

Credit Overview: Rating Agency Process, Municipal Financial Health, and MFABC

21 March 2018

Agenda

1. **What is a rating?**
2. **Municipal and provincial credit ratings landscape**
3. **Main credit determinations**
4. **Four key credit metrics**
5. **MFABC**

1. What is a rating?

What is a rating?

Ratings assigned on Moody's global long-term and short-term rating scales are *forward-looking opinions of the relative credit risks of financial obligations* issued by non-financial corporates, financial institutions, structured finance vehicles, project finance vehicles, and public sector entities.

Obligations rated Aaa are judged to be of the highest quality, subject to the lowest level of credit risk.

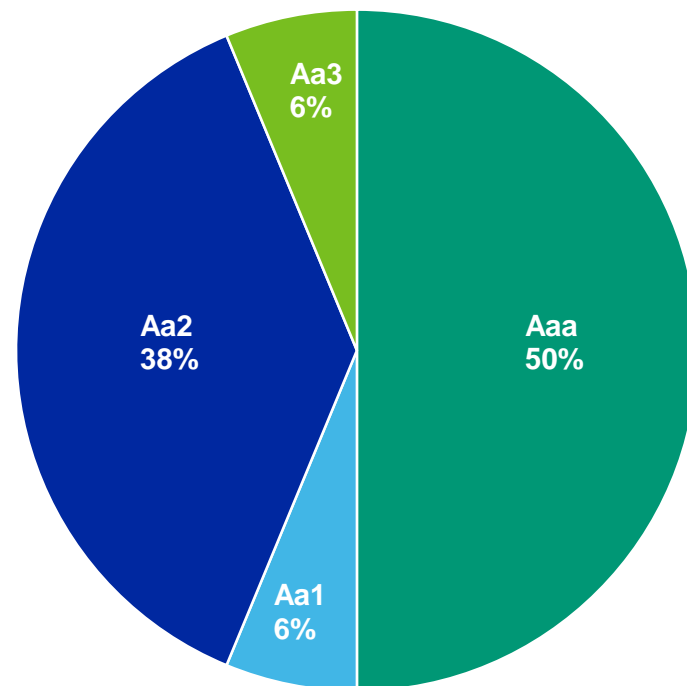
LONG-TERM RATING	SHORT-TERM RATING
Aaa	Prime-1
Aa1	
Aa2	
Aa3	
A1	
A2	Prime-2
A3	
Baa1	Prime-3
Baa2	
Baa3	
Ba1, Ba2, Ba3	Not Prime
B1, B2, B3	
Caa1, Caa2, Caa3	
Ca, C	

Source: Moody's Rating Symbols and Definitions July 2017

2. Municipal and provincial credit ratings landscape

Canadian municipal ratings

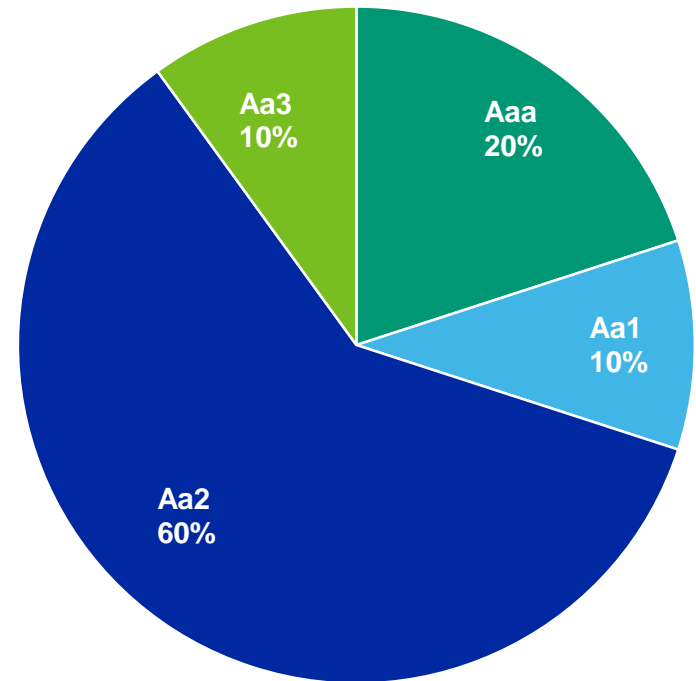
Municipalities	Rating	Outlook
Durham	Aaa	Stable
Halton	Aaa	Stable
London	Aaa	Stable
Ottawa	Aaa	Stable
Peel	Aaa	Stable
Vancouver	Aaa	Stable
Waterloo	Aaa	Stable
York	Aaa	Stable
Toronto	Aa1	Stable
Montreal	Aa2	Stable
Muskoka	Aa2	Stable
North Bay	Aa2	Stable
Quebec City	Aa2	Stable
Winnipeg	Aa2	Stable
Yellowknife	Aa2	Stable
St. John's	Aa3	Negative



