August 17, 2023 - (Vol. VII, No. 62)

Ratings resolution: Provincial government edition

By Warren Lovely & Ethan Falby (Intern)

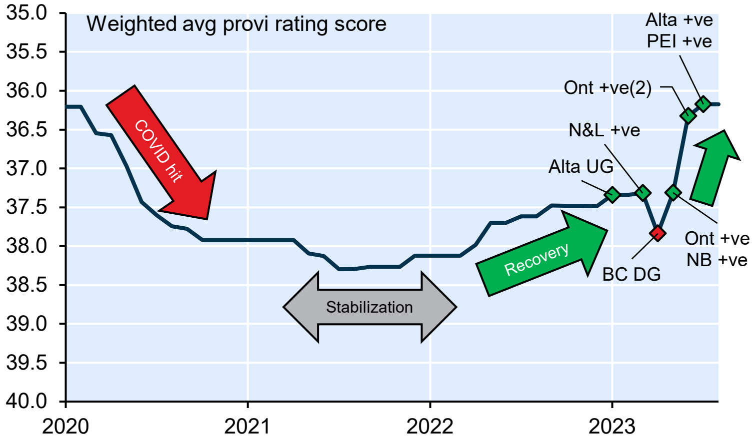
Provincial credit ratings are recovering much ground, 'positive' adjustments having accumulated in 2023. Following a raft of recent announcements, 9 of the 35 long-term provincial credit ratings assigned by S&P, Moody's, DBRS and Fitch are now on 'positive' outlook. Against this, only a single individual rating is on 'negative' outlook. That's a seriously healthy balance when it comes to intrinsic credit quality, and one that is broadly consistent with the economic resilience and budgetary/borrowing normalization observed in many provinces.

There's no assurance that 'positive' outlooks result in timely rating upgrades. Our study of 50+ 'positive' outlooks going back more than 30 years, shows 'positive' outlooks led to a timely rating upgrade more than 70% of the time, it taking just over a year (on average) for outlook resolution. As a caution, the empirical record (and intuition) argues that a serious economic hiccup can derail upward rating momentum. Historical culprits include the 1990s recession, GFC and COVID-19. That's a not-so-subtle caveat given tight monetary policy and related recession risks. Beyond a slowdown, provinces face ongoing spending pressures (not least of all in the health care sphere). And despite fiscal progress, relative leverage in many cases remains a noted challenge, with today's higher interest rates making debt service more costly.

So the road ahead is not without obstacles. Provincial governments genuinely seeking to convert 'positive' outlooks into upgrades may need to demonstrate their fiscal resolve/perseverance through this fall and into 2024 budget season. We're nonetheless confident with the general direction the provincial sector is headed and deem it likely that the majority of today's 'positive' outlooks will transform into timely upgrades. That in turn would provide ongoing impetus for a relative re-pricing in the provincial bond market, since credit ratings (alongside liquidity and a variety of other considerations) remain a statistically significant determinant of where one province should trade vs. another.

Chart 1: Provincial credit ratings on the up!

Average provincial long-term credit rating score

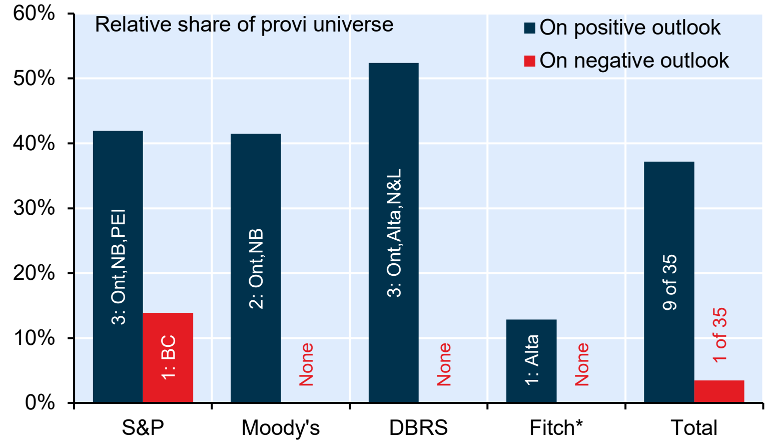


Source: NBF, rating agencies | Note: Linear conversion of ratings into scores, where AAA=10, AA+=20, etc; scores control for +ve/-ve outlooks; weighted by LFS population

Following a raft of 'positive' outlooks, the weighted average provincial credit rating has now fully recovered the ground lost during COVID. Intrinsic credit quality in the sector is pointed up.

