Moody's
INVESTORS SERVICE

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An Inside Look Into Moody's Rating Process

NMFA, NM Oversight Committee

June 13, 2019

Agenda

» Ratings Process Overview

» Methodologies Overview

  – Pool Program Debt

  – General Obligation

  – Special Tax

» New Mexico Credit Trends

» Local Government Outlook

» Framework for Assessing Environmental Risk in Credit Analysis

» Cyber Security: Implications of Cyber Risks and Data Privacy Issues for Governments

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Ratings Process Overview

Moody's Ratings

What They Are:

- Independent, objective assessments of the relative creditworthiness of debt obligations
- Shorthand symbols denoting the relative ability and willingness of debt issuers to make full and timely payment
- Opinions about the future

INVESTMENT GRADE	Aaa Aa1 Aa2 Aa3 A1 A2 A3 Baa1 Baa2 Baa3
SPECULATIVE GRADE	Ba1 Ba2 Ba3 B1 B2 B3 Caa1 Caa2 Caa3 Ca C

Moody's Ratings

What They Are Not:

» Ratings are not recommendations to purchase, sell, or hold particular securities

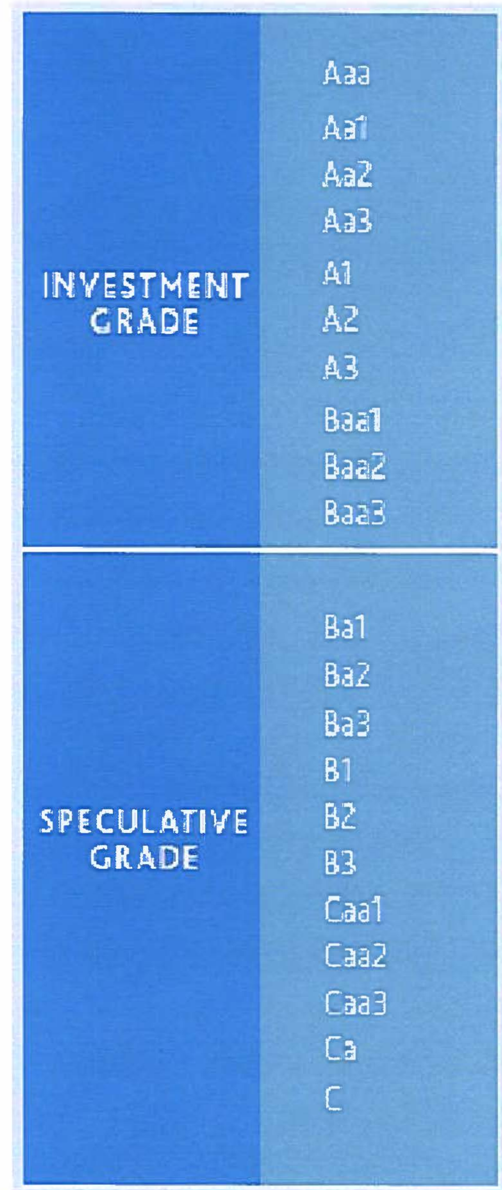
» Ratings are not predictors of non-credit-related market price movements

» Ratings are not audits, and do not guarantee the authenticity of information from issuers

» Ratings are not public policy report cards

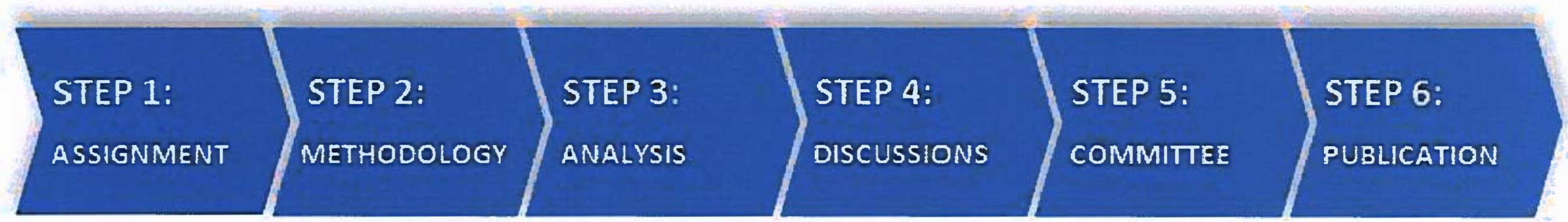
» Ratings are not fixed; they may change over time

» Rating analysts are neither financial advisors nor investment bankers



Understanding the Rating Process

Key Steps in a Typical Rating



- Assignment of an analyst
- Selection of a methodology
- Gathering of information and analysis of the issuer or obligation to be rated
- Discussion with the issuer (in-person/conference call)
- Rating committee
- Issuer review and publication of the rating and report

Ratings are monitored at least annually

2 Methodologies Overview

Pool Program Debt Methodology

Municipal

- This methodology is used to evaluate the credit quality of municipal pool programs
  - Pool programs tend to be characterized by a larger evolving pool of participants, active management teams independent of the participants, and more robust structural enhancements
  - Pools are generally divided into two models: reserve fund or cash flow
  - NMFA is a cash flow model (GGRT)

- Our pool program methodology incorporates four broad rating factors:
  - Underlying Credit Quality and Default Tolerance (50%)
  - Pool Size and Diversity (15%)
  - Debt Structure, Legal Covenants, Investments and Cash Flow (20%)
  - Management and Governance (15%)

