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Alternative Futures for Government of Canada Debt Management

Bank of Canada Staff Discussion Paper 2018-58

This document represents the views of the authors and not of the Bank of Canada or the Department of Finance

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Canada has two debt management objectives

1. Funding cost and risk:

"To raise **stable** and **low-cost** funding … striking a balance between the **cost** and the **risk** associated with the debt structure."

2. Liquidity

"To maintain a **well-functioning** government securities market … ensuring that funds can be raised efficiently over time."

2018 Debt Management Strategy, Canadian Department of Finance

The core of our ideas: **#2 feeds into #1**

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2. Liquidity

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2018 Debt Management Strategy, Canadian Department of Finance

How can liquidity be improved?

Going off benchmark

Static supplies

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But 95% of debt is off-benchmark and illiquid.

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Static supplies

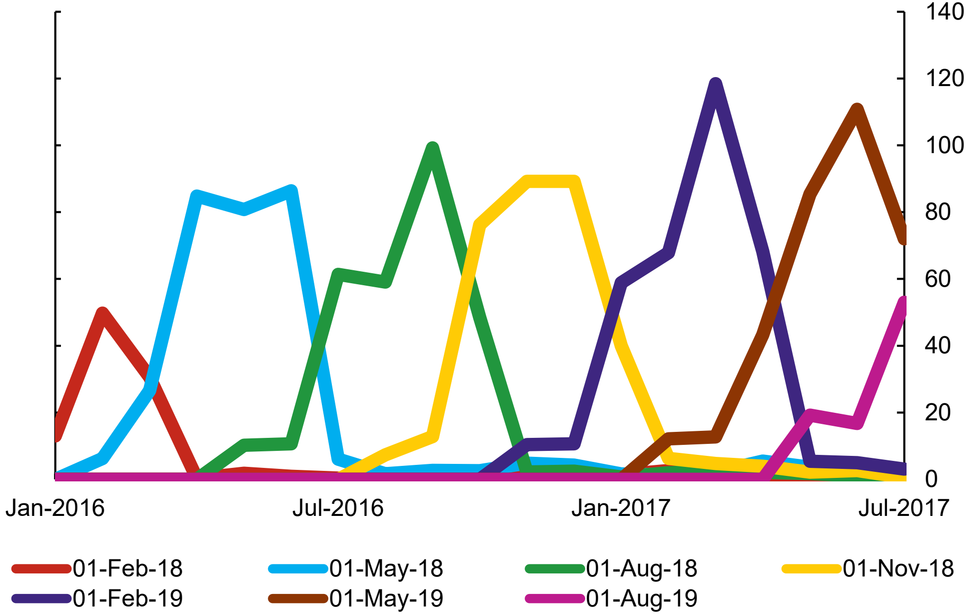
We issue enough to meet demand at auction.

But demand can change yet quantities are fixed.