Chart 2: Positive credit rating outlooks have accumulated

Distribution of positive/negative provincial long-term credit rating outlooks

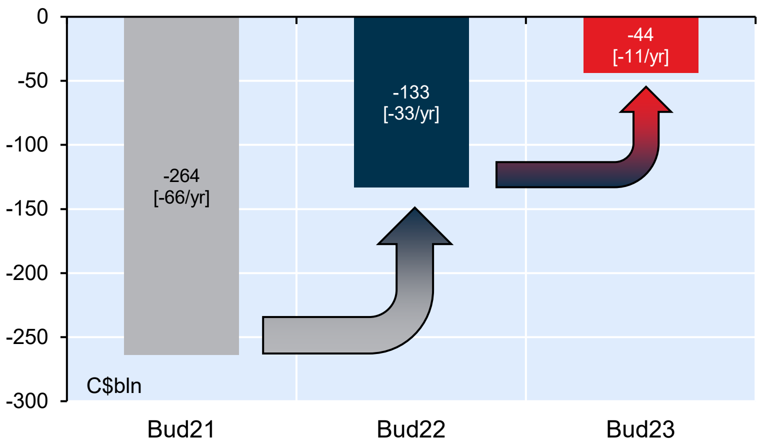


Source: NBF, rating agencies | Note: As at 16-Aug; Fitch rates 5 provinces, bringing total provincial ratings sample to 35; relative share based on latest LFS population

As it stands, 9 of 35 provincial ratings are on 'positive' outlook. Ontario—the bellwether—is on 'positive' at each of S&P, Moody's & DBRS. There's but a single 'negative' outlook (BC at S&P).

Chart 3: Provinces get credit for erasing much red ink...

Cumulative provincial budget balance: 4Y sum covering 2020-21 to 2023-24

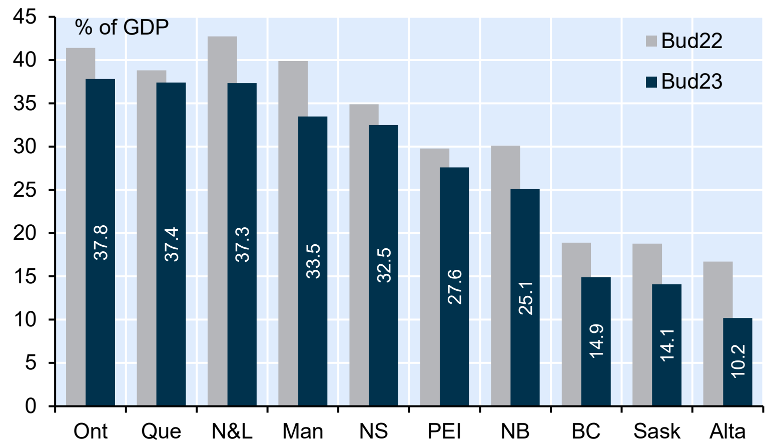


Source: NBF, prov gov'ts | Note: Based on multi-year projections at time of budget

On balance, rating agencies like what they've heard from provincial governments. Economic and fiscal repair has in many cases been real, with much red ink sopped up vs. earlier plans.

Chart 4: ...with net debt burdens having been marked down

Budget estimates of provincial net debt-to-GDP: As at March 31, 2023

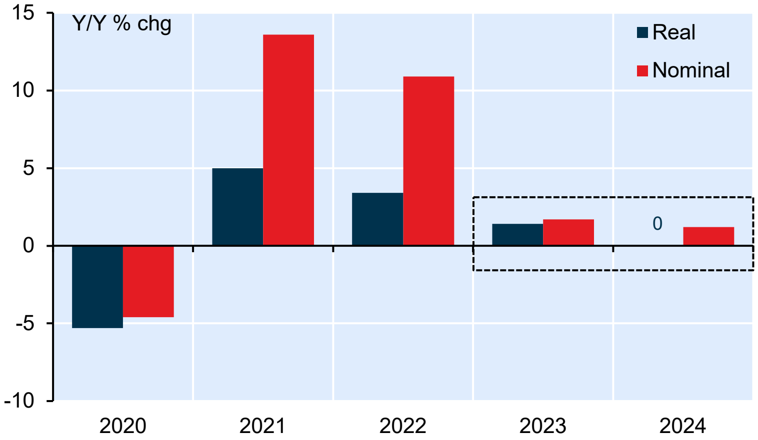


Source: NBF, prov gov'ts | Note: Compares Bud23 est with original Bud22 plan

Meaningfully positive fiscal adjustments have filtered through to debt loads, which have been marked down. Mind you, debt metrics are still a relative weak spot when it comes to provi ratings.

