

Tracking bonds, with a view to 2022

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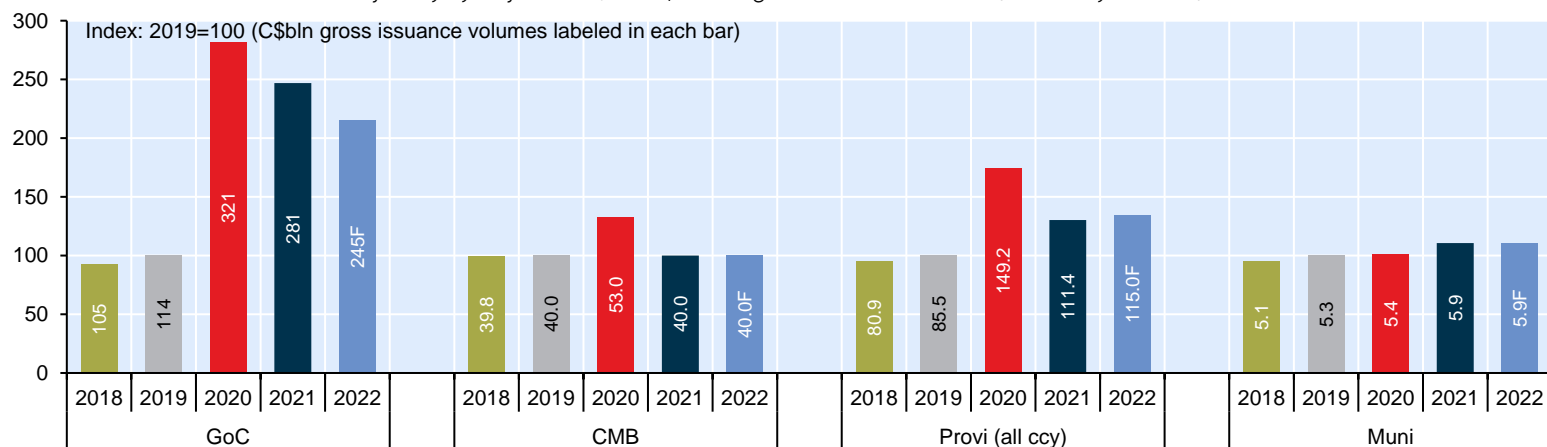
Having closed the books on calendar 2021, we're duty bound to tally up the bond supply digested in the past 12 months. Our detailed *Domestic Bond Tracker* table can be found on page 3, which details gross issuance by select sectors/issuers. We've added a number of related visuals; in many cases, the charts speak for themselves, but by way of ultra-brief commentary, we'd remark as follows:

For the largest issuer in the land – the Government of Canada – gross issuance clearly receded in 2021, as nominal GDP popped and some virus-related funding needs eased. GoC supply should step down further in 2022. We project C\$245 billion of gross issuance for calendar 2022, off 13% vs. 2021 and further removed from 2020's peak supply. Fewer bonds may be washing over the market, but the term-out looks to remain in full effect, the weighted average term of GoC supply not far from 10-years (essentially double what it was pre-COVID). The Bank of Canada has absorbed the vast majority of net GoC bond supply since the pandemic hit. Last year, the central bank absorbed fully three-quarters of net GoC issuance, but moved to 'reinvestment' in the final quarter of the year. That means the full C\$90 billion of net GoC issuance we project for 2022 will need to be placed with end investors, perhaps a fair bit more if, as, and when a BoC balance sheet run-off gets rolling in earnest.

Provincial bond supply likewise declined in calendar 2021. The provinces collectively printed ~C\$110 billion (all markets) last year vs. the record C\$149 billion rushed out in calendar 2020. Funding requirements for fiscal 2021-22 were slashed repeatedly and broadly, as revenue soared above plan and some significant expenditure pressures failed to materialize. At this point, we anticipate roughly C\$115 billion of gross provincial bond supply this calendar year, with at least one quarter of that amount to be sourced internationally. Indeed, international markets could serve as a potential relief valve should the BoC opt for early/aggressive balance sheet run-off. Whether domestic or international, look for the tell-tale seasonality in gross supply, provinces tending to be busy early in the calendar year and in the immediate wake of spring budgets. We'd note that there's a non-trivial portion of the outgoing fiscal year's official requirement still to fund, which hints at an eagerness to issue when/where favourable conditions exist. Moreover, with rates due to head higher, pre-funding may be desirable strategy for some.

