

## WEEK 5 and 6: Labor Market Impacts of COVID on Businesses: Update with Homebase Data Through May 9



*By Alexander W. Bartik, Marianne Bertrand, Feng Lin, Jesse Rothstein, and Matt Unrath*

[Week 1: Labor Market Impacts of COVID-19 on Hourly Workers in Small- and Medium-Sized Businesses](#)

[Week 2: Update with Homebase Data Through April 11](#)

[Week 3 and 4: Update with Homebase Data Through April 25](#)

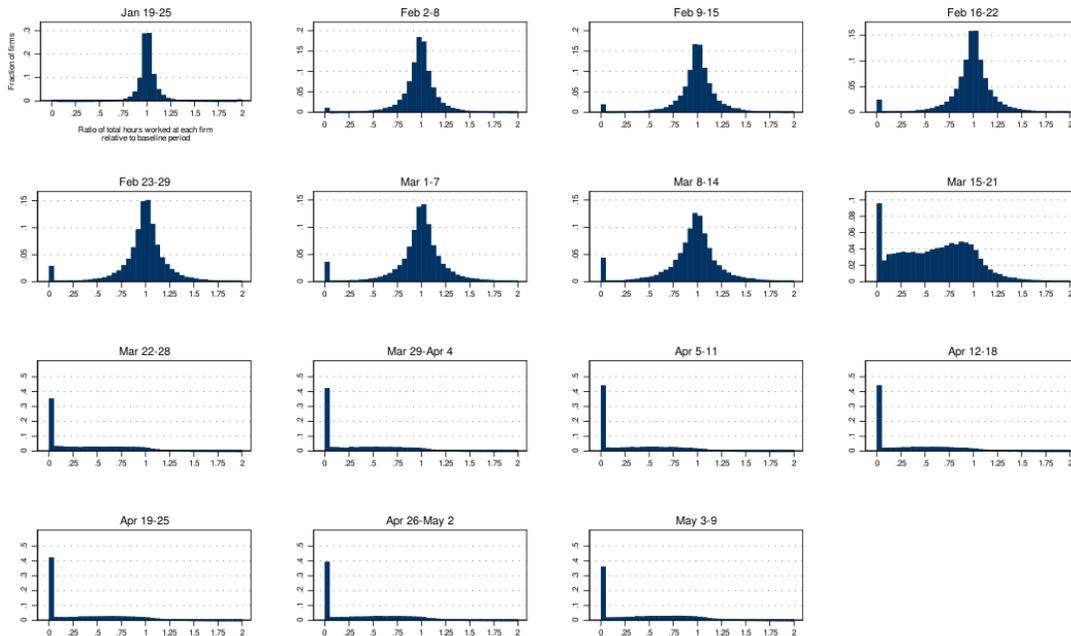
Below, we update our analysis of the labor market impacts of COVID-19 on small- and medium-sized businesses using Homebase time-card records through May 9. We highlight three new facts from our analysis of the last two weeks' of data below.

We will update these facts frequently to track these patterns over time and add new information as the COVID-19 situation develops. An up-to-date version of this summary will be maintained [here](#).

**FACT #1: MUCH OF THE HOURS REDUCTIONS PERSIST, BUT SOME FIRMS ARE REOPENING.**

Though the lion’s share of hours reductions and firm shutdowns persist, the slight bounce back in hours identified in our last update continued through May. The share of firms operating as of early February that remained shut down fell from around 45 percent in late April to below 40 percent last week (Figure 1). As of the week ending on April 18, total hours across all firms fell by about 60 percent from the baseline period. As of last week, that fraction had shrunk to about 48 percent. Much of the improvement in hours is attributable to some firms reopening (Figure 2).