Source: Moody's (as of 12 March 2018)

Canadian provincial ratings

Provinces	Rating	Outlook
British Columbia	Aaa	Stable
Saskatchewan	Aaa	Stable
Alberta	Aa1	Negative
Manitoba	Aa2	Stable
New Brunswick	Aa2	Stable
Nova Scotia	Aa2	Stable
Ontario	Aa2	Stable
Prince Edward Island	Aa2	Stable
Quebec	Aa2	Stable
Newfoundland and Labrador	Aa3	Negative



Source: Moody's (as of 12 March 2018)

3. Main credit determinations

Ratings: baseline credit assessment (BCA)

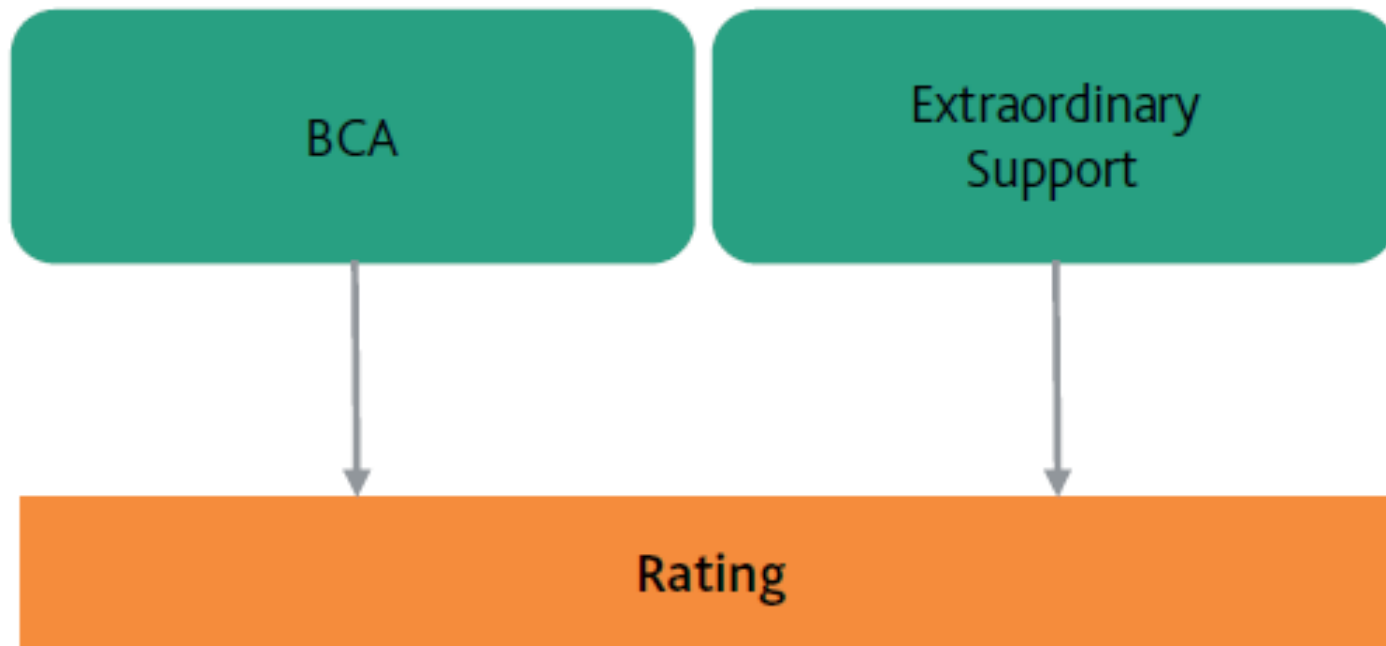
Key Factors	Weight	Sub-Factors	Key strengths and challenges
Economic fundamentals	20%	Economic strength	<ul style="list-style-type: none"> ● Predictable revenues from property taxes and user fees
		Economic volatility	<ul style="list-style-type: none"> ● Sound economic fundamentals (industry diversity and GDP and population growth)
Institutional Framework	20%	Legislative background	<ul style="list-style-type: none"> ● Stable institutional framework ● Strong access to capital markets
		Financial flexibility	<ul style="list-style-type: none"> ● But, political willingness may constrain revenue growth

