Market View
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CMB consolidation: Contextualizing the notional interest savings

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We've had no shortage of discussions with investors since the Government of Canada announced its intention to consult on the potential consolidation of the Canada Mortgage Bond (CMB) program. Here we tackle the stated rationale for consolidation: Reduced interest charges.

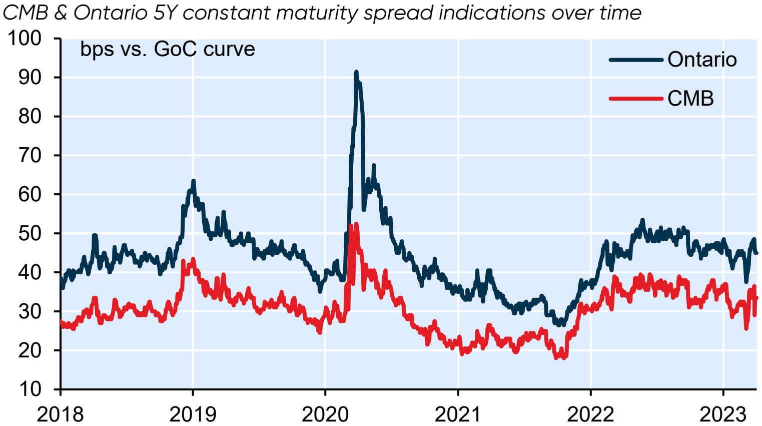
> *"...despite carrying the same credit rating, CMBs are a more costly form of borrowing compared to regular Government of Canada bonds. In this context, consolidating CMBs into the regular Government of Canada borrowing program represents an opportunity to reduce debt charges and reinvest savings into important affordable housing programs." – Government of Canada Budget 2023*

Yes, explicitly guaranteed CMBs trade at a spread to the GoC curve, and always have. So there are prospective savings to be had and a sizeable slug of bonds that could gradually be refinanced at cheaper levels. Based on the average spreads observed during the past five years (spanning the pre- and post-pandemic era), Ottawa might theoretically save $150 million in year 1 of consolidation (plus commission savings). Net savings would accumulate from there, ultimately topping $1 billion by year 10. Year 10 could be considered the 'steady state', after which time all existing CMBs would be re-couponed and the related bond stock would top out at $280 billion (based on the current issuance cap/mix). In constant 2023 dollars, steady state savings would range from $780-860 million/year assuming inflation averaged 2-3%.

Critically, all this assumes that the CMB program could be fully absorbed into the regular GoC program <u>with no net impact on the risk-free curve</u>. We caution that net supply is a less-than-reliable indicator of where GoC debt trades. Still, our inner economist might argue that some marginal yield could be needed to clear the larger GoC flow and expanding debt stock that would characterize a consolidated world. Bank treasuries and other domestics might need some extra return to hold the lower yielding paper on their balance sheets. Nor is it clear that non-residents would blindly steer all of their $100 billion of CMB holdings into Canadas. Were some foreign investors to balk at the yield give-up, taking their money elsewhere (or opting for higher yielding alternatives within the Canadian market), it would equate to a reduction in demand for the consolidated debt program. We estimate that it would take only a 4 bp back-up in GoC borrowing rates to undo consolidation savings in year 1. No more than 10 bps of back-up in the GoC curve might fully neutralize perceived savings in a steady state. The aim here is not to trivialize potential savings nor argue against affordable housing initiatives. Rather, in quantifying the notional interest savings available from consolidation, we've identified a relatively narrow margin for error when it comes to the potential fallout on the sovereign's borrowing rates as more and more Canada bonds accumulate. Among a variety of other items, this is something to be considered carefully during consultations.

Chart 1: Despite GoC guarantee, CMBs trade at a spread

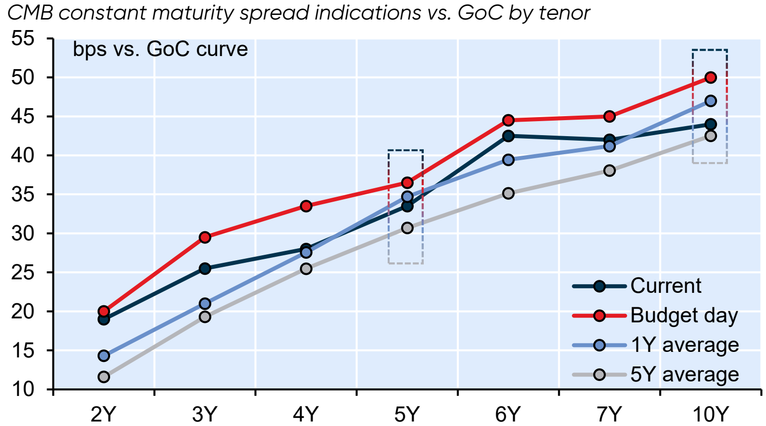
CMB & Ontario 5Y constant maturity spread indications over time



Source: NBF | Note: Based on constant maturity indications

Chart 2: How much extra yield for a CMB vs. GoC bond?

