Advancing Cash to Small Businesses through Banks: An Assessment of the SBA’s PPP Program to Date

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The Paycheck Protection Program, authorized by the CARES Act and administered by the U.S. Small Business Administration, has been offering loans to small businesses to mitigate adverse economic effects of the Covid-19 pandemic on them and their employees. The program incentivizes businesses to retain paid staff by forgiving loans if all employees are kept on the payroll for eight weeks and the money is used for payroll, rent, mortgage interest, or utilities. Loan forgiveness will be reduced if full-time headcount declines or if salaries and wages decrease.

The PPP opened for applications on April 3 and was oversubscribed by April 16. Over those 2 weeks, the program approved more than $340 billion in loans to small businesses. A second round of the program commenced on April 27, after Congress had replenished it with another $310 billion. As of this writing, nearly two-thirds of the additional funding (about $189 billion) has been disbursed.

In this note, we examine the cumulative activity of the PPP and find that the program has been successful in aligning the flow of credit toward areas most affected by Covid-19. Specifically, there is a strong, positive correlation (0.66) across states between disruption of economic activity (as measured by a worker mobility index) and dollars disbursed per small-business employee.

In addition, contrary to preliminary assessments criticizing large banks for inadequate participation, the data show that large banks managed a broad distribution of PPP funds. In fact, more dollars per small-business employee have been disbursed in states with more large banks, as measured by their share of retail deposits in that state.

ABOUT ASSESSMENTS BASED ON THE FIRST ROUND OF PPP

As established by the CARES Act, eligibility for the PPP program depends on business size and on declared need resulting from the economic impact of Covid-19. Size eligibility is determined by existing SBA size standards, with the important override that “any business with a NAICS Code that begins with 72 (Accommodations and Food Services) that has more than one physical location and employs less than 500 per location” qualifies for the program. Because of this exception, some sizeable hotel and restaurant chains have been eligible. Sole proprietors, independent contractors, and self-employed persons are also eligible for PPP loans.

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1 See https://www.sba.gov/funding-programs/loans/coronavirus-relief-options/paycheck-protection-program#section-header-0 for details, including eligibility criteria and a list of participating lenders.

2 The interim final rule (IFR) for the PPP program that was issued on April 2 requires that not more than 25 percent of the loan forgiveness amount may be attributable to non-payroll costs. As stated in the IFR, “the Administrator has determined that the non-payroll portion of the forgivable loan amount should be limited to effectuate the core purpose of the statute and ensure finite program resources are devoted primarily to payroll. The Administrator has determined in consultation with the Secretary that 75 percent is an appropriate percentage in light of the Act’s overarching focus on keeping workers paid and employed.” The IFR is posted at https://www.sba.gov/sites/default/files/2020-04/PPP%20Interim%20Final%20Rule_0.pdf.

Borrowers must self-certify that “current economic uncertainty makes this loan request necessary to support the ongoing operations of the Applicant.”

3 Also eligible is “any business, 501(c)(3) non-profit organization, 501(c)(19) veterans’ organization, or Tribal business concern (sec. 31(b)(2)(C) of the Small Business Act) with no more than 500 employees or that meets the SBA industry size standard if more than 500.”
The interim final rule (IFR) for the PPP issued on April 2 specified that applications will be considered on a first-come, first-serve basis, not based on size or other criteria. Congress was expected to replenish the program when the first round of funding was depleted, so that those still in the queue would not be left unfunded.

After the close of the first round, the PPP received a barrage of criticism for having disbursed most of the funds to relatively large businesses. These criticisms initially were based on data released to the public by the SBA, indicating that 45 percent of PPA dollars in round 1 had gone to loans over $1 million, and nearly 70 percent to loans over $350,000.⁵

Analysis of data from the first round of the PPP also suggested that the program had not effectively distributed funds relative to economic need. Researchers at the University of Chicago's Booth School and Massachusetts Institute of Technology's Sloan School found that the PPP was failing to disburse sufficient funds to the areas hardest hit by Covid-19.⁶ Another study, by researchers at the Federal Reserve Bank of New York, had a similar finding.⁷ Using the number of coronavirus cases as a proxy for the economic impact of COVID-19 in a specific state, the study found that the hardest-hit areas obtained fewer loans relative to the total number of small businesses.

However, these analyses and assessments were based on data from only the first phase of the PPP program, and thus were only preliminary. Moreover, given that the primary objective of the PPP is to keep as many employees on the payroll as possible, an assessment of the program should focus ultimately on employee retention. Success along this dimension requires attending to the biggest eligible companies while also implementing an efficient process to disburse funds to huge numbers of small establishments.

The criticism of large banks focusing on large businesses notably omitted considering some important differences between the capabilities and specializations of big national firms versus small community-based institutions. According to the FDIC Small Business Survey, larger banks have the resources to meet the demand for credit from bigger small-business borrowers without having concerns about taking on excessive risk. In addition, they can also foster economies of scale and use substantial amounts of quantifiable information to support a high volume of small-business loans and customers. Therefore, it is natural to expect their role in the PPP would differ from that of community banks.

Our analysis that follows, based on all PPP lending to date, indicates that the program has been more successful than preliminary assessments suggest. The data show that the program’s accomplishments reflect the combined efforts of all participating lenders, with large banks playing an important role.

PPP LOANS WENT TO THE STATES MOST SEVERELY AFFECTED BY THE PANDEMIC . . .

Figure 1 shows the amount of PPP loans disbursed relative to the number of employees of small businesses for the top 15 states. The data include loans disbursed in both rounds 1 and 2 of the PPP. The amount of loans approved in the first round totaled $342 billion. Round 2 is still ongoing. As of May 8, the SBA had approved $189 billion more in loans, totaling about $530 billion in PPP loans disbursed to small businesses.

