



# The COVID Report Card

## Grading U.S. states and countries based on their discretionary behavior

How you play the cards you're dealt matters a great deal. When the COVID pandemic hit, some U.S. states had better hands than others, owing to demographic factors beyond their immediate control. And though these factors, such as population density and median age, had a powerful effect on COVID outcomes, they're only part of the story. Because despite the hand they were dealt, states' actions also played an important role. To evaluate how well U.S. states responded to the COVID crisis, we disentangle these two effects and focus on outcomes owing to a state's discretionary behavior and governance.

First, we estimate the impact of a collection of demographic factors on COVID outcomes across states. Importantly, these factors—education level, median age, political affiliation of the governor, and population density—are beyond the control of states, at least in the near term. Yet, we find they play a powerful role in explaining COVID outcomes. States with higher education levels, older populations, Democratic governors, and sparser populations generally experienced fewer COVID cases and deaths per million people. These relationships are statistically significant and impactful. For example, all else equal, a state with one percent more people with a Bachelor's degree or higher and a population of 20 million should have experienced 952 fewer cases per week than the national average.

Next, we compare each state's actual COVID outcomes with their expected outcomes according to their demographics. We interpret these differences as the impact of their discretionary behavior and governance. Exhibit 1 shows the top and bottom states according to this metric for new COVID cases (for results across all states as well as countries, please see our paper cited below). These bars represent the number of new cases per million people each week, beyond what was expected based on pre-existing circumstances. Negative bars imply outperformance, states that reduced COVID outcomes as a result of prudent behavior; positive bars imply underperformance.

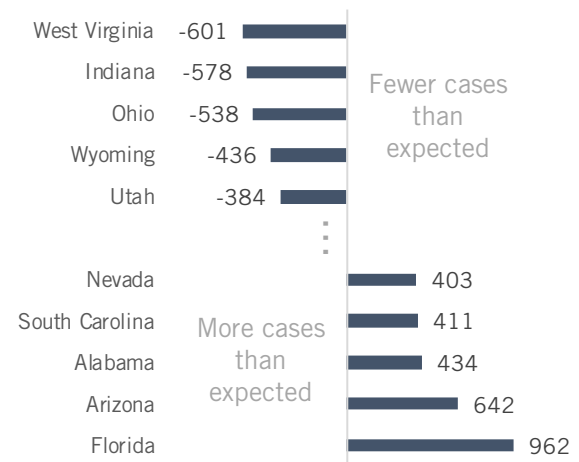
Understanding the drivers of COVID outcomes is important to policymakers and citizens alike. Though some factors are beyond anyone's control in the near term, our analysis suggests that discretionary behavior can influence COVID outcomes in meaningful ways.

For more on this topic, see our 2020 working paper on SSRN:

**"The Covid Report Card"** by Megan Czasonis, Mark Kritzman, Baykan Pamir, and David Turkington.

**Exhibit 1: COVID Report Card for New Cases**

*Actual minus expected new cases per week (per million people)*



*Based on weekly data over the period May 23, 2020 through September 12, 2020. Expected new cases are based on each state's demographic factors times the fitted coefficients from a pooled cross-sectional regression. Reported values are per million people. For more details on the methodology, please refer to the paper cited below. Source: State Street Global Markets*

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