Pool Program Debt Methodology

Underlying Credit Quality & Default Tolerance (50%)

- Main driver in NMFA's senior & subordinate lien ratings of Aa1/Aa2
  - First considering underlying credit quality:
    - Internal evaluation of pool participants based on pledge
      - E.g., school districts pledge GO, cities/counties pledge GRT
      - We assign internal, non-public ratings using GO/SPTAX methodologies
    - These individual scores are then used to determine the overall weighted average of the pool
      - Weighted average is calculated based on our ten-year global corporate idealized probability of default rates
    - Senior is A-quality (average) & sub is Baa-quality (weak)

Underlying Credit Quality & Default Tolerance, *(cont.)*

» Now considering Default Tolerance:

- The percentage of the portfolio that could default & NMFA still meet annual debt service (ADS)
- Calculated by comparing excess revenues to ADS
  - › Senior – default tolerance > 30%
  - › Subordinate – default tolerance > 90%
- **GGRT is a particular credit strength; without it, default tolerance falls to single-digits**
- Default Tolerance: senior = 1 (Aaa) / sub = 2 (Aa)

Approximate Default Tolerance of Program

Weighted Average Portfolio Rating		25% And Higher	20%	15%	10%	5% And Lower
	Aaa	1	1	1	1	2
	Aa	1	1	2	2	3
	A	1	2	3	3	4
	Baa	2	3	4	4	5
	Below IG	3 or below	4 or below	5	5	5

Pool Program Debt Methodology

Other credit factors

- **Pool Size and Diversity (15%) – senior Aa / sub Aa**
  - Number of borrowers: a large pool is considered a credit strength because more borrowers serve to mitigate event risk or specific credit deterioration associated with a single borrower
  - Diversity:
    - Number of borrowers who account for less than 1% of outstanding debt
    - Portion of loan pool represented by the top 5% of borrowers
- **Debt Structure, Legal Covenants, Investments and Cash Flow (20%) – senior Aa / sub Aa**
  - Assesses the structure and legal framework of the bond program in order to determine what loan payments and other bond program assets will be available to cover bond debt service and expenses when due (e.g. DSRF, interceptable revenue)
  - We consider NMFA's ability to adjust revenues somewhat limited given that loans issued to participants are fixed-rate, long-term obligations with level debt service

Other credit factors (*cont.*)

» **Management and Governance (15%) – senior Aaa / sub Aaa**

– Given the generally evolving nature of the programs and the need for strong program oversight, management and governance is an important ratings driver for pool program debt. A highly-rated program will have sufficiently experienced staff who are able to manage and foresee potential credit issues in order to maintain the credit strength of the program.

Pool Program Debt Methodology

NMFA's bond ratings

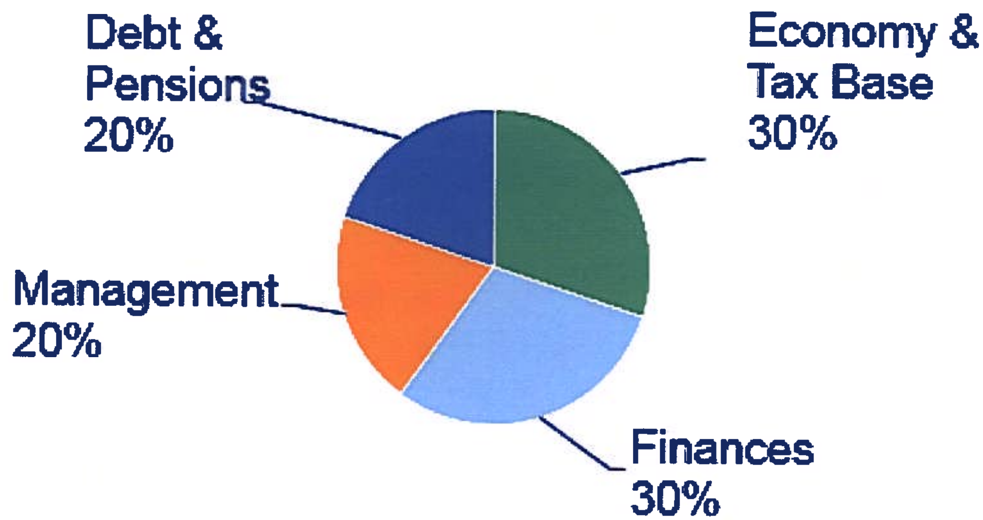
- Senior Aa1 & subordinate Aa2
- Main difference between the two pools is the participant credit quality
  - Senior – A / sub – Baa
- To determine participant ratings, we assign internal ratings
  - The majority of borrowers have pledged their GO or GRT
  - We use the GO & SPTAX methodologies to evaluate participant credit quality
- Unique considerations when evaluating underlying credit quality
  - Certain number of pueblos and tribes in these pools
  - We do not have a methodology to rate these issuers, thus, we tend to be conservative in our ratings

Moody's General Obligation Methodology

- Primary methodology used for rating cities, counties and school districts
- Focuses on local government ratings based on GOULT/GOLT securities
- Four key factors:
  - Economy & Tax Base (30%)
  - Finances (30%)
  - Management (20%)
  - Debt/Pensions (20%)

Moody's General Obligation Methodology

- Rating is decided based on individual credit review
- Rating factors fall into four major categories
- Both qualitative and quantitative analysis are involved
- Legal structure of security also plays a role in rating