Figure 1: Distribution of work hours by firm by week, Jan-May 2020

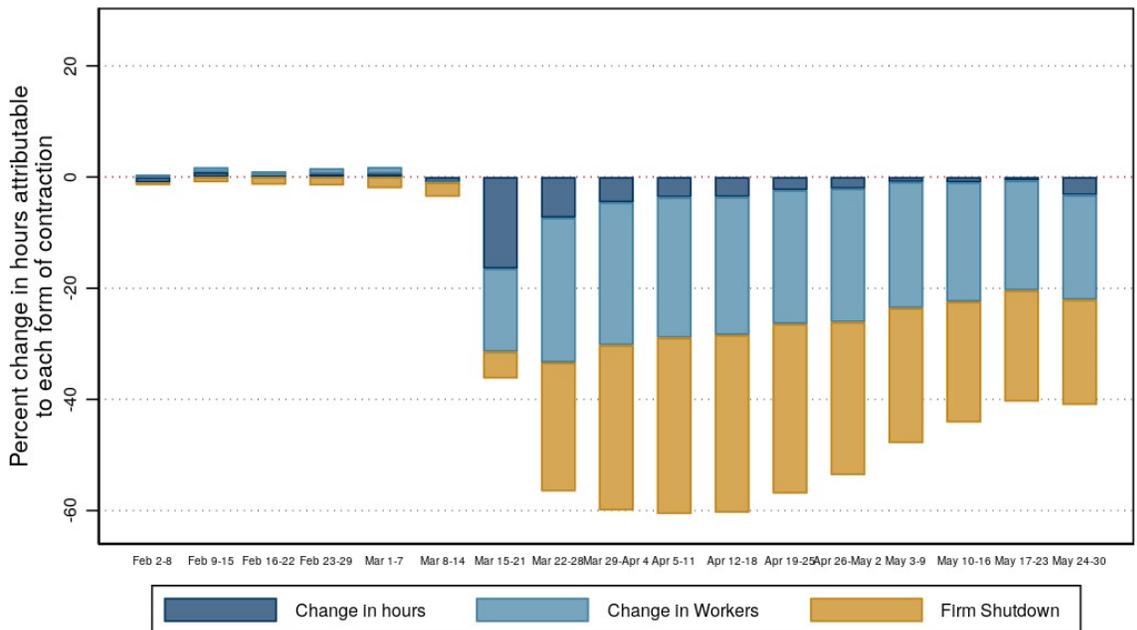


Data updated through May 12

Bartik, Bertrand, Lin, Rothstein and Unrath (2020)

ChicagoBooth.edu/PovertyLab/COVIDresearch

Figure 2: Hours changes at Homebase firms each week relative to Jan 19-Feb 1 decomposed into firm shutdowns, layoffs, and hours reductions



Data updated through May 30

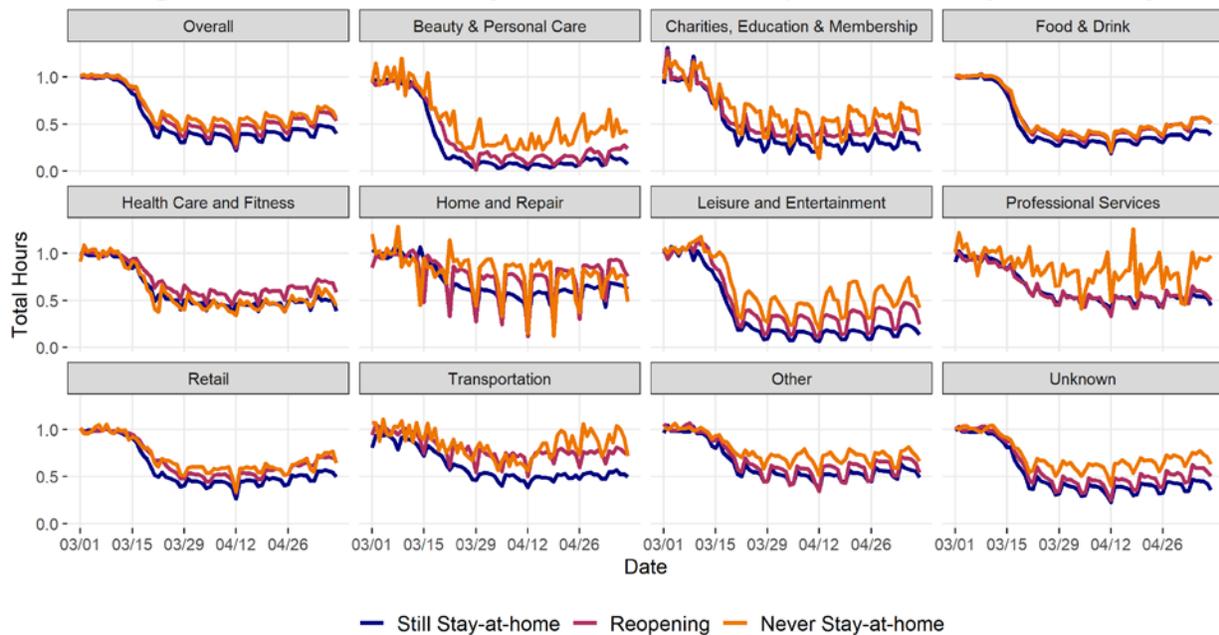
Bartik, Bertrand, Lin, Rothstein and Unrath (2020)

