ECONOMIC VIEWPOINT

What should bond market investors expect from the Federal government's Debt Management Strategy?

On March 22nd, the Federal Minister of Finance will table his budget for fiscal year 2017–2018, and investors in Canadian bonds will keep an eye on the evolution of the borrowing program. While the total volume of bond issuance should not deviate too much from last year, one question is whether the government will continue to emphasize issuance of short-term bonds. This *Economic Viewpoint* provides a brief review of the federal government's most recent fiscal year of bond issuance and provides an overview of the likely issuance program for the fiscal year beginning April 1st. While the government can easily auction bonds using parameters similar to those of the last fiscal year, there are also merits to increasing longer-term debt issuance.

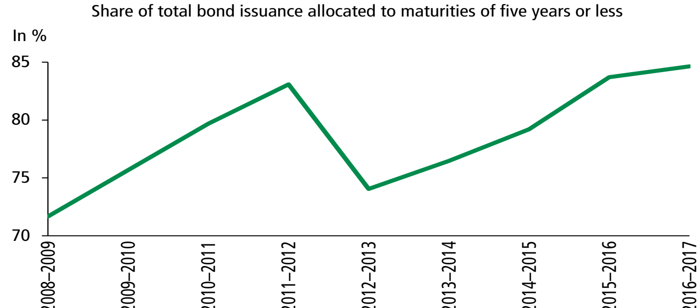
The Minister of Finance will soon table his 2017 budget and bond market investors will be assessing implications for the bond issuance program. Last year's budget was pivotal, in that the budgetary balance went from a more-or-less balanced position in 2015–2016 to an expected $29.4B deficit in 2016–2017. This deficit projection was later adjusted to $25.1B in the Fall Economic Statement but nonetheless, the implications for the bond issuance program were meaningful given that the return to larger deficits coincided with an increase in maturing debt.

As a result, gross bond issuance went from $92B in 2015–2016 to $133B in 2016–2017. A good portion of this increase was reflected in larger issuance of 2-year, as well as 5-year bonds. Both the frequency and the sizes of 2-year auctions were increased to new highs. Sixteen auctions of 2-year bonds took place at an average $3.9B per auction. The frequency of 5-year auctions was kept at eight per year but the average size moved to $3.75B from $3.35B, a new high. And the government reintroduced the 3-year program, with six auctions at an average $3.25B per auction. With such focus on front-end supply, the share of gross issuance in maturities up to five years moved to 85%, a record (graph 1).

Base Case for 2017–2018: Much Like Déjà Vu

In the coming Debt Management Strategy, appended to the Budget, the broad parameters of the bond issuance should be relatively similar to last year. With refunding needs only about $5B less than last year, and assuming a deficit in the $30B vicinity (Fall update guidance was $27.8B before any contingency adjustment), the size of the overall bond program will likely fall in the $125B–$135B range, depending on the treasury bill float, this means that issuance in fiscal year 2017–2018 would fall in the same ballpark, still one of the heaviest issuing programs in recent history (graph 2 on page 2)

GRAPH 1
Short-term bonds have taken up a growing share of total bond issuance



Sources: Department of Finance of Canada, Bank of Canada and Desjardins, Economic Studies

It could be assumed that the maturity breakdown of the planned issuance be fairly similar to last year. Truth be told, even an issuance program of $125B (i.e. a larger reduction to the borrowing program), would only necessitate reducing sizes by an average $267,000 per auction for 2-year, 3-year or 5-year bonds, assuming unchanged sizes for other maturities. A $130B program would reduce average sizes by a mere $100,000. Given

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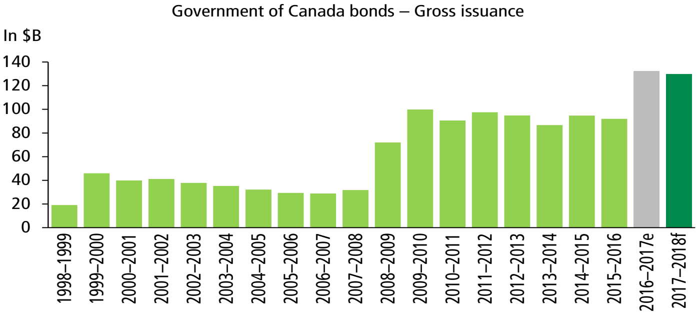
NOTE TO READERS: The letters k, M and B are used in texts and tables to refer to thousands, millions and billions respectively.