Ratings: baseline credit assessment (BCA)

Key Factors	Weight	Sub-Factors	Key strengths and challenges
Financial Performance and Debt Profile	30%	<hr/> Operating margin <hr/> Interest burden <hr/> Liquidity <hr/> Debt burden <hr/> Debt structure	<ul style="list-style-type: none"> ● Stable sector debt burden since 2014 ● Strong debt affordability supported by continued low interest environment ● Debt and debt service limits exist ● But, growing capital needs and infrastructure backlog ● Operating budget pressures from program spending (housing, police, health)
Governance and Management	30%	<hr/> Risk controls and financial management <hr/> Investment and debt management <hr/> Transparency and disclosure	<ul style="list-style-type: none"> ● Transparent and high quality public reporting ● Operating budgets and long-term capital budgets

Combine BCA with extraordinary support

Extraordinary support = default dependence + support
Typically *High* support and *Very High* dependence



What differentiates the different ratings?

No “one” specific metric will be a differentiator, rather a combination of factors. Factors not static and may overlap

	Aaa	Aa1	Aa2	Aa3
Liquidity	Exceptional / very strong		Strong to moderate	
Capital	Recurring sources		Non-recurring sources	
Operating surplus	>15% of revenue		<15% of revenue	
Debt	<85% of revenue		>85% of revenue	

Can municipalities be rated above province?

Yes, ratings can pierce through the provincial rating

This is because:

- » Municipal property taxes and user fees are not correlated with provincial revenues
- » Mill rates can be adjusted to ensure stability in taxes
- » As a result, municipal operating profiles tend to be more stable which allows for better planning (less downside risk)
- » Provincial credit pressures are not necessarily transferred to municipalities

Looking ahead and emerging trends

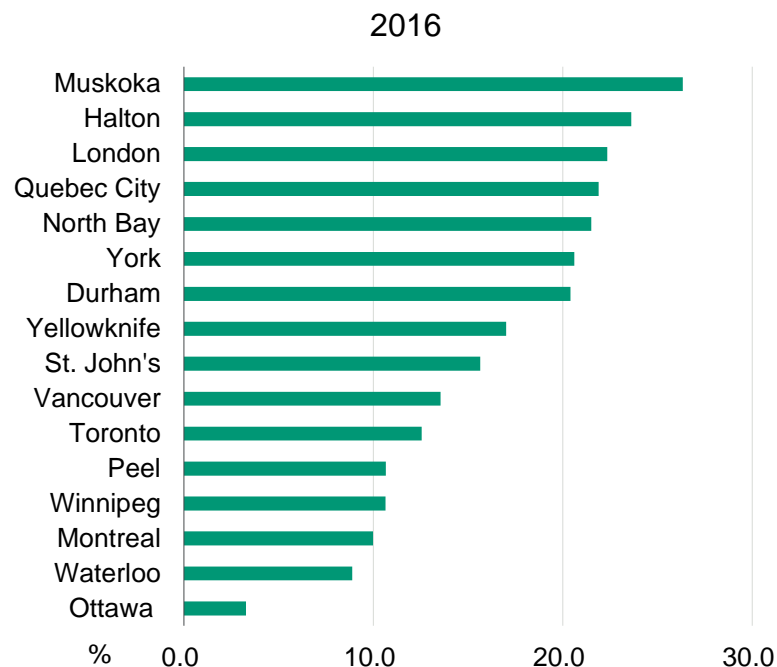
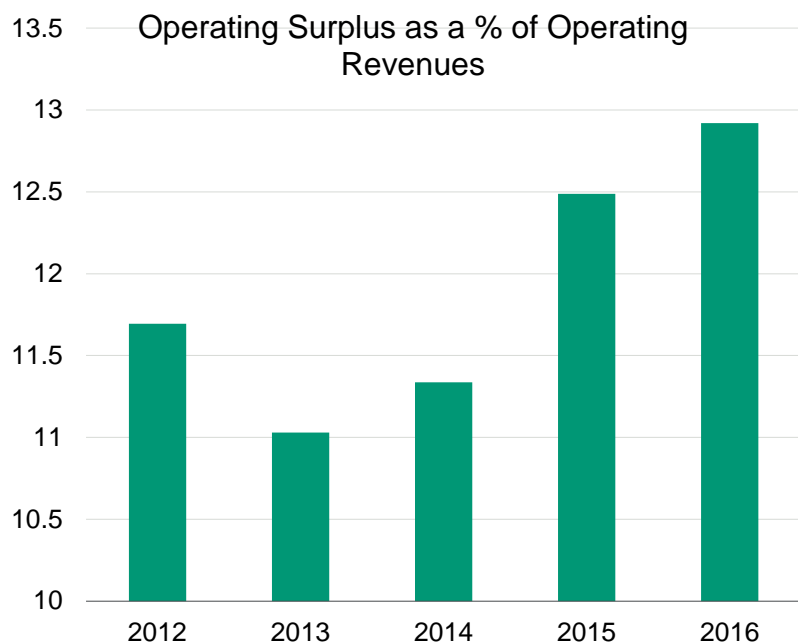
Debt issuances continue, new sources of government funding available