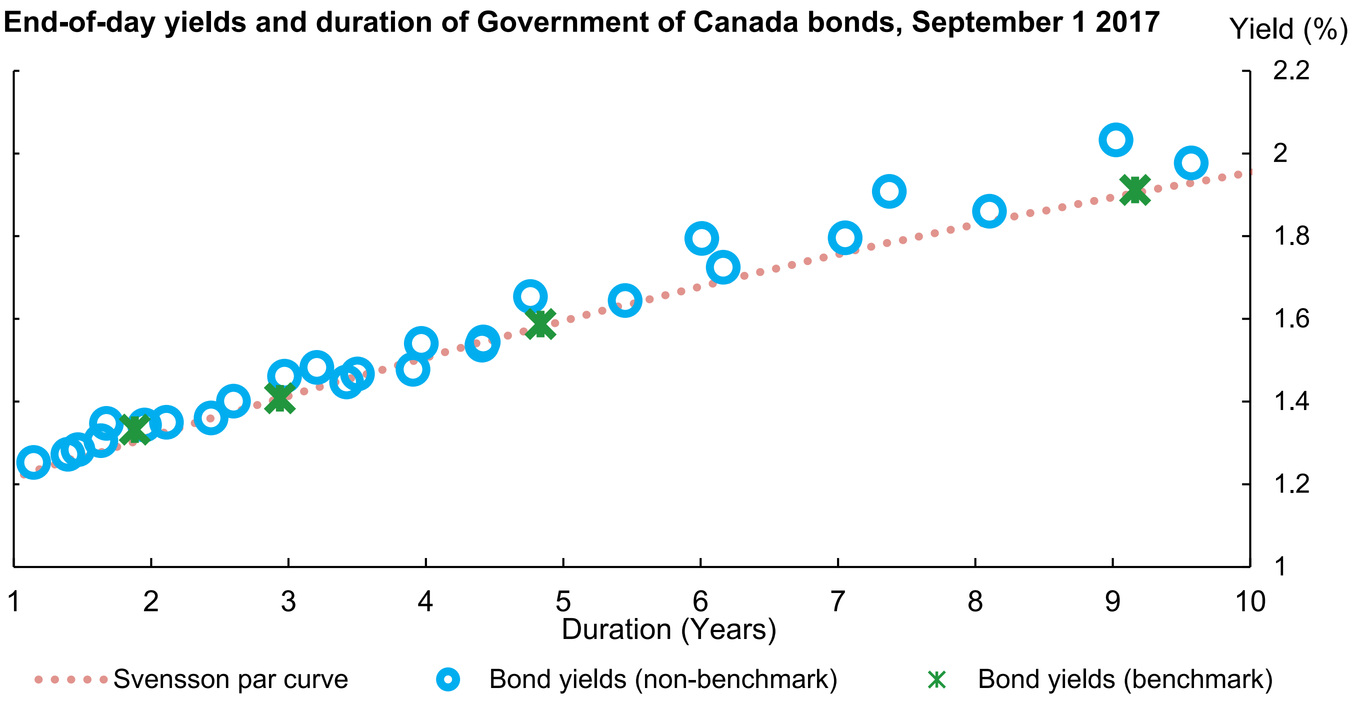
Benchmarking: a blessing and a curse

- The illiquidity is due to benchmarking:
  - Good: Benchmarking coordinates trade
  - However: **Liquidity declines** when bonds are post-benchmark

Turnover ratio for issues of two-year bonds, 2016-2017
Monthly ratio, annualized



Illiquidity affects prices **significantly**



We propose **four ways** to **enhance liquidity**

1. “Issue into specialness”
2. “Run an active bond switch desk”
3. “Streamline the debt portfolio”
4. “Center the portfolio on perpetuities”

Framework

Our framework is to advance proposals that satisfy four criteria

1) Would the liquidity improvement be significant? *Yes*
2) Would the proposal decrease the liquidity of an existing government security? *No*
3) Does it have an acceptable risk profile in terms of volatility in funding cost or rollover risk? *Mostly no, but small trade-offs*
4) Are there substantial tax, legal, political or accounting impediments? *Yes and this is important*

Proposal one: “Issue into specialness”

