

Moody's approach to analyzing US local governments

Agenda

1. Moody's approach to analyzing US local governments' general obligation (GO) debt
2. Moody's rating process
3. 2021 outlook for US local governments
4. Q+A

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**Moody's approach to
analyzing US local
governments' GO debt**

Factor 1: Economy and tax base (30%)

- Full value (10%) measures market value of taxable property.
- Full value per capita (10%) measures market value of taxable property per resident.
- Median family income (10%) measures socioeconomic characteristics of the base.
- Other considerations: institutional presence; economic concentration; unemployment.

	<i>Very Strong</i>	<i>Strong</i>	<i>Moderate</i>	<i>Weak</i>	<i>Poor</i>	<i>Very Poor</i>
	Aaa	Aa	A	Baa	Ba	B & Below
ECONOMY AND TAX BASE (30%)						
Tax Base Size: Full Value (in 000s)	> \$12B	\$12B ≥ n > \$1.4B	\$1.4B ≥ n > \$240M	\$240M ≥ n > \$120M	\$120M ≥ n > \$60M	≤ \$60M
Full Value Per Capita	> \$150,000	\$150,000 ≥ n > \$65,000	\$65,000 ≥ n > \$35,000	\$35,000 ≥ n > \$20,000	\$20,000 ≥ n > \$10,000	≤ \$10,000
Socioeconomic Indices: MFI	> 150% of US median	150% to 90% of US median	90% to 75% of US median	75% to 50% of US median	50% to 40% of US median	≤ 40% of US median

Factor 2: Finances (30%)

- Fund balance (15%) measures financial resources relative to operating revenue.
- Cash balance (15%) measures liquidity relative to operating revenue.
- Other considerations: forward-looking estimates and projections.

	<i>Very Strong</i>	<i>Strong</i>	<i>Moderate</i>	<i>Weak</i>	<i>Poor</i>	<i>Very Poor</i>
	Aaa	Aa	A	Baa	Ba	B & Below
FINANCES (30%)						
Fund Balance as % of Revenues	> 30.0% > 25.0% for School Districts	30.0% ≥ n > 15.0% 25.0% ≥ n > 10.0% for SD	15.0% ≥ n > 5.0% 10.0% ≥ n > 2.5% for SD	5.0% ≥ n > 0.0% 2.5% ≥ n > 0.0% for SD	0.0% ≥ n > -2.5% 0.0% ≥ n > -2.5% for SD	≤ -2.5% ≤ -2.5% for SD
5-Year Dollar Change in Fund Balance as % of Revenues	> 25.0%	25.0% ≥ n > 10.0%	10.0% ≥ n > 0.0%	0.0% ≥ n > -10.0%	-10.0% ≥ n > -18.0%	≤ -18.0%
Cash Balance as % of Revenues	> 25.0% > 10.0% for School Districts	25.0% ≥ n > 10.0% 10.0% ≥ n > 5.0% for SD	10.0% ≥ n > 5.0% 5.0% ≥ n > 2.5% for SD	5.0% ≥ n > 0.0% 2.5% ≥ n > 0.0% for SD	0.0% ≥ n > -2.5% 0.0% ≥ n > -2.5% for SD	≤ -2.5% ≤ -2.5% for SD
5-Year Dollar Change in Cash Balance as % of Revenues	> 25.0%	25.0% ≥ n > 10.0%	10.0% ≥ n > 0.0%	0.0% ≥ n > -10.0%	-10.0% ≥ n > -18.0%	≤ -18.0%

Factor 3: Management and governance (20%)

- Institutional framework (10%) measures the sector’s legal ability to match revenues and expenditures.
- Operating history (10%) compares revenues and expenditures over time.
- Other considerations: state oversight or support; unusually strong or weak management or planning.

	<i>Very Strong</i>	<i>Strong</i>	<i>Moderate</i>	<i>Weak</i>	<i>Poor</i>	<i>Very Poor</i>
	Aaa	Aa	A	Baa	Ba	B & Below
MANAGEMENT AND GOVERNANCE (20%)						
Institutional Framework	Very strong legal ability to match resources with spending	Strong legal ability to match resources with spending	Moderate legal ability to match resources with spending	Limited legal ability to match resources with spending	Poor legal ability to match resources with spending	Very poor or no legal ability to match resources with spending
Operating History: 5-Year Avg of Op Rev / Op Expend	> 1.05x	1.05x ≥ n > 1.02x	1.02x ≥ n > 0.98x	0.98x ≥ n > 0.95x	0.95x ≥ n > 0.92x	≤ 0.92x

Factor 4: Debt and pensions (20%)

- Debt (10%) measures long-term debt relative to tax base value and operating revenue.
- Pensions (10%) measures Moody's adjusted net pension liability (ANPL) relative to tax base value and operating revenue.
- Other considerations: unusual risks posed by debt and pension structure; fixed cost burden; overlapping debt and pensions; history of missed debt service payments.