Chart 1: From pre- to peak-crisis and beyond for public sector bond issuance

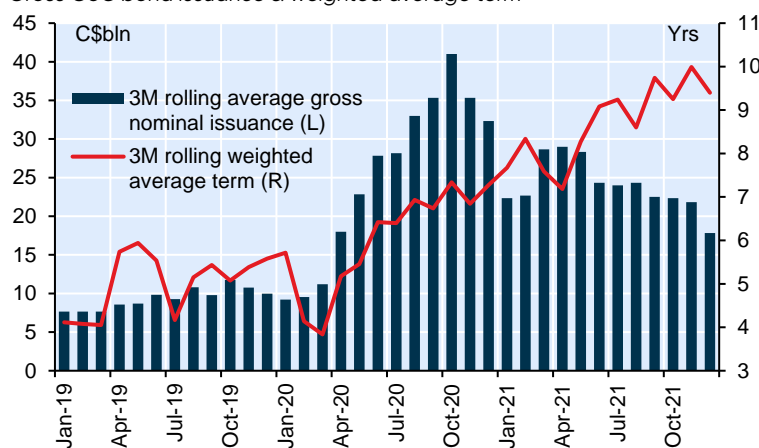
Absolute & relative bond issuance trajectory by major sector/issuer, including NBF forecasts for 2022 (calendar year basis)



Source: NBF, BoC, Bloomberg | Note: 2022 figures are NBF forecasts based on available information/guidance; more detailed breakdowns available to interested readers

Chart 2: GoC issuance eases, but term-out intact

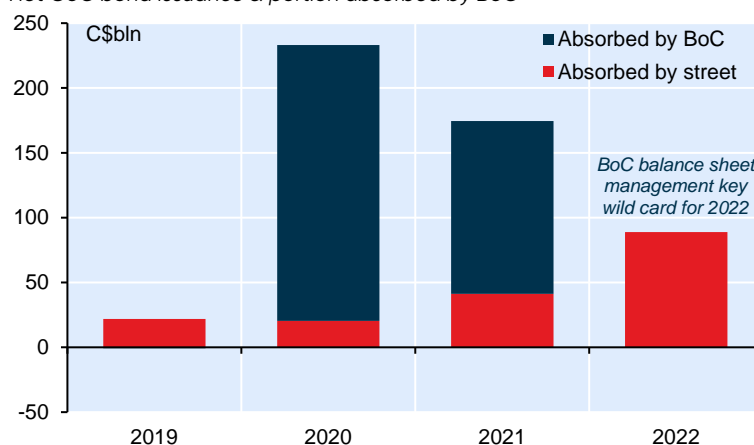
Gross GoC bond issuance & weighted average term



Source: NBF, BoC | Note: Gross issuance/WAT includes nominal bonds only

Chart 3: BoC vacuum turned off, run-off an open question

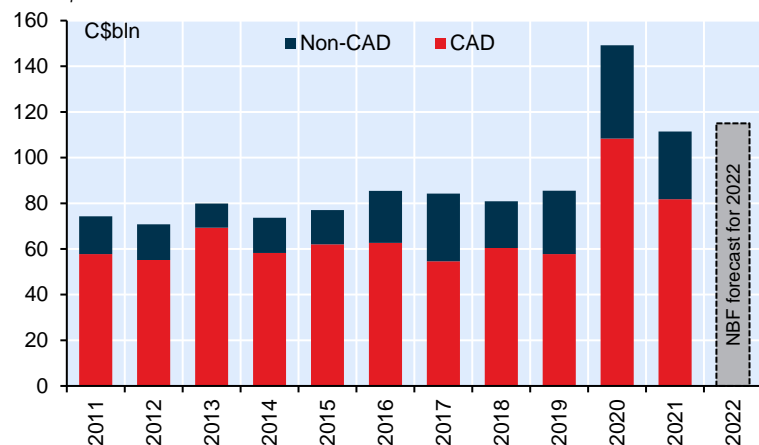
Net GoC bond issuance & portion absorbed by BoC



Source: NBF, BoC | Note: 2022 bar assumes full reinvestment of maturing holdings (i.e. no absorption of net supply); allowing for run-off would imply more absorption by the street

Chart 4: Provincial bond supply recedes from 2020 peak...

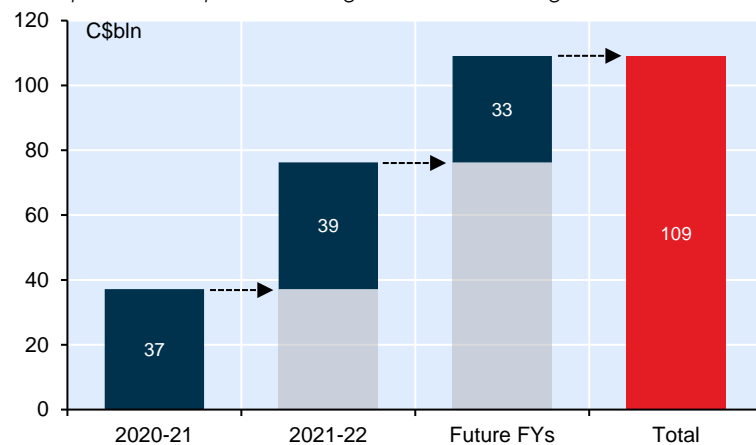
Gross provincial bond issuance: Domestic & international



