

The Pandemic Economy and State Budgets

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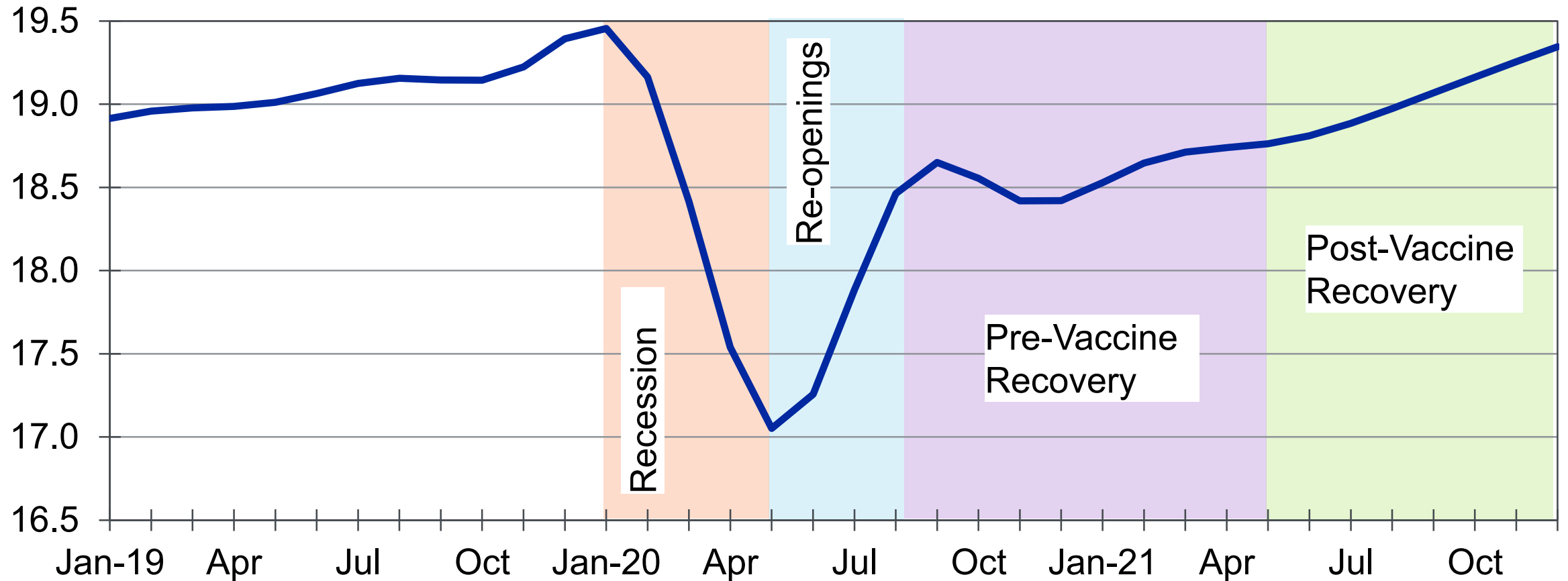
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The Pandemic Economy

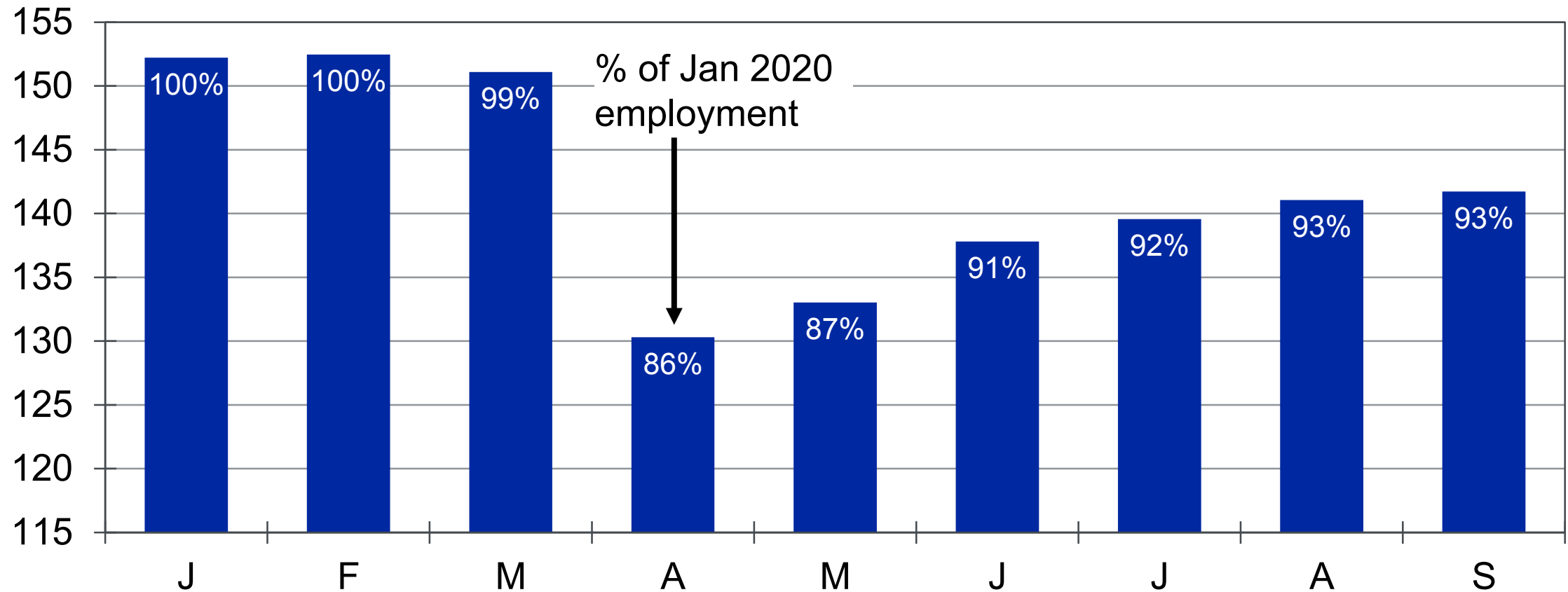
U.S. Real GDP, Moody's Analytics Baseline Scenario, Trillions 2012\$, SAAR