	<i>Very Strong</i>	<i>Strong</i>	<i>Moderate</i>	<i>Weak</i>	<i>Poor</i>	<i>Very Poor</i>
	Aaa	Aa	A	Baa	Ba	B & Below
DEBT AND PENSIONS (20%)						
Net Direct Debt / Full Value	< 0.75%	0.75% ≤ n < 1.75%	1.75% ≤ n < 4.00%	4.00% ≤ n < 10.00%	10.00% ≤ n < 15.00%	> 15.00%
Net Direct Debt / Operating Revenues	< 0.33x	0.33x ≤ n < 0.67x	0.67x ≤ n < 3.00x	3.00x ≤ n < 5.00x	5.00x ≤ n < 7.00x	> 7.00x
3-Year Average ANPL/ Full Value	< 0.90%	0.90% ≤ n < 2.10%	2.10% ≤ n < 4.80%	4.80% ≤ n < 12.00%	12.00% ≤ n < 18.00%	> 18.00%
3-Year Average ANPL/ Op Revenues	< 0.40x	0.40x ≤ n < 0.80x	0.80x ≤ n < 3.60x	3.60x ≤ n < 6.00x	6.00x ≤ n < 8.40x	> 8.40x

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Moody's rating process

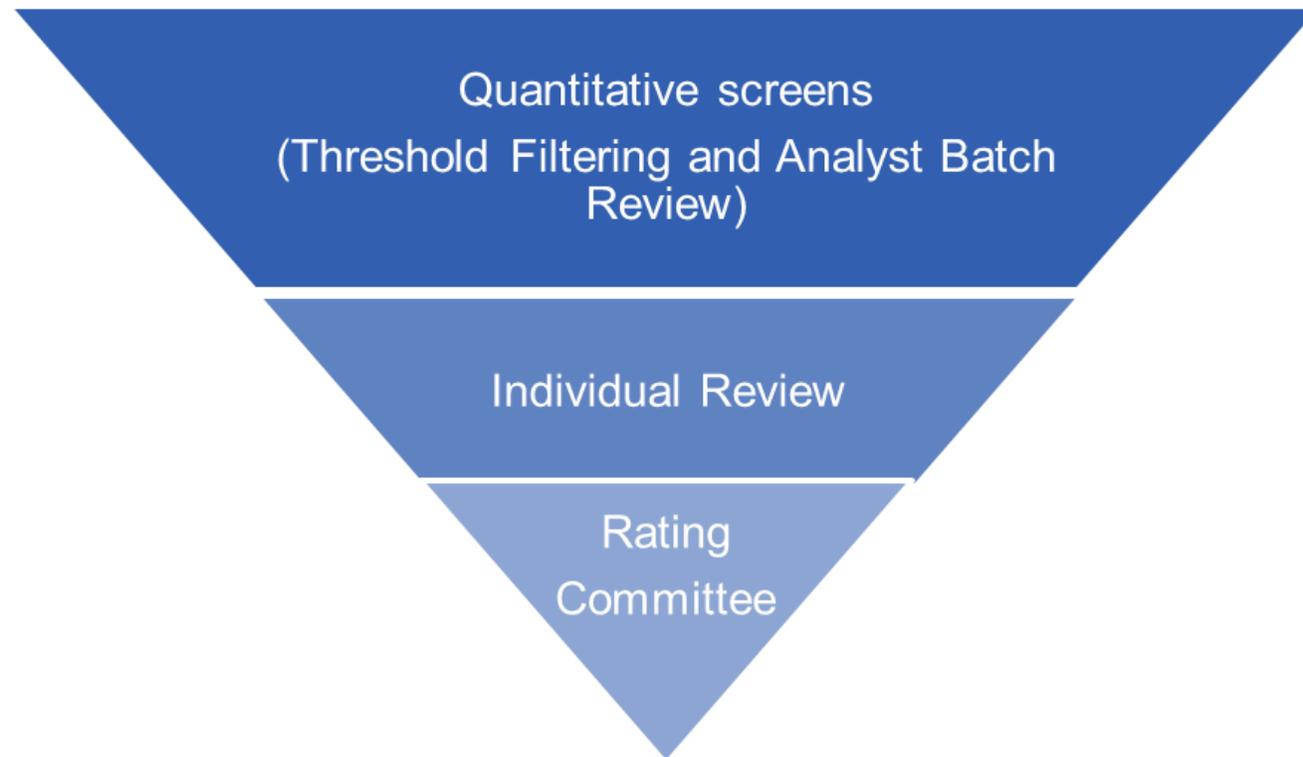
Rating assignment process (new sales)



- Step 1: Assignment of the lead analyst upon notification of the sale.
- Step 2: Selection of a methodology based on the security of the debt.
- Step 3: Analysis of the offering statement, legal documents, economic information, audited financial reports, operating budgets, and capital improvement plans.
- Step 4: Discussions between Moody's analysts and the local government.
- Step 5: Moody's rating committee determines the rating outcome.
- Step 6: Moody's analysts communicate the rating outcome to the local government and, after the issuer's review of the draft report, publishes the rating outcome.

Rating management process (surveillance)

- Moody's monitors each rating at least annually or more often as circumstances warrant.
- The process usually begins with the receipt of audited annual financial statements and involves multiple screens.



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2021 outlook for US local governments

Stable outlook for US local governments reflects strengths and challenges in 2021

Strengths

- Improving economic conditions are driving growth in revenue from income taxes, sales taxes, and state aid.
- Residential property appreciation is supporting property tax revenue growth.
- Federal aid has improved local governments' ability to meet pandemic costs while maintaining liquidity.

Challenges

- Fixed costs for debt and post-retirement obligations are rising for some local governments.
- Capital assets continue to depreciate, signaling a need for greater investment.

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