GRAPH 2
It should be another year of heavy bond issuance

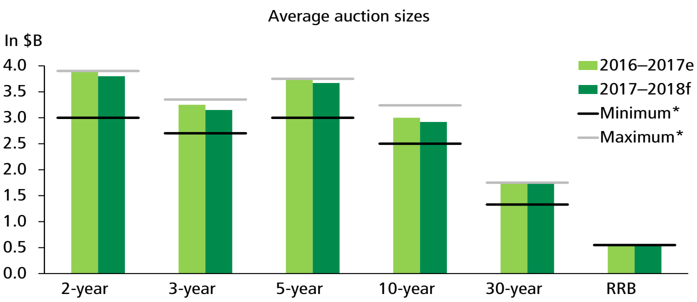


e: Desjardins estimates; f: Desjardins forecasts
Sources: Department of Finance of Canada, Bank of Canada and Desjardins, Economic Studies

that currently, sizes for auctions at these maturities are historically high, the government has plenty of flexibility to perform these adjustments without the need to reduce the number of auctions.

Under a hypothetical $130B program, and taking debt rollover and buybacks into consideration, we evaluate that auction size for most terms would decline slightly compared with fiscal year 2016–2017, but remain at historically high levels (graph 3).

GRAPH 3
Although auction sizes could decline, they will remain near the top of the post-crisis range for most maturities



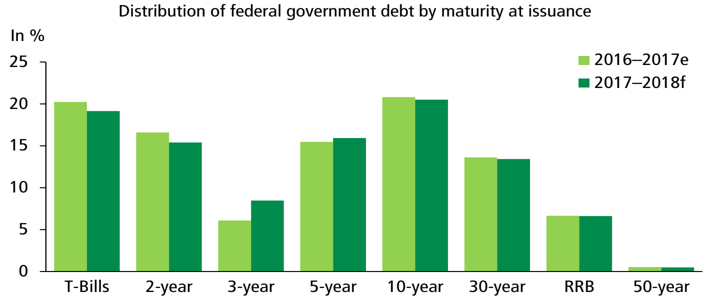
e: Desjardins estimates; f: Desjardins forecasts; RRB : real return bonds;
* Between 2008-2009 and 2016-2017 fiscal years.
Sources: Department of Finance of Canada, Bank of Canada and Desjardins, Economic Studies

The composition of the outstanding debt would evolve only marginally, if only to continue depicting an increased allocation to the 3-year bonds (graph 4). While 3-year bonds should keep being issued, the bonds issued in fiscal year 2016–2017 will not be maturing before September 2019.

An Alternative Case: Taking Advantage of Low Long-term Borrowing Costs

Another scenario that is not too difficult to imagine is an increased emphasis on long-end issuance. Some questioned last year's decision to primarily boost front-end issuance, given that the deficit was in part motivated by an augmented infrastructure investment program.

GRAPH 4
The maturity distribution of the government's debt should closely resemble that of the 2016-2017 fiscal year



e: Desjardins estimates; f: Desjardins forecasts; RRB : real return bonds
Sources: Department of Finance of Canada, Bank of Canada and Desjardins, Economic Studies

There is nonetheless a precedent for this. In 2009, despite higher commitments to infrastructure, issuance allocations to 10-year and long bonds actually fell, in favour of increased 5-year bond issuance. The ramp-up in 5-year issuance had also been motivated by the funding of the Insured Mortgage Purchasing Program, a credit easing initiative.

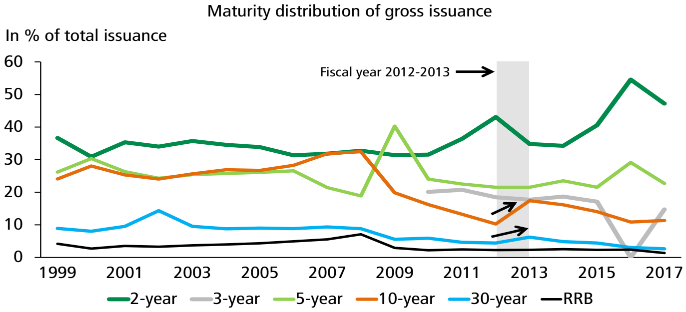
This shows that the government's debt managers are not tied to strict asset-liability matching considerations in making maturity distribution choices. The process in fact involves solving a complex optimization problem taking a variety of factors into consideration, such as rollover risk, debt costs, budgetary risk and market impact[1]. It is informed by the results of this exercise that issuing authorities have tended to emphasize issuance in the front end and belly of the curve in recent years.

This being said, neither do debt managers rely strictly on model output. Judgment and input from market participants are also part of the decision process. For instance, the only time the government decided to increase 10-year and long-end issuance in this cycle was in fiscal year 2012–2013 (graph 5 on page 3). Yields had just collapsed (by over 100bp in the case of 10-year bonds), and as part of the debt management consultations taking place annually between the issuing authorities and market participants, the latter indicated strong demand for longer-dated bonds.