Sources: BEA, Moody's Analytics

Sliding Sideways Into the End of the Year

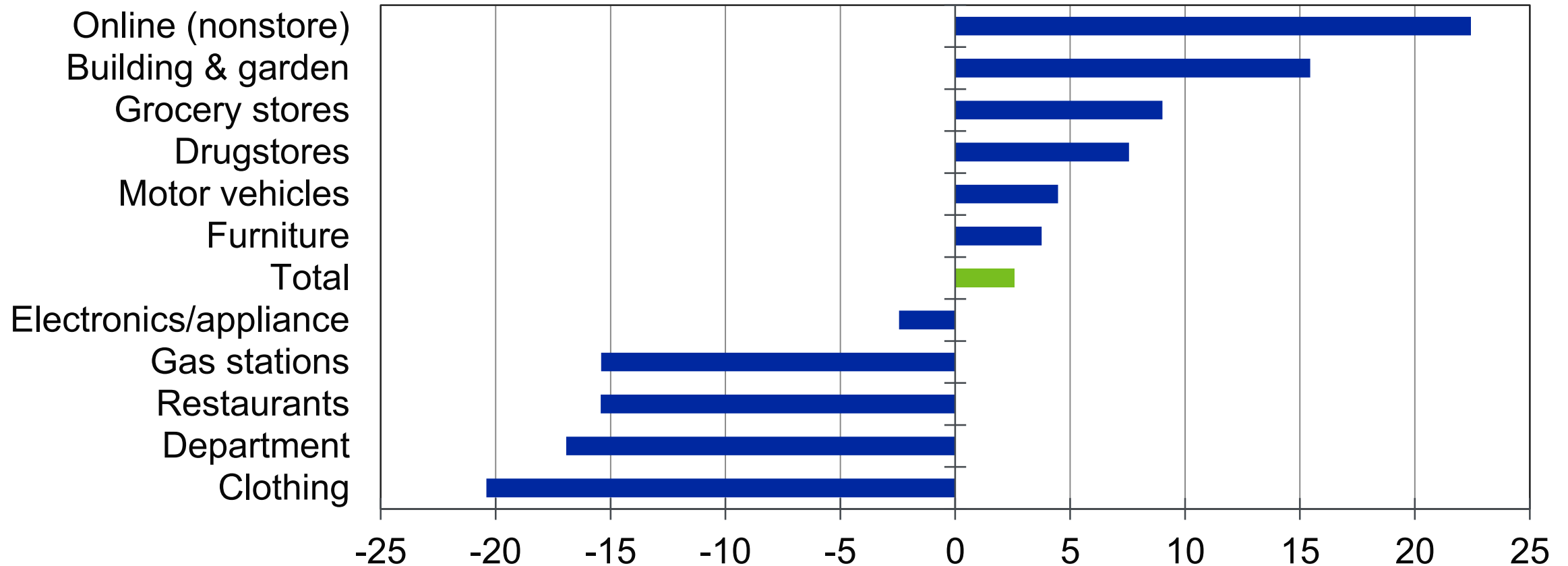
Nonfarm employment, mil, 2020



Sources: BLS, Moody's Analytics

Spending Focuses on Essentials, Homes, Autos

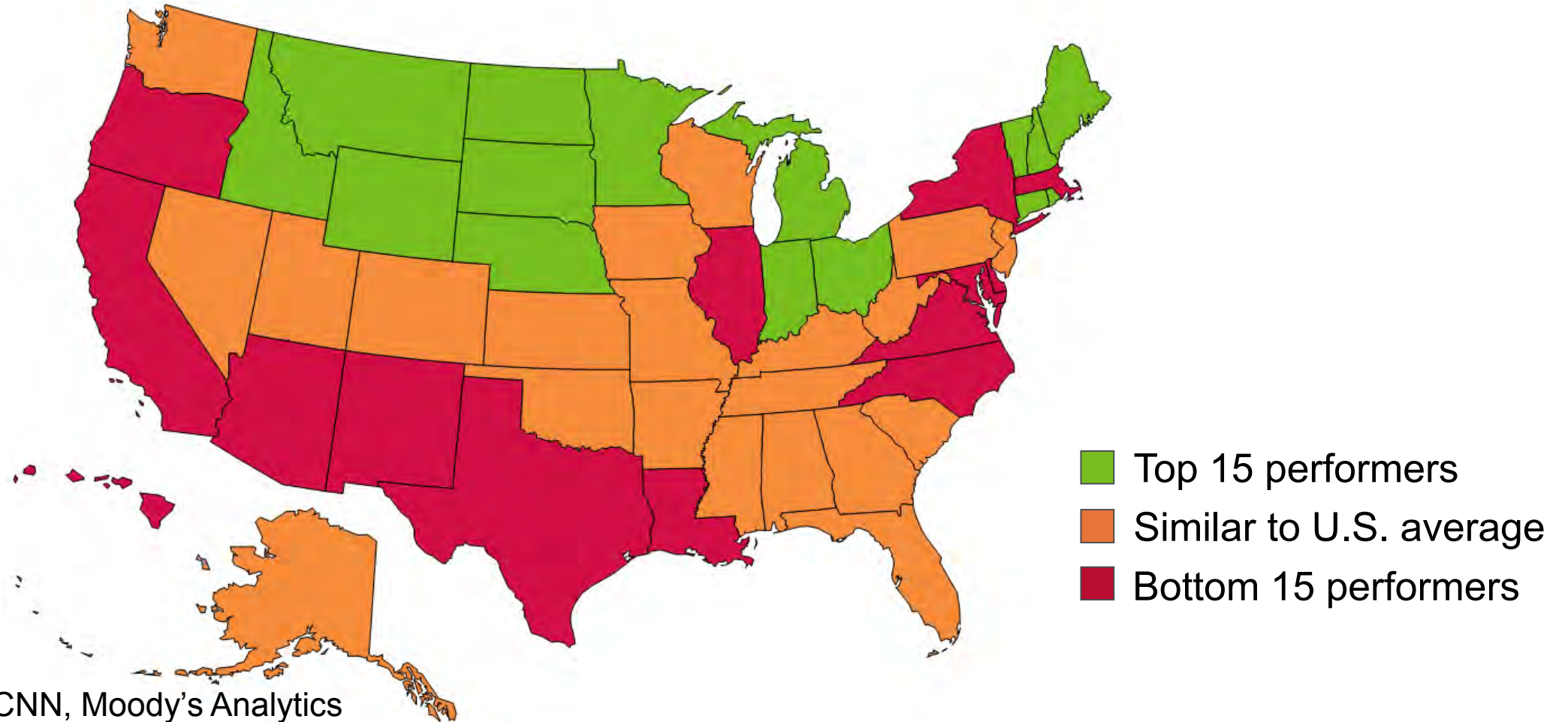
Retail sales, Aug 2020, % change yr ago



