PRIVATE ENTERPRISE RESEARCH CENTER
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PERCSPECTIVES ON POLICY

PANDEMIC MISERY INDEX: STATES AND TEXAS MSAs

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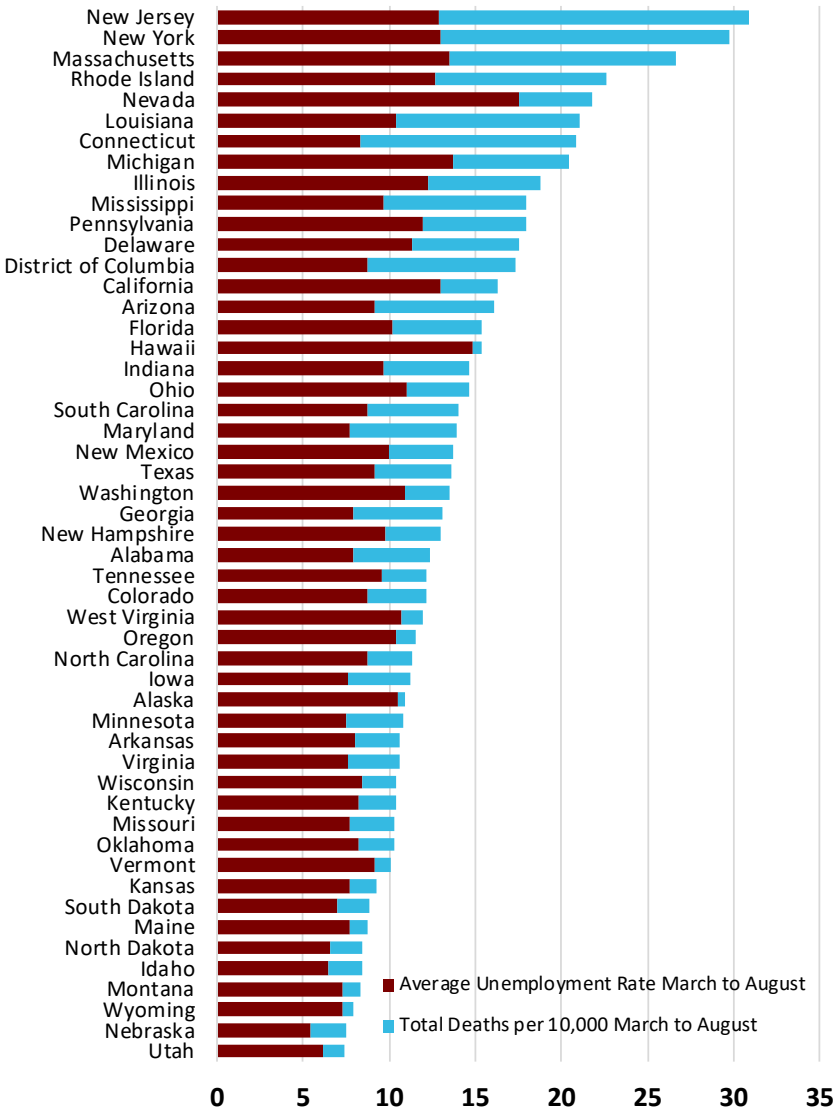
Which state has been more effective at dealing with Covid-19, New York or Texas? Who has done better at stemming the spread of the virus and keeping businesses afloat, California of Florida?

The answer to these questions depends on how we define and measure 'effectiveness.'

As shelter-in-place orders began, many states' goals were to protect vulnerable populations and minimize deaths, while maintaining economic activity and employment levels. Covid-19 fatalities relative to the population can be used as an indicator of public health effectiveness, with a lower fatality rate indicating greater effectiveness. The unemployment rate, averaged over the pandemic months, can serve as a measure of economic health, with lower unemployment rates indicating higher economic effectiveness.

How, then, do we define effectiveness? Borrowed from the misery index of economist Arthur Okun and popularized by Ronald Reagan in his campaign against Jimmy Carter, our Pandemic Misery Index or PMI is a simple addition of the average unemployment rate in percent starting in March and the total number of deaths per 10,000 of the population. How to balance the health risk and the economic risk, and how to weigh

FIGURE 1. PANDEMIC MISERY INDEX



Pandemic Misery Index=March to August average unemployment rate + ((March to August total deaths/population)*10,000) Sources: COVID-19 deaths from the New York Times, unemployment rates from the Bureau of Labor Statistics, 2019 population estimates from the Census Bureau.