Moody's General Obligation Methodology

Economy & Tax Base (30%)

» Considerations generally include
  - Tax base size & tax rates
  - Institutional presence & diversity
  - Major employers
  - Tax base concentration
  - Population trends
  - Wealth & income indices (MFI, unemployment, poverty)

Moody's General Obligation Methodology
Finances (30%)

» Considerations generally include
  - General and Operating Fund operating history (e.g. deficits or surpluses)
  - General and Operating Fund balance and cash reserves
  - Outsized liabilities or aged receivables
  - Additional liquidity outside the Operating Funds
  - Expectations for future performance
  - Formal policies (e.g. minimum General Fund balance)

Moody's General Obligation Methodology

Management (20%)

» Considerations generally include
  - Policies (financial, debt, investment)
  - Tenure & stability of staff
  - Budgeting practices & ability to manage challenging situations
  - Institutional Framework (IF) score
    - › The IF score represents a local government's legal and statutory ability to raise revenues & cut expenditures
    - › In New Mexico,
      - Cities & counties receive an IF score of "A"
      - School districts receive an IF score of "Baa"

Moody's General Obligation Methodology

Debt & Pensions (20%)

» Considerations generally include
  - Direct debt as a percent of full value and a multiple of operating revenues
  - Principal amortization
  - Remaining authorization & future debt plans
  - Moody's-calculated pension burden as a percent of full value and a multiple of operating revenues
  - Fixed cost burden

Moody's General Obligation Methodology

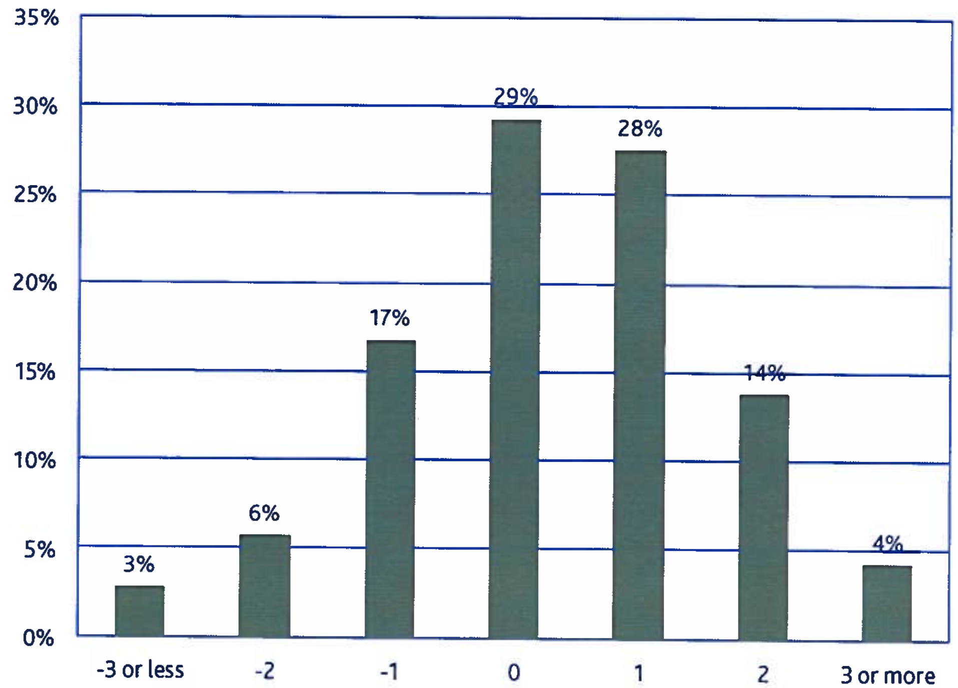
Use of GO & Other Methodology Scorecards

Purpose and Use of Methodology Scorecards:

- » Enhance the transparency of our rating process
- » Capture the key considerations that correspond to particular rating categories
- » Not an exhaustive list of factors that we consider in every rating assignment
- » Scorecard acts as a starting point for a more thorough and individualistic analysis
- » Scorecards are mostly quantitative, but include some qualitative metrics
- » May adjust up or down from the grid-indicated outcome based on additional factors
- » Assigned rating is determined by a Rating Committee after consideration of all relevant facts

Scorecards generally put us in the right "zip code"

Local Government General Obligations:
Assigned Ratings vs Grid-Indicated Outcomes



74% are within 1 notch

Note: A positive value in the bar chart indicates an assigned rating that is higher than the grid-indicated outcome

General Obligation Scorecard Example

U.S. LOCAL GOVERNMENT GENERAL OBLIGATION SCORECARD, Dec2016.0003

Issuer Name: Favorite NM City **Org ID:** 123456789

Enter Sector Below	*Very Strong* *0.50 - 1.49*	*Strong* *1.50 - 2.49*	*Moderate* *2.50 - 3.49*	*Weak* *3.50 - 4.49*	*Poor* *4.50 - 5.49*	*Very Poor* *5.50 - 6.50*			
City	Aaa	Aa	A	Baa	Ba	B & Below	Input	Weight	Score
ECONOMY/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	$1,700,000	10%	2.47
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	$73,913	10%	2.40
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	90.00%	10%	2.50
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	31.72%	10%	1.44
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%	7.25%	5%	2.78
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	19.78%	10%	1.85
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%	3.61%	5%	3.14
MANAGEMENT (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	A	10%	3.00
Operating History: 5-Year Average of Operating Revenues / Operating Expenditures	> 1.05x	1.05x ≥ n > 1.02x	1.02x ≥ n > 0.98x	0.98x ≥ n > 0.95x	0.95x ≥ n > 0.92x	≤ 0.92x	1.01x	10%	2.69
DEBT/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%	1.47%	5%	2.22
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	1.25x	5%	2.75
3-Year Average of Moody's Adjusted Net Pension Liability / 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%	3.53%	5%	3.03
3-Year Average of Moody's Adjusted Net Pension Liability / Operating 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	3.00x	5%	3.29
								Total Score	2.49
								Unadjusted Outcome	Aa3

