

CREDIT OPINION

2 February 2018

Update

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RATINGS

Ontario, Province of

Domicile	Canada
Long Term Rating	Aa2
Type	LT Issuer Rating
Outlook	Stable

Please see the [ratings section](#) at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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Province of Ontario (Canada)

Update to credit analysis

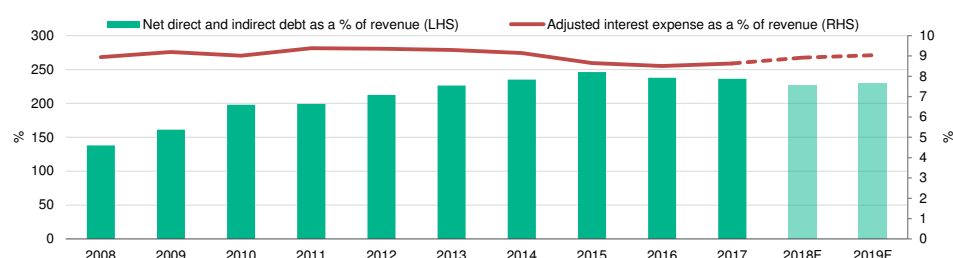
Summary

The credit profile of the [Province of Ontario](#) (Aa2 stable) reflects its large diversified economy, high degree of fiscal flexibility to accommodate revenue and expenditure pressures, prudent debt management a high likelihood that the [Government of Canada](#) (Aaa stable) would provide support if the province were to face acute liquidity stress. Ontario's economy is the largest among Canadian provinces, which supports an unfettered access to a broad range of tax bases. Combined with its ability to adjust expenditures, the province possesses important tools to align policy to meet budget goals on both sides of the ledger. These positives are offset by a high debt burden which will remain elevated over the next 5 years and which faces upward pressure on interest expense due to rising interest costs.

Exhibit 1

Ontario's debt burden should remain below the recent peak over the medium-term although it remains high relative to peers

Net direct and indirect debt as % of revenue



Source: Moody's Investor Service, Ontario financial statements

Credit strengths

- » Institutional framework provides significant fiscal policy flexibility
- » Prudent debt management with a focus on market access and debt affordability
- » Revenue supported by a diversified economy with a broad and productive tax base

Credit challenges

- » High debt burden and debt will continue to increase despite balance budget projections
- » Elevated interest expense, with higher rates anticipated
- » Rising expenditures risk to balanced fiscal targets

Rating outlook

The outlook is stable. This reflects our forecast that Ontario's debt burden will continue to fall marginally and interest expense will remain manageable across the 18-24 month horizon.

Factors that could lead to an upgrade

A significant reduction in the province's debt burden, accompanied by lower interest expense, could put upward pressure on the rating.

Factors that could lead to a downgrade

A return to an upward trend in the province's debt burden leading to higher interest expense or increases in provincial liabilities, including off-balance sheet contingent liabilities, could put downward pressure on the rating. Loss of fiscal discipline leading to consecutive years of material consolidated deficits could also lead to downward credit pressure.

Key indicators

Exhibit 2

Ontario, Province of
Year ending March 31

	2015	2016	2017	2018F	2019F
Net Direct and Indirect Debt as a % of Revenues [1]	246.4	238.0	236.3	227.1	229.1
Net Direct and Indirect Debt as a % of GDP	42.8	42.5	41.8	40.7	40.4
Cash Financing Surplus (Requirement) as a % of Revenues	(16.3)	(8.9)	(6.1)	(3.9)	(5.2)
Consolidated Surplus (Deficit) as a % of Revenues	(8.7)	(2.6)	(0.7)	0.3	0.3
Total Interest Expense as a % of Revenues [2]	9.1	8.7	8.5	8.6	8.9
Intergovernmental Transfers as a % of Revenue	18.2	17.0	17.4	18.0	17.6
Real GDP Growth (%) [3]	2.9	2.6	2.8	2.1	2.0

[1] Debt and revenue are adjusted to include school boards, colleges and hospitals

[2] Before offset for interest earnings on cash holdings; includes interest on school board, college and hospital debt. Also includes corresponding revenue adjustments.

[3] Corresponds to calendar year.

Source: Moody's Investors Service, Provincial financial statements

Detailed credit considerations

The credit profile of the Province of Ontario, as expressed in its Aa2 stable rating, combines a baseline credit assessment (BCA) for the province of a1, and a high likelihood of extraordinary support coming from the Government of Canada (Aaa stable) in the event that the province faced acute liquidity stress.

Baseline credit assessment

Institutional framework provides significant fiscal policy flexibility

Given the high level of net direct and indirect debt relative to revenues, the high investment grade creditworthiness of the Province of Ontario is principally 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.

