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# Comments on “Has the Paycheck Protection Program Succeeded?”

by Hubbard and Strain

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Hubbard and Strain offer a clear and comprehensive assessment of the initial months of the Paycheck Protection Program (PPP). My comments have two goals. First, I want to place the PPP into a framework for evaluating the welfare effects of such programs. Second, I want to place this analysis in the context of what we know from contemporaneous work about whether the PPP succeeded. While I agree with the authors that it is too soon to provide a complete grade of the PPP, we know enough now to offer a provisional assessment that can guide ongoing policy debates and future research on the program.

## **Grading the PPP: A Rubric**

What kind of policy is the PPP? Many popular commentators have described the program as fiscal stimulus, but this view is mistaken. The goal of the PPP was not to increase economic activity immediately. In fact, if the initial crisis response was aimed at suppressing the virus by reducing public interactions, the goal may well have been the opposite: to encourage everyone to stay home to slow the virus’s spread while supporting workers and firms during the lockdown.

Thus, the goal of the PPP was more to enable *future* economic activity—by preserving firm-worker links and preventing permanent failures—than stimulate immediately. Hubbard and Strain are right to point out that in this case we should not use metrics like cost per job or fiscal impact multipliers to grade the program.

One might alternatively think of the program as support for capital markets in the spirit of liquidity support programs aimed at the financial system, which were pursued by the Federal Reserve and Treasury both during this crisis and during the Great Recession. Again, this is not the right way to view the PPP. In particular, the “lender of last resort”

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motivation for policy intervention is not the right model when output evaporates and there are real losses. In this world, loans are unattractive from a private and public perspective because repayment is nonviable for many firms despite having positive long term prospects.<sup>1</sup> In such a case, and in stark contrast to the Great Recession, banks may be more unwilling than unable to lend to firms that were hard hit by the crisis.

In my view, the closest policy analogy to the current situation is disaster relief and insurance. Firms face a severe non-economic shock that entails an unusually low correlation between their short-run and long-run performance. If these firms close, society will risk losing valuable firm-worker matches, fixed startup costs already paid, and sweat equity already accumulated. At the aggregate level, there is risk that congestion externalities in bankruptcy courts and in the labor market could exacerbate economic losses.

In all of these respects, the pandemic is similar to a large storm that devastates a local area, though this time the devastation is geographically widespread, of uncertain duration, and wrought with lost revenues instead of lost capital. Still, I believe that conceptualizing the PPP as a kind of social insurance program helps to illuminate the framework we ought to use to evaluate design and implementation.

## **Revenue Replacement versus Business Continuity Insurance**

An important part of the Hubbard and Strain paper is a discussion of the key design elements of a business support program. If we think of the PPP as insurance, then we can fruitfully debate these elements in terms of their insurance value beyond being mere transfers. Let me contrast some of Hubbard and Strain’s preferred design elements to our Business Continuity Insurance proposal (Hanson et al., 2020*a*), which was itself inspired by Hubbard and Strain’s earlier writing on the program and by Emmanuel Saez and Gabriel Zucman’s “buyer of last resort” proposal (Saez and Zucman, 2020).

First is the question of what expenses to permit. Hubbard and Strain argue for including payroll in the category of eligible expenses to be covered by the PPP. Supporting payroll might help firms retain workers, thereby preserving valuable firm-worker matches. It also might keep workers from claiming unemployment insurance (UI) at a time when the risk of overwhelmed UI systems is a concern. Both arguments amplify the insurance

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<sup>1</sup>Hanson et al. (2020*b*) argue why it makes more sense to think of the government’s role as “venture capitalist of last resort,” that is, as needing to take on significant credit risk in this crisis.

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value of the program.