General Obligation Scorecard

Notching Factors

Adjustments/Notching Factors	Direction
Economy/Tax Base	
Institutional presence	up
Regional economic center	up
Economic concentration	down
Outsized unemployment or poverty levels	down
Other analyst adjustment to Economy/Tax Base factor (specify)	up/down
Finances	
Outsized contingent liability risk	down
Unusually volatile revenue structure	down
Other analyst adjustment to Finances factor (specify)	up/down
Management	
State oversight or support	up/down
Unusually strong or weak budgetary management and planning	up/down
Other analyst adjustment to Management factor (specify)	up/down
Debt/Pensions	
Unusually strong or weak security features	up/down
Unusual risk posed by debt/pension structure	down
History of missed debt service payments	down
Other analyst adjustment to Debt/Pensions factor (specify)	up/down
Other	
Credit event/trend not yet reflected in existing data sets	up/down

Moody's General Obligation Methodology

Applying the Analytical Factors

- » Analysts score each subfactor in the grid
- » The weighted average of the analyst-assigned scores will determine a raw score that maps to Moody's rating scale → the grid-indicated outcome
- » Analyst and Rating Committee will determine any additional factors beyond the grid-indicated outcome→ the scorecard indicated outcome
- » The assigned rating may differ from the scorecard indicated outcome

Moody's General Obligation Methodology

Pension Liability Among Many Rating Factors

- Pensions directly affect three of the four key areas of our credit analysis
  - **Debt burden** – pension obligations exceed bonded debt in many jurisdictions, with escalating payments, and may be on legal parity with GO bonds
  - **Financial performance** – underfunding annual contributions may mask a structurally imbalanced budget
  - **Management** – key assumptions used, strategies to control costs, degree of local control and flexibility to implement reform
- Given the variety of pension plans across all local governments, to improve comparability from issuer-to-issuer we have standardized pension liabilities using a market-based discount rate
  - FTSE Pension Liability Index – 3.69% as of May 2019
  - The Moody's-calculated adjusted net pension liability (ANPL) is often larger than what issuers report in their audits

Increased Emphasis on “Tread Water” and Fixed Costs

» Tread water payment: the calculation to determine the amount a local government should contribute to avoid increases to its pension burden
  – The tread water payment is calculated using the plan’s existing assumptions

Moody's "Tread Water" Analysis Uses Reported Data and Assumptions to Gauge Relative Strength of Government Pension Contributions

Tread Water Payment	Interest Rate	If government contributions greater than "Tread water"	If government contributions less than "Tread Water"
Employer service cost + interest on reported net pension liability at beginning of year	Prior year reported discount rate	Reported Net Pension Liability will decrease if plan assumptions are met	Reported Net Pension Liability will increase if plan assumptions are met

» Fixed costs: pension contribution (@ tread water) + debt service + OPEB divided by operating revenues
  – This measures the portion of the operating budget that is fixed

Special Tax Methodology
Linkages with issuer GO credit quality

- Methodology used to rate non-property tax pledges
- In nearly all cases, an issuer's special tax rating is lower than the issuer's corresponding general obligation rating (given the strength of the full faith and credit pledge backing the GO rating)
  - Rare to have case where a special tax is rated higher than a GO (which we consider the strongest pledge)
  - In cases where coverage is very strong, SPTAX could be on parity with the GO (often the case in NM)

Special Tax Methodology

Credit Factors

- Factors:
  - Tax base & pledge (30%)
    - Economic strength
    - Nature of the special tax pledge
  - Legal structure (30%)
    - ABT
    - DSRF requirement
  - Financial metrics (40%)
    - MADS coverage
    - Revenue trend
    - Revenue volatility

3

New Mexico Credit Profiles

School Districts

US median Aa3 / NM median is A1/A2

Strengths:

» Debt burden in line with US medians (1.5% of FV)

» Rapid principal payout

Challenges:

» Smaller tax bases ($1.7B v $2.1B)

» General Fund Balance is below medians (14% v 21%)

» Elevated pension burdens (ANPL is 3.8x v 1.7x)

» Large tread water gap

Cities

US median Aa3 / NM median is Aa3

Strengths:

- General Fund Balance is strong (45% v 38%)
- Debt burden below US medians (0.9% v 1.1%)

Challenges:

- Tax base slightly below US medians ($1.6B v $2B)
- Elevated pension burden (ANPL is 3.2x v 1.6x)
- Negative tread water gap

Counties

US median Aa3 / NM median is Aa3

Strengths:

» General Fund Balance is strong (48% v 36%)

» Debt burden in line with US medians (0.6% v 0.5%)

Challenges:

» Small tax base ($2.8B v $7B)

