

How to build a yield curve

By Taylor Schleich & Warren Lovely

While not the only driver of interest rates on an absolute or relative (e.g., cross-market, on the curve) basis, the term structure of outstanding debt is important. Across the G7, the share of long-term debt correlates with the steepness of the curve (in addition to other factors, of course). For GoC bond investors, this may be well appreciated given that the sovereign bond stock has a short-term skew compared to its peers. In fact, no other G7 issuer has more bonds with a term of 10 years or less than Canada. This can partly be credited to the ultra-short bond program in the half decade before the pandemic. Were it not for the COVID 'term out', Canada's long-term debt share would be even skinnier.

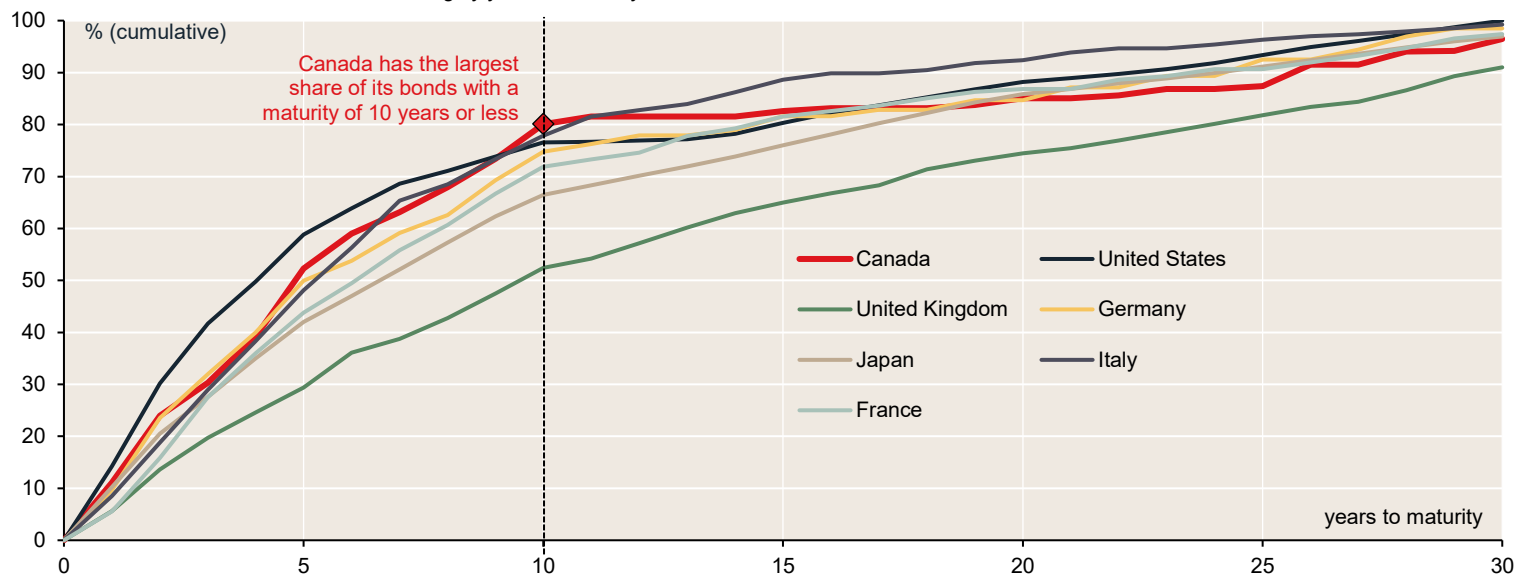
At the other end of the debt distribution spectrum is the U.K., where nearly half of its bonds are longer than 10 years. It thus shouldn't be surprising that gilt investors require more compensation to extend out the curve.