Nevertheless, I have several concerns with this element. First, including payroll dramatically raises the cost of the program, thus limiting the amount of time firms might be able to benefit from additional funds. Second, many of the hardest hit firms were bars and restaurants in the service sector, for which high rates of turnover in normal times imply the value of firm-worker matches might be low. Third, it is somewhat unnatural to expect firms to pay workers to idle, when accounting and payroll systems are based on hours worked and when many firms have some workers that can still work. Fourth, though there were plenty of hiccups in the initial rollout, the UI system actually worked pretty well in supporting more than 30 million workers! Last, as Hubbard and Strain note, including payroll deters reallocation of workers across firms and industries by subsidizing newly inefficient matches.

The second design question concerns how to deploy PPP funds. Hubbard and Strain argue in favor of using banks as conduits to access the program. Pre-existing relationships between banks and firms might accelerate the transfer of funds, and the underwriting infrastructure could help detect fraud. These arguments speak to the efficiency and timeliness of the program, both key aspects of good insurance.

At the same time, because banks do not have the same incentives as the government, we have to pay them to participate. And banks might steer preferred clients in one direction and new clients in another. While true that many firms are connected to banks, there are many others without prior relationships or whose banks were themselves disrupted by the lockdown orders. My view is that the IRS could have been more involved in implementing this policy, given its track record for large scale stimulus in other context (such as economic impact payments, refunds for net operating losses, or the First-Time Homebuyer credit).

A third question concerns targeting. Hubbard and Strain argue that the program should feature little or no targeting. Their logic is that, given the unknown shock severity and duration, trying to narrow eligibility for the program in a sophisticated way would fall prey to lobbying by connected industries. They also worry that conditioning loan forgiveness on revenues might discourage firms from reopening by subjecting them to high marginal tax rates.

Here, viewing the program through the lens of insurance is especially instructive. Providing little or no targeting is both expensive and by definition allocates funds to low-

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insurance-value types. To the extent there is a budget constraint at the federal level (which is debatable these days), we are now in a position where benefits have been exhausted though help is still needed. Moreover, it will surely strike many as unfair that firms that were able to continue operating, or that operated in defiance of best public health practices, received the same level of support as those that temporarily closed.

I should note that we agree on many design features and general principles. For example, though Hubbard and Strain describe their proposal as “revenue replacement,” it is better thought of as “net value added” replacement. In other words, we agree to exclude profits, intermediates, and depreciation in the list of eligible expenses. More fundamentally, we agree that the loans should be closer to grants. We also agree that placing the demands solely on the SBA to implement this program would not have made sense, given the agency’s size and the infrastructure in place prior to the crisis.<sup>2</sup> And we agree that the largest firms should be treated less generously.

The bottom line in this discussion is that this area deserves more formal study. Economics has a natural opportunity to contribute in this time of crisis by improving our understanding of the optimal features of business support policy.

## Did Funds Go to “High-Insurance-Value” Types?

Ideally, we would grade the PPP in terms of insurance value provided relative to the program’s cost, but defining the notion of insurance value for firms is beyond the scope of my discussion. As a first pass, let’s consider what we know about program targeting and how firms used the funds.

Judged by its timeliness, the program receives high marks. More than \$500 billion in funds were distributed in just six weeks!