Chart 5: Slowdown remains a risk (alongside spending pressures)

Canada GDP growth, including NBF forecasts for 2023 & 2024

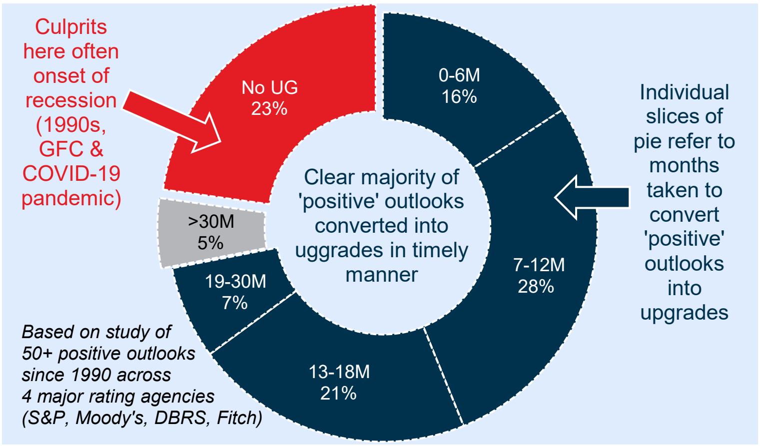


Source: NBF, StatCan | Note: 2023-24 as per Jul/Aug issue of Monthly Economic Monitor

The economic road ahead looks to get tougher. Provinces face structural spending pressures too. Maintaining fiscal resolve will thus be key to converting 'positive' outlooks into upgrades.

Chart 6: Past success converting +ve outlooks into upgrades

Months to convert 'positive' outlooks into rating upgrades: Provincial gov'ts

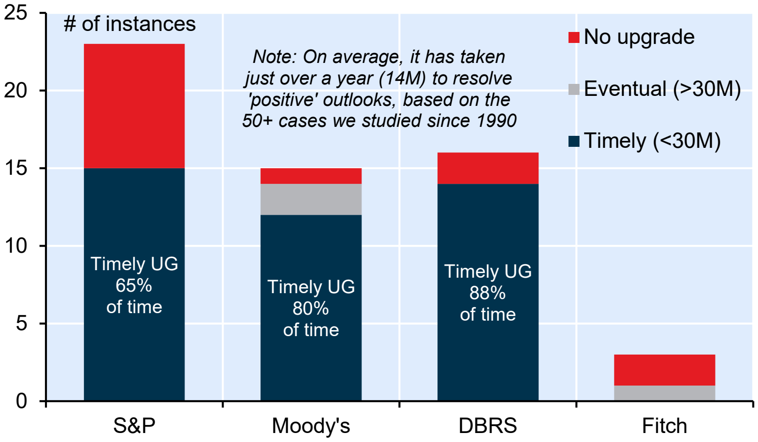


Source: NBF, rating agencies | Note: Based on available information from 1990 onwards

Looking back, a timely one-notch upgrade often follows a 'positive' outlook. You can generally blame the onset of recession for the handful of instances where there was a 'failure to convert'.

Chart 7: Timely upgrades from 'positive' the norm in past

Resolution of 'positive' outlooks by rating agency: Provincial gov'ts

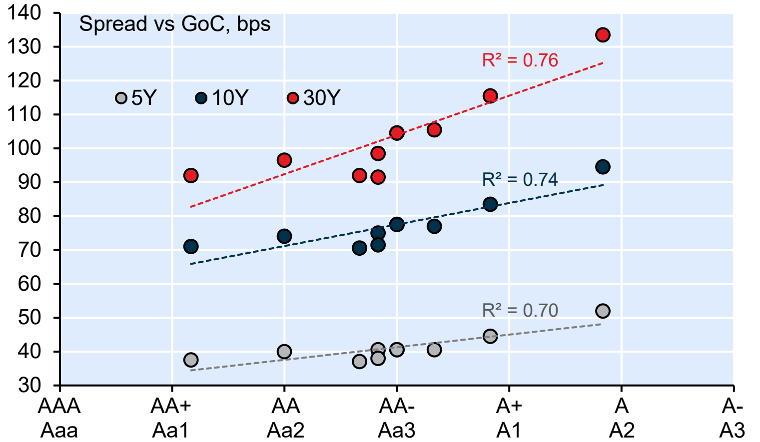


Source: NBF, rating agencies | Note: Based on available information from 1990 onwards

Caveats on past results/future performance notwithstanding, many of today's 'positive' outlooks should lead to rating upgrades. The main window for resolution would be this fall into next spring.