Sources: Commerce Department, Moody's Analytics

Normal Is a Relative Term

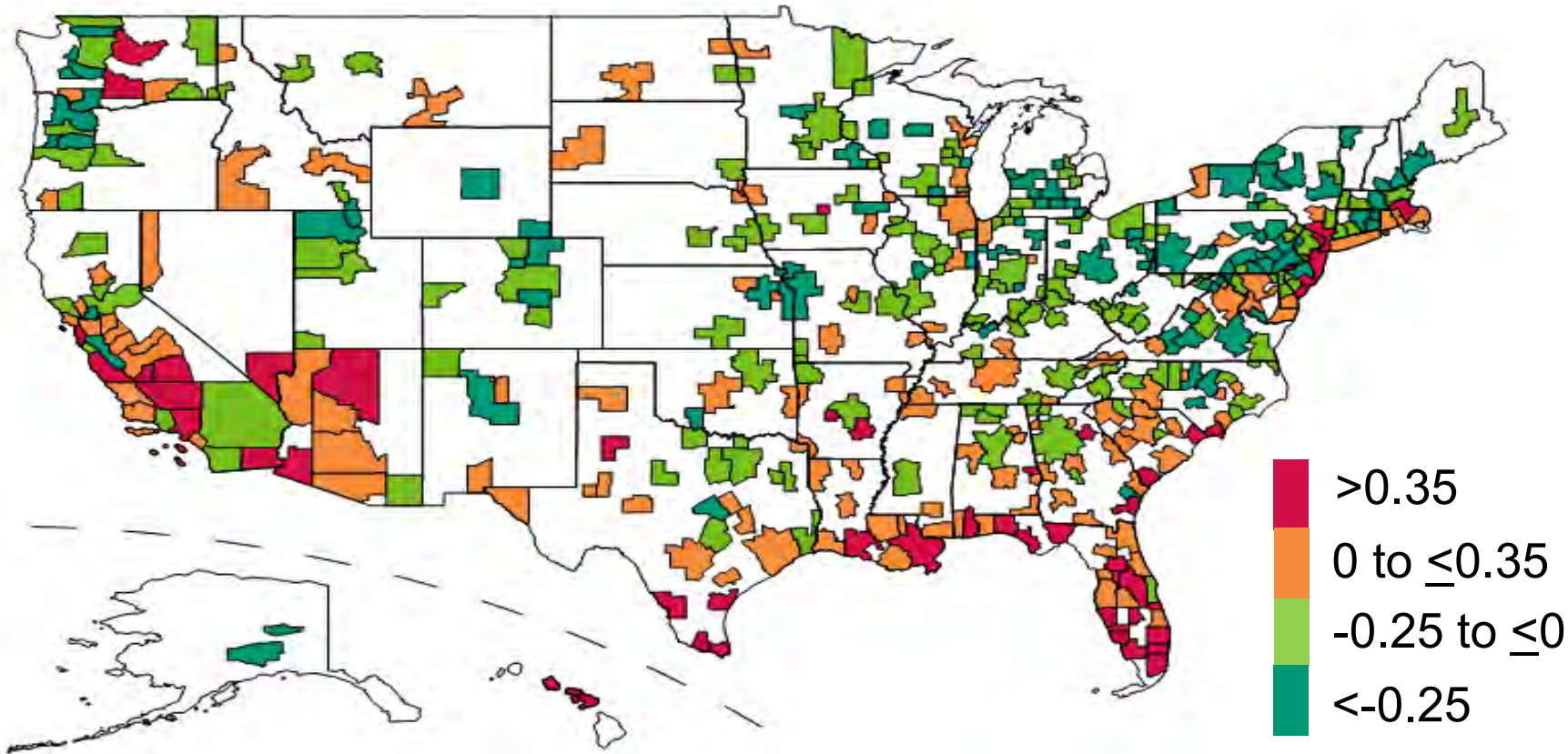
Moody's Analytics/CNN Money "Back-to-Normal Index," as of 9/23



Sources: CNN, Moody's Analytics

Where the Economy Is Most Vulnerable

COVID Economic Exposure Score, 0=metro area avg, Oct 2020



