The Bond Ratings Process

Introduction to Municipal Bonds

Ohio Government Finance Officers Association

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S&P Global Ratings

Agenda

- What is a Credit Rating and Why Do We Care?

- Our Role
- The Rating Scale
- The Rating Process
- Credit Analysis
 - Example of U.S. Local Government General Obligation Criteria
- Ohio Means and Medians
- Local Government and Ohio Outlook



Credit Ratings: What's the Big Deal?



Understanding S&P Global's Ratings

- Credit ratings are forward looking
- Credit ratings are not a recommendation to buy or hold a security instrument
- S&P Global ratings are opinions, not guarantees of credit quality or exact measures of the probability that a particular issuer or particular debt issue will default
- The Ratings scale is relative and based on the creditworthiness of an issuer or credit quality of an individual debt issue, from strongest to weakest, within a universe of credit risk
- Criteria provide the analytic framework to derive the rating opinion

www.understandingratings.com



I'm Just a Bond

Issuer creates and formalizes capital plan that includes long-term debt	 Receives voter or legislative approval to sell bonds 			integral to the process: • Issuers • Intermediaries • Investors
	Issuer hires outside professional (usually)	 Municipal advisor Bond Counsel Underwriter (negotiated transaction) 		
		Simultaneously	 Creation of offerin Rating presentation Communication was participants 	on and a second s
			Final Steps	Rating AssignedBond sale/pricingBond closing/proceeds delivery

Credit rating is

Ratings' Role in the Municipal Bond Market

lssuers

- -Optimize the cost of funding
- -Expand the pool of investors and available capital
- -Lengthen the terms of financing
- -Diversify funding sources

Intermediaries

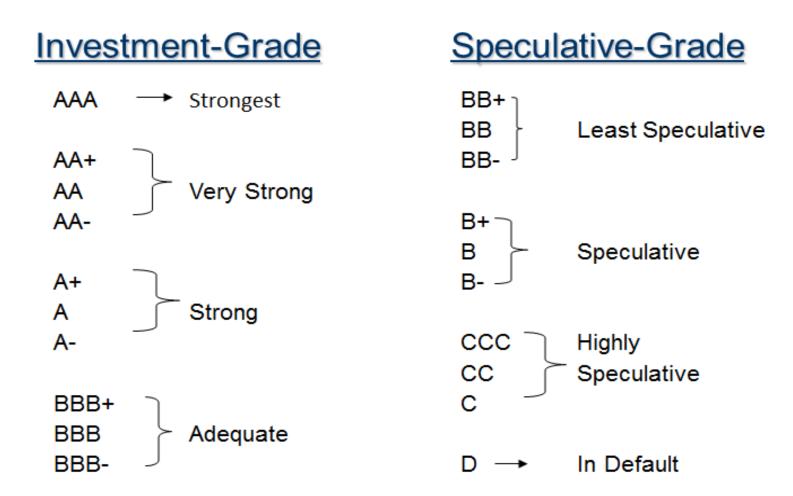
- -Benchmark the relative credit risk of different debt issues
- -Set the initial pricing for individual debt issues they structure
- -Determine the interest rate issues will pay
- -Package assets into securities or structured finance instruments to market to investors

Investors

- —A third-party opinion of credit quality
- —A basis for comparison across asset classes, geographies, and peers

—Information and metrics to make informed decisions, such as supplementing their own credit analysis or establishing thresholds for credit risk and investment guideline

S&P Global's Ratings Scale



Short-term U.S. Public Finance note ratings: SP-1+, SP-1, SP-2 & SP-3



Outlooks and CreditWatch

Outlooks

- Potential rating change within 1 to 2 years
- At least 1-in-3 likelihood of rating action
- Outlooks can be:
 - Stable
 - Positive
 - Negative
 - Developing

<u>CreditWatch</u>

- Potential rating change within 60 to 90 days
- At least 1-in-2 likelihood of rating action
- CreditWatch can be:
 - Positive
 - Negative
 - Developing

Key Takeaway

- An issuer's *ability* and *willingness* to pay debt in a *timely* manner
- Ability
 - At its most fundamental level, an issuer's **ability** to meet its debt obligations depends on its financial resources available to pay debt service.
- Willingness
 - Willingness, although more elusive (art of credit analysis), relates an issuer's priority of debt service over other competing demands on financial resources.
 - What is given up in order to pay debt? Payroll? Paying pensions and healthcare costs?
 - What is the political cost of doing one over the other?
- **Timeliness** = availability (liquidity) of resources at a point in time

The Rating Process





- Rating Request
- Analyst Assignment
- Initial Analysis and Management Meeting
- Rating Committee Preparation
- Rating Committee
- Rating and Rationale Released to Market
- Rating Surveillance

Initial Analysis & Management Meeting

- Review of bond offering documents, audits, budgets, and news articles
- Schedule meeting with issuer's management team

Best practices:

- Gather key management documents in advance of the meeting (long-term financial forecast, capital improvement plan, mid-year budget reports and investment reports, key management policies)
- Come prepared to speak on prior year financial performance in main operating funds.
- Discuss projected and budgeted financial performance along with factors which are influencing the projected results.

