

ECONOMIC FINDING

Measuring the Labor Market at the Onset of the COVID-19 Crisis

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The COVID-19 economic collapse was extremely sudden, nearly all of the decline in hours worked occurred between March 14 and March 28.

The COVID-19 pandemic hit the US labor market with astonishing speed. For the week ending March 14, 2020, there were 250,000 initial unemployment insurance claims—about 20% more than the prior week, but still below January levels. Two weeks later, there were over 6 million claims, shattering the pre-2020 record of 1.07 million, set in January 1982. As of mid-June, claims remained above one million for 13 consecutive weeks, with a cumulative total of over 40 million. At the same time, the unemployment rate spiked from 3.5% in February to 14.7 percent in April, and the number of people at work fell by 25 million.

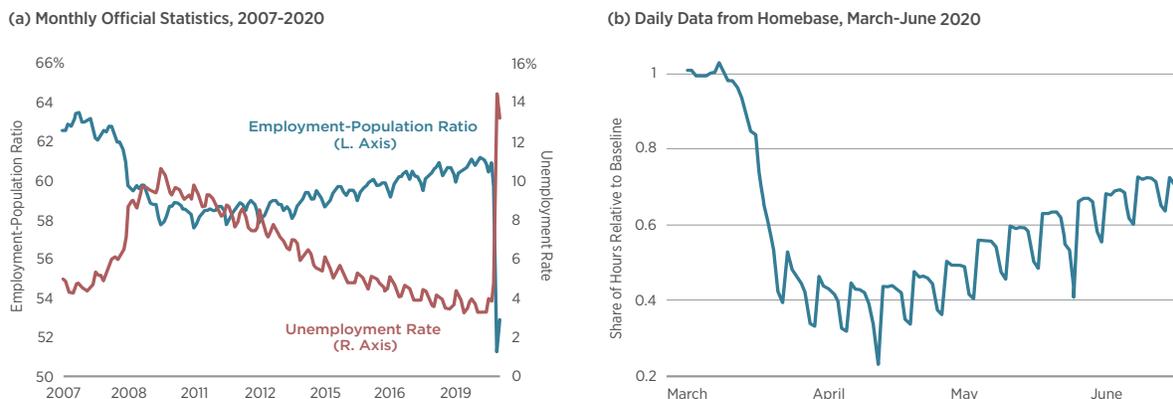
Given the rapid nature of these extensive job losses, and the inability of existing labor market information systems to keep up with such changes, the authors devised a measurement method that combines data from traditional government surveys with non-traditional data sources, particularly daily work records compiled by Homebase, a private sector firm that provides time clocks and scheduling software to mostly small businesses. The authors linked this data with a survey answered by a subsample of Homebase employees, as well as other data sources to measure the

effects of shelter-in-place orders and other policies on employment patterns from March to early June.

The unemployment rate (not seasonally adjusted) spiked by 10.6 percentage points between February and April, reaching 14.4%, while the employment rate fell by over 9 percentage points over the same period. These two-month changes were roughly 50% larger than the cumulative changes in the respective series in the Great Recession, which took over two years to unfold. Both unemployment and employment recovered a small amount in May, but remain in unprecedented territory.

The authors' novel methodology delivers insights beyond official statistics. For example, Panel B of the accompanying Figure reveals that total hours worked at Homebase firms fell by approximately 60% between the beginning and end of March, with the bulk of this decline in the second and third weeks of the month—facts that go unrevealed in government data. The largest single daily drop was on March 17, when hours, expressed as a percentage of baseline, fell by 12.9 percentage points from the previous day. The nadir seems to have been around the second week of April. Hours have grown slowly and steadily since then.

Figure 1 • The Labor Market Collapse



Notes; Panel A shows monthly unemployment rate and employment-population rate statistics, not seasonally adjusted. Panel B shows daily total hours worked across all firms in Homebase data, as a fraction of average hours worked on the same day for the week in the January 19-February 1 base period. The sample includes firms (defined at the firm-industry-state-MSA level) that recorded at least 80 hours in the base period and excludes Vermont.