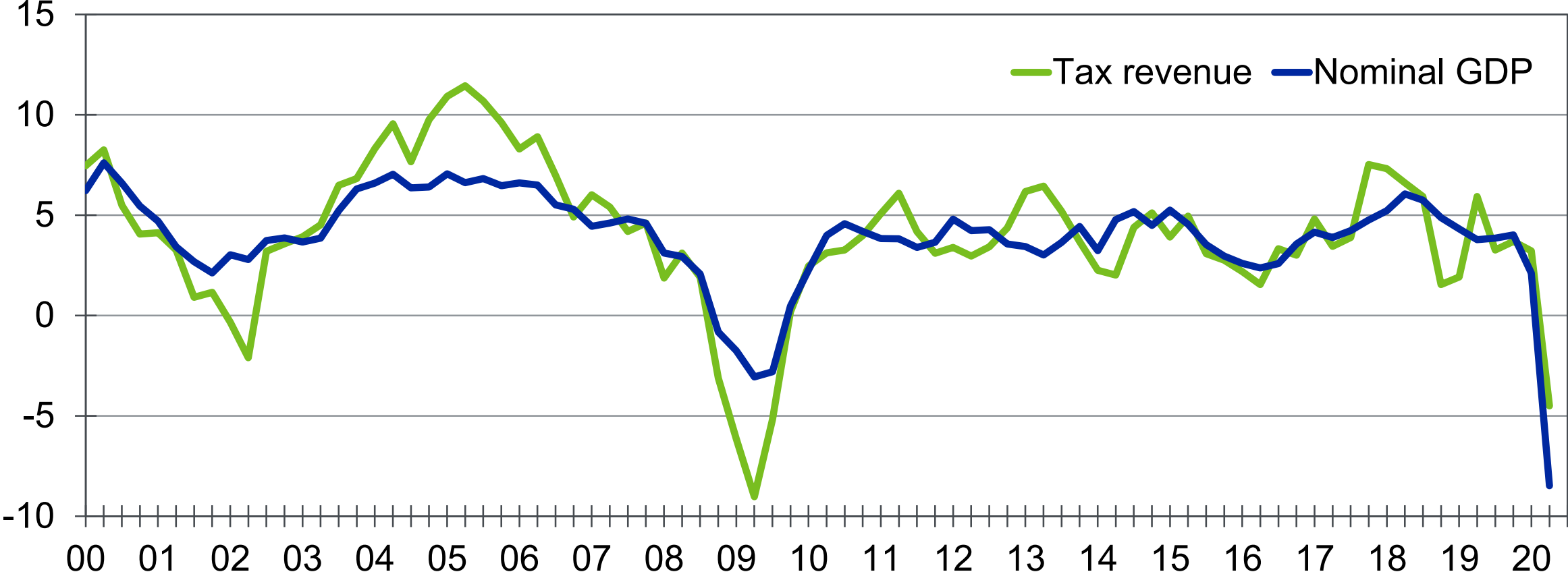
MA Economic Exposure Score Key Components:

- Previous infections
- Demographics
- Commuting patterns
- Population density
- Industrial mix
- Income levels

Source: Moody's Analytics

Not Your Normal Recession

% change yr ago, U.S.



