Many observers have noted the recent shift in new COVID-19 cases from states that were previously hotspots (i.e., first wave states) to other states that have become new hotspots (i.e., second wave states). In this post, we show that within “first” and “second wave” states, the evolution of cases has not been uniform. In particular, county-level data suggest areas that entered the pandemic with higher levels of financial distress (FD) have systematically fared worse in terms of infections than areas with lower levels of financial distress. This fact is noteworthy since our previous work shows that in response to COVID-related earnings losses, higher FD areas are likely to dissave or increase debt, further exacerbating their already precarious financial state.

Figure 1 shows the different dynamics of the disease spread across U.S. states. Between April 15 and June 24, new cases in “first wave” states (Connecticut, Massachusetts, New York, New Jersey, and Washington) have fallen from a peak of 3.4 cases per day per 10,000 people (about 15,500 per day overall) to less than half a case per day per 10,000 people (about 1,700 per day overall). In contrast, over the same time horizon, “second wave” states (Arizona, California, Florida, Georgia, Nevada, South Carolina, Texas, and Utah) saw daily infections rise from less than half a case to slightly over 1.5 cases per day per 10,000 people (or from 4,300 cases to 18,800 cases per day overall). Reported cases in the remaining states have been somewhat stable, averaging about 0.7 cases per day per 10,000 people (roughly 11,100 cases per day) over the same period.
Following our previous work (Part 1, Part 2, Part 3), we next analyze whether the spread of infection among first or second wave states has differed by FD. As before, FD is measured by difficulty in making timely payments on credit card debt.1 We divide all U.S. counties into five groups, or quintiles, defined by the incidence of FD. Counties with FD incidence in the bottom 20 percent of all counties are in group one (Q1), while counties in the top 20 percent are in group five (Q5), and so on.

Focusing first on new hotspot or second wave states, Figure 2 Panel (a) shows the very different time paths of new cases by the degree of FD. This figure clearly shows that new case growth within second wave states has been most rapid in high FD counties relative to low FD counties. For example, relative to May 15 levels, in Q4 and Q5 counties, new cases have grown from 0.4 cases per 10,000 people (1,000 cases per day overall) to nearly two cases per 10,000 people (more than 5,000 cases overall). In contrast, new cases in Q1 counties have grown from roughly 0.3 cases per 10,000 people (380 cases per day) to 0.8 cases per 10,000 people (1,000 cases per day overall). Thus, while case growth in all second wave counties has risen, it appears to have risen by more in high FD counties.

On a more positive note, the improvement in case growth within old hotspots or first wave states has been associated with substantial decreases in the number of cases among higher FD counties (albeit from very elevated levels). Figure 2 Panel (b) shows that while daily cases reached a peak of 5.7 cases per day per 10,000 people (3,700 cases per day overall) among Q5 counties in mid-April, it has since subsided to roughly half a case per day per 10,000 people (300 cases per day overall) in late June. Case growth in Q1 counties has also declined, but from a lower peak of 1.5 cases per day per 10,000 people (1,200 per day overall) to about 0.3 cases per 10,000 people (250 cases per day overall). Thus, while case growth in higher FD counties remains above their lower FD counterparts, the gap has narrowed considerably.

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Figure 2: New COVID-19 Cases by Quintile of Financial Distress

Panel (a): Second Wave States and Financial Distress

Panel (b): First Wave States and Financial Distress

Source: USA facts, FRBNY/Equifax Consumer Credit Panel, and authors' calculations
Lastly, Figure 3 shows that the steady case growth among all other states masks important differences by FD. As with the previous figures, it reveals that higher FD counties have experienced rates of infection nearly twice as high as their lower FD counterparts. Additionally, this figure reveals that these differences have remained fairly stable since the pandemic began.

What might be driving the differences in case growth by FD? Our previous work (Part 1, Part 2, Part 3) highlighted that, in general, areas of higher FD tend to have higher employment shares in leisure and hospitality. Reopenings have disproportionately affected these kinds of activities. Moreover, work by Leibovici et al. (2020) shows that workers in these kinds of sectors require relatively close physical proximity to others.2 Combining these two factors, it is perhaps not so surprising that high FD areas are driving the bulk of infection increases.

Endnotes

1 Specifically, we define the level of financial distress as the percentage of the population that has gone 30 days or more delinquent on a credit card payment at some point over the course of a year.


Figure 3: New COVID-19 Cases in All Other States by Quintile of Financial Distress

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