

## Provincial valuation toolkit

By Warren Lovely

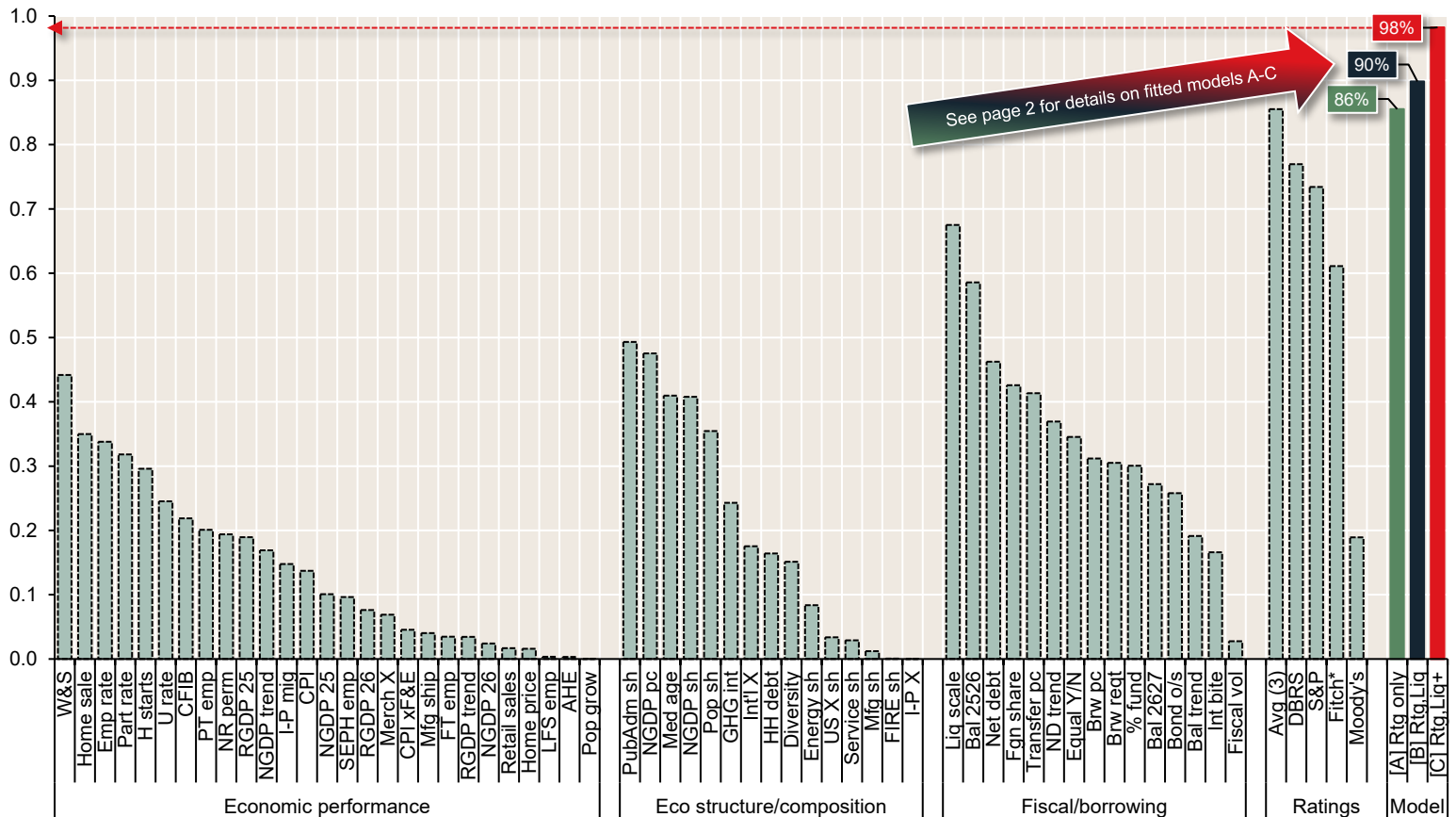
Yesterday, we updated our *Canadian Government Fact Sheet*. If you're not familiar with this document, it's designed as a quick reference tool for investors interested in Canada's federal, crown, provincial and municipal/local government authority securities.