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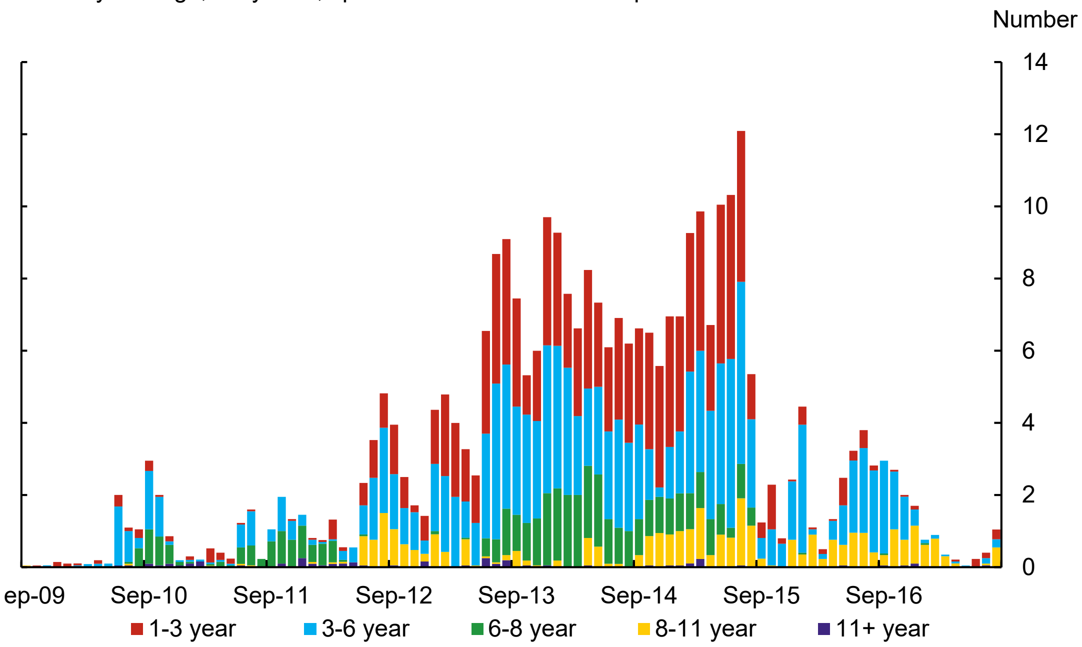
There is demand for **better liquidity**

- Any given week, two to six GoC bonds are on special in repo.

- Existing switch operations to address specialness are **oversubscribed**.

Daily number of Government of Canada bonds on special
Monthly average, daily data, specialness reckoned at 25bps



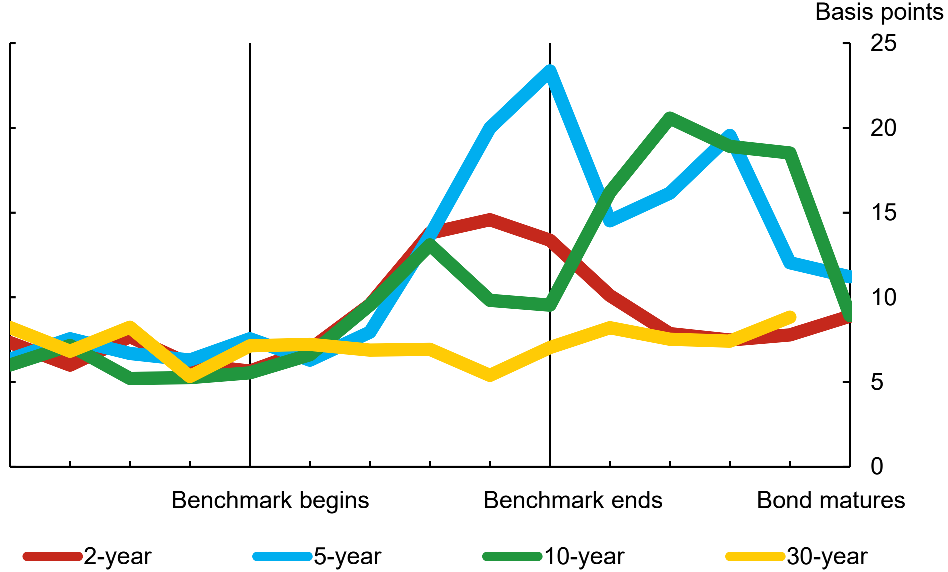
Government bonds often (and predictably) go “on special”

- A bond is “on special” when its borrowing rate is higher than the general collateral rate
- Specialness of a bond can persist for weeks

Proposal: reopen bonds on special and capture the special spread

Specialness of Government of Canada bonds during the benchmark cycle

Average special repo spread



Proposal: **Reopen bonds** that are persistently on special

- Bank of Canada would conduct a new tender of a bond determined to be persistently on special
- Operations satisfy a pre-stated policy
  - Regular assessment of market to identify target bonds
  - Maintain current practice on calls for tender, auctions
  - Compensate for re-opening by reducing size at subsequent auctions

Impediments to reopening of bonds on special

- Re-openings could modify the target duration of the debt portfolio (unlikely to be significant change)
- Settlement: is T+0 settlement achievable for bonds of long maturity?
- Selection: the reopening operation will itself change the timing of when securities go persistently on special, so we may have to modify the selection criteria

