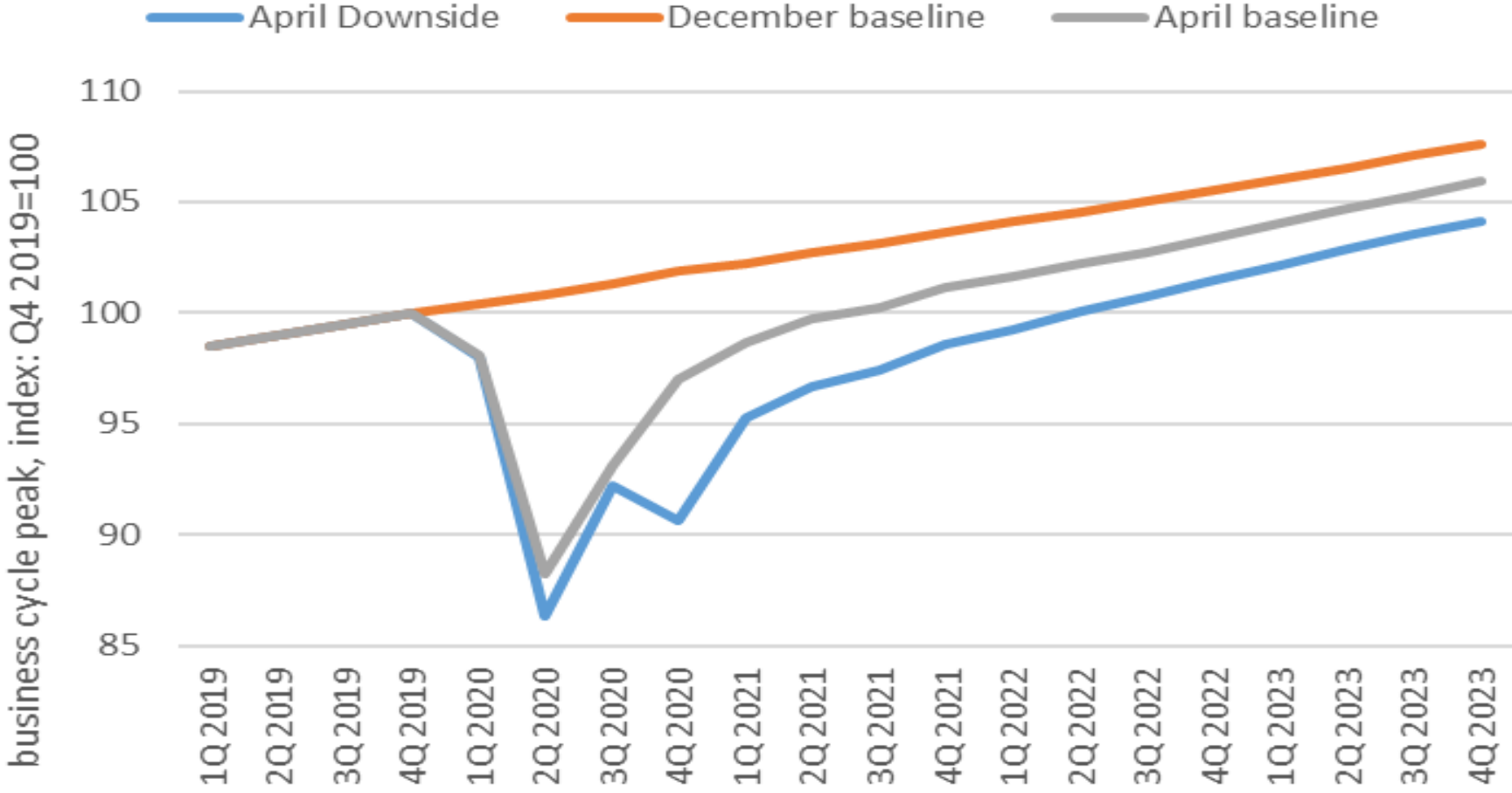


Volcker Alliance: Special Briefing on COVID-19

June 18th, 2020



GDP Forecasts: Before and After COVID-19



All Sector Outlooks Across U.S. Public Finance Turn Negative – Key Macro Factors



Duration

Uncertainty about the rate of spread and peak of COVID-19 could pressure liquidity



Mobility Restrictions

Closure of large segments of the economy has weakened demand and revenues



GDP Decline/Unemployment

Unprecedented decline forecasted for the 2nd quarter will present challenges across public finance



Containment/Mitigation Costs

Many issuers are at the front line of absorbing these unbudgeted costs



Policy Response

The timing of federal stimulus funds and support are uncertain and timing is of the essence



Market Volatility

Market access could continue to be pressured and more costly; prolonged equity market decline hurts revenues and pensions

Source: S&P Global Ratings.