Management Meeting

- Typically a 60 minute phone call
 - May request more time for more complicated structures, or less time for frequent issuers
- Discuss bond provisions and key criteria factors
- Provides valuable forward-looking and qualitative information used in the rating analysis and committee decision
- Qualitative analysis supplements the quantitative portion of our criteria
- Robust management responses better inform the rating committee
- Be prepared for follow-up questions from analyst
- It is okay if the issuer does not have answers to every question. Follow-up items are common.



Complete Rating Analysis

- Gather additional information, as needed
- Compare key credit characteristics of issuer to credit characteristics of peers with a similar security
- Write rating rationale and prepare presentation for rating committee

Best practices:

• As quickly as possible, provide follow-up requests or documentation to be incorporated into the final rating consideration.

Rating Committee

- Gathering of senior level analysts and democratic process to assign rating
- Analysts presents bond features and key criteria factors

Rating and Rationale Released to Market

• Initial rating notification to Issuer and Financial Advisor

Best practices:

- Communicate to your analyst if you or your representative financial advisor will be absent when rating decision is expected, and appropriate designated contacts.
- Publication and dissemination of rating and rating rationale

Best practices:

- Provide prompt commentary on the draft of the rating report as to not delay the public release of the rating and report to the market.
 - Note: Purpose of review is to ensure factual accuracy and avoid inadvertent inclusion of confidential information. We will use our sole discretion in making editorial changes to the document, which represents our independent opinion.

Surveillance

- Routine review of ratings to ensure accuracy and timeliness of rating
- Annual requests for financial statements
- Periodic requests for additional information
- Best practices:
 - Upload continuing disclosure documents (financial statements and other info relevant to credit quality) in a timely manner each year.
 - Respond promptly to additional information and document requests from S&P Global Ratings employees.

Credit Analysis

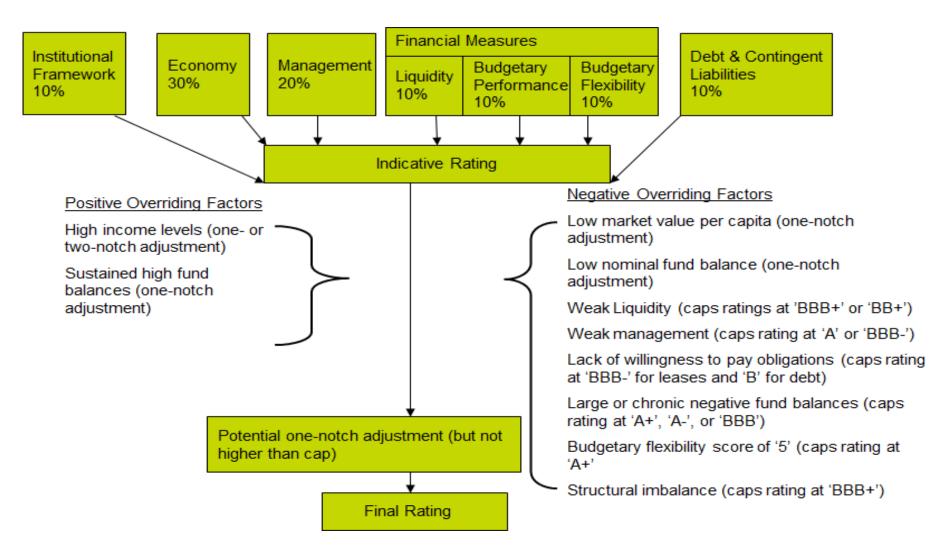


First Things First

- How are the bonds secured? What resources can an issuer use to pay debt service?
 - General Obligation (GO)
 - Limited GO
 - Appropriation
 - Revenue Bonds (Sales tax, Gas Tax, Personal Income Tax, W&S)
 - Moral Obligation
- Credit analysis is quantitative and qualitative measures
- Criteria provides transparency, comparability, and forward-looking measures