Our primary *Fact Sheet* (available on request) contained updated values for a wide selection of socio-economic, fiscal and political indicators for Canada and each of the ten provinces. We believe these assorted variables can help inform a credit view and thus have some potential

bearing on bond valuations. Here we put a number of these individual indicators to the test, illustrating the statistical fit (R-squared) with current long-term domestic provincial bonds spreads (as of June 25<sup>th</sup>).

As we've argued previously ([link](#)), putting just a few of these indicators into an OLS model can yield a satisfying fit with domestic spreads. We've updated a few of these model specifications on page 2. As was the case back in April, a 'Rating, Liquidity PLUS' model works well, as evidenced by an adjusted R<sup>2</sup> of 97% and relatively narrow standard error.

**Chart 1: Casting the net wide in search for statistical connections to domestic provincial government credit spreads**  
R-squared between provincial government 30-year domestic bond spreads (vs. GoC curve) & selected economic, fiscal, credit rating variables (25-Jun-26 AM)

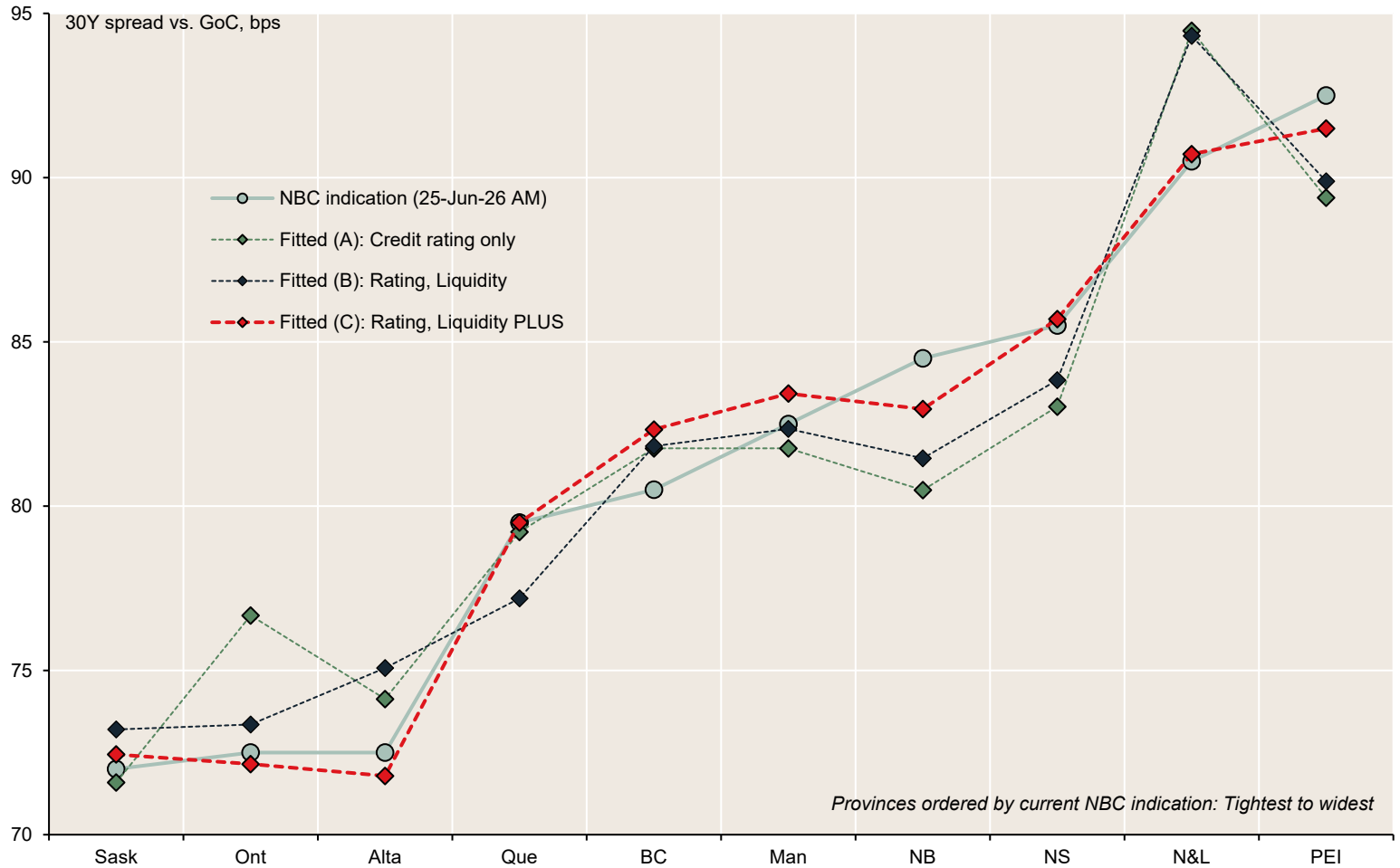


Sources: NBC, Government of Canada, provincial governments, Bloomberg, S&P, Moody's, DBRS, Fitch, Statistics Canada, Industry Canada, Bank of Canada, CMHC, CREA, CFIB  
 Guide to indicators (alpha by category): **Economic performance** > AHE: Average hourly earnings growth (Y/Y %, 3M); CFIB: CFIB Business Barometer® (long-term index); CPI: Consumer Price Index inflation (Y/Y %, 3M); CPI xF&E: CPI inflation excluding food & energy (Y/Y %, 3M); Emp rate: Employment rate (% , 3M); FT emp: Full-time employment growth (Y/Y %, 3M); H starts: Housing starts growth (Y/Y %, 3M); Home price: Housing price (existing) growth (Y/Y %, 3M); Home sale: Existing home sales growth (Y/Y %, 3M); I-P mig: Net inter-provincial migration (per 1,000 population, qtrly); LFS emp: Employment (household) growth (Y/Y %, 3M); Merch X: International merchandise exports growth (Y/Y %, 3M); Mfg ship: Manufacturing shipments growth (Y/Y %, 3M); NGDP 25: 2025 nominal GDP growth (Y/Y %); NGDP 26: 2026 nominal GDP growth (Y/Y %); NGDP trend: Nominal GDP growth 5-year trend to 2025 (CAGR %); NR