Illinois Financial Forecast Forum

Actuarial Perspectives Pension Predictions

January 30, 2015
Moody’s

- Economy
- Debt
- Finances
- Management

Standard & Poor’s

- Institutional framework;
- Economy;
- Management;
- Budgetary flexibility;
- Budgetary performance;
- Liquidity; and
- Debt and contingent liabilities
## MOODY’S RATING CRITERIA

### EXHIBIT 1

**Scorecard Factors and Weights**

<table>
<thead>
<tr>
<th>Broad Rating Factors</th>
<th>Factor Weighting</th>
<th>Rating Subfactors</th>
<th>Subfactor Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economy/Tax Base</td>
<td>30%</td>
<td>Tax Base Size (full value)</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Full Value Per Capita</td>
<td>10%</td>
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<tr>
<td></td>
<td></td>
<td>Wealth (median family income)</td>
<td>10%</td>
</tr>
<tr>
<td>Finances</td>
<td>30%</td>
<td>Fund Balance (% of revenues)</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fund Balance Trend (5-year change)</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cash Balance (% of revenues)</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cash Balance Trend (5-year change)</td>
<td>5%</td>
</tr>
<tr>
<td>Management</td>
<td>20%</td>
<td>Institutional Framework</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Operating History</td>
<td>10%</td>
</tr>
<tr>
<td>Debt/Pensions</td>
<td>20%</td>
<td>Debt to Full Value</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Debt to Revenue</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Moody’s-adjusted Net Pension Liability (3-year average) to Full Value</strong></td>
<td>5%</td>
</tr>
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<td></td>
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<td><strong>Moody’s-adjusted Net Pension Liability (3-year average) to Revenue</strong></td>
<td>5%</td>
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</table>
S&P RATING REVISED CRITERIA – ONLY APPLIED TO STATES, MUNICIPALITIES AND COUNTIES

Indicative Rating

Positive Overriding Factors
- High income levels (one- or two-notch adjustment)
- Sustained high fund balances (one-notch adjustment)

Negative Overriding Factors
- Low market value per capita (one-notch adjustment)
- Low nominal fund balance (one-notch adjustment)
- Weak liquidity (caps rating at 'BBB-' or 'BBB+ ')
- Weak management (caps rating at 'A-' or 'BBB-' )
- Lack of willingness to pay obligations (caps rating at 'BBB-' for leases and 'B' for debt)
- Large or chronic negative fund balances (caps rating at 'A+', 'A-', or 'BBB-')
- Budgetary flexibility score of '5' (caps rating at 'A+')
- Structural imbalance (caps rating at 'BBB+ ')

Potential one-notch adjustment (but not higher than cap)

Final Rating
Rating Agency Perspective on Pension/OPEB Liabilities
• S&P will incorporate the new pension data into their analysis

• "According to the criteria, the primary focus of our analysis of a local government's pension or OPEB liability is not that the liability will grow or the funded ratio will fall," said Standard & Poor's credit analyst Katilyn Pulcher, "but whether it requires significant—or significantly increasing--contributions over the medium term."

• S&P will focus on the following: commitment to funding, investment performance, trend analysis, affordability, and efforts at maintaining plan sustainability

• Limited resources or no credible plan for how to pay for these benefits could exacerbate the situation
• Under Standard & Poor's new local government General Obligation criteria

  – One point adjustment to a local government's debt and contingent liabilities initial score if the local government has an unaddressed exposure to large unfunded pension or OPEB obligations that leads or potential leads to accelerating payment obligations over the medium term that represent significant budget pressure

  – Two point adjustment if there is no specific and credible plan to address this burden in place
• Carrying Charge: The required annual pension payment plus annual OPEB payment as a percentage of total governmental funds expenditures

• A combined carrying charge of 10% or more will be considered elevated, however, S&P will consider whether it expects the elevated payments to result in lower future obligations

• If funding ratio(s) are less than 80%, they will receive further review especially when the carrying charge is elevated