Sources: BEA, Moody's Analytics

What Scenarios Are We Looking At?

Scenario assumptions behind MA's most recent stress tests



Baseline – Moderate Stress Scenario

BL

Assumes the worst of the pandemic will end with the summer.

By Q4 of 2021 the jobless rate is still around 8% and real GDP is at the same level it was to end 2019.

Job market doesn't recover previous peak until late 2023.

S3 – Severe Stress Scenario

S3

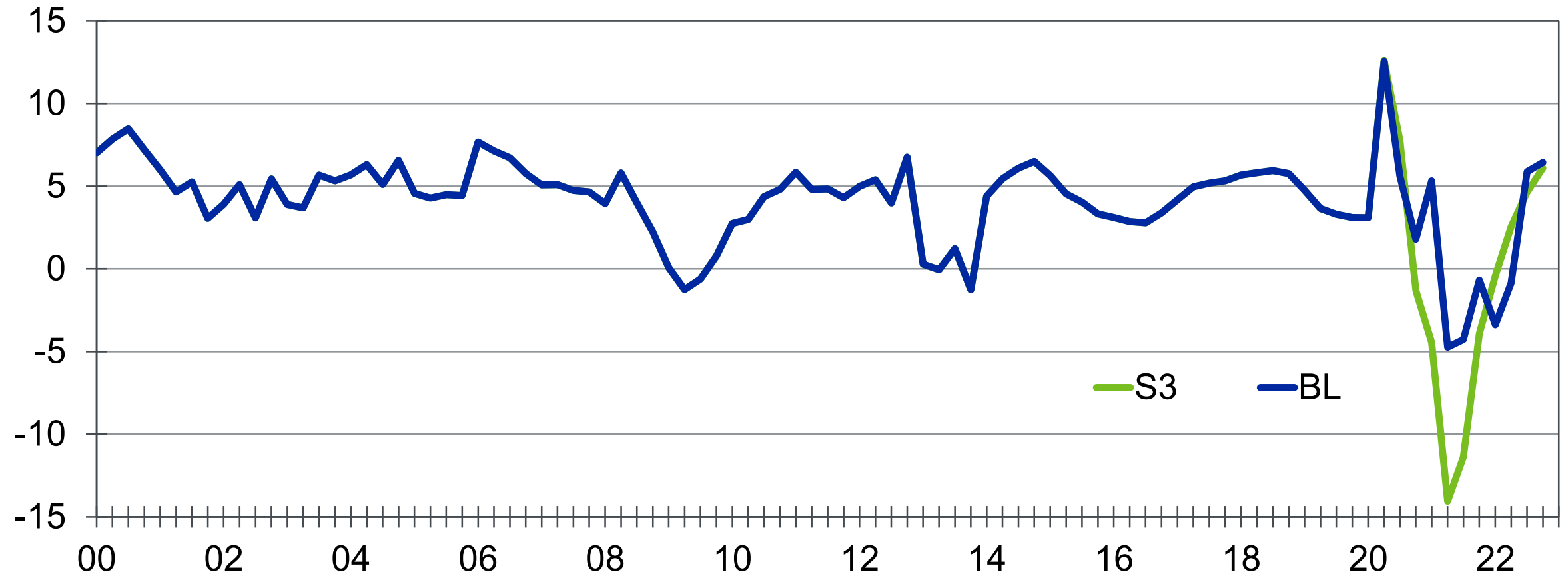
Assumes a second round of outbreaks leads to a double-dip recession.

By Q4 of 2021 the jobless rate is almost 11% and real GDP is nearly 6% lower than at the end of 2019.

Job market doesn't recover previous peak until early 2027.