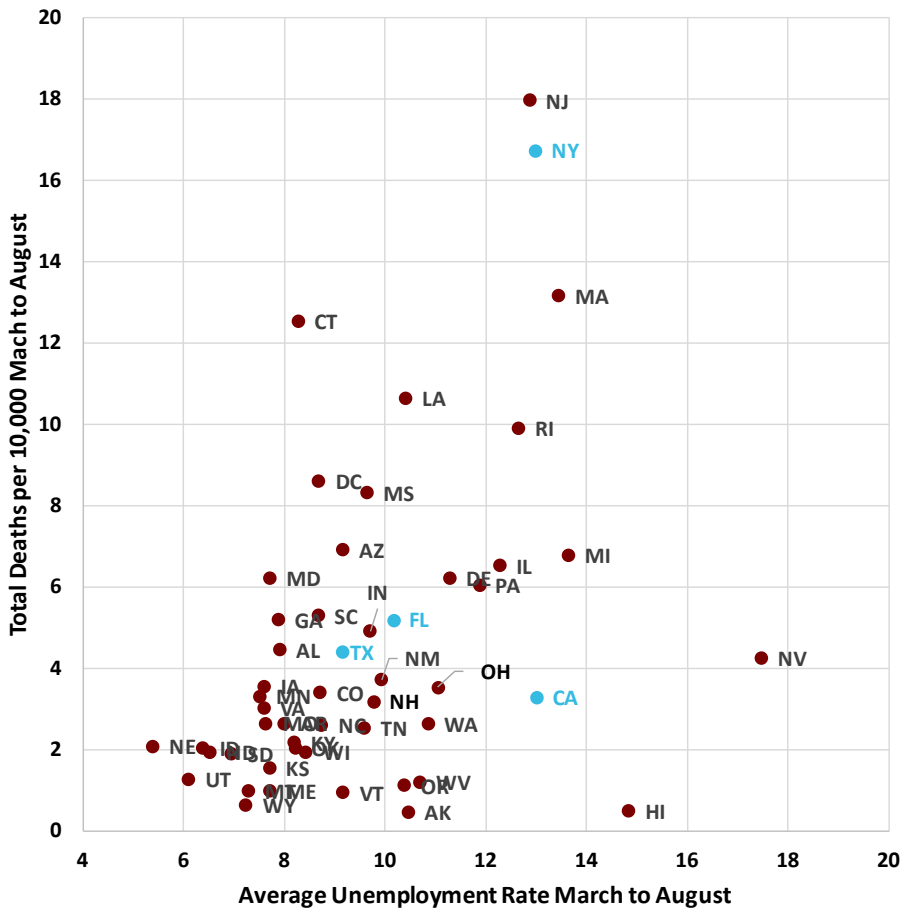
these two often conflicting goals in making policy decisions, are difficult issues that each state has had to face. As is true of the original misery index, this Pandemic Misery Index is a simple approach that weighs these two features equally.

What is the result? As shown in Figure 1, there is a wide range of experiences with both the unemployment rate and the fatality rate during the pandemic. Some states have been hard hit under both measures, while some have been relatively unscathed by one or both measures. So, Texas or New York? California or Florida?

New York's fatality rate from March to August, 16.7 deaths per 10,000, was second highest only to New Jersey. Combined with the state's average unemployment rate of 13.0%, this produces a PMI value of 29.7. Texas has both a far lower mortality rate of 4.4 per 10,000 and a lower average unemployment rate of 9.1%, giving Texas an index value of 13.6. Florida's index value was higher at 15.4 due to a higher average unemployment rate of 10.2% and a mortality rate of 5.2 deaths per 10,000. California's PMI stands at 16.3, as its March-to-August average unemployment rate was 13.0%, the fifth highest, although its 3.3 deaths per 10,000 residents was lower than both Florida and Texas.

To be fair, New York faced its biggest test early in the pandemic, and its decisions and experiences have been instructional to others. Medical professionals are better able to handle cases today in part because of the events in New York. Still, the Lone Star State has handled the crisis better than New York, and at least with respect to the PMI, Texans will be happy to admit that everything is not always bigger in Texas. As for Florida, it has performed better than New York despite having 20.5% of its population over 65, compared to New York with 16.4%. California has done better than Florida, and marginally better than Texas, in terms of deaths per capita, but has paid a high price in unemployment.