• The degree to which a local government contributes less than its full required contribution(s) could be an indication of either short-term cash flow issues or a willingness of management to defer difficult decisions

• The OPEB costs exceed 5% of total governmental funds expenditures and the local government has limited flexibility to change or amend these benefits
• Moody’s will analyze the new results, but they make their own pension calculations

• Multiple-employer cost-sharing plan liabilities will be allocated to specific government employers based on proportionate shares of total plan contributions

• Asset smoothing will be replaced with reported market or fair value as of the actuarial reporting date

• Accrued actuarial liabilities will be adjusted based on a high-grade long-term taxable bond index discount rate as of the date of valuation
  – They use the Citibank Pension Liability index as of the date of the asset valuation
• The resulting **adjusted net pension liability** (i.e. adjusted liabilities less assets) will be amortized over 20 years using a level-dollar method to create a measure of annual burden related to the net pension liability

• Moody’s position is they are not suggesting that their adjusted pension figures be used as a guide, standard or requirement for a state or local government to fund these obligations. Instead, they introduced these adjustments solely for the purpose of evaluating pension risk in the context of its credit ratings

• As the GASB 68 numbers come out they will use the sensitivity analysis to estimate duration of liabilities. They currently assume 13 years
Moody’s treatment of debt seeks to scale the magnitude of a local government’s debt obligations relative to:
- The local government’s resources (using tax base as the proxy)
- The local government’s operations (using operating revenues as a proxy)

<table>
<thead>
<tr>
<th>Factor 4: Debt/Pensions (20%)</th>
<th>Aaa</th>
<th>Aa</th>
<th>A</th>
<th>Baa</th>
<th>Ba</th>
<th>B &amp; Below</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Direct Debt / Full Value</td>
<td>&lt; 0.75%</td>
<td>0.75% ≤ n &lt; 1.75%</td>
<td>1.75% ≤ n &lt; 4%</td>
<td>4% ≤ n &lt; 10%</td>
<td>10% ≤ n &lt; 15%</td>
<td>&gt; 15%</td>
<td>5%</td>
</tr>
<tr>
<td>Net Direct Debt / Operating Revenues</td>
<td>&lt; 0.33x</td>
<td>0.33x ≤ n &lt; 0.67x</td>
<td>0.67x ≤ n &lt; 3x</td>
<td>3x ≤ n &lt; 5x</td>
<td>5x ≤ n &lt; 7x</td>
<td>&gt; 7x</td>
<td>5%</td>
</tr>
<tr>
<td>3-Year Average of Moody’s Adjusted Net Pension Liability / Full Value</td>
<td>&lt; 0.9%</td>
<td>0.9% ≤ n &lt; 2.1%</td>
<td>2.1% ≤ n &lt; 4.8%</td>
<td>4.8% ≤ n &lt; 12%</td>
<td>12% ≤ n &lt; 18%</td>
<td>&gt; 18%</td>
<td>5%</td>
</tr>
<tr>
<td>3-Year Average of Moody’s Adjusted Net Pension Liability / Operating Revenues</td>
<td>&lt; 0.4x</td>
<td>0.4x ≤ n &lt; 0.8x</td>
<td>0.8x ≤ n &lt; 3.6x</td>
<td>3.6x ≤ n &lt; 6x</td>
<td>6x ≤ n &lt; 8.4x</td>
<td>&gt; 8.4x</td>
<td>5%</td>
</tr>
</tbody>
</table>
What can you do?
• Educate the governing board on pension related liabilities and the consequences of deferring tough decisions (see State of Illinois)
  – Establish policies and procedures

• If pension/OPEB liabilities are increasing, create a credible plan to address the liabilities especially if trends are worsening

• Make additional contributions to reduce net pension liabilities
  – Utilize excess fund balances
  – Borrow tax exempt for capital expenditures in lieu of using funds on hand to pay capital expenditures

• Both rating agencies give credit to governments that begin to prefund OPEB liabilities
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