BY ROSEMARY COSKREY

Paycheck Protection and the Pandemic

n March 2020, as COVID-19 rippled across the globe, small-business owners found the U.S. economy pivoting from a boom to a crisis. Aware of the mounting challenges these businesses faced, Congress quickly passed legislation that allocated \$350 billion to an initiative called the Pavcheck Protection Program, or PPP. In late April, Congress passed an additional \$320 billion in funding after the initial amount was exhausted. The PPP was intended to help business owners sustain their employees' wages during the pandemic. Set up as a guaranteed loan program, it allowed eligible firms to apply for support through banks while the U.S. Small Business Administration (SBA) approved loans and forgiveness. Loans could be forgiven if no more than 25 percent of the loan amount went toward nonpayroll costs and if the firm did not cut pay or employment counts.

The PPP was an exceptionally large-scale fiscal intervention, and economists are eager to understand its efficacy. Several teams of economists have conducted research on its effects using different types of analyses.

A paper by David Autor of the Massachusetts Institute of Technology and others, released in July 2020, examined the PPP's efficacy in maintaining employment at small firms. They used administrative data from ADP, a provider of payroll services, to measure and contrast weekly employment changes of firms above and below the PPP eligibility threshold within narrow industry and state groups. The program's eligibility threshold was determined by firm size — in most industries, firms with more than 500 employees were ineligible for the program. According to their estimates, the level of employment at PPP-eligible firms

was 2 percent to 4.5 percent higher than at noneligible firms. Aggregating these results across all eligible firms, the PPP would have helped maintain U.S. payroll employment for about 2.3 million workers through the first week of June 2020. Although this work was preliminary, and the authors intend to refine their analysis and interpretation once better data become available, these initial results suggest the PPP was moderately effective in preserving small-business employment.

Research by Alexander Bartik of the University of Illinois Urbana-Champaign and others, also released in July 2020, found similar evidence of the beneficial effects of the PPP. but they approached the issue from a different perspective and used different data. Trying to understand the effectiveness of a program where private actors distribute public resources, they compared firms that received loans in the first wave (before April 16) of the PPP to firms that received loans in the second wave (after April 24). Their work relied on survey data from small-business network Alignable, which contained information on the business owners' PPP application status, employment and payroll characteristics, and operational expectations. Results of their analysis indicated that providing firms loans promptly made a big difference in program efficacy; firms receiving a PPP loan in the first round self-reported an increase in survival probabilities ranging from 9 percentage points to 23 percentage points, resulting in fewer smallbusiness closures. In addition, they showed that PPP approval appeared to increase employment and that banks effectively allocated funds but were somewhat biased toward betterconnected firms.

Finally, work released by João

Granja of the University of Chicago Booth School of Business and others in May 2020 found small effects from the PPP on local economic outcomes and business shutdowns following the pandemic, and only modest positive effects on employment outcomes. They used the SBA's loan-level microdata for all PPP loans approved under the program and combined this data with Call Reports from all active commercial banks, Homebase software data on employment indicators, Opportunity Insights data on county-level employment, and Womply data on small-business revenues. Examining the flow of PPP funds across the country, they contrasted changes in local employment and economic outcomes in regions with high versus low PPP exposure. They also examined the role that banks played in distributing loans but reached a different conclusion from the Bartik group, finding that funds were not well-targeted to areas most adversely affected by the pandemic. In general, their results indicated that the program's short- and medium-term effects on employment were small relative to the program's size, but that funding did contribute to firms' financial stability. In the future, they argued, the PPP's effectiveness in preventing permanent business closures may result in more pronounced positive employment effects.

Overall, the studies indicate that the PPP helped prevent small-business shutdowns and, to a lower degree, helped sustain employment. But evidence suggests that PPP funds were not consistently distributed to the highest-need firms. As more data emerge, economists will continue to explore the effectiveness of the PPP and its implications for future fiscal interventions. **EF**