COVID-19 Activity in U.S. Public Finance

Rating Activity

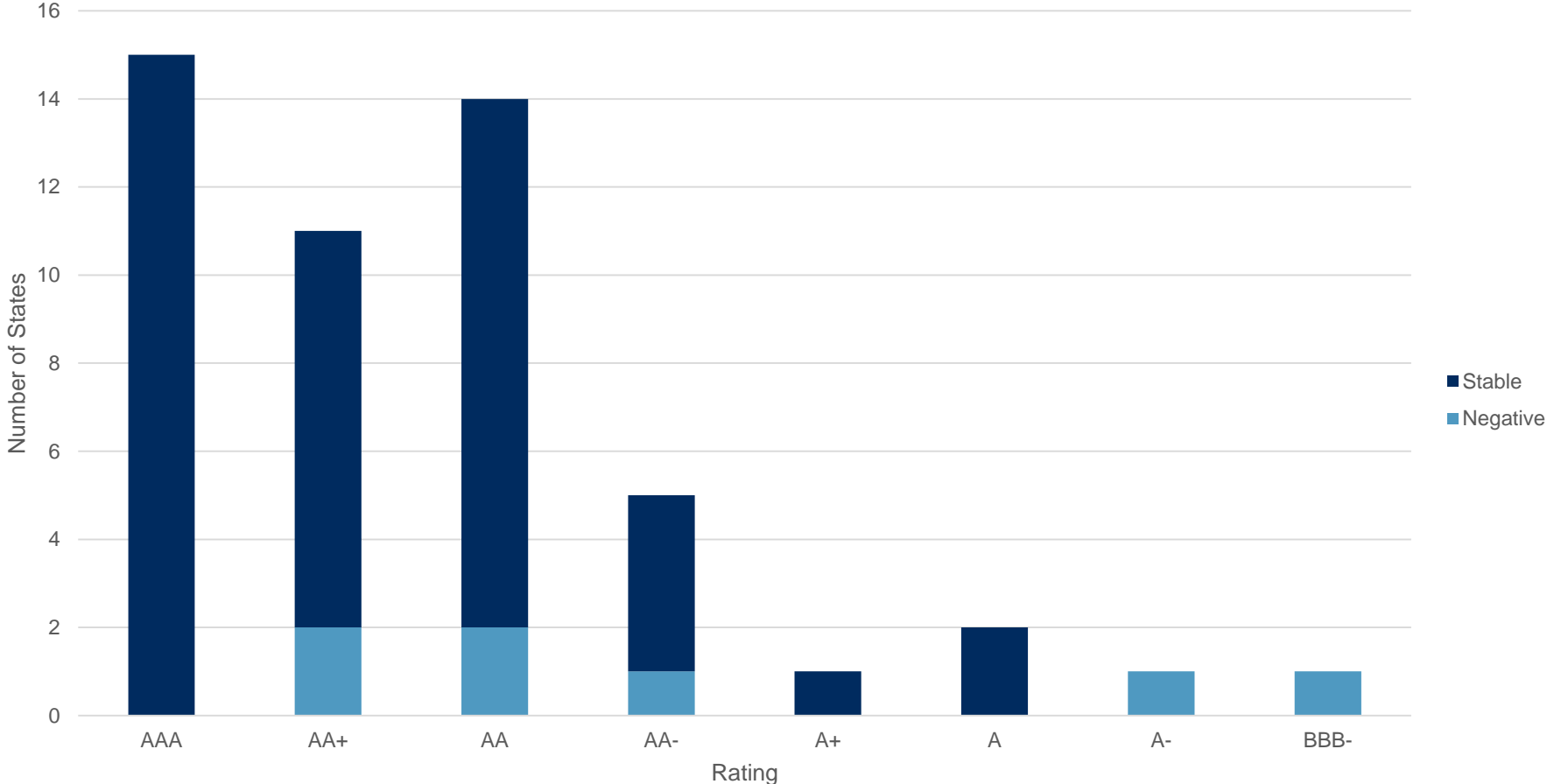
Through June 11, 2020

| Action | Health Care | Housing* | Higher Ed & Not-For-Profit | Charter Schools, Independent Schools, Community Colleges | Local Govts | States | Transportation | Utilities | Total |
|----------------------------------|-------------|----------|----------------------------|--|-------------|--------|----------------|-----------|-------|
| Downgrade | 5 | 2 | 4 | 1 | 5 | | 3 | | 20 |
| Downgrade + outlook to negative | | | 4 | 2 | 14 | 1 | 1 | | 22 |
| Downgrade + CreditWatch negative | | 1 | | | | | | 1 | 2 |
| Negative outlook revision | 53 | 22 | 247 | 18 | 282 | 12 | 184 | 31 | 849 |
| CreditWatch negative | 2 | | | | 10 | | 2 | | 14 |
| Total | 60 | 25 | 255 | 21 | 311 | 13 | 190 | 32 | 907 |

Some ratings were included in the bulk negative outlook rating actions despite already being on negative outlook. These ratings are not included here. Rating activity is summarized by issuer, except for the higher education sector which includes individual projects within the privatized student housing portfolio. *Four housing transactions were downgraded when the outlook was revised to negative; however, we only consider the outlook change to be COVID-19 related so they are listed under "Negative outlook revision" in the table.