Factors	Trends
Debt	<ul style="list-style-type: none">● Debt financing of capital projects continues● Higher-rated municipalities continue to fund many projects from reserves● Pay-as-you-go financing also remains prevalent
Funding	<ul style="list-style-type: none">● Federal infrastructure funding programs available, including phase 1 (and phase 2?) of PTIF and CWWF● Infrastructure Bank? (for large capital projects)● But: provincial funding constraints also exist (Winnipeg, Toronto)
Legislation, Policy	<ul style="list-style-type: none">● New municipal legislative powers. For example, Vancouver and Toronto received power to tax empty homes● Provincial and municipal legislations to cool housing markets (in BC and ON)● Provincial uploading of social assistance costs (e.g. Ontario Works)

4. Four key credit metrics

Fiscal performance continues to strengthen

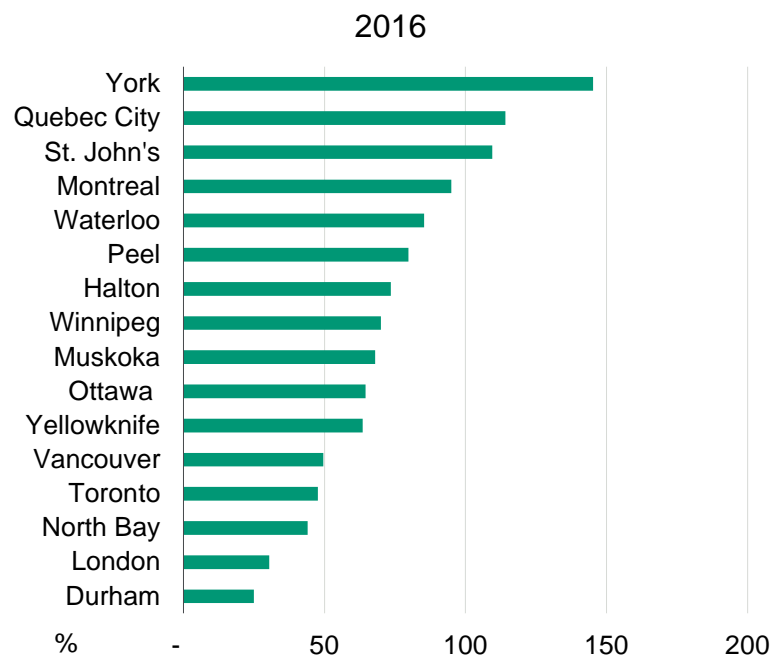
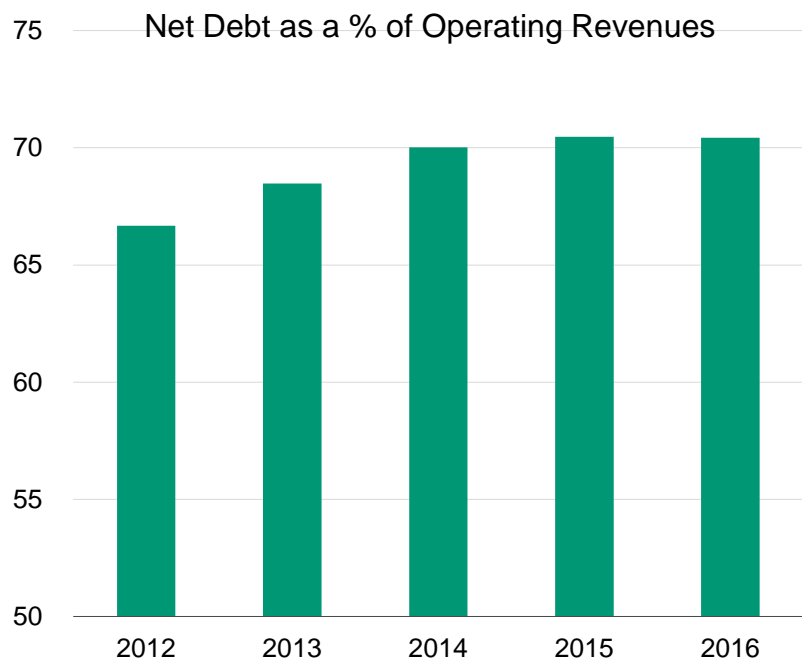
Double digit margins support funding capital from operations