perm: Non-resident building permits growth (Y/Y %, 3M); Part rate: Participation rate (% , 3M); Pop grow: Population growth (Y/Y %, qtrly); PT emp: Part-time employment growth (Y/Y %, 3M); Retail sale: Retail sales growth (Y/Y %, 3M); RGDP 25: 2025 real GDP growth (Y/Y %); RGDP 26: 2026 real GDP growth (Y/Y %); RGDP trend: Real GDP growth 5-year trend to 2025 (CAGR %); SEPH emp: Employment (payroll) growth (Y/Y %, 3M); U rate: Unemployment rate (% , 3M); W&S: Wages & salaries growth (Y/Y %, qtrly) | **Eco structure/composition** > Diversity: GDP by industry diversity score (HLI, 2025); Energy sh: Energy sector share of GDP (% , 2025); FIRE sh: Finance, insurance, real estate, rental, leasing share of GDP (% , 2025); GHG int: GHG emissions intensity (MT/\$bn GDP, 2024); Int'l X: International exports share of GDP (% , 2024); I-P X: Inter-provincial exports share of GDP % (2024); Med age: Median age (years, 2025); NGDP pc: Nominal GDP per capita (\$ , 2025); NGDP sh: Share of national nominal GDP (% , 2025); Pop sh: Share of national population (quarterly) (%); PubAdm sh: Public administration share of GDP (% , 2025); Service sh: Services share of GDP (% , 2025); US X sh: U.S. share of international exports (% , 2025) | **Fiscal/borrowing** > % fund: Long-term borrowing program funded status (% , 2026-27); Bal 2526: 2025-26 budget balance (% of GDP); Bal 2627: 2026-27 budget balance (% of GDP); Bond o/s: Share of domestic provincial bonds outstanding (% , current); Brw pc: Gross long-term borrowing requirement per capita (\$ , 2026-27); Brw reqt: Gross long-term borrowing requirement (\$ , 2026-27); Equal Y/N: Equalization-receiving province (yes/no, 2026-27); Fgn share: Non-CAD share of bonds o/s (% , current); Fiscal vol: Standard deviation in budget balance 20Y to 2025-26 (%-pts of GDP); Int bite: Interest-to-revenue ratio (% , 2026-27); Liq scale: Domestic bond liquidity ranking (1-6); ND trend: Net debt-to-GDP ratio 5-year trend to 2026-27 (%-pts); Net debt: Net debt-to-GDP ratio (% , 2026-27); Transfer pc: Major federal transfers per capita (\$ , 2026-27) | **Ratings** > DBRS, Fitch\*, Moody's, S&P: Linear score based on all available long-term ratings, controlling for non-stable outlooks (current) | **Model** > Refer to page 2