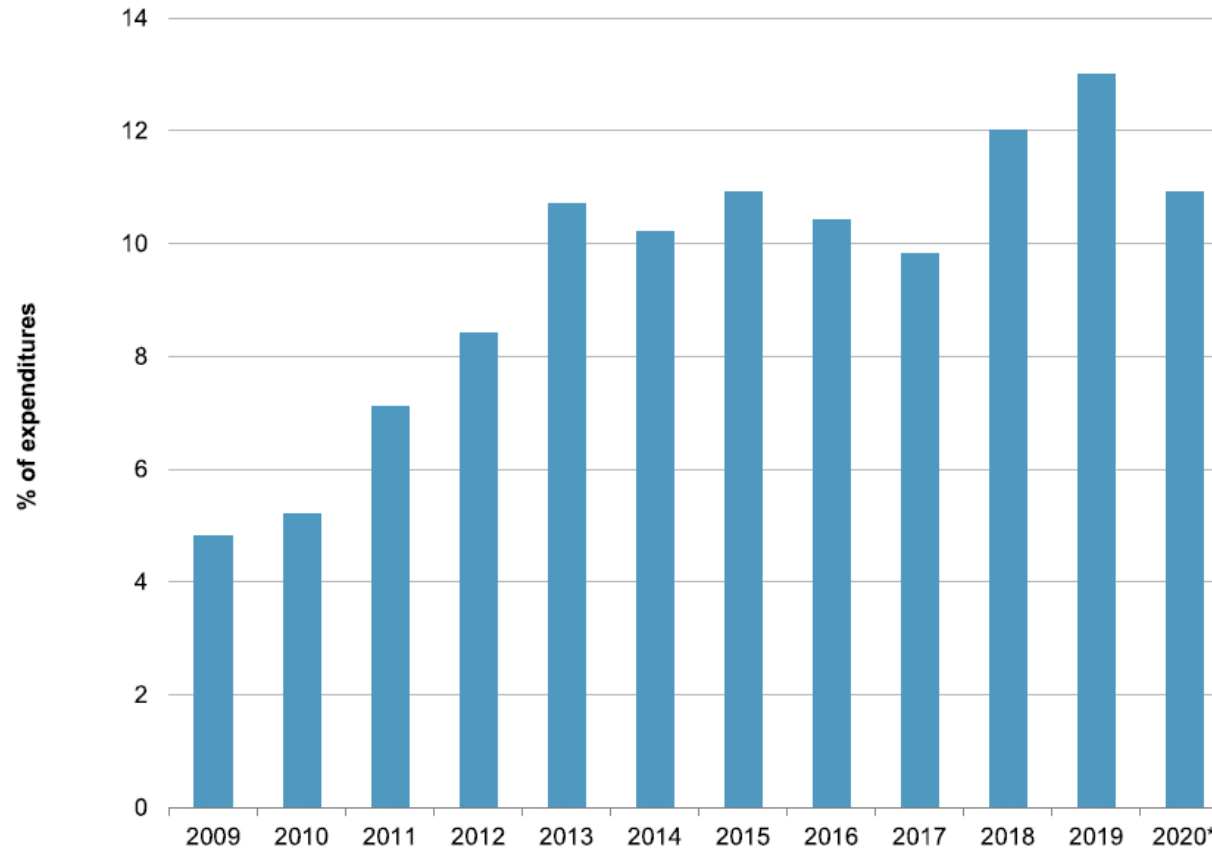
U.S. State Ratings Distribution

As of May 19, 2020



Ratings are for the state's general obligation debt or ICR (issuer credit rating). Ratings for other debt issued by the state will vary based on the security backing the bonds.

Ten-Year Growth in Combined State Reserves



* Budget estimate. Source: NASBO.

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Source: S&P Global Ratings COVID-Induced Recession Throws Curveball To U.S. State Budgets, May 21, 2020

Fiscal Year 2021 State Budget Highlights

State Budget Highlights



32

States with budgets enacted



11%

Average anticipated reserves as a percentage of expenditure for FY 2020



50

States expecting a COVID-related downturn



20

States with revised revenue forecast since March