ChicagoBooth.edu/PovertyLab/COVIDresearch

**FACT #2: BEAUTY AND PERSONAL CARE BUSINESSES, AS WELL AS FIRMS IN STATES WHERE SHUTDOWN ORDERS HAVE BEEN ROLLED BACK, WERE MORE LIKELY TO REOPEN.**

Propensity to reopen and restore hours varies slightly by region and industry. For example, beauty and personal care firms were most likely to have reopened and restored some share of hours. Hours also bounced back more in states that moved to reopen than in states that never shutdown or remained shut down (Figure 3). In so-called “reopened” states, total hours in the past week (May 3-9) were 35 percent higher than their respective low. In other states, hours have only come back about 26 percent from their respective lows. Hours remain far below their baseline averages in all regions and industries.

Figure 3: Hours Reductions by Announcement to Reopen the Economy and Industry



Data updated through May 09  
Bartik, Bertrand, Lin, Rothstein and Unrath (2020)

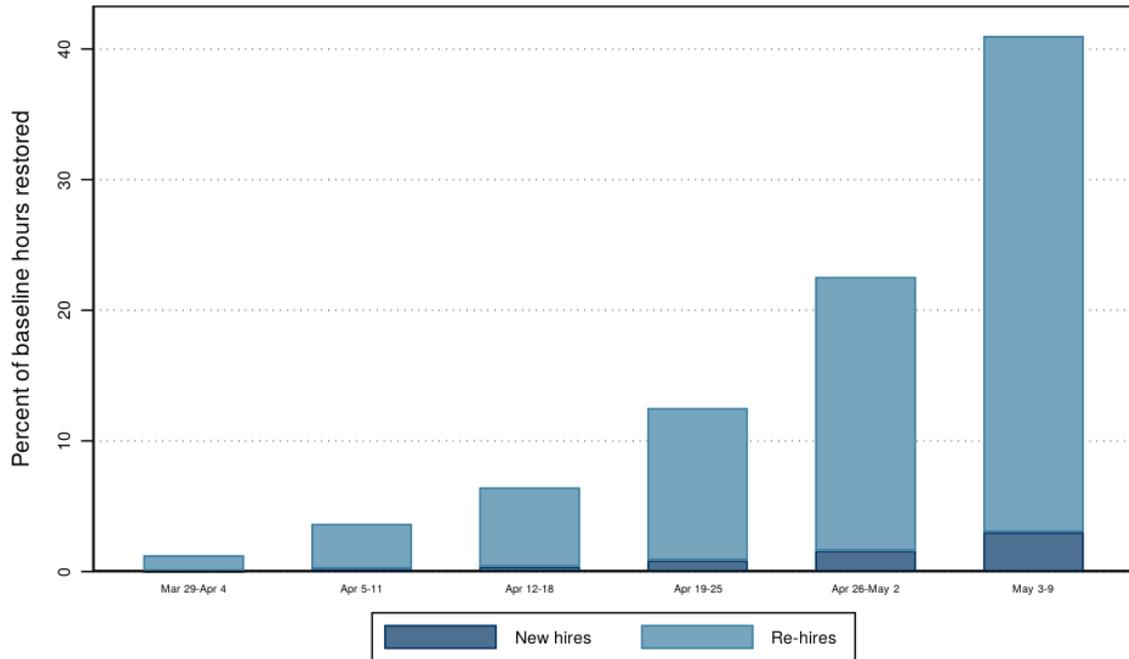
ChicagoBooth.edu/PovertyLab/COVIDresearch