Source: NBF, Bloomberg | Note: 2022 figure is NBF forecast of all currency supply

Chart 5: ...as budgets beat in unprecedented fashion

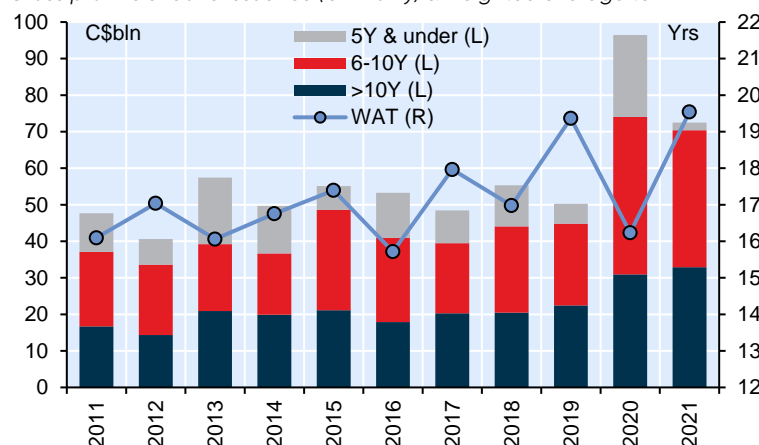
Net improvement in provincial budget balances vs. Budget 2021



Source: NBF, prov'l gov'ts | Note: Future FYs refers only to Ont, Que, Alta

Chart 6: Provis once again locked it in long

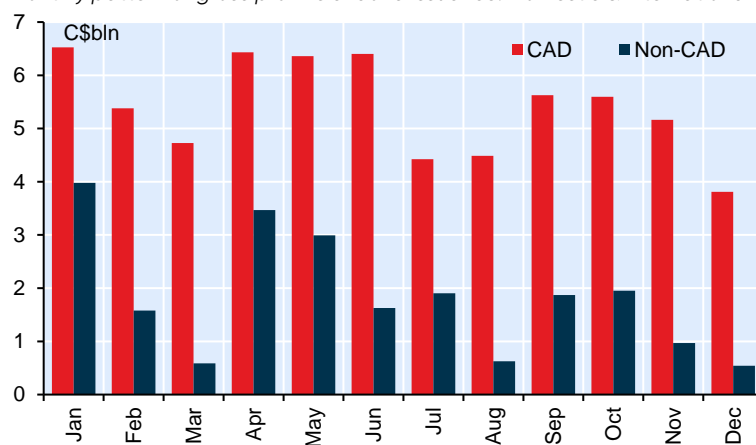
Gross provincial bond issuance (CAD only) & weighted average term



Source: NBF, Bloomberg | Note: Excludes international issues

Chart 7: Seasonal flavour to provincial supply (at home & abroad)

Monthly pattern of gross provincial bond issuance: Domestic & international



Source: NBF, Bloomberg | Note: Based on 12Y monthly averages from 2010-21

Table 1: NBF's 2021-22 Provincial Borrowing Program Update (i.e., April 2021 to March 2022)

Gross provincial borrowing requirement, amount completed, funding mix, remaining requirement & implied funding status: 2021-22 fiscal year as at 6-Jan

Province / Agency	Ticker	Required ^a		Completed ^b	Domestic	Foreign	Remaining	Funded Status
		C\$bn	C\$/per capita					
British Columbia	BRCOL	11.34	2,175	8.35	58%	42%	2.99	74%
Alberta	ALTA	11.83	2,662	4.27	97%	3%	7.55	36%
Saskatchewan	SCDA	4.20	3,560	2.76	93%	7%	1.44	66%
Manitoba	MP	4.90	3,542	3.40	56%	44%	1.50	69%
Ontario ^c	ONT	42.00	2,833	33.35	78%	22%	8.65	79%
Québec ^d	Q	24.53	3,258	18.11	78%	22%	6.43	74%
Hydro-Québec ^{e,f}	QHEL	3.50		3.57	100%	0%	0.00	102%
New Brunswick ^g	NBRNS	1.25	1,584	0.86	100%	0%	0.39	69%
Nova Scotia	NS	2.00	2,016	1.10	100%	0%	0.90	55%
Prince Edward Island	PRINCE	0.20	1,217	0.10	100%	0%	0.10	50%
Newfoundland & Labrador ^h	NF	1.50	2,882	0.95	100%	0%	0.55	63%
TOTAL		107.3	2,814	76.8	78%	22%	30.5	72%