Source: Moody's, Municipal financial statements

Debt burdens do not pose undue constraints

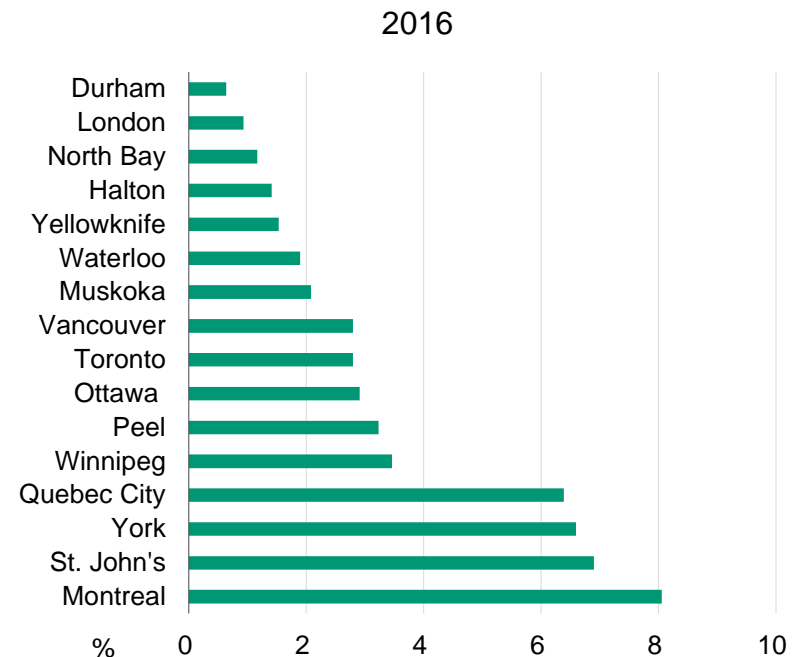
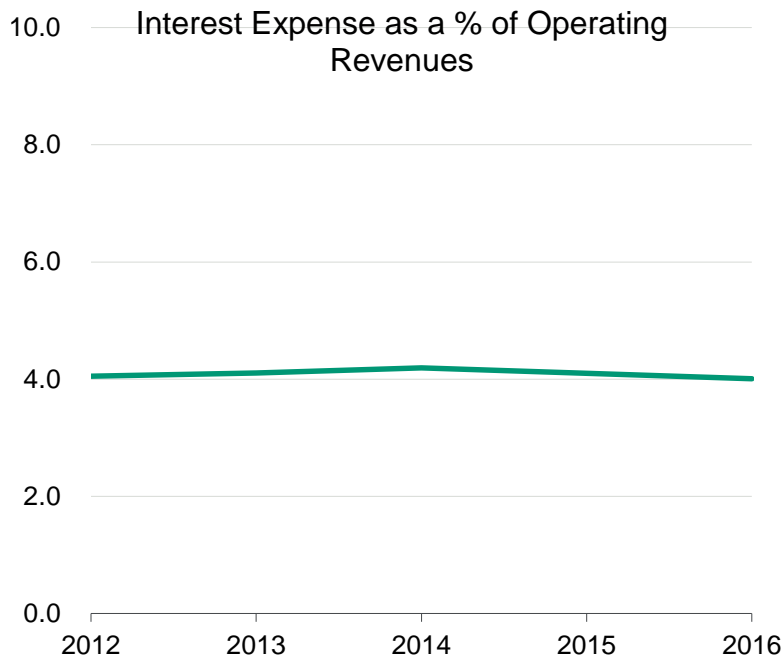
Municipalities continue to issue debt for capital needs, but strong fiscal performances support stable debt burdens