» Elevated pension burden (ANPL is 2.2x v 1.4x)

» Negative tread water gap

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2019 Outlook: Local Government

2019 LG Outlook

Outlook stable as tax revenue grows slowly; pressures intensify for some issuers

NEGATIVE

What could change outlook to negative

» Property tax revenue growth of less than 2%

» Property tax revenue growth of more than 2% that is outpaced by rising fixed costs or growth in leverage from debt and pensions

» Evidence of reduced willingness of local governments to pay debt service, as indicated by a significant increase in the number of issuers resorting to bankruptcy or default in the face of financial challenges

STABLE

» Property tax revenue growth of 2%-4%

» Recovering tax bases

» Healthy fund balances

POSITIVE

What could change outlook to positive

» Property tax revenue growth of more than 4%

» Maintenance of operating reserves

» Lowered fixed costs

» Reduced leverage from debt and pensions

Note: A negative sector outlook indicates our view that fundamental credit conditions will worsen. A positive outlook indicates that we expect fundamental credit conditions to improve. A stable sector outlook indicates that conditions are not expected to change significantly. Since sector outlooks represent our forward looking view on conditions that factor into ratings, a negative (positive) outlook indicates that negative (positive) rating actions are more likely on average.

2019 LG Outlook

» Local government property tax revenue will continue to grow in most regions, but the pace of growth will slow relative to trends of the past three years.

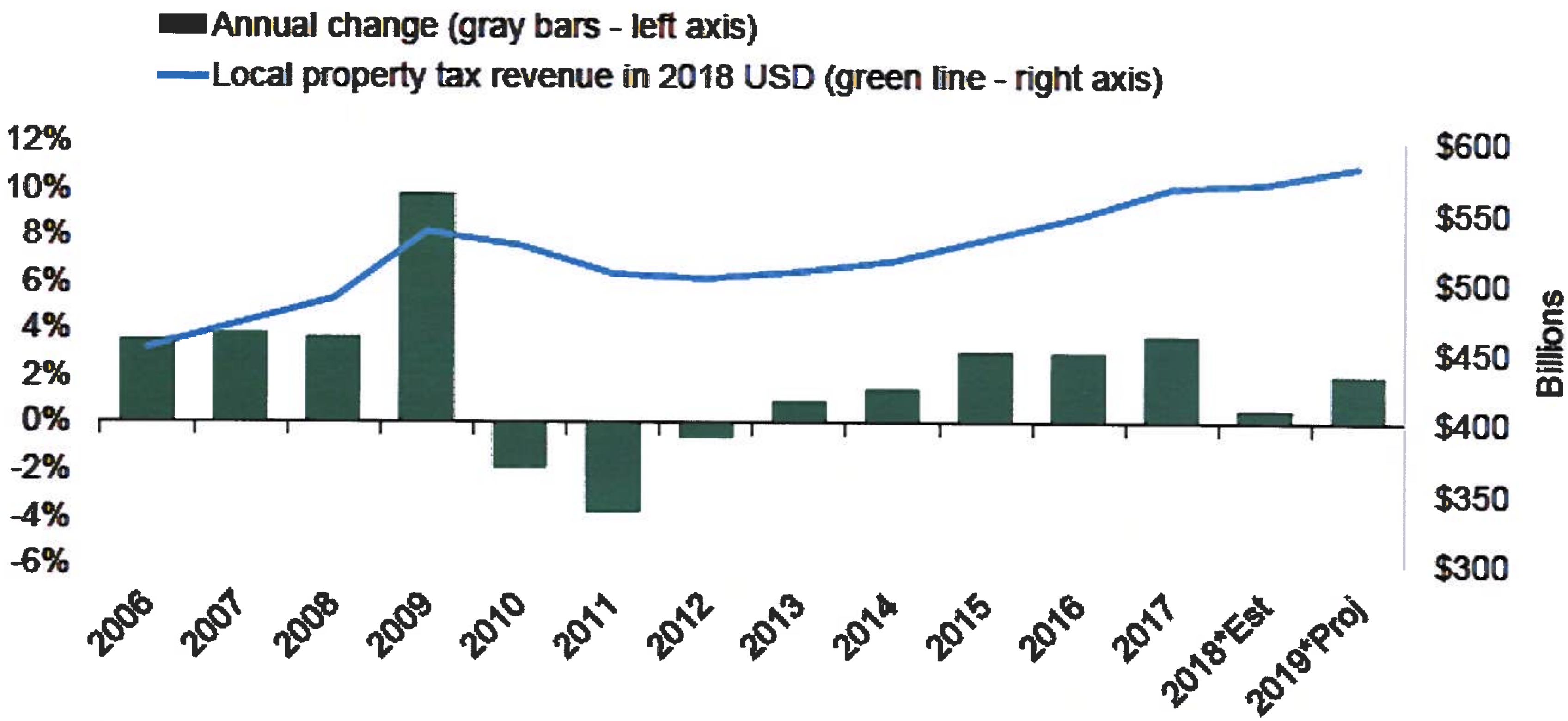
» Growing fund balances will support stable credit quality for local governments overall. As revenues grow, we expect most issuers to maintain or increase reserves.

» Municipal bankruptcies and defaults will remain the exception, not the rule. Most local governments will handle challenges while preserving or even improving credit quality.

» Pockets of local governments face intensifying credit pressures. Growing pension costs, unmet infrastructure needs, and weak revenue prospects will weaken credit quality for some.