Overall Analytical Framework Local Government



S&P Global Ratings

How Does it All Work– Example

Economic Score

Table 8 Assessing The Economic Score (see paragraphs 41-47)							
		Total Ma	arket Value Per C	apita			
Projected per capita effective buying income as a % of U.S. projected per capita EBI	>\$195,000	\$100,000 to \$195,000	\$80,000 to \$100,000	\$55,000 to \$80,000	<u>≤</u> \$55,000		
>150	1	1.5	2	2.5	3		
110 to 150	1.5	2	2.5	3	3.5		
85 to 110	2	2.5	3	3.5	4		
70 to 85	2.5	3	3.5	4	4.5		
≤70	3	3.5	4	4.5	5		
A score of '1',' 2', '3',' 4', and '5' means very stron	ig, strong, ade	quate, weak, and v	veryweak, respect	tively.	1		

Due to the presence of a university, we apply our 'Stabilizing Institution (where market values may be understated)' adjustment.

Financial Management Assessment

Table 9 Assessing The Management Score (see paragraphs 48-58)					
Score	Characteristics				
1 (very strong)	FMA score of "Strong" and none of the factors in scores '4' or '5' are present.				
2 (strong)	FMA score of "Good" and none of the factors in scores '4' or '5' are present.				
3 (adequate)	FMA score of "Standard" and none of the factors in scores '4' or '5' are present.				
4 (weak)	FMA score of "Vulnerable" or any of the following is present: there is a financial reporting restatement that has a material negative impact; any of the conditions in score '5' existed within the past three years; the structural imbalance override condition exists or existed within the past three years; or a very high debt, pension, and OPEB burden.				
5 (very weak)	Regardless of the FMA score, any of the following is present: a management team that lacks relevant skills resulting in a weak capacity for planning, monitoring, and management; an auditor has delivered a going concern opinion; the government is exhibiting an unwillingness to support a debt or capital lease obligation; or the government is actively considering bankruptcy in the near term.				

How Does it All Work– Example

Budgetary Flexibility

Assessing The Budgetary Flexibility Score (see paragraphs 59-64)						
		Available Fund	Balance As A %	Of Expenditures		
%	>15	8-15	4-8	1-4	<u><</u> 1	
Score	1	2	3	4	5	

Liquidity Score

	Total Gov	emment Available C	ash As% OfTotal Gov	emmental Funds D	ebt Service
Total Government Available Cash As % OfTotal Governmental Funds Expenditures	>120	100 to 120	80 to 100	40 to 80	<u><</u> 40
>15	1	2	3	4	5
8 to 15	2	2	3	4	5
4 to 8	3	3	3	4	5
1 to 4	4	4	4	4	5
<u><</u> 1	5	5	5	5	5

Budgetary Performance

		Total Governmental Funds Net Result (%)					
General Fund Net Result (%)	> -1	-1 to -5	-5 to -10	-10 to -15	≤ -15		
(> 5)	1,	2	3	3	4		
(-1 to 5)	2	3	3	4	5		
(<u><</u> -1)	3	4	4	5	5		

Debt and Contingent Liabilities

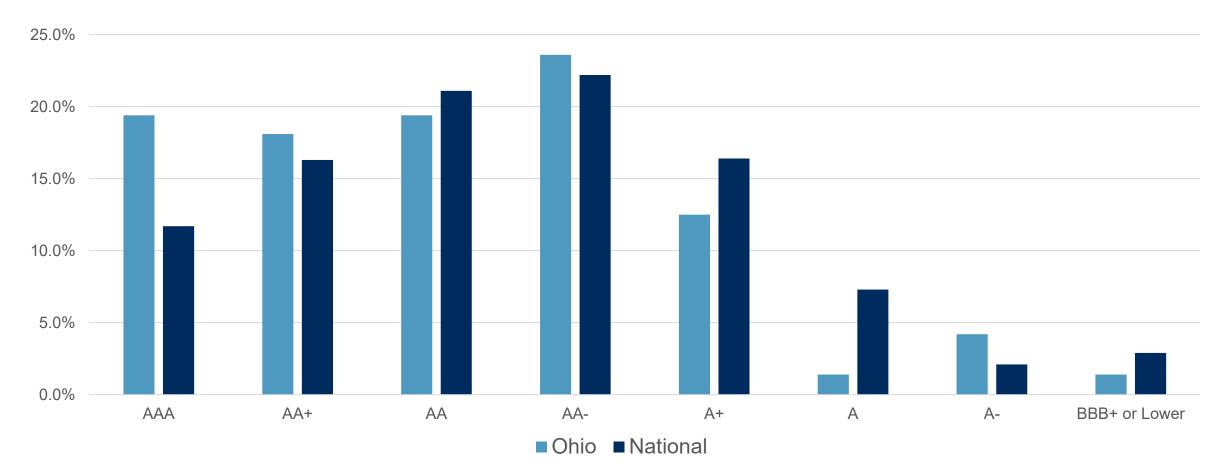
Table 14 Assessing The Debt And Contingent Liabilities Score (see paragraphs 78-84)									
	Net Dir	Net Direct Debt As % Of Total Governmental Funds Revenue							
Total Governmental Funds Debt Service As A % of Total Governmental Funds Expenditures	<30	30 to 60	60 to 120	120 to 180	≥180				
< 8	1	2	3	4	5				
8 to 15	2	3	4	4	5				
15 to 25	3	4	5	5	5				
25 to 35	4	4	5	5	5				
≥35	4	5	5	5	5				
A score of 1, 2, 3, 4 and 5 an	e very strong, strong	g, adequate, we	ak and very weak, re	spectively.					