Chart 8: Gauging rating-spread correlation in provi land

Correlation btw provincial long-term credit ratings & indicative NI spreads

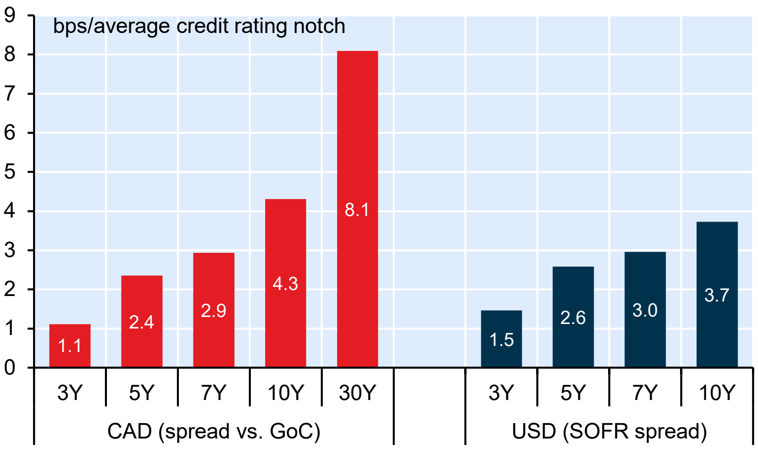


Source: NBF, rating agencies | Note: Based on latest indications/ratings

Credit rating developments are clearly relevant for provincial bond investors. There's a clear albeit imperfect correlation between ratings and spread across the curve and currency markets.

Chart 9: What's a credit rating notch really worth?

*Estimated value of credit rating notch to provincial spread, all else equal**



Source: NBF | Note: Based on latest indications/ratings; see model notes at right

If you additionally control for relative liquidity, fiscal volatility and certain other factors, a full credit rating notch (on average) is today worth ~2½ bps in the 5Y sector and more like 4bps in 10s.

Box: A word on estimating provincial basis spreads

Notes/caveats/qualifications as they relate to NBF's statistical approach

First things first, the high-level statistical results presented at left (Chart 9) are based on cross-sectional analysis of provincial new issue spread indications in the domestic (CAD) and Yankee (USD) bond markets. This is not to be confused with separate statistical analysis approaches estimating 'fair value' in credit spreads over time.

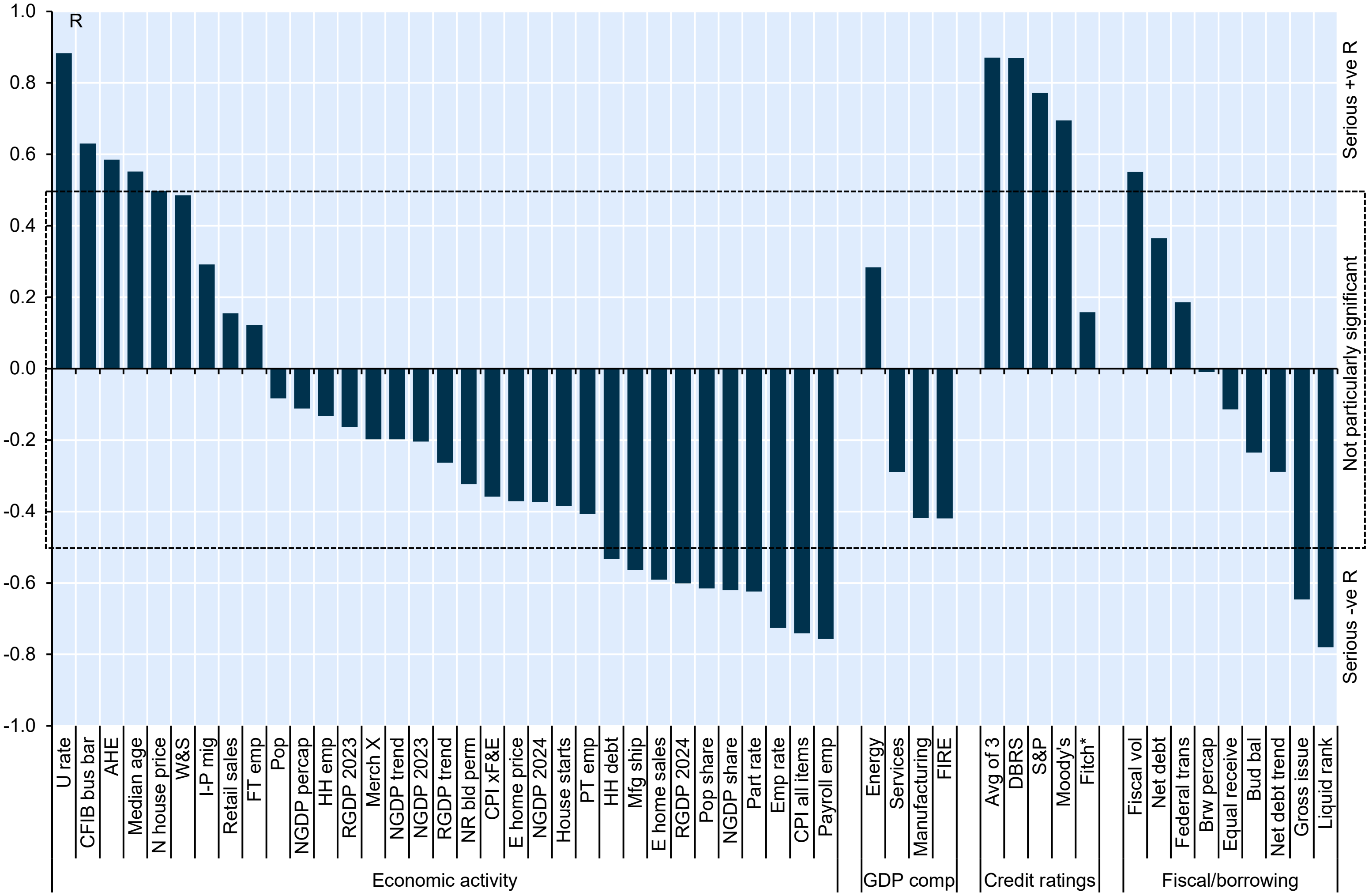
We have specified a variety of OLS models with current spread indications across all the provinces serving as the dependent variable. In addition to credit ratings (inclusive of outlooks), statistical testing examined the influence from (among other things): economic performance & structure; budgetary stance, momentum & volatility; relative leverage trends; primary/secondary market liquidity measures; etc.