17%

Average growth in reserves 2009-2019



5

States with fixed costs above 40% before recession

Moderating Debt Burdens Allow Some U.S. States Room To Borrow During A Recession

Key Takeaways

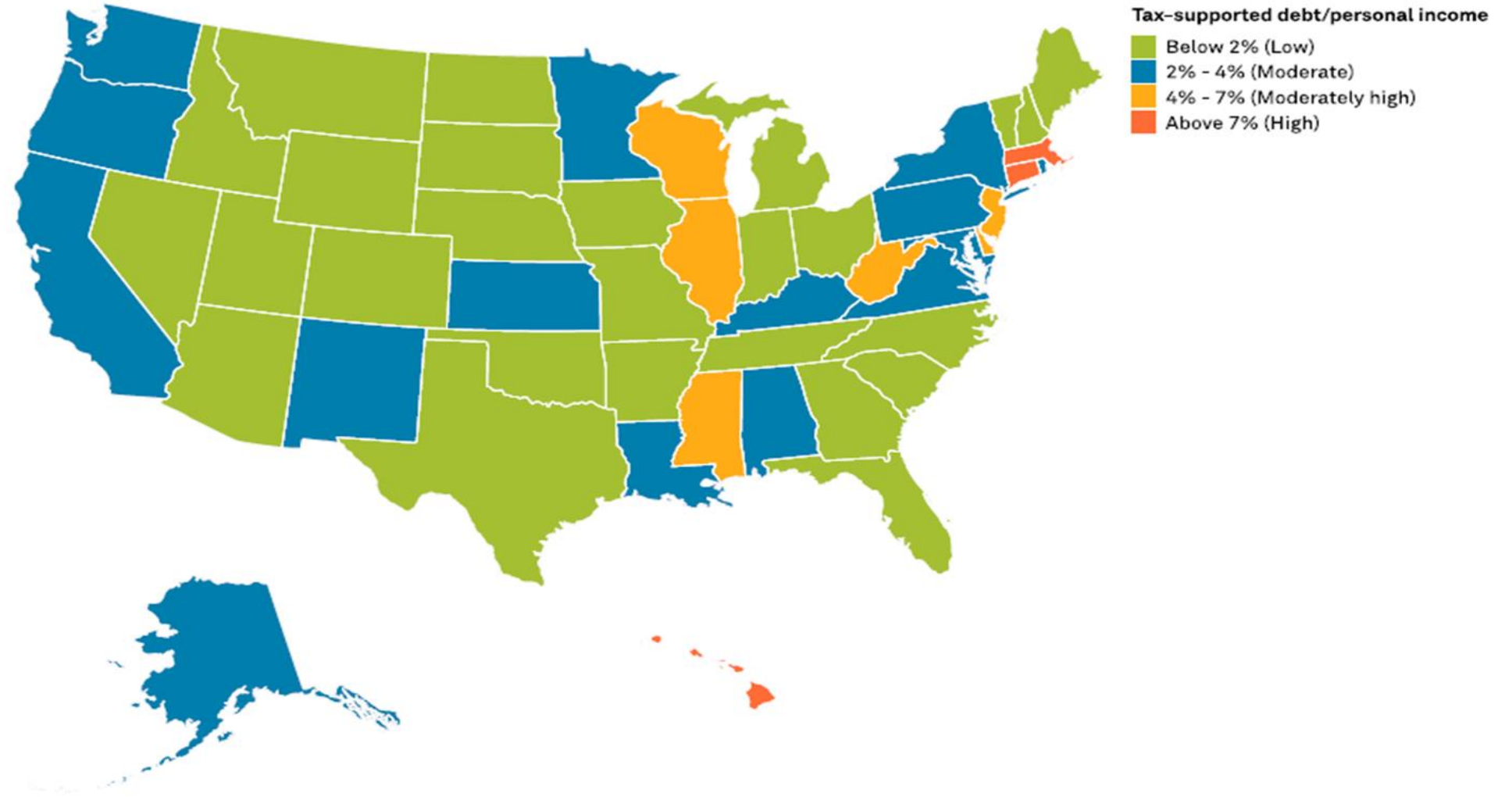
- With debt profiles comparatively stable since the Great Recession, S&P Global Ratings expects states will look to increase their capital borrowing.
- Generally, debt levels are sustainable at low-to-moderate debt ratios with capacity for growth for most states.
- Acceleration in infrastructure spending could buoy states' economies and induce longer-term growth.
- From a regional perspective, with the exception of California and Washington, the states at the top of total tax-supported debt list are all east of the Mississippi River.