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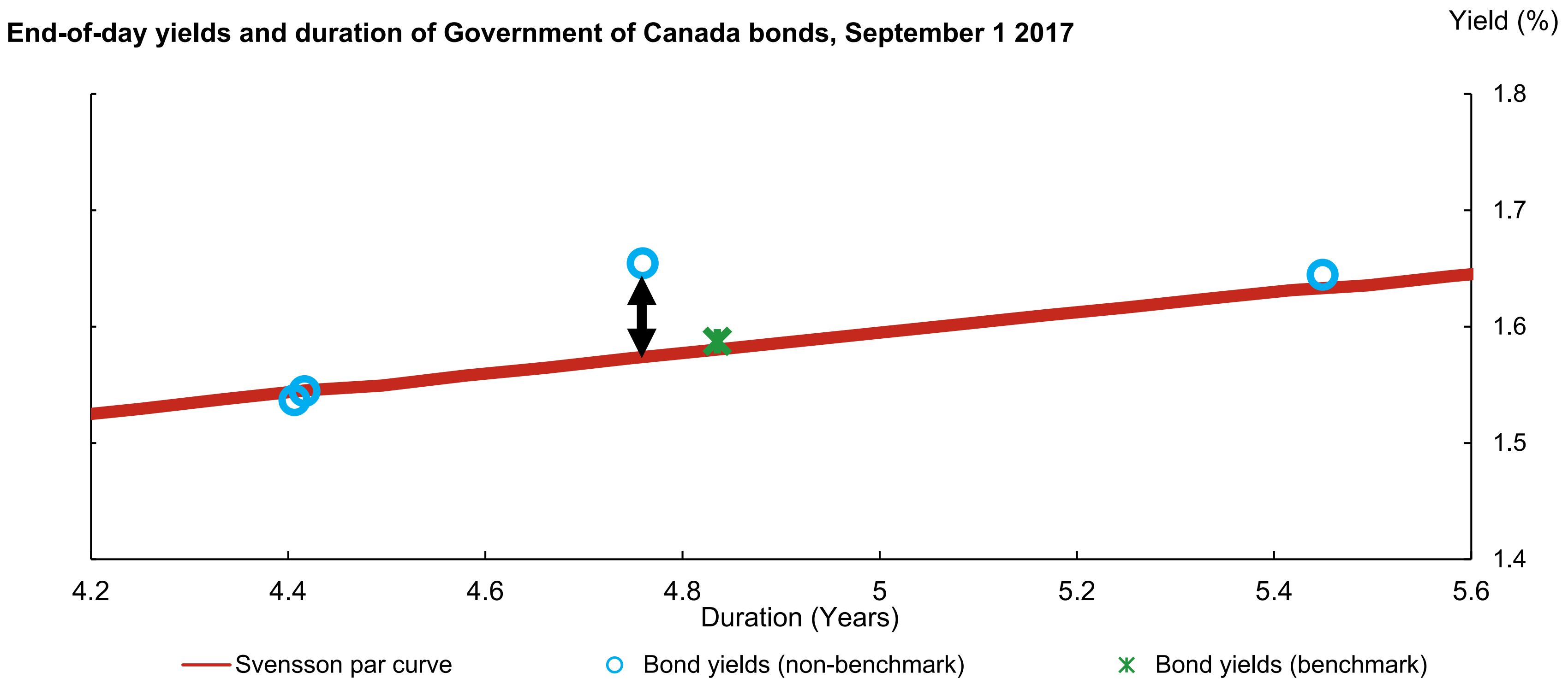
Proposal two: “Switch any off-benchmark to benchmark”

Run a **standing switch desk**

- Repurchase off-the-run securities and issue into the building or current benchmark (same conditions as those of current program)
  - Make it duration-neutral
  - Maintain current practice on calls for tender, auctions
- Could be a standing desk (i.e., based on market conditions) or as part of the quarterly bond schedule (i.e., as done in the past)

