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Sovereign Asset and Liability Management

The Canadian Strategy

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Outline

- Funds Management Objectives and Governance
- Issuance strategy
- Debt stock and structure
- Government’s financial assets
- Combining the two: ALM strategies

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Funds Management Objectives and Governance

Funds Management Objectives

- Funds management activities encompass issuance of debt, management of liquidity and investment of financial assets
- Two key functions:
  - Financial Asset and Liability Management
  - Risk Management
- Guided by key principles:
  - Efficiency and effectiveness; transparency and accountability; risk management; and fiscal prudence

Funds Management Governance

- Ultimate authority for funds management policy rests with the Minister of Finance
- Bank of Canada is the government's fiscal agent, responsible for:
  - Collaborating with Finance to develop policies and strategies
  - Banking and treasury management services
  - Operation implementation of borrowing and investment programs
  - Risk management and oversight
- Work is coordinated through key governance committees

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Domestic Debt Issuance Strategy

Debt Management Objectives and Trade-Offs

Stable, low-cost funding

Trade-offs:

- **Cost/Risks**: a shorter-term debt structure will on average be less costly but exposes the Government to more volatility in debt cost and refinancing risk, while a longer-term debt structure can reduce these risks but have a higher cost
- **Cost/Contingency:** issuance in longer-term debt, while more costly, helps preserve funding capacity in key sectors in case of a stress event

Maintain a well-functioning market

Trade-off:

- **Cost-Risks/Well-functioning markets**: maintaining regular issuance across a wide range of maturity sectors supports well-functioning government securities and broader capital markets and diversifies access to funding, but could divert us from optimal debt structure in terms of cost and risks

The Canadian Debt Strategy Model

- Provides a comprehensive framework to quantify the cost and risks trade-off between issuing shorter-term and long-term debt based on a wide range of interest rate and economic scenarios
- This allows the decision makers to apply their risk preference to determine the optimal structure to target in the long-run
- The results from the Canadian Debt Strategy Model serve as the basis for the annual debt management strategy

The Canadian Debt Strategy Model

Step 1: Produces a long-run range of economic scenarios

Step 2: Evaluates a set of representative strategies under these scenarios

Step 3: Finds the group of efficient debt targets over a wide range of risk levels, and represents that with an Efficient Frontier

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Current Debt Program

Composition of Market Debt

	2012-13 Actual	2013-14 Actual	2014-15 Actual	2015-16 Estimated	2016-17 Projected
Marketable Bonds	469	474	488	503	544
Treasury Bills	181	153	136	136	134
Foreign Debt	11	16	20	24	24
Retail Debt	7	6	6	6	5
Total Market Debt	668	649	649	669	706

Bond Program

	2012-13 Actual	2013-14 Actual	2014-15 Actual	2015-16 Estimated	2016-17 Projected
Gross Bond Issuance	96	88	99	92	133
Buybacks	-1.1	-1	-0.5	-0.7	-0.8
Net Issuance	94	86	98	92	132
Maturing Bonds and Adjustments	-74	-82	-84	-76	-92
Change in bond stock	21	4	15	16	41

Financial Assets

Official International Reserves

	August 31 2016
Securities	67,748
Deposits	5,840
Total securities and deposits (liquid reserves)	73,588
Gold	0
SDRs	7,855
Total EFA	81,443
IMF reserve position	2,313
Total official international reserves	83,756

Official International Reserves – Currency Composition

August 31 2016	Millions of USD	% of Liquid Reserves
US dollars	51,766	70.3
Euro	15,285	20.8
Pound Sterling	5,910	8.0
Yen	627	0.9
Total	73,588	100.0

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An ALM Strategy

Asset/ Liability Management

- The national balance sheet has CAD670 billion in debt and about CAD95 billion in liquid financial assets (denominated in foreign currency)
- This mismatch between the currency and term-to-maturity of the assets and liabilities raises financial risks
- Joint management of the assets and liabilities can reduce fiscal volatility

Asset/ Liability Management

- Canada manages its reserve assets on an ALM basis
  - Reserves assets have an associated liability
  - Align assets and liabilities as closely as possible in terms of currency and duration to effectively eliminate currency and interest rate risks
  - Explicitly transform the funding of the reserves into foreign currency liabilities
    - Direct foreign currency issuance
    - Cross-currency swaps of domestic debt

Benefits of ALM

- Effectively mitigates adverse impacts from changes in interest rates and foreign exchange rates
- In the case of Canada, the FX and interest rate risk of the EFA is minimal
  - VaR of < 0.05% of the value of the liquid reserves
- ALM enhances transparency of funding cost and investment return
- Funding costs are equal to the spread between the return on reserve assets and the yield on the matched liability.

Challenges

- Credit risk is not hedged in the ALM framework
  - Can be significant basis risk between the assets and liabilities
- Intervention opens unhedged FX position; not suited to a country with an active intervention policy
- Typically relatively expensive
  - Countries have a comparative advantage in borrowing in their domestic currency
  - Direct foreign currency funding can be expensive
  - Liquid CCS markets may not exist

Canada’s Experience

- ALM strategy has served Canada extremely well
- There are a number of factors that explain this:
  - Floating exchange rate with very infrequent intervention. Reserves stay hedged.
- High credit quality and well-developed capital markets means Canada can borrow relatively cheaply, both directly and synthetically
  - Lowest cost SSA borrower. Direct issuance at <10 bps over US Treasuries.
  - Synthetic borrowing (CCS) at rates substantially below reference issuers.
- Allows Canada to meet its objectives (liquidity and capital preservation) at a positive net return and materially reduces financial risk (fiscal volatility)

Questions?