Amortization is rapid (66% over the next 10 years) however pensions are a pressure as the plan is 62.9% funded with a net pension liability of \$24.3 million and pension and OPEB contributions were 17.7% of the total budget in FY2022.

Ohio Means & Medians



Municipality General Obligation Rating Distribution



Source: S&P Global Ratings

S&P Global Ratings

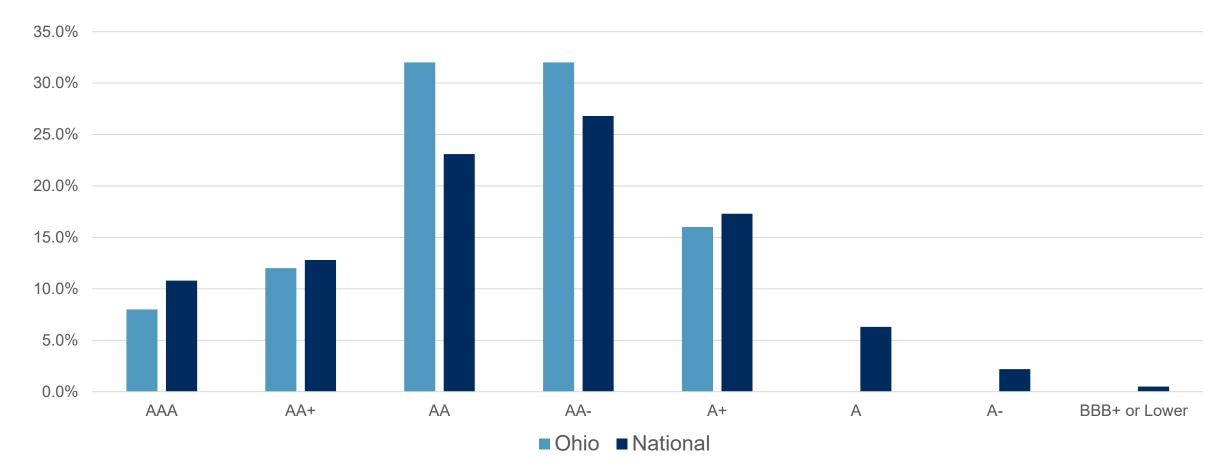
Ohio Municipalities: Medians

	AAA	AA+	AA	AA-	A+	Α	A-	BBB+ or Lower
Projected per capita EBI (%)	170%	113%	101%	85%	76%	69%	62%	96%
Market value per capita (\$)	142,614	93,325	75,690	55,111	55,203	43,504	40,281	121,572
Available general fund (%)	123%	108%	82%	68%	54%	18.4%	14.8%	0.7%
General fund performance (%)	14.9%	9.7%	8.8%	6.4%	3.3%	6.6%	(12.3)%	(1.1)%
Cash and expense (%)	130%	124%	112%	99%	132%	116%	7.2%	1.9%
Carrying charge (%)	8.6%	4.8%	4.5%	6.5%	7.5%	4.2%	5.1%	25.6%
Pension ARC + OPEB as % expense	5.7%	6.8%	8.7%	7.5%	7.3%	9.8%	7.9%	3.1%

EBI--Effective buying income. ARC--Annual required contribution. OPEB--Other postemployment benefits. As of May 5, 2023