In the U.S., the share of the debt stock below 10 years isn't wildly different from Canada. And yet despite the Fed's slightly restrictive policy stance and the BoC's slightly accommodative one, the Canada 10s-30s curve is flatter. That's because it's not just *stocks* that are important. The size and composition of *flows* are too. While you'll find the amount of short-end supply in Canada and the U.S. is similar, a larger overall U.S. program means more supply out the curve, supporting relatively more steepness. Over coming years, US coupon issuance will rise while the GoC program will enjoy greater stability. Together with an expected *eventual* narrowing in the policy rate gap (and less supportive Fed balance sheet policy?), the Canada curve's relative flatness may only grow more pronounced.

Note: There's also an important provincial angle to this debt distribution analysis. Stay tuned for more...

Chart 1: 80% of GoC bonds are 10-years or shorter, a greater share than any other G7 nation

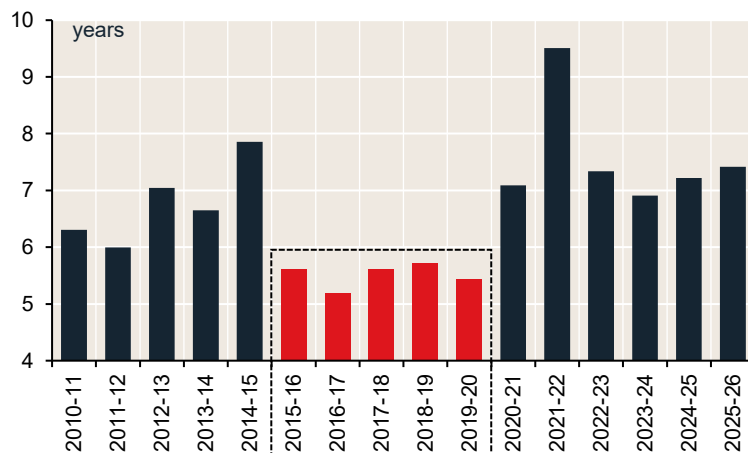
Cumulative share of domestic bonds outstanding by years to maturity: G7 countries



Source: NBC, Bloomberg:

Chart 2: Pre-COVID, GoC supply was skewed very short...

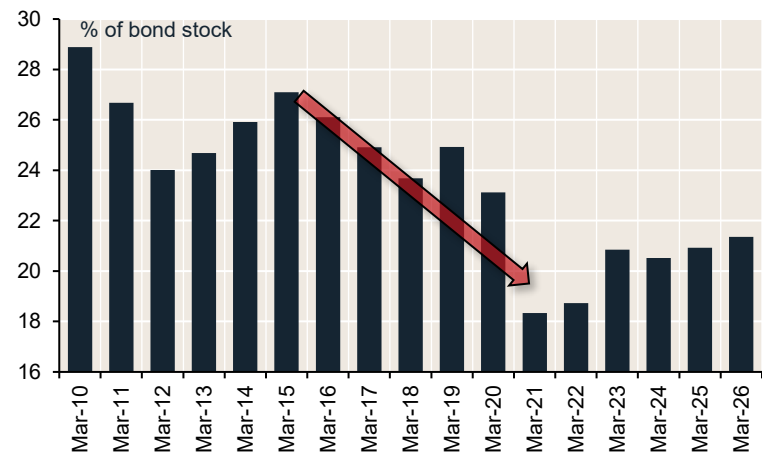
Weighted average term of domestic GoC bond issuance by fiscal year



Source: NBC, BoC | Note: Includes RRBs, green bonds.