Lots of Downside Without More Stimulus

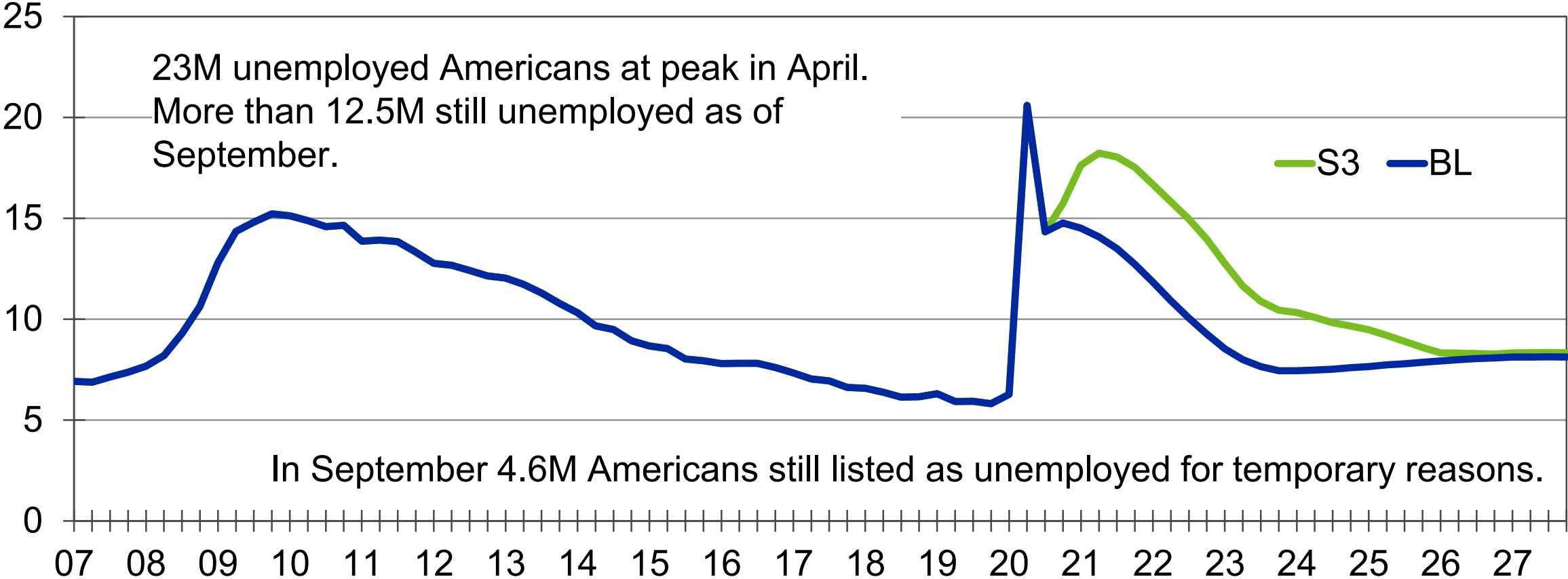
U.S. disposable personal income, % change yr ago



Sources: BEA, Moody's Analytics

Unemployment and Medicaid

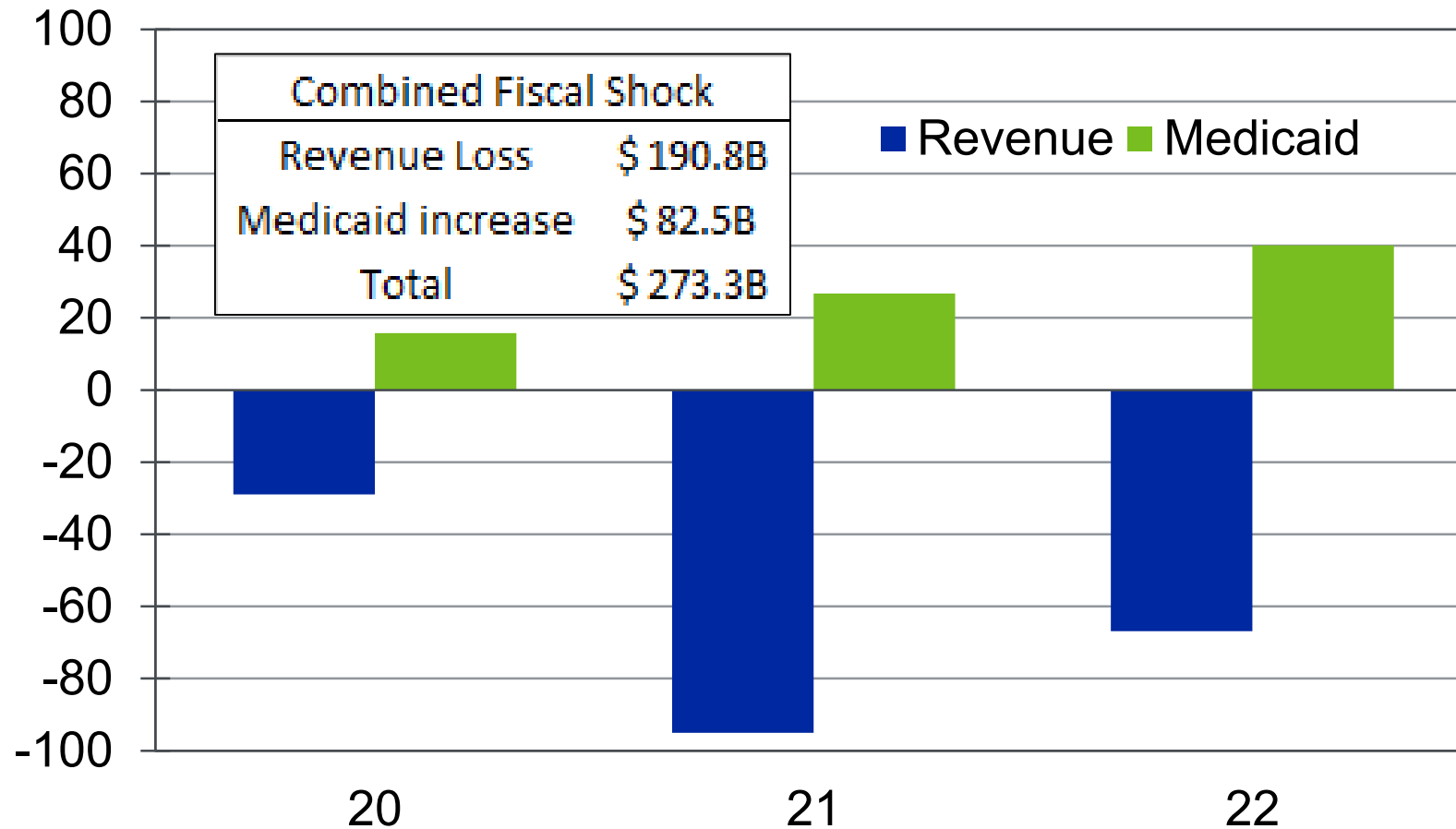
Number of unemployed persons in the U.S., mil