**FACT #3: REOPENED FIRMS TENDED TO REHIRE ORIGINAL EMPLOYEES, BUT THEY’VE ONLY RESTORED A PORTION OF THEIR ORIGINAL HOURS.**

Of the roughly 42,000 unique firms in our baseline sample, approximately half (around 21,000) shutdown for at least one week in March or April. Of these firms that ever shut down, almost 6,500 have reopened and remained open through last week. In Figure 4, we show how much these firms’ baseline hours and workforce were restored through each week. By last week, these reopened firms had collectively regained about 35 percent of their baseline hours and 40 percent of their baseline employment levels. Almost 90 percent of this reemployment came through rehiring employees who worked at the firms before they shutdown, as opposed to new hires. This suggests that, so far, most worker-firm matches at these firms have been maintained through the crisis, firm closures, and reopenings.

Although some firms are reopening, most remain closed. Figure 5 shows how hours have been restored (or are still missing) among firms that shut down before April 4. Across these firms, two-thirds of their collective baseline hours remain missing due simply to ongoing firm closures. Another 19 percent of hours are lost because reopened firms are operating at reduced scale. Counting all of the firms that have ever shut down, only about 14 percent of pre-shutdown hours have been restored.

Figure 4: Percent of hours restored at reopened Homebase firms, relative to Jan 19-Feb 1, separated into those worked by re-hires versus new hires

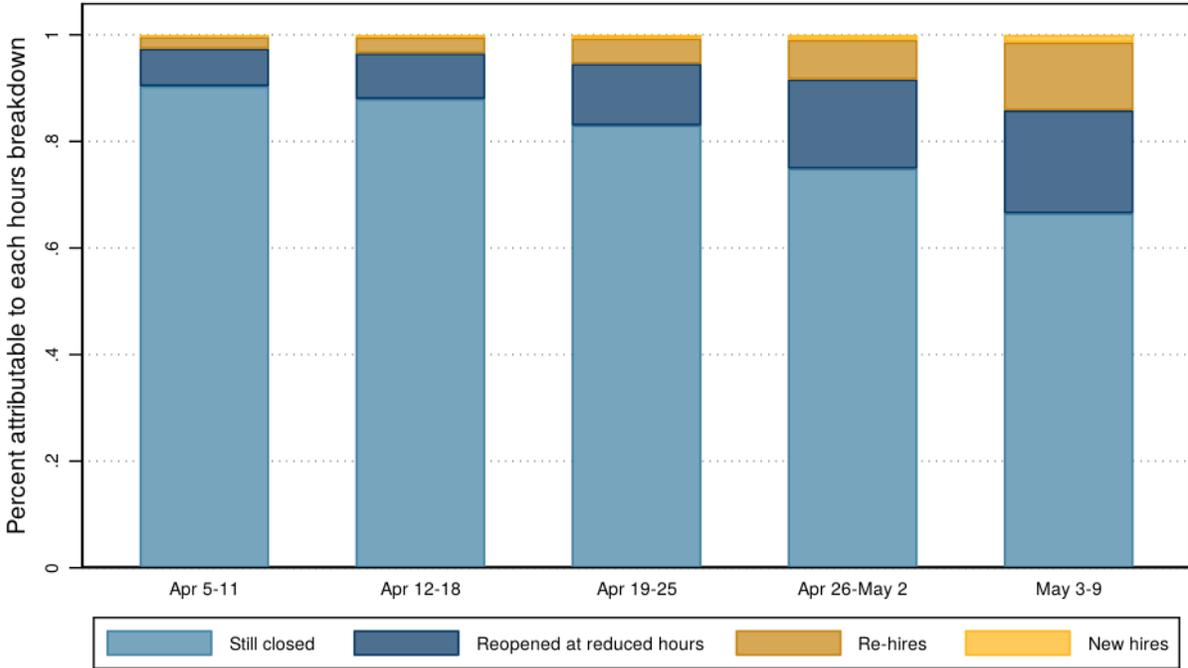


Data updated through May 9

Bartik, Bertrand, Lin, Rothstein and Unrath (2020)