The coefficients presented in Chart 9 represent the value of a single rating notch, all else equal. Note that provincial spreads appear most closely correlated with the 'average' rating assigned by the three agencies rating all provinces (S&P, Moody's, DBRS). When using an 'average' rating, we'd note that a given rating event (from a single agency) would not necessarily change the average rating by a full notch.

Finally, our analysis suggests that relative bond market liquidity is at least as important as credit ratings. We estimate that moving from the most to the least liquid of provincial names might add 7-8 bps to a current 10-year domestic spread indication, all else equal. Additional details on our approach are available to those interested.

Chart 10: As always, a number of 'other' variables help explain where provinces trade vs. each other

Correlation between 30-year CAD provincial credit spreads & collection of economic/fiscal/credit rating variables



Source: NBF, StatCan, CREA, CFIB, IIROC, Bloomberg, rating agencies | Note: Based on latest available information

Further to the discussion box on page 2, a scan of the above correlation coefficients reveals a few pockets of serious connectedness when it comes to provincial bond valuations. Credit ratings (inclusive of outlook/trend) clearly hold sway on provincial basis spreads, as we've argued in this note. Relatively liquidity is likewise a key consideration, in many cases trumping underlying fiscal metrics (which it should be noted are already generally embedded in ratings/outlooks). Credit ratings also capture some information on absolute/relative economic performance and structure. Looked at in isolation, however, provincial unemployment rates tend to fit pretty well with today's provincial credit spreads.

Provincial Ratings Snapshot

Economics and Strategy

NATIONAL BANK OF CANADA FINANCIAL MARKETS

August 17, 2023

Ticker			Ontario	Québec	British Columbia	Alberta	Manitoba	Saskatchewan	Nova Scotia	New Brunswick	Newfoundland & Labrador	Prince Edward Island
	Bloomberg bond ticker	Govt	ONT	Q	BRCOL	ALTA	MP	SCDA	NS	NBRNS	NF	PRINCE
	:	Gteed	OHYD	FINQUE|QHEL		ALBCAP			NSMFC	NBMFC	NFLAB|NFMF	
	Bloomberg T-bill ticker	Govt	ONTB	QTB		ALTATB	MPTB		NVSCTB	NWBRTB	NFTB	

S&P			Ontario	Québec	British Columbia	Alberta	Manitoba	Saskatchewan	Nova Scotia	New Brunswick	Newfoundland & Labrador	Prince Edward Island
	Long-term rating		A+	AA-	AA	A+	A+	AA	AA-	A+	A	A
	Outlook		Positive ★	Stable	Negative ★	Stable	Stable	Stable	Stable	Positive ★	Stable	Positive ★
	Short-term rating		A-1	A-1+	A-1+	A-1	A-1	A-1+	A-1+	A-1+	A-1	A-1
	Stand-alone credit profile (SACP)		a+	aa-	aa	a+	a+	aa	aa-	a+	a	a
	Institutional framework		Very predictable & well-balanced — Applies to all provinces equally									
	Economy	20%	V Strong	V Strong	V Strong	Strong	V Strong	V Strong	Average	Average	Average	Strong
	Financial management	20%	Strong	Strong	Strong	Strong	Strong	Strong	Strong	Satisfactory	Strong	Strong
	Budgetary performance	20%	Average	Average	Average	Average	Average	Average	Average	Strong	Average	Weak
	Liquidity	20%	Exceptional	Exceptional	Adequate	Exceptional	Adequate	Exceptional	Strong	Exceptional	< Adequate	Adequate
	Debt burden	20%	High	High	High	High	High	Moderate	High	High	V High	High
	Date of rating report		6-Jun-23	6-Jun-23	18-Apr-23	17-May-23	25-May-23	19-Jun-23	20-Jun-23	18-May-23	19-Jul-23	31-Jul-23