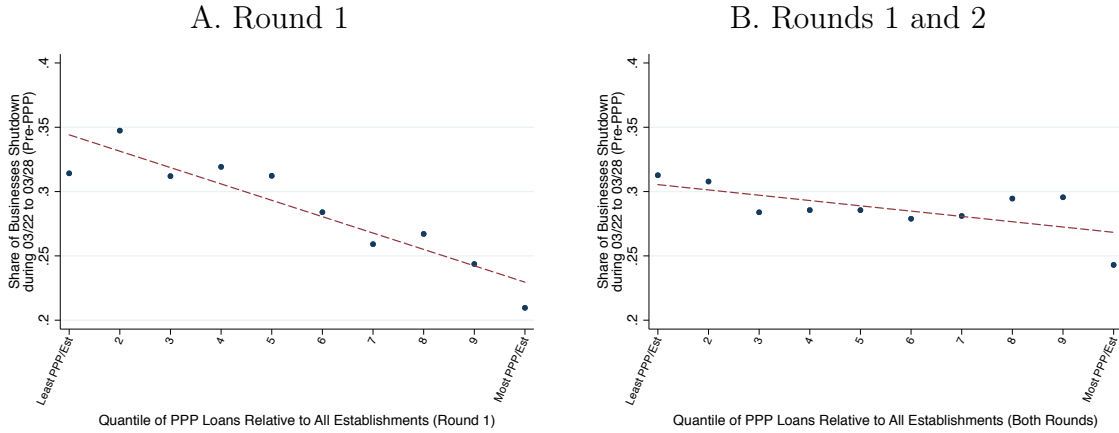
One reason why funds could be deployed so quickly is that nearly all firms could apply. As a consequence, the targeting of the program was poor. In work with Joao Granja, Christos Makridis, and Constantine Yannelis, I found that more of the program’s initial funds actually flowed to regions that were *less hard-hit* by the shock (Figure 1A). This distribution is to a large extent due to differences across lenders in their participation

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<sup>2</sup>Recently, the SBA Inspector General released a report finding that the “unprecedented demand for COVID-19 [EIDL relief loans] and the equally unprecedented challenges SBA had in responding to this pandemic combined with lowered controls resulted in billions of dollars in potentially fraudulent loans and loans to potentially ineligible businesses” (SBA IG Report 21-02, 10/28/2020).

in the program. For example, the top-4 banks alone account for 36% of total pre-policy small business loans, but disbursed less than 3% of all PPP loans in the first round of funding. Ultimately, we find a weak correlation between initial shock severity and funding levels, reflecting the program’s broad eligibility criteria (Figure 1B).

Figure 1: Weak Geographic Targeting of the PPP



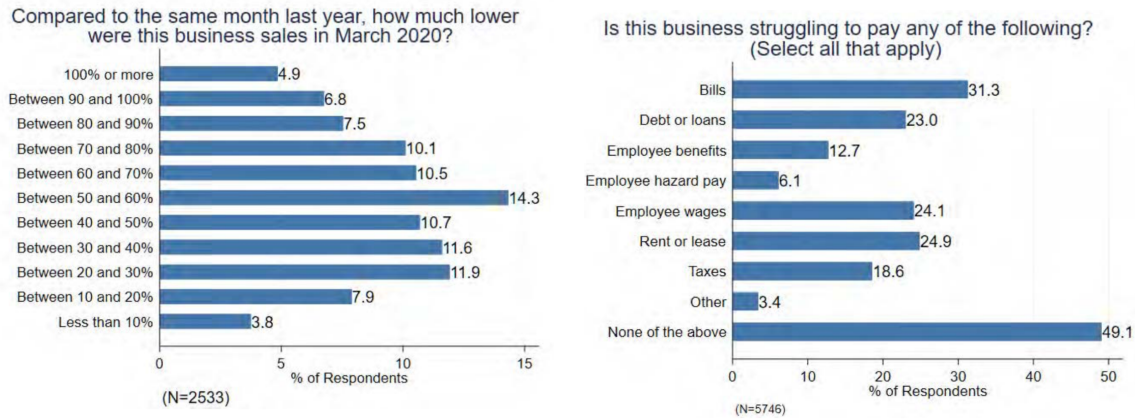
Source: Granja et al. (2020). The figure stratifies all businesses in Homebase in 10 bins based on the fraction of establishments in their ZIP code receiving PPP during the first round and during both rounds combined. The figure plots for each bin the share of Homebase businesses that shut down in the week of March 22nd–March 28th, that is, prior to the PPP.

Additional evidence on targeting and design elements comes from firm surveys (Figure 2). Drawing on data from a large survey of business owners on Facebook, Alekseev et al. (2020) find that 30% to 40% of small businesses did not experience sales declines in the first month of the crisis. Among the businesses that did experience declines, the severity of the decline varies widely from declines of 10% to 20% to nearly complete shutdowns. Moreover, only half of firms surveyed reported struggling to pay obligated expenses (though presumably this share increased over time). Such heterogeneity in experiences is at odds with the “one-size-fits-all” design of the program’s forgiveness formula.