ChicagoBooth.edu/PovertyLab/COVIDresearch

Figure 5: Distribution of hours, relative to Jan 19-Feb 1, among firms shutdown by Apr 4 separated into firms still closed, hours reductions at reopened firms, and hours worked by re-hired employees and new hires



Data updated through May 9

Bartik, Bertrand, Lin, Rothstein and Unrath (2020)

ChicagoBooth.edu/PovertyLab/COVIDresearch

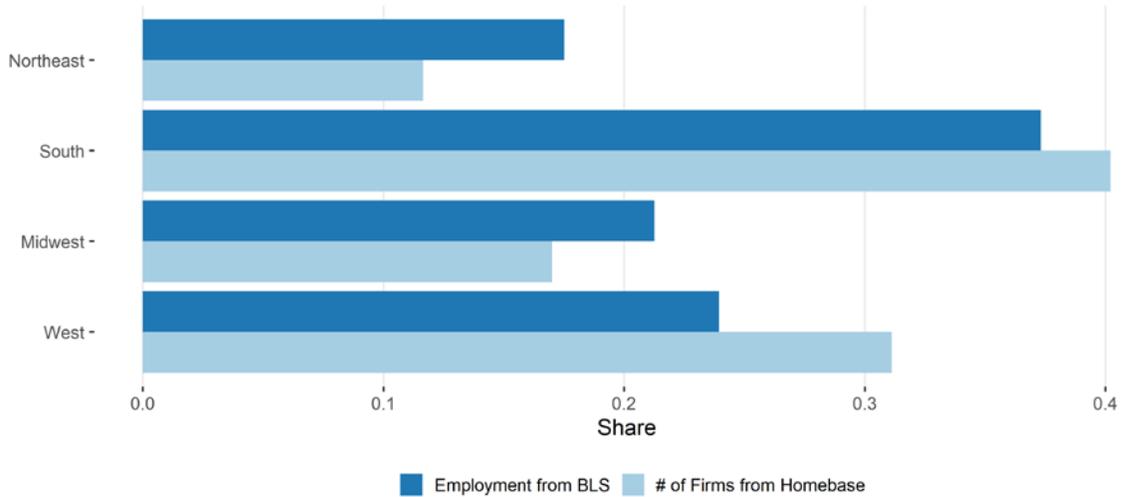
### DESCRIBING HOMEBASE FIRM CHARACTERISTICS

Our analysis is based on firms that use Homebase, which are not representative along many dimensions. They tend to be smaller than average, and concentrated in particular industries (such as food and drink and retail).

Below, we provide information on three characteristics of the firms in the Homebase data: the regions they are located in, the industries they operate in, and the number of employees they have. This information is based on firm characteristics between January 19 and February 1 and includes all firms operating during this time period, regardless of whether they have continued to operate through the COVID-19 crisis or not.

