

As Need for Additional Small Business Aid Intensifies, Preliminary Evaluations of the PPP Suggest It Improved Business Survival

By Mallory Dreyer

Original post [here](#).

A central component of the initial fiscal response to the Covid-19 pandemic, the Paycheck Protection Program (PPP) was designed to support small businesses in the United States. It launched on April 3 after Congress signed the Coronavirus Aid, Relief, and Economic Security (CARES) Act into law on March 27, initially allocating \$349 billion for the forgivable loan program. Congress later increased funding by \$310 billion, bringing total funding to \$659 billion. When the PPP closed for applications on [August 8](#), it had provided \$525 billion in support through more than 5.2 million loans.

This post begins with an overview of key design features of the PPP followed by a summary of preliminary research on the effectiveness of the PPP. Though it is too early to determine the long-term impact of the PPP, it appears that the PPP improved short-term business survival, while evidence of its impact on employment is mixed.

It is important to note that the evaluations do not take into account the program's expiration and the continued impact of the pandemic on small businesses. According to recent [Yelp data](#), business closures have risen since July, with 60% of all business closures becoming permanent. Despite [apparent bipartisan support](#) for additional small business aid, Congress has not agreed on how to allocate the remaining \$134 billion.

Key Features of the Paycheck Protection Program

The PPP is the largest forgivable loan program adopted in response to the Covid-19 pandemic. Forgivable loans are essentially grants, but loan forgiveness depends on whether borrowers meet certain requirements and criteria.

The [Small Business Administration](#) (SBA) operates the PPP with support from the [Treasury Department](#). PPP loans are fully guaranteed by the SBA, carry a 1% interest rate, and have a six-month repayment deferral. Loans issued before June 5 have a two-year term while loans issued after June 5 have a five-year term. The maximum PPP loan size was equal to 8 weeks of the firm's average annual payroll costs, capped at \$10 million. Small businesses with less than 500 employees were eligible to apply for a PPP loan through one of the more than 5,000 participating financial institutions.

To incentivize small businesses to retain their employees, the SBA initially required borrowers to spend at least 75% of the loan on payroll expenses to receive full forgiveness. [In June](#), the SBA modified this requirement, decreasing it to 60% and allowing for partial forgiveness. Borrowers were required to retain or rehire employees to maintain the pre-Covid employment level, and firms could not cut salaries or wages. Initially, borrowers could use the PPP loan for eight weeks'

of eligible payroll and business expenses, but this covered period was extended to 24 weeks as part of the [Paycheck Protection Program Flexibility Act](#) in June.

The PPP [continues to evolve](#): on October 8, the SBA and Treasury released new guidance for borrowers with loans of \$50,000 or less, exempting them from the employee retention and payroll maintenance requirements.

Preliminary Evaluation

Despite the ongoing evolution of the PPP, there is a growing body of economic analysis on the effectiveness of the program. To date, the literature evaluates the short-term impact of the PPP on employment and business survival, in addition to analyzing whether the program effectively targeted funding.

Impact on employment

Evidence of the PPP's impact on employment is mixed. [Hubbard and Strain \(2020\)](#) find that the PPP had a significant positive effect on employment between April and June for the businesses in their sample, which included only recipients of PPP loans of more than \$150,000.

Others have found that the PPP had a slight positive effect on employment, though the benefits came at a high cost per job saved. For example, [Chetty, Friedman, Hendren, Stepner, and the Opportunity Insights Team \(2020\)](#) estimate that PPP loans increased employment at small businesses with 45 employees or more by 3 percent, implying a cost of \$290,000 per job saved. Similarly, [Autor et al. \(2020\)](#) estimate that the PPP increased employment by 2 to 4.5 percent, implying a cost of \$224,000 per job saved.

[Bartik, Cullen, Glaeser, Luca, Stanton and Sunderam \(2020\)](#) focus on the first phase of the PPP and find that PPP approval had positive but imprecise effects on employment at recipient firms. [Granja, Makridis, Yannelis, and Zwick \(2020\)](#) analyze the impact of the first phase of the PPP on the local economy of recipients. They find no evidence that the PPP had a substantial effect on local economic outcomes, including unemployment insurance claims.

