

SEPTEMBER 16, 2020 | NUMBER 232

COVID-19 Is Also a Reallocation Shock

BY JOSÉ MARÍA BARRERO, INSTITUTO TECNOLÓGICO AUTÓNOMO DE MÉXICO; NICHOLAS BLOOM, STANFORD UNIVERSITY; AND STEVEN J. DAVIS, THE UNIVERSITY OF CHICAGO

The COVID-19 pandemic and efforts to contain the virus are exacting a staggering economic toll in countries around the world. China's economy shrank 6.8 percent in the first quarter of 2020 on a year-on-year basis, and eurozone economies shrank at a 14.8 percent annualized rate. In the United States, nearly 28 million people filed new claims for unemployment benefits over the six-week period ending April 25. The U.S. economy shrank 12 percent between the end of 2019 and June 2020, the largest contraction since the Great Depression of the 1930s. Yet even as much of the economy is shuttered, some firms are expanding in response to pandemic-induced demand shifts. As noted in a recent *Wall Street Journal* article, "The coronavirus pandemic is forcing the fastest reallocation of labor since World War II, with companies and governments mobilizing an army of idled workers into new activities that are urgently needed." In other words, COVID-19 is also a major reallocation shock.

Anecdotal evidence illustrates this reallocation activity. Recent news stories have highlighted millions of layoffs triggered by the pandemic and lockdown, as well as many examples of large-scale hiring. There is also anecdotal evidence of intraindustry reallocation. For example, while many restaurants have permanently closed, takeout and delivery-oriented chains are experiencing a huge demand boom.

We develop evidence on the extent and character of this reallocation shock for the U.S. economy by using the Survey of Business Uncertainty (SBU), a monthly panel survey, to quantify the near-term reallocative impact on business staffing outcomes. We draw on two special questions fielded in the April 2020 SBU. One question asks (as of mid-April) about the novel coronavirus impact on company staffing since March 1, and another asks about the anticipated impact over the ensuing four weeks. Cumulating responses from firms to these two questions, the data say that pandemic-related developments caused near-term layoffs equal to 12.8 percent of March 1 employment and new hires equal to 3.8 percent. In

other words, the COVID-19 shock caused 3 new hires in the near term for every 10 layoffs. Similarly, the Job Openings and Labor Turnover Survey reports more than 4 hires for every 10 layoffs in March and April.

Next, we construct projections for the permanent-layoff share of recent job losses. As a first step, we draw on questions about layoff status put to employers in the SBU, households in a *Washington Post*-Ipsos survey, and unemployment benefit claimants in California. All three sources indicate that about 23 percent of layoffs from March to May were seen as permanent at the time and that the rest were seen as temporary. Historically, many layoffs perceived as temporary when they happen do not result in recalls. Adjusting for this pattern, we project that one-third or more of COVID-19-induced layoffs will be permanent in the sense that job losers won't return to their old jobs at their former employers. Though our use of historical evidence on how "temporary" layoffs convert to actual recalls means our adjustment could be too small or too large for the current episode (the conversion rate will surely depend on how long it takes to resolve the COVID-19 health crisis and for the economy to recover), it is clear that many jobs lost in the wake of the COVID-19 pandemic are gone for good.

We also use SBU data to construct novel measures of expected reallocation among American firms. Using firm-level employment forecasts in the SBU to obtain the expected excess job reallocation rate at a one-year look-ahead horizon, we quantify the volume of cross-firm job reallocation in excess of the amount needed to accommodate the aggregate net change. Our measure of the expected excess job reallocation rate rises from 1.5 percent of employment in January to 5.4 percent in April. The April value is 2.4 times the pre-COVID-19 average and is, by far, the highest value in the short history of the series. We also use firm-level sales forecasts in the SBU to compute the expected excess sales reallocation rate at a one-year forecast horizon. The expected excess reallocation rate rises from an average of 1 percent of sales before the pandemic to more than 5 percent from April to June. These forward-looking measures reinforce the view that COVID-19 is a major reallocation shock.

Next, we draw on special questions in the May SBU to quantify the anticipated shift to working from home after the novel coronavirus pandemic ends. To do so, we first asked firms about the share of full workdays performed at home by their full-time employees in 2019. We then asked firms what they anticipate about the share of full workdays performed at home after the pandemic ends. Comparing responses to the before and after questions, firms expect that full workdays performed at home will triple. This expected

tripling will involve shifting one-tenth of all full workdays from business premises to residences—one-fifth for office workers. Since the scope for working from home rises with wages, the shift in workers' spending power from business districts to locations near residences is even greater.

Finally, we consider time-series evidence on the dispersion in monthly equity returns among U.S.-listed firms. Return dispersion relates less directly to future reallocation activity, but its availability over several decades helps us put the COVID-19 episode in perspective. The dispersion in equity returns jumps sharply in March, reaching levels last seen during the global financial crisis of 2008–2009 and the dot-com bust of the early 2000s. These three episodes exhibit the highest return dispersion in our sample period, which starts in 1984.

Even if medical advances or natural forces bring an end to the health crisis in the near future, there are sound economic reasons to think that pandemic-induced shifts in consumer spending patterns, working arrangements, and business practices will partly stick. First, millions of households have tried online shopping and delivery services in recent months. Some find they like it and will continue to value the convenience and (perceived) safety after the pandemic ends. Second, according to our survey evidence, more than half of those currently employed had been working from home as of May. This mass experiment has pushed workers and organizations to invest in becoming more effective at working from home, which is a source of persistence in the new working arrangements. Third, after turning to virtual meetings out of necessity, many businesses are likely to see them as an easier, cheaper option to travel and in-person meetings in some circumstances. A persistent drop in business travel has profound implications for travel and hospitality industries. A survey question from July suggests the number of external meetings that are held remotely will triple, rising from 16 percent prepandemic to 50 percent postpandemic. Fourth, the pandemic knocked down regulations that had stymied a shift from in-person to virtual interactions, especially in health care services. Thus, much of the near-term reallocative impact of the pandemic will persist.

Historically, creation responses to major reallocation shocks lag the destruction responses by a year or more. Partly for this reason, we anticipate a drawn-out economic recovery from the COVID-19 shock, even if the pandemic is largely controlled within a few months. Policy responses to major shocks and inherited features of the policy landscape can further stretch out the creation response, slowing the recovery. In this regard, five aspects of U.S. policy can retard creation responses to the pandemic-induced reallocation

shock: unemployment benefit levels that exceed earnings for many American workers under the Coronavirus Aid, Relief, and Economic Security Act; policies that subsidize employee retention irrespective of the employer's long-term outlook; land-use restrictions that inhibit the reallocation of jobs and workers; occupational licensing restrictions that impede mobility across occupations and states; and regulations that inhibit business formation and expansion.

NOTE:

This research brief is based on José María Barrero, Nicholas Bloom, and Steven J. Davis, "COVID-19 Is Also a Reallocation Shock," Brookings Papers on Economic Activity, July 20, 2020, <https://static1.squarespace.com/static/5e2ea3a8097ed30c779bd707/t/5f1748b5671c822a8c7960e3/1595361462774/COVID+Reallocation+Shock%2C+20+July+2020.pdf>.