### FIGURE 6: HOMEBASE FIRMS BROADLY MATCH THE DISTRIBUTION OF EMPLOYMENT ACROSS US REGIONS

Figure 6: Comparison with BLS Employment



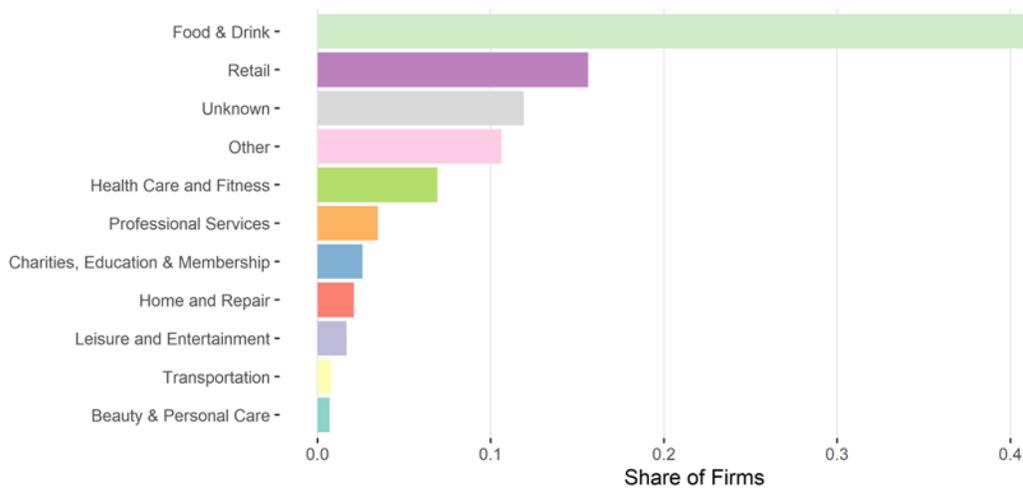
Based on data from 1/19-2/1  
Bartik, Bertrand, Lin, Rothstein and Unrath (2020)

ChicagoBooth.edu/PovertyLab/COVIDresearch

This figure shows the share of Homebase firms located in each Census region (in light blue) and compares these shares to each region's share of total employment (in dark blue), as measured by the Bureau of Labor Statistics (BLS) data. Homebase firms are somewhat concentrated in the West region and less concentrated in the Northeast and Midwest than overall employment.