We could make off-benchmarks easier to sell



The chief impediment to this proposal is **accounting**

- Repurchased bonds can **appear as a "loss"** for the Government.
  - Think about exceptions in accounting rules.
- "Competing with the private sector?"
- Could be perceived as monetary policy, so need to ensure proper governance structure and accountability and clear communication around intent of the program

Proposal three: “Streamline the debt portfolio”

Eliminate coupons and **align maturity dates**

- Issue bonds with fewer, more regular maturity dates and a **single payment at maturity**.
- Re-open bonds rather than issuing new ones expiring at the same date:
  - Old bonds would become new bonds or t-bills
  - Number of bonds could be **reduced to around 26** (from 43)
  - The number of distinct payments would shrink

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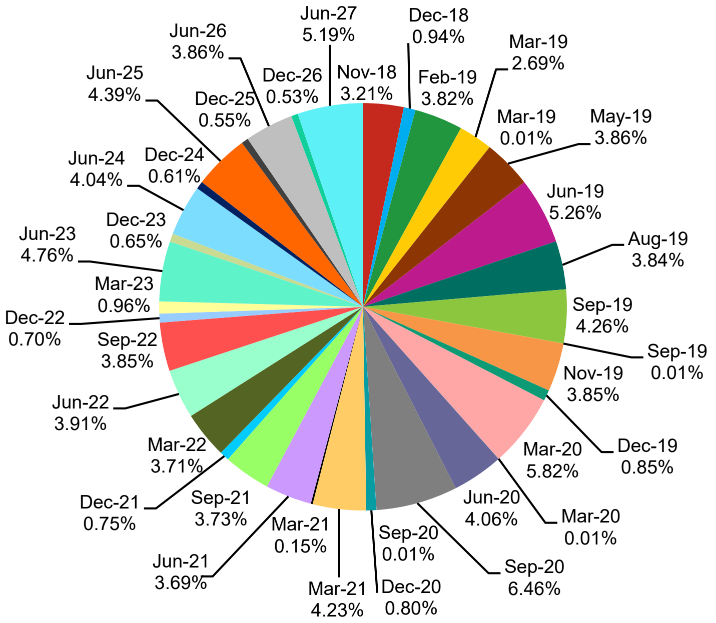
From complex to streamlined

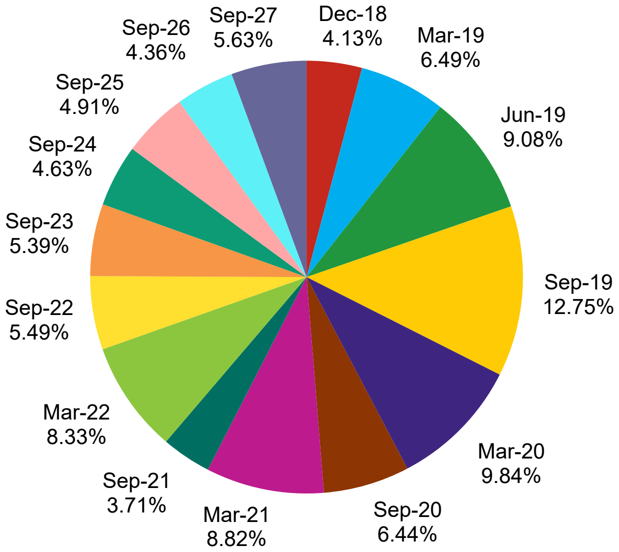
The current Government of Canada bonds payment schedule

All payments between 1 November 2018 and 1 November 2027



The same bond payments, streamlined

All payments between 1 November 2018 and 1 November 2027



Accounting practices are an impediment

- Interest is taxed on an accrual basis, which could reduce demand from liquidity-constrained taxable investors.
- The Government reports that its debt is equal to the par value of its debt instruments. Issuing at a discount would **“increase” these numbers**.
- Decreasing the number of bonds can **concentrate rollover risk** and **complicate cash management**.