Chart 3: ...leading to relatively fewer long-term bonds

Share of domestic GoC bond stock longer than 10 years to maturity

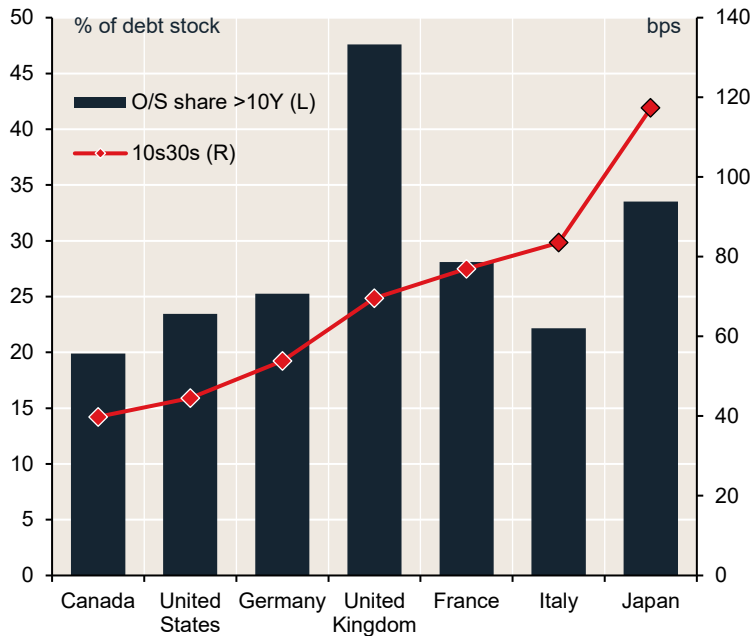


Source: NBC, BoC | Note: Includes RRBs, green bonds



Chart 4: Generally, more long-term debt → steeper curve

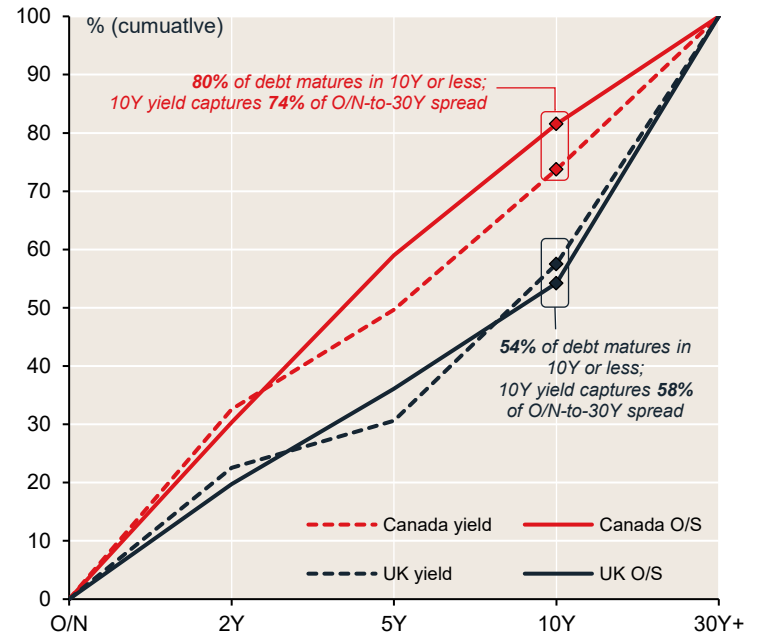
Share of bond >10Y to maturity and 10s30s curve