% FY elapsed: 77%

Source: NBF, prov'l gov'ts, Bloomberg | Notes: (a) Long-term gross funding requirement; where available, funding requirement based on official sources; excludes pre-funding for coming fiscal year; (b) funds borrowed to date; (c) includes certain hydro-related financing under province's banner; (d) includes financing for Financement-Québec; (e) funds in own name with explicit provincial guarantee; (f) fiscal year is January - December; C\$3.5bn requirement related to calendar 2021; preliminary estimates suggest calendar 2022 requirement ~C\$5bn; (g) includes requirements for NB Municipal Finance Corp; (h) NBF estimate, includes funding for N&L Hydro

Table 2: NBF's Domestic Bond Tracker

Gross Canadian dollar bond issuance by month & year, arranged by select sector, issuer, term & coupon/placement type

C\$billion	Monthly issuance			Prior yr	Calendar year sum			
	Dec-21	Nov-21	Oct-21	Dec-20	2021	2020	2019	2018
Government of Canada	9.9	22.5	21.5	21.4	281.4	321.2	114.0	105.0
2Y	3.5	3.5	7.5	5.0	82.0	117.0	48.0	49.2
3Y	-	3.0	3.0	4.0	35.0	49.3	16.4	11.7
5Y	-	4.5	4.5	4.0	48.0	73.9	30.6	25.4
10Y	4.0	8.5	4.5	5.0	79.0	56.9	12.6	13.5
30Y Nominal	2.0	2.0	2.0	3.0	33.0	23.0	4.2	3.0
30Y RRB	0.4	-	-	0.4	1.4	1.1	2.2	2.2
Extra-longs	-	1.0	-	-	3.0	-	-	-
Weighted avg term (yrs)	12.0	10.1	7.0	9.1	8.8	6.4	5.4	5.3
Canada Housing Trust	5.0	5.0	-	5.5	40.0	53.0	40.0	39.8
5Y Fixed	5.0	-	-	5.5	20.3	32.0	21.5	21.5
5Y FRN	-	1.0	-	-	4.3	6.0	9.8	9.5
10Y Fixed	-	4.0	-	-	15.5	15.0	8.8	8.8
Provincial governments	4.2	5.1	4.3	5.6	81.8	108.3	57.8	60.4
Ontario	2.1	2.1	1.5	1.6	36.0	40.7	25.3	26.7
Québec	1.6	1.1	1.0	1.7	20.9	24.2	14.4	11.5
British Columbia	0.5	0.5	0.5	1.0	6.3	10.3	2.9	3.5
<i>Most populous (Ont, Qué, BC)</i>	<i>4.2</i>	<i>3.7</i>	<i>3.0</i>	<i>4.3</i>	<i>63.2</i>	<i>75.2</i>	<i>42.6</i>	<i>41.7</i>
Alberta	-	-	-	0.8	8.8	15.4	5.7	7.0
Saskatchewan	-	0.5	0.3	-	3.0	4.3	1.9	2.6
Newfoundland & Lab.	-	-	0.5	0.5	1.3	3.0	1.6	1.9
<i>Oil-levered (Alta, Sask, N&L)</i>	<i>-</i>	<i>0.5</i>	<i>0.8</i>	<i>1.3</i>	<i>13.0</i>	<i>22.6</i>	<i>9.2</i>	<i>11.4</i>
Manitoba	-	0.3	0.3	-	3.1	5.8	2.9	5.4
Maritimes (NB, NS, PEI)	-	0.6	0.3	-	2.5	4.7	3.2	2.0
Public	3.5	5.1	4.3	5.6	80.4	102.9	55.7	54.1
Private / MTN / Auctions	0.8	-	-	-	1.3	5.4	2.0	6.3
Fixed	4.2	5.1	4.3	5.6	81.7	107.5	57.1	55.1
Floating	-	-	-	-	0.0	0.8	0.6	5.3
1-5Y	0.8	0.5	-	-	3.3	23.5	7.0	11.9
6-10Y	1.4	2.4	2.3	4.0	41.3	49.8	24.9	25.5
>10Y (i.e. longs)	2.1	2.2	2.0	1.6	37.2	35.1	25.9	23.1
Weighted avg term (yrs)	20.1	18.6	20.7	15.9	19.5	16.4	19.3	17.2
International issuance	0.3	0.7	2.5	0.1	29.6	40.9	27.8	20.4
Prov'l total (incl non-C\$)	4.5	5.8	6.8	5.6	111.4	149.2	85.5	80.9
Municipal governments	0.2	0.3	0.4	0.1	5.9	5.4	5.3	5.1

Source: NBF, Bloomberg | Notes: Figures represent gross bond supply; issuance totals based on par amount; deals recorded as per issue date; unless otherwise noted, figures refer to C\$-denominated issues only; provincial figures include issuance by guaranteed entities; provincial international issuance presented for reference purposes, converted to C\$-equivalent amounts at prevailing exchange rates; municipal government issuance refers to publicly syndicated deals only



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