Prudent debt management with a focus on market access and debt affordability

The important increase in Ontario's debt since 2009 is mitigated by prudent debt management. As it relies on large annual borrowing programs, continued ready access to capital markets is a priority for the province. To meet these needs, Ontario ensures its debt is attractive to a wide audience of perspective investors: it issues debt across a variety of tenures (although principally 5, 10 and 30

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years) and is active in domestic and foreign currency markets. The province also maintains a high level of unrestricted liquid reserves (averaging CAD20.9 billion in 2016/17) to ensure it can meet short-term needs if market conditions warrant such use. The province has also made prudent use of pre-borrowing a strategic level of future debt in the current year, limiting financing risk should market conditions deteriorate.

The province's debt management also mitigates risk by a variety of measures. Given the continued low interest rate environment, Ontario has been able to issue long-term debt bearing historically low coupons thereby assuring continued debt affordability and a high degree of interest expense certainty despite its ongoing debt accumulation. The province's weighted average term-to-maturity for its existing stock of debt is just under 14 years, reducing refinancing risk. The province also swaps most foreign currency denominated debt back to Canadian dollars, thereby reducing exchange rate risk (only 0.2% of total debt is exposed to foreign exchange movements).

The current low interest rate environment has meant that, despite an accumulation in debt, interest expense as a percentage of revenue has remained relatively stable over the current period extending back to 2008/09 despite an important increase in debt. Should the medium-term fiscal plan come to fruition, adjusted interest expense as a percentage of adjusted revenue will fluctuate slightly within a band of 8.5-9.0% of revenue through 2020.

Ontario sponsors or co-sponsors three defined benefit pension plans: the Public Service Pension Plan, the Ontario Public Service Employees Union Pension Plan and the Ontario Teachers' Pension Plan. As at March 31, 2017, the total liability of earned pension benefits was CAD124.7 billion, surpassed by plan assets of CAD149.9 billion. Government's cash contributions to its three defined benefits pension plans are expected to remain within a range of 1.5-2% of revenue across the medium-term. Unlike most plans sponsored or co-sponsored by other Canadian provinces and regional governments elsewhere, Ontario's pension plans do not represent a drag on the province's financial position and performance and are a source of relative credit strength.

Revenue supported by large diversified economy with a broad and productive tax base

Ontario's economy is the largest of the Canadian provinces, representing roughly 40% of national economic output. The economy is diverse, with substantial manufacturing (roughly 12% of GDP) and service sectors (over 77% of GDP). Economic activity continues to be strong, with real GDP growth of 2.6% in 2016 and forecasted at 2.8% in 2017. The province forecasts a slight decrease in growth: 2.1% in 2018 and 2.0 in 2019, but still in line with the national average. The service sector includes a significant financial services industry, with Toronto, Ontario's largest city, serving as Canada's financial services capital. The provincial economy is highly integrated with the United States, as evidenced by the significant cross-border trade in automobiles and auto parts as well as in a variety of other manufactured goods.

Representing slightly more than 38% of the national population, Ontario also benefits from strong demographic and wealth factors. The province's population increased 5.4% between 2011 and 2016 and it continues to remain a strong destination for immigration. The province's unemployment rate was 6.0% in 2017, below the national rate of 6.3%. Median total family income is also in line with national levels and well above many of the other Aa2-rated Canadian provinces. These factors help support a strong revenue base for the province.

Downward risks to the economic growth include a slowdown in residential investment, which has recorded strong growth over the past several years. Housing activity will adjust to recent changes introduced by all levels of government to address a range of concerns, including affordability, non-resident investment levels and increased stress testing of mortgages to interest rate increases. Given the long period of low interest rates and the rise in household debt, Ontario's economy is also exposed to a potential slowdown in consumer activity if household budgets become constrained due to rising interest rates. Finally, given the close ties to the US market, significant disruptions to the North American Free Trade Agreement (NAFTA), which continues to be renegotiated, could also have negative impacts on economic activity.

High debt burden and debt will continue to increase despite balance budget projections

Financing for the significant consolidated deficits recorded during the lengthy recovery following financial crisis of 2008-09, as well financing for infrastructure spending, pushed the province's debt burden, measured by net direct and indirect debt relative to revenues, to a high level compared to other global regional governments. Ontario's debt burden increased from 137.9% of revenue as of March 31, 2008 to a projected 227.1% of revenue at March 31, 2018, levels that are among the highest of global sub-sovereign peers. This

measure, however, has fallen from its recent peak of 246.4% recorded at March 31, 2015, a trend that mirrors the province's improving fiscal position and reduced need to borrow for operations.

Future debt issuance will be driven by the province's goal to reduce its sizeable infrastructure backlog. The province has proposed to invest more than CAD156 billion over the period 2017/18-2026/27 in public infrastructure, leading to annual provincial borrowing requirements of more than CAD30 billion. This will ensure that the province's debt levels remain high, although with revenue growth the province's debt burden will continue to fall gradually. Our forecast is for the province's debt burden to remain near 230% of revenues as of March 31, 2019.