Source: NBC, Bloomberg

Chart 5: GoCs offer less pick from 10Y to 30Y than gilts

Cumulative share of outstandings bonds and cumulative yield* by term

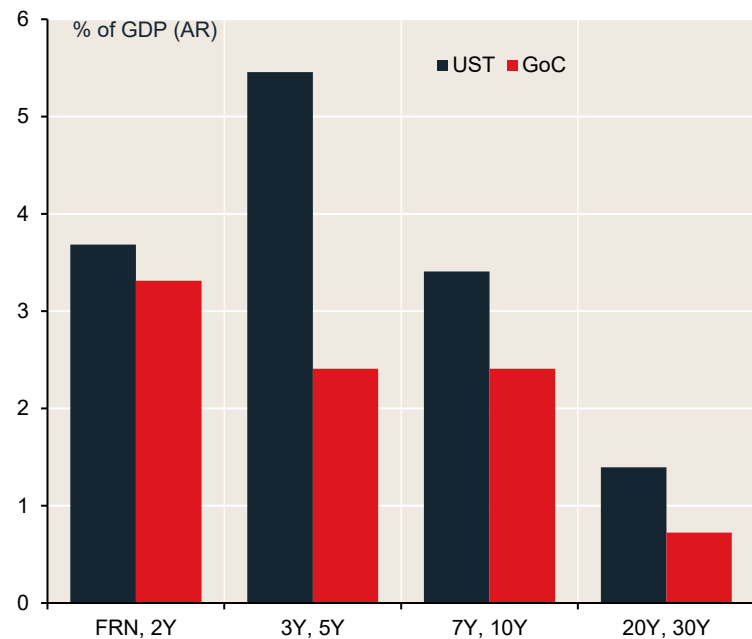


Source: NBC, Bloomberg | Note: *Cumulative yield is based on the difference in the overnight rate and the 30-year yield. Each point/term measures how much of that spread is captured.

Among G7 countries, you'll find that having a larger share of long-term debt is associated with a steeper yield curve. Of course, the curve isn't only a function of bond stock composition. There are other factors like credit worthiness (see: Italy's steeper curve) and the underlying policy rate (BoJ is looser, consistent with a steeper curve while the Fed and BoE are tighter, consistent with more flatness). Looked at another way, more of the Canada curve (i.e., yield spread between overnight and 30-year) is captured by the 10-year point than the U.K. curve which slopes up more gradually.

Chart 6: GoC supply comparable to UST at front-end...

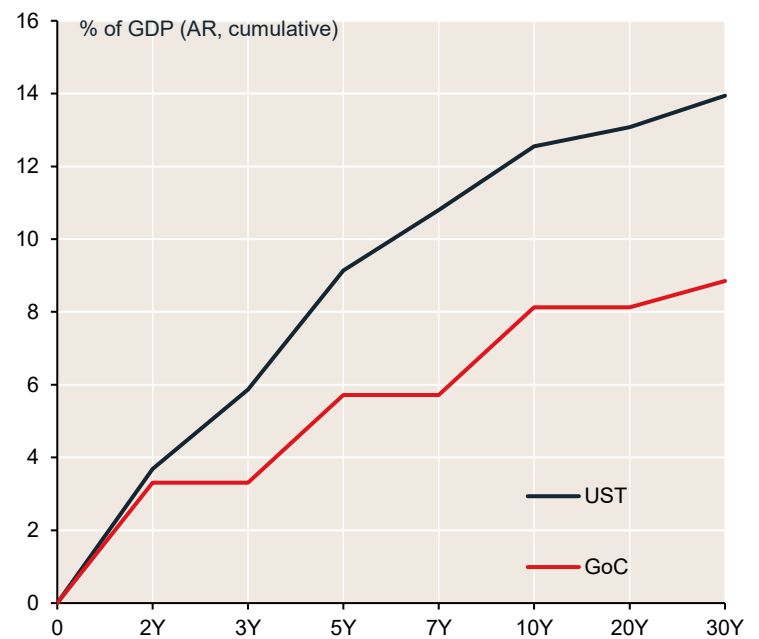
U.S. and Canada Q2:2026 gross bond supply by sector as a share of GDP



Source: NBC, U.S. Treasury, BoC | Note: 2026:Q2 gross issuance is annualized

Chart 7: ...but not further out the curve

Cumulative GoC, UST issuance by term (% of GDP)



Source: NBC, U.S. Treasury, BoC | Note: 2026:Q2 gross issuance is annualized

While the Fed is more restrictive than the BoC, the Canada curve is flatter. That's because the flow of bonds, rather than just the stock, is also an important consideration. As a share of GDP, the GoC and U.S. Treasury issue a similar amount down the curve. But gross coupon issuance in the US is much larger, resulting in proportionally greater issuance in the belly and further out the curve.



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