Understanding S&P Global’s Ratings

- An issuer’s **ability** and **willingness** to pay debt in a **timely** manner
- Credit ratings are **forward looking**
- 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
USPF 2023 Midyear Sector Summary

States

What we're watching

• Monthly revenues actual-to-budget as the economy slows
• Medicaid redeterminations and the stepdown of eFMAP reimbursement levels

Trends

• Reserves holding steady at all-time highs
• Pay-as-you-go capital used in lieu of upsizing borrowing as costs increase

Rest of year expectations

• Workforce retention and attraction challenges remain, but hiring counts improve
• Pension costs lessen as market rebounds from 2022 lows
What we’re watching
• Higher interest rates and inflation continue to be headwinds for most issuers from a debt issuance and operation and capital budget perspective
• Summer storm and fire season heightens the possibility of catastrophic events that require swift response and resource allocation

Trends
• Credit conditions have been largely stable, and upgrades have exceeded downgrades this year for most sectors
• Federal stimulus and healthy financial reserves continues to provide significant flexibility

Rest of year expectations
• Our baseline U.S. economic forecast is now for GDP growth below potential, but skirting a recession
## S&P Global Ratings' U.S. Economic Forecast Overview

### Key indicators

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023f</th>
<th>2024f</th>
<th>2025f</th>
<th>2026f</th>
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<tbody>
<tr>
<td>Real GDP (annual average % change)</td>
<td>2.3</td>
<td>-2.8</td>
<td>5.9</td>
<td>2.1</td>
<td>1.7</td>
<td>1.3</td>
<td>1.5</td>
<td>1.8</td>
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<tr>
<td>Real consumer spending (annual average % change)</td>
<td>2.0</td>
<td>-3.0</td>
<td>8.3</td>
<td>2.8</td>
<td>2.0</td>
<td>1.2</td>
<td>1.4</td>
<td>2.1</td>
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<td>Real equipment investment (annual average % change)</td>
<td>1.3</td>
<td>-10.5</td>
<td>10.3</td>
<td>4.3</td>
<td>-0.7</td>
<td>1.4</td>
<td>2.0</td>
<td>2.7</td>
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<tr>
<td>Real nonresidential structures investment (annual average % change)</td>
<td>2.3</td>
<td>-10.1</td>
<td>-6.4</td>
<td>-6.5</td>
<td>8.0</td>
<td>0.2</td>
<td>-0.3</td>
<td>1.1</td>
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<tr>
<td>Real residential investment (annual average % change)</td>
<td>-1.0</td>
<td>7.2</td>
<td>10.7</td>
<td>-10.5</td>
<td>-11.5</td>
<td>1.1</td>
<td>4.4</td>
<td>1.8</td>
</tr>
<tr>
<td>Core CPI (annual average % change)</td>
<td>2.2</td>
<td>1.7</td>
<td>3.6</td>
<td>6.2</td>
<td>5.0</td>
<td>3.3</td>
<td>2.4</td>
<td>2.2</td>
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<tr>
<td>Unemployment rate (%)</td>
<td>3.7</td>
<td>8.1</td>
<td>5.4</td>
<td>3.6</td>
<td>3.5</td>
<td>4.0</td>
<td>4.5</td>
<td>4.6</td>
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<tr>
<td>Housing starts (annual total in mil.)</td>
<td>1.3</td>
<td>1.4</td>
<td>1.6</td>
<td>1.6</td>
<td>1.4</td>
<td>1.3</td>
<td>1.4</td>
<td>1.4</td>
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<tr>
<td>Light-vehicle sales (annual total in mil.)</td>
<td>17.0</td>
<td>14.5</td>
<td>15.0</td>
<td>13.8</td>
<td>15.1</td>
<td>15.1</td>
<td>15.9</td>
<td>16.0</td>
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<td>10-year Treasury (%)</td>
<td>2.1</td>
<td>0.9</td>
<td>1.4</td>
<td>3.0</td>
<td>3.7</td>
<td>3.6</td>
<td>3.4</td>
<td>3.3</td>
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</table>

U.S. States | U.S. State Ratings Methodology (GO)

**Government Framework**
- Fiscal policy framework
- System support
- Intergovernmental funding

**Financial Management**
- System support
- Willingness to support debt
- Liquidity and capital market access
- High level of expected future debt/liabilities
- Weak structural budget performance
- High level of contingent liquidity risk

**Economy**
- Economic structure
- Wealth and income indicators
- Economic development

**Budgetary Performance**
- Budget reserves
- Liquidity
- Tax/revenue structure
- Revenue forecasting
- Service levels
- Structural performance

**Debt and Liability Profile**
- Debt burden
- Pension liabilities
- OPEB risk assessment

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**Indicative Credit Level** → **Overriding factors** + **Holistic analysis** → **State Rating**

One-notch adjustment, subject to any applicable rating cap

Source: S&P Global Ratings  U.S. States Ratings Methodology, October 17, 2016
Inflationary pressures
Will wages, as well as construction and insurance costs, continue to rise?

Revenue stability
Will sales and income taxes continue to hold strong as consumer confidence softens?

Monthly revenues
Monthly revenue declines are often a bellwether of recessions

Expected recession
Reserve levels, liquidity positions, and management options will allow states to weather a shallow recession

Proactive management
In a recession, management may need to cut expenses, raise revenues, or draw from reserves

New Congress
The past 3 years have seen record levels of federal aid flow to the states. That period has ended

Event risks
Cyber attacks and extreme weather events will continue to challenge management

Demographics
Will international migration return and will hiring challenges slow economic growth?
## U.S. States | By The Numbers

- **$121B**<br>Aggregate reserves 130% higher than pre-pandemic<br>2019 $280B 2023f

- **5.1%**<br>U.S. (unadjusted) hourly wage gains in 2022

- **81.7%**<br>Average state pension funded ratio for FYE 2021, expected to decline FY22

- **0**<br>States with negative outlooks

- **6**<br>States with positive outlooks

### Core CPI forecast (% change)

- **FY23**<br>**4.7%**<br>2022 **6.3%**

- **18.7 mil.**<br>Medicaid and CHIP enrollment increase (or 26.4%) between Feb. 2020 and Aug. 2022

- **20.8%**<br>State Fiscal Recovery funds still to be appropriated (as of Aug. 31)

- **4.7 mil.**<br>More jobs open in Nov. than active job seekers (10.3 mil. open to 5.6 mil. actively seeking work)

- **5**<br>Consecutive years with international migration to the U.S. declining

- **25**<br>States in which deaths exceeded births in 2021

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**Sources:**
- National Association of State Budget Officers;
- S&P Global Economics;
- Centers for Medicare & Medicaid Services;
- Federal Funds Information For States;
- U.S. Census Bureau;
- Bureau of Labor Statistics
Event Risks | Risk Management

Cyberattacks Increasing Across All Industries

Cryptocurrency and Decentralized Finance

Source: Check Point Research

Source: Exploring Crypto And DeFi Risks In Credit Ratings, published June 30, 2022
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