Moody's			Ontario	Québec	British Columbia	Alberta	Manitoba	Saskatchewan	Nova Scotia	New Brunswick	Newfoundland & Labrador	Prince Edward Island
	Long-term rating		Aa3	Aa2	Aaa	Aa2	Aa2	Aa1	Aa2	Aa2	A1	Aa2
	Outlook		Positive ★	Stable	Stable	Stable	Stable	Stable	Stable	Positive ★	Stable	Stable
	Short-term rating		P-1	P-1	P-1	P-1	P-1	-	-	-	-	-
	Systemic risk assessment		Aaa — Applies to all provinces equally, based on Government of Canada rating									
	Idiosyncratic risk assessment		3.96(4)	2.67(3)	2.24(2)	3.42(3)	2.74(3)	2.12(2)	2.74(3)	2.74(3)	4.07(4)	4.69(5)
	Baseline Credit Assessment: Indicated|assign		aa3 | a1	aa2 | aa3	aa1 | aa1	aa3 | aa3	aa2 | aa3	aa1 | aa2	aa2 | aa3	aa2 | aa3	aa3 | a3	a1 | a1
	F1: Economic fundamentals	20%	3.8	5.2	3.8	2.2	5.2	3.6	5.2	5.2	3.6	7.8
	Economic strength	70%	5	7	5	1	7	3	7	7	3	9
	Economic volatility	30%	1	1	1	5	1	5	1	1	5	5
	F2: Institutional framework	20%	1	1	1	1	1	1	1	1	1	1
	Legislative background	50%	1	1	1	1	1	1	1	1	1	1
	Financial flexibility	50%	1	1	1	1	1	1	1	1	1	1
	F3: Financial performance/debt	30%	5	3.75	3.25	4.25	4	3	4	4	5.5	4.75
	Operating margin	12.5%	5	5	5	7	7	5	5	3	9	5
	Interest burden	12.5%	9	7	3	5	7	5	5	7	9	7
	Liquidity	25%	1	1	1	1	1	1	1	1	1	1
	Debt burden	25%	9	7	5	7	7	5	7	7	9	7
	Debt structure	25%	3	1	3	3	1	1	3	3	3	5
	F4: Governance & management	30%	5	1	1	5	1	1	1	1	5	5
	Risk controls & financial mgmt	Max	5	1	1	5	1	1	1	1	5	5
	Investment & debt mgmt	Max	1	1	1	1	1	1	1	1	1	1
	Transparency & disclosure	Max	1	1	1	1	1	1	1	1	5	5
	Date of rating report		10-May-23	20-Jun-23	17-May-23	31-Jan-23	18-Jul-23	31-Jul-23	12-Oct-22	23-May-23	19-Jul-22	2-Aug-22