Source: Moody's, Municipal financial statements

Low interest burden supports debt affordability

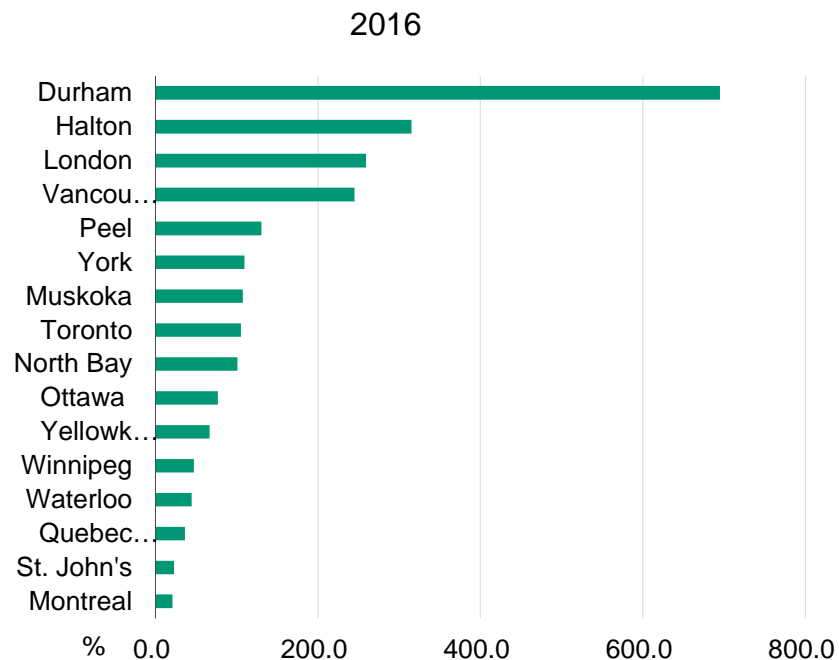
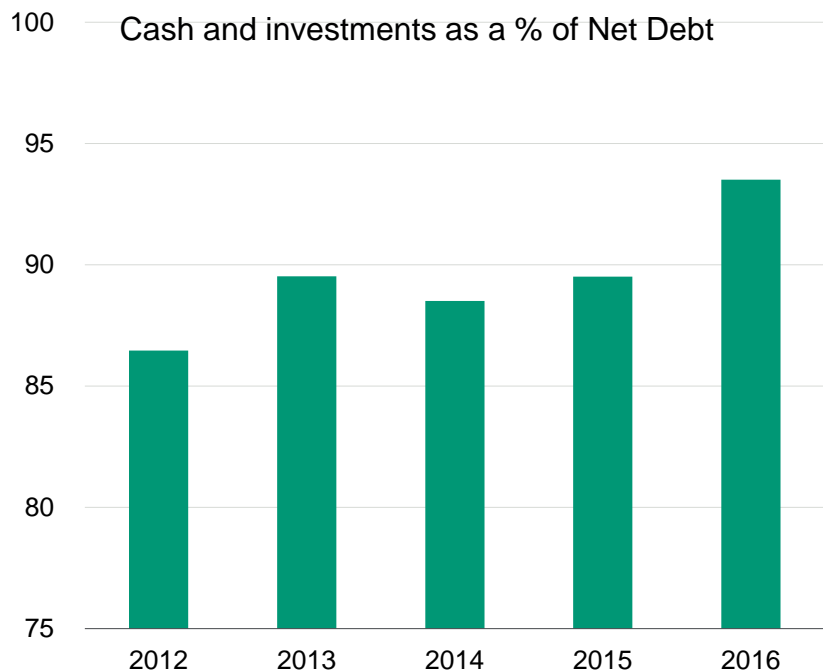
Interest burdens remain low due to low interest rates and modest debt issuances