**FIGURE 7: A MAJORITY OF HOMEBASE FIRMS ARE IN THE FOOD AND DRINK OR RETAIL INDUSTRIES**

Figure 7: Distribution Across Industries

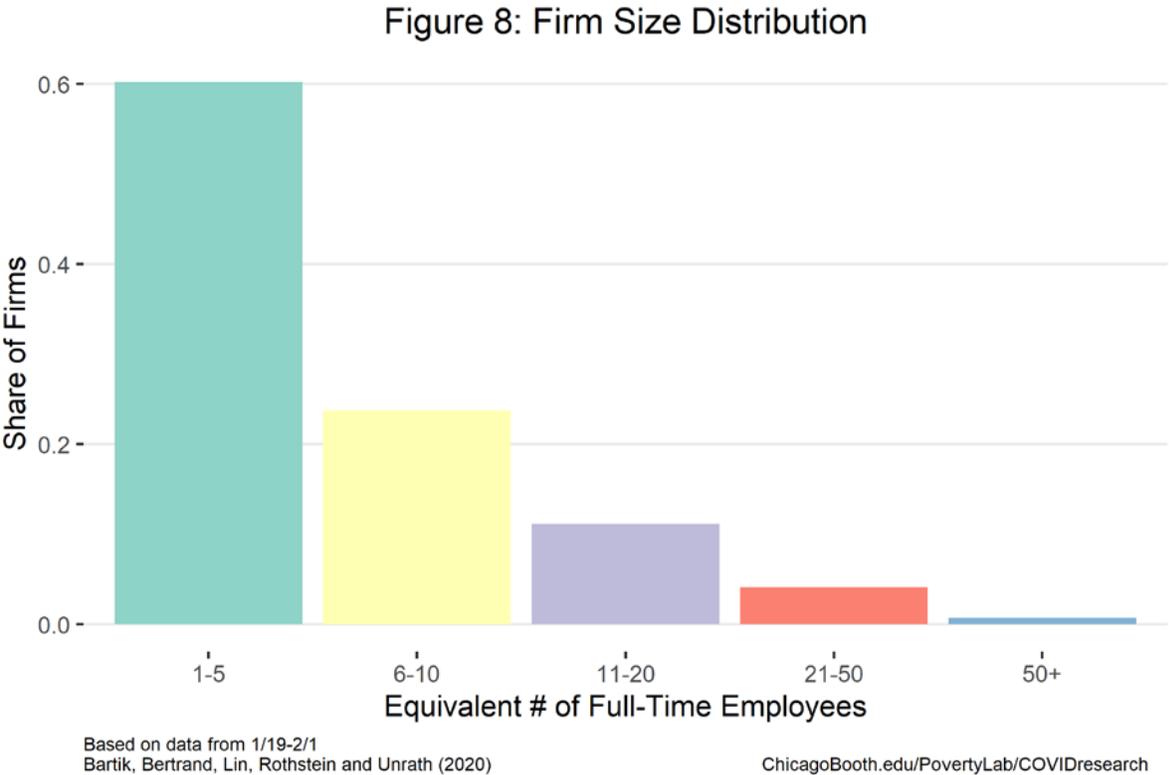


Based on data from 1/19-2/1  
Bartik, Bertrand, Lin, Rothstein and Unrath (2020)

ChicagoBooth.edu/PovertyLab/COVIDresearch

This figure shows the share of Homebase firms in each of the nine industry categories that Homebase uses. As might be expected given that Homebase offers scheduling and time-card software, Homebase firms are predominantly in industries like food & drink and retail that employ many hourly workers.

**FIGURE 8: ALMOST ALL HOMEBASE FIRMS HAVE 50 FULL-TIME EQUIVALENT EMPLOYEES OR LESS**



This figure shows the share of Homebase firms in each of five size categories. We define categories based on the number of hours worked at the firm between January 19 and February 1st, which we convert to full-time equivalent (FTE) workers by dividing by 40 hours per week. Roughly 60 percent of Homebase firms have one to five FTE employees (i.e., less than 400 hours worked in our two base period) and the vast majority have fifty or fewer FTE employees.

**METHODOLOGY**

Our analyses are based on data on hours worked at the establishment-worker-day level generously made available by Homebase. These data extend from January 1,

2020 through May 9, 2020. We aggregate the Homebase data to the firm-MSA-industry-day level. We restrict the sample to firms whose employees worked at least 80 hours between January 19 and February 1 and to states for which we observe at least 50 such firms. We refer to this two-week window as the “base period.” All analyses weight firms by their total hours during the base period.

In our analyses of weekly outcomes, we normalize each firm’s hours by dividing by the average hours worked per week over the base period at the firm. In our analyses of daily outcomes, we normalize by dividing by the average value of the outcome at the given firm on the same day of the week during our base period. For example, if total hours for a firm on Friday, March 13 was 100 and total hours for the same firm on Friday, January 24 and Friday, January 31 was 300, (150 on each day), the outcome variable total hours’ value would be .66. (This is 100 divided by (300/2), the average Friday hours in the base period.)

We use the data compiled by [\*The New York Times\*](#) on the timing of stay-at-home and shelter-in-place orders in different states.

—Check back to the [\*COVID-19 Social Impact Research Page\*](#) for the latest results.

## AUTHORS

**Alexander W. Bartik**, Assistant Professor Economics, [\*University of Illinois at Urbana-Champaign\*](#), and Research Affiliate, [\*UChicago’s Poverty Lab\*](#); **Marianne Bertrand**, Chris P. Dialynas Distinguished Service Professor of Economics, [\*University of Chicago Booth School of Business\*](#), and Faculty Director, Chicago Booth’s [\*Rustandy Center for Social Sector Innovation\*](#) and [\*UChicago’s Poverty Lab\*](#); **Feng Lin**, Research Professional, Chicago Booth; **Jesse Rothstein**, Professor of Public Policy and Economics, [\*University of California, Berkeley\*](#), and Director, [\*Institute for Research on Labor and Employment \(IRLE\)\*](#) and [\*California Policy Lab\*](#); and **Matt Unrath**, PhD Candidate, Goldman School of Public Policy, UC Berkeley, and Research Fellow, California Policy Lab

## ACKNOWLEDGEMENTS

We thank [\*Homebase\*](#) and Ray Sandza and Andrew Vogeley in particular for generously allowing access to their data and sharing their time to answer questions and help us understand the data. We also thank Jingwei Maggie Li, Salma Nassar, and Greg Saldutte at Booth’s [\*Rustandy Center for Social Sector Innovation\*](#) and

Manal Saleh at the [Poverty Lab](#) for excellent assistance on this project and Michael Stepner for comments.



homebase