DBRS			Ontario	Québec	British Columbia	Alberta	Manitoba	Saskatchewan	Nova Scotia	New Brunswick	Newfoundland & Labrador	Prince Edward Island
	Long-term rating		AA(Low)	AA(Low)	AA(High)	AA(Low)	A(High)	AA(Low)	A(High)	A(High)	A(Low)	A
	Outlook		Positive ★	Stable	Stable	Positive ★	Stable	Stable	Stable	Stable	Positive ★	Stable
	Short-term rating		R-1(Mid)	R-1(Mid)	R-1(High)	R-1(Mid)	R-1(Mid)	R-1(Mid)	R-1(Mid)	R-1(Mid)	R-1(Low)	R-1(Low)
	Economic structure	*Corporate Risk Assessment Scorecard for Canadian Provincial Governments (10-May-2023)*	AA	AA(Low)	AA(High)	AA	AA	AA(Low)	A(High)	A(Low)	BBB(High)	A(Low)
	Debt & liability management		AA(Low)	AA	AA(High)	A(High)	A(High)	AA(Low)	AA(Low)	A(High)	A(Low)	A(High)
	Debt management		AA(High)	AA(High)	AA(High)	AA	AA(Low)	AA	AA(Low)	AA(Low)	A(Low)	A(High)
	Intergovernmental relations		AA(High)	AA(Low)	AA(High)	AA	AA(Low)	AA(High)	A(High)	A(High)	AA	A(High)
	Debt-to-GDP		A(High)	A(High)	AA(High)	AA(High)	A(High)	AA(Low)	AA(Low)	AA(Low)	A	A(High)
	Surplus/(deficit)-to-GDP		AA(Low)	AA(Low)	A(High)	AA	AA(Low)	AA(Low)	A(High)	AA	AA	AA(Low)
	Real GDP growth rate		AA	AA	AAA	AA(Low)	AA	A(Low)	AA	A	BBB(High)	AAA
	Federal tranfers-to-revenue		AA(High)	AA	AA(High)	AA(High)	A(High)	AA(High)	A(High)	A	AA	A
	Interest costs-to-revenue		AA	AA(High)	AAA	AAA	AA(High)	AAA	AA(High)	AAA	A(High)	AA(High)
	Strengths		Large, diversified economy Capacity to raise revenue Effective borrowing platform Liquidity to manage risk	Large, diversified economy Strong fiscal management Low-cost hydro generation Diversified, well-established borrowing	Diversified economy Disciplined fiscal policy & management Low debt burden Fiscal capacity	Competitive tax regime Strong demographics Abundant oil & gas resources	Diversified & resilient economy Demographics Debt management Abundant low-cost hydroelectricity	Responsible fiscal policy commitment Young & growing population Diversified portfolio of GBEs Major DB pension plans closed	Track record of fiscal discipline Economic stability Prudent debt mgmt & structure Strong liquidity positon	Commitment to fiscal discipline/growth Significant liquidity via sinking funds Reforms addressing pension liability	Significant energy resources Low reliance on federal transfers	Relatively stable economy Prudent debt & liquidity management Growing population
	Challenges		Deteriorating growth outlook w/ high inflation Relatively high debt burden Electricity system policy	High debt burden Aging population Relatively high personal income tax Slowing global demand	Moderating spending growth High household indebtedness Affordability challenges	Eco concentration & market access Political uncertainty Labour negotiations	Elevated debt levels High taxes & limited fiscal capacity Eco uncertainty & slow fiscal improvement Moderate reliance on federal transfers	Economic volatility Revenue volatility	Weak economic growth potential Reliance on federal transfers Relatively older population	Weak economic growth prospects Highly leveraged provincial utility Moderate reliance on federal transfers Weak demographics	Reliance on volatile commodity sector Elevated debt burden Weak demographics	Small size & eco concentration Limited fiscal capacity Reliance on federal transfers Moderately high debt burden
	Date of rating report		16-Jun-23	20-Jun-23	5-May-23	23-Sep-22	9-Nov-22	19-Jul-23	18-Nov-22	31-May-23	25-Aug-22	30-Jun-23

Fitch		Ontario	Québec	British Columbia	Alberta	Manitoba	Saskatchewan	Nova Scotia	New Brunswick	Newfoundland & Labrador	Prince Edward Island
	Long-term rating	AA-	AA-	AA+	AA-	-	AA	-	-	-	-
	Outlook	Stable	Stable	Stable	Positive ★	-	Stable	-	-	-	-
	Short-term rating	F1+	F1+	F1+	F1+	-	F1+	-	-	-	-
	Stand-alone credit profile (SCP)	a+	a+	aa+	a+		aa-				
	Risk profile	Stronger	Stronger	Stronger	High Midrange		Stronger				
	Revenue robustness	Stronger	Stronger	Stronger	Midrange		Midrange				
	Revenue adjustability	Stronger	Stronger	Stronger	Stronger		Stronger				
	Expenditure sustainability	Midrange	Midrange	Midrange	Midrange		Midrange				
	Expenditure adjustability	Stronger	Stronger	Stronger	Stronger		Stronger				
	Liability/liquidity robustness	Stronger	Stronger	Stronger	Stronger		Stronger				
	Liability/liquidity flexibility	Stronger	Stronger	Stronger	Stronger		Stronger				
	Debt sustainability category	'bbb'	'bbb'	'a'	'a'		'a'				
	Date of rating report	9-Jun-23	26-Jul-23	4-Apr-23	27-Jul-23		26-May-23				

Provincial Ratings Snapshot

Economics and Strategy

NATIONAL BANK OF CANADA FINANCIAL MARKETS

August 17, 2023

		Government of Canada	Municipal Finance Authority of BC
Ticker	Bloomberg bond ticker	CAN|CANRRB	BCMFA
	:	CANADA	
	Bloomberg T-bill ticker	CTB	
S&P	Long-term rating	AAA	AAA
	Outlook	Stable	Stable
	Short-term rating	A-1+	A-1+
Moodys	Long-term rating	Aaa	Aaa
	Outlook	Stable	Stable
	Short-term rating	P-1	P-1
DBRS	Long-term rating	AAA	-
	Outlook	Stable	-
	Short-term rating	R-1(High)	-
Fitch	Long-term rating	AA+	AAA
	Outlook	Stable	Stable
	Short-term rating	F1+	-

Canada's institutional framework

Provincial credit ratings draw support (in one form or another) from a sound institutional framework and top-rated sovereign government. The Government of Canada's ratings are presented at left for reference. Below is a brief summary of how each rating agency thinks of Canada's institutional framework and/or system of transfers. We refer you to detailed rating reports/methodologies for additional information.