Also included in our forecast is debt of [Fair Hydro Trust](#) (FHT). While FHT, which was created at the behest of the province, is designed to be self-supporting (pay principle and interest through revenue generation) on a life-cycle basis, it is not currently as it faces a moratorium on revenue generation. Further, FHT carries the possibility that a provincial guarantee of its debt may be invoked in certain prescribed circumstances. As such, we will include FHT's debt in the provincial net debt metrics during, at a minimum, the period in which it does not generate sufficient revenue to cover debt service. Once revenues from the Clean Energy Adjustment charge, which will be added to consumers' electricity bills in 2021, begins to fully cover debt service, we will review this treatment. The projected total financing required, CAD19 billion plus accumulated interest charges prior to being fully self-supporting, is nonetheless fairly negligible given the province's high net direct and indirect debt level (CAD332.6 billion as of March 31, 2017).

Elevated interest expense, with higher rates anticipated

Despite strong debt management which has helped minimize increases to the province's interest expense as debt levels have risen, Ontario's interest expense is elevated. Ontario's interest payments measured 8.5% of revenue as of March 31, 2017. Debt service, which includes principal repayments and interest, measured 23.8% of total revenue in 2016/17, on par with the share of 25.1% in 2007/08.

Given Ontario's high debt burden and significant planned medium-term re-financing, the province is exposed to a potential sudden rise in interest rates. If the 10 year Government of Canada bond rises 200 basis points between 2017 and 2021, we forecast that the province's interest expense would exceed 10% of revenue.

Although high, under these conservative scenarios of interest rate increases we remain confident that interest expense is not expected to accelerate quickly, and we note that these levels of interest expense would continue to be less than what the province reported in the period prior to 2006. Furthermore, the exposure to an increase in interest expense is expected to correspond with an offsetting decrease in the province's debt burden. Nonetheless, the province is exposed to the potential need to accommodate higher interest expense across the short-term horizon, adding to financial pressure as it attempts to establish consistent balanced budgets.

Rising expenditures risk to balanced fiscal targets

Although Ontario has plans to maintain balanced budgets across the medium-term, increased pressure to raise expenditures will challenge those goals. As per Budget 2017, the province anticipated to reduce total spending growth to 2.3% in 2018/19 and 2.8% in 2019/20, following growth levels that averaged 3.7% over the period 2013/14-2016/17 and projected growth of 5.7% in 2017/18. The targeted growth levels for spending are below the combined forecasted rate of inflation and population growth and therefore not deemed sustainable for lengthy periods of time. This raises the likelihood that future planned expenditure growth will exceed current targets, and place increased risk that balanced budget outcomes will not be met.

Extraordinary support considerations

Moody's assigns a high likelihood that the Government of Canada (Aaa stable) would act to prevent a default by the province. The high likelihood of support reflects Moody's assessment of the federal government's incentive of minimizing the risk of potential disruptions to capital markets if Ontario, or any province, were to default. It also reflects indications of a moderately positive federal government policy stance, as illustrated by the flexibility inherent in the system of federal-provincial transfers.

Rating methodology and scorecard factors

In the case of Ontario, the BCA matrix generates an estimated BCA of aa3, close to the BCA of a1 assigned by the rating committee. The matrix-generated BCA of aa3 reflects (i) an idiosyncratic risk score of 4 (presented below) on a 1 to 9 scale, where 1 represents the strongest relative credit quality and 9 the weakest; and (ii) a systemic risk score of Aaa, as reflected in the sovereign bond rating for Canada.

Exhibit 3

Ontario, Province of

Rating Methodology: [Regional and Local Governments](#), 16 January 2018

Baseline Credit Assessment	Score	Value	Sub-factor Weighting	Sub-factor Total	Factor Weighting	Total
Scorecard						
Factor 1: Economic Fundamentals						
Economic strength	5	99.80	70%	3.8	20%	0.76
Economic volatility	1		30%			
Factor 2: Institutional Framework						
Legislative background	1		50%	1	20%	0.20
Financial flexibility	1		50%			
Factor 3: Financial Performance and Debt Profile						
Gross operating balance / operating revenues (%)	5	1.30	12.5%	4.75	30%	1.35
Interest payments / operating revenues (%)	9	8.64	12.5%			
Liquidity	1		25%			
Net direct and indirect debt / operating revenues (%)	9	235.70	25%			
Short-term direct debt / total direct debt (%)	1	5.30	25%			
Factor 4: Governance and Management - MAX						
Risk controls and financial management	5			5	30%	1.50
Investment and debt management	1					
Transparency and disclosure	1					
Idiosyncratic Risk Assessment						3.81(4)
Systemic Risk Assessment						Aaa
Suggested BCA						aa3

Source: Moody's Investors Service

Ratings

Exhibit 4

Category	Moody's Rating
ONTARIO, PROVINCE OF	
Outlook	Stable
Issuer Rating	Aa2
Senior Unsecured	Aa2
Commercial Paper	P-1
Other Short Term	(P)P-1
ONTARIO ELECTRICITY FINANCIAL CORPORATION	
Outlook	Stable
Bkd Senior Unsecured -Dom Curr	Aa2

Source: Moody's Investors Service

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