Sources: BEA, Moody's Analytics

Baseline Outlook

Aggregate fiscal shock across all 50 states



What was severe has become the baseline:

Revenue losses and Medicaid surge are likely to extend across at least three fiscal years

Majority of the pain will still be concentrated on the revenue side of the ledger.

Including local governments, total need could be as high as \$450 billion

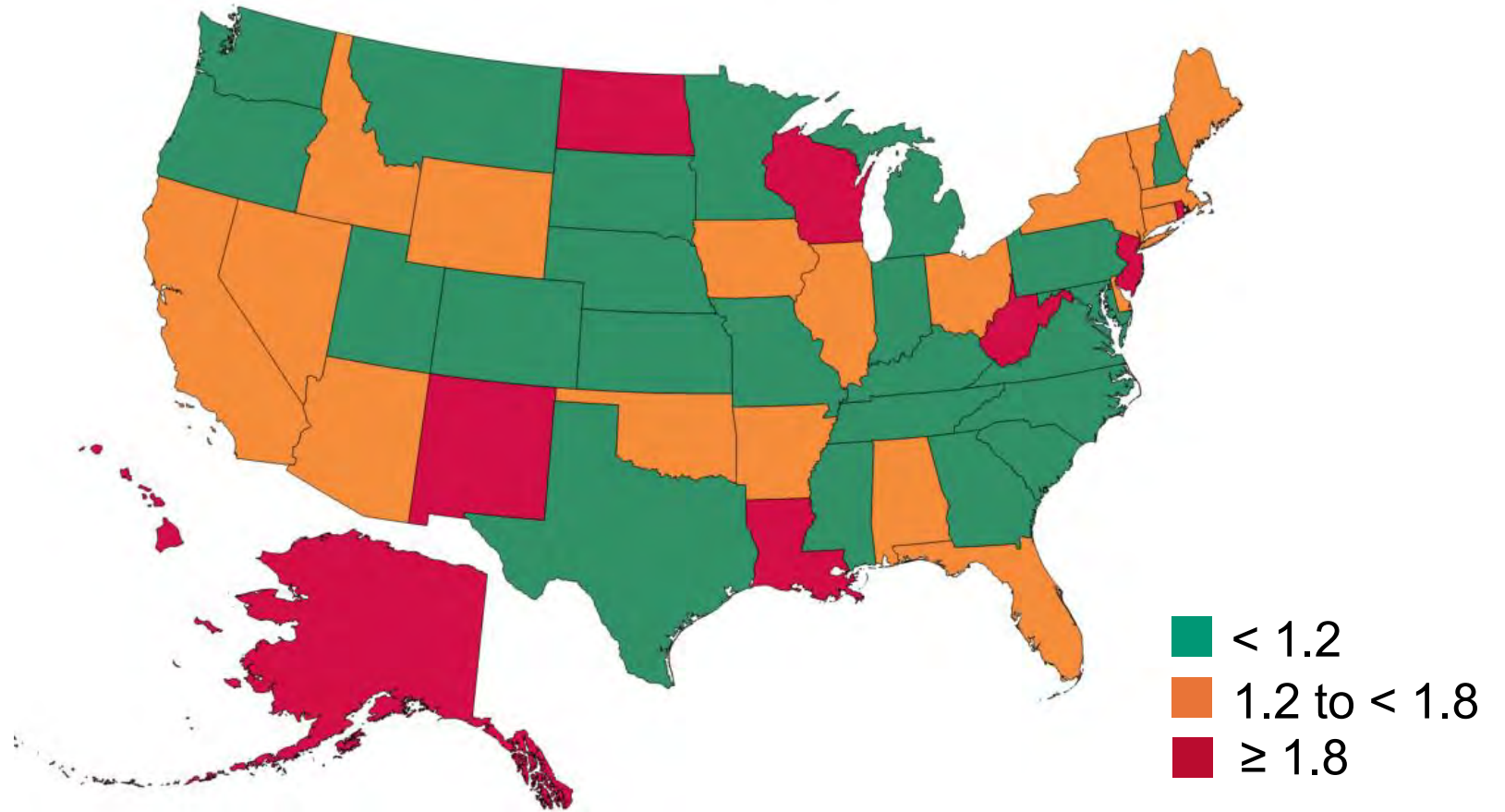
Baseline Outlook

Three-year fiscal shock as a % of Gross State Product

Implications Vary Across States

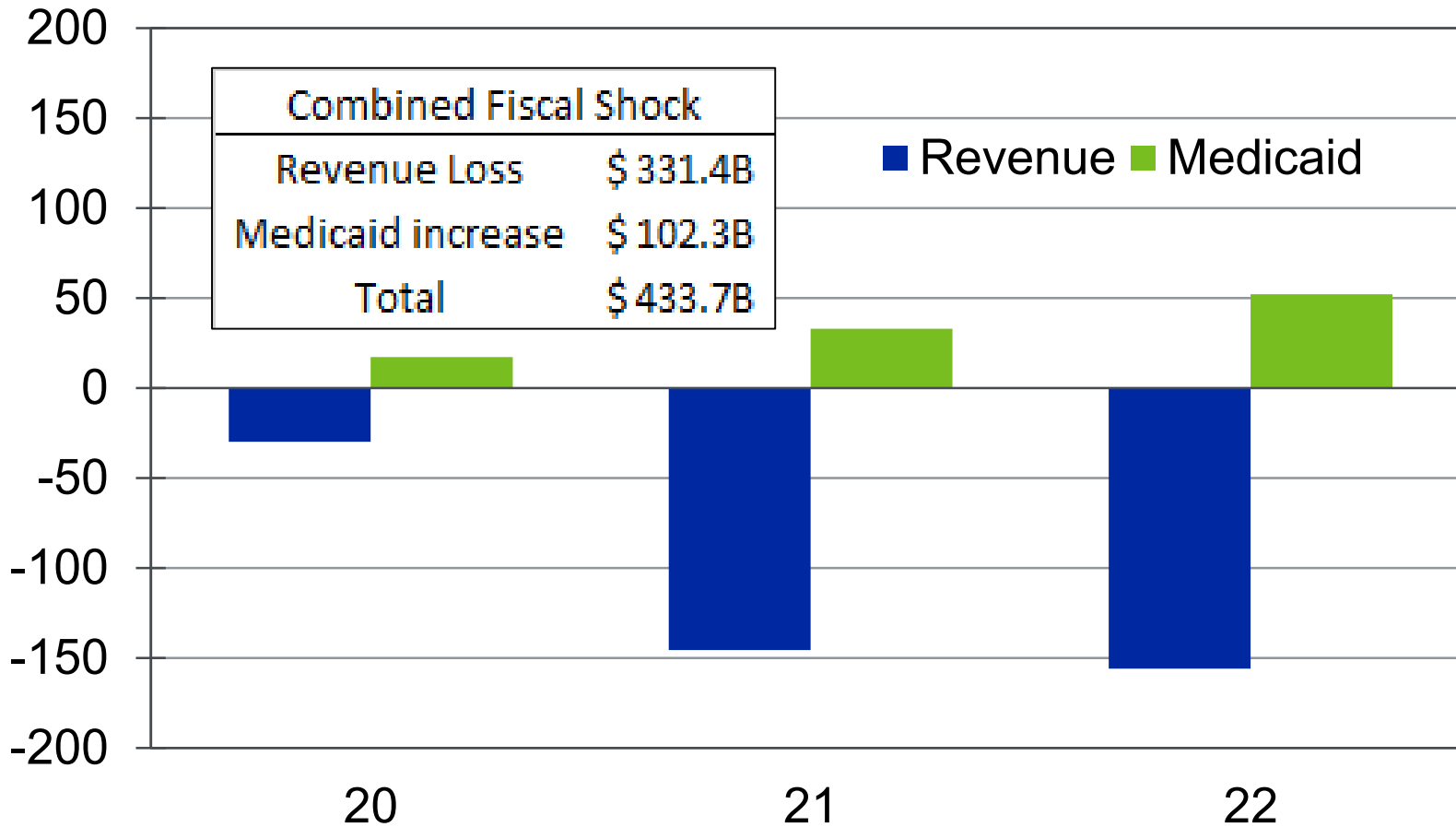
Overall fiscal shock, not including the use of rainy-day reserves.

States seeing the most risk are those whose economies rely heavily on the public sector, tourism, and energy. Also those with exceptionally high exposure rates/business restrictions.



Severe Outlook

Aggregate fiscal shock across all 50 states



Reimagining the meaning of the word severe:

A double-dip recession would create unprecedented fiscal stress for state budgets.

Including local governments, total need could be as high as \$650 billion

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