07/lvts\\_primer\\_2010.pdf](http://www.bankofcanada.ca/wp-content/uploads/2010/07/lvts_primer_2010.pdf).

At the same time, we may accept larger deviations from the target rate before we step in. Doing so will give the market more room to manoeuvre and clear itself without our intervention.

These are the main proposed changes to our operations to reinforce the target for the overnight rate.

Now, I'm going to turn to the enhancements we are proposing to support well-functioning markets. An important part of how we participate in markets is through the management of our balance sheet. Let me give you some details on that.

## **The Bank's Balance Sheet**

Like any company, central banks have balance sheets that need to be managed. At the Bank of Canada, our largest liabilities are bank notes in circulation and deposits from the federal government, which are mainly backed by the assets in our investment portfolio. Almost all of the \$94-billion in assets held on our balance sheet consist of Government of Canada bonds and treasury bills. These are acquired on a regular basis through primary-market purchases on a non-competitive basis.<sup>7</sup>

We follow three principles in acquiring these assets: prudence, transparency and neutrality. Prudence is exercised primarily by selecting assets that have a low credit risk. We achieve transparency by communicating our balance-sheet activities to the public. And to attain neutrality, we act as broadly and neutrally as possible to limit market distortions from our investment activities.

At present, the composition of the Bank's portfolio broadly reflects the composition of the federal government's domestic debt.

Going forward, we expect that the volume of bank notes in circulation will continue to grow roughly in line with the growth of nominal GDP. This will increase the Bank's asset requirements. At the same time, the market demand for Government of Canada securities is also increasing. For example, the proportion of the federal government's debt held by non-residents has increased steadily. It has risen from almost 15 per cent in 2006 to just over 25 per cent in 2014.<sup>8</sup> One of the factors underlying this increase is that the Canadian dollar has become a more commonly held reserve currency in other countries.<sup>9</sup>

Another factor is the Basel III regulations that I mentioned earlier which requires banks to hold more high-quality assets. Since government securities are among

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<sup>7</sup> The results of the Bank's purchases, including the value of securities purchased and the price, can be found at: [www.bankofcanada.ca/markets/government-securities-auctions/#sched](http://www.bankofcanada.ca/markets/government-securities-auctions/#sched).

<sup>8</sup> Figure for 2014 updated from J. Cruz Lopez, R. Mendes and H. Vikstedt, "The Market for Collateral: The Potential Impact of Financial Regulation," Bank of Canada *Financial System Review* (June 2013): 45-53. Available at [www.bankofcanada.ca/wp-content/uploads/2013/06/fsr-0613-lopez.pdf](http://www.bankofcanada.ca/wp-content/uploads/2013/06/fsr-0613-lopez.pdf)

<sup>9</sup> According to the International Monetary Fund, in 2012 the Canadian dollar accounted for about 1.4 per cent or \$87 billion of the foreign reserves held by other countries. Those numbers have since risen to 2 per cent or close to \$120 billion (<http://data.imf.org/?sk=E6A5F467-C14B-4AA8-9F6D-5A09EC4E62A4>).

the safest and most liquid assets available, they have become more desirable. This is why, in Canada, federal government securities account for the majority of the collateral used in the repo market.

Given these pressures and the expected future growth of the Bank's balance sheet, absent any changes, we would have to buy a growing share of the outstanding stock of government securities. This would reduce the tradable float.

Taken together, all of these factors could intensify liquidity pressures in the Government of Canada repo and cash markets. Indeed, we have already seen signs of this. The Bank has had to lend securities from its balance sheet to alleviate short-term imbalances in demand and supply more frequently over the past couple of years.

Recognizing this shifting dynamic, we are proposing several enhancements to help support well-functioning markets.

## **Proposals to Support Market Functioning**

### ***Term repos***

The first enhancement is the introduction of regular term repo operations as part of the routine management of the Bank's balance sheet. We anticipate that the conduct of money market operations at longer maturities will not detract from our ability to influence the overnight rate.<sup>10</sup>

Term repos will be useful to us from a policy perspective. They will help the Bank gather intelligence and analyze changes in liquidity conditions in short-term funding markets. In addition, they may encourage further development of the longer-term repo market in Canada. And conducting term repos on a routine basis will facilitate a quick response to future market-wide liquidity shocks.

Term repos will also serve as a source of assets for the Bank's balance sheet, allowing us to decrease our presence in the primary market for Government of Canada securities.

We propose to commence these term repo operations in the autumn of 2015, with a six-month phase-in strategy to reach a steady state portfolio of \$7 billion to \$10 billion. This would amount to roughly 10 per cent of the Bank's balance sheet.