Impact on small business survival

In addition to the PPP's objective to preserve employment during the Covid-19 pandemic, the program was designed to improve a small business's likelihood of surviving the pandemic. Preliminary evaluations show that the survival effects of the PPP are positive. For example, [Bartik et al. \(2020\)](#) find that PPP loans led to a 14 to 30 percentage point increase in a business's expected survival during the early months of the program. [Hubbard and Strain \(2020\)](#) also find evidence that the PPP increased the survival of small businesses and improved their financial health. They find that the impact of the PPP increased over time, as there were larger effects in June than in April and May. In June, PPP rules were relaxed, allowing businesses to spend up to 40% of the loan on non-payroll expenses such as rent.

[Bartlett and Morse \(2020\)](#) analyze the impact of the PPP at a local level, focusing on firm survival in Oakland, California. Their findings are firm-size specific: they conclude that PPP funding increased the medium-run survival probability by 20.5 percent only for businesses with 1-5 employees. They find no impact on medium-term survival for businesses with between 6 and 50 employees.

Effectiveness of targeting

The PPP was not restricted to certain industries, sectors, or severely impacted regions; rather, it was broadly available with eligibility restricted by size. Some analyses focused on whether the PPP funding was directed to the firms that most needed support. Granja et al. (2020) find that the funds did not flow to the hardest hit regions and also conclude that the PPP did not have significant positive effects on local economic outcomes.

In the first few weeks of the PPP, there was significant public outrage regarding publicly owned firms that received PPP loans. In response, [Cororaton and Rosen \(2020\)](#) focus their analysis on publicly owned firms that received PPP loans. They find that 424 such firms were granted \$1.4 billion in PPP loans through July 15, accounting for only 0.2% of allocated funds. They conclude that nearly half of all publicly owned firms were eligible for the PPP based on SBA criteria. They find that 22% of the eligible publicly owned firms received PPP loans, but these firms tended to be smaller in size and have fewer employees on average.

[Humphries, Neilson, and Ulyssea \(2020\)](#) find that PPP's "first-come, first-served" model meant that funding was more readily available to larger firms with established banking relationships. They find that the smallest businesses were both less aware of the PPP and less likely to apply for the program. According to their analysis, information frictions, which includes the lack of awareness and uncertainty about the application process, forgiveness, and eligibility, prevented the smallest businesses from accessing the funding. They also attribute widespread uncertainty regarding eligibility and forgiveness to the lower likelihood that the smallest business would apply for the program. The fact that small businesses were less aware of and less likely to apply for the PPP is a concern, as Bartlett and Morse (2020) find that the PPP's impact was positive for only the smallest businesses.

A recent [House report](#) from the Select Subcommittee on the Coronavirus Crisis presents preliminary findings that the SBA and Treasury encouraged banks to limit their PPP lending to existing customers. The report also notes that the administration failed to issue guidance to prioritize underserved markets.

Other Impacts

Other research has focused on access to credit for small businesses and how nonbank lenders participated in the PPP. [Chodorow-Reich, Darmouni, Luck, and Plosser \(2020\)](#) focus on access to credit during the pandemic and find that the increase in bank credit in the first two quarters of 2020 was primarily due to large firm drawdowns of pre-committed lines of credit. They also investigate whether PPP recipients reduced other borrowing, finding that PPP borrowers

reduced their non-PPP bank borrowing by between 53 and 125 percent of the amount of their PPP loan. They conclude that their results suggest that government-sponsored liquidity can overcome private credit constraints.

[Erel and Liebersohn \(2020\)](#) examine how fintech lenders responded to the introduction of the PPP. They find that fintech firms lend disproportionately more in zip codes with fewer bank branches, lower household incomes, and a larger minority population. They also investigate whether fintech lenders filled a finance gap or if borrowers were switching from traditional banks to fintech lenders. They find that businesses were more likely to borrow from a fintech lender in zip codes where local banks were unlikely to make PPP loans.

Evaluation of the PPP will continue as new data become available. It is still too early to reach a conclusion on the effectiveness or long-term success of the PPP. However, preliminary evaluations are informative and valuable for policymakers, especially given the continued demand for additional small business support.