Source: Moody's, Municipal financial statements

Liquidity from cash and investments improving

Municipalities gradually build up reserves, but range of liquidity metrics remains wide



Source: Moody's, Municipal financial statements

5. MFABC

Overview and key supporting factors to MFABC's Aaa rating

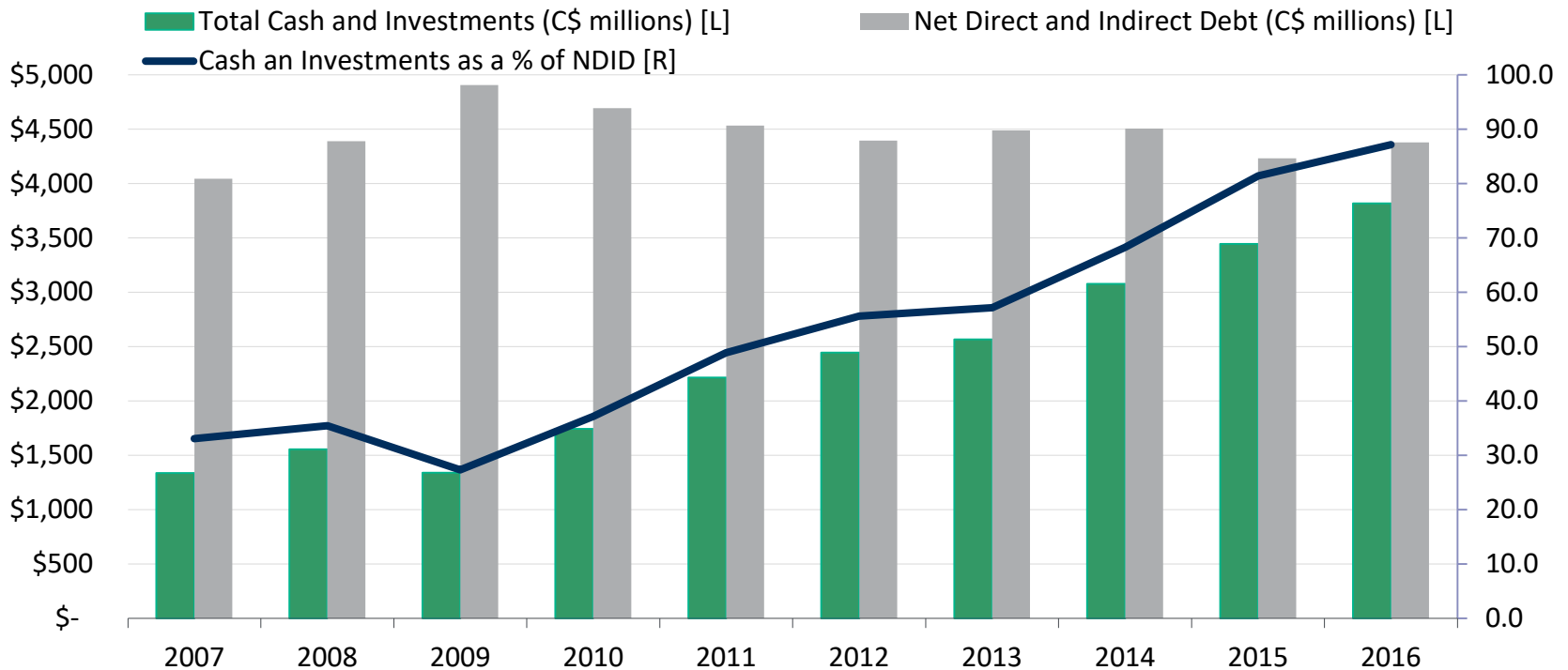
- » Aaa rated since 1980 (affirmed May 2017)
- » One of only a handful of Moody's-rated Aaa GRIs globally
- » Methodologies: U.S. Municipal Pool Program Debt and Government-Related Issuers

- » Nearly 50-year operations of MFABC with no borrower defaults
- » History of very strong operating results (average 28% operating margin over the last 5 years)
- » Robust liquidity from cash & investment, sinking funds, CP program