The evidence also points to other issues with the PPP’s rollout. First, firms that do report struggling to make payments appear to struggle equally to pay rent, wages, and interest on loans. This fact suggests the initial weight of 75% on payroll expenses was likely too high. Second, half of firms report not having pre-existing relationships with

banks as borrowers, which appears to have led to such firms initially struggling to access the program and eventually switching lenders in order to receive funds. Data from the SBA show that, across participating banks, larger firms received funding first, and many smaller borrowers had to wait several months to access the program.

Figure 2: Heterogeneity in Shock Severity among Small Businesses



Source: Alekseev and others (2020), April survey of small businesses on Facebook.

It is natural to think of underserved firms facing severe shocks in hard-hit regions as likely to have a higher insurance value from a social planner’s perspective. Whether improved targeting along some of these lines can be achieved, while maintaining the program’s timeliness and the benefits of bank underwriting, remains an open question for policy going forward.

## What Did Firms Do with the Money?

Hubbard and Strain focus on a second approach to evaluating the PPP’s success to date. They use data from Dun & Bradstreet and a series of research designs to evaluate the impact of the program on employment, financial performance, and business closures. Their most compelling research design exploits the eligibility threshold of 500 workers; with some exceptions, firms above this threshold could not apply for PPP loans, providing a natural control group.

Hubbard and Strain find modest but statistically significant effects on employment that appear to grow over the six-month period their data cover. These employment effects

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are largely consistent with Autor et al. (2020) and Chetty et al. (2020), who use the same research design and data from different payroll processors. Using a bank exposure design at the regional level, Granja et al. (2020) find null effects of the program in April that grow to modest effects in May and June. Across studies, the results appear to imply very high cost-per-job estimates ( $\approx$  \$200 thousand per job), though recall this metric is probably the wrong way to evaluate this program.

Hubbard and Strain find modest impacts of the program in reducing financial vulnerability and business closures. These findings contrast somewhat with Granja et al. (2020), who find no impact on business shutdowns and large effects on firms' reported cash on hand and propensity to miss obligated loan and other payments. On the other hand, Bartik et al. (2020) use a bank exposure design and find that the PPP had large effects on firms' own forecasts of failure probabilities. Reconciling these contrasting findings is a task for future research, as more data become available.

I do have a few concerns with Hubbard and Strain's approach. First, in some analyses, they report differences that compare loan applicants to non-applicants. These differences will tend to overstate program impacts because they do not isolate loan demand effects, which are likely to be correlated with business expenditure plans. For these reasons, I prefer estimates using the worker threshold as an instrument.

Second, the aggregate time series in the Dun & Bradstreet data are extremely stable and indicate very limited aggregate impact of the pandemic and lockdowns on firms in the sample. These patterns stand in sharp contrast to pretty much every other real time data set available, in which employment appears to fall by between 20 and 60 percent depending on the sample of interest. I worry that the patterns in the Dun & Bradstreet data are an artifact of stale or incomplete measurement and updating. Moreover, if such measurement issues are more pronounced for small firms, this problem will confound estimates that compare firms across size thresholds. My bet is the Dun & Bradstreet data will ultimately be more useful for evaluating the question of permanent closures, once data are comprehensively updated.

## **Pencils Down**

The ultimate grade for the PPP will depend on the medium-term impacts that have yet to materialize. We see modest short-term employment effects but more significant

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improvement in firm balance sheets. The PPP’s success will hinge on whether the cost of limited targeting is ultimately offset by the gains from preventing a large number of firm failures. If instead a large share of the funds prove inframarginal, the economic incidence of the program will fall largely on business owners, many of whom would have been able to weather the storm without this support.

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