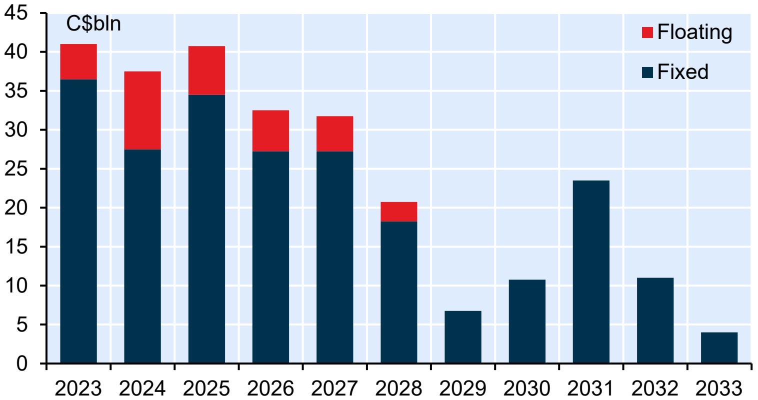
CMB constant maturity spread indications vs. GoC by tenor



Source: NBF | Note: Based on constant maturity indications; 5Y & 10Y sectors highlighted

Chart 3: A non-trivial stock of bonds to be re-couponed

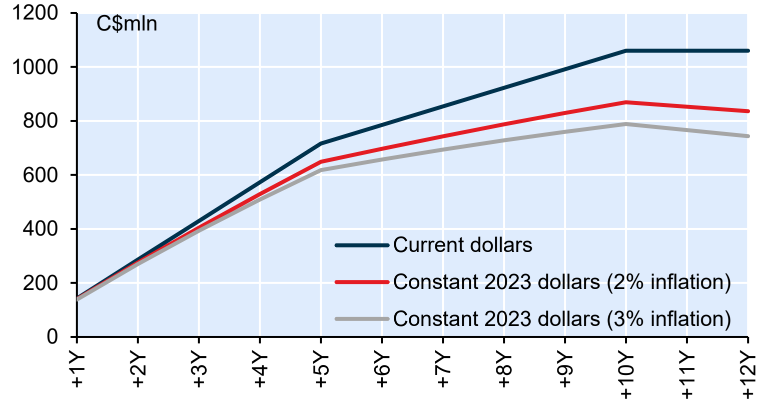
CMB maturity profile by maturity year: As at Apr-2023



Source: NBF, Bloomberg | Note: Current o/s totals C$260bln

Chart 4: Visualizing interest savings from consolidation

One illustration of net interest savings from consolidation, all else equal



Source: NBF, GoC, CMHC | Note: Based on avg spreads, current issuance cap/mix

Box: Some high-level perspective on notional interest savings from consolidating CMB with regular GoC bond program

NBF simplified illustration/simulation to help quantify the potential net interest savings from prospective CMB consolidation, all else equal

NBF illustration:

Estimating steady state net interest savings from consolidating CMB program with regular GoC bond program (based on average CMB spread levels & current CMB issuance volume/mix)

Detailed parameters & approach:

- Bond issuance: $40 billion in annual CMB issuance (pursuant to legislated cap); assumed split of $24 billion in 5Y & $16 billion in 10Y; assume this gross bond supply is replaced by GoC bonds of similar term/duration
- Outstanding bond stock: $260 billion CMBs currently outstanding (as at 4-Apr); related debt stock would peak at $280 billion in year 10 based on current annual issuance volume & assumed 5Y/10Y mix
- Weighted average term of bond stock: 3.78 years currently (as at 4-Apr), gradually rising to ~4.4 years in steady state (i.e., Year 10) based on annual issuance volume & assumed 5Y/10Y mix
- 5Y CMB Spread: Average constant maturity indication of +31 bps vs. GoC curve based on past 5 years (current = +32 bps | budget day = +37 bps)
- 10Y CMB Spread: Average constant maturity indication of +43 bps vs. GoC curve based on past 5 years (current = +44 bps | budget day = +50 bps)
- Estimated annual interest savings (in current dollars) from consolidation, assuming no impact on GoC borrowing rates:

Year 1 = $143 mln	Year 6 = $785 mln
Year 2 = $286 mln	Year 7 = $854 mln
Year 3 = $430 mln	Year 8 = $922 mln
Year 4 = $573 mln	Year 9 = $991 mln
Year 5 = $716 mln	Year 10 = $1,060 mln (refer to steady state details below)

- Estimated annual interest savings in steady state (i.e., Year 10):

  Current dollars = $1,060 mln (as outlined above)

  Constant 2023 dollars, assuming 2% average inflation = $870 mln (declining over time)

  Constant 2023 dollars, assuming 3% average inflation = $789 mln (declining over time)

- Net fiscal cost of sustained 100 bp increase in all GoC borrowing rates (based on pre-consolidation GoC debt stock):

  Year 1 = $4.0 bln | Year 2 = $5.1 bln | Year 5 = $6.9 bln

- Back-up in all GoC borrowing rates that could negate above-noted interest savings (controlling for larger GoC debt stock):

  Year 1 = ~4 bps | Steady state = ~10 bps

Caution: The above represents summary findings from NBF simulation analysis. These calculations/findings are provided for illustrative purposes and embed a number of simplifying assumptions. Prospective interest savings are sensitive to the implied spread between GoC borrowing rates and where CMB would be assumed to issue under a status quo framework. The figures noted utilize historical spread relationships, although a variety of alternative scenarios were also tested. See additional notes below.

Source: NBF, GoC, CMHC, Bloomberg | Note: NBF illustrative scenarios/simulations as at 4-Apr-2023; for the purposes of calculating interest savings from consolidation, we have used average CMB spreads for a 5-year period that spans 2018-23; to estimate savings, the related bond stock was fully simulated & re-couponed over a 10-year period, during which time the outstanding debt stock grows from $260 billion (current) to $280 billion (in year 10) under the existing $40 billion annual issuance cap & 5Y/10Y issuance split; in all cases, notional savings do not include the impact of dealer fees/commissions

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