S&P Global Source: S&P Global Ratings Ratings

County General Obligation Rating Distribution



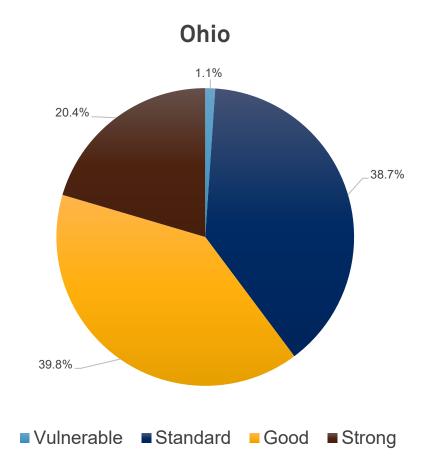
Source: S&P Global Ratings

Ohio Counties: Medians

	ΑΑΑ	AA+	AA	AA-	A+
Projected per capita EBI (%)	126%	105%	91%	80%	68%
Market value per capita (\$)	100,848	87,429	75,428	73,013	62,818
Available general fund (%)	72%	56%	79%	60%	64%
General fund performance (%)	12.4%	2.3%	7.1%	11.5%	10.1%
Cash and expense (%)	67%	114%	105%	110%	76%
Carrying charge (%)	3.3%	2.8%	2.0%	2.5%	0.7%
Pension ARC + OPEB as % expense	4.2%	4.9%	4.8%	5.1%	5.6%
EBIEffective buying income. ARC benefits. As of May 5, 2023	Annual requ	ired contribu	ution. OPEB-	-Other poste	employment

S&P Global Source: S&P Global Ratings Ratings

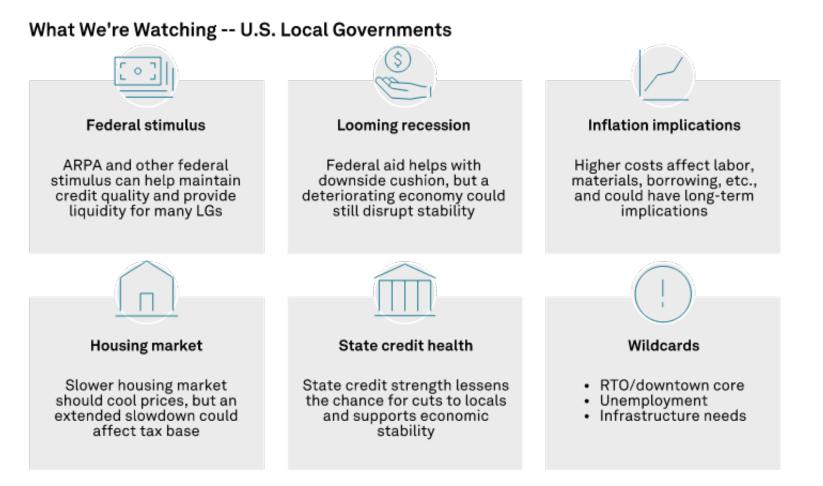
Financial Management Assessment (FMA)



2023 Credit Outlook For Ohio & U.S. Public Finance

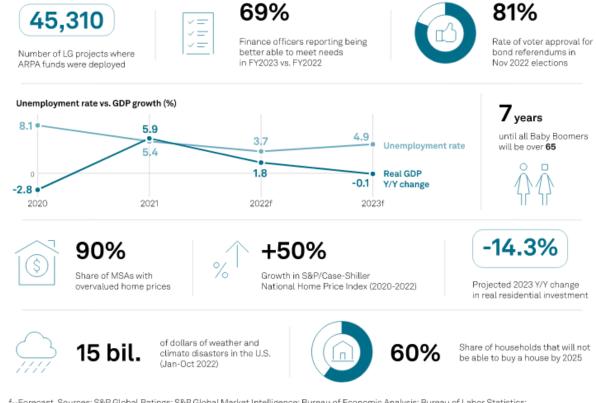


What We're Watching - Local Government



What We're Watching

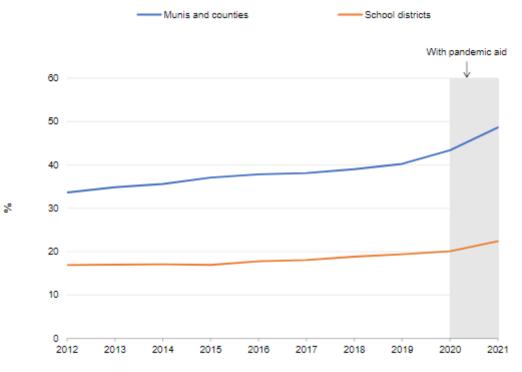
U.S. Local Governments: By The Numbers



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What We're Watching



Unassigned General Fund Balance As Share Of General Fund Expenditures

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What We're Watching - Ohio

Municipality reliance on income taxes and effects from remote working	County reliance on sales tax and effects from inflation	Diversification of employment base (e.g., Intel)	Manufacturing sector
Oil/gas industry	Tourism/hospitality industry	State's credit (AA+/Stable) and budget cycle	Aging infrastructure
	Clean water	Slow population growth, lack of in- migration	







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