**Chart 2: Fitting a few simple OLS models to current provincial spreads can yield increasingly satisfying results**

Current provincial government 30-year domestic bond spreads vs. GoC curve: Current NBC indications vs. select OLS model specifications (25-Jun-26 AM)



**Table: Sample provincial bond spread model specifications, including current test results**

Current provincial government 30-year domestic bond spreads vs. GoC curve & select OLS model specifications (25-Jun-26 AM)

	30Y provincial government domestic spread estimation: 25-Jun-26 AM												
	NBC	Model A			Model B			Model C			Reference		
	Spread	1 var OLS: CRS only			2 var OLS: CRS, Liq			4 var OLS: CRS, Liq PLUS			Rating	Liquidity	Energy
	Indication bps	Fitted bps	Resid bps	Resid-sq units	Fitted bps	Resid bps	Resid-sq units	Fitted bps	Resid bps	Resid-sq units	CRS AAA=10	Bonds O/S % total	Weight % of GDP
Sask	72.0	71.6	0.4	0.2	73.2	-1.2	1.4	72.4	-0.4	0.2	30.0	3.1	18.5
Ont	72.5	76.7	-4.2	17.4	73.4	-0.9	0.7	72.1	0.4	0.1	36.7	40.5	2.5
Alta	72.5	74.1	-1.6	2.7	75.1	-2.6	6.6	71.8	0.7	0.5	33.3	6.9	28.1
Que	79.5	79.2	0.3	0.1	77.2	2.3	5.3	79.5	0.0	0.0	40.0	28.1	3.1
BC	80.5	81.8	-1.3	1.6	81.8	-1.3	1.8	82.3	-1.8	3.4	43.3	9.1	5.8
Man	82.5	81.8	0.7	0.5	82.3	0.2	0.0	83.4	-0.9	0.9	43.3	4.8	4.8
NB	84.5	80.5	4.0	16.1	81.5	3.0	9.3	83.0	1.5	2.4	41.7	2.5	4.3
NS	85.5	83.0	2.5	6.1	83.8	1.7	2.8	85.7	-0.2	0.0	45.0	2.1	1.7
N&L	90.5	94.5	-4.0	15.8	94.3	-3.8	14.5	90.7	-0.2	0.0	60.0	2.5	23.5
PEI	92.5	89.4	3.1	9.7	89.9	2.6	6.8	91.5	1.0	1.0	53.3	0.4	1.1
Sum of squared residuals >				70.1			49.3			8.5			
Standard error of regression >				3.0			2.7			1.3			
R-squared >				86%			90%			98%			
Adjusted R-squared >				84%			87%			97%			

Source: NBC, S&P, Moody's, DBRS, Bloomberg, Statistics Canada

Notes: Spreads are 30Y constant maturity indications vs. GoC curve; Models (A,B,C) are OLS regressions; Credit Rating Score (CRS) is linear conversion of average long-term ratings from S&P, Moody's and DBRS; CRS values control for non-stable outlooks; for CRS values, AAA=10, AA+=20, AA=30, etc.; 'Liquidity' proxy is based on share of outstanding domestic bonds (Jun-26); 'Energy weight' is based on share of provincial GDP (2025); "PLUS" model specification incorporates political risk dummy; as at 25-Jun-26 (AM)



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