The government took the opportunity to lock in the lower borrowing costs available at longer maturities. During fiscal year 2012–2013, the number of 10-year auctions increased to six (vs. four in the previous fiscal year). Sizes for 10-year auctions had also been increased, from $2.6B to $2.9B. Meanwhile, 30-year bonds were reopened four times (vs. three times previously), although sizes were kept nearly intact.

[1] Marc LARSON and Étienne LESSARD, Developing a Medium-Term Debt-Management Strategy for the Government of Canada, Bank of Canada, *Bank of Canada Review*, Summer 2011, p. 47-54.

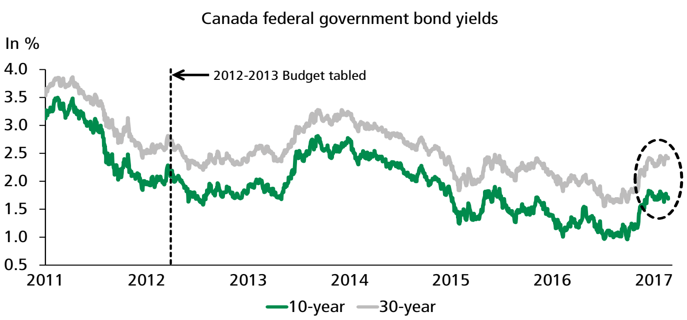
GRAPH 5
Issuing authorities have tended to favour issuing in short-term maturities in recent years



RRB : real return bonds
Sources: Department of Finance of Canada, Bank of Canada and Desjardins, Economic Studies

Looking at the current conditions, even though borrowing costs have increased since the U.S. election, they are still low. In fact, longer-term borrowing costs are still lower today than they were at the time of fiscal year 2012–2013, when it was judged sound to lock them in (graph 6).

GRAPH 6
Long-term borrowing costs are still lower than they were the last time the government increased long-term issuance

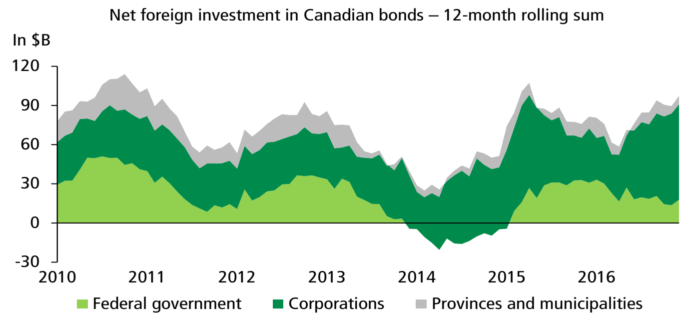


Sources: Bloomberg and Desjardins, Economic Studies

Currently, markets are anticipating more inflation compared to recent years, and are closely monitoring the risk that an expansionary fiscal policy in the United States would lead to additional inflationary pressures, in turn forcing the Federal Reserve (Fed) to tighten its monetary policy more aggressively than has been discounted up until recently. Thus, the least that can be said is that the upward risk to government borrowing costs is greater than it has been in recent years. And Canada is not immune; the recent experience reinforces the perception that long-term yields in Canada would struggle to escape a significant upward movement in yields south of the border[2].

The changing profile of demand for Canadian bonds over recent years is also a factor worth considering. The diversification of foreign exchange reserves undertaken by some countries after the crisis was at one time an important demand driver for Canadian bonds. But now, countries like China and Japan are liquidating their reserves. This change in direction may in part explain the decline in the purchase of Canadian federal government bonds by foreigners recently (graph 7).

GRAPH 7
Foreign appetite for Canadian federal government bonds diminished somewhat in 2016



Sources: Statistics Canada and Desjardins, Economic Studies

These changes have implications for bonds of certain maturities. For example, foreign reserve funds tend to favour bonds maturing in five years or less. If their appetite eroded even more rapidly, it might be less interesting for the government to issue massively in these buckets, relative to the last few years.

On the flipside, pension funds and insurance companies can be expected to remain loyal buyers of long-term bonds, in particular for asset-liability matching purposes. To mitigate its rollover risk while taking advantage of low long-term rates, government debt managers choosing to increase the share of long-term bond issuance does not seem a too outrageous proposition. However, the magnitude of any adjustments is likely to be modest, as the government attributes significant importance to continuity.

Conclusion

It will be interesting to see whether the government elect to seize the window to once again try to lock in what are still historically attractive borrowing costs. There could be mild curve steepening implications if the issuing authorities go in this direction, extending the trend seen in recent months. Any response would rather be modest, however. From a broader perspective, higher U.S. policy rates, reductions to both the size and average duration of the Fed's balance sheet and a potentially inflationary U.S. fiscal policy, constitute far more potent drivers of a steepening movement.

Jimmy Jean, CFA, Senior Economist

[2] *Is the correlation with U.S. interest rates too high?*, Desjardins, Economic Studies, *Economic News*, January 19, 2017, 1 p.