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Proposal four: “Center the debt portfolio on perpetuities”

If we center the portfolio on perpetuities, we create ultraliquid bonds

- It could be three perpetuities:
  - Floating rate, fixed price (replaces bills)
  - Fixed rate, floating price (replaces bonds)
  - Rate tied to inflation (replaces RRBs)
- Only 3 bonds => All highly liquid => Cheaper to issue
- No rollover => No rollover risk
- Perpetuities can be issued alongside traditional bonds

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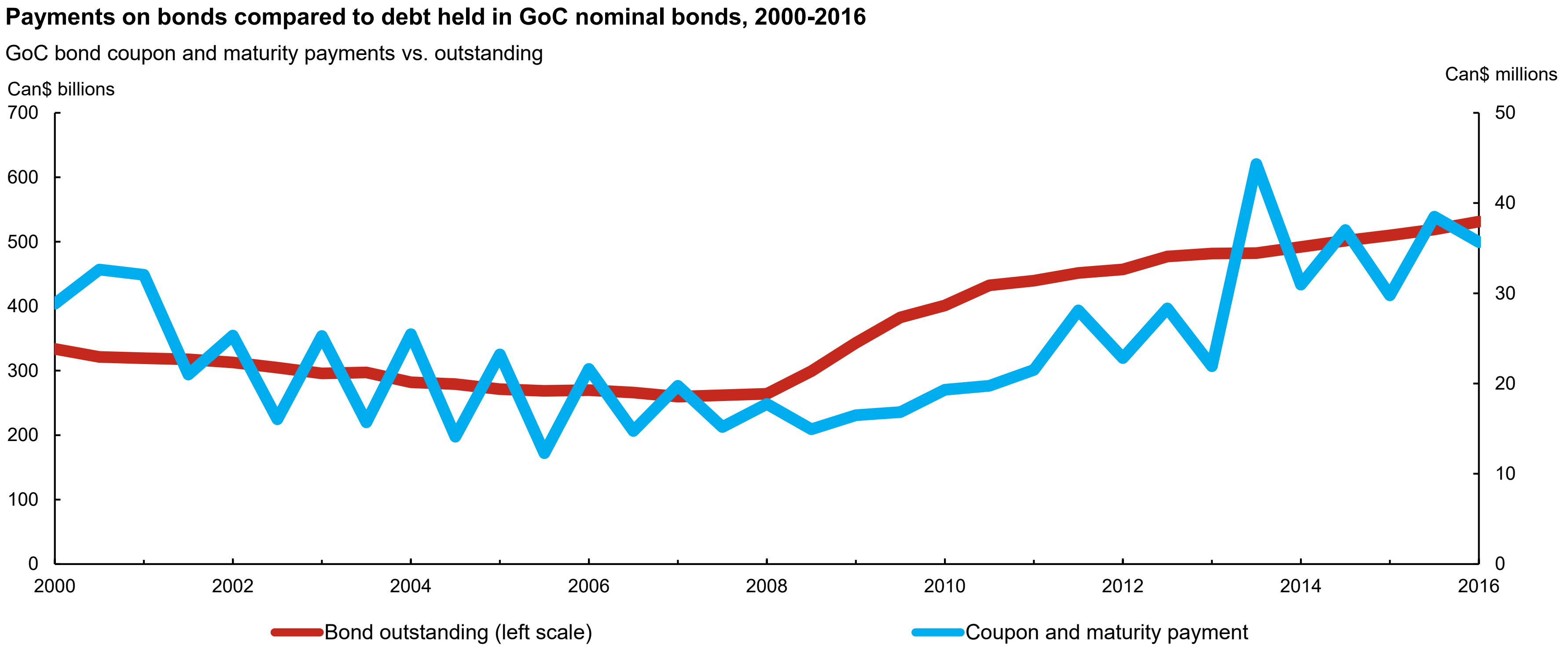
Perpetuities are less radical than they might appear



Impediment: “Debt you never pay back” sounds bad

- Debt can be reduced by buying back perpetuities at market prices.
- What if certain holders refuse to sell?
  - Perpetuities can be made callable
- But, how will the government manage its duration?
  - The mix of “bond” perpetuities vs “bill” perpetuities
  - Swaps

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So what did we just learn?

The major impediments preventing innovation in primary issuance:

1. Accounting
2. Perceptions
3. Tax code
4. Clienteles

Thank you