2019 LG Outlook

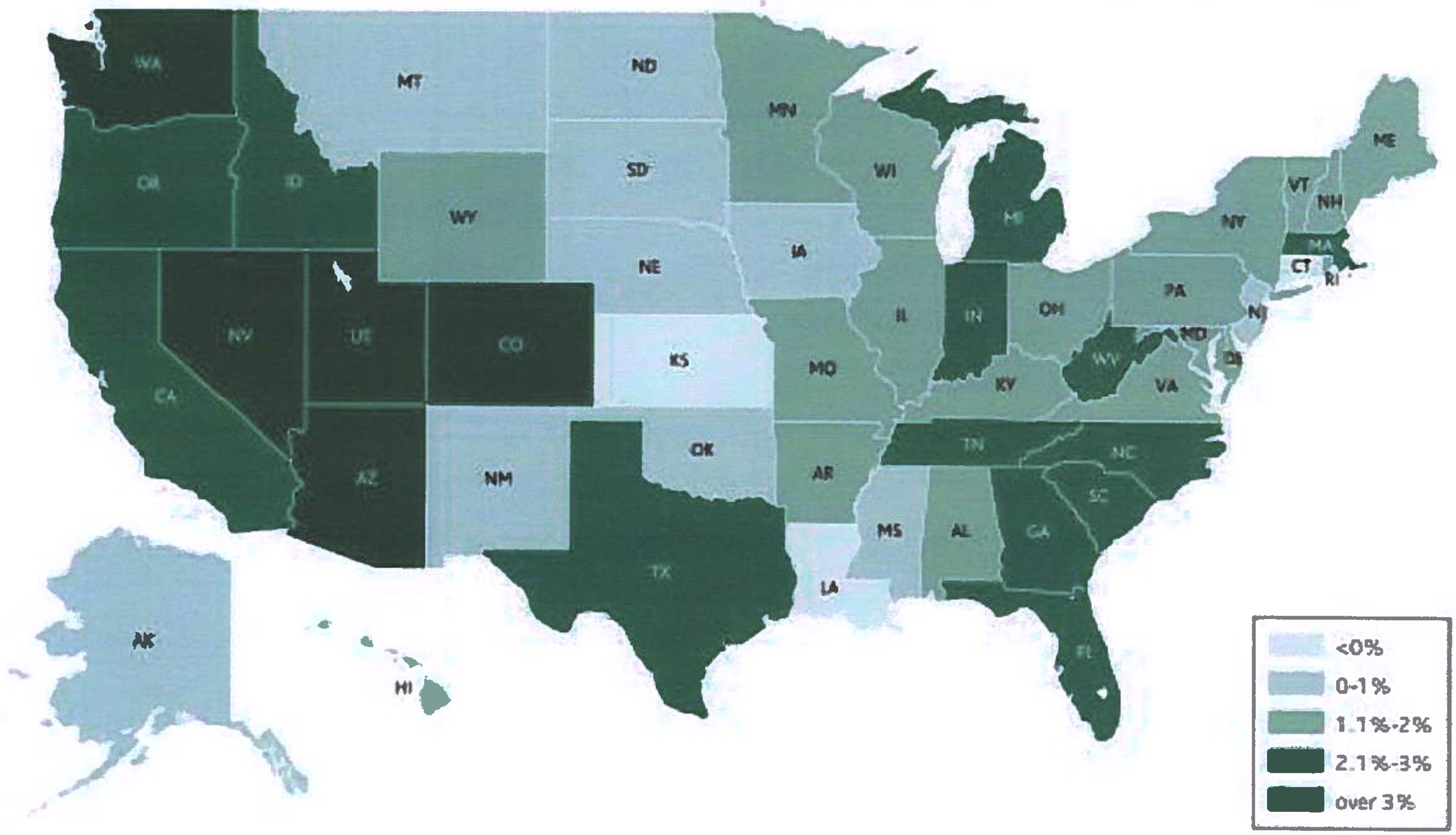
Property tax revenue growth of 2%-3% expected in 2019 after weak 2018 growth



*2018 includes estimates for second half of year, 2019 is projected
Sources: US Census Bureau, Moody's Investors Service

2019 LG Outlook

GDP growth strongest in West and Southeast, signaling generally stronger property tax growth in those regions



Data is from 2017
Sources: US Bureau or Economic Analysis, Moody's Investors Service

2019 LG Outlook

ESG RISKS

Wildfires, hurricanes, droughts, tornadoes and other climate shocks present a multitude of credit risks for local governments, including damaged infrastructure, economic disruptions and potential population loss.

Credit stress, however, is generally mitigated by financial assistance from the Federal Emergency Management Agency (FEMA), private insurance and individual issuers' liquidity.