Key supporting factors to MFABC's Aaa rating (cont'd)

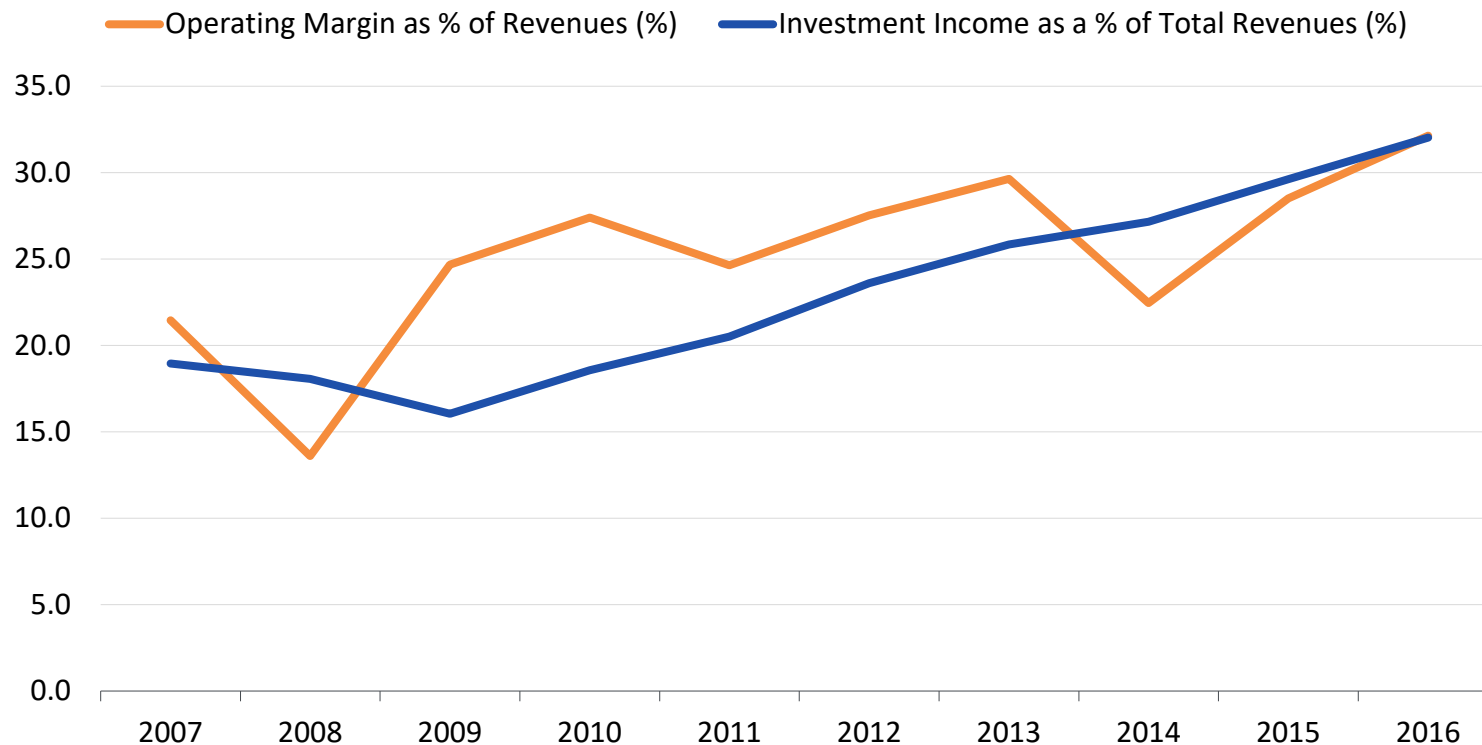
- » Strong institutional framework, including provincial oversight of municipalities (no operating deficits, public approval of borrowing, debt service limits, audits)
- » High quality loan portfolio and diversified borrower pool
- » Joint and several liability of borrowers
- » MFABC's unfettered taxing powers
- » MFABC's robust debt structure, repayment mechanism and covenants
- » Pool concentration in the Metro Vancouver mitigated by high credit quality of pool and strong provincial and regional oversight

Sizeable liquidity from cash and investments



Source: Moody's, MFABC

Exceptional operating margin and investment income



Source: Moody's, MFABC

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