The SBA data indicate that the states with the highest incidence of COVID-19 cases per capita tended to receive the most PPP loans per small-business employee. As shown in Figure 1, Massachusetts, California, New Jersey, and New York received the highest amount of loans per small-business employee at $9,973, $9,580, $9,561, and $9,521, respectively. Based on data from the Centers for Disease Control and Prevention, three of those four states have the highest infection rates (with the notable exception of California).⁸

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⁶ They noted that during the initial phase of the program, the geographic distribution of PPP loans did not correlate with the severity of local economic shocks, as measured by declines in hours worked or number of business shutdowns. See https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3588650. The study used proprietary data supplied to the researchers by the SBA.

⁷ See https://libertystreeteconomics.newyorkfed.org/2020/05/where-have-the-paycheck-protection-loans-gone-so-far.html

⁸ Indeed, we find a positive correlation between PPP loans per small-business employee and COVID-19 cases per capita. The estimated correlation is 46%, and it is statistically different from zero.
The incidence of COVID-19 cases is not ideal for assessing the effectiveness of the PPP program, because many states imposed strict restrictions on the movement of their residents early on. Those restrictions caused a significant disruption in economic activity. And yet, probably as a result of such measures, these states did not have elevated rates of COVID-19 infection.9

An alternative measure that offers a better proxy for the disruption in economic activity caused by the government’s containment actions (e.g., social distancing) is the work mobility index created by Google. This index uses location data gathered by smartphones to measure people’s mobility across six different categories: retail and recreation, groceries and pharmacies, parks, transit stations, workplaces, and residential areas. The index we use tracks movement to and from the workplace, represented by the percentage change in trips to work relative to a baseline defined by Google.

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9 For instance, California was the first state in the nation to implement stay-at-home orders, which became effective March 19, and has had a relatively low incidence of Covid-19 cases per capita. See [https://www.kff.org/health-policy-watch/lifting-social-distancing-measures-in-the-united-states-what-the-data-shows/](https://www.kff.org/health-policy-watch/lifting-social-distancing-measures-in-the-united-states-what-the-data-shows/) for details on the timing and nature of stay-at-home orders or other restrictions across states.
Figure 2 shows a strong positive correlation between the states that received the most PPP loans per small-business employee and economic disruption in those states, as measured by the decline in workplace visits. In particular, the states (including the District of Columbia) with the largest decline in trips to the workplace are the District of Columbia with 38.7%, New York with 33.0%, Massachusetts with 32.7%, and New Jersey at 32.6%. Three of these four received the highest PPP loan amounts per small-business employee based on the most recent PPP report (Figure 1). Figure 2 thus demonstrates that more PPP loans per employee were received by states that experienced the highest economic disruption as a result of the pandemic.10

...AND LARGE BANKS PLAYED A KEY ROLE IN DISBURSEMENT OF PPP LOANS TO SMALL BUSINESSES

Some earlier studies on the effectiveness of the PPP called into question whether large banks were doing enough to help small businesses overcome the challenges associated with the pandemic.

Those conclusions were premature for two main reasons. First, the time it took for the SBA to process applications caused some congestion issues in round 1, as evidenced by the surge in loan approvals shortly after round 2 started. Second, prior analyses looked only at the share of small businesses that received a loan in each state and did not consider the number of their employees that benefited from the program. In general, a program is deemed more effective by preserving the payrolls of slightly fewer firms with many more employees relative to supporting those of slightly more firms each with a much smaller number of employees. For this reason, we need to measure the penetration and effectiveness of the program in a way that includes the amount of loans disbursed and the number of employees working at small businesses across states.

![Figure 3: Small Businesses in States with Higher Large Bank Presence Received More PPP Loans](image)

Figure 3 shows a positive correlation between the large-bank presence in a state and the loan amount per small-business employee. That is, states more widely served by large banks received more PPP loans per small-business employee. To those familiar with the geography of the banking industry, this phenomenon could have been inferred from Figure 1, because some of the states that received the most PPP funding per small-business employee have many large banks.

Large banks bring various material advantages to the PPP program. They are well diversified across sectors; have relationships with many small businesses across the country; and benefit from economies of scale that, once appropriate processes are in place, allow for efficient execution of a mass lending program. Small and mid-sized banks

10 The data also suggests PPP loans to small businesses located in low-and-moderate income (LMI) areas were as equally served by the program as those in non-LMI neighborhoods. We used the 2018 CRA data to proxy for the number of small businesses located in LMI areas. We found that states with a higher share of small businesses in LMI areas also received a higher PPP loan amount per employee but the correlation is not statistically different from zero.
also bring their own unique strengths to the PPP program. For instance, small banks are more likely to rely on relationship-lending practices and use information that may seem harder to quantify while helping meet the credit needs of their customers.

Indeed, a more formal (i.e., regression) analysis that takes into account the severity of the pandemic across states, namely the work-mobility index, finds that having a larger bank presence did not result in those states receiving more PPP loans simply because they have more large banks relative to smaller ones. Instead, those states received more funding because the more severe economic disruptions occurred in states where large banks deal with most small businesses.

AS THE PPP CONTINUES . . .

Although the PPP is ongoing and not necessarily in its final phase, our results indicate that the program has been successful to date in allocating loans to the areas of the country most affected by the pandemic. In addition, some of the states with the most severe economic disruptions as a result of government containment policies also have a significant large-bank presence. As a result, large banks have played an important role in the disbursement of PPP loans to help small businesses maintain their payrolls intact. Overall, our results show that earlier reporting on the effectiveness of the PPP and the role of large banks in disbursing PPP loans was premature and does not hold up in the near-final analysis.

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