S&P — "The ratings also benefit from the very predictable and well-balanced institutional framework in which Quebec operates. The Canadian constitution is the cornerstone of federal-provincial intergovernmental arrangements, which we view as mature and stable. The federal government provides revenue support through a number of agreements and transfer arrangements including the Canada Health Transfer and Canada Social Transfer payments."

Moody's — Provincial credit ratings are "supported by the inherent significant level of fiscal flexibility provided to all Canadian provinces. Compared to their counterparts in other countries, such as the German Länder or Australian States, Canadian provinces enjoy far greater autonomy in terms of both the spending and revenue sides of their budgets. Unfettered access to a broad range of tax bases and the ability to alter expenditure programs provide Canadian provinces with substantial flexibility to meet fiscal challenges. As such, Canadian provinces benefit from a high degree of fiscal policy flexibility that is more akin to that of sovereign governments than to many of their international sub-sovereign peers. These positive institutional factors increase Canadian provinces' ability to manage through economic downturns and handle relatively high debt burdens."

DBRS — "...the provincial governments receive substantial funding from the federal government for key social programs within provincial jurisdiction, such as health care and education and through the equalization program, which enables the less prosperous provinces to offer public services comparable to those in other provinces at reasonably comparable levels of taxation." / "Canada enjoys one of the most stable political environments in the world."

Notes to the table

Sources: NBF, S&P, Moody's, DBRS, Fitch.
This table aims to summarize the credit ratings, outlooks and key ratings rationale for each of Canada's ten provinces.
We have included the outlook on each long-term rating and have highlighted in RED where an outlook is either positive or negative.
In general, we have adopted a "heat map" approach on page 1, highlighting in GREEN relatively positive rating factors and highlight in RED those factors that may be contraining the rating or leading to downside pressure.
In some cases, we present the qualitative assessment as per a given credit rating agency, while in other cases we've presented "scores". Where possible, we've included weights to illustrate relative importance of a given factor.
Generally speaking, we have based our summaries on the latest detailed rating report or credit opinion. Where those rating reports/credit opinions are older than 12 months, we have highlighted the date in RED.
Refer to individual rating reports for detailed rating considerations, basecase forecasts and identified risks.
All credit ratings are subject to certain limitations and disclaimers, available via each credit rating agency's website.

S&P

Refer to S&P for its detailed methodology, including:
> Methodology For Rating Local And Regional Governments Outside Of The U.S. (15-Jul-2019)
> Analyzing The Liquidity Of Non-U.S. Local And Regional Governments And Related Entities And For Rating Their Commercial Paper Programs (15-Oct-2009)
> Methodology For Linking Long-Term And Short-Term Ratings (7-Apr-2017)
We have summarized the "key rating factors" as identified by S&P. That includes the "instituational framework" and multiple factors comprising the "individual credit profile". Under S&P's 2019 methodology, individual credit profiles are now made up of five factors, with budgetary performance and debt burden each combining what had been two sub-factors.

Moody's

Refer to Moody's for its detailed methodology, including:
> Rating Methodology: Regional and Local Governments (16-Jan-2018)
The methodology considers provincial governemnt ratings to be a function of two key factors: the government's Baseline Credit Assessment (BCA) and the likelihood of extraordinary support from another entity in the event of acute liquidity stress. Each province's BCA incorporates an "idiosyncratic risk score" and "systemic risk". We have summarized the scores (from 1-9) and included the relative weights for each of the four main rating "factors", denoted F1 to F4.
The "systemic risk assessment" reflects the sovereign's rating ('Aaa').

DBRS

Refer to DBRS for its detailed methodology, including:
> Rating Canadian Provincial Governments (3-May-2021)
> Global Methodology for Government Related Entities (8-Mar-2021)
Detailed rating reports for each of the provinces do not contain detailed scores/rankings for each of the "critical rating factors". As such, we have included a summary of relative risk across multiple rating factors contained in DBRS' most recent industry study (from Nov-2017). We have supplemented these relative risks with each of the noted "strengths" and "challenges" identified in the latest rating report for each province.
Re. Corporate Risk Assessment (8-Jan-2020): Size & concentration of PEI economy viewed as "negative"; N&L ownership of Nalcor viewed as "modestly negative".

Fitch

Refer to Fitch for its detailed methodology, including:
> Rating Criteria for International Local and Regional Governments (13-Sep-2019)
We have listed the "key rating drivers" identified in the latest rating report for each province.
Note that Fitch currently rates only four of the ten provinces.

Compiled by National Bank of Canada Financial Markets

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NATIONAL BANK OF CANADA
FINANCIAL MARKETS

August 17, 2023

Note: The Sovereign Government Fact Sheet, Canadian Government Fact Sheet, Provincial Ratings Snapshot and Municipal Ratings Snapshot have been designed and updated by National Bank of Canada Financial Markets.

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Important Disclosures

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