Top Ten States Ranked By Tax Supported Debt

| Ranking | Total tax-supported debt | Per capita | As % of personal income | As % of GSP | Debt service as % of general spending |
|---------|--------------------------|---------------|-------------------------|---------------|---------------------------------------|
| 1 | California | Connecticut | Hawaii | Connecticut | Connecticut |
| 2 | New York | Massachusetts | Connecticut | Hawaii | Hawaii |
| 3 | Massachusetts | Hawaii | Massachusetts | Massachusetts | New Jersey |
| 4 | New Jersey | New Jersey | New Jersey | New Jersey | Illinois |
| 5 | Illinois | New York | Delaware | Mississippi | Washington |
| 6 | Connecticut | Illinois | Mississippi | Wisconsin | Massachusetts |
| 7 | Pennsylvania | Washington | Illinois | West Virginia | Mississippi |
| 8 | Washington | Delaware | Wisconsin | Illinois | Maryland |
| 9 | Florida | Maryland | West Virginia | Delaware | New York |
| 10 | Maryland | Wisconsin | Oregon | Maryland | Georgia |

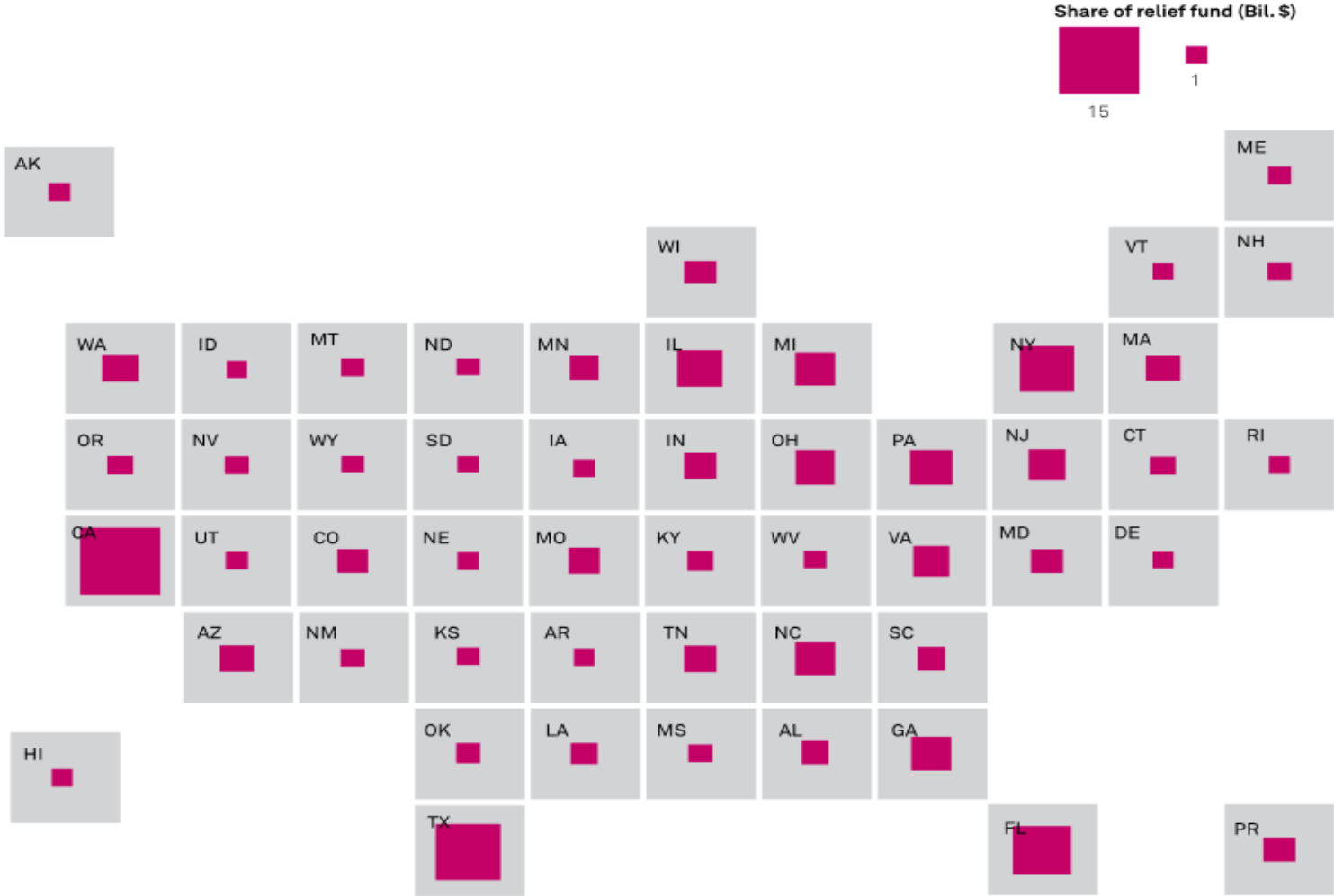
GSP--Gross state product.

Tax-Supported Debt As A % of Personal Income



What the CARES Act Means For U.S. Public Finance

Proportionate Share Of Coronavirus Relief Fund



Source: S&P Global Ratings.
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[COVID-19 Activity In U.S. Public Finance](#), *updated frequently*

[Moderating Debt Burdens Allow Some U.S. States Room To Borrow During A Recession](#), *June 16, 2020*

[U.S. Oil-Producing States Dealt Double Blow From Price Collapse And COVID-19](#), *June 8, 2020*

[COVID-19 Induced Recession Throws Curveball To U.S. State Budgets](#), *May 21, 2020*

[Credit FAQ: COVID-19, Recession, And U.S. Public Finance Ratings](#), *May 14, 2020*

[The COVID-19 Outbreak Weakens U.S. State and Local Government Credit Conditions](#), *April 2, 2020*

[All U.S. Public Finance Sector Outlooks Are Now Negative](#), *April 1, 2020*

Thank you!



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S&P Global
Ratings



All research, commentary, and rating actions related to COVID-19 in U.S. Public Finance can be found at the link below:

[COVID-19 Activity in U.S. Public Finance](#)

Q&A



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