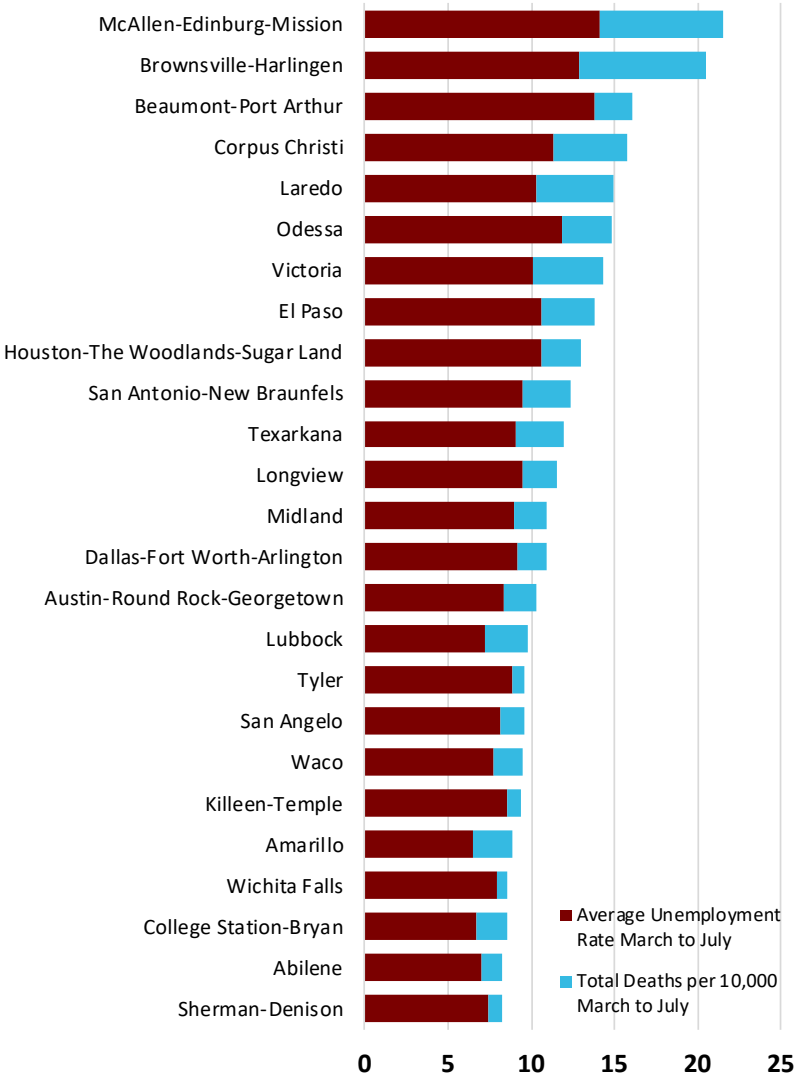
FIGURE 2. UNEMPLOYMENT AND COVID-19 DEATHS, MARCH TO AUGUST



Which states have done exceedingly well in one or both measures? Figure 2 plots the average unemployment rate from March-to-August on the horizontal axis and the March-to-August cumulative death rate on the vertical axis. Hawaii has certainly achieved a low fatality rate, but at the cost of massive unemployment. Only Nevada's 17.5% average unemployment rate beats Hawaii's 14.9%. Connecticut and Massachusetts have had similar deaths per 10,000 at 12.5 and 13.1, respectively. However, Massachusetts's unemployment rate averaged 13.5%, which combined with its deaths per 10,000, produced the third highest index value. Connecticut's unemployment rate averaged 8.3% and combined with its death rate, resulted in the seventh highest index value.

Utah has the second lowest average unemployment rate of 6.1% and its 1.3 deaths per 10,000 was ninth lowest, winning the lowest PMI spot. Other

FIGURE 3. PANDEMIC MISERY INDEX, TEXAS MSAs



Pandemic Misery Index=March to July average unemployment rate + ((March to July total deaths/population)*10,000) Sources: COVID-19 deaths from the New York Times, unemployment rates from the Bureau of Labor Statistics, 2019 population estimates from the Census Bureau.

states with low unemployment and low death rates include Nebraska, Wyoming, Montana, and Idaho. Two-thirds of all states had fewer than 5 deaths per 10,000 and an average unemployment rate of less than 12%.

Pandemic Misery Index values can also be calculated for metropolitan statistical areas (MSAs). Figure 3 presents the results for the MSAs in the state of Texas. Given that unemployment rates for MSAs are only available through July, the unemployment rate is averaged and the deaths are totaled for March to July. McAllen-Edinburg-Mission had the highest index value at 21.6. The average unemployment rate from March to July in this MSA was 14.1% and the cumulative deaths per 10,000 was 7.4. Brownsville-Harlingen had the second highest index value at 20.5. These two MSAs have the highest deaths per 10,000 in Texas and have the first and third highest average unemployment rates. Beaumont-Port Arthur had the third highest index value at 16.1, primarily due to its high average unemployment rate of 13.8%.

The MSAs with three lowest PMI values are Sherman-Denison, Abilene, and College Station-Bryan. Sherman-Denison's lowest statewide value was 8.2, comprised of an average unemployment rate of 7.4, the fifth lowest in the state, and 0.8 deaths per 10,000, the fourth lowest in the state. Abilene's second lowest PMI value was due to the third lowest unemployment rate and the fifth lowest number of deaths per 10,000. College Station-Bryan's third lowest PMI was largely a result of its second lowest average unemployment rate combined with the 10th lowest number of deaths per 10,000.

As the results for the Texas MSAs indicate, the experience of the different locals varies markedly within a state, just as we saw with the variation among the states. Still, changes have come quickly during this pandemic, and unemployment rates are now declining in most places, and monthly death rates are declining in some of the states that experienced the highest death rates in April while they are rising in others. Future events may well lead to changes in the PMI ranking of states and MSAs.

The PMI is a convenient way to combine the economic and personal stress people are facing. During this pandemic, states have functioned as laboratories of democracy, and within states, cities and counties have had varying autonomy and responses. Keeping in mind the experiences of citizens with respect to both physical and economic health is essential when crafting the ongoing policies in response to the pandemic.

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