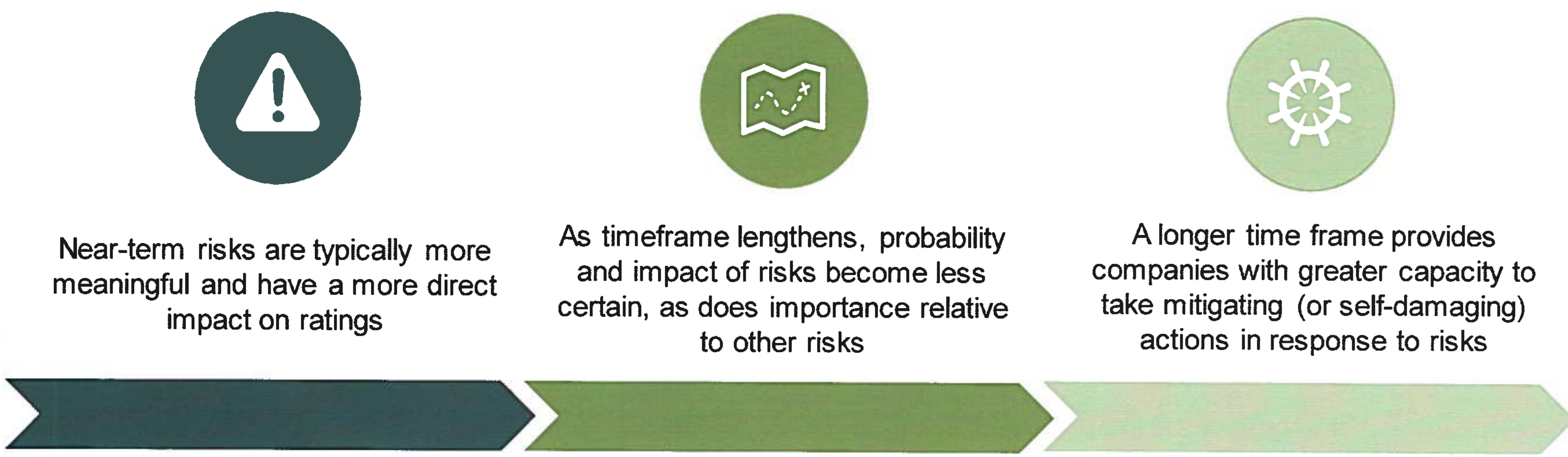
Cities are investing in resilience and adaptation strategies to lower risks from climate shocks. While the efforts are positive, additional capital investment can be an added credit risk when it increases leverage.

5 Framework for Assessing Environmental Risk in Credit Analysis

Credit ratings, time horizons and ESG (Environmental, Social, Governance)

» We seek to incorporate all relevant credit considerations with the most forward looking view that visibility permits

» However, we do not integrate the impact of long-term risks with great degree of precision given that uncertainty increases as timeframes lengthen



What is environmental risk?

Adverse effects of direct environmental hazards and the consequences of regulatory or policy initiatives that seek to reduce or prevent environmental hazards or perceived hazards

Why do we care?