### ***Purchasing Government of Canada securities in the secondary market***

Enhancement number two is a shift to the secondary market for some of the Bank's purchases of Government of Canada securities, primarily non-benchmark bonds. Currently, our primary-market purchases of bonds amount to 20 per cent of every nominal bond auction.

The introduction of term repos and secondary-market purchases will enable us to reduce our purchases at primary bond auctions to what we expect will be around 10 per cent. Using 2014 issuance figures, this would amount to an increase of about \$9 billion in tradable float available across benchmarks. Our intent is to

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<sup>10</sup> A number of other central banks routinely conduct term repo operations. The Bank of Canada also undertakes them, but thus far only on an occasional basis.

enhance liquidity in these benchmark securities and hold fewer of them, leaving more available to other buyers. These securities play a unique role in financial markets because they are used to price and hedge a variety of cash and derivative instruments. The Bank will maintain the maturity structure of the securities it purchases roughly in line with the profile of government debt outstanding.

### ***Securities lending***

The third enhancement is a change to some of the parameters of our existing securities-lending activities.

Since 2002, the Bank has operated a program to lend a portion of its holdings when a specific bond or treasury bill is in high demand and is otherwise unavailable or trading below a certain threshold in the repo market. Lending our holdings provides a secondary source of liquidity, which helps maintain a well-functioning market. The program is designed to support efficient clearing and price discovery.

Since 2013, a growing number of Government of Canada bonds have been trading at repo rates persistently below the overnight general collateral rate. As a result, the frequency of the Bank's securities-lending has increased considerably.

Repo tightness typically reflects an imbalance between the demand for, and availability of, certain securities in the repo market. Protracted repo tightness can affect the cash prices of these bonds and contribute to a reduction in market liquidity. It can also lead to an increase in settlement fails, where one party is unable to deliver the securities promised to its counterparty.

To help support market liquidity, the Bank is proposing changes to the intervention threshold for its securities lending. At the moment, it appears that the Bank's existing threshold is setting a de facto floor for market repo rates. In some circumstances the rate does not seem to be low enough to induce sufficient lending from private sector bondholders to meet demand. A lower threshold could help clear the market, while the Bank's program would remain available to primary dealers as a backstop.

The goal is to encourage Government of Canada securities holders, which may include not only domestic investors but also central banks and sovereign wealth funds, to lend out their securities before the Bank has to intervene. We act as custodian for 30 central banks and are currently implementing a number of measures that will allow them to more actively trade their holdings of Government of Canada securities, including in the repo market.

Another element we are proposing is the introduction of a market-wide fail fee. Our own securities-lending program already includes such a fee. We are seeking feedback on whether the market should impose this kind of levy on trades in securities that fail to settle on time, as they do in the U.S. The main purpose for adopting it would be to reduce the risk of settlement fails and provide investors with additional financial incentives to lend securities that are in short supply.

### ***Contingent term repo facility***

Finally, after reviewing some of the ways that we dealt with short term funding needs during the crisis, we are proposing to develop a Contingent Term Repo Facility (CTRF).<sup>11</sup> This will enhance our ability to respond to future episodes of intense market-wide stress. The facility would be activated at the Bank's discretion only when conditions warrant.

Establishing the CTRF will ensure that the Bank has a permanent and flexible range of extraordinary liquidity facilities in place that could be activated to respond to and alleviate system-wide liquidity pressures.

The CTRF would offer liquidity on a bilateral basis for customized variable terms of up to one month and be available to a range of counterparties, against a broad set of securities, at a fixed price. The specific parameters would be confirmed upon activation. We expect that if the CTRF were activated, the counterparties eligible would be primary dealers and their affiliates. However, the number of counterparties could be extended to include other institutions—subject to certain criteria—should the Bank consider it necessary for the stability of the financial system.

### **Conclusion**

Let me wrap up by reiterating that the Bank's operating framework is working well. We monitor our market operations closely to ensure that they are contributing to the maintenance and diversity of the financial ecosystem. Bearing in mind that a healthy system will feed economic growth, we have identified important areas for improvement.

We think carefully about making changes to our framework because we recognize that doing so will affect markets. We want to make sure that any changes we propose are well thought out and include feedback gathered from market participants like you.

The adjustments I have outlined are in response to the changes we are witnessing in financial markets. In addition to helping us achieve our framework objectives, they will benefit all market participants.

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<sup>11</sup> During the global financial crisis, the Bank used a number of facilities that remain available should they ever be required again. The CTRF is an additional tool that would complement the Bank's arsenal.