» One of many risks, but a growing one facing virtually all issuers

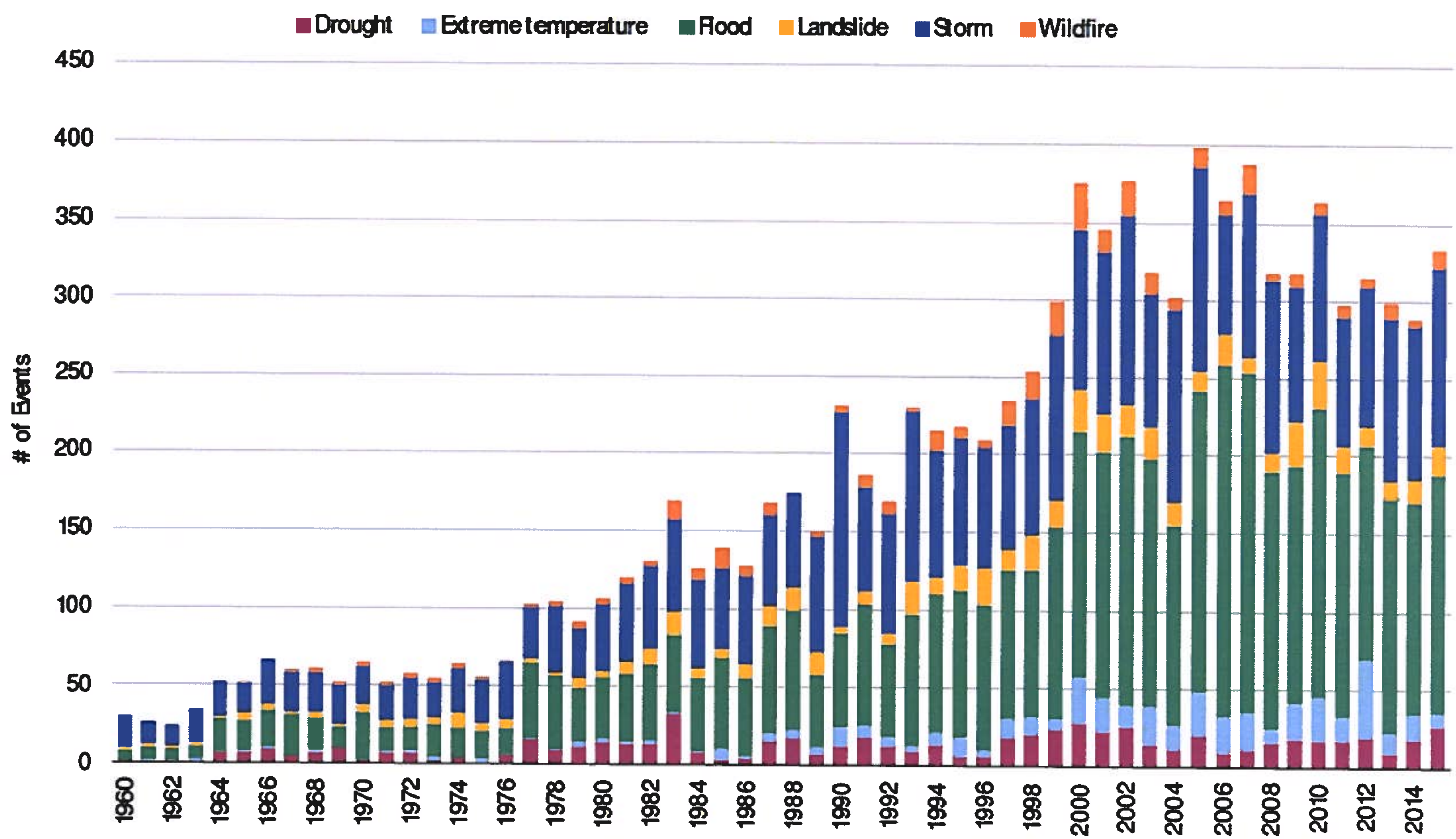
» Growing investor interest

» Weather related events can...

- cause significant disruption for issuers
- reduce revenues and increase capital and operational costs
- in the extreme, cause increased defaults and losses

» Weather related events have become more frequent and more severe

Weather-related events are increasing



Source: Moody's Investors Service, EM-DAT International Disaster Database

Environmental risks inform various key rating factors

- **Economy and Tax Base**: Climate shocks may weaken economic output and tax base valuation and reduce an issuer's revenue base. Issuers with economies concentrated in sectors exposed to climate risks face higher credit vulnerability.

- **Finances**: Fiscal flexibility can be challenged by unanticipated emergency response costs, infrastructure repair costs, the loss of revenue, or the cost of adaptive strategies.

- **Management**: Climate events can test management's capacity to handle short and long-term challenges to its economy, finances, and infrastructure.

- **Debt and Pensions**: Issuers may be subject to increased debt burdens to finance the cost to repair or replace infrastructure. Issuers with already high debt obligations will be stressed to accommodate new burdens into their existing debt portfolios.

Local governments have a Low Risk environmental score

- » Key Issue: Environmental risk vulnerability varies significantly across countries and within LGs in the same country, but remains low
- » Modest sector-wide exposure to meaningful environmental risks, or, if they do, the consequences are not likely to be material to credit quality
- » LGs in developed economies are very diverse, in terms of geography and ecosystems, responsibilities assumed, taxbase concentration, and policies and regulations designed to reduce carbon emissions or mitigate air pollution and other factors.
- » LGs face a relatively low level of environment related credit risk and are overall resilient to climate shocks.
- » LGs though have a clear exposure to natural hazards, including flooding, drought, forest fires and earthquakes. Pollution and carbon-related issues do not pose material risks, although they may pose health and quality of life concerns.

Sample Questions

- How do you view your exposure and vulnerability to environmental risks?
- How are these risks incorporated into your budget and capital planning?
- Do you have a mitigation plan?
  - If yes, please elaborate on the details.
- If you experience an interruption in regular revenue flow from an environmental event, what liquidity in addition to reserves could be accessed to bridge the funding gap (market access, insurance coverage, etc.)?

6

Cyber Security: Implications of Cyber Risks and Data Privacy Issues for Governments

Key messages

1 **We view cyber risk as event risk and see a rising tide;** digitization, greater intersection of supply chains, connectivity and access to data are creating new vulnerabilities for governments and businesses

2 **Our assessments consider the financial impact of an attack that could lead to weakened credit profile;** these primarily derive from reputational impacts and/or disruption of core business processes

3 **13 sectors assessed as high or medium-high risk;** common attributes include significant reliance on technology / data; limited ability to fall back on manual processes; represent critical global infrastructure

Cyber risk is event risk and tide is rising

- Digitization, greater intersection of supply chains, connectivity and access to data are creating new vulnerabilities for governments and businesses
- Attacker sophistication increasing; defense baselines need to rise as a result
  - Attacker ecosystem has evolved; blurred lines between nation states and cyber criminals
  - Talent gap creates further pressure on defense
- Financial impact of individual events has reached billions

Cyber risk assessment framework

Cyber risk exposure measured relative to two key factors

- We have assessed cyber risk at the sector level along two lines:
  - **Vulnerability** to some form of cyber attack
  - Reputational and operational **impact** of an attack
- Process included assessment of relative risk within and across sector groupings
- These assessments only consider mitigation that would uniformly benefit the entire sector or individual issuers equally
  - e.g. monopolies, supply chain diversity, manual back-up processes, customer stickiness
- Our assessments consider the overall financial impact of an attack that could lead to weakened credit profile

Regional and Local Governments (RLGs)

OVERALL
Medium-Low

VULNERABILITY: Medium
IMPACT: Low

$3,008.4 billion
Rated debt

- RLGs are digitizing their services for cost and service efficiency, increasing their exposure to cyber attacks.
  - Retain personal and business data like bank accounts and credit card information
  - Larger RLGs are often responsible for delivering healthcare services and retain sensitive personal information
- Larger RLGs can more easily fund cyber defense IT programs.
- Strong ties with the central government is a benefit, since it can provide support if necessary
- RLGs will continue to provide services following an attack, and should not suffer brand erosion or customer defection
- Moderate risk of legal action from tax payers, but strong reserve and liquidity positions are risk mitigants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